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| Title | Repair heavy vehicle or machine exhaust systems | | |
| Level | 3 | Credits | 3 |

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| Purpose | <p>This unit standard is intended for people in the automotive heavy repair industry.</p> <p>People credited with this unit standard are able to repair a faulty exhaust system on a heavy vehicle or machine and repair a noisy exhaust system on a heavy vehicle or machine.</p> |
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| Classification | Motor Industry > Automotive Fuel Systems and Exhaust |
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| Available grade | Achieved |
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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 requirements and legislative requirements. This includes the knowledge and use of suitable tools and equipment.
- 2 Performance of the outcomes of this unit standard must comply with the following:
Health and Safety at Work Act 2015;
Vehicle Inspection Requirements Manual (VIRM) In-service Certification;
Land Transport Rule: Vehicle Equipment 2004;
Land Transport Rule: Vehicle Exhaust Emissions 2007;
Land Transport Rule: Vehicle Repair 1998.
- 3 Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.
- 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.
Heavy Vehicle refers to classes MD3, MD4, ME, NB, TC and TD as specified in the Vehicle equipment standards classifications at <https://www.nzta.govt.nz/vehicles/vehicle-types/vehicle-classes-and-standards/vehicle-classes/>; or has a gross vehicle mass that exceeds 3500kg and is not of a class specified in the Vehicle equipment standards classifications.
Service information refers to technical information for a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions; technical terms and descriptions; and detailed illustrations.

Suitable tools and equipment refer to industry approved tools and equipment that are recognised within the industry as being the most suited to complete the task in a professional and competent manner with due regard to safe working practices.

- 5 For this unit standard, it is essential that the practical assessment evidence is obtained in the workplace under normal workplace conditions.
- 6 This unit standard can be assessed against in conjunction with Unit 24180, *Inspect and test diesel engine induction and exhaust systems*.

Outcomes and performance criteria

Outcome 1

Repair a faulty exhaust system on a heavy vehicle or machine.

Performance criteria

- 1.1 Exhaust components are repaired or replaced, and all leaks are repaired.

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| Range | any two of the following – pipes, stacks, mufflers, mountings, flange; removed, tightened, welded, secured, replaced with new parts; may include – diesel exhaust brake components. |
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Outcome 2

Repair a noisy exhaust system on a heavy vehicle or machine.

Range noises other than those caused by leaking exhaust gas.

Performance criteria

- 2.1 The vehicle or machine is operated to reproduce the offending noise, and to verify whether the source of the noise is the exhaust system.
- 2.2 The exhaust system is checked for loose internal parts and blockages, and any faults are rectified.
- 2.3 Damaged components, and components that are the source of the noise, are replaced.
- 2.4 The system is checked to ensure security of attachment.
- 2.5 System mounting points are checked to ensure that they are not faulty.

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| Range | transmitting noise and vibration, bound up, wrongly located. |
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- 2.6 The vehicle or machine is operated to recheck that the noise level is within legislative requirements.

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| Replacement information | This unit standard and unit standard 24191 replaced unit standard 3394. |
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| Planned review date | 31 December 2025 |
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Status information and last date for assessment for superseded versions

| Process | Version | Date | Last Date for Assessment |
|--------------|---------|-----------------|--------------------------|
| Registration | 1 | 25 January 2008 | 31 December 2022 |
| Review | 2 | 29 April 2021 | 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.