



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **MEM21023A Plan, set up and operate horological workshop or service centre**

**Release: 1**

## MEM21023A Plan, set up and operate horological workshop or service centre

### Modification History

Not Applicable

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers planning, equipping and implementing a functional horological workshop or service centre to industry standards. This unit also covers basic administration procedures of a watch and clock service centre (e.g. quotations, security of goods held in trust, spare parts and repair administration procedures).
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit of competency applies to all those working in the horological service and repair industry (e.g. self-employed trade workers and workshop managers of large service centres). Applications may also be found in watch service centres and jewellery stores offering watch service and repair.</p> <p>This unit has been developed for watch and clock service and repair apprenticeship or post trade training and the recognition of trade-level skills in watch and clock servicing and repair.</p> <p>Band: B Unit weight: 4 points</p>
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### Licensing/Regulatory Information

Not Applicable

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	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. Plan workshop layout	1.1.Prepare sketches of workshop layout 1.2.Plan work zones 1.3.Source suppliers of fixtures and furnishings
2. Source and purchase tools and equipment	2.1.Establish a budget 2.2.Determine major plant equipment for after sales service 2.3.Establish an adequate supply of tools for each workbench 2.4.Source suppliers of tools and equipment 2.5.Establish costs and initiate purchase
3. Set up workshop or service centre	3.1.Purchase and set up furnishings and fittings 3.2.Install major plant bench tools and machinery 3.3.Implement ventilation, extraction and climate control systems 3.4.Establish repair administration systems 3.5.Establish spare parts systems and controls 3.6.Implement control and security measures for repair process
4. Prepare quotations and orders	4.1.Calculate profitability 4.2.Establish hourly rate 4.3.Correctly establish service and repair requirements 4.4.Determine availability and cost of spare parts 4.5.Provide customer with estimate 4.6.Prepare spare parts and other orders
5. Monitor workshop operations	5.1.Establish maintenance procedures for premises, major plant, equipment and tools 5.2.Review systems for efficiency and effectiveness 5.3.Implement improvements to operations

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

Required skills include:

- planning and organising

**REQUIRED SKILLS AND KNOWLEDGE**

- selecting and implementing appropriate repair systems
- preparing quotes and estimates
- preparing orders
- controlling stocks of spare parts
- sketching
- accessing information
- preparing procedures
- monitoring and reviewing procedures and systems

**Required knowledge**

Required knowledge includes:

- horological workshop and service centre layouts, zoning of areas and other considerations
- occupational health and safety (OHS) issues for watch and clock trade
- handling and storage/disposal of solvents and other chemicals
- job control systems and methods of monitoring work flow
- horological tools and equipment/suppliers
- ergonomics, ventilation, dust control, lighting and climate control requirements for horological industry

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<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>	
<p><b>Overview of assessment</b></p>	<p>A person who demonstrates competency in this unit must be able to plan and set up a horological workshop or service centre to industry standards, and monitor and review operations for efficiency and effectiveness in accordance with safety and other regulations and procedures.</p>
<p><b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b></p>	<p>Assessors must be satisfied that the candidate can competently and consistently:</p> <ul style="list-style-type: none"> <li>• plan horological service centre layout</li> <li>• source and set up equipment</li> <li>• set up repair systems and procedures</li> <li>• monitor and review operations</li> <li>• prepare quotes, estimates and orders.</li> </ul>
<p><b>Context of and specific resources for assessment</b></p>	<ul style="list-style-type: none"> <li>• Assessment may occur on the job or in an appropriately simulated environment. Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and information on workplace practices and OHS practices.</li> <li>• Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</li> <li>• Access must be provided to appropriate learning and/or assessment support when required. Where applicable, physical resources should include equipment modified for people with disabilities.</li> </ul>
<p><b>Method of assessment</b></p>	<ul style="list-style-type: none"> <li>• Assessment must satisfy the endorsed Assessment Guidelines of the MEM05 Metal and Engineering Training Package.</li> <li>• Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of underpinning knowledge.</li> <li>• Assessment methods must be by direct observation of tasks and include questioning on underpinning knowledge to ensure its correct interpretation and</li> </ul>

**EVIDENCE GUIDE**

	<p>application.</p> <ul style="list-style-type: none"><li>• Assessment may be applied under project-related conditions (real or simulated) and require evidence of process.</li><li>• Assessment must confirm a reasonable inference that competency is not only able to be satisfied under the particular circumstance, but is able to be transferred to other circumstances.</li><li>• Assessment may be in conjunction with assessment of other units of competency where required.</li></ul>
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**EVIDENCE GUIDE****Guidance information for assessment**

Assessment processes and techniques must be culturally appropriate and appropriate to the language and literacy capacity of the candidate and the work being performed.

**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.

**Workshop layout**

Workshop layout may include:

- orientation for adequate natural/artificial light
- ventilation control
- humidity and dust
- appropriately positioned power points
- consideration of work zone layout

**Work zones**

Work zones may include:

- customer reception
- administration
- dismantling and reassembling
- cleaning
- polishing
- storage (e.g. solvents, spare parts and technical guides)

**Fixtures and furnishings**

Fixtures and furnishings may include:

- workbenches
- chairs
- lights
- ventilation, extraction and dust suppression
- climate control
- desks
- point of sale and cash control devices



<b>RANGE STATEMENT</b>	
<b>Major plant and equipment</b>	Major plant and equipment may include: <ul style="list-style-type: none"> <li>• watch and clock servicing equipment</li> <li>• testing equipment, such as electronic testers for control of timing and water-resistance testing</li> <li>• machinery, such as watchmakers'/clockmakers' lathe</li> <li>• bench equipment, such as drill press and staking set</li> </ul>
<b>Supply of tools</b>	Supply of tools may include: <ul style="list-style-type: none"> <li>• comprehensive assortment of watch and clockmakers' hand tools</li> <li>• reference catalogues and publications</li> </ul>
<b>Ventilation, extraction and climate control systems</b>	Ventilation, extraction and climate control systems may include: <ul style="list-style-type: none"> <li>• air conditioning and ventilation</li> <li>• dust extraction and trapping</li> <li>• chemical storage, decanting areas and fume cupboards</li> </ul>
<b>Repair administration systems</b>	Repair administration systems may include: <ul style="list-style-type: none"> <li>• job envelope system</li> <li>• repair tracking software</li> </ul>
<b>Other orders</b>	Other orders may include: <ul style="list-style-type: none"> <li>• supplies</li> <li>• tools and equipment</li> <li>• consumables</li> <li>• materials and solutions</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Horology
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## Co-requisite units

<b>Co-requisite units</b>	
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<b>Co-requisite units</b>		

## Competency field

<b>Competency field</b>	
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