

<b>Title</b>	<b>Diagnose and repair faults in a motorcycle engine</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 diagnose and repair faults in a motorcycle cylinder head and cylinder and piston assembly.
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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 30891, *Describe engine disassembly, inspection and reassembly*, 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 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 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.  
*Motorcycle* referred to in this unit standard includes on-road and off-road motorcycles and scooters.

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### Outcomes and performance criteria

#### Outcome 1

Diagnose and repair faults in a motorcycle cylinder head.

Range evidence of three separate faults is required.

**Performance criteria**

- 1.1 Cylinder head faults are diagnosed.
- 1.2 Cylinder head is removed and disassembled.
- 1.3 Faults in the cylinder head are repaired.  
Range may include – head gasket, valves, cracks, warpage.
- 1.4 Cylinder head is reassembled and refitted.

**Outcome 2**

Diagnose and repair faults in a motorcycle cylinder and piston assembly.

Range evidence of three cylinder and piston assembly repairs is required.

**Performance criteria**

- 2.1 Cylinder and piston assembly fault is diagnosed.
- 2.2 Cylinder and piston assembly is disassembled and removed.
- 2.3 Faults in the cylinder and piston assembly are repaired.
- 2.4 Cylinder and piston assembly are reassembled and refitted.

<b>Replacement information</b>	This unit standard replaced unit standard 15442 and unit standard 15445.
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<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	1 November 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.