## Failure of Suspension Airbag

## WHAT HAPPENED

The injured party (IP) was carrying out maintenance work on the underside of a trailer unit. Near the end of the maintenance, the IP was stood in the pit working on the underside of the trailer near the axle, when the suspension airbag to the right exploded.

The result of this release and the noise created was sufficient enough to cause temporary hearing loss and strained the IP's neck area. The IP was treated by the first aider on site and later attended hospital. The incident caused no permanent damage to the ear and normal hearing returned a short time after. The failure of the suspension bag was caused by either a stone or other object that was trapped between the pedestal and the air bag, causing a cut, allowing the bag to fail under pressure. After researching similar events, the potential for this incident to have caused far greater levels of injury cannot be understated. Trauma because of airbag explosion/deployment is not uncommon - injuries have usually been sustained because of failure or misuse of the system. In one incident, a 53-year-old man was attempting to repair the suspension airbag on the undercarriage of his articulated vehicle. To save time he decided not to raise the vehicle. The air bag spontaneously ruptured causing massive trauma to the patient. His injuries were facial lacerations, a fractured mandible, loss of teeth, displacement of his denture and would have needed ongoing rehabilitation and support. The patient in this case was extremely fortunate.





## **LEARNING POINTS / ACTIONS TAKEN**

- Understand the potential of suspension airbags to cause harm - For underside 'suspension airbag inspections', a face shield and hearing protection must be worn at all times, until the inspection in complete. - When general maintenance is being undertaken on the underside of the trailer, the air must be fully released from the suspension system - Eliminate/Reduce the risk where practicable, removal of air, pressure, stored energy - always follow the correct procedures - Treat any pressurised or closed pressurised system with care and if in any doubt as to the systems integrity, stop and report this to supervisors/managers immediately

LOCATION: ACTIVITY:

**CONTRACTING - ON-HIGHWAY MAINTENANCE & HOUSEKEEPING** 

SUB ACTIVITY: N/A **ALERT STATUS:** 

DATE ISSUED: **INCIDENT No:** 

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