



Australian Government

Department of Education, Employment and Workplace Relations

TLIC3029A Stable a heritage motive power unit

Release: 1

TLIC3029A Stable a heritage motive power unit

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to stable a motive power unit in accordance with relevant workplace practices, rail regulations and codes of practice. It includes determining the required stabling location, shunting and securing the train, stabling and securing the motive power unit, carrying out all required post-operational checks and completing post-operational paperwork. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

Application of the Unit

Persons achieving competence in this unit will need to fulfil the applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines and local rail regulations and codes of practice as they apply to the operation of heritage railway systems.

Work is performed under some supervision, generally within a team environment.

It involves the application of routine operational principles and procedures to the stabling and securing of a motive power unit across a variety of operational contexts in the Australian heritage rail system.

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability Skills 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

ELEMENT	PERFORMANCE CRITERIA
1 Determine stabling location	1.1 Contact is made with train controller and yard staff to determine planned location for stabling the motive power unit 1.2 Directions of train controller and yard staff are interpreted and followed 1.3 Care is taken to keep clear of other roads
2 Stable motive power unit	2.1 Train is shunted and secured in accordance with directions, workplace procedures and rail regulations 2.2 Motive power unit is stabled as directed 2.3 Derailers are set in place as per workplace procedures and rail regulations 2.4 Handbrakes are applied 2.5 Power brakes are applied 2.6 Motive power unit is shut down as per manufacturers instructions and workplace procedures 2.7 Cab is secured as per workplace procedures
3 Carry out post-operational checks	3.1 Fuel and fluid levels are checked and any required action is taken to replenish them 3.2 Inspection is made of motive power unit as per workplace procedures 3.3 Any identified faults and defects are fixed or reported and recorded as per workplace procedures 3.4 Faulty and defective equipment that presents a safety risk is isolated and tagged as per workplace procedures and rail regulations 3.5 Outcomes of post-operational checks are recorded as per workplace procedures
4 Complete post-operational paperwork	4.1 All required safeworking documentation is completed as per workplace procedures and rail regulations 4.2 All equipment is returned and stowed as per workplace requirements

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

REQUIRED KNOWLEDGE AND SKILLS

- Applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines and local rail regulations and codes of practice as they relate to heritage railway operations
- Relevant OH&S and environmental procedures and regulations
- Motive power unit controls, instruments and indicators and their purpose, location and use
- Procedures for stabling a motive power unit
- Braking and safety system procedures
- Operating controls to start, accelerate, decelerate and stop a motive power unit
- Speed and load limits compliance requirements
- Procedures for managing hazardous situations when operating and stabling a motive power unit
- Procedures for operating and shutting down auxiliary systems
- Procedure for completing relevant documentation when stabling a motive power unit
- Procedures to be followed in the event of an emergency
- Procedures for minor maintenance, cleaning, lubricating and servicing of motive power unit
- Procedures for identifying equipment defects and assessing for appropriate action
- Motive power unit knowledge may include: monitoring devices; braking and power equipment; ancillary systems; and signalling systems
- Local procedures and operating requirements
- Typical defects that can occur on a motive power unit and related action that should be taken
- Procedures for operating electronic communications equipment with required protocol

Required skills:

- Communicate effectively with others when stabling a heritage motive power unit
- Read and interpret instructions, procedures and information relevant to the inspection, preparation, start up and positioning of a motive power unit
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to the stabling of a motive power unit
- Operate electronic communications equipment to required protocol
- Work collaboratively with others as part of a train crew
- Identify and assess motive power unit defects and deficiencies and take appropriate action to report, isolate, repair or replace any identified defective equipment as per workplace procedures
- Implement contingency plans for unplanned events
- Apply precautions and required action to minimise, control or eliminate hazards that may exist when stabling a motive power unit
- Recognise problems that may arise when stabling a motive power unit and take appropriate

Required skills:

action

- Check and replenish fuel and fluids and carry out lubrication requirements on a motive power unit
- Modify activities depending on differing operational contingencies, risk situations and environments
- Adapt to differences in motive power units and associated equipment and procedures
- Select and use required personal protective equipment conforming to industry and OH&S standards
- Conduct a visual inspection of a motive power unit
- Document outcomes of an inspection of a motive power unit
- Shut down a motive power unit after service

Evidence Guide**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 underpinning knowledge and skills
 - relevant legislation and workplace procedures
 - other relevant aspects of the range statement

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

EVIDENCE GUIDE

	procedures, regulations, codes of practice and operation manuals
Method of assessment	• Assessment of this unit must be undertaken by a registered training organisation • 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 at the registered training organisation, and/or • in an appropriate range of situations in the workplace

Range Statement

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.

Operations may be conducted:	• by day or night in all relevant weather conditions
Heritage motive power units may include all heritage motive power units in service within Australian rail systems and may include:	• diesel locomotives • electric locomotives • railcars • multiple units (including electric multiple units)
Motive power equipment may include:	• auxiliary systems • automatic control systems • braking systems • drive systems • instrumentation • manual controls • remote train and signal control systems • communication systems • warning equipment • power source • vigilance systems • traction systems • head and marker lights
Inspection of a heritage motive	• lights • hoses

RANGE STATEMENT

power unit may include:

- couplings
- destination boards (electric urban train services)
- doors and door locks
- springs
- brake equipment
- wheels
- seals
- sand and fuel (regional diesel train services)
- pantographs (in case of electric MPUs)
- electrical cables
- glass windows and doors
- compressor oil levels
- automatic power cut out sensors
- audible faults (e.g. hiss of escaping air)
- visible faults (e.g. oil leaks, tears and cracks)

Post operation checks may include:

- lubrication system
- checking for fluid leaks
- brake testing
- checking of fluid levels

Risk minimisation may require differentiating between faults, defects and deficiencies that:

- do not present a hazard and could be attended to under running maintenance or in a normal maintenance schedule
- present a potential hazard and need to be attended to under running maintenance or at the next most practical opportunity
- present an immediate hazard and require immediate attention

Relevant personnel may include:

- train crew
- train controllers and signallers
- rostering supervisors and staff
- other train drivers and crews
- depot coordinators
- yard masters, supervisors and other operational personnel
- service delivery supervisors
- electric train service supervisor
- station yard staff
- maintenance and cleaning personnel
- immediate internal or external customers

Action taken upon the identification of faults, defects or deficiencies may include:

- reporting the problem and carrying out repairs (depending on the level and extent of work required), or isolating and tagging the faulty equipment and advising appropriate personnel of the fault and need for repair or replacement

RANGE STATEMENT

Depending on the organisation concerned workplace procedures may be called:

- standard operating procedures
- company procedures
- enterprise procedures
- organisational procedures
- established procedures

Safety and personal protective equipment may include:

- gloves
- sunscreen and sunglasses
- safety glasses
- insect repellent
- safety headwear and footwear
- two-way radios
- hand lamps
- flags
- safety devices
- audible indicators
- breathing equipment
- fire extinguishers
- high visibility clothing
- hearing protection

Information and documents may include:

- applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines
- motive power unit operational records and user log books
- maintenance notices, records and requests
- preparation sheets certificates and service dockets
- train running sheets
- time sheets
- safe working documentation
- automatic train protection parameters
- operational instructions, policies and procedures, including: those related to preventing motive power units from moving; track speed, length and load limitations; monitoring and complying with signals; and procedures for operating in accordance with specific track conditions
- emergency procedures manual

Applicable legislation, regulations and codes may include:

- applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines
- relevant Australian Standards and related requirements

RANGE STATEMENT

- relevant state/territory OH&S legislation
- relevant state/territory environmental protection legislation

Unit Sector(s)

Not Applicable

Competency Field

Competency Field C - Vehicle Operation