



Australian Government

AURTTJ001 Balance wheels and tyres

Release: 1

AURTTJ001 Balance wheels and tyres

Modification History

Release	Comment
Release 1	New unit of competency.

Application

This unit describes the performance outcomes required to balance automotive wheels and tyres. It involves identifying and confirming work requirements; preparing for the work; inspecting, balancing and refitting wheel and tyre assemblies; and completing workplace processes and documentation.

It applies to those working in the automotive service and repair industry. The wheels and tyres include those of agricultural machinery, heavy commercial vehicles, light vehicles, mobile plant machinery, motorcycles or trailers.

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

Competency Field

Mechanical Miscellaneous

Unit Sector

Technical – Wheels and Tyres

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 balance wheels and tyres	1.1 Job requirements are determined from workplace instructions 1.2 Wheel balancing information is sourced and interpreted 1.3 Hazards associated with the work are identified and risks are managed

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 Tools, equipment and materials are selected and checked for serviceability
2. Conduct wheel and tyre pre-balance inspection	2.1 Wheel and tyre pre-balance inspection is carried out according to manufacturer specifications, workplace procedures and safety requirements 2.2 Inspection findings are reported according to workplace procedures, including recommendations for necessary repair or replacement
3. Carry out balancing procedures	3.1 Wheel balancing machine is inspected and operated according to manufacturer specifications, workplace procedures and safety requirements 3.2 Wheel is balanced according to manufacturer specifications, workplace procedures and safety requirements, and without causing damage to wheel or tyre
4. Complete work processes	4.1 Final inspection is made to ensure work is to workplace expectations and vehicle or wheels are presented ready for use 4.2 Work area is cleaned, waste and non-recyclable materials are disposed of, and recyclable material is collected 4.3 Tools and equipment are checked and stored according to workplace procedures 4.4 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.
Reading skills to:	interpret information from manufacturer specifications and workshop literature relating to wheel balance procedures and specifications.
Writing skills to:	legibly and accurately fill out workplace documentation when reporting inspection findings, making recommendations, and recording parts and material used.

Skills	Description
Numeracy skills to:	• measure wheel balancing weights and use basic mathematical operations, including addition and subtraction, to calculate distances, tolerances and deviations from manufacturer specifications • calculate balance weights in metric and imperial units of measurement • set and calibrate wheel balancing machine.
Technology skills to:	• operate wheel balance machines.

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>Safety requirements</i> must include:	• work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for: • lifting and supporting vehicles and wheels • working with balancing machines, including rotating components and flying objects.
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Unit Mapping Information

Equivalent to AURTTJ2001 Balance wheels and tyres

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 AURTTJ001 Balance wheels and tyres

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Performance Evidence

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

- balance at least four different wheels and tyres, in which work must involve:
 - selecting appropriate methods and techniques to balance wheels and tyres
 - conducting wheel and tyre pre-balance inspection for damage and excessive run-out.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to balancing wheels and tyres, including procedures for:
 - lifting and supporting vehicles and wheels
 - working with balancing machines, including rotating components and flying objects
- procedures for pre-balance inspection of wheels and tyres
- application, purpose, function and operation of wheel balancing machinery, including:
 - off vehicle balancers
 - on vehicle balancers
- operating principles of wheel balancing, including:
 - tyre and wheel run-out
 - static and dynamic balance
 - out of balance effects on wheels, including:
 - wheel hop or tramp
 - wheel shimmy
 - vibration
 - tread wear

- types and applications of wheel weights.

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 vehicles or wheels and tyres that they have balanced, 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:

- automotive repair workplace or simulated workplace
- workplace instructions
- manufacturer wheel balancing specifications
- four different wheels and tyres for balancing
- wheel balancing machinery
- tools, equipment and materials appropriate for balancing wheels and tyres.

Links

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