



Australian Government

AURBTA2004 Assemble box bicycles for retail sale

Release 1

AURBT A2004 Assemble box bicycles for retail sale

Modification History

Release	Comment
Release 1	Replaces AURB211305A Assemble box bicycle for retail sale Unit code updated to meet policy requirements. Minor changes to unit title Reference to OHS legislation replaced with new WHS legislation

Unit Descriptor

Unit descriptor	<p>This unit of competency describes the skills and knowledge required to assemble and test a new bicycle for retail sale.</p> <p>It requires the ability to identify bicycle components, interpret manufacturer instructions and specifications, assemble a bicycle and test the assembled bicycle for safe and efficient operation.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit in some jurisdictions. Users are advised to check with the relevant regulatory authority.</p>
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Application of the Unit

Application of the unit	This unit applies to individuals who undertake assembling and testing of new bicycles in a bicycle retail, service and repair environment.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for the assembly of a new bicycle	1.1. Identify and confirm nature and scope of work requirements 1.2. Identify workplace health and safety (WHS) requirements, including individual state/territory regulatory requirements and personal protection needs, and observe throughout the work 1.3. Source procedures and information, such as workshop manuals and manufacturer specifications 1.4. Check tooling and equipment for availability, conformity with specifications and safe condition 1.5. Prepare work area and set up equipment and materials
2. Assemble new bicycle	2.1. Unpack bicycle components and confirm contents are complete 2.2. Identify damaged and/or missing frames and components and report/replace according to workshop procedures 2.3. Identify methods for bicycle model assembly requirements in accordance with manufacturer/component supplier specifications 2.4. Install components without damage 2.5. Set up moving parts in accordance with manufacturer/component supplier specifications 2.6. Select and use appropriate tools, materials and equipment 2.7. Check fitted bicycle components and make necessary adjustments 2.8. Complete records in accordance with workplace procedures
3. Tag assembled bicycle	3.1. Identify workplace tagging procedures 3.2. Identify and prepare resource requirements and support equipment for tagging 3.3. Tag assembled bicycle without damage 3.4. Clean up work area and dispose of packing materials in accordance with workplace procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- technical skills to the level required to safely use tooling and equipment to assemble a new bicycle, test the unit and make adjustments and tag the completed bicycle
- communication skills to the level required to confirm work requirements and specifications, to communicate effectively regarding work requirements with supervisor, other workers and customers, to report work outcomes and problems, and to relate to people from a range of social, cultural and ethnic backgrounds and of varying physical and mental abilities
- literacy skills to the level required to understand information related to work orders, including common industry terminology, plans and safety procedures, prepare reports and interpret technical information and specifications
- numeracy skills to the level required to correctly complete tests and measurements to determine safe assembly and operation
- problem solving skills to the level required to identify technical and procedural problems to avoid planning, scheduling problems and time and material wastage
- team skills to the level required to work effectively and cooperatively with others to optimise workflow and productivity

Required knowledge

Required knowledge includes:

- bicycle classifications and terminology
- manufacturer and/or component supplier specifications
- component function and application
- installation and assembly procedures
- testing procedures and adjustment methods
- tagging procedures
- tools and equipment used in bicycle assembly
- Australian standards applicable to bicycles
- applicable commonwealth, state or territory legislation, regulations, standards and codes of practice, including WHS, personal safety and environment, relevant to assembling a bicycle for retail sale
- organisational policies and procedures, including quality requirements, reporting and recording procedures, and work organisation and planning processes, related to assembling a bicycle for retail sale

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors must be satisfied that the candidate can competently and consistently:

- observe safety procedures and requirements
- communicate effectively with others involved in or affected by the work
- select methods and techniques which are appropriate to the circumstances
- complete preparatory activity in a systematic manner
- conduct assembly and tagging without damage to components or tooling and equipment
- assemble a range of bicycles in compliance with Australian standards and workplace requirements.

Context of, and specific resources for assessment

- The application of competency is to be assessed in the workplace or a simulated environment that reflects as far as possible the actual working environment.
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints.
- Assessment is to comply with relevant regulatory requirements, including specified Australian standards.
- Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.
- The following resources should be made available:
 - a range of bicycle models
 - equipment, hand and power tools appropriate to assembling bicycles
 - technical specifications and standards
 - tagging equipment.

Method of assessment

- Assessment must satisfy the endorsed Assessment Guidelines of this Training Package.
- Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of Required Skills and Knowledge.
- Assessment methods must be by direct observation of tasks and

EVIDENCE GUIDE

	<p>include questioning on Required Skills and Knowledge to ensure its correct interpretation and application.</p> <ul style="list-style-type: none">• Assessment may be applied under project-related conditions (real or simulated) and require evidence of process.• Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances.• Competence in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role.
Guidance information for assessment	<p>Assessment processes and techniques must be culturally sensitive and appropriate to the language and literacy capacity of the candidate and the work being performed.</p>

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Bicycles

Bicycles may include:

- those with and without gears, and with lever operated brakes
- children and adult models of different heights
- mountain, road, hybrid, BMX, track and trials models

Tooling and equipment

Tooling and equipment may include:

- hand tooling
- hand-held power tooling
- floor stands, workbench and air tooling

Assembly methods

Assembly methods are to include:

- fitting and manual adjustments of components and accessories
- measuring, screwing, bonding, clamping, filing, riveting and drilling
- greasing and lubrication
- torque settings

Materials

Materials may include:

- tags
- tapes
- fitting consumables
- cleaning materials

Assembly tasks

Assembly tasks are to include:

- basic adjustments and set-up of a cycle
- headset adjustment
- brake adjustment, including the capabilities to shorten outer cables and to reset the brakes to operating condition, applicable to cable and general hydraulic
- gear adjustment, including dérailleurs and hub gears, shifters and chain
- wheel fitting and adjustment
- pedals
- saddles

Testing

Testing is to confirm:

RANGE STATEMENT	
	<ul style="list-style-type: none"> • safety and efficiency • stable handling, turning and steering • no failure in parts of the bicycle • no loosening or misalignment of seat, handlebars, controls or reflectors • no loss of components or accessories
Tagging	<p>Tagging methods may include:</p> <ul style="list-style-type: none"> • tagging by model, size and application
Information/documents	<p>Information/documents may include:</p> <ul style="list-style-type: none"> • hardcopy and electronic media • verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • safe work procedures related to assembling bicycles • regulatory/legislative requirements pertaining to bicycle safety • engineer's design specifications and instructions • organisation work specifications and requirements • instructions issued by authorised enterprise or external persons • Australian standards
WHS requirements	<p>WHS requirements are to be in accordance with applicable commonwealth, state or territory legislation and regulations, and organisational safety policies and procedures, and may include:</p> <ul style="list-style-type: none"> • personal protective equipment and clothing • safety equipment • first aid equipment • hazard and risk control • elimination of hazardous materials and substances • manual handling, including shifting, lifting and carrying • emergency procedures
Legislative requirements	<p>Legislative requirements are to be in accordance with applicable commonwealth, state or territory legislation, regulations, certification requirements and codes of practice, and may include:</p> <ul style="list-style-type: none"> • award and enterprise agreements • industrial relations • Australian standards • Australian Design Rules • confidentiality and privacy • WHS

RANGE STATEMENT

	<ul style="list-style-type: none"> • the environment • equal opportunity • anti-discrimination • relevant industry codes of practice • duty of care
Environmental requirements	<p>Environmental requirements may include:</p> <ul style="list-style-type: none"> • waste management • noise • dust • clean-up management
Quality requirements	<p>Quality requirements may include:</p> <ul style="list-style-type: none"> • regulations, including Australian standards • internal organisational quality policies and procedures • enterprise operations and procedures
Organisational policies and procedures	<p>Organisational policies and procedures may include:</p> <ul style="list-style-type: none"> • quality policy and procedures, including Australian standards • WHS, sustainability, environment, equal opportunity and anti-discrimination • manufacturer specifications and industry codes of practice • safe work procedures • reporting and recording procedures

Unit Sector(s)

Unit sector	Bicycle
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Co-requisite units

Not applicable.

Competency field

Competency field	Technical
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