



# INDUSTRY SAFETY ALERT

## Hydrostatic-Drive Skidder Brake Failure

**Date:** June 2025

**Location:** Kootenay-Boundary TSA

**Details:** A Tigercat 620D Skidder was backing up a skid trail when the engine stalled causing the skidder to start rolling forward. The emergency brakes failed to stop the skidder, and it rolled on its wheels for approximately 100m downslope, across a road and into standing timber. The skidder came to rest after knocking over about 10 trees along the cutblock boundary.

The site foreman checked the operator for injuries and determined that the injuries were minor. A loader was used to assist the operator with backing the skidder out of the standing timber and to the road for inspection. Further medical attention was later received as the operator experienced a sore elbow and back.

### Background:

- This was the first Tigercat hydrostatic skidder owned by the contractor and was purchased used.
- The primary braking for this skidder utilizes a hydrostatic drive that only works when the skidder motor is running. When the skidder is turned off or stalled the hydrostatic braking is no longer functional. The secondary or emergency braking system relies on an accumulator which should have enough pressure for 13 brake applications.
- The Dealer mechanic identified that the emergency braking system accumulator had failed and only held enough pressure for one emergency braking application.
- The mechanic also recommended changing brake pads, but these would not have made a difference in incident.

### Actions and Recommendations:

- Add an accumulator test as part of pre-trip inspection and train operators in how to test.
- Add a mechanic's pressure test of the accumulator every 6 months as part of the maintenance program.
- Add Emergency brake testing and inspections to Safe Work Procedure.
- The contractor was advised to investigate the root cause of the skidder stalling to prevent the need for the emergency braking system usage.
- The operator experienced some medical aid but not until after assisting with the skidder removal from the standing timber. The worker returned to light duty the next day. During upset conditions it can be difficult to prioritize responses. Prior to responding to the skidder, the worker's condition was assessed and then later required medical aid. It is recommended that workers receive medical aid prior to addressing an incident (such as removing the skidder to the road).
- Use RADAR during upset conditions. Any distraction or break in the normal work routine is considered an Upset Condition. Workers are up to 35 times more likely to be injured while working during an upset condition.



BC Forest Safety

Unit 8C - 2220 Bowen Road, Nanaimo, BC, V9S 1H9  
Toll Free: 1.877.741.1060 | [bcforestsafe.org](http://bcforestsafe.org)





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**SKIDDER PATH** (started in foreground of picture and rolled on its wheels for approximately 100 metres into standing timber below the roadside where loader is pictured):



**SKIDDER STOP LOCATION:**



*This information voluntarily submitted – to share a safety alert click [here](#)*



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