

TRANSPORT - Fatal 6 - External haulier wheel separation – M4

WHAT HAPPENED

A loaded cement tanker was driving on the M4 Severn Crossing bridge when it experienced a wheel separation on the near side drive axle. The outer wheel came free and undertook the vehicle, this wheel was not recovered. The inner wheel came free to rest by the vehicle as it came to a stop, this wheel was recovered.

Images from rear camera



Images from forward facing camera



KEY FINDINGS

Manufacturers provide specific guidance on the requirement when removing and fitting wheels included cleaning the wheel face plate and applying lubricant. In this case, there is evidence to suggest that this preparation had not been completed. Also, the driver did not carry out his first use check.

LEARNING POINTS / ACTIONS TAKEN

Safety equipment / procedures

All wheels on Unit / Trailer should be fitted with wheel nut indicators to alert the driver to any movement of wheel nuts. If any wheel nuts are missing – you must follow your company procedure and replace immediately.

When a wheel is removed – the wheel torque procedure must be adhered to in full – all drivers must be familiar and understand their own hauliers procedure'

When a wheel has been removed – the wheel nuts are most susceptible to experience a loss of torque within its first week (this can be in excess of 800miles!). Drivers and operators must always be vigilant to this.

Driver Vigilance / Checks

It is imperative that drivers undertake a thorough vehicle walkaround check for each TractorUnit / trailer driven within the shift with time & care taken to inspect each tyre / wheel as per training.

Tyres / wheels should be visually monitored throughout the shift for any changes in condition or shift in wheel nut indicator position.

Actions to Consider (Workshop / Tyre Fitters) - Wheel replacement procedures

Tyre fitters / workshops MUST follow the manufacturers guidelines when replacing wheels

All of the team must be signed off on their training and company procedures, which must cover the wheel cleaning requirements, lubrication requirements and re-torque requirements

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| LOCATION: | ON-HIGHWAY | ALERT STATUS: | Normal |
| ACTIVITY: | TRANSPORT & LOGISTICS / DELIVERY | DATE ISSUED: | 20/09/2023 11:08:13 |
| SUB ACTIVITY: | DELIVERING CEMENT | INCIDENT No: | 03669 |