

<b>Title</b>	<b>Diagnose and rectify faults in a common rail diesel fuel system</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>3</b>

<b>Purpose</b>	<p>This unit standard is intended for people in the automotive industry.</p> <p>People credited with this unit standard are able to diagnose and record faults in a common rail diesel fuel system and rectify common rail diesel fuel system faults.</p>
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<b>Classification</b>	Motor Industry > Automotive Fuel Systems and Exhaust
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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 30437, *Demonstrate knowledge of the operation of a diesel fuel 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 requirements and legislative requirements. This includes the knowledge and use of suitable tools and equipment.
- 3 Performance of the outcomes of this unit standard must comply with the following:  
Health and Safety at Work Act 2015;  
Land Transport Rule: Vehicle Exhaust Emissions 2007;  
Land Transport Rule: Vehicle Repair 1998;  
Land Transport Rule: Vehicle Standards Compliance 2002.
- 4 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.
- 5 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.

- 6 For this unit standard, it is essential that the practical assessment evidence is obtained in the workplace under normal workplace conditions.

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## Outcomes and performance criteria

### Outcome 1

Diagnose and record faults in a common rail diesel fuel system.

#### Performance criteria

- 1.1 The symptoms of the fault(s) are verified and recorded.
- Range communication with the customer or driver, running the engine to reproduce the fault(s), fault diagnosis information, manufacturer specifications.
- 1.2 The diesel fuel system is tested following a logical systematic test procedure.
- Range may include but is not limited to – vehicle or machine performance, engine miss, fuel quality, fuel leaks, actuator, pump, injectors, adjustment, engine management system faults.
- 1.3 Faults identified from carrying out a test procedure are recorded, and recommendations for repair based on these findings are reported.

### Outcome 2

Rectify common rail diesel fuel system faults.

#### Performance criteria

- 2.1 Common rail diesel fuel system faults are rectified.
- Range may include but is not limited to – vehicle or machine performance, engine miss, fuel leaks, actuator, pump, injectors, incorrect system adjustments, engine management system faults, excessive emissions.
- 2.2 The engine is run to ensure the diesel fuel system operation is within the manufacturer specifications.

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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	25 January 2008	31 December 2022
Review	2	29 April 2021	N/A

**Consent and Moderation Requirements (CMR) reference**

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.