



Australian Government

PMBPROD338 Repair heavy off-the-road tyres

Release: 1

PMBPROD338 Repair heavy off-the-road tyres

Modification History

Release 1. Supersedes and is equivalent to PMBPROD338A Repair heavy off-the-road tyres

Application

This unit of competency covers the skills and knowledge required to repair heavy off-the-road tyres. It applies to tyres defined by AS 4457.2-2008 Earth-moving machinery - Off-the-road wheels, rims and tyres - Maintenance and repair - Tyres (or its replacement) or similar tyres.

This unit of competency applies to operators who are required to select and prepare tools/equipment and materials, prepare surfaces and materials, make repairs and solve problems within area of responsibility.

This unit of competency applies to an operator demonstrating theoretical and technical knowledge and well developed skills in situations that require some discretion and judgement. The operator may work alone or as a member of a team or group and will work in liaison with other shift team members, team leader and supervisor, as appropriate.

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

Pre-requisite Unit

Nil

Competency Field

Production

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

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|--------------------------|------------|------------------------------|
| 1 Prepare for job | 1.1 | Move tyre into position |
| | 1.2 | Secure tyre ready for repair |

- 1.3 Determine repair stock and cure time required from injury dimensions
 - 1.4 Select required patches and rubber repair stock
 - 1.5 Select, check and prepare tooling
 - 1.6 Acclimate required repair products according to the supplier recommendation
 - 1.7 Check and wear required personal protective equipment (PPE)
- 2 **Prepare substrates**
 - 2.1 Prepare surfaces as required
 - 2.2 Apply adhesive to repair surfaces according to procedures
 - 2.3 Allow surfaces to 'prime' according to procedures
- 3 **Repair injury**
 - 3.1 Choose correct repair materials
 - 3.2 Check compatibility of materials used
 - 3.3 Check maximum pre-heating temperatures
 - 3.4 Repair tyre components as required
 - 3.5 Fill injury according to procedure
- 4 **Patch injury as required**
 - 4.1 Review correct patch size
 - 4.2 Remove inner liner as required
 - 4.3 Prepare surfaces as required
 - 4.4 Prepare patch according to procedure
 - 4.5 Install patch according to procedure
 - 4.6 Follow pressurisation and/or curing instruction

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|---|--------------------------------------|-----|---|
| 5 | Complete repair | 5.1 | Prepare injury for curing |
| | | 5.2 | Complete any required paperwork |
| | | 5.3 | Complete housekeeping according to procedures |
| | | | |
| 6 | Anticipate and solve problems | 6.1 | Recognise a problem or a potential problem |
| | | 6.2 | Determine problems needing priority action |
| | | 6.3 | Refer problems outside area of responsibility to appropriate person, with possible causes |
| | | 6.4 | Seek information and assistance as required to solve problems |
| | | 6.5 | Solve problems within area of responsibility |
| | | 6.6 | Follow through items initiated until final resolution has occurred |

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different 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.

Regulatory framework The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used.

Applicable legislation, regulations, standards and codes of practice include:

- health, safety and environmental (HSE) legislation, regulations and codes of practice relevant to the workplace, manual handling and hazardous materials
- AS 4457.2-2008 Earth-moving machinery - Off-the-road wheels, rims and tyres - Maintenance and repair – Tyres, or its replacement
- other Australian/international standards relevant to the materials being used and products being made
- any relevant licence and certification requirements.

All operations to which this unit applies are subject to stringent HSE requirements, which may be imposed through state/territory or federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and such requirements the legislative requirements take precedence.

Procedures All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or any combination of:

- emergency procedures
- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Tools and Tools and equipment include:

- equipment**
- knives, scissors and other cutting tools
 - rubber extruders and other preparation equipment
 - stitching tools.

Additional tools and equipment will be selected as required from:

- mounts and stands
- chocks
- wall or floor mounted frames which may be manually, electrically or hydraulically operated
- hoists/lifting equipment not requiring any special permits or licences
- manual handling aids, such as hand carts and trolleys
- relevant personal protective equipment (PPE).

Problems Routine and non-routine problems must be resolved.

Non-routine problems must be resolved by applying operational knowledge to develop new solutions, either individually or in collaboration with relevant experts, to:

- determine problems needing action
- determine possible fault causes
- develop solutions to problems which do not have a known solution
- follow through items initiated until final resolution has occurred
- report problems outside area of responsibility to designated person.

Non-routine problems are unexpected problems or variations of previous problems and include one or more of:

- variations in quality
- emergency situations
- intermittent faults.

Operational knowledge includes one or more of:

- procedures
- training
- technical information, such as journals and engineering specifications
- remembered experience
- relevant knowledge obtained from appropriate people.

Routine problems are predictable and have known solutions and include one

or more of:

- equipment malfunctions
- hidden damage
- broken chords
- cord body fabric damage
- variations in materials.

Unit Mapping Information

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Links

MSA Training Package Implementation Guides - <http://mskills.org.au/training-packages/info/>