

Title	Dismantle, inspect, and overhaul vehicle manual steering boxes and rack assemblies		
Level	3	Credits	2

Purpose	People credited with this unit standard are able to dismantle, inspect, and overhaul a manual steering box and a manual steering rack assembly.
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Classification	Motor Industry > Vehicle Steering and Suspension
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Available grade	Achieved
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Guidance Information

- 1 It is recommended that people hold credit for Unit 30566, *Demonstrate knowledge of steering and suspension systems* before being assessed against this unit standard.
- 2 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable service information, and company requirements and legislative requirements. This includes the knowledge and use of suitable tools and equipment.
- 3 Performance of the outcomes of this unit standard must comply with the following:
Health and Safety at Work Act 2015;
Land Transport Rule: Steering Systems 2001;
Land Transport Rule: Vehicle Repair 1998.
- 4 Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.
- 5 Definitions
Company requirements refer to instructions to staff on policy and procedures that are available in the workplace. These requirements may include – company policies and procedures, work instructions, product quality specifications and legislative requirements.
Service information refers to information such as technical information for a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions; technical terms and descriptions; and detailed illustrations.
Suitable tools and equipment refer to 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.
- 6 For this unit standard, it is essential that the practical assessment evidence is obtained in the workplace under normal workplace conditions.

Outcomes and performance criteria

Outcome 1

Disassemble and inspect a manual steering box and a manual steering rack assembly.

Performance criteria

- 1.1 The steering box and rack assembly are cleaned externally to prevent the ingress of dirt and foreign matter during disassembly.
- 1.2 The steering box and rack assembly is disassembled, and seals, bearings, and bushes are removed.
- 1.3 All parts are inspected for wear, and those that are worn beyond manufacturer service limits are replaced with new parts.
- 1.4 All parts are inspected for damage, and those that are damaged are replaced with new parts.

Outcome 2

Overhaul a manual steering box and a manual steering rack assembly.

Performance criteria

- 2.1 Any parts worn beyond manufacturer service limits are replaced with new parts.
- 2.2 Any parts that are damaged are replaced with new parts.
- 2.3 Components of the steering box and rack assembly are assembled, using the replacement parts, the specified lubricant, and the mandatory new parts.
 - Range mandatory new parts include – bushes, bearings, seals, lockwashers;
may include – boots (bellows).
- 2.4 Adjustments are carried out.
 - Range steering box – end play and backlash of the steering gear and cross-shaft;
rack assembly – bearing and rack preloads and clearances, pinion backlash and adjustments.

Planned review date	31 December 2025
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	29 October 1993	31 December 2022
Review	2	4 October 1996	31 December 2022
Review	3	26 February 1999	31 December 2022
Review	4	25 January 2008	31 December 2022
Review	5	29 July 2021	N/A

Consent and Moderation Requirements (CMR) reference

0014

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact MITO New Zealand Incorporated info@mito.org.nz if you wish to suggest changes to the content of this unit standard.