

## Diagnose and rectify heavy vehicle or equipment transmission fluid coupling faults

**Level** 3

**Credits** 3

**Purpose** This unit standard is for people in the automotive heavy repair industry. People credited with this unit standard are able to diagnose and rectify fluid coupling faults on heavy vehicles or equipment.

**Subfield** Motor Industry

**Domain** Automotive Transmission Systems

**Status** Registered

**Status date** 25 February 2008

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**Entry information** Open.

**Accreditation** Evaluation of documentation and visit by NZQA and industry.

**Standard setting body (SSB)** NZ Motor Industry Training Organisation (Incorporated)

**Accreditation and Moderation Action Plan (AMAP) reference** 0014

This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

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### Special notes

1 Legislation relevant to this unit standard includes but is not limited to – Health and Safety in Employment Act 1992.

2 Definitions

*Heavy vehicle* refers to a motor vehicle that is of Class MD3, MD4, ME, NB, NC, TC or TD; or has a gross vehicle mass that exceeds 3500 kg and is not of a class specified in the Table of vehicle classes as listed from Land Transport New Zealand website <http://www.landtransport.govt.nz/publications/infosheets/infosheet-1-10.html#classes>.

*Service information* may include but is not limited to – technical information of a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions and specifications; technical terms and descriptions; and detailed illustrations. This can be accessed in hard copy or electronic format and is normally sourced from the manufacturer.

*Suitable tools and equipment* means 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.

- 3 For this unit standard, it is essential that the practical assessment evidence is obtained in the workplace under normal workplace conditions.

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## Elements and performance criteria

### Element 1

Diagnose fluid coupling faults on heavy vehicles or equipment.

#### Performance criteria

- 1.1 Safe working practices are observed throughout the task in accordance with legislative requirements.
- Range personal safety, safety of others, vehicle or equipment safety, workshop safety, environmental safety, tools and equipment safety.
- 1.2 The fluid coupling is checked for oil leaks, and the results noted, in accordance with service information.
- Range oil leaks from the seal area, plugs, joints.
- 1.3 The oil level is checked, and its condition noted, in accordance with service information.
- Range oil loss, sludging, foaming, scorching of the oil, metal particles.
- 1.4 A decision is made to top up the oil or overhaul the unit based on the visual inspection of the oil. The decision is reported to the supervisor.

### Element 2

Rectify fluid coupling faults on heavy vehicles or equipment.

#### Performance criteria

- 2.1 Safe working practices are observed throughout the task in accordance with legislative requirements.
- Range personal safety, safety of others, vehicle or equipment safety, workshop safety, environmental safety, tools and equipment safety.

- 2.2 Suitable tools and equipment are selected and used that enable the coupling to be removed and repaired in accordance with service information.
- 2.3 The transmission and coupling are disconnected and removed from the engine in accordance with service information.
- 2.4 The fluid coupling is disassembled in accordance with service information. The bearing and seals are inspected for wear and damage, and unserviceable components are replaced with manufacturer approved replacement parts.
- 2.5 The coupling is reassembled, without damage to bearings and seals, in accordance with service information.
- 2.6 The coupling and transmission are replaced in the vehicle or equipment and the coupling filled with oil of a type approved by the manufacturer, and to the level of the filler hole when at its highest point.
- 2.7 The coupling is tested for oil leaks once the coupling is refitted to the vehicle or equipment, and the results noted, in accordance with service information.

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### **Please note**

Providers must be accredited by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

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### **Comments on this unit standard**

Please contact the NZ Motor Industry Training Organisation (Incorporated) [info@mito.org.nz](mailto:info@mito.org.nz) if you wish to suggest changes to the content of this unit standard.