



Australian Government

UEEEEC0074 Troubleshoot resonance circuits in an electronic apparatus

Release: 1

UEEEEC0074 Troubleshoot resonance circuits in an electronic apparatus

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 troubleshoot resonance circuits in an electronic apparatus.

It includes working safely, applying problem-solving procedures, and providing solutions derived from measurements and calculations to problems in resonance circuits.

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

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

Pre-requisite Unit

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

UEECD0043 Solve problems in direct current circuits

or

UEECD0044 Solve problems in multiple path circuits

UEECD0046 Solve problems in single path circuits

Competency Field

Electronics and Communications

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

1 Prepare to troubleshoot resonance circuits

- 1.1** Work health and safety (WHS)/occupational health and safety (OHS) processes and workplace procedures for a given work area are identified, obtained and applied
- 1.2** WHS/OHS risk control work preparation measures and workplace procedures are followed
- 1.3** Scope of fault is obtained from documentation and/or work supervisor to determine work to be undertaken
- 1.4** Advice is sought from work supervisor to ensure the work is coordinated effectively with others
- 1.5** Sources of materials required for work are determined in accordance with workplace procedures
- 1.6** Tools, equipment and testing devices required for work are obtained and checked for correct operation and safety

2 Solve problems in resonance circuits

- 2.1** WHS/OHS risk control work measures and workplace procedures are followed
- 2.2** Need to test and measure live work is determined in accordance with WHS/OHS requirements and workplace procedures
- 2.3** Circuits are checked and isolated in accordance with WHS/OHS requirements and workplace procedures
- 2.4** Fault finding of resonance circuits is conducted using measured and calculated values of parameters in accordance with workplace procedures
- 2.5** Unplanned situations are dealt with safely and with the approval of relevant person/s in accordance with workplace procedures
- 2.6** Fault-finding activities are carried out efficiently without waste of materials or damage to apparatus, the surrounding environment or services using sustainable energy practices

3 Complete work and document troubleshooting activities

- 3.1** WHS/OHS work completion risk control measures and workplace procedures are followed

- 3.2 Worksite is cleaned and made safe in accordance with workplace procedures
- 3.3 Work completion is documented and relevant person/s notified 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.

Solving resonance circuit problems must include at least two of the following:

- determining the operating parameters of an existing circuit
- altering an existing circuit to comply with specified operating parameters
- developing circuits to comply with specified function and operating parameters

Unit Mapping Information

This unit replaces and is equivalent to UEENEEH114A Troubleshoot resonance circuits in an electronic apparatus.

Links

Companion Volume implementation guides are found in VETNet - -

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