



Australian Government

AURTTJ011 Balance wheels and tyres

Release: 1

AURTTJ011 Balance wheels and tyres

Modification History

Release	Comment
Release 1	New unit of competency.

Application

This unit describes the skills and knowledge 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 within the automotive light vehicle service and repair or light vehicle wheel alignment 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.

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.
1. Prepare to balance wheels and tyres	1.1 Identify job requirements from workplace instructions 1.2 Obtain and interpret wheel balancing information from manufacturer specifications 1.3 Identify hazards and environmental issues, assess potential risks and implement control measures in line with workplace policies 1.4 Identify tools, equipment and materials required for the job and examine for serviceability
2. Conduct wheel and tyre pre-balance inspection	2.1 Carry out wheel and tyre pre-balance inspection according to manufacturer specifications, workplace procedures and workplace health and safety requirements

	2.2 Report inspection findings according to workplace procedures, including recommendations for necessary repair or replacement
3. Carry out balancing procedures	3.1 Inspect wheel balancing machine according to manufacturer specifications, workplace procedures and safety requirements 3.2 Balance wheel according to manufacturer specifications, workplace procedures and safety requirements without causing damage to wheel or tyre
4. Complete work processes	4.1 Carry out final inspection to ensure work meets workplace expectations and vehicle and wheels are ready for use 4.2 Clear work area and dispose of or recycle materials according to workplace procedures 4.3 Examine and store tools and equipment according to workplace procedures 4.4 Complete workplace documentation 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 relevant sources of balancing wheels and tyres information efficiently
Reading skills to:	read and 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
Numeracy skills to:	- measure wheel balancing weights - 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

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AURTTJ011 Balance wheels and tyres (Release 1)	AURTTJ001 Balance wheels and tyres (Release 1)	Wording changes to ensure compliance with Standards for Training Packages. Removal of references to OHS requirements. Removal of range of conditions. Addition of assessor requirements.	Equivalent

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 AURTTJ011 Balance wheels and tyres

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Performance Evidence

The candidate must demonstrate they can perform the following according to the standards defined in the elements, performance criteria and foundation skills of this unit.

The candidate must demonstrate balancing of wheels and tyres that safely follows workplace procedures to meet required outcomes. This includes:

- balancing 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

The candidate must demonstrate the following knowledge:

Key policies and procedures for balancing wheels and tyres, including:

- how to locate and interpret manufacturers specifications or equivalent information and workplace procedures for balancing wheels and tyres
- the following workplace health and safety requirements and procedures relating to balancing wheels and tyres:
 - lifting and supporting vehicles and wheels
 - working with balancing machines, including rotating components and flying objects
- environmental requirements relating to balancing wheels and tyres
- procedures for pre-balance inspection of wheels and tyres
- workplace housekeeping and documentation procedures

Wheel balancing machinery, including:

- off vehicle balancers
- on vehicle balancers

Wheel balancing equipment and concepts, including:

- tyre and wheel run-out

- static and dynamic balance
- the following out of balance effects on wheels:
 - wheel hop or tramp
 - wheel shimmy
 - vibration
 - tread wear
- types and applications of wheel weights
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Assessment Conditions

The assessment must:

- include access to:
 - an automotive repair workplace or simulated workplace that reflects workplace conditions - where simulation is used, it must reflect real working conditions by modelling industry operating conditions and contingencies, as well as, using suitable facilities, equipment and resources
 - repair orders and workplace instructions relating to balancing wheels and tyres activity
 - workplace procedures relating to balancing wheels and tyres activity
 - manufacturer wheel balancing specifications or equivalent documentation
 - four different wheels and tyres for balancing
 - wheel balancing machinery
 - two different vehicles or machinery requiring wheel/tyre balancing
 - tools, equipment and materials appropriate for balancing wheels and tyres
- be demonstrated in the workplace or in a simulated environment that reflects workplace conditions
- be conducted in a safe environment
- be assessed in compliance with relevant policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed
- confirm consistent performance can be applied in a range of relevant workplace circumstances

Assessor Requirements

Assessors of this unit must:

- satisfy the assessor requirements in applicable vocational education and training legislation, frameworks and/or standards

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