



Australian Government

**Assessment Requirements for MEM18049
Disconnect/reconnect fixed wired
equipment up to 1000 volts a.c./1500 volts
d.c.**

Assessment Requirements for MEM18049 Disconnect/reconnect fixed wired equipment up to 1000 volts a.c./1500 volts d.c.

Modification History

Release 1. Supersedes and is equivalent to MEM18049C Disconnect/reconnect fixed wired equipment up to 1000 volts a.c./1500 volts d.c.

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 disconnect/reconnect fixed wired equipment up to 1000 volts a.c./1500 volts d.c.
- checking that the electrical equipment is isolated and tagged where necessary in strict accordance with work health and safety (WHS) requirements and procedures using appropriate lock-off equipment and tags/signs
- disconnecting equipment by labelling and recording conductors and making safe disconnected cables/connections using appropriate tools, test equipment, procedures and techniques
- confirming isolation prior to reconnecting fixed wired equipment and checking connections and preparing conductors for termination in accordance with manufacturers' specifications and regulatory requirements
- connecting conductors to equipment and fasten/seal cables/wires/conduits using appropriate procedures and tools to relevant specifications and regulatory requirements
- testing terminated cables to ensure continuity and insulation resistance and complying with following requirements:
 - checking continuity of the protective earth conductor to determine whether it is sufficiently low
 - testing the resistance between the protective earth conductor and the neutral conductor to determine whether it is sufficiently low – not greater than 2 Ohms
 - testing the insulation resistance of active conductors to confirm that it is greater than 1 Megohm
- removing all lock-off devices and signage and checking/testing equipment and circuits for compliance to specifications
- rescuing/recovering of injured person in accordance with appropriate standards/procedures and providing first aid, where appropriate, including contacting the appropriate medical and rescue authorities
- recording details of first aid given.

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)
- basic knowledge of electrical theory for the operation of the circuit/equipment
- relevant regulatory requirements
- procedures for:
 - determining and recording equipment characteristics
 - proving and removing electrical isolation
 - labelling conductors and recording conductor layout
 - disconnecting conductors and terminating disconnected cables/connections
 - terminating conductors and checking connections and specifications that apply
 - connecting conductors to equipment
 - fastening and sealing the cables, wires and conduits and tools, techniques and equipment to be used
 - checking and testing the compliance of the equipment with specifications and tools, techniques and equipment to be used
 - recording first aid
- tools, techniques and equipment required to determine equipment characteristics, prove electrical isolation and disconnect/reconnect and terminate conductors
- point(s) of isolation for the fixed wired equipment and reasons for selecting the chosen isolation point(s)
- safe isolation and proving dead
- range of isolation procedures for the fixed wired equipment
- lock-off equipment and signs to be used and reasons for using and procedures for lock-off equipment and signage
- characteristics of the circuit and the equipment
- operational specifications of the fixed wired equipment
- points of danger to the injured person or potential rescuer
- recognised procedures for the movement and treatment of the injured person, including safe rescue of victim from a live situation, clearing of airways, care of spinal injuries, treatment of cuts/lesions, burns/scalds and treatment of shock
- appropriate local medical and rescue services.

Assessment Conditions

- Assessors must:
 - have vocational competency in disconnecting/reconnecting fixed wired equipment up to 1000 volts a.c./1500 volts d.c. 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>