Title	Install, disassemble and repair a hydraulic system on a power boat		
Level	4	Credits	5

Purpose	People credited with this unit standard are able to install a hydraulic steering system and disassemble and repair hydraulic systems on a power boat.
Classification	Motor Industry > Trailer Boat Systems

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
 - Health and Safety in Employment Regulations 1995
 - Resource Management Act 1991

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

Hydraulic fault refers to any malfunction, defect, or failure in a hydraulic system that prevents it from operating as designed.

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.

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 policies to manage risk in the workplace.

3 Assessment information

Hydraulic systems may include steering system, trim tabs, jacking plates, net haulers, amphibious systems, autopilot systems.

Evidence presented for assessment against this unit standard must be in accordance with job specifications, manufacturer's specifications and workplace policies and procedures.

NZQA unit standard 33474 version 1
Page 2 of 3

It is recommended that people hold credits for Unit 23940 *Demonstrate knowledge of power boat hydraulic principles, systems and components* or demonstrate equivalent skills and knowledge before being assessed against this unit standard.

Outcomes and performance criteria

Outcome 1

Install a hydraulic steering system on a power boat.

Performance criteria

- 1.1 Plan system layout in accordance with marine application.
- 1.2 Prepare tools and materials.
- 1.3 Install a hydraulic steering system.
- 1.4 Test the hydraulic steering system to ensure proper functionality.

Range free and unrestricted movement, pressure and leak testing, operational testing, alignment verification.

Outcome 2

Disassemble and repair hydraulic systems on a power boat.

Range evidence must be provided for one power trim and tilt system and one different hydraulic system.

Performance criteria

- 2.1 Diagnose the hydraulic fault.
- 2.2 Disassemble components of the hydraulic system.
- 2.3 Inspect components of the hydraulic system.
- 2.4 Repair or replace any faulty components.
- 2.5 Reassemble and reinstall all components.
- 2.6 Test the hydraulic system for proper functionality.

Range free and unrestricted movement, pressure and leak testing, operational testing, alignment verification.

Planned review date	31 December 2030

NZQA unit standard 33474 version 1
Page 3 of 3

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	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 Manufacturing, Engineering and Logistics Workforce Development Council <u>qualifications@hangaarorau.nz</u> if you wish to suggest changes to the content of this unit standard.