

Title	Demonstrate knowledge of aircraft mechanical component repair and overhaul practices		
Level	4	Credits	10

Purpose	People credited with this unit standard are able to demonstrate knowledge of aircraft mechanical components, and aircraft mechanical component repair and overhaul practices.
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Classification	Aeronautical Engineering > Aircraft Mechanical Repair and Overhaul
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Available grade	Achieved
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Guidance Information

- 1 Components may include pumps, valves, filters, regulators, actuators, control units, hydraulic motors, heaters, heat exchangers, coolers, air cycle machines, pressure bottles and cylinders, reservoirs and tanks, shock struts and absorbers, windows, wheels, brake units.
- 2 Mechanical component repair and overhaul tasks must meet the standards required by the component manufacturer.
- 3 Standard industry practices referred to are those in the aviation industry, examples being Great Britain – Civil Aviation Authority, CAP 562: *Civil Aircraft Airworthiness Information and Procedures* (CAAIP) (London: TSO) and United States – Federal Aviation Administration, Advisory Circular 43.13, *Acceptable Methods, Techniques, and Practices – Aircraft Inspection and Repair* (US Department of Transportation).
- 4 The scope of the systems that this standard relates to is described in the applicable chapters of ATA iSpec 2200.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of aircraft mechanical components.

Range mechanical components within air-conditioning, pressurisation, fire detection and protection, flight control, fuel storage and distribution, hydraulic, ice and rain protection, landing gear (including wheels and brakes), pneumatic, water and waste, door, and windows.

Performance criteria

- 1.1 Mechanical components are described in terms of their purpose, function, construction, and operating principles.

Outcome 2

Demonstrate knowledge of aircraft mechanical component repair and overhaul practices.

Performance criteria

- 2.1 Repair and overhaul of mechanical components is described in terms of standard industry practices.

Range disassembly, assembly, inspection, troubleshooting, defect rectification, repair, adjustment, testing.

- 2.2 Procedures to prepare mechanical components for shipping and storage are described in terms of standard industry practices.

- 2.3 Safety precautions for mechanical component repair and overhaul activities are described in terms of standard industry practices.

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	21 May 1996	31 December 2016
Revision	2	7 August 1997	31 December 2016
Revision	3	8 May 2001	31 December 2016
Review	4	20 April 2006	31 December 2016
Review	5	18 June 2014	31 December 2022
Review	6	23 July 2020	N/A
Rollover and Revision	7	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.