Title	Carry out routine maintenance on automotive automatic transmissions		
Level	3	Credits	4

Purpose	This unit standard is intended for people in the automotive repair industry.	
	People credited with this unit standard are able to: road test a vehicle to determine automatic transmission operation; carry out a visual inspection on an automatic transmission; change the fluid and filter in an automatic transmission; and carry out service adjustments.	

Classification	Motor Industry > Automotive Transmission Systems	
Available grade	Achieved	

Prerequisites	Appropriate driver licence for the vehicle being driven.
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Guidance Information

- 1 It is recommended that people hold credit for Unit 30562, *Demonstrate knowledge of automatic transmissions* 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.
- Performance of the outcomes of this unit standard must comply with the following: Health and Safety at Work Act 2015; The Official New Zealand Road Code.
- 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 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.

- 6 Range This unit standard includes one of the following transmission types – inline transmission, transaxle, CVT (continuously variable transmission).
- 7 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

Road test a vehicle to determine automatic transmission operation.

Performance criteria

- 1.1 Details are obtained, and preliminary checks are carried out before testing the transmission operation.
 - Range may include but is not limited to customer concerns, transmission type, transmission specifications, fluid type, fluid levels, correct operating temperature, engine idle, general engine condition, brake operation, vehicle condition, self-test codes.
- 1.2 The vehicle is tested in a stationary position for transmission operation.

Range smooth selection of selector through all positions, transmission creep, inhibitor switch operation.

- 1.3 The vehicle is road tested to check transmission operation complies with vehicle manufacturer specifications.
 - Range selector lever operation, shift pattern, shift quality, transmission noise; light throttle checks, full throttle checks, kickdown, uphill checks.
- 1.4 A report on transmission operation is made to the supervisor.

Outcome 2

Carry out a visual inspection on an automatic transmission.

Performance criteria

- 2.1 A visual inspection is completed, and any defects are noted and reported to the supervisor.
 - Range may include but is not limited to transmission cooling system, leaks, mountings, linkage and inhibitor, damage, oil condition and level, drive train.

Outcome 3

Change the fluid and filter in an automatic transmission.

Performance criteria

- 3.1 The fluid level is checked, and any variation from the full mark is noted.
- 3.2 The fluid on the dipstick is inspected for condition, and condition is reported to the supervisor.

Range fluid colour, fluid odour, particles in the fluid, water contamination.

- 3.3 The fluid is changed.
 - Range draining the fluid, checking fluid colour, inspecting amount and types of deposits in the oil pan, cleaning removed parts, refitting parts, refilling the transmission with the specified fluid type, observing strict cleanliness.
- 3.4 Oil filters are renewed or cleaned.
 - Range throw-away filters are renewed, gauze screens are cleaned.
- 3.5 A visual inspection for fluid leaks is completed, and the nature of any leakage is identified and reported to the supervisor.

Outcome 4

Carry out service adjustments.

Performance criteria

4.1 Service information is obtained before attempting any adjustment.

Range type of adjustment, method of adjustment.

- 4.2 The service adjustments are carried out in accordance with vehicle manufacturer specifications.
 - Range may include but not limited to cables, bands, TPS (throttle position sensor), VAC (vacuum) modulator, linkages, inhibitor switch, engine idle speed, cooling system.

4.3 The vehicle is road tested, once adjustments have been made, to confirm that the transmission operates to vehicle manufacturer specifications.

Replacement information	This unit standard replaced unit standard 935 and unit standard 15420.

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	
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 <u>info@mito.org.nz</u> if you wish to suggest changes to the content of this unit standard.