



Australian Government

Department of Education, Employment and Workplace Relations

MEM18038B Maintain wheels and tyres

Release: 1

MEM18038B Maintain wheels and tyres

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers assessing wheel condition, and repairing/replacing and maintaining the wheel.
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Application of the Unit

Application of the unit	<p>This unit applies to the basic maintenance and repair or replacement of wheel rims and to the full range of wheel/tyre assemblies, plant and equipment using appropriate regulations, codes of practice, manufacturers' specifications or in-house standards as a guide for assessment repair and assembly.</p> <p>For complex rim repairs, appropriate fitting or welding units may be required, for example, Unit MEM18003C (Use tools for precision work) and Unit MEM18006C (Repair and fit engineering components).</p> <p>Band: A</p> <p>Unit Weight: 2</p>
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		
Path 1	MEM18001C	Use hand tools

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Assess wheel condition	1.1.Rim/tyre designs, constructions, codes, balancing, fastening principles and terminology are understood. 1.2.Fastening components are correctly assessed for damage and security. 1.3.Abnormal tyre wear is recognised and cause of fault is correctly determined. 1.4.Unsafe tyre and/or wheel condition is recognised and remedial action is determined.
2. Rectify and maintain wheel	2.1.Safety procedures associated with tyre/wheel removal, handling, inflation, assembly and disassembly and fastening are understood and adhered to. 2.2.Wheels/tyres are safely removed and replaced using standard procedures and appropriate tools/equipment. 2.3.Tools and equipment are correctly applied and used. 2.4.Ballasting and/or inflation of tyres is performed safely and to specification. 2.5.Static/dynamic balancing of wheels is performed to specification. 2.6.Rim/tyre/tube faults are rectified to specifications, regulations or codes. 2.7.Rectification activities are accurately recorded. 2.8.Wheel bearings are correctly lubricated to specification.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

Look for evidence that confirms skills in:

- reading, interpreting and following information on written job instructions, specifications, standard operating procedures, charts, lists, drawings and other applicable reference documents
- planning and sequencing operations

REQUIRED SKILLS AND KNOWLEDGE

- checking task-related information
- checking for conformance to specification
- identifying damaged fastening components
- identifying abnormal tyre wear
- checking wheel fastening components for damage and security
- identifying corrective action to be taken for unsafe tyre and wheel condition
- removing and replacing wheels/tyres using appropriate tools and equipment
- using tools and equipment correctly and appropriately
- undertaking ballasting and/or inflation of tyres
- balancing wheels to specification
- identifying repairable rim, tyre and tube faults
- repairing faults in rims/tyres/tubes to specification
- recording work activities
- lubricating wheel bearings in accordance with specification

Required knowledge

Look for evidence that confirms knowledge of:

- the design and construction of a variety of rims and tyres
- the principles of fastening and balancing of wheels
- the relevant codes and standards
- the procedures for checking wheels for secure fastening
- the reasons for checking fastening components for damage and security
- the causes of abnormal tyre wear
- examples and causes of unsafe tyre and wheel condition
- the procedures for removing, handling, inflating, assembling/disassembling and fastening of tyres and wheels
- the safety precautions to be taken when working with wheels and tyres
- the tools, techniques and equipment required to carry out the above procedures
- the procedures, tools, techniques and equipment for static and dynamic balancing of wheels
- the reasons for selecting the chosen tools, techniques and equipment
- the procedures, tools, techniques and equipment for repairing rim, tyre and tube faults
- examples of unrepairable rim, tyre and tube faults
- the procedures for recording repairs undertaken on rims, tyres and tubes
- the procedures for lubricating wheel bearings
- types of wheel bearing lubricant and their application
- hazards and control measures associate with maintaining and rectifying wheels and tyres, including housekeeping
- safe work practices and procedures

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

A person who demonstrates competency in this unit must be able to maintain wheels and tyres. Competency in this unit cannot be claimed until all prerequisites have been satisfied.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.

Context of and specific resources for assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with maintaining wheels and tyres, or other units requiring the exercise of the skills and knowledge covered by this unit.

Method of assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

EVIDENCE GUIDE**Guidance information for
assessment****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. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Unit Sector(s)

Unit sector	
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Co-requisite units

Co-requisite units		

Competency field

Competency field	Maintenance and diagnostics
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