

<b>Title</b>	<b>Assemble cryogenic valves</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>20</b>

<b>Purpose</b>	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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<b>Classification</b>	Aeronautical Engineering > Aerospace Engineering
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<b>Available grade</b>	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.

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### 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.

<b>Planned review date</b>	31 December 2025
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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

<b>Consent and Moderation Requirements (CMR) reference</b>	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](mailto:qualifications@serviceiq.org.nz) if you wish to suggest changes to the content of this unit standard.