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| Title | Describe heavy diesel engine cylinder head removal, inspection and refitting | | |
| Level | 3 | Credits | 2 |

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| Purpose | People credited with this unit standard are able to describe the removal, inspection and refitting of a heavy diesel engine cylinder head. |
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| Classification | Motor Industry > Engines |
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| Available grade | Achieved |
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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, 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 or replacements.
- 4 Definitions
Company requirements refers 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

Describe heavy diesel engine cylinder head removal, inspection and refitting.

Performance criteria

1.1 Cylinder head components are identified.

Range valve actuator systems, galleries; oil, coolant, fuel.

1.2 Cylinder head removal is described.

Range cylinder head bolt removal sequence, head gasket condition, liner inspection; protrusion, bore condition, deck inspection; preventing damage to: valves, pistons, and surrounding components.

1.3 Inspection of a cylinder head is described.

Range cleaning prior to inspection, condition of machined surfaces, cracks, damage, flatness, wear, injector sleeves, head bolt serviceability.

1.4 Refitting a cylinder head is described.

Range cleanliness, surface preparation, torque settings, head gasket suitability, head bolt tightening sequence, lubrication of rotating parts, valve timing.

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| Planned review date | 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 | 26 July 2018 | N/A |

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| Consent and Moderation Requirements (CMR) reference | 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 if you wish to suggest changes to the content of this unit standard.