

Title	Test and rectify faults in marine engine charging and starting systems		
Level	4	Credits	5

Purpose	People credited with this unit standard are able to test and rectify faults in marine engine charging and starting systems.
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Classification	Boating Industries > Boatbuilding
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Available grade	Achieved
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Guidance Information

- 1 Legislation, regulations, references and/or industry standards relevant to this unit standard include but are not limited to the:
 - [Health and Safety at Work Act 2015](#)
 Any new, amended or replacement Acts, regulations, rules, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.
- 2 Definition

Manufacturer specifications refer to technical information of a boat or product detailing: operation, installation and servicing procedures; technical terms and descriptions; and illustrations. Manufacturer specifications must be followed to ensure compliance with manufacturer warranty, safe operation, and operation that meets manufacturer performance claims.

Outcomes and performance criteria

Outcome 1

Test marine engine charging and starting systems.

Performance criteria

- 1.1 Marine engine charging and starting systems components are tested in accordance with manufacturer specifications

Range	batteries, circuit protection, cables, battery switches, solenoids, earthing, starter motor, alternator/stator, rectifiers/regulators.
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- 1.2 Test results are recorded and identified faults isolated.

Outcome 2

Rectify faults in marine engine charging and starting systems.

Performance criteria

- 2.1 Faults in marine engine charging and starting systems are rectified and recorded in accordance with manufacturer specifications.
- 2.2 Re-testing of marine engine charging and starting systems are carried out and recorded to ensure manufacturer specifications are met.

Planned review date	31 December 2030
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	26 July 2018	31 December 2027
Review	2	26 June 2025	N/A

Consent and Moderation Requirements (CMR) reference	0136
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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 Hanga-Aro-Rau Engineering, Manufacturing and Logistics Workforce Development Council at qualifications@hangaarorau.nz if you wish to suggest changes to this unit standard.