

Demonstrate knowledge of light vehicle final drive assembly operation

Level 3

Credits 4

Purpose This theory-based unit standard is for people in the automotive repair industry. People credited with this unit standard are able to demonstrate knowledge of light vehicle final drives and differential mechanisms.

Subfield Motor Industry

Domain Automotive Transmission Systems

Status Registered

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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>.

Special notes

Definitions

Light vehicle refers to classes as listed from Land Transport New Zealand website table <http://www.landtransport.govt.nz/publications/infosheets/infosheet-1-10.html#classes>: passenger vehicle MA, MB, MC; omnibus MD, MD1, MD2; and goods vehicle NA.

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.

Elements and performance criteria

Element 1

Demonstrate knowledge of light vehicle final drives.

Range spiral bevel, hypoid, helical.

Performance criteria

- 1.1 The gears used for each type of final drive are identified, and the relative positioning of the gears in each case described, in accordance with manufacturer specifications.
- 1.2 The application of each type of drive is explained in accordance with service information.

Element 2

Demonstrate knowledge of light vehicle differential mechanisms.

Performance criteria

- 2.1 The purpose and operation of a differential unit are described in accordance with service information.
- 2.2 The purpose and operation of a limited slip differential are described in accordance with service information.

Range cone type, clutch type (passive, hydraulic, electronic).
- 2.3 The purpose of a third differential is described in accordance with service information.
- 2.4 The operation of a viscous fluid differential and its uses (including all-wheel drive) are described in accordance with service information.

Range smooth operation, apportioning torque.
- 2.5 The operation of electronic traction control is described 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.