

Title	Install electrical systems in a power boat		
Level	4	Credits	5

Purpose	People credited with this unit standard are able to prepare materials and equipment and install an electrical wiring system in a power boat.
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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](#).
- [Health and Safety in Employment Regulations 1995](#).
- [Resource Management Act 1991](#).
- [Hazardous Substances and New Organisms Act 1996](#).

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 Definitions

Job specifications refer to the standard requirements of the job being undertaken.

Manufacturers' 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.

Marine environment refers to tasks, materials, conditions and environments specific to vessels, marine structures, or activities related to the marine and composite industries.

Workplace policies and procedures refer to the documented procedures and policies providing guidelines for the tasks and activities carried out in the workplace. This typically includes relevant health and safety requirements to eliminate hazards and/or risks in the workplace.

3 Assessment information

Evidence is required to install one of the following systems, that is either 12V, 24V or 36V:

- Starting and charging
- House
- Network
- Canbus

Outcomes and performance criteria
Outcome 1

Prepare materials and equipment for installation of an electrical system in a power boat.

Performance criteria

- 1.1 Materials and equipment for electrical installation are prepared in accordance with job specifications and the marine environment.
- 1.2 Wire termination and terminal insulation methods, circuit and cable protection are established in accordance with job specifications.

Outcome 2

Install an electrical wiring system in a power boat.

Performance criteria

- 2.1 Electrical components are checked and installed in accordance with job specifications
- Range components include - circuit protection, wiring loom, connectors, grounding.
- 2.2 Completed installation is checked to ensure manufacturers' specifications and job specifications are met.
- Range checks include – test system, document.

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	27 October 2006	31 December 2018
Review	2	20 April 2017	31 December 2027
Review	3	29 May 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.