



Australian Government

TLIB3113B Diagnose and rectify minor faults on motive power units and rolling stock

Release 1

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Modification History

Release 1. Revised unit.

This unit replaces and is equivalent to TLIB3113A Diagnose and rectify minor faults on motive power units and rolling stock.

Unit Descriptor

This unit involves the skills and knowledge required to identify, diagnose and rectify minor faults on motive power units and rolling stock in accordance with workplace requirements. It includes identifying maintenance and/or repair requirements, conducting minor maintenance and routine repairs, checking and reporting minor repairs and/or maintenance, and providing support in accordance with workplace procedures. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

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

Work is performed under some supervision, generally within a team environment. It involves the application of routine minor fault diagnosis and rectification procedures to maintain the safety and operation of equipment across a variety of operational rail transport contexts.

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 Identify maintenance/repair requirements | <p>1.1 Condition of rolling stock and/or motive power unit ancillary equipment is assessed as part of job role</p> <p>1.2 Faulty or damaged components or equipment are identified and assessed for component exchange or minor repair</p> <p>1.3 Equipment and tools required are identified and obtained</p> <p>1.4 Equipment is prepared and work areas are checked to ensure repair/maintenance/component exchange activities are carried out in a safe environment</p> <p>1.5 Faulty or damaged components or equipment that are not able to be repaired or exchanged are reported for further maintenance in accordance with workplace procedures</p> |
| 2 Conduct minor maintenance and routine repairs | <p>2.1 Minor repair/maintenance/component exchange are carried out in accordance with the manufacturers specifications and workplace procedures</p> <p>2.2 Equipment, tools and materials required are operated, applied and handled in accordance with OH&S requirements and manufacturers specifications to prevent injury and damage</p> |
| 3 Check and report minor repairs/maintenance | <p>3.1 Minor repair/maintenance/component exchange activities are checked for compliance with safety requirements and workplace procedures</p> <p>3.2 Equipment is checked to confirm that it has been restored to operational standards</p> <p>3.3 Repair/maintenance/component exchange activities are documented in accordance with workplace procedures and regulatory requirements</p> <p>3.4 Work area is checked for cleanliness and operational safety</p> |

Required Skills and Knowledge

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

Required knowledge:

- Relevant state/territory regulations, codes of practice and safeworking system requirements
- Relevant OH&S and environmental protection requirements
- Workplace procedures and policies for the diagnosis and repair of minor faults
- Typical minor repair problems that can occur, and related action that should be taken
- Tools and equipment used when diagnosing and rectifying minor faults and the procedures and precautions for their care, use and storage
- Workplace documentation and records requirements
- Procedures to be followed in the event of an emergency
- Workplace component and material supply system

Required skills:

- Communicate effectively with others when diagnosing and rectifying minor faults
- Read and interpret instructions, procedures, information and signs relevant to the identification, diagnosis and rectification of minor faults
- Complete documentation related to work activities
- Work collaboratively with others when identifying, diagnosing and rectifying minor faults
- Implement contingency plans for unplanned events that may occur when rectifying minor faults
- Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities
- Operate tools and equipment when diagnosing and rectifying minor faults
- Modify activities depending on differing operational contingencies, risk situations and environments
- Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment
- Operate and adapt to differences in equipment in accordance with standard operating procedures
- Select and use required personal protective equipment conforming to industry and OH&S standards

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

Assessment must include exercises which 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 and defects and the appropriate remedial activities
- carrying out minor repair, maintenance and component exchange activities correctly

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.

Equipment, motive power units and rolling stock to be checked and maintained may include:

- all classes of locomotives, motive power units, rail cars, wagons or carriages in service within Australian rail systems

Minor maintenance/repair component exchange may include:

- minor component change out
- changing flexible air hoses/hosebags
- auto-coupling knuckles
- brake blocks
- inspecting wheels and ancillary equipment in cabin or on rolling stock

Safety equipment may include:

- high visibility clothing
- sunscreen and sun glasses
- insect repellent
- gloves, safety headwear, mask and footwear
- portable radios
- flags and hand lamps
- safety glasses and hearing protection
- safety devices

Consultative processes may involve:

- workplace personnel including supervisors and managers
- union representatives
- industrial relations and OH&S specialists
- other train crew

Depending on the type of organisation concerned and the local terminology used, organisational procedures may be known as:

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

Contingency processes may relate to:

- personal injury
- tool malfunctions

Information/records may include:

- workplace operational and technical instructions and procedures for the diagnosis and rectification of minor faults
- relevant regulations including state/territory safety codes of practice
- maintenance checklists and records for the diagnosis and rectification of minor faults
- tool/equipment manufacturers instructions, specifications and

Applicable regulations and legislation may include:

- recommended procedures
- precautions and procedures to be adopted to protect the environment when diagnosing and rectifying minor faults
- OH&S procedures
- relevant Australian Standards and certification requirements
- emergency procedures
- award, enterprise bargaining agreement, other industrial arrangements
- relevant state/territory regulations, codes of practice and safeworking system requirements
- relevant state/territory OH&S legislation
- relevant state/territory environmental protection legislation
- workplace relations regulations including equal opportunity, equal employment opportunity and affirmative action legislation
- workers compensation regulations

Unit Sector(s)

Not applicable.

Competency Field

B – Equipment Checking and Maintenance