

Title	Preserve and evaluate a previously submerged marine engine		
Level	4	Credits	3

Purpose	People credited with this unit standard are able to, for a previously submerged marine engine: prevent further deterioration; identify the nature and extent of damage; and evaluate actions required to restore operational effectiveness.
----------------	---

Classification	Boating Industries > Boatbuilding
-----------------------	-----------------------------------

Available grade	Achieved
------------------------	----------

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](#)
- [Resource Management Act 1991](#)
- [Fair Trading Act 1986](#)
- [Consumer Guarantees Act 1993](#)

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

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.

Previously submerged refers to a marine engine that has been underwater and has been retrieved.

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

This unit standard does not cover the retrieval of marine engines from under water.

Range Marine engines – inboard petrol or diesel, or outboard petrol or diesel.

All required equipment must be set up, started up, operated, and shutdown in accordance with manufacturer specifications and workplace policies and procedures.

Outcomes and performance criteria

Outcome 1

Prevent further deterioration of a previously submerged marine engine.

Performance criteria

- 1.1 Actions are taken to prevent danger to personnel and the environment.
- Range disposal of batteries, isolation of batteries, coolant and oil, fuel and oil, dispersal of explosive gases.
- 1.2 Actions are taken appropriate for the time elapsed since retrieval of the marine engine from under water to prevent further damage and deterioration to the marine engine.
- 1.3 Viability of repair is assessed and a report made.

Outcome 2

Identify the nature and extent of damage to a previously submerged marine engine.

Performance criteria

- 2.1 The extent of damage and deterioration is assessed and recorded.
- Range fuel system, air delivery system, internal engine components, electrical and electronic systems, throttle and control system.

Outcome 3

Evaluate actions required to restore operational effectiveness to a previously submerged marine engine.

Range actions include – repair or replace.

Performance criteria

- 3.1 Required actions are evaluated.
- 3.2 Required actions are costed.
- Range costs may include but are not limited to – parts, machining, labour, testing, painting, meeting the costs of any relevant survey and/or regulatory requirements, transport fees, haul-out fees, storage fees.
- 3.3 Required actions are recorded and confirmed.

Planned review date	31 December 2030
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 August 1997	31 December 2019
Revision	2	20 March 2001	31 December 2019
Revision	3	16 April 2004	31 December 2019
Rollover	4	20 March 2009	31 December 2019
Review	5	14 December 2017	31 December 2027
Review	6	26 June 2025	N/A

Consent and Moderation Requirements (CMR) reference	0136
--	------

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.