

Title	Test aircraft turbo-fan or turbo-jet powerplants on a test bed		
Level	5	Credits	20

Purpose	People credited with this unit standard are able to: prepare aircraft turbo-fan or turbo-jet powerplants for testing on a test bed; test aircraft turbo-fan or turbo-jet powerplants; and complete finishing activities related to the testing tasks.
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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 This unit standard can be assessed against using a fixed or a mobile test cell.
- 4 Credit for this unit standard may also be gained from tasks assessed on aero-derivative engines, and on associated systems and components used for marine or industrial applications.
- 5 Evidence for performance criterion 2.5 may be gathered under simulated conditions.

Outcomes and performance criteria

Outcome 1

Prepare aircraft turbo-fan or turbo-jet powerplants for testing on a test bed.

Performance criteria

- 1.1 Testing task is determined by reviewing maintenance documentation and enterprise procedures.
- 1.2 Powerplant identity is confirmed with documentation by comparing serial and part numbers.

- 1.3 Work area is prepared, and resources are obtained and checked for serviceability.

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

- 1.4 Powerplant is prepared for testing.

Range may include but is not limited to – clean, inspect, install on test bed.

Outcome 2

Test aircraft turbo-fan or turbo-jet powerplants.

Performance criteria

- 2.1 Powerplant is tested and adjusted.

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

- 2.2 Defects found during testing are reported and recorded.

Range may include but is not limited to – vibrations, out of limits performance parameters, leaks.

- 2.3 Defects are rectified.

Range may include but is not limited to – vibrations, out of limits performance parameters, leaks.

- 2.4 Inspections are obtained.

- 2.5 Action to be taken in abnormal and emergency occurrences is demonstrated.

Outcome 3

Complete finishing activities related to the testing tasks.

Performance criteria

- 3.1 Powerplant is prepared for use, storage, or transit.

Range may include but is not limited to – lock, inhibit, blank, remove from test bed, prepare for transit.

- 3.2 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.
- 3.3 Resources are checked for serviceability and returned to service or storage.
- Range may include but is not limited to – tools, equipment, safety equipment.
- 3.4 Leftover parts and materials are disposed of.
- Range may include but is not limited to – serviceable, unserviceable, surplus, waste, scrap, hazardous.
- 3.5 Documentation is completed.

Replacement information	This unit standard, unit standard 20635, unit standard 20636, and unit standard 23160 replaced unit standard 3425.
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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	25 September 2006	31 December 2016
Review	2	18 June 2014	31 December 2021
Review	3	26 March 2020	N/A
Rollover and Revision	4	30 May 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.