



Australian Government

**Assessment Requirements for MEM18045
Fault find and repair electrical
equipment/components up to 250 volts
single phase supply**

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Modification History

Release 1. Supersedes and is equivalent to MEM18045B Fault find/repair electrical equipment/components up to 250 volts single phase supply

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 and interpreting specifications, charts, lists, circuit drawings, schematics, regulatory and legislative requirements to fault find and repair electrical equipment/components up to 250 volts single phase supply
- checking that the electrical equipment/components are isolated and tagged where necessary in strict accordance with work health and safety (WHS) requirements and procedures
- locating and reading/recording built-in indicators and error codes
- checking and testing electrical components for correct operation and/or compliance with specifications
- identifying and localising faults in electrical equipment/components using appropriate fault-finding techniques and test equipment and recording/reporting faults in accordance with SOPs
- repairing/replacing or adjusting electrical equipment/components to specifications and selecting replacement parts using manufacturers' catalogues and data
- verifying that the electrical equipment/components are operating to specifications
- recording rectification activities in accordance with SOPs.

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)
- operation and characteristics of active and passive components
- basic motor operation of various types
- function of the electrical equipment/component within the circuit
- relevant regulatory requirements
- electrical equipment/component isolation procedures

- test equipment to be used to verify isolation of the electrical equipment/circuit
- errors indicated by built-in devices
- procedures for:
 - testing the operation of the electrical equipment/component and tools, equipment and techniques to be used and reasons for selection
 - localising faults in electrical equipment/components
 - recording/reporting faults in electrical equipment/components
 - recording electrical equipment/component rectifications
- specifications of the electrical equipment/component
- variations between test results and specifications
- techniques/procedures and adjustments that can be made for returning the electrical equipment/components to specification.

Assessment Conditions

- Assessors must:
 - have vocational competency in fault finding/repairing electrical equipment/components up to 250 volts single phase supply 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>