| Title | Diagnose and repair a gearbox in an outboard marine engine |         |   |
|-------|--|---------|---|
| Level | 4  | Credits | 3 |

| Purpose        | People credited with this unit standard are able to diagnose and repair a gearbox in an outboard marine engine. |
|----------------|---|
| 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

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.

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 hazards and/or risks in the workplace.

#### 3 Assessment information

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

# Outcomes and performance criteria

# **Outcome 1**

Diagnose and repair a gearbox in an outboard marine engine

## Performance criteria

1.1 Faults are diagnosed.

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- 1.2 Components of a gearbox are disassembled.
- 1.3 Components are inspected.
- 1.4 Faults are identified.
- 1.5 Faulty components are repaired or replaced.
- 1.6 Components are reassembled.
- 1.7 Gearbox is tested for proper functionality and results recorded.

Range shift, pressure test, vacuum

| 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Status information and last date for assessment for superseded versions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       | 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 Manufacturing, Engineering and Logistics WDC <a href="mailto:qualifications@hangaarorau.nz">qualifications@hangaarorau.nz</a> if you wish to suggest changes to the content of this unit standard.