



Australian Government

TLIB4076 Inspect and prepare a heritage motive power unit

Release: 2

TLIB4076 Inspect and prepare 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 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 and prepare a heritage motive power unit in accordance with workplace procedures and the requirements of relevant rail 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.

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 some 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 Start heritage motive power unit

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 in conjunction with network control officer and roster
- 1.3** Motive power unit to be inspected and prepared is located in the yard
- 1.4** Motive power unit is started in accordance with manufacturer instructions and operating faults are recognised, diagnosed, reported and recorded in appropriate records for follow-up
- 1.5** 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 for rectification
- 1.6** Instruments and gauges are observed and readings are interpreted to confirm effective operation, including air and electrical
- 1.7** Actions are taken to determine cause of identified problems in instruments and gauges, and situation is rectified or reported
- 1.8** Fluid levels are rechecked after starting and appropriate actions are taken, as required
- 1.9** Pre-departure checks are carried out to ensure motive power unit is braking and powering effectively and is safe to move

2 Prepare for heritage motive power unit work activities

- 2.1** Roster is checked and interpreted for day's train driving activities
- 2.2** Allocation of motive power units is checked as identified by notices, in conjunction with network control officer and roster
- 2.3** Hazards are identified, risks are assessed and risk control measures are implemented
- 2.4** Trackside safety and basic electrification awareness procedures are followed while locating allocated motive power unit in the yard

- 2.5 Motive power unit inspection and preparation duties are identified and interpreted
- 2.6 Train schedules, notices and other operational and regulatory documentation are accessed and interpreted in accordance with workplace procedures
- 2.7 Communication equipment required for day's operations is obtained and checked to ensure it is functional
- 2.8 Required personal protective equipment (PPE) is obtained for use prior to day's train driving activities
- 2.9 Motive power unit to be inspected and prepared is located in the yard
- 3 Inspect and prepare heritage motive power unit**
 - 3.1 Features, functions and location of motive power unit and associated equipment are identified
 - 3.2 Logbook is checked to confirm serviceability of unit
 - 3.3 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
 - 3.4 Motive power unit, kit and equipment are checked and defects and deficiencies recorded and rectified, isolated, tagged or reported in accordance with workplace procedures and regulatory requirements
 - 3.5 Availability of appropriate fuel, lubricating oils, water, coolant and sand quantities, as required, are checked against journey requirements and appropriate actions are taken to replenish them, as required
 - 3.6 Relevant WHS/OHS and regulatory requirements are followed
- 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 is 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 are 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 confirmed to be operational in accordance with operating requirements
- 4.8 Fire extinguisher, emergency toolbox and other required equipment are checked to confirm they are in position and meet operational requirements
- 5 **Complete documentation**
 - 5.1 Required documentation concerning inspecting 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 heritage 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 operational 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 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.

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 TLIB4076A Inspect and prepare 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 TLIB4076 Inspect and prepare 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 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.

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
- checking and replenishing fluids and carrying out lubrication requirements on a heritage motive power unit
- checking electronic communications equipment is in accordance with required protocol
- conducting a visual inspection of a heritage motive power unit and associated equipment
- documenting outcomes of visual inspection of a motive power unit
- 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 required actions to minimise, control or eliminate identified hazards
- interpreting and following instructions and prioritising work
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring and anticipating operational problems and hazards and taking appropriate actions
- preparing a heritage motive power unit prior to service
- reading and interpreting relevant instructions, procedures, information and signs
- working collaboratively with others as part of a train crew.

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

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.

Links

Companion Volume Implementation Guides are found in VETNet -

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