



**CRUSHED IN ARTICULATION POINT OF LHD**

**INCIDENT**

A Loader Operator received serious crush injuries including a fractured pelvis when he was caught in the articulation point of a low-profile LHD unit. After alighting from the loader to clean a window with the engine running, the operator began to climb back into the cab. He reached for the grab handle near the door hinge and was pulling himself into the cab when he inadvertently nudged the joystick steering control with his left forearm. The operator had omitted to engage the manual lock prior to exiting the cab. The movement of the joystick activated the steering control and articulated the loader to the left, crushing the operator.

**IMMEDIATE CAUSES**

1. The hydraulic steering lock was not functioning.
2. The primary safety device did not fail to safety and had to be manually operated.
3. Safe working procedures were not followed.

**COMMENT AND ACTION**

As the machine had only been in service for 200 hours since new when the hydraulic steering lock device was discovered to have failed, it would appear that the manufacturer's recommended 1000 hour check was not adequate. Such devices should be checked more frequently, perhaps as part of the operator's pre-start procedure.

In this case, the hydraulic steering lock device was located on the floor of the operator's cab and connected to the door via an adjustable linkage rod. This device can be tested daily by the operator whilst remaining in the operators seat. To test the device the door is opened slightly and the steering stick control is moved. With the manual transmission lock lever in the off position, there still should be no steering articulation movement occurring. If movement does occur then the machine should not go into service until the hydraulic steering lock is repaired.

In addition the safe operating procedures for the machine should stipulate that the operator must not leave the cab until the manual transmission lock is in the "Lock" position and the engine is shut down. Separate safe working procedures are required for maintenance and service tasks which require the engine to be running.

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