

<b>Title</b>	<b>Overhaul axial diesel fuel injection pumps</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>8</b>

<b>Purpose</b>	People credited with this unit standard are able to dismantle and reassemble axial diesel fuel injection pumps and bench test an axial diesel fuel injection pump assembly.
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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 31402, *Demonstrate knowledge of axial diesel fuel injection pumps* 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 Legislation, regulations 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 Types of axial pump may include – VE, VP30, Denso V3, Covec.
- 6 For the purposes of this unit standard, evidence of overhauling a VE type pump and one other different type of axial pump is required.

## Outcomes and performance criteria

### Outcome 1

Dismantle and reassemble axial diesel fuel injection pumps.

#### Performance criteria

- 1.1 Pump assembly is dismantled.
- 1.2 All parts are cleaned to enable an inspection to be carried out.
- 1.3 A condition report is completed.
- Range inspection of parts, identifying and recording faults, recommending repairs and replacement of parts, additional devices.
- 1.4 Pump is reassembled.

### Outcome 2

Bench test an axial diesel fuel injection pump assembly.

#### Performance criteria

- 2.1 Pump assembly is mounted and set up for testing and setting on a test bench.
- 2.2 Pump assembly is tested and calibrated.
- Range pre-stroke, fuel delivery and governing calibration, advance, internal pump pressure, external timing checked and set, additional devices.
- 2.3 Pump assembly is removed from the test bench with fuel inlets and adjustments sealed.
- 2.4 Pump packaged and stored correctly.

<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	30 August 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>.

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**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.