

40477 Prepare to lubricate, test, and tune a two-stroke petrol engine

Kaupae Level	4
Whiwhinga Credit	3
Whāinga Purpose	<p>This skill standard is intended for people already working in the outdoor power equipment industry. People credited with this skill standard can prepare to lubricate, test and tune a two-stroke petrol engine.</p> <p>This standard can be used in programmes incorporating the use of outdoor power equipment.</p>

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Prepare to lubricate, test, and tune a two-stroke petrol engine	a. Describe how to calculate fuel-oil ratios.
	b. Explain why the correct fuel-oil ratio is important.
	c. Describe how an oil injection system works.
	d. Describe how to test and tune a two-stroke petrol engine.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications

The evidence presented for assessment against this skill standard must be consistent with safe working procedures and be in accordance with applicable service information.

It is recommended that people hold credit for unit standard 30477, *Demonstrate knowledge of petrol and diesel engines* before being assessed against this skill standard.

Evidence for assessment criterion 1b must include:

- engine damage
- engine performance
- using specified oil.

Evidence for assessment criterion 1d (testing and tuning), must include:

- spark plug(s)
- compression test
- leakage test
- power valve operation
- carburettor settings
- ignition timing
- crankcase pressure
- vacuum tests
- exhaust system inspection.

Definitions

Service information refers technical information for a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions; technical terms and descriptions; and detailed illustrations.

Workplace procedures refer to organisation policies and procedures that are documented in memo, electronic, or manual format and available in the workplace. They may include but are not limited to – standard operating procedures, site specific procedures, site safety procedures, equipment operating procedures, quality assurance procedures, product quality specifications, manufacturer's requirements, references, approved codes of practice, housekeeping standards, environmental considerations, on-site briefings, supervisor's instructions, and procedures to comply with legislative and local body requirements relevant to the automotive industry.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

N/A

Rauemi | Resources

Legislation and resources relevant to this skill standard include:

- [Health and Safety at Work Act 2015](#)

Pārongo Whakaū Kounga | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Hanga-Aro-Rau Engineering, Manufacturing and Logistics Workforce Development Council
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Engineering and Technology > Motor Industry > Engines
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0014

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	27 March 2025	N/A
Kōrero whakakapinga Replacement information	This skill standard replaces unit standard 24294		
Rā arotake Planned review date	31 December 2029		

Please contact Hanga-Aro-Rau Engineering, Manufacturing and Logistics Workforce Development Council at qualifications@hangaarorau.nz to suggest changes to this skill standard.