

General Equipment Safety Bulletin

Technical Support Department

Bulletin 002/2012

Subject: Off Highway Truck (OHT) Front Suspension Wheel Spindle Accident

Affected Product: All Caterpillar Rigid Frame Off-Highway Trucks **Risks identified:** Crush injuries related to wheel spindle removal

Problem Overview

A serious hand crush injury occurred while removing the wheel spindle from the suspension cylinder taper on a 789 OHT located in a HDAL workshop.

The under cab/fender location of front suspension cylinder/wheel spindle/brake assemblies on OHT, prevents overhead crane access. This can lead to the adoption of potentially hazardous work practices and lifting techniques.

Incident Description

The retaining plate that secures the front wheel spindle to the suspension cylinder rod taper was supported by a hydraulic jack. A forklift with a jib attachment, polyester sling and two link brackets was attached to the spindle assembly (including brake and hub). It was intended that this would support the weight of the aforementioned assembly.

The retaining plate bolts were removed, and the retaining plate lowered approximately 50mm by lowering the jack. The fitter attempted to remove a shim pack sitting on the retainer plate. At this point, the spindle and hub assembly unexpectedly released from the tapered section of strut rod. The lift and sling arrangement was unable to restrain downward movement of the spindle and hub assembly. The fitter had parts of both left and right hands crushed between spindle and retainer plate.





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Recommended Management Action Plan

- Perform a Job Hazard Analysis (JHA) prior to undertaking all complex and potentially dangerous tasks
- Develop a written work procedure addressing identified hazards
- Ensure appropriate supervision for task is in place
- Do not work under suspended loads
- Follow Caterpillar service procedures
- If you elect to use an alternative procedure, ensure that this procedure is risk assessed, and that all hazards identified are addressed
- Ensure tooling and lifting equipment is appropriate for task, currently certified, in good working condition, and used within its rated capacity*.

*Includes Caterpillar tooling, and specialized tooling developed and certified by others

Contact Details:

If further information is required about this bulletin, contact your nearest Hastings Deering branch on 131 228 and ask to speak to a Service Advisor, or your Product Support Representative.

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