



Australian Government

Assessment Requirements for UEERS0011 Install and maintain rail track circuit leads and bonds

Release: 1

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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 and performance criteria on at least two separate occasions and include:

- applying bonding techniques correctly
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements
- applying safe working practices, rules and relevant industry standards, codes of practice and regulations
- completing installation/maintenance of track circuit leads and bonds
- completing relevant technical reports, records and documentation
- dealing with unplanned events in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- ensuring bonds and leads testing and test results comply with technical requirements
- following relevant codes of practice, WHS/OHS and environmental procedures and requirements
- installing/maintaining track circuit leads and bonds correctly
- interpreting relevant diagrams and track insulation plans
- interpreting specifications correctly
- preparing to install/maintain track circuit leads and bonds
- selecting and using tools correctly.

Knowledge Evidence

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

- abnormal train operating conditions
- basic rail operations
- braking distance
- emergency train and signal system operation
- environmental and heritage awareness, including the purpose for regulation
- gradients/terrain

- methods for recording and maintaining work records and documentation
- relevant rail terminology, including signalling nomenclature, signalling symbols and terms relevant to each state or territory
- relationship to the signalling arrangement plan/scheme
- relevant enterprise work activities records
- relevant job safety assessments or risk mitigation processes
- relevant manufacturer specifications
- relevant purpose of rail signalling, including:
 - conflicting movement between rail vehicles
 - driver interprets the information to safely control a train
 - emergency train and signal system operation
 - safe distances between rail vehicles
- safe movement of rail vehicles and trains, including
 - degraded signalling system performance
 - role of rail signalling system in enabling safe and efficient movement of trains
 - standard operating conditions as per operating timetable/schedule
 - signalling system provides driver information
 - signalling system restricts the signaller and driver following an operation error
- relevant scheduled and unscheduled infrastructure maintenance requirements
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace policies and procedures
- train dynamics including types of rail vehicles
- rail track circuit leads and bonds installation and maintenance
- typical issues/faults affecting rail electrotechnology services and systems
- sighting distance.

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 other simulations

- relevant and appropriate materials, tools, facilities, equipment and personal protective equipment (PPE) currently used in industry
- 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>