

Use a vehicle-mounted winch in heavy haulage operations

Level 4

Credits 7

Purpose This unit standard is for drivers who use a vehicle-mounted winch in heavy haulage operations.

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 winching equipment; connect the winching equipment to the load; operate the trailer mounted winch; and carry out post-winch activities.

Subfield Commercial Road Transport

Domain Heavy Haulage

Status Registered

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Entry information Open.

Accreditation Evaluation of documentation and visit by NZQA and industry.

Standard setting body (SSB) NZ Motor Industry Training Organisation (Incorporated)

Accreditation and Moderation Action Plan (AMAP) reference 0092

This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Special notes

- 1 Legal requirements to be complied with include:
Land Transport Act 1998;
Land Transport Rule: Heavy Vehicles 2004;
Land Transport Rule: Vehicle Dimensions and Mass 2002;
Traffic Regulations 1976.

- 2 Any new, amended, or replacement Acts, regulations, Rules, standards, codes of practice, Land Transport New Zealand or Transit New Zealand requirements or conditions affecting the outcome of this unit standard will take precedence for assessment purposes, pending review of this unit standard.
- 3 References
Approved Code of Practice for Load-Lifting Rigging (Wellington: Occupational Safety and Health Service, Department of Labour, 2001) available at <http://www.osh.govt.nz/order/catalogue/pdf/rigging-ac.pdf>;
Official New Zealand Truck Loading Code – Code of Practice for the Safety of Loads on Heavy Vehicles (current edition), available from booksellers;
PCA Crane Safety Manual, published by the Power Crane Association of New Zealand (Inc.), PO Box 30 074, LOWER HUTT;
The *Transit New Zealand Overweight Permit Manual SM070 1995*, available at the Transit New Zealand website www.transit.govt.nz/technical/manuals.jsp.
- 4 Definitions
Organisational requirements include any legal requirements, standards, codes of practice, organisational and/or site requirements, industry best practice, and manufacturers' instructions. These must be available to candidates, providers, and assessors.

Elements and performance criteria

Element 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 in accordance with organisational requirements.
- Range includes but is not limited to – 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 in accordance with organisational requirements.
- 1.4 The trailer is located on a firm surface, and levelled in accordance with organisational requirements.
- Range includes but is not limited to – 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 and organisational requirements.
- 1.6 The winch is set up in accordance with winch, vehicle, and trailer manufacturers' recommendations and organisational requirements.

Element 2

Select winching equipment.

Performance criteria

- 2.1 Winching equipment is selected in accordance with organisational requirements, the PCA Crane Safety Manual, and the Approved Code of Practice for Load-Lifting Rigging.

Range includes but is not limited to – 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 PCA Crane Safety Manual and the Approved Code of Practice for Load-Lifting Rigging.

Element 3

Connect the winching equipment to the load.

Performance criteria

- 3.1 Personal protective equipment is worn in accordance with organisational requirements.

Range includes but is not limited to – 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 in accordance with organisational requirements.

- 3.3 The rope and winch tackle is 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 in accordance with organisational requirements.

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 in accordance with organisational requirements.

Element 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 in accordance with organisational requirements.
- 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, in accordance with organisational requirements.
- 4.3 The winch is operated to pull the load onto the trailer in accordance with observer and radio instructions and organisational requirements.

Element 5

Carry out post-winch activities.

Performance criteria

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

Please note

Providers must be accredited by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact NZ Motor Industry Training Organisation (Incorporated) info@mito.org.nz if you wish to suggest changes to the content of this unit standard.