



Australian Government

Assessment Requirements for MEM21018 Service clock escapements and oscillating systems

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM21018A Service clock escapements and oscillating systems

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria on at least two (2) occasions and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- identifying different types of clock escapements/oscillating systems
- liaising with customer, verifying condition and performance, and identifying repair costs
- diagnosing and repairing faults in clock escapement action and fault finding oscillating systems
- calculating length of replacement pendulum and repairing, replacing and adjusting pendulum
- repairing, replacing and adjusting escapement and oscillator components
- setting up and adjusting clock escapements for optimum performance
- adjusting platform escapement and correct dephasing with contrate wheel
- verifying and confirming function of clock movement and adjusting rate of timepiece using appropriate timing machine in accordance with procedures
- recording and documenting repairs.

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 and use of personal protective equipment (PPE)
- clock escapement types
- oscillator types
- torsional pendulums and oscillator components
- performance characteristics of escapements and oscillators
- escapement adjusting techniques
- clock servicing procedures and techniques
- calculations and formulas for length of pendulum and geometry of escapements.

Assessment Conditions

- Assessors must:
 - have vocational competency in servicing clock escapements and oscillating systems 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.

Links

Companion Volume implementation guides are found in VETNet -

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