Title	Inspect and test a four stroke petrol marine engine		
Level	3	Credits	4

Purpose	People credited with this unit standard are able to perform visual inspection of a four stroke petrol marine engine and perform tests on a four stroke petrol marine engine.

Available grade	Achieved
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# **Guidance Information**

All work practices must meet recognised codes of practice and workplace policies and procedures (where these exceed code) for personal, product, and workplace health and safety, and must meet the obligations required under the Health and Safety at Work Act 2015 and Resource Management Act 1991, and any subsequent amendments.

#### 2 Definitions

Service information refers to technical information of boat or product detailing: operation; installation and servicing procedures; manufacturer instructions and specifications; technical terms and descriptions; or illustrations.

Workplace policies and procedures refers to the documented procedures and policies providing guidelines of the tasks and activities carried out in the workplace. This typically includes relevant health and safety requirements to manage risk in the workplace.

3 Range four stroke petrol marine engine – inboard, outboard.

# Outcomes and performance criteria

## **Outcome 1**

Perform a visual inspection of a four stroke petrol marine engine.

#### Performance criteria

1.1 Visual inspection of four stroke petrol marine engine is carried out in accordance with service information.

Range inspection include – fuel-oil, exhaust and cooling system leaks, vacuum hose disconnection or split, corroded connectors, air cleaner and duct, lube system, spark plugs, fuel pump pressure.

# Outcome 2

Perform test on four stroke petrol marine engine.

#### Performance criteria

- 2.1 Engine is started to determine the operating temperature in accordance with service information.
- 2.2 Testing on four stroke petrol marine engine is carried out in accordance with service information.

Range

testing includes – compression test, cylinder leakage test, ignition system, exhaust system, crankcase pressure, fuel pump pressure, fuel system vacuum test, engine control systems (remotes, gauges, wire harnesses, power trim and tilt).

2.3 Test reports are made in accordance with workplace policies and procedures.

Planned review date	31 December 2023
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Status information and last date for assessment for superseded versions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	N/A

Consent and Moderation Requirements (CMR) reference	0136

This CMR can be accessed at <a href="http://www.nzqa.govt.nz/framework/search/index.do">http://www.nzqa.govt.nz/framework/search/index.do</a>.

### Comments on this unit standard

Please contact the NZ Marine and Composites Industry Training Organisation training@nzmarine.com if you wish to suggest changes to the content of this unit standard.