



Australian Government

TLIB4082A Set up motive power units in multi-coupled consist

Release 1

TLIB4082A Set up motive power units in multi-coupled consist

Modification History

Release 1. This is the first release of this unit.

Unit Descriptor

This unit involves the skills and knowledge required to set up one or more motive power units in multi-coupled consist in accordance with network owner and regulatory requirements. It includes motive power units in power or when being hauled dead or offline. Licensing or certification requirements are not applicable to this unit.

Application of the Unit

These operations are conducted as part of operating motive power units and may be carried out by different personnel working within rail operations.

Licensing/Regulatory Information

Refer to Unit Descriptor.

Pre-Requisites

Nil

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

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| 1 Prepare motive power units for coupling | <ul style="list-style-type: none">1.1 Identification and location of motive power units to be coupled is confirmed1.2 Motive power units are marshalled into desired position and orientation to meet consist requirements in accordance with organisational policies and procedures |
| 2 Set up motive power units for multi-consist operation | <ul style="list-style-type: none">2.1 Motive power units are coupled in accordance with manufacturer instructions and/or organisational procedures2.2 Relevant hose pipes and electrical connections are made in accordance with manufacturer instructions and/or organisational procedures2.3 Fuel lines are coupled as required in accordance with manufacturer instructions and/or organisational procedures2.4 As required, area is checked before pantographs are raised or lowered to ensure safety, in accordance with organisational procedures |
| 3 Set up in-cab controls for multi-consist operation | <ul style="list-style-type: none">3.1 Motive power unit controls are set up for multi-consist operation in accordance with manufacturer and/or organisational policies and procedures3.2 Vigilance and safety controls are set-up as required to ensure they are functioning correctly in multi-consist operation3.3 Motive power unit equipment is set up or adjusted for multi-consist operation in accordance with manufacturer and/or organisational policies and procedures |
| 4 Perform post start up checks | <ul style="list-style-type: none">4.1 Post start-up checks are carried out to ensure all motive power units are braking and powering effectively and are safe to move, in accordance with manufacturer and/or organisational policies and procedures4.2 Handbrakes on all motive power units are applied/released in accordance with manufacturer and/or organisational policies and procedures4.3 Pantographs are raised or lowered where required in accordance with manufacturer and organisational procedures |

**5 Haul dead
motive power
units**

- 5.1 Motive power unit controls are set up for being hauled dead in motive power unit consist or in-train in accordance with manufacturer and/or organisational policies and procedures
- 5.2 Vigilance and safety controls are set up as required to ensure they are functioning correctly when being hauled dead in motive power unit consist or in-train
- 5.3 Motive power unit equipment is set up or adjusted for being hauled dead in motive power unit consist or in-train in accordance with manufacturer and/or organisational policies and procedures
- 5.4 Handbrakes are applied and released in accordance with manufacturer and/or organisational policies and procedures

Required Skills and Knowledge

This section describes the knowledge and skills required for this unit.

Required knowledge:

- Auxiliary systems on a motive power unit and related checks for correct operation
- Braking and safety system procedures for motive power units
- Capabilities, compatibilities and types of motive power units
- Defects that can occur on motive power units and related action that should be taken
- Electrical awareness
- External features of motive power units that must be checked during a visual inspection
- Functions of all supervisory indicators and controls, and related checks for correct operation
- Inspection procedures for motive power units
- Isolation systems
- Purpose and location of controls, monitoring devices, braking, power source and traction systems
- Relevant Australian Standards and related requirements
- Relevant environmental protection legislation, regulations, codes, policies and procedures
- Relevant legislated rail safety requirements including state and territory acts and regulations, and nationally approved compliance codes and/or guidelines
- Relevant work health and safety (WHS)/occupational health and safety (OHS) legislation, regulations, codes, policies and procedures

Required skills:

- Adapt to differences in motive power units and associated equipment and procedures
- Communicate effectively with others in accordance with organisational protocols when inspecting, preparing and stabling a motive power unit
- Identify where systems isolation is required and implement isolation
- Modify activities depending on operational contingencies, risk situations and environments
- Read and interpret instructions, procedures, information and signs relevant to visually inspecting, preparing, starting up and stabling a motive power unit
- Work collaboratively with others inspecting and preparing a motive power unit

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:

- required knowledge and skills
- relevant legislation and organisational procedures
- other relevant aspects of the range statement.

Context of and specific resources for assessment

Performance is demonstrated consistently over time and in a suitable range of contexts.

Resources for assessment include:

- a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or
- access to an appropriate range of relevant operational situations in the workplace.

In both real and simulated environments, access is required to:

- relevant and appropriate materials and equipment, and
- applicable documentation including organisational procedures, regulations, codes of practice and operation manuals.

Method of assessment

As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests.

Practical assessment must occur:

- through activities in an appropriately simulated environment, and/or
- in an appropriate range of situations in the workplace.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Motive power units may include:

- diesel motive power units
- electric motive power units
- railcars

Motive power unit controls may include:

- battery isolation switch
- brake equipment and isolation valves
- circuit breakers
- dead engine device
- driver safety systems
- knife switches
- multi-unit switch
- pantograph equipment
- reverser handle
- throttle

Motive power unit equipment may include:

- air conditioner
- blinds/curtains
- exterior lighting
- heaters
- interior lighting
- jumper cable
- windows

Appropriate personnel may include:

- depot/yard supervisor
- ground support crew
- maintenance personnel
- train controllers and signallers

Safety and personal protective equipment may include:

- communication equipment
- gloves
- hand lamps
- hearing protection
- high visibility clothing
- insect repellent
- safety:
 - devices
 - footwear
 - glasses
 - headwear
- sunscreen and sunglasses

Unit Sector(s)

Not applicable.

Competency Field

B – Equipment Checking and Maintenance