



VUL-SWP-072a-012-Repairs

STANDARD WORK PROCEDURE (SWP)	
Description	Repairs
Site	Vulcan Mine
Department	Maintenance – Tyres
Purpose	<i>The purpose of this SWP is to provide a documented way of working to achieve an acceptable level of risk. The steps outlined pertain to the titled task only. All other SHMS requirements such as SOPs must be followed e.g.: VUL-SOP-065-PPE, VUL-SOP-089-Dust etc.</i>
1. Completion and Restoration	
Tyre and rim components that are not fit for purpose shall be 'tagged out of service' shall be labelled as such, and if practical, rendered incapable of use. All documents shall be completed and delivered appropriate person for recording, prior to the end of the shift in which the work was conducted.	
2. Repairs	
All maintenance and repairs will be conducted in accordance with manufacture instructions. Where practicable, Heavy Earth Moving tyre and rim repairs should be carried out by the OEM or their agents' employing techniques and materials at least equivalent to those used in the original manufacture. Where it is not practicable for the OEM or agent to carry out repairs, they may be carried out by an authorised person in accordance with the requirements of the relevant Australian Standard.	
3. Allowable Repairs	
Only Heavy Earth Moving tyres and rims may be repaired. Unless authorised by the OEM, no repairs shall be conducted on any lock ring, flange or bead seat band. In such instances, these components are to be tagged out of service. They shall be rendered inoperable. The gutter or back sections shall not be repaired. It is permitted to part-off or machine-off either the gutter or back sections and replace them with a new section. The damaged sections shall be rendered inoperable. Fretting or surface corrosion may be repaired where a method is specified by the OEM manufacturer or by a competent service provider. All surfaces should be treated to minimise corrosion. Suitable means include priming and painting. The lock ring groove may be protected; however, care is necessary to ensure that the protection used is not detrimental to the operation of the groove. Care shall be taken to ensure replacement components are compatible with the original components. NOTE: Similar components from different manufacturers are frequently not compatible. The Maintenance/Asset Manager may approve a JHA to release pressure from minor side wall bubbles on Earth Mover Tyres: - the bubble must not compromise the main belts and may not be on steer tyre. - any bubbling in a tyre on a light vehicle, forklift, EWP or similar vehicle should result in the tyre being scrapped.	



4. Welding

Where rim repairs are to be made by welding, they may only be performed by a boilermaker holding a welding certificate at least sufficient to permit the holder to carry out welding operations on pressure vessels in accordance with the relevant Australian Standard.

All rim welds must be assessed by an accredited testing authority to the relevant Australian Standard.

Where necessary, in the case of some forgings, the wheel or rim should be stress relieved in areas affected by welding.

5. Marking and Reporting of Repairs

Where a tyre or rim has been repaired, the repairer shall permanently mark the tyre or rim and submit a Repair Report including the following:

- Name and address of the organization that performed the repair;
- Location and extent of the repair
- Date of repair
- Details of the marking

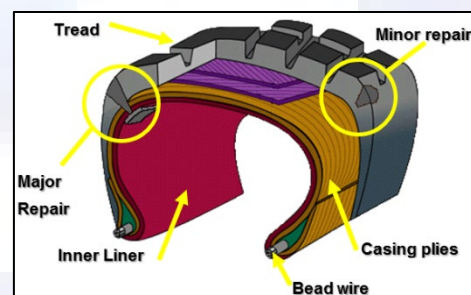
The report shall be filed with the Tyre and Rim Register against the asset.

Repaired Tyres shall be marked with at least one "X" by the repair company.

All tyres that have been repaired shall be identified by the use of an 'X' coding system on the tyre sidewall alongside the tyre serial number.

The number of 'Xs' indicates the severity of the tyre repair.

Number of X markings	Description
Single marking – X MINOR REPAIRS	tyre is suitable to fitment in any position
Double marking – XX INTERMEDIATE REPAIRS	tyre is NOT suitable for front wheel fitment – except for Graders and Wheel Dozers
Triple marking – XXX MAJOR REPAIRS	Tyre is NOT suitable for front wheel fitment – except for Graders and Wheel Dozers, and when fitted the repair must face the machine chassis or inside dual wheel



6. Marking

Tyre and Rim bases used on Heavy Plant and multi-piece rims [but not tyres] used on any other plant at the mine must be permanently marked as per relevant Australian Standard (with a unique, unambiguous, and clearly seen identification).

Rim markings are to be adjacent the valve stem area on both sides of the rim.

The identification must be in place and the tyres and rims registered in the 'Tyre and Rim Register' before the tyre/rim is released for service.