

<b>Title</b>	<b>Demonstrate knowledge of an electronic fuel injection (EFI) system</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>2</b>

<b>Purpose</b>	This unit standard is for people who wish to enter or are currently employed in the motor industry. People credited with this unit standard are able to demonstrate knowledge of: petrol as an automotive fuel; petrol combustion; and EFI operation.
----------------	---

<b>Classification</b>	Motor Industry > Automotive Fuel Systems and Exhaust
-----------------------	--

<b>Available grade</b>	Achieved
------------------------	----------

---

### Guidance Information

Legislation relevant to this unit standard includes but is not limited to the Health and Safety at Work Act 2015 and any subsequent amendments or replacements.

---

### Outcomes and evidence requirements

#### Outcome 1

Demonstrate knowledge of petrol as an automotive fuel.

#### Performance criteria

- 1.1 The main grades of petrol and ethanol blends that are commercially available in New Zealand are identified in terms of octane rating.

#### Outcome 2

Demonstrate knowledge of petrol combustion.

#### Performance criteria

- 2.1 Air-fuel mixture ratios and their effect on the engine are described.
- Range stoichiometric fuel mixture, lean air-fuel mixture, rich air-fuel mixture.
- 2.2 Combustion within the engine is described.
- Range normal combustion, abnormal combustion; detonation, pre-ignition.

**Outcome 3**

Demonstrate knowledge of EFI operation.

**Performance criteria**

- 3.1 The operating principles of an EFI system are described.
- 3.2 Components of an EFI system are identified.
- 3.3 Safety precautions necessary when working on an EFI system are described.

<b>Replacement information</b>	This unit standard replaced unit standard 240 and unit standard 5459.
--------------------------------	---

<b>Planned review date</b>	31 December 2022
----------------------------	------------------

**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	17 August 2017	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0014
--	------

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.