



Australian Government

MEM21011 Service calendar and other dial indication mechanisms for watches

Release: 1

MEM21011 Service calendar and other dial indication mechanisms for watches

Modification History

Release 1. Supersedes and is equivalent to MEM21011A Service calendar and other dial indication mechanisms for watches

Application

This unit of competency defines the skills and knowledge required to service and repair watches with different types or combinations of calendar and other dial indications. This work is often performed in conjunction with major servicing on both mechanical and quartz watches.

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

Band: A

Unit weight: 4

Pre-requisite Unit

MEM11011	Undertake manual handling
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information
MEM18001	Use hand tools
MEM21008	Service mechanical watches
MEM21009	Inspect, diagnose, adjust and repair mechanical watches
MEM21010	Service watch power generating systems

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	Determine servicing requirements	1.1	Follow standard operating procedures (SOPs)
		1.2	Comply with work health and safety (WHS) requirements at all times
		1.3	Identify watch type, calendar construction and dial indicator components
		1.4	Inspect condition and functions of calendar operation and dial indicator mechanisms, including creeping, semi-instantaneous, instantaneous, retrograde and rapid corrector
		1.5	Prepare watch for handover
		1.6	Record and document repair requirements
2	Dismantle and reassemble calendar and dial indication mechanisms	2.1	Select and use appropriate personal protective equipment (PPE) in accordance with SOPs
		2.2	Select and use appropriate workshop tools and equipment
		2.3	Open and close watch cases
		2.4	Dismantle and reassemble calendar and dial indication mechanisms according to design and construction constraints
3	Service and verify calendar and dial indication mechanisms	3.1	Identify calendar and dial indications drive mechanism
		3.2	Identify faults and repair or replace worn or damaged component parts
		3.3	Clean components using appropriate methods
		3.4	Inspect correct fitting and function of all components
		3.5	Verify sequencing and alignment of components during reassembly, including dial and hand fitting
		3.6	Lubricate components according to manufacturer

Elements describe the essential outcomes.

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

- 3.7 Test calendar and dial indications will not impact on watch performance, amplitude or timekeeping

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.

Watch type, calendar construction and dial indication components include one (1) or more of the following:

- date indications:
 - day/date
 - day/date/month
- moon phase and year indicators
- annual calendar
- perpetual calendar
- power reserve indicator
- equation of time

Record and document repair includes one (1) or more of the following:

- date and extent of repair
- cost of replacement part
- time spent on procedure

Workshop tools and equipment include one (1) or more of the following:

- hand tools:
 - tweezers
 - screwdrivers
 - eyeglasses
- hand fitting pushers
- stakes
- presses

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.

Calendar and dial indications drive mechanism include one (1) or more of the following:

- creeping
- semi-instantaneous
- instantaneous
- retrograde
- rapid corrector

Correct fitting and functions include one (1) or more of the following:

- end shake of components
- clearances of moving parts
- penetrations of calendar drive wheel mechanism and finger
- spaces
- safety features
- calendar change operation at midnight
- calendar action
- rapid corrector engagement and operation
- calendar day and date mechanisms

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM21011A Service calendar and other dial indication mechanisms for watches

Links

Companion Volume implementation guides are found in VETNet -

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