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| Title | **Remove, inspect and refit a cylinder head** |
| Level | **4** | **Credits** | **4** |

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| Purpose | People credited with this unit standard are able to remove, inspect and refit a cylinder head. |

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| Classification | Motor Industry > Engines |

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| Available grade | Achieved |

**Guidance Information**

1 It is recommended that people hold credit for Unit 30477, *Demonstrate knowledge of petrol and diesel engines*, 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.

5 Machines may include – forklifts, earth moving equipment, grader equipment, loaders, dozers, tractors, agricultural equipment, dump trucks, prime movers; electric machines including – forklift, walk-behind pallet, ride-on pallet, reach truck, order picker, counterbalance truck, turret truck.

**Outcomes and performance criteria**

**Outcome 1**

Remove and inspect a cylinder head.

Range evidence of removing two separate cylinder heads from an operational engine is required

**Performance criteria**

* 1. Cylinder head is removed and the block protected against disturbance.

1.2 Cylinder head and block is cleaned and inspected.

 Range may include – cracks, damage, flatness, wear, liner protrusion, pistons, cylinders, cylinder head bolt serviceability.

**Outcome 2**

Refit a cylinder head.

Range evidence of refitting two separate cylinder heads from an operational engine is required

**Performance criteria**

2.1 Cylinder head and block are prepared for reassembly.

2.2 Cylinder head is refitted.

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| 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 | 14 December 2017 | N/A |

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| 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.