

Title	Assemble cryogenic valves		
Level	4	Credits	20

Purpose	People credited with this unit standard are able to: prepare to assemble cryogenic valves; assemble cryogenic valves; test and adjust cryogenic valves; and complete finishing activities related to the assembly of cryogenic valves.
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Classification	Aeronautical Engineering > Aerospace Engineering
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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 Assembly activities are those usually carried out in a specialist bay or workshop.
- 4 Cryogenic valves may include assembly and test of valves that control cryogenic liquids and gasses, observation and use of cryogenic safe handling methods and cleanliness requirements.

Outcomes and performance criteria

Outcome 1

Prepare to assemble cryogenic valves.

Performance criteria

- 1.1 Task is determined by reviewing maintenance documentation and manuals.
- 1.2 Cryogenic valve 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, tools, equipment, safety equipment, safety devices fitted, hazard symbols displayed.
- 1.4 Support equipment is positioned.
- 1.5 Defects are reported and documented.
- 1.6 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

Assemble cryogenic valves.

Performance criteria

- 2.1 Equipment and personnel are earthed and/or bonded.
- 2.2 Cryogenic valves and accessories are checked.
- Range may include but is not limited to – security and alignment of components, shorting pins and/or clips fitted, plugs, wires and safety devices fitted.
- 2.3 Cryogenic valves and accessories are assembled ready for use on launch vehicles.
- 2.4 Cryogenic temperatures of cryogenic valves are checked to prevent interference.
- 2.5 Inspections are obtained.

Outcome 3

Test and adjust cryogenic valves.

Performance criteria

- 3.1 Cryogenic valves are prepared for testing.
- 3.2 Cryogenic valves are tested and adjusted.
- Range may include but is not limited to – troubleshoot, functionally test, calibrate, adjust, document adjustments and performance.
- 3.3 Inspections are obtained.

Outcome 4

Complete finishing activities related to the assembly of cryogenic valves.

Performance criteria

- 4.1 Cryogenic valves are prepared for use, storage, or transit.
- Range may include but is not limited to – locking, inhibiting, blanking, packing.
- 4.2 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.
- 4.3 Resources are checked for serviceability and returned to service or storage.
- Range may include but are not limited to – tools, equipment, safety equipment.
- 4.4 Leftover parts and materials are disposed of.
- Range may include but is not limited to – serviceable, unserviceable, surplus, waste, scrap, hazardous.
- 4.5 Documentation is completed.
- 4.6 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	23 April 2020	N/A
Rollover and Revision	2	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.