

Title	Install a repower unit in a light vehicle		
Level	4	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: assess the suitability of a light vehicle for repowering; and install a repower unit in a light vehicle.</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 943, *Remove and install an engine assembly from and to a light vehicle* 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;
 - Consumer Guarantees Act 1993;
 - Land Transport Rule: Vehicle Repair 1998;
 - Low Volume Vehicle Technical Association (Inc) (LVVTA) <https://www.lvvtta.org.nz/>;
 - Low Volume Vehicle Code ('the Code')*, and LVV Standards.
- 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.
 - Light vehicle* refers to classes MA, MB, MC, MD, MD1, MD2 and NA as specified in the Vehicle equipment standards classifications at <https://www.nzta.govt.nz/vehicles/vehicle-types/vehicle-classes-and-standards/vehicle-classes/>.

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.

- 6 For this unit standard, it is essential that the practical assessment evidence is obtained in the workplace under normal workplace conditions.

Outcomes and performance criteria

Outcome 1

Assess the suitability of a light vehicle for repowering.

Performance criteria

- 1.1 The suitability of the vehicle for repowering is assessed and noted.
- Range economic viability, safety, suitability for task, power and torque range, compatibility of transmission, brakes, cooling system, suspension, drive line, exhaust system.
- 1.2 A repowering recommendation is prepared and presented to the customer.
- Range recommendation includes – the availability of a suitable repower unit and a schedule of the required modifications.

Outcome 2

Install a repower unit in a light vehicle.

Performance criteria

- 2.1 The original engine is disconnected and removed from the vehicle.
- 2.2 Modifications to the vehicle necessary to accommodate the repower unit are made following a recommended schedule and in accordance with Land Transport Rules, and LVVTA Code and Standards.
- 2.3 The repower unit is installed, connected to the transmission and controls, and any adjustments necessary are completed to make the unit perform to the engine manufacturer specifications.
- 2.4 The vehicle is tested to ensure its performance meets the expectations of the repowering recommendation and the customer.

Planned review date	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	28 September 1994	31 December 2022
Review	2	21 February 1999	31 December 2022
Review	3	25 January 2008	31 December 2022
Review	4	29 April 2021	N/A

Consent and Moderation Requirements (CMR) reference	0014
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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.