Hazard Alert

Worker pinned and killed after disconnecting hydraulic line

What happened?

A worker was in the process of removing a hydraulic hose on a delimber. Delimbers, normally mounted on hydraulic excavators, are used to remove branches from felled trees in the forestry industry. The machine was placed on level ground, booms extended slightly, mobile grab arms closed, and mobile head left in a raised position. The ignition was turned off, key removed, hydraulic shut-off arm raised, and the master switch was closed. While disconnecting a hose, the boom suddenly dropped, crushing the worker between the boom and the machine.

Why did it happen?

When the hydraulic hose was disconnected, this released the hydraulic pressure from the cylinder, causing the boom to drop. Since the boom was not blocked or supported to prevent it from moving, the front of the boom dropped to the ground and suddenly pinned the worker between the boom and the machine.

How to prevent this type of incident

Employers must ensure workers are properly trained for the task they are doing, including following the instructions of the manufacturer's operating manual. When conducting repairs or maintenance on heavy equipment, the operator or mechanic, must follow the proper established procedures for proper shut down, immobilization, blocking, securing, and lock out of equipment.

Before working on an attachment that cannot be lowered to the ground, it must be blocked or supported to achieve a zero energy state. Even when an attachment is lowered to the ground, it may still need to be blocked as it could still shift or move during the repairs, depending on the type of maintenance being carried out.

Safety chains are also a means of securing a delimber head under certain situations, and should be used as per manufacturer's instructions



(1) While standing on heavy equipment to conduct maintenance, a worker disconnected a hydraulic line and was pinned and crushed when the boom dropped. The boom had not been blocked or secured prior to disconnecting the lines.

It is also recommended that employers, operators, and mechanics conduct a risk assessment when dealing with hazardous energy. This risk assessment should account for any hazards incurred by the actual work, as well as the surrounding danger zone.

Use extreme caution when working or conducting maintenance around logging machinery.

For more information, contact your local WSN Health and Safety Specialist workplacesafetynorth.ca/consulting/findyourspecialist





705 474 7233 1 888 730 7821 (Toll free Ontario) workplacesafetynorth.ca

