

<b>Title</b>	<b>Use a vehicle-mounted winch in heavy haulage operations</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>7</b>

<b>Purpose</b>	People credited with this unit standard are able to: assess the winching requirement and prepare to load or unload a specialist heavy haulage trailer; select and assess winching equipment; connect the winching equipment to the load; operate the trailer mounted winch; and carry out post-winch activities.
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<b>Classification</b>	Commercial Road Transport > Heavy Haulage
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<b>Available grade</b>	Achieved
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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:
  - Land Transport Act 1998;
  - Land Transport Rule: Heavy Vehicles 2004;
  - Land Transport Rule: Vehicle Dimensions and Mass 2016;
  - Traffic Regulations 1976;
  - Waka Kotahi New Zealand Transport Agency. (current edition). *The Official New Zealand Truck Loading Code – Code of Practice for the Safety of Loads on Heavy Vehicles*. Available from: <https://www.nzta.govt.nz/assets/resources/roadcode/truck-loading-code/docs/tlc.pdf>;
  - Worksafe. (2012). *Approved Code of Practice for Load-Lifting Rigging*. Available from: <https://worksafe.govt.nz/topic-and-industry/load-lifting-and-rigging/>;
  - Crane Association of New Zealand. (2019). *Crane Safety Manual*. Available from: <https://shop.cranes.org.nz/en-NZ/products/8995/Crane-Safety-Manual-Ver-4-0/>;
  - Waka Kotahi New Zealand Transport Agency. (1995). *Transit New Zealand Overweight Permit Manual SM070*. Available from: <https://www.nzta.govt.nz/assets/resources/overweight-permit-manual/docs/overweight-permit-manual.pdf>.

Any new, amended, or replacement Acts, regulations, Rules, standards, codes of practice, authority requirements or conditions affecting the outcome of this unit standard will take precedence for assessment purposes, pending review of this unit standard.

- 2 Definitions  
*Vehicle combination* refers to towing a vehicle in combination with one or more trailers.

*Workplace procedures* refers 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 transportation of overdimension and overweight vehicles and/or loads.

### 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.

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## Outcomes and performance criteria

### Outcome 1

Assess the winching requirement and prepare to load or unload a specialist heavy haulage trailer.

#### Performance criteria

- 1.1 The winching situation is inspected for existing and potential hazards.  
  
Range vehicles, equipment, ground condition, underground services, overhead power lines, overhead service lines, trees, buildings, structures, unauthorised people.
- 1.2 The load is assessed to determine whether its mass and resistance are within the single or multiple line pull capacity of the winch and winch-rope safe working load.
- 1.3 The hazards specific to the site and other potential hazards are identified and dealt with.
- 1.4 The trailer is located on a firm surface and levelled.  
  
Range trailer position, truck and trailer park brake applied, trailer suspension lowered, trailer levelled to suit the load, blocking, packing, anti-slip material, safety equipment.
- 1.5 The condition and safety of the winch is checked in accordance with winch and trailer manufacturers’ recommendations.
- 1.6 The winch is set up in accordance with winch, vehicle, and trailer manufacturers’ recommendations.

## Outcome 2

Select and assess winching equipment.

### Performance criteria

- 2.1 Winching equipment is selected in accordance with the Crane Safety Manual, and the Approved Code of Practice for Load-Lifting Rigging.
- Range chains and fittings, winch wire rope capacity, rope lubrication, rope end fittings, shackles, chain shorteners, pins, rope protectors, snatch blocks.
- 2.2 Winching equipment is assessed to ensure all items are serviceable and free from defects in accordance with the Crane Safety Manual and the Approved Code of Practice for Load-Lifting Rigging.

## Outcome 3

Connect the winching equipment to the load.

### Performance criteria

- 3.1 Personal protective equipment is worn.
- Range gloves; safety glasses; full face shield; helmet; steel-capped footwear; overalls, or tight-fitting clothing.
- 3.2 Radio communication is tested prior to the winching operation.
- 3.3 The rope and winch tackle are rigged to the load.
- Range rope alignment on winch drum, drum spooling action, chain and rope protection, fixing points, snatch blocks, rope reaving, pins, shackles, rope for fittings.
- 3.4 The load is checked prior to attachment to the winch.
- Range load attachments for security and hazard potential, load alignment, moving restraints.
- 3.5 The safety of the load winch and stability of the vehicle is assessed for the duration of the winching operation.

## Outcome 4

Operate the trailer mounted winch.

### Performance criteria

- 4.1 The area is cleared of personnel and hazards for safe winch operation, and the load observer and safety equipment are positioned.

- 4.2 An assessment of the safety of the winching operation, load protection, and winch is made on drive engagement and when taking the strain on the winch wire and vehicle.
- 4.3 The winch is operated to pull the load onto the trailer in accordance with observer and radio instructions.

### Outcome 5

Carry out post-winch activities.

### Performance criteria

- 5.1 The load is secured in accordance with the Truck Loading Code.
- 5.2 The winch equipment is unhooked from the load and the winch is restored in accordance with winch manufacturer's instructions.
- 5.3 Damage and defects to the winch and its equipment are rectified and/or reported and documented in accordance with winch manufacturer's instructions.
- 5.4 The winching tackle and safety equipment are stowed and secured in accordance with winch manufacturer's instructions.
- 5.5 The vehicle and load are prepared for road transport mode.
- 5.6 Load documentation is completed, the vehicle combination is checked, and the site exit is confirmed in accordance with on-road regulations.

<b>Planned review date</b>	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	21 September 2007	31 December 2022
Review	2	29 April 2021	31 December 2025
Review	3	29 June 2023	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	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](mailto:qualifications@hangaarorau.nz) if you wish to suggest changes to the content of this unit standard.