

Title	Diagnose 4WD or AWD system faults on light vehicles		
Level	4	Credits	2

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 diagnose 4WD or AWD system faults on light vehicles.</p>
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Classification	Motor Industry > Automotive Transmission Systems
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Available grade	Achieved
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Prerequisites	Class 1 driver licence.
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Guidance Information

- 1 It is recommended that people hold credit for Unit 30561, *Demonstrate knowledge of drivelines and final drives* 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;
Land Transport Rule: Vehicle Repair 1998;
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
AWD stands for all-wheel drive and, for the purposes of the unit standard, refers to full time symmetric or automatic asymmetric systems. Many vehicles are offered with a combination of the systems.
4WD stands for four-wheel drive and, for the purposes of this unit standard, refers to either part time or full time symmetric or automatic asymmetric systems. Vehicle manufacturers use various terms for 4WD. Many vehicles are offered with a combination of the systems.
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.

- 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

Diagnose 4WD or AWD system faults on light vehicles.

Performance criteria

- 1.1 Details of the fault are obtained from the customer and noted.
- 1.2 Service information is obtained to enable reference to manufacturer settings and specifications as an aid to diagnosis.
- 1.3 A visual check is carried out on the system, and any defects are noted.
- Range includes but is not limited to – oil leaks, damage, loose fittings, oil appearance and condition.
- 1.4 Diagnostic tests are carried out, and any abnormal readings or functions are noted.
- 1.5 The vehicle is operated, and the nature of any faults is determined.
- 1.6 The test results are analysed to determine the probable causes of any faults found.

Replacement information	This unit standard, unit standard 24325, and unit standard 24327 replaced unit standard 8185.
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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 info@mito.org.nz if you wish to suggest changes to the content of this unit standard.