

Title	Repair or overhaul helicopter rotor free-wheel units		
Level	4	Credits	4

Purpose	People credited with this unit standard are able to: prepare to repair or overhaul helicopter free-wheel units; locate defects in free-wheel units; repair or overhaul free-wheel units; test and adjust free-wheel units; and complete finishing activities related to the repair or overhaul task of free-wheel units.
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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.

Outcomes and performance criteria

Outcome 1

Prepare to repair or overhaul helicopter free-wheel units.

Performance criteria

- 1.1 Task is determined by reviewing documentation.
Range confirm fault, repair, overhaul, modify.
- 1.2 Free-wheel unit identification 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 Free-wheel unit is prepared for repair or overhaul.

Range clean, inspect, assess economics of carrying out repair or overhaul.

1.5 Next task is determined and documented.

Range locate defects, repair or overhaul, test, adjust, complete the task.

Outcome 2

Locate defects in free-wheel units.

Performance criteria

2.1 Defects are located using troubleshooting techniques and inspection procedures appropriate to the defect indications.

2.2 Defects found during troubleshooting are reported and documented.

Outcome 3

Repair or overhaul free-wheel units.

Performance criteria

3.1 Free-wheel unit is disassembled.

Range clean, label, preserve, segregate.

3.2 Defects found during disassembly are reported and recorded.

3.3 Rectification action is determined and documented.

Range repair, overhaul, replace, modify, adjust, scrap; confirmation of action to be taken obtained from supervisor, action to be taken recorded.

3.4 Replacement parts are procured and verified as authentic and serviceable.

Range identify, inspect.

3.5 Defects are rectified.

Range repair, replace, modify, adjust.

3.6 Free-wheel unit is assembled.

3.7 Inspections are obtained.

Range independent, duplicate, progressive.

Outcome 4

Test and adjust free-wheel units.

Performance criteria

4.1 Free-wheel unit is prepared for testing.

4.2 Free-wheel unit is tested and adjusted.

Range troubleshoot, functionally test, calibrate, adjust, document adjustments and performance.

4.3 Inspections are obtained.

Range independent, duplicate, progressive.

Outcome 5

Complete finishing activities related to the repair or overhaul task of free-wheel units.

Performance criteria

5.1 Free-wheel unit is prepared for use, storage, or transit.

Range locking, inhibiting, blanking, packing.

5.2 Completion activities specific to the task and work area are carried out.

Range may include but is not limited to – tool control, cleanliness, tidiness, return of publications, preparation for next activity, return of helicopter and systems to normal.

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

Range tools, equipment, safety equipment.

5.4 Leftover parts and materials are disposed of.

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

5.5 Documentation is completed.

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 June 1995	31 December 2016
Revision	2	7 August 1997	31 December 2016
Revision	3	8 May 2001	31 December 2016
Review	4	20 June 2006	31 December 2016
Review	5	18 June 2014	31 December 2021
Review	6	26 March 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.