

Diagnose and rectify driveline faults on heavy vehicles or equipment

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 driveline faults on heavy vehicles or equipment, and rectify driveline faults on heavy vehicles or equipment.

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>.

Special notes

- 1 Legislation and publications relevant to this unit standard include but are not limited to – Health and Safety in Employment Act 1992; *The Official New Zealand Road Code*, Land Transport New Zealand.
- 2 New Zealand Road Code information can be obtained from the following website <http://www.landtransport.govt.nz/roadcode>.

3 Definitions

Company requirements refer to instructions to staff on policy and procedures which are documented in memo or manual format and are available in the workplace. These requirements include but are not limited to – company specifications and procedures, work instructions, manufacturer specifications, product quality specifications, and legislative requirements.

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.

- 4 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 driveline 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 vehicle is operated in compliance with the Road Code and driveline fault symptoms and details of when they occur are noted in accordance with company requirements.
- 1.3 Driveline components are checked while in place for wear, damage, security, and vibration in accordance with service information.
- Range includes but is not limited to – shafts, shaft welds, universals, slip joints, gaiters and seals, support bearings, flanges.

Element 2

Rectify driveline 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 drive shafts to be dismantled, repaired, and reinstalled in accordance with service information.
- 2.3 All driveshafts are removed from the vehicle or equipment, the universal joints dismantled and checked for wear and damage, and faulty components are replaced with approved replacement parts in accordance with service information.
- 2.4 All driveshafts and connecting flanges are checked for runout and remedial action taken where the runout exceeds the maximum allowed by the manufacturer in accordance with service information.
- 2.5 All driveshafts are replaced in the vehicle or equipment with the universal joints in phase, the driveshaft angles are checked and adjusted as required by the manufacturer, and the driveshaft assembly is checked for balance in accordance with service information.

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.

Comments on this unit standard

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