



Australian Government

MEM03005 Rework and repair (electrical/electronic production)

Release: 1

MEM03005 Rework and repair (electrical/electronic production)

Modification History

Release 1. Supersedes and is equivalent to MEM03005B Rework and repair (electrical/electronic production)

Application

This unit of competency defines the skills and knowledge required to test electrical/electronic assemblies against functional requirements, identify faults, and repair or rework the assemblies to rectify the faults and applies to work undertaken on a range of components and printed circuit boards.

Where the interpretation of technical drawings is required unit MEM09002 Interpret technical drawing should also be selected.

Where the selection and use of manual handling is required unit MEM11011 Undertake manual handling should also be selected.

Where the selection and use of engineering measuring equipment is required unit MEM12023 Perform engineering measurements should also be selected.

Where the selection and use of power tools for hand held operations is required unit MEM18002 Use power tools/hand held operations should also be selected.

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

Band: A

Unit Weight: 8

Pre-requisite Unit

MEM03004	Perform electronic/electrical assembly (production)
MEM05001	Perform manual soldering/desoldering - electrical/electronic components
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information
MEM18001	Use hand tools

Competency Field

Assembly

Elements and Performance Criteria

Elements describe the essential outcomes.

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

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|---|--|-----|--|
| 1 | Determine job requirements | 1.1 | Follow standard operating procedures (SOPs) |
| | | 1.2 | Comply with work health and safety (WHS) requirements at all times |
| | | 1.3 | Use appropriate personal protective equipment (PPE) in accordance with SOPs |
| | | 1.4 | Identify job requirements from specifications, sketches, job sheets or work instructions |
| | | | |
| 2 | Perform tests | 2.1 | Test assembly for functional requirements from job sheets |
| | | 2.2 | Identify faults in assembly or soldering |
| | | | |
| 3 | Identify cause of fault and rectify fault | 3.1 | Identify cause of fault using procedures |
| | | 3.2 | Complete repair and/or rework according to instructions from job cards, sketches and assembly specifications |
| | | 3.3 | Handle and store components safely using appropriate anti-static handling procedures and techniques |

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.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM03005B Rework and repair (electrical/electronic production)

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for MEM03005 Rework and repair (electrical/electronic production)

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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
- following SOPs to test assembly for functional requirements and identify faults to be rectified
- rectifying faults and completing repair and/or rework according to appropriate instructions from job cards, sketches and assembly specifications
- using appropriate anti-static handling procedures and techniques to handle and store components safely.

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)
- functional requirements of the assembly
- assembly tests and methods
- common causes of faults in connections and components and their symptoms
- dangers of static electricity to electrical and electronic components
- anti-static procedures and techniques and the safe handling and storage requirements of electrical and electronic components.

Assessment Conditions

- Assessors must:
 - have vocational competency in reworking and repairing (electrical/electronic production) 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.

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