



Australian Government

UEERA0090 Service room air conditioners

Release: 1

UEERA0090 Service room air conditioners

Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Application

This unit involves the skills and knowledge required to service room air conditioners.

This unit covers maintaining the effective and efficient operation of self-contained room air conditioners. It includes working safely, applying knowledge of room air conditioners, following service manuals, testing appliance function, locating and rectifying faults and defective components, and completing the necessary service documentation.

To undertake this unit, the learner must have a Trainee Refrigerant Handling Licence as it includes work on refrigeration and air conditioning equipment that carries the risk of a fluorocarbon refrigerant being emitted.

The skills and knowledge described in this unit require a national Refrigerant Handling Licence as it includes work on refrigeration and air conditioning equipment that carries the risk of a fluorocarbon refrigerant being emitted while decanting the refrigerant or manufacturing, installing, commissioning, servicing, maintaining or decommissioning refrigeration and air conditioning equipment.

The skills and knowledge described in this unit require a licence or permit to practice in the workplace where work is carried out on electrical installations which are designed to operate at voltages greater than 50 volt (V) alternating current (a.c.) or 120 V direct current (d.c).

Competency development activities in this unit are subject to regulations directly related to licensing. Where a licence or permit to practice is not held, skills and knowledge described in this unit require a relevant contract of training, such as an Australian Apprenticeship.

Additional and/or other conditions may apply in some jurisdictions subject to regulations related to refrigeration, air conditioning or electrical work. Practice in the workplace and during training is also subject to work health and safety (WHS)/occupational health and safety (OHS) regulations.

Permits may also be required for some work environments, such as confined spaces, working aloft, near live electrical apparatus and site rehabilitation.

Pre-requisite Unit

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

Competency Field

Refrigeration and air-conditioning

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to service room air conditioner

PERFORMANCE CRITERIA

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

1.1 WHS/OHS hazards, risk control methods, relevant standards, codes and legislation are obtained and applied

1.2 Extent of air conditioner work to be undertaken is determined from service/fault request and/or discussions with appropriate person/s

1.3 Advice is sought from work supervisor to ensure servicing work is coordinated effectively with others

1.4 Sources of materials/parts required for the servicing work are determined in accordance with workplace procedures

1.5 Tools, equipment and testing devices needed to locate faults are obtained in accordance with workplace procedures and checked for correct operation and safety

2 Service room air conditioner

2.1 Need to test or measure live work is determined in accordance with WHS/OHS requirements and conducted in accordance with workplace safety procedures

2.2 Air conditioner appliance is inspected, checked and isolated in accordance with WHS/OHS requirements and workplace procedures

2.3 Safety hazards resulting from air conditioner defect or fault are documented and risk control measures devised and implemented in consultation with appropriate person/s

- 2.4 Air conditioner appliances are tested for efficient operation and components affecting efficiency are inspected for wear or defects in accordance with industry standards, manufacturer service manuals and industry codes of practice
 - 2.5 Air conditioner appliance faults and their cause are determined through the application of refrigerated appliances and using measured and calculated values of appliance parameters
 - 2.6 Air conditioner appliance is dismantled, as required, and parts stored to protect against loss or damage
 - 2.7 Defective worn or faulty air conditioner appliance components are rechecked and their status confirmed
 - 2.8 Replacement parts required to rectify defects/faults are sourced and obtained in accordance with workplace procedures
 - 2.9 Effectiveness of the repair is inspected and tested in accordance with workplace procedures
 - 2.10 Air conditioner apparatus is reassembled, tested and prepared for return to service
 - 2.11 Unplanned situations are dealt with safely in accordance with workplace procedures and with the approval of authorised person/s in a manner that minimises risk to personnel and equipment
 - 2.12 Servicing activities are carried out without damage to apparatus, circuits, the surrounding environment or services using sustainable energy practices
- 3 Complete and report fault-finding and repair activities**
- 3.1 Work area is cleaned and made safe in accordance with workplace procedures
 - 3.2 Service report is completed and verified by appropriate person/s in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEE Electrotechnology Training Package Companion Volume Implementation Guide.

- Servicing self-contained room air conditioners must include at least the following:
- two types of room air conditioners
 - four of the following defects/faults:
 - higher energy use than previously experienced
 - not cooling/heating enough
 - fan not operating
 - appliance noisy
 - electric shock received from appliance cabinet

Unit Mapping Information

This unit replaces and is equivalent to UEENEEJ189A Service room air conditioners.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>

Assessment Requirements for UEERA0090 Service room air conditioners

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least two separate occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (WHS/OHS) requirements and workplace procedures and practices, including using risk control measures
- applying sustainable energy principles and practices
- completing service report accurately
- dealing with unplanned events/situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- determining the nature of the work from service request
- finding faults efficiently
- identifying defective components affecting appliance efficiency
- rectifying defects/faults effectively
- servicing room air conditioners
- testing appliance functions effectively.

Knowledge Evidence

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

- component repair/replacement methods
- relevant job safety assessments or risk mitigation processes
- relevant manufacturer specifications, including parts catalogues and service reports
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace policies and procedures
- self-contained room air conditioners, including types, applications, construction, components and operating characteristics
- typical component wear or defects
- typical faults.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

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.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

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