Title	**Rectify fuel injection pump drive faults on diesel engines**		
Level	**4**	**Credits**	**2**

Purpose	This unit standard is intended for people in the automotive repair industry. People credited with this unit standard are able to rectify fuel injection pump drive faults on diesel engines.

Classification	Motor Industry > Engines

Available grade	Achieved

Guidance Information

1 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.

2 Performance of the outcomes of this unit standard must comply with the following: Health and Safety at Work Act 2015.

3 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.

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 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.

Outcomes and performance criteria

Outcome 1

Rectify fuel injection pump drive faults on diesel engines.

Performance criteria

1.1 The area around the injection pump drive is cleaned and any pump timing marks are identified.

1.2 The type of pump coupling is identified.

Range may include but is not limited to – adjustable, non-adjustable, automatic advance.

1.3 The pump coupling and drive train are checked for security and alignment and any discrepancies are rectified.

1.4 Backlash in the drive train is measured and any excess beyond the manufacturer's permitted maximum is removed by adjustment and replacement of worn parts.

1.5 The automatic advance coupling is tested for response, the results are compared with the manufacturer specifications, and any faults are rectified by replacement with approved parts.

1.6 Timing gear is inspected for condition and the drive is repaired or replaced.

Range gear alignment and condition; condition of timing cover; oil and fuel leaks in close proximity to drive.

1.7 Pump drive timing is checked and adjusted.

Planned review date	31 December 2025

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	28 September 1994	31 December 2022
Review	2	21 February 1999	31 December 2022
Review	3	25 January 2008	31 December 2022
Review	4	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 if you wish to suggest changes to the content of this unit standard.