Title	Demonstrate knowledge of and skills for driving a light 4WD vehicle on road		
Level	3	Credits	4

Purpose	People credited with this unit standard are able to: demonstrate knowledge of types and features of light 4WD vehicles; describe light 4WD vehicle stability and vehicle dynamics; describe hazards associated with driving a light 4WD vehicle towing a trailer on road; and drive a light 4WD vehicle safely at different speeds on different road surfaces.	
Classification	Driving > Specialist Driving Knowledge and Skills	
Available grade	Achieved	
Prerequisites	Candidates must hold a minimum of a Restricted Class 1 driver licence.	

#### **Guidance Information**

- Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable company requirements and legislative requirements. This includes the knowledge and use of suitable tools and equipment.
- 2 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the:
  - Health and Safety at Work Act 2015;
  - Land Transport Act 1998;
  - Transport Act 1962; Traffic Regulations 1976;
  - Land Transport (Driver Licensing) Rule 1999;
  - Transport (Vehicle and Driver Registration and Licensing) Act 1986;
  - The official New Zealand road code; and any subsequent amendments and replacements.

### 3 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.

Drive includes to manoeuvre.

Light 4WD vehicle means any four-wheel vehicle with a gross laden weight less than 3500kg and capable of having motive power applied simultaneously to all four wheels. It does not include an all-terrain vehicle.

On road means a sealed or unsealed, formed road or track.

Road surfaces include fine gravel on a hard base, wet sealed, iced road, sealed surface with fresh mud on it, dry sealed road surface, unsealed road surface. Safe driving techniques are defined in Part 2 of The Official New Zealand Road Code, current edition, available from at

https://www.nzta.govt.nz/resources/roadcode/.

*Vehicle dynamics* means the motion of the vehicle, and the interaction of the various physical forces that affect that motion.

# Outcomes and performance criteria

#### Outcome 1

Demonstrate knowledge of types and features of light 4WD vehicles.

#### Performance criteria

- 1.1 Vehicle types are described in terms of their configuration and purpose.
  - Range long and short-wheel base, designed to carry goods, passengers, or a combination of goods and passengers.
- 1.2 Suspension types and their effect on ground clearances are explained in terms of on-road performance.
  - Range independent suspension, live axle suspension system.
- 1.3 Operation of the drive train is identified in terms of function, controls, and components.
  - Range permanent 4WD transmission, selectable 4WD transmission, differentials, hub types.

#### Outcome 2

Describe light 4WD vehicle stability and vehicle dynamics.

#### Performance criteria

- 2.1 The centre of gravity and its effect on vehicle stability is described.
  - Range acceleration, deceleration, cornering.
- 2.2 The requirements for safe loading in terms of load type and load security are described.
  - Range livestock, liquids, passengers, freight.
- 2.3 Driving techniques required to counter load movement are described.
- 2.4 The effects of tyre type and condition on vehicle handling are described.

#### Outcome 3

Describe hazards associated with driving a light 4WD vehicle towing a trailer on road.

#### Performance criteria

3.1 Hazards associated with towing a trailer on road are described.

Range trailer swing, weight distribution, reversing, weight limits.

3.2 Environmental hazards which may be faced when towing a trailer on road are described.

Range weather, road surface conditions, other traffic, terrain, visibility.

#### **Outcome 4**

Drive a light 4WD vehicle safely at different speeds on different road surfaces.

Range speeds under 20 km/hour, speeds between 40 and 70 km/hour; three road surfaces.

#### Performance criteria

4.1 Safe driving techniques are applied to maintain vehicle control in a range of situations, minimise risk of damage to vehicle, equipment and property.

Range urban road, winding rural road, highway or motorway.

Replacement information	This unit standard replaced unit standard 18473 and unit standard 18474.
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Planned review date	31 December 2023

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	24 May 2004	31 December 2020
Review	2	28 March 2019	N/A

Consent and Moderation Requirements (CMR) reference	0014
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This CMR can be accessed at <a href="http://www.nzqa.govt.nz/framework/search/index.do">http://www.nzqa.govt.nz/framework/search/index.do</a>.

NZQA unit standard 20848 version 2

## Comments on this unit standard

Please contact MITO New Zealand Incorporated <a href="mailto:info@mito.org.nz">info@mito.org.nz</a> if you wish to suggest changes to the content of this unit standard.

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