



Australian Government

Assessment Requirements for MEAAVI0002 Remove and install basic aircraft electrical system components

Release: 1

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Modification History

Release 1. Application changed. Elements and Performance Criteria changed. Foundation Skills made explicit. Range of Conditions removed, and relevant information moved to Assessment Requirements. Assessment Requirements clarified. Supersedes and is equivalent to MEA202 Remove and install basic aircraft electrical system components.

Performance Evidence

There must be evidence the candidate has completed all the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- remove and install basic aircraft electrical system components during scheduled or unscheduled maintenance to meet requirements on at least one component from each of the following:
 - direct current (DC) generators, and alternator/rectifier generators, and components of related single generator regulation and distribution systems
 - motors
 - actuators
 - piston engine ignition and starting system components
 - aircraft batteries
 - specific components of DC electrical systems, such as flaps, landing gear
 - aircraft lighting
 - gas turbine engine igniter and starting systems (may be omitted when not applicable to the enterprise).
- complete removal and installation on jobs involving:
 - electrical components with mechanical interface
 - installations that require alignment and/or adjustment (mechanical or electrical)
- apply cleanliness requirements and safety precautions at all times, as relevant to the system/s being maintained, and follow work practices associated with electrostatic sensitive devices
- correctly connect DC generators and alternator/rectifier generators for the components being maintained.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- component attachment methods
- connection of hardware and plugs

- work health and safety (WHS) practices for the removal and installation of basic aircraft electrical system components
- approved maintenance documentation and aircraft publications for DC electrical systems
- properties of permanent magnets
- precautions for the care and storage of permanent magnets
- general construction, operating characteristics and applications for:
 - aircraft DC generators
 - alternator or rectifier DC generators
 - DC starter/generators
 - DC motors, including starter motors
 - DC rotary and linear actuators
 - batteries
- how to locate and identify components of:
 - DC power regulation and distribution systems
 - piston engine ignition and starting systems
 - gas turbine engine igniter systems, including specific WHS precautions
 - gas turbine engine starting systems
 - DC electrical systems, such as flaps and landing gear retraction
 - lighting systems
- regulatory requirements and standard procedures relating to the removal and installation of basic aircraft electrical system components.

Assessment Conditions

The following conditions of assessment represent the requirements of the regulators (Civil Aviation Safety Authority [CASA] and the Defence Aviation Safety Authority [DASA]) and maintenance stakeholders and must be rigorously observed.

Skills must have been demonstrated under routine supervision in the workplace or in a simulated environment that reflects workplace conditions and contingencies encountered in removing and installing basic aircraft electrical system components. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - workplace procedures, manufacturing specifications, codes, standards, manuals, and reference materials relevant to removing and installing basic aircraft electrical system components
 - tools and equipment specified in maintenance manuals
 - general-purpose tools and items of ground support and test equipment found in most routine situations.

Evidence of tasks demonstrating competency must be recorded in a log of industrial experience and achievement.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -

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