Fatal 5 - TRANSPORT – 2 separate incidents in which an individual died from crush injuries when replacing tyres/wheels on a vehicle.

WHAT HAPPENED

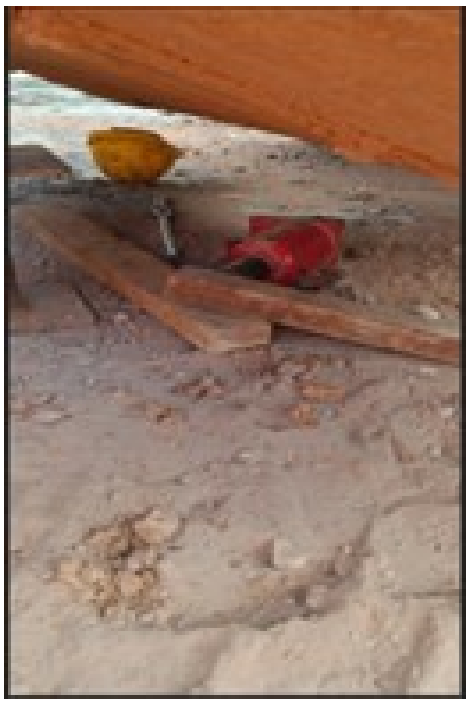
Overseas incident

In July 2024, a third-party mechanic who worked for a quarry contractor, was changing a punctured tyre on the wheel loader.



Another wheel loader was assigned by the supervisor to support lifting the back of the wheel loader which had the punctured tyre so that they could insert a jack. The loader lifted the wheel loader, the mechanic was trying to insert the jack, and the wheel loader slipped and squeezed the right leg of the mechanic with the punctured tyre. The image below shows the jack propped up using a bucket.





After initial medical treatment at the site clinic, the injured party was taken to hospital and underwent surgery for a femur fracture on his right leg. Sadly, he died several days later from his injuries.

UK incident

A UK company was recently prosecuted for a similar incident where an employee was crushed and killed when replacing the front wheels on a mixer truck.

With the existing wheels already removed, the worker entered the underside of the vehicle and attempted to prop it higher up using a bottle jack. It was at this point that the wagon fell onto the worker.

Please follow this link to further information and images from the HSE press release on this incident. [Company fined after worker crushed to death | HSE Media Centre]

LEARNING POINTS / ACTIONS TAKEN

There are frequently better ways of lifting machines but sometimes another machine is the only method available out in the field. However, there are always safer alternatives than trying to balance the machine on a bucket as was the case in one of the fatalities above.

- Ensure you have a safe system of work for the replacement of tyres and wheels
- HSE Guidance on safe working under vehicles which has some essential principles that would apply across a range of vehicles and machines
- Please see below some suggestions on safer ways of lifting
    - Availability of suitable lifting equipment / accessories. Excavators with load tested and certificated lifting eyes on the quick hitch coupled with suitable fabric slings and d shackles. (as in photo below) Hiab's are also used but take more time to get on site.
    - Availability of operator/ workshop manuals with info about suitable lifting/ jacking points. New machines can often be supplied with props and chocks for wheels and bodies.
    - Provision of trolley jacks in a workshop environment and/ or cribbing blocks. The cribbing blocks are light to lift and carry, load tested, robust – if used properly with the ground plate and load bearing caps, and versatile. They can be used out on-site more easily than the trolley jacks or other propping aids.
- If using contractors for all tyre changing and maintenance
    - Ensure work is completed using an approved contractor
    - Ensure there is system in place for the management and control of contractors

- Please follow this link to a pdf of some Do's and Don'ts when Removing, Replacing, Repairing Tyres on Vehicles and Mobile Plant

Use of excavator with lifting equipment



Image of cribbing blocks



LOCATION:	**QUARRY**	**ALERT STATUS:**	**Normal**
ACTIVITY:	**MAINTENANCE & HOUSEKEEPING**	**DATE ISSUED:**	**22/07/2024 18:07:23**
SUB ACTIVITY:	**MOBILE PLANT**	**INCIDENT No:**	**03726**