

Title	Demonstrate knowledge of recovery procedures to recover heavy vehicles and on-road machines		
Level	3	Credits	3

Purpose	People credited with this unit standard are able to demonstrate knowledge of: requirements and procedures to recover and tow heavy vehicles and on-road machines; and heavy equipment recovery, and towing techniques.
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Classification	Motor Industry > Vehicle Recovery
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Available grade	Achieved
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Guidance Information

- 1 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.
- 2 Performance of the outcomes of this unit standard must comply with the following:
 Health and Safety at Work Act 2015;
 Transport Services Licensing Regulations 1989;
 Traffic Regulations 1976;
 Land Transport Rule: Heavy Vehicles 2004;
 Land Transport Rule: Operator Licensing 2017;
 Land Transport Rule: Vehicle Repair 1998;
 The Official New Zealand Road Code;
 Australian Standard AS 1418.5-2002 Cranes, hoists and winches – Mobile cranes;
 Approved code of practice: Load-lifting rigging, ISBN: 978-0-478-40122-6 (print) 978-0-478-40123-3 available at <https://www.worksafe.govt.nz/topic-and-industry/load-lifting-and-rigging/>.
- 3 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.
- 4 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.
Heavy Vehicle refers to classes MD3, MD4, ME, NB, TC and TD as specified in the Vehicle equipment standards classifications at <https://www.nzta.govt.nz/vehicles/vehicle-types/vehicle-classes-and->

[standards/vehicle-classes/](#); or has a gross vehicle mass that exceeds 3500kg and is not of a class specified in the Vehicle equipment standards classifications.

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

Demonstrate knowledge of requirements and procedures to recover and tow heavy vehicles and on-road machines.

Range hook up, flat tow, winch.

Performance criteria

1.1 Rule requirements for Vehicle Recovery Services of the Land Transport Rule: Operator Licensing 2017, and the benefits of using Standards and Codes of Practices directly relating to vehicle recovery and towing, are identified.

Range operator responsibility, driver identification, driver behaviour, tow authority, complaints register, passenger behaviour, animals, register of tows; keeping within the legal requirements, source of practical information.

1.2 Reasons for adhering to vehicle manufacturer towing specifications while undertaking any tow are explained.

Range maximum permissible towing weight, towing points, air brake operation.

1.3 Lifting, winching and towing points are described.

Range heavy vehicles, on-road machines.

1.4 The capability of vehicles to be towed is described.

Range air brake connections between vehicles and reservoir capacity, steerability, lights and warning indicators, mechanical and body damage, weight ratio comparison, security and certified approval of towing anchor points, beams and eyes.

1.5 The reasons for releasing air brakes and disconnecting drive shafts are described.

Range prevention of further damage to components, mobility.

- 1.6 The requirement of a towing vehicle and vehicle or machine to be towed being securely connected with a towing attachment in accordance with Land Transport Rule: Heavy Vehicles 2004 is identified.

Outcome 2

Demonstrate knowledge of heavy equipment recovery, and towing techniques.

Performance criteria

- 2.1 Recovery procedures are described.
- Range tow, suspended tow and trailer recovery methods, winching.
- 2.2 The effect of tow hook loading on vehicle stability is identified.
- Range changes in axle loading, positioning the centre of the lift, height and angle of lift.
- 2.3 The towing factors that affect vehicle stability are identified.
- Range transverse stability (yawing), directional stability (loss of effective steering).
- 2.4 Safe towing and hook up techniques that demonstrate good driving and towing practices are described.
- Range smooth progressive power transfer, braking, keeping the tow distance constant to avoid sharp jerking and movement, clear signaling and communication between vehicles, hazard and towing warning requirements; adherence to Traffic Regulations and the Road Code, safe towing procedure, air line attachment.
- 2.5 The value of communication between the driver of the towing vehicle and driver of the towed vehicle or machine is explained in terms of safe towing practices.
- Range planning the route, pre-arranged signals, visibility, no unsafe actions during the tow.
- 2.6 Procedures to secure a vehicle and a machine on completion of towing are identified.
- Range adherence to Traffic Regulations and the Road Code, safe parking procedure, vehicle and machine security, reporting to supervisor and customer.
- 2.7 Procedures for checking the towing equipment for wear, security and damage and reporting any faulty equipment promptly to the supervisor is described.
- Range wire and fibre ropes, winching equipment, lifting equipment, chains, towing frames.

Replacement information	This unit standard and unit standard 23942 replaced unit standard 2338 and unit standard 15481.
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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	21 September 2007	31 December 2022
Review	2	29 July 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.