

Title	Drive and manoeuvre a steam driven road vehicle		
Level	4	Credits	10

Purpose	<p>This unit standard covers the knowledge and skills required to drive and manoeuvre steam driven road vehicles.</p> <p>People credited with this unit standard are able to demonstrate knowledge and skills required to operate the controls, safely brake, and control a steam driven road vehicle; and demonstrate knowledge of routes suitable for use by steam driven vehicles and procedures for obtaining required permits.</p>
----------------	---

Classification	Commercial Road Transport > Steam Driven Vehicles
-----------------------	---

Available grade	Achieved
------------------------	----------

Entry information	
Recommended skills and knowledge	Prerequisite: Unit 21755, <i>Prepare, bring to steam, and operate a steam driven vehicle and steam boiler</i> , or demonstrate equivalent knowledge and skills.

Explanatory notes

- 1 **Range**
This unit standard applies only to steam driven road vehicles, including steam traction engines, steam cranes, steam trucks, steam cars, and steam rollers. Steam driven road vehicles fitted with boilers not exceeding 50 litres water capacity are excluded.
- 2 All tasks are to be carried out in accordance with the Land Transport Rule: Traction Engines 2010 (the Rule) <http://www.nzta.govt.nz/resources/rules/traction-engines-2010-index.html>.
- 3 **Definitions**
Organisational requirements include any legal requirements, standards, codes of practice, organisational and/or site policies and procedures, industry best practice and manufacturers' instructions. These must be available to candidates, providers, and assessors. The applicable standard is the highest standard specified.
- 4 Before assessment commences, the boiler must be checked to ensure it has a current boiler certificate.

- 5 Achievement of competency in this unit standard does not authorise a person to drive a steam driven vehicle on a public road. For operation on public roads, drivers must hold the required class of driver licence and licence endorsements prescribed in the Land Transport (Driver Licensing) Rule.
- 6 In the case of a traction engine, this unit standard assesses the candidate as the steerer. Unit standard 21754 and unit standard 21755 assess the engine driver.

Outcomes and evidence requirements

Outcome 1

Demonstrate knowledge and skills required to operate the controls of a steam driven road vehicle.

Evidence requirements

- 1.1 The controls of the vehicle are identified, and their use is explained in terms of vehicle behaviour.
- Range: may include but is not limited to – throttle or regulator or auxiliary starting valve, flywheel, gear shift lever, locking pin arrangement, operation of engine cylinder drain cocks, brakes, chocks, reversing lever, steering wheel, driving and differential pins.
- 1.2 The response and behaviour of the vehicle to the operation of the controls is demonstrated safely.
- Range: may include but is not limited to – throttle or regulator or auxiliary starting valve, flywheel, gear shift lever, locking pin arrangement, brakes, chocks, reversing lever, steering wheel, operation of engine cylinder drain cocks.

Outcome 2

Demonstrate knowledge and skills required to safely brake a steam driven road vehicle.

Evidence requirements

- 2.1 The various types of braking or stopping systems in use are described and demonstrated in accordance to organisational requirements.
- 2.2 Best practise and care required when braking under various operating situations are described in accordance with organisational requirements.
- Range: may include but is not limited to – forward direction, reverse direction, level surface, ascending surface, descending surface.

Outcome 3

Demonstrate knowledge and skills required to control a steam driven road vehicle.

Evidence requirements

- 3.1 Smooth starting, acceleration, deceleration, manoeuvring through turns and bends, stopping, and securing the vehicle are explained and demonstrated while maintaining safe control of the vehicle.

Range: forward direction, reverse direction, level surface, ascending surface, descending surface.

Outcome 4

Demonstrate knowledge of routes suitable for use by steam driven vehicles and procedures for obtaining required permits.

Evidence requirements

- 4.1 The explanation includes routes suitable for use by steam driven road vehicles in accordance with local authority bylaws and New Zealand Transport Agency requirements.
- 4.2 The explanation includes procedures for obtaining permits for use of steam driven road vehicles in accordance with local authority bylaws and New Zealand Transport Agency requirements.

Planned review date	31 December 2019
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 January 1998	31 December 2001
Revision	2	16 May 2003	31 December 2016
Review	3	27 May 2005	31 December 2016
Review	4	16 July 2015	N/A

Consent and Moderation Requirements (CMR) reference	0092
--	------

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

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMR). The CMR 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.