



Australian Government

Assessment Requirements for MEM23154 Analyse and service HVACR systems

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM23154A Analyse and service HVACR systems.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include:

- identifying and interpreting drawings, specifications, standards, codes and regulations relevant to heating, ventilation, air conditioning and refrigeration (HVACR) control systems
- implementing work health and safety (WHS) procedures and practices including the use of risk control measures
- demonstrate the use of software tools related to analyse and service HVACR control systems
- using tools and equipment to evaluate automatic control systems and determine control requirements on at least two occasions
- producing control diagrams
- analysing, adjusting and servicing HVACR control systems through appropriate measurements on at least two occasions
- communicating technical and procedural requirements to others
- dealing with unexpected situations
- documenting analysis and preparing recommendations in accordance with procedures.

Note: Where a volume and/or frequency is not specified, demonstration must be provided at least once.

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:

- appropriate personnel to consult
 - thermodynamics principles relevant to HVACR controls
 - control fundamentals
 - types of control equipment including microprocessors and sensors
 - direct data control (DDC) systems
 - supervisory control systems
 - safe work practices and procedures and use and application of personal protective equipment (PPE)
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- hazards and control measures associated with analysing and servicing HVACR systems including housekeeping
 - environmental requirements
 - organisational procedures
 - resource and equipment requirements.
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Assessment Conditions

- Assessors must:
 - have vocational competency in analysing and servicing HVACR 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 that 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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Links

Companion Volume Implementation Guides are available on VETNet -

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