



Australian Government

TLIB3075 Inspect and prepare a motive power unit

Release: 2

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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 Performance Evidence
- 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 inspect, prepare and start a motive power unit in accordance with relevant workplace procedures, rail safety regulations and codes of practice.

It includes checking and preparing a motive power unit, visually examining a motive power unit, conducting in-cab checks, and starting and positioning a motive power unit for service in accordance with workplace requirements.

A motive power unit is a rail vehicle used to provide the power to move itself or other vehicles.

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 without supervision, generally within a team environment.

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

Rail sector.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare for work activities

PERFORMANCE CRITERIA

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

- 1.1** Roster is checked and interpreted for day's train driving activities
- 1.2** Allocation of motive power units is checked, as required, by notices in conjunction with network control officer or roster
- 1.3** Hazards are identified, risks are assessed and risk control measures are implemented
- 1.4** Trackside safety and basic electrification awareness procedures are followed, as required, while locating allocated motive power unit in the yard
- 1.5** Motive power unit inspection and preparation duties are identified and interpreted
- 1.6** Train schedules, notices and other operational and regulatory documentation are accessed and interpreted in accordance with workplace procedures
- 1.7** Communication equipment required for day's operations is obtained and checked to ensure it is functional
- 1.8** Required personal protective equipment (PPE) is obtained for use prior to day's train driving activities
- 1.9** Motive power unit to be inspected and prepared is located in the yard

2 Inspect and prepare motive power unit

- 2.1** Features, functions and location of motive power unit and associated equipment are identified
- 2.2** Logbook is checked to confirm serviceability of unit
- 2.3** Preparation and safety checks are conducted in accordance with work health and safety (WHS)/occupational health and safety (OHS) and other workplace policies and procedures
- 2.4** Motive power unit, kit and equipment are checked and defects and deficiencies are recorded and rectified, isolated, tagged or reported, as required, in accordance with workplace procedures and regulatory requirements

- 2.5 Availability of appropriate fuel, lubricating oils, water, coolant and sand quantities are checked against journey requirements, as required, and appropriate action is taken to replenish them
 - 2.6 Relevant WHS/OHS and regulatory requirements are followed
- 3 Start motive power unit**
- 3.1 Motive power unit is started in accordance with manufacturer instructions and/or workplace procedures and operating faults are recognised, diagnosed, reported and recorded in appropriate records for follow-up
 - 3.2 Where critical or serious equipment faults cannot be readily rectified, motive power unit is shut down, faulty equipment is isolated and tagged, and problem is reported
 - 3.3 Instruments and gauges are observed and readings are interpreted to confirm effective operation
 - 3.4 Actions are taken to determine cause of identified problem in instruments and gauges, and situation is rectified or reported, as required
 - 3.5 Fluid levels are rechecked after starting and appropriate actions are taken, as required
 - 3.6 Pre-departure checks are carried out to ensure motive power unit is braking and powering effectively and is safe to move
- 4 Conduct in-cab checks**
- 4.1 Motive power unit is checked in correct sequence and all equipment is confirmed to be operating to optimum requirements
 - 4.2 Cab layout is checked and confirmed that it meets operating requirements
 - 4.3 Pre-departure mechanical checks are correctly performed and correct functioning of equipment confirmed in accordance with workplace procedures and manufacturer operating requirements
 - 4.4 Supervisory controls and indicators are checked to ensure they are functioning correctly and appropriate actions taken if not working correctly
 - 4.5 Communication equipment is checked to ensure it is functioning correctly and appropriate actions are taken if not working correctly
 - 4.6 Seat, windows, blinds, air conditioners, heaters and other personal in-cab equipment are checked and adjusted for correct

functionality, safety and comfort

- 4.7 Auxiliary equipment is checked and is confirmed to be operational in accordance with operating requirements
- 4.8 Fire extinguisher and emergency toolbox are checked to confirm they are in position and meet operational requirements

5 Complete documentation

- 5.1 Required documentation concerning inspection of motive power unit is completed and processed in accordance with workplace procedures and regulatory requirements
- 5.2 Logbook and other service records on the motive power unit are completed and filed in accordance with workplace procedures and regulatory requirements

6 Position motive power unit

- 6.1 Authority to move and position motive power unit is obtained and relevant personnel are advised of intention and procedures
- 6.2 Motive power unit is operated in accordance with standard procedures and regulatory requirements, within operating and operational constraints
- 6.3 Motive power unit is positioned in accordance with operational requirements and directions
- 6.4 Motive power unit performance is monitored during operation to confirm effective operation or to identify defects
- 6.5 Equipment defects are identified, reported, rectified and recorded or relevant personnel are advised for assistance
- 6.6 Relevant WHS/OHS and regulatory requirements are followed to ensure safety and to prevent injury and damage
- 6.7 Network control officer and other relevant personnel are advised that motive power unit is secured in the required position and is ready for service

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.

Unit Mapping Information

This unit replaces and is equivalent to TLIB3075A Inspect and prepare a 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 TLIB3075 Inspect and prepare a 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 motive power units and associated equipment and procedures
- checking and replenishing fluids and carrying out lubrication requirements on a motive power unit
- communicating effectively and working collaboratively with others including:
 - operating electronic communication equipment to required protocol
- conducting a visual inspection of a motive power unit and associated equipment
- identifying and assessing motive power unit defects and deficiencies and taking appropriate actions to report, isolate, repair or replace identified defective equipment in accordance with workplace procedures
- identifying job hazards and taking required actions to minimise, control or eliminate identified hazards
- interpreting and following instructions and prioritising work
- monitoring and anticipating operational problems and hazards and taking appropriate actions including:
 - modifying activities depending on operational contingencies, risk situations and environments
- preparing a motive power unit prior to service
- reading and interpreting relevant instructions, workplace procedures and information and signs.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- applicable state/territory legislated rail safety requirements, relevant codes of practice and/or guidelines including:
 - emergency response procedures
 - rail safety, work health and safety (WHS)/occupational health and safety (OHS), and environmental procedures and regulations
- external features of a motive power unit that must be checked during a pre-operational visual inspection
- fuel tank capacity and range, if fitted
- functions of:
 - auxiliary systems on a motive power unit and related checks for correct operation
 - operating controls to start, accelerate, decelerate and stop a motive power unit
 - supervisory indicators and controls and related checks for correct operation
- lubrication requirements for a motive power unit
- operating procedures for a motive power unit
- principles, purpose and location of controls, monitoring devices, braking, power source and traction systems
- workplace procedures and operating requirements for:
 - adjusting controls to optimise the operation of a motive power unit
 - braking and safety system procedures for motive power units
 - checking and operating electronic communications equipment in accordance with workplace procedures and required protocols
 - checking fuel and fluid levels and carrying out lubrication processes on a motive power unit
 - cleaning requirements for a motive power unit
 - documentation requirements
 - identifying equipment defects and assessing for appropriate actions
 - in-cab pre-operational checks for a motive power unit
 - inspection procedures for a motive power unit
 - managing and controlling hazardous situations when preparing and starting up a motive power unit
 - minor preventative maintenance including cleaning, brake shoe/pad replacement and sand box requirements
 - starting and operating auxiliary systems on a motive power unit
 - start-up procedures for motive power units
- typical defects that can occur on a motive power unit and related actions that should be taken.

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 personal protective equipment (PPE) currently used in industry
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals.

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