



Australian Government

TLIB4080A Identify, diagnose and rectify minor faults on motive power units and rolling stock

Release 1

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Modification History

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

Unit Descriptor

This unit involves the skills and knowledge required to identify, diagnose and rectify minor faults in accordance with workplace requirements, including identifying repair requirements, conducting minor repairs, checking and reporting minor repairs.

Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

Work must be carried out in compliance with organisational procedures and the regulations and safeworking codes of practice relevant to fault diagnosis and rectification.

Work involves the application of routine minor fault diagnosis and rectification procedures to maintain the safety and operation of motive power units and rolling stock across a variety of operational rail transport contexts.

Licensing/Regulatory Information

Refer to the 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 Identify faults, defects and deficiencies | <ul style="list-style-type: none">1.1 Operational capability of rolling stock and/or motive power unit ancillary equipment is evaluated1.2 Faulty or damaged components or equipment are identified and assessed1.3 Impact of faults on work requirements is identified and safe operating capabilities are evaluated1.4 Work areas and equipment are made safe for inspection |
| 2 Conduct minor repairs | <ul style="list-style-type: none">2.1 Minor repairs are carried out in accordance with manufacturer specifications and organisational procedures2.2 Equipment, tools and required materials are operated, applied and handled in accordance with work health and safety (WHS)/occupational health and safety (OHS) requirements and manufacturer specifications to prevent injury and damage |
| 3 Check and report minor repairs | <ul style="list-style-type: none">3.1 Minor repairs are checked for compliance with safety3.2 Equipment is checked to ensure it conforms to organisational standards3.3 Repairs are recorded in appropriate records or logbooks3.4 Operational capabilities are monitored and further evaluated3.5 Communication is maintained with relevant personnel |

Required Skills and Knowledge

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

Required knowledge:

- Communication protocols
- Emergency procedures
- Isolation systems
- Operational requirement of rolling stock
- Relevant information/records may include:
 - award, enterprise bargaining agreement, other industrial arrangements
 - checklists and records for diagnosing and rectifying minor faults
 - data and document control procedures
 - precautions and procedures to be adopted to protect the environment when diagnosing and rectifying minor faults, defects and deficiencies
 - relevant regulations including state/territory safety codes of practice
 - tool/equipment manufacturer instructions, specifications and recommended procedures
 - workplace operational and technical instructions and procedures for diagnosing and rectifying minor faults, defect and deficiencies
- Relevant Australian Standards and certification requirements
- Relevant organisational standards
- Relevant state/territory environmental protection legislation
- Relevant state/territory regulations, codes of practice and safeworking system requirements
- Relevant WHS/OHS legislation, regulations, codes and procedures
- Tools and equipment used when diagnosing and rectifying minor faults, defects and deficiencies and the procedures and precautions for their care, use and storage
- Typical minor repair problems that can occur, and related action that should be taken
- Workplace component and material supply system
- Workplace documentation and record requirements
- Workplace procedures and policies for the diagnosis and repair of minor faults, defects and deficiencies

Required skills:

- Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities
- Communicate effectively with others when rectifying minor faults, defects and deficiencies
- Conduct risk assessment to identify hazards
- Implement contingency plans when diagnosing and rectifying minor faults, defects and deficiencies

- Make decisions based on evaluation of faults, defects and deficiencies and operational capabilities
- Modify activities depending on differing operational contingencies, risk situations and environments
- Operate and adapt to differences in equipment in accordance with standard operating procedures
- Operate tools and equipment when identifying, diagnosing and rectifying minor faults, defects and deficiencies
- Read and interpret instructions, procedures, information and signs relevant to the identification, diagnosis and rectification of minor faults, defects and deficiencies
- Select and use required personal protective equipment conforming to industry and WHS/OHS standards
- Work collaboratively with others when identifying, diagnosing and rectifying minor faults, defects and deficiencies
- Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment

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.

Assessment must include exercises that demonstrate competent performance of the following in a range of situations:

- carrying out checks of different types of motive power units and rolling stock
- identifying possible faults, defects and deficiencies, and appropriate remedial activities
- carrying out minor repairs correctly.

Context of and specific resources for assessment

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

Resources for assessment include access to:

- 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.

Minor repairs may include:

- broken or leaking brake and branch pipes
- changing brake blocks
- changing flexible air hoses/hosebags
- coupling systems, for example changing knuckles
- inspecting wheels and ancillary equipment in cabin or on rolling stock
- isolating equipment
- minor component change out
- safety systems

Safety equipment may include:

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

Organisational procedures may include:

- company procedures
- enterprise procedures
- established or standard procedures
- workplace procedures

Contingency plans may include:

- emergency response plans
- instructions from infrastructure owner
- instructions from network controller
- personal injury

Unit Sector(s)

Not applicable.

Competency Field

B – Equipment Checking and Maintenance