

<b>Title</b>	<b>Demonstrate knowledge of clutches and manual transmissions</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>3</b>

<b>Purpose</b>	This unit standard is for people who wish to enter or are employed in the motor industry. People credited with this unit standard are able to demonstrate knowledge of clutches and manual transmissions.
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<b>Classification</b>	Motor Industry > Automotive Transmission Systems
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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 and legislative requirements. This includes the knowledge and use of suitable tools and equipment.
- 2 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the current version of the Health and Safety at Work Act 2015; and any subsequent amendments and replacements.
- 3 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* may include – technical information for a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions; technical terms and descriptions; and detailed illustrations.

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### Outcomes and performance criteria

#### Outcome 1

Demonstrate knowledge of clutches.

#### Performance criteria

1.1 Components of a clutch assembly are identified.

1.2 Operation of a clutch assembly is described.

Range may include – multi-plate, wet, dry, push, pull, dual mass flywheel.

1.3 Clutch actuating systems are identified.

## Outcome 2

Demonstrate knowledge of manual transmissions.

### Performance criteria

2.1 Components of a manual transmission are identified.

2.2 Operation of a manual transmission is described.

Range may include – inline, transaxle, sequential, dual clutch, gear ratios, shift mechanisms.

<b>Replacement information</b>	This unit standard replaced unit standard 239.
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<b>Planned review date</b>	31 December 2022
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### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	26 October 2017	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.