



Australian Government

MEA264 Remove and install aircraft electrical/avionic components during line maintenance

Release: 1

MEA264 Remove and install aircraft electrical/avionic components during line maintenance

Modification History

Release 1 - New unit of competency

Application

This unit of competency requires application of hand skills and the use of maintenance documentation/publications in the removal and installation from fixed and rotary wing aircraft of a limited range of aircraft electrical and avionic system components that are within the privileges of the Aircraft Maintenance Engineer A Licence during scheduled or unscheduled maintenance. Work may be performed individually or as part of a team.

It is one of the units required for the granting of the chosen Aircraft Maintenance Engineer A Licence under Civil Aviation Safety Regulation (CASR) Part 66, in accordance with the licensing provisions in the Companion Volume Implementation Guide.

Pre-requisite Unit

MEA265 Remove and install general aircraft electrical hardware

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.
1. Remove aircraft electrical system components	1.1 System is rendered safe and prepared in accordance with the applicable maintenance manual and isolation tags are fitted, where necessary, to ensure personnel safety
	1.2 Electrical component removal is carried out in accordance with the applicable maintenance manual while observing all relevant work health and safety (WHS) requirements
	1.3 Required maintenance documentation is completed and processed in accordance with standard enterprise

		procedures
		1.4 Removed components are tagged and packaged in accordance with specified procedures
2.	Remove avionic system components	2.1 System is rendered safe and prepared in accordance with the applicable maintenance manual and isolation tags are fitted, where necessary, to ensure personnel safety
		2.2 Avionic component removal is carried out in accordance with the applicable maintenance manual while observing all relevant WHS requirements
		2.3 Required maintenance documentation is completed and processed in accordance with standard enterprise procedures
		2.4 Removed components are tagged and packaged in accordance with specified procedures
3.	Install aircraft electrical system components	3.1 Electrical components to be installed are checked to confirm correct part numbers, modification status, serviceability and shelf life
		3.2 Physical installation of electrical components is performed in accordance with the applicable maintenance manual ensuring appropriate adjustment/alignment with mechanical interface is carried out
		3.3 System is reinstated to correct operational condition in preparation for testing, as necessary
		3.4 Required maintenance documentation is completed and processed in accordance with standard enterprise procedures
4.	Install avionic system components	4.1 Avionic components to be installed are checked to confirm correct part numbers, modification status, serviceability and shelf life
		4.2 Physical installation of electrical components is performed in accordance with the applicable maintenance manual ensuring appropriate adjustment/alignment with mechanical interface is carried out
		4.3 System is reinstated to correct operational condition in preparation for testing, as necessary
		4.4 Required maintenance documentation is completed and processed in accordance with standard enterprise

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.

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|---|---|
| Electrical components include: | <ul style="list-style-type: none">• Ovens, boilers and beverage makers• Aircraft internal and external lights, filaments and flash tubes• Aircraft main and auxiliary power unit (APU) batteries• Static wicks |
| Avionic components include: | <ul style="list-style-type: none">• Passenger entertainment system components but excluding public address |
| Procedures and requirements include: | <ul style="list-style-type: none">• Industry standard procedures specified by manufacturers, regulatory authorities or the enterprise |

Unit Mapping Information

Release 1 – equivalent to MEA264A Remove and install aircraft electrical/avionic components during line maintenance

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for MEA264 Remove and install aircraft electrical/avionic components during line maintenance

Modification History

Release 1 - New unit of competency

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 procedures
- using maintenance publications in identifying/locating:
 - ovens, boilers and beverage makers
 - aircraft main and APU batteries (lead acid and nickel cadmium) and associated mounting equipment, including related anti-vibration aids and battery temperature monitoring systems
 - aircraft internal and external lights
 - static wicks
 - passenger entertainment system components
- correctly connecting:
 - ovens, boilers and beverage makers
 - aircraft main and APU batteries (lead acid and nickel cadmium) and associated mounting equipment, including related anti-vibration aids and battery temperature monitoring systems
 - aircraft internal and external lights
 - passenger entertainment system components
- application of standard procedures, including handling of electrostatic sensitive devices

It is essential that cleanliness requirements and safety precautions applicable to the system being maintained are fully observed, understood and complied with, as well as work practices associated with electrostatic sensitive devices.

Evidence of transferability of skills and knowledge related to removal and installation is essential. This is to be demonstrated by application across the range of applicable components listed in the Assessment Conditions.

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:

- component attachment methods
- connection of hardware and plugs

- procedures for handling electrostatic sensitive devices
- relevant WHS practices
- the use of applicable maintenance documentation and aircraft publications relating to electrical and passenger entertainment systems
- relevant regulatory requirements and standard procedures.

Assessment Conditions

- Competency should be assessed in the work environment or simulated work environment, using tools and equipment specified in maintenance manuals. It is also expected that applicable general-purpose tools, and 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 the need for functional testing 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 CASA 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 under supervision but without intervention on at least one (1) component from each of the following groups of components:
 - ovens, boilers and beverage makers
 - aircraft internal and external lights, filaments and flash tubes
 - aircraft main and APU batteries
 - static wicks
 - passenger entertainment system components but excluding public address.
- This shall be established via the records in the Log of Industrial Experience and Achievement or, where appropriate, an equivalent Industry Evidence Guide (for details refer to the Companion Volume Assessment Guidelines).
- The Assessor must meet the criteria specified in the CASR Part 147 Manual of Standards.
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