

Title	Drive a heavy vehicle in an off-road environment		
Level	4	Credits	3

Purpose	People credited with this unit standard are able to: assess the suitability of terrain for off-road driving of a heavy vehicle and identify a route; prepare a heavy vehicle for off-road driving; drive a heavy vehicle in an off-road environment; stop a heavy vehicle in an off-road environment; and return a heavy vehicle to on-road condition following off-road driving.
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Classification	Commercial Road Transport > Commercial Road Transport Skills
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Available grade	Achieved
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Prerequisites	Drivers must hold a current full driver licence appropriate to the class of vehicle being driven.
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Guidance Information

- 1 Legislation, regulations, references and/or industry standards relevant to this unit standard include but are not limited to the:
- Health and Safety at Work 2015;
 - Land Transport Act 1998;
 - Land Transport (Driver Licensing) Rule 1999;
 - Land Transport (Road User) Rule 2004.

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.

2 Definitions

Drive includes to manoeuvre.

Heavy motor vehicle may include a motor vehicle that is of Class MD3, MD4, ME, NB, NC, TC or TD; or has a gross vehicle mass that exceeds 3500 kg and is not of a class specified in the Table of vehicle classes as listed from Waka Kotahi NZTA website <https://www.nzta.govt.nz/>.

Off-road refers to a surface other than a sealed or unsealed, formed road or track and includes but is not limited to bush tracks, beaches, riverbeds and open paddocks.

On-road refers to a sealed or unsealed, formed road or track.

Terrain refers to a piece of ground having specific characteristics such as sloping, hilly, or undulating.

Workplace procedures refer to organisation policies and procedures that are documented in memo, electronic, or manual format and available in the workplace. They may include but are not limited to – standard operating procedures, site specific procedures, site safety procedures, equipment operating procedures, quality assurance procedures, product quality specifications, manufacturer’s requirements, references, approved codes of practice, housekeeping standards, environmental considerations, on-site briefings, supervisor’s instructions, and procedures to comply with legislative and local body requirements relevant to the commercial road transport sector.

3 Assessment information

Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable service information, workplace procedures and legislative requirements.

Outcomes and performance criteria

Outcome 1

Assess the suitability of terrain for off-road driving of a heavy vehicle and identify a route.

Performance criteria

- 1.1 An on-foot assessment is carried out.
- 1.2 Potential hazards in the terrain are identified.
- 1.3 Vehicle capabilities in relation to the terrain, and driving techniques required to exploit these capabilities are assessed.
- 1.4 A route that is consistent with the terrain and vehicle capabilities, fuel usage, minimum wear and tear on the vehicle, and the driver’s ability is chosen.

Outcome 2

Prepare a heavy vehicle for off-road driving.

Performance criteria

- 2.1 Equipment is confirmed as in serviceable condition and any defects are remedied or equipment replaced.

Range may include but is not limited to – vehicle tools, safety equipment, emergency equipment, load securing devices.
- 2.2 Vehicle components are adjusted to allow access to all controls.

Range vehicle components may include – mirrors, seats, steering wheel, seat belts.
- 2.3 Tyre pressures are adjusted.

- 2.4 Where the journey requires that the vehicle is driven through water, actions are taken to prevent water entering the air cleaner, drive train components and engine.
- 2.5 Equipment, load (if loaded) and any loose items in the cab are secured in accordance with organisational requirements.

Outcome 3

Drive a heavy vehicle in an off-road environment.

Performance criteria

- 3.1 When gauges and warning systems indicate load and stress on the vehicle, actions are taken that return the vehicle to within normal operating range.
- 3.2 Obstacles are negotiated smoothly with controlled use of the accelerator, brake, and traction devices.
- 3.3 Driving techniques are employed to suit the nature of the terrain and obstacles encountered.
- 3.4 Wheel spin is managed so that the vehicle returns to a position from which it can be moved safely.

Outcome 4

Stop a heavy vehicle in an off-road environment.

Range uphill, downhill, on level ground.

Performance criteria

- 4.1 Vehicle is stopped.
- 4.2 Vehicle is stopped in a position from which it can move off again.

Outcome 5

Return a heavy vehicle to on-road condition following off-road driving.

Performance criteria

- 5.1 Any damage to the vehicle is identified and recorded.
- Range bodywork, steering, brakes, suspension, sump, gearbox and differential housing, tyres and rims, vehicle panels.
- 5.2 Vehicle components are cleared of debris to allow inspection and operation.
- Range may include – clearing vehicle debris off road.

5.3 Tyre pressures are adjusted to on-road use pressures.

5.4 Vehicle components are readjusted to on-road position.

Range vehicle components may include – mirrors, seats, steering wheel, seat belts.

5.5 Brakes are checked, and action is taken to restore braking efficiency.

Planned review date	31 December 2028
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	9 April 1996	31 December 2022
Review	2	25 May 1999	31 December 2022
Revision	3	18 August 2000	31 December 2022
Review	4	22 March 2005	31 December 2022
Review	5	29 April 2021	31 December 2025
Review	6	29 June 2023	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 Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council qualifications@hangaarorau.nz if you wish to suggest changes to the content of this unit standard.