AURKTJ013 Perform minor repairs to earthmoving and off-the-road tyres

# **AURKTJ013 Perform minor repairs to earthmoving and off-theroad tyres**

## **Modification History**

Release	Comment
Release 2	Updates to Application, Performance Criteria, Performance Evidence and Knowledge Evidence
Release 1	New unit of competency.

# **Application**

This unit describes the performance outcomes required to inspect and perform minor repairs to earthmoving and off-the-road (OTR) tyres. It involves preparing for the task, inspecting and carrying out minor tyre repairs and completing work processes.

It applies to those who fit earthmoving and OTR tyres, wheel and rim assemblies of not less than 600 mm (24 inches) nominal diameter and classified as off-the-road or earthmover tyres.

Licensing, legislative, regulatory, Australian standards or certification requirements may apply to this unit in some jurisdictions. Users are advised to check with the relevant regulatory authority.

### **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.
Prepare for inspection of the tyre	<ul> <li>1.1 Obtain and interpret Australian standards for earthmoving and OTR tyres, workplace procedures and safety information</li> <li>1.2 Identify site and task hazards, assess potential risks, and implement control measures in line with workplace policies</li> <li>1.3 Select and check tools, equipment and materials for serviceability</li> <li>1.4 Complete initial workplace documentation for tyre inspection</li> <li>1.5 Prepare and clean tyre for inspection</li> <li>1.6 Position and secure tyre for inspection</li> </ul>

Commented [DD1]: @Eleanor Yeoell I re-worded this to be consistent with the active voice used throughout these PCs

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ELEMENTS	PERFORMANCE CRITERIA
2. Inspect the tyre	2.1 Identify extent and nature of internal and external tyre damage 2.2 Categorise damage in line with Australian standards 2.3 Identify repairable and non-repairable damage 2.4 Assess overall repairability and extent of repairs required
3. Carry out minor repair	3.1 Access and interpret information on appropriate manufacturer instructions and Australian standards
	3.2 Identify task hazards and risks and apply risk controls to the equipment to be used
	3.3 Carry out minor repair to tyre according to workplace procedures, manufacturer instructions and Australian standards
	3.4 Check repaired tyre for successful repair
4. Complete work processes	4.1 Conduct final inspection according to workplace procedures and confirm tyre is ready for use
	4.2 Clear work area and dispose of or recycle waste materials according to workplace procedures
	4.3 Store tyre according to workplace procedures
	4.4 Complete workplace documentation relating to tyre repair
	4.5 Complete inspection documentation according to Australian standards

# **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:	identify information and assistance in manufacturer instructions and Australian standards relating to the inspection and repair of earthmoving and OTR tyres	
Reading skills to:	<ul> <li>read and interpret information in:</li> <li>written Australian standards, workplace procedures and manufacturer instructions</li> <li>charts, lists, drawings and other applicable documents.</li> </ul>	
Writing skills to:	<ul> <li>document required repair actions</li> <li>complete inspection documentation.</li> </ul>	

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Skills	Description
Oral communication skills to:	ask questions to clarify instructions and procedures     report inspection and repair results.
Numeracy skills to:	<ul> <li>read and interpret metric and imperial systems of measurement.</li> <li>read and interpret mathematical information, including charts and drawings</li> <li>use specialist tools and measuring equipment, including: <ul> <li>gauges</li> <li>pressure testing tools.</li> </ul> </li> </ul>
Digital literacy skills to:	• use workplace computerised technology and tools relating to the inspection and repair of earthmoving and OTR tyres.
Initiative skills to:	plan and prioritise own work to achieve required outcomes.
Planning and organising skills to:	<ul> <li>select and use appropriate equipment, materials, processes and procedures when inspecting and repairing tyres</li> <li>recognise own limitations when selecting and using tools and equipment and seek timely advice.</li> </ul>
Problem-solving skills to:	<ul> <li>seek information and assistance as required to solve problems</li> <li>identify tyre condition and determine repair requirements.</li> </ul>

# **Unit Mapping Information**

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Code and title current version	Code and title previous version	Comments	Equivalence status
AURKTJ013 Perform minor repairs to earthmoving and off-the-road tyres (Release 1)	AURKTJ003 Perform minor repairs to earthmoving and off- the-road tyres (Release 3)	Updates to performance evidence and assessment requirements.	Equivalent

# Links

 $Companion\ Volume\ Implementation\ Guides\ are\ found\ in\ VETNet- \\ \underline{https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1}$ 

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# Assessment Requirements for AURKTJ013 Perform minor repairs to earthmoving and off-the-road tyres

### **Modification History**

Release	Comment
Release 2	Updates to Application, Performance Criteria, Performance Evidence and Knowledge Evidence
Release 1	New unit of competency.

#### 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 performance of minor repairs to earthmoving and off-theroad (OTR) tyres that safely follows workplace procedures to meet required outcomes, on three separate occasions. This includes:

- · determining control measures required to mitigate site and task hazards
- cleaning, preparing, positioning, and securing the tyre for inspection
- inspecting the tyre for internal and external damage, categorise damaging and determining repairability of damage
- safely carrying out minor repairs utilising workplace procedures, manufacturer instructions and Australian standards
- completing work processes, including storage of equipment and documentation.

The above work must be performed on wheel assemblies and rim assemblies of not less than 600 mm (24 inches) nominal diameter and classified as off-the-road or earthmover tyres.

## **Knowledge Evidence**

The candidate must demonstrate the following knowledge:

Key policies and procedures for performing of minor repairs to earthmoving and OTR tyres, including:

- how to locate and interpret manufacturers specifications, Australian standards and workplace procedures for inspecting and repairing earthmoving and OTR tyres, including:
  - tyre placards and markings
- applicable standards, including Australian standards relevant to inspecting and repairing earthmoving and OTR tyres:

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- AS 4457.1 Earth-moving machinery Off-the-road wheels, rims and tyres -Maintenance and repair Wheel assemblies and rim assemblies
- AS 4457.2 Earth-moving machinery Off-the-road wheels, rims and tyres -Maintenance and repair Tyres
- work health and safety (WHS) requirements, including statutory regulations, codes and standards relevant to removing, inspecting and fitting earthmoving and OTR tyres, including procedures for:
  - · deflating and inflating tyres
    - gauge pressure
    - · overinflation and underinflation
  - managing risks associated with working with stored energy, including:
    - air pressure
    - · mechanical release of stored energy
    - explosions, blasts and ruptures
    - the force of explosions and blasts
    - noise
- hazard identification procedures and risk control methods relevant to inspecting and repairing earthmoving and OTR tyres, including:
  - · operating indoors, outdoors, underground, and at nighttime
  - · overhead obstructions
  - working on unstable ground
  - · moving mobile plant
  - falling or dropped objects
  - crushing or trapping
  - projectiles
  - · rupturing wheel components
- workplace procedures required for repairing earthmoving and off-the-road tyres, including:
  - · establishing serviceability of tools and equipment
  - · documentation procedures
  - housekeeping procedures, including:
    - examination of tools and equipment
    - · storage of equipment
    - identification, tagging and isolation of faulty equipment
    - disposal of excess materials
- procedures for identifying and undertaking minor repairs to earthmoving and OTR tyres
- inspection procedures for earthmoving and OTR tyres, including
  - · inspecting for damage and repair
  - post-repair inspection, including:
    - checking for escaping air
  - · identifying tyre pressure monitoring systems
- procedures for reporting damage and repair work on earthmoving and OTR tyres
- correct storage of repaired tyres

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Key types of tyre damage, including repairable and non-repairable damage including:

- · indicators of tyre damage
- identifying when a repair cannot be made and a replacement is required
- disposing of unrepairable tyres

### **Assessment Conditions**

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 earthmoving and off-the-road repairs 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:

- a 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 performing minor repairs to earthmoving and OTR tyres
- WHS requirements and workplace procedures relevant to performing minor repairs to earthmoving and OTR tyres
- manufacturer specifications and procedures or equivalent documentation for performing minor repairs to earthmoving and OTR tyres
- Australian standards relevant to performing minor repairs to earthmoving and OTR tyres
- earthmoving and OTR-classified tyres
- manufacturer instructions and workplace procedures relevant to performing minor repairs to earthmoving and OTR tyres
- tools and equipment required for performing minor repairs to earthmoving and OTR tyres
- workplace location or simulated workplace

### The assessment must:

- 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.

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## Assessor requirements

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

# Links

Companion Volume Implementation Guides are found in VETNet - <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1</a>



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