

Title	Repair or overhaul helicopter gearboxes and transmissions		
Level	4	Credits	10

Purpose	People credited with this unit standard are able to: prepare to repair or overhaul helicopter gearbox and transmission components; locate defects in helicopter gearboxes and transmission components; repair or overhaul helicopter gearboxes and transmission components; test and adjust helicopter gearboxes and transmission components; and complete finishing activities related to the repair or overhaul task of helicopter gearboxes and transmissions.
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Classification	Aeronautical Engineering > Helicopter 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 Helicopter gearboxes and transmission components may include gear trains, cases/housings, oil pumps, valves, filters, drive shafts and couplings.
- 5 Credit for this unit standard may also be gained from tasks assessed on aero-derivative engines, and associated systems.

Outcomes and performance criteria

Outcome 1

Prepare to repair or overhaul helicopter gearboxes and transmission components.

Performance criteria

- 1.1 Task is determined by reviewing maintenance documentation.

- 1.2 Component identity is confirmed with documentation.
- 1.3 Work area is prepared, and resources obtained and checked for serviceability or status.
- Range may include but is not limited to – publications, materials, tools, equipment, safety equipment, environmental conditions established.
- 1.4 Component is prepared for repair or overhaul.
- Range may include but is not limited to – clean, inspect.
- 1.5 Next task is determined and documented.
- Range may include but is not limited to – locate defects, repair, overhaul, test, adjust, complete the task.

Outcome 2

Locate defects in helicopter gearboxes and transmission components.

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 helicopter gearboxes and transmission components.

Performance criteria

- 3.1 Component is disassembled.
- Range may include but is not limited to – clean, label, preserve.
- 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

Test and adjust helicopter gearboxes and transmission components.

Performance criteria

4.1 Component is prepared for testing.

4.2 Component is tested and adjusted.

Range may include but is not limited to – troubleshoot, functionally test, calibrate, adjust, document adjustments and performance.

4.3 Inspections are obtained.

Outcome 5

Complete finishing activities related to the repair or overhaul task of helicopter gearboxes and transmission components.

Performance criteria

5.1 Component is prepared for use, storage, or transit.

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

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

Range tools, equipment, safety equipment, publications.

5.3 Leftover parts and materials are disposed of.

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

5.4 Documentation is completed.

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

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	26 March 2020	N/A
Rollover and Revision	2	27 June 2024	N/A

Consent and Moderation Requirements (CMR) reference

0028

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.