



Australian Government

TLIB0132A Start up and shut down a single locomotive

Release 1

TLIB0132A Start up and shut down a single locomotive

Modification History

Release 1 - New unit of competency

Unit Descriptor

This unit involves the skills and knowledge required to start up and shut down a single locomotive motive and making it as a vehicle.

Licensing or certification requirements are not applicable to this unit.

Application of the Unit

These operations are conducted as part of the operation of locomotives and may be carried out by different personnel working within rail operations.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

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

1 Inspect and prepare locomotive

- 1.1 Identification and location of locomotive is confirmed
- 1.2 Logbook and locomotive are checked for out of service indications and to confirm serviceability
- 1.3 Where applicable, locomotive kit and equipment are checked and defects and deficiencies are recorded and rectified, isolated, tagged (where applicable) or reported in accordance with organisational policies and procedures
- 1.4 Fuel, lubricating oils, water, coolant and sand equipment are checked and replenished if required
- 1.5 External visual checks are conducted in accordance with manufacturer and/or organisational policies and procedures

2 Start up locomotive

- 2.1 Locomotive is started in accordance with manufacturer instructions and/or organisational procedures
- 2.2 Any operating faults are identified, diagnosed, rectified and/or reported and recorded in appropriate records
- 2.3 All instruments and gauges are observed and readings are interpreted to confirm effective operation in accordance with manufacturer and/or organisational procedures
- 2.4 Where required, fluid levels are rechecked after starting and appropriate action is taken if required

3 Conduct in-cab checks

- 3.1 Locomotive in-cab checks are conducted in accordance with manufacturer and/or organisational policies and procedures
- 3.2 Vigilance and safety controls and indicators are checked to ensure they are functioning correctly and appropriate action is taken if they are not working correctly
- 3.3 Communication equipment is checked to ensure that it is functioning correctly and appropriate action is taken if it is not working correctly
- 3.4 Personal in-cab equipment and crew comfort requirements are checked and adjusted for correct functionality and comfort
- 3.5 Auxiliary and emergency equipment is checked and confirmed to be operational in accordance with operating requirements

4 Conduct post start up checks

- 4.1 Post start up checks are carried out to ensure locomotive is braking and powering effectively and is safe to move in accordance with manufacturer and/or organisational policies and procedures
- 4.2 If required, personal communication equipment is obtained and checked to ensure that it is functional

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| 5 Raise or lower pantograph (if required) | 5.1 If required, pantographs are raised or lowered and confirmed to be operational in accordance with manufacturer instructions and/or organisational policies and procedures |
| 6 Complete start up documentation | 6.1 All required documentation concerning inspecting the locomotive is completed in accordance with organisational policies and procedures

6.2 Logbook and other locomotive service records are completed in accordance with organisational policies and procedures |
| 7 Stable locomotive | 7.1 Location for stabling the locomotive is identified and confirmed with appropriate personnel

7.2 Where required, directions of appropriate personnel are interpreted and followed

7.3 Locomotive is stabled and shut down in accordance with manufacturer and/or organisational procedures

7.4 Locomotive is secured in accordance with organisational policies and procedures

7.5 Control equipment and cab are secured in accordance with organisational policies and procedures

7.6 If required, additional protection is set in place in accordance with organisational policies and procedures |
| 8 Carry out post-operational checks | 8.1 Fuel, oil, water and sand levels are checked and replenished if required

8.2 Outcomes of post-operational checks are recorded in accordance with 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 locomotive and related checks for correct operation
- Braking and safety system procedures for locomotives
- Defects that can occur on a locomotive and related action that should be taken
- External features of a locomotive that must be checked during a visual inspection
- Functions of all supervisory indicators and controls, and related checks for correct operation
- Inspection procedures for a locomotive
- Lubrication requirements for a locomotive
- Procedures for operating electronic communications equipment with required protocol
- Purpose and location of controls, monitoring devices, braking, power source and traction systems
- Relevant legislated rail safety requirements including acts and regulations from each applicable state and territory together with any nationally approved compliance codes and/or guidelines
- Relevant OH&S and environmental procedures and regulations

Required skills:

- Adapt to differences in locomotives and associated equipment and procedures
- Communicate effectively with others when inspecting, preparing and stabling a locomotive
- Modify activities depending on operational contingencies, risk situations and environments
- Read and interpret instructions, procedures and information and signs relevant to the visual inspection, preparation, start up and stabling a locomotive
- Work collaboratively with others inspecting and preparing a locomotive

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:
 - the required knowledge and skills
 - relevant legislation and workplace procedures
 - other relevant aspects of the range statement
- Assessment must include exercises which demonstrate competent performance of the following in a range of situations:
 - completing all pre-start-up checks on a locomotives
 - correctly starting up a locomotive
 - shutting down a locomotive

Context of and specific resources for assessment

- Performance is demonstrated consistently over a period of 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 workplace 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.

Locomotives may include:	• diesel locomotives • electric locomotives • railcars
Personal in-cab equipment may include:	• entertainment systems • microwave • kettle • hotplate • fridge
Crew comfort equipment may include:	• toilet • air conditioning • heating • seat • blinds • demisters
Auxiliary and emergency equipment may include but not limited to:	• fire extinguishers • tool box • first aid kit • emergency chain • audible track warning devices • spill kits • hydraulic/manual jacks • spare brake blocks • spare knuckles • chocks • flags
Additional protection may include:	• derailleurs • chocks • catch points • dump device clamp • rail anchor
Appropriate personnel may include:	• train controllers and signallers • depot/yard supervisor • ground support crew • maintenance personnel
Safety and personal protective equipment may include:	• gloves • sunscreen and sunglasses • safety glasses

Applicable legislation, regulations and codes may include:

- insect repellent
- safety headwear and footwear
- two-way radios
- hand lamps
- safety devices
- high visibility clothing
- hearing protection
- legislated rail safety requirements including acts and regulations from each applicable state/territory and any nationally approved compliance codes and/or guidelines
- relevant Australian Standards and related requirements
- relevant state/territory OH&S legislation
- relevant state/territory environmental protection legislation

Unit Sector(s)

Not applicable.

Competency Field

B – Equipment Checking and Maintenance