

Title	Demonstrate knowledge of unit type diesel fuel injectors		
Level	3	Credits	3

Purpose	People credited with this unit standard are able to demonstrate knowledge of unit type fuel injector construction and operation, and unit type diesel fuel injector service procedures.
----------------	---

Classification	Motor Industry > Automotive Fuel Systems and Exhaust
-----------------------	--

Available grade	Achieved
------------------------	----------

Guidance Information

Definition

Service information may include but is not limited to – technical information of a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions and specifications; technical terms and descriptions; and detailed illustrations. This can be accessed in hard copy or electronic format and is normally sourced from the manufacturer.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of unit type fuel injector construction and operation.

Performance criteria

1.1 Injector construction is described in accordance with service information.

Range names of parts, shapes of parts, locations of parts.

1.2 Injector nozzle operation is explained in accordance with service information.

Range includes but is not limited to – fuel pressure path, needle valve operation, spray patterns.

Outcome 2

Demonstrate knowledge of unit type diesel fuel injector service procedures.

Performance criteria

- 2.1 The importance of cleanliness when working with fuel injectors is identified in accordance with service information.
- Range includes but is not limited to – contamination, precise machining tolerances, close operating fits of parts, damage, premature failure.
- 2.2 Faults which affect injector operation are described in accordance with service information.
- Range includes but is not limited to – fuel contamination, wear, opening pressure, leakage, damage.
- 2.3 Procedures for removing and refitting injectors to an engine are described in accordance with service information.
- Range includes but is not limited to – sealing, cleanliness of injector and surrounding area, torque settings.
- 2.4 Overhaul procedures are described in accordance with service information.
- Range includes but is not limited to – cleaning, testing, dismantling, rectifying faults, reassembling.

Planned review date	31 December 2023
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 April 2002	31 December 2020
Review	2	25 January 2008	31 December 2020
Review	3	30 August 2018	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.