

Title	Carry out general repairs to an engine short block		
Level	3	Credits	3

Purpose	<p>This unit standard is intended for people in the automotive repair industry.</p> <p>People credited with this unit standard are able to carry out general repairs to an engine short block.</p>
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Classification	Motor Industry > Engines
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Available grade	Achieved
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Guidance Information

- 1 It is recommended that people hold credit for Unit 244, *Disassemble and reassemble a four stroke multi-cylinder engine to a running state* 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.
- 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.

General repairs to an engine short block are those repairs that do not require machining skills other than deglazing.

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

Carry out general repairs to an engine short block.

Performance criteria

- 1.1 The cylinder bores are deglazed and prepared.
- Range deglazing includes – measuring, meeting clearances and tolerances, cleaning;
deglazing process includes – bores suitable and recommended by the manufacturer for deglazing, glazing equipment selected, feed and speed determined, glazing lubrication selected and used, cross hatch pattern established, post glazing cleaning completed, bores lubricated.
- 1.2 Faulty piston assemblies are replaced to meet manufacturer's specifications and to match the size of the cylinder bores.
- 1.3 Piston rings are replaced.
- 1.4 Crankshaft and connecting rod bearings, crankshaft thrusts (where fitted), and seals are replaced.
- 1.5 Faulty crankshaft assemblies are replaced to meet manufacturer's specifications.
- 1.6 Faulty timing gears, water pump, and oil pump are replaced to meet manufacturer's specifications.
- 1.7 Leaking core plugs are removed and replaced.
- 1.8 Clogged threads are cleaned out, and broken studs are replaced.
- 1.9 Components are assembled to the block.

Replacement information	This unit standard and unit standard 24275 replaced unit standard 925.
Planned review date	31 December 2025

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

Consent and Moderation Requirements (CMR) reference

0014

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

Comments on this unit standard

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