



Australian Government

Assessment Requirements for UEEEC0066

Troubleshoot amplifiers in an electronic apparatus

Release: 1

Assessment Requirements for UEEEC0066 Troubleshoot amplifiers in an electronic apparatus

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 relevant risk identification, assessment, reporting and control requirements
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements
- applying sustainable energy principles and practices
- applying the principles of amplifiers
- coordinating work with relevant person/s
- dealing effectively with unplanned events
- determining live testing/measurement requirements
- methodically fault finding using measured and calculated values of parameters
- identifying and accessing materials, tools, apparatus and testing devices
- isolating circuits/machines/system
- troubleshooting amplifiers, including:
 - applying methodical problem-solving methods
 - calculating parameters correctly and accurately
 - correctly and accurately taking measurements
 - providing solutions to amplifier problems
 - providing written justification for the solutions to problems.

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:

- amplifier troubleshooting, including:
 - fundamentals of amplifiers
 - classes of power amplifier operation (basics)
 - complementary-symmetry power amplifiers

- differential amplifiers
- multistage amplifier coupling methods
- negative feedback
- other solid-state power amplifier design
- relevant standards, codes and regulations
- single stage discrete amplifier:
 - direct current (d.c.) characteristics
 - small signal characteristics
 - capacitive coupling
- relevant manufacturer specifications
- relevant safe work method statements (SWMS)/job safety assessments or risk mitigation processes
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace policies and procedures.

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 suitable 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
- resources that reflect current industry practices in relation to troubleshooting amplifiers
- 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>