

Title	Remove and replace heavy vehicle or equipment transmissions and clutches		
Level	3	Credits	3

Purpose	<p>This unit standard is intended for people in the automotive heavy repair industry.</p> <p>People credited with this unit standard are able to remove and replace heavy vehicle or equipment transmissions and clutches.</p>
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Classification	Motor Industry > Automotive Transmission Systems
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Available grade	Achieved
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Guidance Information

- 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.
- 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.
- 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.
- 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.
Heavy vehicle refers to classes MD3, MD4, ME, NB, TC and TD as specified in the Vehicle equipment standards classifications at <https://www.nzta.govt.nz/vehicles/vehicle-types/vehicle-classes-and-standards/vehicle-classes/>; or has a gross vehicle mass that exceeds 3500kg and is not of a class specified in the Vehicle equipment standards classifications.
Service information refers to information such as 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.

- 5 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

Remove heavy vehicle or equipment transmissions and clutches.

Performance criteria

- 1.1 The type of transmission is identified from reference to service information.
- 1.2 The transmission is disconnected from driveline and removed from the vehicle or equipment, in a manner that avoids personal injury and damage to the transmission and vehicle or equipment.
- 1.3 The clutch is removed from the heavy vehicle or equipment.

Outcome 2

Replace heavy vehicle or equipment transmissions and clutches.

Performance criteria

- 2.1 The clutch is attached to the engine flywheel and the friction disc(s) is aligned.
- 2.2 The transmission is installed and connected to the vehicle or equipment.
- 2.3 The transmission oil is checked and, if necessary, topped up to the required level with the type determined by the manufacturer.
- 2.4 With the transmission installed, any external clutch faults are identified and reported to supervisor.
- 2.5 The release mechanism adjustment is checked. The operation of the clutch is tested, and any further adjustments found to be necessary are made under supervision.
- Range may include but is not limited to – clutch slip, clutch release, clutch braking.
- 2.6 Tools and equipment are put away in their place and the work area is cleaned.

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	25 February 2008	31 December 2022
Review	2	27 May 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.