

<b>Title</b>	<b>Disassemble and assemble launch vehicle propulsion systems</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>30</b>

<b>Purpose</b>	People credited with this unit standard are able to: prepare to disassemble and assemble launch vehicle propulsion systems; disassemble launch vehicle propulsion systems; assemble launch vehicle propulsion systems; test and adjust launch vehicle propulsion systems; and complete finishing activities related to the disassembly and assembly of launch vehicle propulsion systems.
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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 Disassembly and assembly activities are those usually carried out in a specialist bay or workshop.
- 4 Propulsion may include single main engine assembly, thrust chamber, pumps, motor controllers, mounting structure, attached avionic components, related plumbing, valves and wiring systems.

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### Outcomes and performance criteria

#### Outcome 1

Prepare to disassemble and assemble launch vehicle propulsion systems.

#### Performance criteria

- 1.1 Task is determined by reviewing maintenance documentation and manuals.
- 1.2 Launch vehicle propulsion systems 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, environmental conditions established.
- 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

Disassemble launch vehicle propulsion systems.

### Performance criteria

- 2.1 Launch vehicle propulsion system is disassembled.
- Range clean, label, preserve, segregate, store.
- 2.2 Defects found during disassembly are reported and documented.
- 2.3 Inspections are obtained.

## Outcome 3

Assemble launch vehicle propulsion systems.

### Performance criteria

- 3.1 Equipment and personnel are earthed and/or bonded.
- 3.2 Launch vehicle propulsion systems are checked.
- Range may include but is not limited to – security and alignment of components, plugs, wires and safety devices fitted.
- 3.3 Launch vehicle propulsion systems are assembled.
- 3.4 Prepared launch vehicle propulsion systems are checked to prevent interference.
- 3.5 Inspections are obtained.

**Outcome 4**

Test and adjust launch vehicle propulsion systems.

**Performance criteria**

4.1 Launch vehicle propulsion systems are prepared for testing.

4.2 Launch vehicle propulsion systems are 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 disassembly and assembly of launch vehicle propulsion systems.

**Performance criteria**

5.1 Launch vehicle propulsion systems are prepared for use, storage, or transit.

Range may include but is not limited to – 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.

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

Range may include but is not limited to – 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.

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

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<b>Planned review date</b>	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
Revision	2	30 March 2023	N/A
Rollover and Revision	3	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](mailto:qualifications@ringahora.nz) if you wish to suggest changes to the content of this unit standard.