

Title	Demonstrate knowledge of induction and exhaust systems		
Level	3	Credits	4

Purpose	This unit standard is for people who wish to enter or are employed in the motor industry. People credited with this unit standard are able to demonstrate knowledge of induction and exhaust systems.
----------------	---

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

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 and legislative requirements. This includes the knowledge and use of suitable tools and equipment.
- 2 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; Land Transport Rule: Vehicle Exhaust Emission 2007; and any subsequent amendments or replacements.
- 3 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.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of induction systems.

Range naturally aspirated, forced induction.

Performance criteria

- 1.1 System components are identified and their function is described.

1.2 Principles of an induction system are described.

Range may include – volumetric efficiency, engine performance.

1.3 Describe the operation of a turbocharger and supercharger.

Outcome 2

Demonstrate knowledge of an exhaust system.

Performance criteria

2.1 System components are identified and their function is described.

Range mufflers, resonators, pipes.

2.2 The compatibility of replacement exhaust components is described.

Range size, flow rates, noise, back pressure.

Replacement information	This unit standard replaced unit standard 24179.
--------------------------------	--

Planned review date	31 December 2022
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	26 October 2017	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.