



Australian Government

MEM21023 Plan, set up and operate horological workshop or service centre

Release: 1

MEM21023 Plan, set up and operate horological workshop or service centre

Modification History

Release 1. Supersedes and is equivalent to MEM21023A Plan, set up and operate horological workshop or service centre

Application

This unit of competency defines the skills and knowledge required to plan, equip and set up a functional horological workshop or service centre.

It has been developed for post-trade training and the recognition of advanced trade-level skills in planning, equipping and setting up a functional horological workshop or service centre.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Band: B

Unit weight: 4

Pre-requisite Unit

MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information

Competency Field

Horology

Elements and Performance Criteria

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
1	Plan workshop layout	1.1	Follow standard operating procedures (SOPs)
		1.2	Comply with work health and safety (WHS) requirements at all times
		1.3	Prepare sketches of workshop layout

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
		1.4	Plan work zones
		1.5	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	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

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

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

Foundation Skills

This section describes those required skills (reading, writing, oral communication and numeracy) that are essential to workplace performance in this unit of competency.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Workshop layout includes the following:

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

Work zones include the following:

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

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Fixtures and furnishings include the following:

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

Major plant and equipment includes the following:

- watch and clock servicing equipment
- testing equipment
- electronic testers for control of timing and water-resistance testing
- machinery
- lathe
- bench equipment
- drill press
- staking set

Supply of tools include the following:

- comprehensive assortment of watch and clockmakers' hand tools
- reference catalogues and publications

Ventilation, extraction and climate control systems include the following:

- air conditioning and ventilation
- dust extraction and trapping
- chemical storage
- decanting areas
- fume cupboards

Repair administration systems include the following:

- job envelope system
- repair tracking software
- quotations
- security of goods held in trust
- spare parts and repair administration procedures

Other orders include the following:

- supplies
- tools and equipment
- consumables
- materials and solutions

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM21023A Plan, set up and operate horological workshop or service centre

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>

Assessment Requirements for MEM21023 Plan, set up and operate horological workshop or service centre

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- planning horological service centre layout
- planning the work zones
- sourcing suppliers for fixtures and furnishings
- sourcing and setting up major plant and equipment and establishing an adequate supply of tools
- implementing ventilation, extraction and climate control systems
- setting up repair systems and administration procedures
- preparing quotes, estimates and orders
- monitoring and reviewing operations, procedures and systems.

Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- safe work practices and procedures
- horological workshop and service centre layouts, zoning of areas and other considerations
- work health and safety (WHS) issues for watch and clock trade
- handling and storage/disposal of solvents and other chemicals
- administration procedures and systems
- 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.

Assessment Conditions

- Assessors must:

- have vocational competency in planning, setting up and operating horological workshop or service centre at least to the level being assessed with relevant industry knowledge and experience
- satisfy the assessor requirements in the *Standards for Registered Training Organisations 2015* or its replacement and comply with the *National Vocational Education and Training Regulator Act 2011*, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires
- Where possible assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

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