



Australian Government

Assessment Requirements for UEEEC0070 Troubleshoot faults in television receivers

Release: 1

Assessment Requirements for UEEEC0070 Troubleshoot faults in television receivers

Modification History

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

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 sustainable energy principles and practices
- completing and reporting television receiver fault-finding and repair activities
- dealing with unplanned situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- finding and repairing faults in television receiver
- finding television receiver faults efficiently
- implementing relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, workplace procedures and practices, including the use of risk control measures
- providing written justification for television receiver repairs
- replacing television receiver components without damage
- using methodical television receiver fault-finding techniques.

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:

- automatic gain control (AGC) circuits in typical television receivers, including operation and fault-finding techniques
- components providing radio frequency (RF) interference suppression protection, rectification and filtering in a typical television receiver power supply
- operation of a typical television synchronous demodulator circuit
- operation of series regulated power supplies as used in typical television receiver/monitors and recording device
- operation of the switched-mode power supply (SMPS) control circuits in a television/video cassette recorder (VCR)
- operation of tuners found in typical television receivers
- operation of typical self-oscillating television/VCR/switched-mode power supply (SMPS)

circuits

- relevant job safety assessments or risk mitigation processes
- relevant manufacturer specifications
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace policies and procedures
- safe working procedures to test power supply circuitry of a typical 'hot chassis' television receiver
- sub-system arrangements and the operating principles of series and shunt type television receiver/VCR/SMPS
- techniques for locating and repairing faults in a defective SMPS in a typical television monitor or VCR
- techniques for locating and repairing faults in typical vision intermediate frequency (IF) circuits
- techniques for locating and repairing faulty components.

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 suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated suitable 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 simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- resources that reflect current industry practices in relation to finding and repairing faults in television receivers
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

Companion Volume implementation guides are found in VETNet - -

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