

## Diagnose and rectify faults in heavy vehicle or equipment hydraulic driveline retarders

**Level** 4

**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 heavy vehicle or equipment hydraulic retarder faults.

**Subfield** Motor Industry

**Domain** Automotive Transmission Systems

**Status** Registered

**Status date** 25 February 2008

**Date version published** 25 February 2008

**Planned review date** 31 December 2012

**Entry information** Prerequisite: Appropriate driver licence for the vehicle or equipment being driven.

**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.

## Elements and performance criteria

### Element 1

Diagnose heavy vehicle or equipment hydraulic retarder faults.

#### 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 Suitable tools and equipment are selected and used to enable hydraulic faults to be identified in accordance with service information.
- 1.3 The retarder operating equipment is tested for faults, and the results noted, in accordance with service information.
- Range may include but is not limited to - power supply, solenoid, dash switch, throttle switch, clutch switch, control valve.
- 1.4 The retarder is checked for oil leaks from the seal areas, and the results noted, in accordance with service information.
- 1.5 The causes of any faults are determined from the tests and checks made to the retarder system, and a repair recommendation is made.

## Element 2

Rectify heavy vehicle or equipment hydraulic retarder faults.

### 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 to enable the retarder to be removed and repaired in accordance with service information.
- 2.3 The retarder is removed from the vehicle in accordance with service information.
- 2.4 The retarder is disassembled in accordance with service information. Faulty parts are replaced with manufacturer approved replacement parts.
- Range includes but is not limited to - seals, bearings.
- 2.5 The retarder is assembled and installed in the vehicle or machine in accordance with service information.
- 2.6 Faulty parts of the control system are repaired in accordance with service information.
- Range replace with manufacturer approved replacement parts, repair, adjust.
- 2.7 The retarder system is tested for correct operation, 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.