

SAFETY ALERT

TRUCKMIXER MOUNTING BOLT FAILURE (HiPo)

DETAILS OF THE INCIDENT

A truck mixer was being loaded with 4m³ of concrete, the first load of the day. Upon noticing a metal-on-metal noise, the driver moved away from the loading bay to investigate the issue. He discovered several of the bolts securing the gearbox and drum had sheared, leaving only three bolts holding the drum in place, see picture 1. A new gearbox had been fitted less than 18 months previously.

On inspecting the remaining bolts in the flange, one was identified as a high-tensile grade 10.9 bolt which is the correct bolt for mounting the gearbox & flange to the drum, while the other was a grade 8.8 bolt, more usually found on mounting brackets that allow for movement. **This high potential (HiPo) incident could have had catastrophic consequences if the drum had become detached.**

KEY FINDINGS

Safe Systems	The recent Safety Alert SA01.2025 relating to a similar incident was shared with both the truck owner and driver; however, it appears regular maintenance inspections were not undertaken as highlighted in this Alert.
Inspection & Maintenance	The truck owner's incorrect maintenance decisions highlight the need for better understanding of potential consequences.
Inspection & Maintenance	Truckmixer drivers should visually inspect the mixer gearbox mounting bolts (picture 2) as part of their daily pre-use inspection, checking for signs of movement or missing bolts.
Tools and Equipment	This type of incident appears more likely to occur following the removal of the drum or installation of a new gear box.

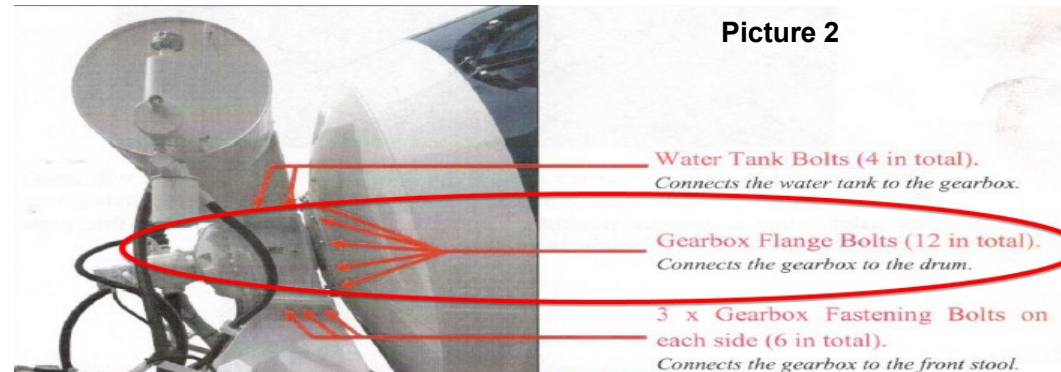
Picture 1



HOW COULD THIS HAVE BEEN AVOIDED

- Operators must ensure they follow manufacturers' maintenance guidance in accordance with the specific equipment operators guide (drivers handbook).
- Best practice is to have this area checked during formal documented safety inspections by the vehicle maintenance provider in accordance with a recommended truck mixer inspection sheet.
- Ensure robust defect reporting and rectification schemes are in place, which should be audited and checked by the vehicle owner. This should include procedures which require the vehicle to stop operating if critical faults are found.

Picture 2



Look after yourself and each other

Don't let anyone act unsafely, always stop unsafe practices.

Tools and Equipment

Use the right, well maintained, tools/equipment for the job. Never make do.

Safe Systems

Follow safe systems of work, site rules, signage and traffic signals.



STOP THINK ACT