

Title	Rectify driveline faults on light vehicles, and overhaul universal and constant velocity (CV) joints		
Level	3	Credits	3

Purpose	This unit standard is for people in the automotive repair industry. People credited with this unit standard are able to check and rectify faults in driveline components fitted to light vehicles, and overhaul universal and CV joints.
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Classification	Motor Industry > Automotive Transmission Systems
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Available grade	Achieved
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Entry information	
Recommended skills and knowledge	Unit 24307, <i>Demonstrate knowledge of vehicle driveline components.</i>

Explanatory 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: Vehicle Repair 1998, Rule 34001; Vehicle Standards Compliance 2002, Rule 35001/1; *Vehicle Inspection Requirements Manual (VIRM) – In-service Certification.*
- 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/>.
The VIRM is published by Land Transport New Zealand and is available online at <http://www.landtransport.govt.nz/certifiers/virm-in-service/index.html>.
- 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 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.

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.

Outcomes and evidence requirements

Outcome 1

Check and rectify faults in driveline components fitted to light vehicles.

Range front and rear wheel drive.

Evidence requirements

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

Range personal safety, safety of others, vehicle safety, workshop safety, environmental safety, tools and equipment safety.

- 1.2 Suitable tools and equipment are selected and used that enable drivelines to be checked, and faults rectified, in accordance with service information.

- 1.3 The vehicle is operated in compliance with the Road Code. Fault symptoms and details of conditions when they occur are noted in accordance with company requirements.

Range may include but is not limited to – vibration, noise, take-up.

- 1.4 Driveline components are checked in situ for wear and damage, and any faults noted, in accordance with service information.

Range may include but is not limited to – shafts, joints, rubber gaiters and seals, support bearings.

- 1.5 All driveline components are checked to ensure that they are securely attached and in compliance with the VIRM requirements.

Range may include but is not limited to – shafts, joints, support bearings, engine and transmission mounts, differential and driving hubs.

- 1.6 Phasing of the universal joints complies with vehicle manufacturer specifications.

- 1.7 Driveline installation angles are checked in accordance with service information, and comply with vehicle specifications.

- 1.8 The driveshaft and its connecting flanges are checked for runout, and remedial action is taken where runout is outside the maximum specified by vehicle manufacturer.

Outcome 2

Overhaul universal and CV joints.

Evidence requirements

- 2.1 Safe working practices are observed throughout the task in accordance with legislative requirements.

Range personal safety, safety of others, vehicle safety, workshop safety, environmental safety, tools and equipment safety.
- 2.2 Suitable tools and equipment are selected and used that enable joints to be overhauled in accordance with service information.
- 2.3 The faulty shaft is removed from the vehicle, with due care being taken to minimise spillage of oil, in accordance with service information.
- 2.4 The joint is disassembled and cleaned to enable inspection of the parts for damage and wear.
- 2.5 Suitability of the parts for further service is determined in accordance with manufacturer specifications.
- 2.6 The joint is assembled in accordance with service information. Any faults are rectified to meet manufacturer specifications and the VIRM requirements.
- 2.7 The assembled shaft is installed in the vehicle in accordance with service information.

Replacement information	<p>This unit standard and unit standard 24307 replaced unit standard 921.</p> <p>This unit standard was replaced by unit standard 30516.</p>
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This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 February 2008	31 December 2020
Review	2	28 September 2017	31 December 2020

Consent and Moderation Requirements (CMR) reference	0014
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMR). The CMR 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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