

Incident Summary (Reference #5621423) (FINAL)

	Incident Date		Date	August 05, 2017
SUPPORTING INFORMATION	Location			Burnaby
	Regulated industry sector			Elevating Devices
	Impact	Injury	Qty injuries	0
			Injury description	No injury to person(s).
			Injury rating	None
		Damage	Damage description	Damage to Escalator; Handrail drive sprocket, handrail track, step chain, step track, step axial(s) and steps.
		ă	Damage rating	Moderate
	Incident rating		rating	Minor
	Incident overview			A piece of the handrail track broke and was able to rotate with the handrail. The plastic track was pushed/pulled along with the handrail and eventually became caught into the handrail drive sprocket. This caused the handrail drive sprocket to flex and make contact with an escalator step. This contact caused a chain reaction on the underside of the step carriage and brought the escalator to a stop.
INVESTIGATION CONCLUSIONS	Site, system and components			The handrail track is installed under the handrail. This track works as a guide and allows the handrail to rotate with minimal friction continuously around the escalator. The handrail sprocket is a large hard plastic star wheel that meshes with the escalator step chain. The star wheel sprocket ensures that the handrail and steps rotate at a constant speed.
	Failure scenario(s)		cenario(s)	A piece of handrail track broke and was able to become tangled into the handrail drive system.
	Facts and evidence			Broken handrail track in handrail drive system.
	Causes and contributing factors			Integrity of handrail track compromised over the years of service.





Handrail track





Handrail track pushed/pulled into handrail drive system.



