

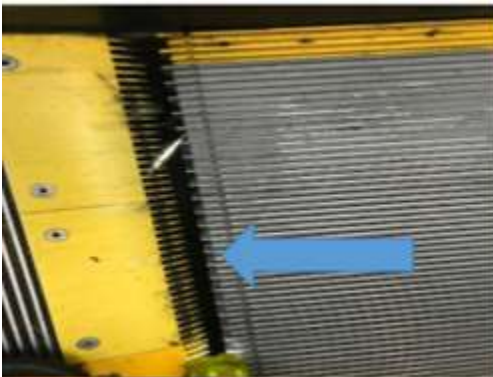
## Incident Summary Report II-663374-2018 (6288)

SUPPORTING INFORMATION	Incident Date	March 11, 2018	
	Location	Vancouver	
	Regulated industry sector	Elevating Device- Escalator	
	Impact	Qty injuries	No injuries reported
		Injury description	N/A
		Injury rating	N/A
	Damage	Damage description	Several escalator steps, and the step chain were damaged due to a pile up (steps colliding with each other) at the bottom landing
		Damage rating	Minor
	Incident rating	Minor	
Incident overview	Multiple steps collided with each other at the lower landing, causing a missing step switch to activate and shut the system down.		
INVESTIGATION CONCLUSIONS	Site, system and components	Escalator is an vertical transportation system in the form of a moving staircase which carries people between floors. It consists of a motor-driven chain linked to aluminum steps on a track which cycles on a set of guides. Multiple safety switches are in place to ensure that the system is running as intended, any deviation from the manufacturer's specification causes the system to shut down.	
	Failure scenario(s)	The escalator controller shut the system down due to a "missing step" switch being activated. A gap between two escalator steps was larger than the allowed manufacturer's specification, resulting in the controller faulting out as designed.	
	Facts and evidence	<p>During a Site visit:</p> <ul style="list-style-type: none"> <li>- 2 steps were fractured completely due to the pileup, the step chain was damaged due to the incident.</li> <li>- Photos of the gap between steps</li> <li>- The last fault log in the escalator controller indicates a missing step switch being activated.</li> <li>- Indentation on the landing plate indicating a heavy impact to the plate.</li> </ul>	
	Causes and contributing factors	It is highly likely that the visible indentation on the landing plate indicates a heavy impact, possibly causing the steps to not be aligned and piling up at the bottom landing.	

Photos or diagrams (if necessary)



Step piled up on top of another. Visible gap between steps.



Showing the gap from a different angle



Indentation in landing plate