Title	Demonstrate knowledge of belt and chain drive systems on plant and machinery		
Level	3	Credits	2

Purpose	This theory-based unit standard is intended for people in the automotive repair industry.
	People credited with this unit standard are able to demonstrate knowledge of belt and chain drive systems on plant and machinery.

Classification	Motor Industry > Automotive Transmission Systems	
Available grade	Achieved	

# **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.
- 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.

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 belt drive systems on plant and machinery.

Range includes but is not limited to – vee belts, multiple vee belts, flat belts, toothed belts, vee pulleys, variable speed vee pulleys, flat pulleys, toothed pulleys.

## Performance criteria

1.1 The characteristics of belt drives are described.

Range advantages, disadvantages, construction, tension, power transmitted.

1.2 The maintenance of belt drives is described.

Range pulley wear, belt wear, misalignment, tension adjustment.

1.3 Procedures for testing the belt drive system for correct operation are described.

### Outcome 2

Demonstrate knowledge of chain drive systems on plant and machinery.

Range single roller chain, multiple roller chain, link-belt chain.

## Performance criteria

2.1 The characteristics of chain types used on equipment are described.

Range advantages, disadvantages, construction, speed ratios and drive

direction, power transmitted.

2.2 The maintenance of chain drive systems is described.

Range sprocket wear, chain wear, misalignment, tension adjustment, lubrication.

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2.3 Procedures for testing the chain drive system for correct operation are described.

Replacement information	This unit standard and unit standard 24322 replaced unit standard 2343.

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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	25 February 2008	31 December 2022
Review	2	27 May 2021	N/A

Consent and Moderation Requirements (CMR) reference	0014
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This CMR can be accessed at <a href="http://www.nzqa.govt.nz/framework/search/index.do">http://www.nzqa.govt.nz/framework/search/index.do</a>.

# Comments on this unit standard

Please contact MITO New Zealand Incorporated <a href="mailto:info@mito.org.nz">info@mito.org.nz</a> if you wish to suggest changes to the content of this unit standard.