

<b>Title</b>	<b>Test engine performance using a dynamometer and determine engine condition</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>1</b>

<b>Purpose</b>	<p>This unit standard is intended for people in the automotive repair industry.</p> <p>People credited with this unit standard are able to: test engine performance using a dynamometer; and determine engine condition using test results.</p>
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<b>Classification</b>	Motor Industry > Engines
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 It is recommended that people hold credit for Unit 24278, *Demonstrate knowledge of engine performance testing using a dynamometer* before being assessed against this unit standard.
- 2 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable service information, and company requirements and legislative requirements. This includes the knowledge and use of suitable tools and equipment.
- 3 Performance of the outcomes of this unit standard must comply with the following:  
Health and Safety at Work Act 2015;  
Land Transport Rule: Vehicle Repair 1998.
- 4 Any new, amended or replacement Acts, regulations, 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.
- 5 Definitions  
*Company requirements* refer to instructions to staff on policy and procedures that are available in the workplace. These requirements may include – company policies and procedures, work instructions, product quality specifications and legislative requirements.  
*Service information* refers to technical information for a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions; technical terms and descriptions; and detailed illustrations.  
*Suitable tools and equipment* refer to industry approved tools and equipment that are recognised within the industry as being the most suited to complete the task in a professional and competent manner with due regard to safe working practices.

## Outcomes and performance criteria

### Outcome 1

Test engine performance using a dynamometer.

Range either engine or chassis type.

### Performance criteria

1.1 The engine, vehicle, or machine is prepared for a dynamometer test.

Range basic mechanical condition, fluid levels, sufficient fuel, engine cooling and forced air requirements, instrument and gauge hook-up, security.

1.2 The engine, vehicle, or machine is operated on the dynamometer.

Range may include but is not limited to – acceleration tests, power output tests, engine torque tests.

### Outcome 2

Determine engine condition using test results.

### Performance criteria

2.1 An analysis of the engine condition is made, based on information obtained from dynamometer tests.

2.2 A recommendation specifying the remedial work necessary to rectify any deficiencies found as a result of analysis is reported to the customer.

<b>Replacement information</b>	This unit standard, unit standard 24278, and unit standard 24279 replaced unit standard 967, unit standard 15448, and unit standard 15449.
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<b>Planned review date</b>	31 December 2025
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### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 January 2008	31 December 2022
Review	2	29 April 2021	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0014
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

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**Comments on this unit standard**

Please contact MITO New Zealand Incorporated [info@mito.org.nz](mailto:info@mito.org.nz) if you wish to suggest changes to the content of this unit standard.