



Australian Government

Department of Education, Employment and Workplace Relations

MEM18008B Balance equipment

Release: 1

MEM18008B Balance equipment

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers checking the balance and balancing equipment.
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Application of the Unit

Application of the unit	<p>Work is undertaken with minimum supervision or team environment. Work may be undertaken in the field, on-site or in a workshop environment. Balancing may include the addition or removal of material. All specifications for machine operation and degree of balance to be supplied.</p> <p>Wheel and tyre balancing is covered in Unit MEM18038B (Maintain wheels and tyres).</p> <p>Where additional fitting and repair skills are required then MEM18003C (Use tools for precision work) should also be considered.</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	MEM09002B	Interpret technical drawing
	MEM12023A	Perform engineering measurements
	MEM18001C	Use hand tools
	MEM18002B	Use power tools/hand held operations
	MEM18003C	Use tools for precision work
	MEM18006C	Repair and fit engineering components
	MEM18055B	Dismantle, replace and assemble engineering components

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. Check balance	1.1. Principles of equipment balance testing are understood. 1.2. Most appropriate balancing check procedure is selected. 1.3. Component is set up correctly and to site/manufacturer's procedure for balance check. 1.4. Balance/out of balance is determined and compared to specification requirements. 1.5. Out of balance readings are recorded to prescribed procedures.
2. Balance equipment	2.1. Principles and methods of rigid and/or flexible rotation balancing are understood. 2.2. Techniques of single and/or multi-plane balancing are used appropriate to application. 2.3. Equipment is balanced utilising correct procedures.

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:

- setting up component to be balanced
- operating balancing equipment
- recording out of balance readings
- balancing equipment using the appropriate techniques
- 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
- checking and clarifying task-related information
- checking for conformance to specifications
- undertake numerical operations, geometry and calculations/formulae within the scope of this unit

REQUIRED SKILLS AND KNOWLEDGE**Required knowledge**

Look for evidence that confirms knowledge of:

- principles of balancing
- reasons for testing equipment for balance
- reffect of out of balance components on machine/equipment operation and life
- several procedures for checking the balance of equipment
- the most appropriate procedure to be applied to selected balancing situations
- reasons for selecting the chosen balancing check procedure
- procedures for setting up the component to be balanced
- procedures for operating the balancing equipment
- specifications of the component to be balanced
- procedures for recording out of balance readings
- principles of rigid and flexible rotation balancing
- methods of rigid and flexible rotation balancing
- the techniques of single and multiple plane balancing
- the appropriate balancing technique for given balancing situations
- reasons for selecting the chosen balancing technique
- procedures for balancing out of balance equipment
- the precautions to be taken when adding or removing material to achieve balance
- hazard and control measures associated with balancing equipment, including housekeeping
- safe work practices and procedures

Evidence Guide

EVIDENCE GUIDE	
<p>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.</p>	
Overview of assessment	<p>A person who demonstrates competency in this unit must be able to balance equipment. Competency in this unit cannot be claimed until all prerequisites have been satisfied.</p>
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>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.</p>
Context of and specific resources for assessment	<p>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.</p> <p>This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with balancing equipment or other units requiring the exercise of the skills and knowledge covered by this unit.</p>
Method of assessment	<p>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.</p>
Guidance information for	

EVIDENCE GUIDE

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.

Equipment

Equipment may range from static balancing devices to sophisticated electronic dynamic balancing machines

Unit Sector(s)

Unit sector

Co-requisite units

Co-requisite units

Competency field

Competency field	Maintenance and diagnostics
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