

## Tyre Degradation on Mobile Elevating Work Platforms Guidance Document

Please note: This document should be used in conjunction with the relevant OEM manuals for the machine model

### Tyres

Tyre damage on mobile elevating work platforms (MEWPs) is a common occurrence. Identifying what is still serviceable can sometimes be a difficult decision. Tyres on MEWPs are either solid, polyurethane foam filled or pneumatic which are found on road going vehicles (truck mounted and trailer lifts). All these tyres should be approved by the MEWP manufacturer for applications in which those products are intended to be used. This guidance highlights reasonable benchmarks for tyres on MEWPs.

When any of the following are discovered, measures must be taken to remove the product from service immediately and arrangements must be made for replacement of the tyre or tyre assembly:

### Polyurethane foam filled tyres

- Smooth, even cut through the cord plies which exceeds 10% of the tread width
- Tears or rips (ragged edges) in the cord plies which exceeds 25mm in any direction
- Punctures which exceed 25mm in diameter
- Damage to the bead area cords of the tyre
- Evidence of fluid leaving the tyre at the valve stem, bead of tyre or at any punctures/holes in the tyre



**UNACCEPTABLE** – Sever tread damage complete lug can be peeled away



**UNACCEPTABLE** – Severe tread wear



Bolt in tyre – this is not a fault – bolt is used to plug their air hole after filling



Non-critical – Small amount of tread missing but outer case is not damaged



## Solid Tyres

If a cut, tear, chunk or other discrepancy exceeds any one of the following dimensions:

- 76mm long or 10% of the diameter in length, 19mm wide or 19mm deep
- If the metal wheel is visible at any point through the tread of the tyre

No longer serviceable:



Excessive damage to sidewall and separation between tyre and rim



Tread pattern no longer visible



Non Critical – Small amount of tread missing



Non Critical – Small amount of tread damage and minor wear



UNACCEPTABLE – Bead damage



UNACCEPTABLE – Severe side wall damage



### Air filled/pneumatic tyres

When any cut, rip or tear is discovered that exposes **sidewall or tread area cords** in the tyre, measures must be taken to remove the product from service immediately. Arrangements must be made for replacement of the tyre or tyre assembly. When any defect causes the tyre to be un-roadworthy (e.g. loss of tread or tread wear indicators showing). Note: re-treads are not recommended for vehicle mounted MEWPs that are supported on pneumatic tyres.

### Rims

The rims installed on each product model have been designed to satisfy stability requirements which consist of track width, tyre pressure and load capacity. Size changes such as rim width, offset, larger or smaller diameter without written factory recommendations may result in an unsafe condition regarding stability.



### Tyre pressures

Tyres and rims are to be inspected daily as part of the pre-operational checks by the trained operator and an entry recorded in the EWPA Log Book.

To safeguard maximum stability, achieve optimum machine handling and minimise tyre wear, it is essential to maintain proper pressure in all air-filled tyres. The operator should refer to the machines operator's manual to identify the correct tyre pressure for that particular machine.

### Replacement

Any replacement tyre should be the same size, ply and brand as originally installed on the machine. Please refer to the machines Parts Manual for the part number of the approved tyres for a particular machine model.

\*Wheel weight is a critical for the stability of the machine, replacement wheels must be the same weight as those that have been replaced.

Unless specifically approved, do not replace a foam filled tyre assembly with a pneumatic tyre. When selecting and installing a replacement tyre, ensure that all tyres are inflated to the pressure recommended by the manufacturer of that particular machine. Due to size variations between tyre brands, both tyres on the same axle should be the same and all four tyres should contain the same fill media.