

Diagnose suspension and manual steering faults on light vehicles

Level 3

Credits 2

Purpose This unit standard is for people in the automotive repair industry. People credited with this unit standard are able to diagnose suspension and manual steering faults on light vehicles.

Subfield Motor Industry

Domain Vehicle Steering and Suspension

Status Registered

Status date 26 November 2007

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Entry information Prerequisite: Class 1 driver licence.

Recommended: Unit 21721, *Demonstrate knowledge of vehicle steering and suspension systems*; and Unit 24026, *Demonstrate knowledge of motor vehicle wheel alignment*, or demonstrate equivalent knowledge and skills.

Replacement information This unit standard and unit standard 24564 replaced unit standard 896 and unit standard 15657.

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; Land Transport Rules: Steering Systems 2001, Rule 32003/1; Vehicle Repair 1998, Rule 34001; Vehicle Standards Compliance 2002, Rule 35001/1; *The Official New Zealand Road Code*, Land Transport New Zealand.

- 2 Land Transport Rules are produced for the Minister of Transport by Land Transport New Zealand. These rules are available online at <http://www.landtransport.govt.nz/rules/>. 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.
Light vehicles refer 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.
- 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 suspension and manual steering faults on light vehicles.

Performance criteria

- 1.1 Safe working and driving practices are observed throughout the task in accordance with legislative requirements.

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| Range | personal safety, safety of others, tool and equipment safety, vehicle safety. |
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- 1.2 Details of the fault are obtained from the customer and noted in accordance with company requirements.
- 1.3 A visual check is carried out on components in accordance with Land Transport Rules, and any defects noted in accordance with company requirements.

- 1.4 The vehicle is test driven, and the symptoms of any suspension and steering fault(s) and the conditions when they occur are determined and noted in accordance with company requirements.
- Range may include but is not limited to – abnormal tyre wear, wallow, harshness, vibration, ride height, oversteer, understeer, shimmy, wander, tramp, heavy steering, noise.
- 1.5 The fault symptoms and the conditions when they occur are analysed, and a likely cause is determined in accordance with service information.
- 1.6 The actual cause of the fault is investigated and identified in reference to service information.
- Range may include but is not limited to – worn parts, damaged parts, lack of lubrication, parts out of adjustment, incorrect parts fitted.

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.