

<b>Title</b>	<b>Demonstrate knowledge of engine management system fault diagnosis</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>4</b>

<b>Purpose</b>	People credited with this unit standard are able to demonstrate knowledge of engine management system fault diagnosis.
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<b>Classification</b>	Motor Industry > Automotive Electrical and Electronics
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 It is recommended that people hold credit for Unit 30885, *Demonstrate knowledge of automotive diagnostic and repair procedures*, Unit 30437, *Demonstrate knowledge of the operation of a diesel fuel system*, and Unit 30436, *Demonstrate knowledge of electronic fuel injection (EFI) system* before being assessed against this unit standard.
- 2 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.
- 3 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.
- 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* 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.
- 5 Machines may include: forklifts, earth moving equipment, grader equipment, loaders, dozers, tractors, agricultural equipment, dump trucks, prime movers; electric machines including – forklift, walk-behind pallet, ride-on pallet, reach truck, order picker, counterbalance truck, turret truck.
- 6 Methods of diagnosing engine management systems applies to both petrol or diesel engines.

## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of engine management system fault diagnosis.

### Performance criteria

1.1 Methods of diagnosing engine management system faults are described.

Range may include – camshaft position, crankshaft position and speed, coolant temperature, electronic throttle, fuel supply and fuel pressure control, fuel temperature, idle speed control, ignition (primary and secondary), combustion, injectors, intake air temperature, manifold pressure, mass air flow, power supply and ground points, throttle position, accelerator pedal position, boost control.

<b>Replacement information</b>	This unit standard replaced unit standard 24090.
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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	1 March 2018	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.