

# Truck Wheel Loss

## WHAT HAPPENED

Recently, an articulated lorry lost a wheel on the M45 motorway. The driver felt the steering go slightly sloppy, so started to slow down; however the rev counter shot up even though he was decelerating. After travelling less than 1 mile from the initial suspected fault, the driver pulled over on to the hard shoulder, stopped the vehicle and climbed out of the cab once he had established that it was safe to do so. At this point it was evident that the wheel on the near side drive axle was missing and the second wheel was sitting at an angle. The wheel nuts on the wheel hub had come away completely leaving the studs in place. The wheel was never found.

Following an independent analysis of the remaining wheel studs, the report is inconclusive. The likely cause is both stud stretching, caused by historical over tightening when wheels are changed or worked on, combined with corrosion between the two faces of the drive axle wheels.



## LEARNING POINTS / ACTIONS TAKEN

### Learning Points:

- The driver carried out his pre-start checks - Do drivers meticulously check wheel nuts when they carry out their pre-start checks? Are they trained and aware what to look for? Are vehicle checks documented by drivers and monitored by line managers to ensure defects are repaired in a timely manner and any trends are identified?
- The driver also walked around the vehicle to check the basics whilst at a customer site – Do drivers utilise the time when at a delivery point to carry out general spot checks on their vehicle?
- There is a wheel re-torque procedure in place - Are there processes in place when a wheel/tyre is changed to ensure it is initially torqued correctly using a calibrated wrench and then re-torqued at the appropriate interval? Are these processes

followed?

- The facing plates are cleaned each time a wheel is removed – Is there a process in place to ensure that facing plates are cleaned every time a set of wheels is worked on.
- The vehicle was fitted with wheel nut movement indicators – It is a company requirement that wheel nut movement indicators are fitted to LGV wheels to compliment, rather than replace, robust maintenance programmes.



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LOCATION:  
ACTIVITY:  
SUB ACTIVITY:

ON-HIGHWAY  
TRANSPORT & LOGISTICS / DELIVERY  
ON-HIGHWAY

ALERT STATUS: Normal  
DATE ISSUED: 23/02/2015 12:15:58  
INCIDENT No: 00402