

<b>Title</b>	<b>Demonstrate knowledge of hard facing automotive components</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>3</b>

<b>Purpose</b>	<p>This theory-based unit standard is intended for people in the automotive repair industry.</p> <p>People credited with this unit standard are able to demonstrate knowledge of hard facing automotive components.</p>
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<b>Classification</b>	Motor Industry > Automotive Workshop Engineering
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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: Heavy Vehicles 2004;  
Land Transport Rule: Vehicle Repair 1998.
- 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.

## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of hard facing automotive components.

Range oxyacetylene welding, manual arc welding, gas metal arc welding processes.

### Performance criteria

1.1 Types and grades of hard facing materials used on automotive components are defined.

Range includes but is not limited to – cobalt alloys, chromium alloys, tungsten alloys.

1.2 Reasons for hard facing automotive components are explained in terms of increasing service life.

Range includes but is not limited to – high operating temperatures, hammering of parts, where wear is excessive through operating conditions.

1.3 The process and principle of each process when hard facing automotive components are described.

Range using hard facing rod, powder spraying.

1.4 Precautions to be observed when hard facing are described.

Range personal safety, safety of others, workshop safety, environmental safety, tools and equipment safety, fire safety.

<b>Replacement information</b>	This unit standard and unit standard 24375 replaced unit standard 2310 and unit standard 3395.
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<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	20 March 2008	31 December 2022
Review	2	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>.

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### 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.