

<b>Title</b>	<b>Demonstrate knowledge of interchanging and balancing wheels in the automotive industry</b>		
<b>Level</b>	<b>2</b>	<b>Credits</b>	<b>2</b>

<b>Purpose</b>	<p>This theory-based unit standard is intended for people who wish to enter or are employed in the automotive repair industry.</p> <p>People credited with this unit standard are able to demonstrate knowledge of interchanging vehicle or machine wheels, and balancing wheels and tyres.</p>
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<b>Classification</b>	Motor Industry > Automotive Preventive Maintenance
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<b>Available grade</b>	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;  
Land Transport Rule: Tyres and Wheels 2001.
- 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 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.

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## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of interchanging vehicle or machine wheels.

#### Performance criteria

- 1.1 Safe working practices when interchanging wheels are described.
- Range personal safety, safety of others, no damage to equipment, vehicle safety.
- 1.2 Procedures for lifting the vehicle or machine to remove and replace wheels are described.
- Range includes but is not limited to – jacking points, use of supports (axle stands), vehicle supported so that wheels are clear of the ground and the vehicle cannot slip; jack, hoist.
- 1.3 Considerations to take into account when interchanging wheels and tyres are explained.
- Range includes but is not limited to – matching type and size of wheels and tyres, matching tyres by amount of wear, tread pattern, tyre construction.
- 1.4 Procedures to check wheel bearings are described.
- Range play, over-tight, roughness.
- 1.5 Procedures for removing and refitting wheels are described.
- Range includes but is not limited to – positioning, avoiding damage to the vehicle, wheel and hub condition, threads of the wheel nuts and studs, torquing wheel nuts and studs, removing supports, lowering vehicle.

### Outcome 2

Demonstrate knowledge of balancing wheels and tyres.

#### Performance criteria

- 2.1 Reasons for balancing wheels and tyres are explained.
- Range includes but is not limited to – tyre wear, damage to components, driving safety.
- 2.2 Types of wheel balancers are described.
- Range on-vehicle balancing, off-vehicle balancing.

- 2.3 Types of weights and attachment methods used in wheel balancing are described.
- 2.4 Procedures for balancing vehicle wheels are explained.
- Range includes but is not limited to – cars, light and heavy commercial vehicles.
- 2.5 Safety procedures when balancing wheels are described.
- Range personal safety, safety of others, no damage to equipment, vehicle safety.

<b>Planned review date</b>	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	27 July 2005	31 December 2022
Rollover and Revision	2	26 November 2007	31 December 2022
Review	3	29 April 2021	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 MITO New Zealand Incorporated [info@mito.org.nz](mailto:info@mito.org.nz) if you wish to suggest changes to the content of this unit standard.