

<b>Title</b>	<b>Describe diesel engine tuning</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>6</b>

<b>Purpose</b>	People credited with this unit standard are able to describe diesel engine tuning.
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<b>Classification</b>	Motor Industry > Engines
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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 30477, *Demonstrate knowledge of petrol and diesel engines* 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, company requirements 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 or replacements.
- 4 Definitions  
*Company requirements* refers 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

Describe diesel engine tuning.

#### Performance criteria

- 1.1 Pre-tune visual inspection is described.
 

Range	intake system, fuel system, cooling system, exhaust system, electrical system.
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- 1.2 Engine pressure testing is described.
- Range intake restriction, crankcase pressure, fuel pressures, cylinder balance test.
- 1.3 Checking and adjusting valve clearances is described.
- 1.4 Importance of correct injection pump timing is described.
- 1.5 Injector replacement is described.
- Range adjusting mechanical injectors, calibrating electronic injectors.
- 1.6 High and low idle speed are described.

<b>Planned review date</b>	31 December 2023
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	26 July 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.