

Title	Repair or overhaul aircraft powerplant turbine sections		
Level	4	Credits	20

Purpose	People credited with this unit standard are able to: prepare to repair or overhaul aircraft powerplant turbine sections; locate defects in aircraft powerplant turbine sections; repair or overhaul aircraft powerplant turbine section components; and complete the repair or overhaul task for aircraft powerplant turbine sections.
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Classification	Aeronautical Engineering > Aircraft Powerplant Repair and Overhaul
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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 Repair or overhaul activities are those usually carried out in a specialist bay or workshop.
- 4 Turbine sections may include intakes, rotating and stationary assemblies, frames, sumps, seals, bearings.
- 5 Credit for this unit standard may also be gained from tasks assessed on aero-derivative engines, and associated systems and components used for marine or industrial applications.

Outcomes and performance criteria

Outcome 1

Prepare to repair or overhaul aircraft powerplant turbine sections.

Performance criteria

- 1.1 Task is determined by reviewing maintenance documentation and enterprise procedures.
- 1.2 Turbine section identity is confirmed with documentation.
- 1.3 Work area is prepared, and resources are obtained and checked.
- Range may include but is not limited to – publications, materials, tools, equipment, safety equipment, environmental conditions established.
- 1.4 Turbine section is prepared for repair or overhaul.
- Range may include but is not limited to – clean, inspect.
- 1.5 Next task is determined and documented.

Outcome 2

Locate defects in aircraft powerplant turbine sections.

Performance criteria

- 2.1 Defects are located using troubleshooting techniques appropriate to the defect indications.
- 2.2 Defects found during troubleshooting are reported and documented.

Outcome 3

Repair or overhaul aircraft powerplant turbine section components.

Performance criteria

- 3.1 Component is disassembled.
- Range may include but is not limited to – clean, label, preserve, segregate, store.
- 3.2 Defects found during disassembly are reported and documented.
- 3.3 Rectification action is determined and documented.
- 3.4 Replacement parts are procured and verified as authentic and serviceable.
- Range identify, inspect.
- 3.5 Defects are rectified.
- Range may include but is not limited to – repair, replace, modify, adjust.

3.6 Component is assembled.

3.7 Inspections are obtained.

Outcome 4

Complete the repair or overhaul task for aircraft powerplant turbine sections.

Performance criteria

4.1 Turbine section is prepared for use, storage, or transit.

Range may include but is not limited to – locking, inhibiting, blanking, packing, labelling.

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

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

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.

4.5 Work area is left in a state that enables the next task to begin.

Replacement information	This unit standard, unit standard 23161, unit standard 23162, and unit standard 23164 replaced unit standard 3423.
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Planned review date	31 December 2024
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 September 2006	31 December 2016
Review	2	18 June 2014	31 December 2021
Review	3	26 March 2020	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 ServiceIQ qualifications@serviceiq.org.nz if you wish to suggest changes to the content of this unit standard.