



Australian Government

**Assessment Requirements for MEM18088
Maintain and repair commercial air
conditioning systems and components**

Release: 1

Assessment Requirements for MEM18088 Maintain and repair commercial air conditioning systems and components

Modification History

Release 1. Supersedes and is equivalent to MEM18088B Maintain and repair commercial air conditioning systems and components

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, on at least (2) systems, and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- identifying and interpreting charts, lists, catalogues, specifications, drawings and relevant legislation with respect to maintaining and repairing commercial air conditioning systems and components
- selecting and using equipment to test and check temperature, flow and quality of conditioned air for conformance against specifications, legislation and regulations
- carrying out preventative maintenance according to manufacturers' specifications using refrigeration/air conditioning techniques/practices
- checking system components for correct operation using appropriate tools, techniques and test equipment and assessing component performance/operation against specifications
- identifying and localising faulty components and confirming malfunction by inspection/testing, making required adjustments to achieve specifications
- removing the refrigerant from the system and containing in accordance with procedures and regulatory requirements
- removing/dismantling and reassembling faulty components and selecting replace parts from manufacturers' catalogues to meet the required specifications
- undertaking calculations and numerical operations associated with maintaining and repairing commercial air conditioning systems and components
- charging the system and verifying correct operation of the equipment to meet specifications
- completing all maintenance records/reports 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)
- measuring instruments/equipment and specifications for checking air temperatures, air flows, air quality and air properties

- procedures for performing preventative maintenance on air conditioning systems and sequence of implementation
- techniques and procedures for inspecting, testing and assessing system components and operational compliance to meet specifications
- procedures for safely removing the refrigerant from the system and charging the system and all legislative and regulatory requirements
- tools, equipment, techniques and procedures for dismantling and repairing faulty components, reassembling and testing components
- air properties controlled by the air conditioning system
- measuring instruments/equipment and specifications required for checking component noise and vibration levels
- specifications and process for identifying system components
- operational characteristics of the system components
- appropriate process for localising and confirming faulty components
- selecting and using equipment for testing electrical compliance of equipment
- procedures for completing maintenance records/service reports and reporting non-conformances.

Assessment Conditions

- Assessors must:
 - have vocational competency in maintaining and repairing commercial air conditioning systems and components 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>