



**Australian Government**

# **AURBTA106 Assemble components for custom bicycles**

**Release: 1**

## AURBTA106 Assemble components for custom bicycles

### 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 select and assemble bicycle components in order to custom bicycles to meet client cycling requirements. The unit involves preparing for the work, selecting and using specialist tools and equipment, identifying and selecting bicycle frames, wheels and components, assembling and testing the bicycle, 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

### 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. Gather customer information	1.1 Determine job requirements from workplace instructions 1.2 Assess customer requirements and riding style through observation, discussion and taking measurements 1.3 Use sizing cycle or other methods to determine optimum bicycle set-up 1.4 Identify hazards associated with the work and manage risks
2. Select bicycle frame	2.1 Identify suitable frame types that match customer requirements 2.2 Research frame specifications, design and availability using various sources of information 2.3 Select bicycle frame to match customer physical attributes

ELEMENTS	PERFORMANCE CRITERIA
	<p>and intended use</p> <p>2.4 Calculate frame measurements, and select frame material and build method</p>
3. Select wheels	<p>3.1 Determine wheel size that suits frame measurements</p> <p>3.2 Identify rims, spokes and hub types that suit customer needs</p> <p>3.3 Discuss and determine features and benefits of different wheel designs and components with the customer</p> <p>3.4 Select stock wheels and components or choose custom wheel design and calculate specifications</p>
4. Select components	<p>4.1 Research options for components and discuss with customer</p> <p>4.2 Select components that meet customer design and price preferences</p>
5. Confirm bicycle details	<p>5.1 Specify custom paint requirements, as required</p> <p>5.2 List components and parts and confirm details of availability</p> <p>5.3 Calculate and document costs, and obtain customer approval for work</p>
6. Assemble components	<p>6.1 Prepare work area and plan work to minimise waste and use time efficiently</p> <p>6.2 Prepare customer approved components for assembly</p> <p>6.3 Select and check tools and equipment for serviceability</p> <p>6.4 Assemble and lubricate bicycle and selected components and adjust fastener tensions according to manufacturer specifications, workplace procedures and safety and environmental requirements, and without causing damage to components or systems</p> <p>6.5 Inspect and test assembled bicycle for required tension of components and operation, and adjust as required according to workplace procedures</p>
7. Complete work processes	<p>7.1 Conduct final inspection according to workplace procedures and confirm bicycle is ready for use</p> <p>7.2 Clear work area and dispose of or recycle materials according to workplace procedures</p> <p>7.3 Complete documentation according to workplace procedures</p>

## Foundation Skills

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

<b>SKILL</b>	<b>DESCRIPTION</b>
Learning	<ul style="list-style-type: none"> <li>• Locates required sources of information efficiently.</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>• Matches component codes, serial numbers and specifications</li> <li>• Uses bicycle sizing measuring equipment</li> <li>• Measures bicycle components and uses basic mathematical operations, including addition, subtraction, multiplication and division, to calculate: <ul style="list-style-type: none"> <li>• frame size</li> <li>• component specifications and ratios</li> <li>• adjustments and settings.</li> </ul> </li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>• Asks questions to clarify job, customer and supplier requirements.</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• Plans own work requirements</li> <li>• Prioritises actions to achieve required outcomes</li> <li>• Ensures tasks are completed within workplace timeframes.</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• Uses required methods and processes to select bicycle components that meet customer requirements for a customised bicycle.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• Uses specialist bicycle fitting and adjusting tools and equipment in line with workplace procedures.</li> </ul>

## Unit Mapping Information

Supersedes and is equivalent to AURBTA006 Assemble components for custom bicycles.

## Links

Companion Volume Implementation Guide is found on VETNet -

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