



Australian Government

Department of Education, Employment and Workplace Relations

TLIB3113A Diagnose and rectify minor faults on motive power units and rolling stock

Release: 1

TLIB3113A Diagnose and rectify minor faults on motive power units and rolling stock

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to 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

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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

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 Identify maintenance/repair requirements	1.1 Condition of rolling stock and/or motive power unit ancillary equipment is assessed as part of job role 1.2 Faulty or damaged components or equipment are identified and assessed for component exchange or minor repair 1.3 Equipment and tools required are identified and obtained 1.4 Equipment is prepared and work areas are checked to ensure repair/maintenance/component exchange activities are carried out in a safe environment 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
2 Conduct minor maintenance and routine repairs	2.1 Minor repair/maintenance/component exchange are carried out in accordance with the manufacturers specifications and workplace procedures 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
3 Check and report minor repairs/maintenance	3.1 Minor repair/maintenance/component exchange activities are checked for compliance with safety requirements and workplace procedures 3.2 Equipment is checked to confirm that it has been restored to operational standards 3.3 Repair/maintenance/component exchange activities are documented in accordance with workplace procedures and regulatory requirements 3.4 Work area is checked for cleanliness and operational safety

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level 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

REQUIRED KNOWLEDGE AND SKILLS

- 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 diagnosis and rectification of minor faults
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to work activities
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when diagnosing and rectifying minor faults
- Promptly report and/or rectify any identified problems, faults or malfunctions that may arise when diagnosing and rectifying minor faults in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unplanned events that may occur when diagnosing and rectifying minor faults
- Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities
- Monitor work activities in terms of planned schedule
- 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
- Monitor performance of equipment

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.

EVIDENCE GUIDE

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

- 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, 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.

Equipment, motive power units and rolling stock to be checked and maintained may include:	all classes of locomotives, motive power units, rail cars and types of wagons in service within Australian rail systems
Operations may be carried out in typical rail transport situations, including:	- by day or night - in all weather conditions - in exposed conditions and controlled or open environments
Minor maintenance/repair component exchange may include:	- minor component change out - diagnosing minor faults - identifying correct lubricants - identifying correct fuel and carrying out refuelling - identifying correct solvents and cleaning fluids - maintaining fluid and air pressures - replacing faulty/damaged/worn equipment - servicing and cleaning batteries - inspecting wheels and ancillary equipment in cabin or on rolling stock
Safety equipment may include:	- high visibility clothing - end of train markers - 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
Environmental hazards may include:	- leaking oil and fuel - defective or inappropriately adjusted exhaust systems - inappropriate disposal of fluids in drains or sewerage systems - inappropriate disposal of waste and rubbish
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	company procedures

RANGE STATEMENT

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| organisation concerned and the local terminology used, workplace procedures may include: | <ul style="list-style-type: none">• enterprise procedures• organisational procedures• established or standard procedures |
| Contingency processes may relate to: | <ul style="list-style-type: none">• personal injury• tool malfunctions |
| Information/records may include: | <ul style="list-style-type: none">• workplace operational and technical instructions and procedures for the diagnosis and rectification of minor faults• relevant regulations including state/territory safety codes of practice and safeworking regulations• maintenance checklists and records for the diagnosis and rectification of minor faults• tool/equipment manufacturers instructions, specifications and recommended procedures• precautions and procedures to be adopted to protect the environment when diagnosing and rectifying minor faults• OH&S procedures• QA plans and procedures• relevant Australian Standards and certification requirements• emergency procedures• award, enterprise bargaining agreement, other industrial arrangements |
| Applicable regulations and legislation may include: | <ul style="list-style-type: none">• 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

Competency Field

B - Equipment Checking and Maintenance