



Australian Government

MEA246 Fabricate and/or repair aircraft electrical hardware or parts

Release: 2

MEA246 Fabricate and/or repair aircraft electrical hardware or parts

Modification History

Release 2. Equivalent to MEA246 Fabricate and/or repair aircraft electrical hardware or parts with amended prerequisite codes.

Application

This unit of competency requires application of hand skills and knowledge of wiring standards and specifications to fabricate aircraft electrical looms, harnesses and cables in aircraft maintenance hangars and workshops during scheduled or unscheduled maintenance. Work may be performed individually or as part of a team.

The unit is part of all Avionic Certificate IV training pathways. It is also part of the Mechanical Aircraft Maintenance Engineer licensing pathway.

The unit is used in workplaces that operate under the airworthiness regulatory systems of the Australian Defence Force (ADF) and the Civil Aviation safety Authority (CASA).

Where a CASA licensing outcome is sought this unit forms part of the CASA requirement for the granting of the chosen maintenance certification licence under Civil Aviation Safety Regulation (CASR) Part 66, in accordance with the licensing provisions in the Companion Volume Implementation Guide.

Pre-requisite Unit

MEA201	Remove and install miscellaneous aircraft electrical hardware/components
MEA296	Use electrical test equipment in aviation maintenance activities

Competency Field

Aviation maintenance

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.

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

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|----|---|-----|--|
| 1. | Interpret specifications and organise materials | 1.1 | Specifications are interpreted to determine the dimensions and procedure for fabrication |
| | | 1.2 | Appropriate materials, tools and equipment are selected and prepared for the particular specification requirements |
| 2. | Fabricate/repair electrical components or parts | 2.1 | Assembly or fabrication jigs, where applicable, are aligned to ensure accurate fabrication of components |
| | | 2.2 | Components or parts are fabricated in accordance with required specifications while observing all relevant work health and safety (WHS) requirements including the use of material safety data sheets (MSDS) and personal protective equipment (PPE) |
| 3. | Test fabricated/repaired components or parts | 3.1 | Test equipment and/or rigs are used, where applicable, to confirm serviceability of finished components |
| | | 3.2 | Fabricated components are tagged, sealed and packaged within specified procedures |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Components or parts include:

- Electrical looms, harnesses and cables associated with:
 - power distribution
 - ignition
 - control circuits
 - signal circuits

Procedures and requirements include:

- Industry standard procedures specified by manufacturers, regulatory authorities or the enterprise

Unit Mapping Information

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Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371>