



Australian Government

AURBTD102 Service bicycle suspension systems

Release: 1

AURBTD102 Service bicycle suspension 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 service bicycle suspension systems. The unit involves preparing for the work, selecting and using specialist tools and equipment, inspecting, servicing and testing the bicycle suspension system and its components, 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 service bicycle suspension 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 Inspect condition of bicycle suspension system for faults and worn or damaged components using visual and physical methods and compare with manufacturer specifications 1.4 Identify hazards associated with the work and manage risks 1.5 Select and check tools and equipment, including personal protective equipment (PPE), for serviceability 1.6 Prepare work area and plan service sequence to avoid damage to bicycle, minimise waste and use time efficiently
2. Carry out service of	2.1 Use tools and equipment according to workplace procedures

ELEMENTS	PERFORMANCE CRITERIA
suspension system	and manufacturer specifications 2.2 Service bicycle suspension system according to job requirements, manufacturer specifications, and safety and environmental requirements 2.3 Test operation of serviced suspension system through its full range and make adjustments as required 2.4 Report results and quality issues to authorised personnel as required
3. Complete work processes	3.1 Conduct final inspection according to workplace procedures and confirm bicycle is ready for use 3.2 Clear work area and dispose of or recycle materials according to workplace procedures 3.3 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.
Numeracy	- Completes measurements to determine suspension system condition and operation - Identifies and calculates bicycle suspension system settings and adjustments.
Oral communication	Asks questions to clarify instructions and requirements.
Problem solving	Identifies technical and operational faults and defects, quality issues and potential problems associated with bicycle suspension system during service activities.
Technology	Uses specialist bicycle tools and equipment in line with workplace procedures.

Unit Mapping Information

Supersedes and is equivalent to AURBTD002 Service bicycle suspension 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 AURBTD102 Service bicycle suspension 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:

- service and test at least one of each of the following three different bicycle suspension systems according to manufacturer specifications:
 - elastomer and spring units system
 - mechanical system
 - hydraulic system.

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 service bicycle suspension systems, including:
 - manufacturer specifications and procedures or equivalent documentation
- workplace procedures required to service bicycle suspension 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 servicing bicycle suspension systems, including procedures for:
 - manually handling bicycles and their suspension systems
 - identifying workplace hazards

- using personal protective equipment (PPE)
- environmental requirements, including procedures for disposing of waste materials
- bicycle suspension system terminology
- types of bicycle suspension systems and application of suspension mechanical principles
- service requirements of a bicycle suspension system
- types and use of tools and equipment used to service bicycle suspension systems
- techniques and processes for servicing bicycle suspension systems, including:
 - identification of bicycle suspension components, materials and specifications, including:
 - elastomer and spring units
 - mechanical systems
 - pneumatic systems
 - hydraulic systems
 - fault identification
 - bicycle measuring techniques
 - suspension system adjustment techniques
- suspension system testing procedures
- servicing options, including:
 - on- and off-site servicing
 - servicing and adjusting suspension system components
 - upgrading suspension components.

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 suspension systems that they have serviced, e.g. service 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 suspension system
- workplace instructions detailing job requirements
- manufacturer specifications for suspension systems
- PPE required to service bicycle suspension systems
- three different bicycle suspension systems specified in the performance evidence and requiring servicing and testing
- tools and equipment appropriate for servicing bicycle suspension 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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