



Australian Government

AURBTD002 Service bicycle suspension systems

Release: 1

AURBTD002 Service bicycle suspension systems

Modification History

Release	Comment
Release 1	New unit of competency.

Application

This unit describes the performance outcomes required to service bicycle suspension systems. It 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.

It 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.

Competency Field

Bicycle

Unit Sector

Technical - Steering and Suspension

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold and italicised text is used, further information is detailed in the range of conditions section.
1. Prepare to service bicycle suspension system	1.1 Job requirements are determined from workplace instructions 1.2 Manufacturer specifications, workplace procedures and other relevant technical information are accessed and interpreted 1.3 Condition of bicycle suspension system is inspected for faults and worn or damaged components using visual and physical methods and compared with manufacturer specifications

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold and italicised text is used, further information is detailed in the range of conditions section.
	1.4 Hazards associated with the work are identified and risks are managed 1.5 Tools and equipment, including personal protective equipment (PPE), are selected and checked for serviceability 1.6 Work area is prepared and service sequence planned to avoid damage to bicycle, minimise waste and use time efficiently
2. Carry out service of suspension system	2.1 Tools and equipment are used according to workplace procedures and manufacturer specifications 2.2 Bicycle suspension system is serviced according to job requirements, manufacturer specifications, and safety and environmental requirements 2.3 Operation of serviced suspension system is tested through its full range and adjustments are made as required 2.4 Results and quality issues are reported to authorised personnel as required
3. Complete work processes	3.1 Final inspection is made to ensure work meets workplace expectations and bicycle is presented ready for use 3.2 Work area is cleaned, waste and non-recyclable materials are disposed of, and recyclable material is collected and stored 3.3 Tools and equipment are checked, reported if faulty, and stored according to workplace procedures 3.4 Workplace documentation is processed according to workplace procedures

Foundation Skills

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

Skills	Description
Learning skills to:	locate appropriate sources of information efficiently.
Writing skills to:	legibly and accurately fill out workplace documentation, including service reports.
Oral communication skills to:	ask questions to clarify instructions and requirements.

Skills	Description
Numeracy skills to:	- complete measurements to determine suspension system condition and operation - identify and calculate bicycle suspension system settings and adjustments.
Problem solving skills to:	identify technical and operational faults and defects, quality issues and potential problems associated with bicycle suspension system during service activities.
Technology skills to:	use specialist bicycle tools and equipment in line with workplace procedures.

Range of Conditions

This section specifies work environments and conditions that may affect performance.

Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Bold italicised wording, if used in the performance criteria, is detailed below.

<i>Suspension system</i> must include:	- elastomer and spring units - mechanical systems - pneumatic systems - hydraulic systems.
<i>Safety and environmental requirements</i> must include:	- work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for: - manually handling bicycles and their suspension systems - identifying workplace hazards - using PPE - environmental requirements, including procedures for disposing of waste materials.

Unit Mapping Information

Equivalent to AURBTD2002 Service bicycle suspension systems

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for AURBTD002 Service bicycle suspension systems

Modification History

Release	Comment
Release 1	New unit of competency.

Performance Evidence

Before competency can be determined, individuals must demonstrate they can perform the following according to the standard defined in this unit's elements, performance criteria, range of conditions and foundation skills:

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

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) 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
 - 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

Assessors must satisfy NVR/AQTF assessor requirements.

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.

Links

Companion Volume implementation guides are found in VETNet -

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

Companion Volume implementation guides are found in VETNet -

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