

## Assessment Requirements for MEA510 Maintain seat and pod electrical and electronic systems

Release: 1

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## **Modification History**

Release 1 - New unit of competency

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#### **Performance Evidence**

Evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria under the specified conditions of assessment, and must include:

- applying relevant WHS practices, including the use of PPE and MSDS
- using approved maintenance documentation and aircraft publications relating to aircraft seat and pod electrical and electronic systems and components
- recognising defects in and deterioration of electrical cables to aircraft industry standards, including crimped and soldered joints
- correctly interpreting aircraft wire markings, terminal block identification and plug/socket pin numbering systems
- inspecting electrical looms and harness pre and post-removal and installation to ensure minimum bends are maintained, cable is not in tension, plugs are correctly aligned, security of route ensures no chaffing of insulation, adequate clipping and cable ties have been utilised and construction complies with aircraft industry standards
- positively identifying seat and pod electrical and electronic system components
- plug connector pin removal and insertion where soldering is not required
- recognising damage and visual defects in electrical components, such as actuators, motors and switches
- recognising damage and visual defects in electronic system components, such as display screens, tuners, volume controls, audio headset receptacles and data cables.

It is essential that applicable cleanliness requirements and WHS precautions are fully observed, including awareness of electrostatic discharge procedures. Evidence of transferability of skills and knowledge related to removal and installation is essential.

### **Knowledge Evidence**

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

- relevant WHS procedures
- how to obtain relevant MSDS
- the use of applicable items of PPE
- component attachment methods
- connection of hardware and plugs
- electrical wiring used in aircraft and wire marking
- plug/socket pin numbering and terminal block identification
- cable and loom installation requirements, including bonding and screening
- crimping tools and crimp terminals
- procedures for removal and insertion of plug connector pins where soldering is not required
- handling and maintenance precautions relating to electronic displays and electrostatic sensitive devices
- electromagnetic environment
- data cable installation requirements.

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#### **Assessment Conditions**

- Competency should be assessed in the workplace or simulated workplace using tools and equipment specified in maintenance manuals. It is also expected that general-purpose tools, test and ground support equipment found in most routine situations would be used where appropriate.
- An understanding of the attachment methods, connection of hardware and system
  operation as they relate to the work must be demonstrated before undertaking any action.
  The work plan should take account of applicable safety and quality requirements in
  accordance with the industry and regulatory standards.
- The following conditions of assessment represent the requirements of the Regulators (ADF and CASA) and maintenance stakeholders and must be rigorously observed.
- A person cannot be assessed as competent until it can be demonstrated to the satisfaction
  of the workplace assessor that the relevant elements and performance criteria of the unit of
  competency are being achieved on the range of components and tasks listed in the Range
  of Conditions.
- This shall be established via the records in the Log of Industrial Experience and Achievement or, where appropriate, an equivalent Industry Evidence Guide.
- Assessors must satisfy the requirements of the National Vocational Education and Training Regulator (Australian Skills Quality Authority, or its successors).

#### Links

Companion Volume implementation guides are found in VETNet - https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d 0950371

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