



Australian Government

UEENEEH123A Fault find and repair microwave heating apparatus

Release: 2

UEENEEH123A Fault find and repair microwave heating apparatus

Modification History

Not applicable.

Unit Descriptor

Unit Descriptor

1) Scope:

1.1) Descriptor

This unit covers fault finding and repair in microwave heating apparatus. The unit encompasses safe working practices, interpreting circuit diagrams, applying knowledge of microwave heating apparatus to logical fault finding procedures, conducting repairs, safety and functional testing and completing the necessary service documentation.

Application of the Unit

Application of the Unit 2)

This unit is intended for competency development entry-level employment based programs incorporated in approved contracts of training or approved training programs. It may also used to augment previously acquired competencies.

Licensing/Regulatory Information

License to practice 3)

The skills and knowledge described in this unit do not require a license to practice in the workplace provided equipment is not connected to installation wiring at voltage above 50 V a.c. or 120 V d.c. However other conditions may apply in some States/Territories subject to

License to practice**3)**

regulations related to electrical work.

Practice in the workplace and during training is also subject to regulations directly related to occupational health and safety and where applicable contracts of training such as apprenticeships.

Note:

1. Compliance with permits may be required in various jurisdictions and typically relates to the operation of plant, machinery and equipment such as elevating work platforms, powder operated fixing tools, power operated tools, vehicles, road signage and traffic control, lifting equipment and the like. Permits may also be required for some work environments such as confined spaces, working aloft, near live electrical apparatus and site rehabilitation.

2. Compliance may be required in various jurisdictions relating to currency in First Aid, confined space, lifting and risk safety measures.

Pre-Requisites**Prerequisite Unit(s)****4)****Competencies****4.1)**

Granting competency in this unit shall be made only after competency in the following unit(s) has/have been confirmed.

UEENEEE1 01A Apply Occupational Health and Safety regulations, codes and practices in the workplace

UEENEEE1 37A Document and apply measures to control OHS risks associated with electrotechnology work

Literacy and numeracy skills**4.2)**

Participants are best equipped to achieve competency in

this unit if they have reading, writing and numeracy skills indicated by the following scales. Description of each scale is given in Volume 2, Part 3 'Literacy and Numeracy'

Reading 3 Writing 3 Numeracy 3

Employability Skills Information

Employability Skills 5)

This unit contains Employability Skills

The required outcomes described in this unit of competency contain applicable facets of Employability Skills. The Employability Skills Summary of the qualification in which this unit of competency is packaged will assist in identifying Employability Skill requirements.

Elements and Performance Criteria Pre-Content

6) Elements describe the essential outcomes of a competency standard unit
Performance Criteria describe the required performance needed to demonstrate achievement of the element.
Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Prepare to find and repair faults.	1.1 OHS procedures for a given work area are identified, obtained and understood.
	1.2 OHS risk control measures and procedures are followed in preparation for the work.
	1.3 The nature of the fault is obtained from documentation, work supervisor and customer to establish the scope of work to be undertaken.

ELEMENT	PERFORMANCE CRITERIA
	1.4 Advice is sought from the work supervisor to ensure the work is co-ordinated effectively with others.
	1.5 Sources of materials that may be required for the work are established in accordance with established procedures.
	1.6 Tools, equipment and testing devices needed to carry out the work are obtained in accordance with established procedures and checked for correct operation and safety.
2 Find and repair faults.	2.1 OHS risk control measures and procedures for carrying out the work are followed.
	2.2 The need to test or measure live is determined in strict accordance with OHS requirements and when necessary conducted within established safety procedures.
	2.3 Apparatus is checked as being isolated where necessary in strict accordance OHS requirements and procedures.
	2.4 Fault finding is approached methodically drawing on knowledge of microwave heating apparatus using measured and calculated values of operating parameters and referenced to manufacturer's specifications.
	2.5 Equipment components are dismantled where necessary and parts stored to protect them against loss or damage.
	2.6 Faulty components are rechecked and their fault status confirmed.
	2.7 Faulty components are readjusted or replace in accordance with established procedures.
	2.8 Effectiveness of the repaired component is tested in accordance with established procedures.
	2.9 Apparatus is reassembled, finally tested and prepared for return to customer.

ELEMENT	PERFORMANCE CRITERIA
3 Completion and report fault finding and repair activities.	2.10 Unexpected situations are dealt with safely and with the approval of an authorised person.
	2.11 Fault finding and repair activities are carried out efficiently without waste of materials or damage to apparatus and the surrounding environment or services and using sustainable energy practices.
	3.1 OHS work completion risk control measures and procedures are followed.
	3.2 Work area is cleaned and made safe in accordance with established procedures.
	3.3 Written justification is made for repairs to apparatus including components and materials used.
	3.4 Acceptance that the reported fault(s) have been repaired is sought from an appropriate person in accordance with established procedures.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

8) This describes the essential skills and knowledge and their level, required for this unit.

Evidence shall show that knowledge has been acquired of safe working practices and finding and repairing faults in microwave heating apparatus.

All knowledge and skills detailed in this unit should be contextualised to current industry practices and technologies.

KS01-EH123A

Microwave heating apparatus

Evidence shall show an understanding of microwave heating apparatus fault finding and repair, applying safe working practices and relevant Standards, Codes and Regulations to an extent indicated by the following aspects:

T1. Propagation of electromagnetic waves through the atmosphere, microwave frequency bands

T2. Microwave heating devices encompassing:

- Components
- Operating parameters and constraints
- Measurements, test equipment and testing techniques

T3. EMI/EMC, generation, suppression and reduction.

Evidence Guide

EVIDENCE GUIDE

9)

Overview of Assessment 9.1)

**Critical aspects
of evidence
required to
demonstrate
competency in
this unit**

9.2)

**Context of and
specific
resources for
assessment**

9.3)

**Method of
assessment**

9.4)

**Concurrent
assessment and
relationship with
other units**

9.5)

Range Statement

RANGE STATEMENT

10) This relates to the unit as a whole providing the range of contexts and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

This unit shall be demonstrated in relation to finding and repairing at least four faults in two different microwave heating devices.

Generic terms used throughout this Vocational Standard shall be regarded as part of the Range Statement in which competency is demonstrated. The definition of these and other terms that apply are given in Volume 2, Part 2.1.

Unit Sector(s)

Not applicable.

Competency Field

Competency Field	11)
	Electronics