

Title	Dismantle and inspect, overhaul, and reassemble an automatic transmission or transaxle assembly from a light vehicle		
Level	4	Credits	8

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 dismantle and inspect, overhaul, and reassemble an automatic transmission or automatic transaxle assembly from a light vehicle.</p>
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Classification	Motor Industry > Automotive Transmission Systems
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Available grade	Achieved
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Guidance Information

- 1 It is recommended that people hold credit for Unit 24314, *Diagnose faults in automatic transmissions on light vehicles* 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.
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 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.

Outcomes and performance criteria

Outcome 1

Dismantle and inspect an automatic transmission or automatic transaxle assembly from a light vehicle.

Performance criteria

- 1.1 The transmission is cleaned externally in order to prevent the ingress of dirt and foreign matter during disassembly.
- 1.2 The torque converter is removed, drained, and inspected, and any faults are noted.
- Range noisy operation, welds, bearing and sealing surfaces, one-way clutch operation.
- 1.3 The torque converter mounting plate and starter ring gear are inspected, and any damage is noted.
- 1.4 The environment where the transmission is to be dismantled is inspected for cleanliness, to ensure that no dust or foreign matter will affect the components.
- Range personal cleanliness, workshop environment, tools and equipment.
- 1.5 The transmission is disassembled in the sequence and manner prescribed by the vehicle manufacturer. Signs that could indicate causes of faults are identified and noted.
- 1.6 Any electronic control mechanisms are stored to prevent ingress of foreign matter or damage.
- 1.7 Sub-assemblies are disassembled and cleaned to remove all traces of foreign matter.
- Range includes but is not limited to – pump, servos, clutches, governor, valve body, gear sets.
- 1.8 All the transmission components are inspected for wear, damage, blockage of passageways, and any faults are noted.

Outcome 2

Overhaul an automatic transmission or automatic transaxle assembly from a light vehicle.

Performance criteria

- 2.1 The environment where the transmission is to be overhauled is inspected for cleanliness, to ensure that no dust or foreign matter will affect the components.
- Range personal cleanliness, workshop environment, tools and equipment.
- 2.2 Transmission or transaxle assembly faults found as a result of dismantling and inspecting components and circuits are rectified to meet manufacturer specifications.

Outcome 3

Reassemble an automatic transmission or automatic transaxle assembly from a light vehicle.

Performance criteria

- 3.1 The environment where the transmission is to be reassembled is inspected for cleanliness, to ensure that no dust or foreign matter will affect the components.
- Range personal cleanliness, workshop environment, tools and equipment.
- 3.2 The transmission is assembled in the sequence and manner prescribed by the manufacturer. Any clearances and preloads are adjusted to comply with manufacturer specifications.
- 3.3 Specific fluid type is used to comply with manufacturer specifications.
- 3.4 An air pressure test and any electronic tests are conducted to confirm correct assembly after overhaul.
- 3.5 Tools and equipment are cleaned and put away after use.

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	21 August 1996	31 December 2022
Review	2	20 December 1998	31 December 2022
Revision	3	16 October 2003	31 December 2022
Review	4	25 February 2008	31 December 2022
Review	5	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.