



Australian Government

AURBTD103 Repair and overhaul bicycle steering systems

Release: 1

AURBTD103 Repair and overhaul bicycle steering systems

Modification History

Release	Comments
Release 1	This version first released with AUR Automotive Retail, Service and Repair Training Package Version 6.0

Application

This unit describes the skills and knowledge required to repair and overhaul bicycle steering systems. The unit involves preparing for the work, selecting and using specialist tools and equipment, inspecting, repairing and testing the bicycle headset, handlebar and stem, and completing workplace processes and documentation.

The unit applies to those working in the bicycle retail, service and repair industry.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Bicycle Technical - Steering and Suspension

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to repair and overhaul bicycle steering system	1.1 Determine job requirements from workplace instructions 1.2 Access and interpret manufacturer specifications, workplace procedures and other relevant technical information 1.3 Identify hazards associated with the work and manage risks 1.4 Select and check tools and equipment for serviceability 1.5 Plan work to avoid damage to bicycle, minimise waste and use time efficiently
2. Inspect steering system	2.1 Check bicycle steering system for faults and worn or damaged components using visual inspection methods and by comparison of measurements against manufacturer specifications 2.2 Identify, document and cost repair and replacement options

ELEMENTS	PERFORMANCE CRITERIA
	for customer approval according to workplace procedures 2.3 Prepare work area, replacement parts and bicycle for repair work
3. Carry out repair and overhaul of steering system	3.1 Carry out repair and overhaul activities according to workplace procedures, work plan, and safety and environmental requirements 3.2 Check and fit required replacement parts according to manufacturer specifications 3.3 Check and test repaired steering system for required operation according to manufacturer specifications 3.4 Adjust repaired steering system and align as required according to workplace procedures 3.5 Report results and quality issues to authorised personnel as required
4. Complete work processes	4.1 Conduct final inspection according to workplace procedures and confirm bicycle is ready for use 4.2 Clear work area and dispose of or recycle materials according to workplace procedures 4.3 Complete documentation according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
Learning	Locates required sources of information efficiently.
Oral communication	Asks questions to clarify instructions and requirements.
Numeracy	Completes measurements to determine repair requirements.
Problem solving	Identifies technical and operational faults and defects, quality issues and potential problems associated with bicycle steering systems.
Technology	Uses specialist bicycle tools and equipment in line with workplace procedures.

Unit Mapping Information

Supersedes and is equivalent to AURBTD003 Repair and overhaul bicycle steering systems.

Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>

Assessment Requirements for AURBTD103 Repair and overhaul bicycle steering systems

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- repair and overhaul at least three different bicycle steering systems according to manufacturer specifications
- in the course of the above work, repair and overhaul the following components:
 - forks
 - headsets
 - handlebars and stems.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- methods to locate and interpret information required to repair and overhaul bicycle steering systems, including:
 - information provided by customer and supervisors
 - manufacturer specifications and procedures or equivalent documentation
- workplace procedures required to repair and overhaul bicycle steering systems, including:
 - establishing serviceability of tools and equipment
 - documentation procedures
 - housekeeping procedures, including:
 - examination of tools and equipment
 - storage of equipment
 - identification, tagging and isolation of faulty equipment
 - disposal of excess materials
 - recycling procedures
- work health and safety (WHS) requirements relating to repairing and overhauling bicycle steering systems, including procedures for:

- manually handling bicycles and their steering systems
- identifying workplace hazards
- using tools and equipment, including personal protective equipment (PPE)
- environmental requirements, including procedures for disposing of waste materials
- key bicycle steering system terminology
- purpose of bicycle steering systems and their relationship to suspension, wheels, drivetrain, frame and braking systems
- operating principles of steering system components, including:
 - forks
 - headsets
 - handlebars and stems
- types and use of tools and equipment used to repair and overhaul bicycle steering systems
- techniques and processes for repairing and overhauling bicycle steering systems, including:
 - identification of bicycle steering components, materials and specifications
 - selection and checking of personal protective equipment
 - fault identification
 - measuring techniques
 - steering system adjustment techniques.
 - steering system testing procedures.

Assessment Conditions

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessment must include direct observation of tasks.

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the bicycle steering systems that they have repaired and overhauled, e.g. repair orders.

Assessors must verify performance evidence through questioning on skills and knowledge to ensure correct interpretation and application.

The following resources must be made available:

- bicycle workplace or simulated workplace, including location to test bicycle steering system
- workplace instructions detailing job requirements
- manufacturer specifications and technical information for bicycle steering systems
- PPE required to repair and overhaul bicycle steering systems
- component parts as required
- three different bicycles with steering systems requiring repair and overhaul
- tools and equipment appropriate for repairing and overhauling bicycle steering systems.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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