

Diagnose and rectify faults in tractor or agricultural machine final drive assemblies

Level 4

Credits 4

Purpose This unit standard is for people in the agricultural equipment repair industry. People credited with this unit standard are able to diagnose tractor or agricultural machine final drive assembly faults and their causes, and rectify tractor or agricultural machine final drive faults.

Subfield Motor Industry

Domain Automotive Transmission Systems

Status Registered

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Entry information Recommended: Unit 24323, *Demonstrate knowledge of tractor and agricultural machine final drive assemblies*, or demonstrate equivalent knowledge and skills.

Replacement information This unit standard and unit standard 24323 replaced unit standard 5441.

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 relevant to this unit standard includes but is not limited to – Health and Safety in Employment Act 1992; Land Transport Rules: Steering Systems 2001, Rule 32003/1; Vehicle Repair 1998, Rule 34001.

- 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/>.
- 3 Definitions
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 tractor or agricultural machine final drive assembly faults and their causes.

Performance criteria

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

Range personal safety, safety of others, tractor or agricultural machinery safety, workshop safety, environmental safety, tools and equipment safety.
- 1.2 Suitable tools and equipment are selected and used that enable faults to be diagnosed in accordance with service information.
- 1.3 Final drive assembly fault symptoms are verified in accordance with service information.

Range may include but is not limited to – obtaining operator's explanation of fault symptoms, field testing to reproduce fault symptoms.
- 1.4 Faults in tractor and agricultural machine final drive assemblies are identified in accordance with service information.

Range may include but is not limited to – checking machine operation against manufacturer specifications; visual inspection of components for damage, leakage and wear; checking for abnormal noise; incorrect settings and angles.

Element 2

Rectify tractor or agricultural machine final drive faults.

Performance criteria

- 2.1 Safe working practices are observed throughout the task in accordance with legislative requirements.
- Range personal safety, safety of others, tractor or agricultural machinery safety, workshop safety, environmental safety, tools and equipment safety.
- 2.2 Suitable tools and equipment are selected and used that enable faults to be rectified in accordance with service information.
- 2.3 Tractor and agricultural equipment final drive assembly faults are rectified in accordance with service information.
- Range may include but is not limited to – standard differential unit, transfer case, drive shaft and universal joints, front axle hub.

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.