



Safety Alert

Tyre/Wheel Disassembly causes multiple Fatality

Accident

Four tyre service persons were fatally injured while carrying out routine maintenance on Position 6 of a Komatsu 785-5 truck.

The investigation concluded that the lockring of Position 6 assembly had not been seated in its lockring groove for a considerable time, possibly since time of OEM fitment, and that the tyre had not been sufficiently deflated prior to commencement of wheel removal. The complete removal of the assembly's wheel nuts, probably to assist in freeing the assembly off the hub, allowed the lockring to then fully exit its lockring groove with the remaining air pressure causing the rim and other components to be violently ejected into the group of tyre service men.

Actions

The following recommendations are provided and are aimed to eliminate a repetition of this type of incident:

1. All tyre fitments including OEM fitments to any vehicle require the highest standard of workmanship and must include a comprehensive quality check as to the final integrity of the complete assembly prior to, during and following assembly and inflation – the assembly process must also ensure that the tyres fitted are clean and do not contain any foreign material. The correct positioning of the lockring **must be checked** and verified prior to fitment of all tyre and rim assemblies to a vehicle.
2. Any “new to site” rubber tyred vehicle inspection must include a visual integrity verification of the lock ring area of all rims including any spare tyre assemblies, whether delivered with the vehicle or separately.
NEVER re inflate any tyre/s insitu if it has lost or been deflated to less than 20% of recommended cold inflation pressure,
3. All deflations must be performed as per the site SWP for that particular vehicle, brand & type and require removal of the valve core from the valve stem, **and**
4. The valve stem must be checked and cleared from any obstructions (ice, dirt, etc from tyre cavity) by inserting a piece of wire into the open valve stem a number of times throughout the deflation process.
5. Where work is to be conducted on a set of dual tyres, **both tyres** must be deflated and checked/ verified to have reached the SWP pressure using a pressure gauge before any further work can commence.

Tilman Rasche
Manager – Global Risk & Business Improvement

10/8/2004/04 Safety Alert25 TyreWheel disassembly causes multiple fatality incl disclaimer1.doc

‘Klinge Safe Tyres Produce More & Last Longer’

This material is for information only. We (Klinge & Co Pty Ltd) intend to bring the existence of potential problems to your attention and to inform you of solutions which we have adopted. We do not warrant that any solutions that we have adopted are infallible, nor do we recommend that you adopt same. If you are concerned about a potential problem and wish to implement a solution, then we recommend you carry out your own research and testing. Expert advice should be obtained before adopting any solution that we have adopted to ensure that such a solution is appropriate and suitable to your needs. Any information provided by us in this material or otherwise on this web site is not intended to create any sort of legal relationship between us and you, nor is it intended that you will rely upon it without obtaining proper professional advice. We will not be responsible for any loss and damage occasioned, including but not limited to damages for personal injuries or loss of business or other profits, by any person relying on information contained in this material or otherwise on this website. We do not guarantee that the information material or otherwise on the web site is accurate, reliable, definitive, complete or up to date. We may claim legal privilege and common interest privilege in relation to this material.