



Australian Government

AURHTJ003 Remove, inspect and refit heavy vehicle wheel and tyre assemblies

Release: 1

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Modification History

Release	Comment
Release 1	New unit of competency.

Application

This unit describes the performance outcomes required to remove, inspect and refit the wheel and tyre assemblies of heavy vehicles. It involves identifying and confirming work requirements; preparing for the work; removing, inspecting and refitting the wheel and tyre assembly; and completing workplace processes and documentation.

It applies to those working in the automotive service and repair industry. The wheel and tyre assemblies include those of agricultural machinery, forklifts, heavy commercial vehicles or mobile plant machinery. This unit does not apply to off-the-road tyres of mobile plant machinery.

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

Competency Field

Mechanical - Heavy Vehicle

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 remove wheel and tyre assembly	1.1 Job requirements are determined from workplace instructions 1.2 Removal, inspection and refitting information is sourced and

Elements Elements describe the essential outcomes.	Performance Criteria 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.
	interpreted 1.3 Hazards associated with the work are identified and risks are managed 1.4 Tools, equipment and materials are selected and checked for serviceability
2. Remove and inspect wheel and tyre assembly	2.1 <i>Wheel and tyre assembly</i> is removed according to manufacturer specifications, workplace procedures and <i>safety requirements</i>, and without causing damage to components or systems 2.2 Wheel and tyre assembly, mounting points and attachment devices are inspected for condition, damage and wear 2.3 Inspection findings are reported according to workplace procedures, including recommendations for necessary repairs, replacements or adjustments
3. Refit wheel and tyre assembly	3.1 Refitting options are analysed and those most appropriate to the circumstances are selected 3.2 Wheel and tyre assembly is fitted and adjusted according to manufacturer specifications, workplace procedures and safety requirements, and without causing damage to components or systems 3.3 Tightening sequence and torque settings are completed according to manufacturer specifications and workplace procedures 3.4 Wheel and tyre assembly is checked for correct assembly, run-out and alignment according to manufacturer specifications and workplace procedures
4. Complete work processes	4.1 <i>Final inspection</i> is made to ensure work is to workplace expectations and vehicle is 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 and workshop literature when seeking wheel and tyre specifications, including tightening procedures.
Writing skills to:	legibly and accurately fill out workplace documentation, making repair recommendations, and recording parts and material used.
Numeracy skills to:	- interpret numerical information in: - manufacturer specifications, including wheel nut tension settings - demountable rim assembly documentation - tyres - disc wheels - tyre inflation gauges - understand numerical divisions in metric and imperial units of measurement.
Technology skills to:	operate wheel and tyre assembly removal, inspection, refitting and adjustment tools and equipment.

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>Wheel and tyre assembly</i> must include:	- tyre and demountable rim assembly - tyre and disc wheel.
<i>Safety requirements</i> must include:	- work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for: - working with wheel and tyre assemblies and air inflation pressures - working with two piece split wheels, split and multi-piece wheels and rims - manually handling wheel and tyre assemblies - lifting and supporting heavy vehicles.
<i>Final inspection</i> must include:	- wheel and tyre assembly run-out and alignment testing - testing the operation of vehicle systems affected by the removal and refitting of wheel and tyre assemblies

	• rechecking tightness of attachment devices.
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Unit Mapping Information

Equivalent to AURHTJ2003 Remove, inspect, and refit heavy vehicle wheel assemblies

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 AURHTJ003 Remove, inspect and refit heavy vehicle wheel and tyre assemblies

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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:

- remove, inspect, refit and adjust the wheel and tyre assemblies on the steer and drive axle dual wheels of a heavy vehicle
- remove, inspect, refit and adjust the demountable rim and tyre assemblies on the steer and drive axle dual wheels of a second heavy vehicle.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to heavy vehicle wheel and tyre assemblies, including procedures for:
 - working with wheel and tyre assemblies and air inflation pressures
 - working with two piece split wheels, split and multi-piece wheels and rims
 - manually handling wheel and tyre assemblies
 - lifting and supporting heavy vehicles
- types and applications of wheel assemblies, including:
 - cast spoke wheels
 - disc wheels, including:
 - stud piloted wheels
 - hub piloted wheels
 - studs and nuts for disc wheels
 - two piece split wheels
 - demountable rims, including:
 - single piece tyre-to-rim assemblies

- multi-piece tyre-to-rim assemblies
- spacer band
- rim clamps, studs and nuts for demountable rims
- procedures for removing, inspecting and refitting heavy vehicle wheel and tyre assemblies, including:
 - wheel nut tensioning procedures
 - manufacturer wheel and tyre assembly specifications appropriate to the assemblies specified in the performance evidence
- post-fitting procedures and checks of heavy vehicle wheel and tyre assemblies, including wheel and tyre assembly run-out.

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 heavy vehicle wheel and tyre assemblies that they have worked on 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 and tyre assembly specifications
- two different heavy vehicles and heavy vehicle wheel and tyre assemblies, including:
 - disc wheels and tyres
 - demountable rims, tyres and cast spoke wheels
- tools, equipment and materials appropriate for removing, inspecting and refitting heavy vehicle wheel and tyre assemblies.

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