

Title	Maintain aircraft electrical motors and actuators		
Level	4	Credits	6

Purpose	People credited with this unit standard are able to: prepare to maintain aircraft electrical motors and actuators; locate defects in aircraft electrical motors and actuators; restore airworthiness of aircraft electrical motors and actuators; and complete the maintenance task for aircraft electrical motors and actuators.
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Classification	Aeronautical Engineering > Avionic Maintenance
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Available grade	Achieved
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Guidance Information

- 1 All tasks must be carried out in accordance with enterprise procedures.
- 2 Definition
Enterprise procedures – procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.
- 3 Maintenance activities are those usually carried out on an aircraft in a hangar.
- 4 The scope of the system that this standard relates to is described in the applicable chapters of ATA iSpec 2200.

Outcomes and performance criteria

Outcome 1

Prepare to maintain aircraft electrical motors and actuators.

Performance criteria

- 1.1 Task is determined by reviewing maintenance documentation.
- 1.2 Resources are obtained and checked for serviceability or status.

Range may include but is not limited to – publications, tools, equipment, safety equipment, materials.

- 1.3 Aircraft registration and system to be maintained are matched with documentation.
- 1.4 Aircraft and system are prepared for the application of power and for system operation.
- Range cockpit controls match component positions, clearances, isolation tags, warning signs.
- 1.5 Ground and/or support equipment is positioned ready for system operation.

Outcome 2

Locate defects in aircraft electrical motors and actuators.

Performance criteria

- 2.1 Serviceability is determined.
- Range inspect, assess, test.
- 2.2 Defects are reported and documented.

Outcome 3

Restore airworthiness of aircraft electrical motors and actuators.

Performance criteria

- 3.1 Methods of rectifying defects are determined.
- 3.2 Replacement parts are procured and verified as authentic and serviceable.
- Range identify, inspect.
- 3.3 Defects are rectified.
- Range may include but is not limited to – repair, replace, modify, adjust, calibrate, lubricate.
- 3.4 System is tested to verify serviceability.
- 3.5 Inspections are obtained.
- Range independent, duplicate, progressive.

Outcome 4

Complete the maintenance task for aircraft electrical motors and actuators.

Performance criteria

4.1 Aircraft, system, and work area are left in a state that enables the next task to begin.

4.2 Resources are checked for serviceability and returned to service or storage.

Range may include but is not limited to – publications, tools, equipment, safety equipment.

4.3 Leftover parts and materials are disposed of.

Range may include but is not limited to – serviceable, unserviceable, surplus, waste, scrap, hazardous.

4.4 Documentation is completed.

Range may include but is not limited to – labels, work cards, release notes, log books, certification.

Replacement information	This unit standard, unit standard 22515, unit standard 22516, unit standard 22518, unit standard 22519, unit standard 22520, unit standard 22521, unit standard 22522, and unit standard 22523, replaced unit standard 3947.
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Planned review date	31 December 2027
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 May 2006	31 December 2016
Review	2	24 October 2014	31 December 2021
Review	3	26 March 2020	N/A
Rollover and Revision	4	27 June 2024	N/A

Consent and Moderation Requirements (CMR) reference	0028
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Ringa Hora Services Workforce Development Council qualifications@ringahora.nz if you wish to suggest changes to the content of this unit standard.