



Australian Government

Assessment Requirements for MEM18048 Fault find and repair/rectify basic electrical circuits

Release: 1

Assessment Requirements for MEM18048 Fault find and repair/rectify basic electrical circuits

Modification History

Release 1. Supersedes and is equivalent to MEM18048B Fault find and repair/rectify basic electrical circuits

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
- use appropriate personal protective equipment (PPE)
- identify and interpret specifications, charts, lists, circuit drawings, schematics, regulatory and legislative requirements to fault find and repair/rectify basic electrical circuits
- check and record built-in fault indicators and error codes to site requirements
- checking that the electrical circuit is isolated and tagged where necessary in strict accordance with work health and safety (WHS) requirements and procedures
- using diagnostic skills to locate faulty operation using appropriate fault-finding techniques and test equipment to verify faults
- test, adjust or set basic controls (e.g. pressure controls thermostats, timers and overloads)
- repairing/replacing or adjusting electrical circuits to specifications and verifying using appropriate test equipment that the electrical circuit is operating to manufacturers 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 PPE
- circuit characteristics
- relevant regulatory requirements
- errors indicated by built-in devices
- circuit isolation and tagging procedures
- common electrical test instruments and their application
- common techniques for testing electrical circuits
- recording/reporting requirements for electrical circuit faults
- appropriate techniques/procedures for returning the circuit/s to specification
- site/manufacturers' circuit specifications

- requirements for recording circuit rectifications or replacement.

Assessment Conditions

- Assessors must:
 - have vocational competency in diagnosing, repairing/rectifying basic electrical 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>