

## Incident Summary #II-1735538-2024 (# 48950) (FINAL)

SUPPORTING INFORMATION	Incident Date	July 17, 2024	
	Location	Prince George, BC	
	Regulated industry sector	Electrical - Low voltage electrical system (30V to 1000V)	
	Impact	Qty injuries	2
		Injury description	Two people received an electric shock.
			Injury rating
	Damage	Damage description	The adjacent appliance cord was melted and destroyed.
		Damage rating	Minor
	Incident rating	Minor	
	Incident overview	<p>Multiple counter appliances were placed together on the kitchen counter and shared one of the kitchen counter outlets. The power cords of the appliances were pushed behind the appliances. One of the power cords from an adjacent appliance had contacted the rear metal case of the toaster oven. The heat from the toaster oven melted the adjacent power cord which energized the metal case of the toaster oven.</p> <p>The owners of the home on two separate occasions received an electric shock when they came in contact with both the electric range and the toaster oven at the same time.</p>	
INVESTIGATION CONCLUSIONS	Site, system and components	The incident involved a certified toaster oven which became energized when an adjacent kitchen appliance power cord melted into the rear metal cover of the toaster oven.	
	Failure scenario(s)	<p>The toaster oven was located on the kitchen counter with other portable kitchen appliances. The appliances and the toaster oven shared the same counter outlet for power. The power cord from the adjacent appliance contacted the rear metal cover of the toaster oven. The heat from the toaster oven melted the adjacent kitchen appliance cord causing the toaster oven metal case to become energized with a 120-volt potential.</p> <p>The owners of the home received an electric shock when they came in contact with the electric range and the toaster oven at the same time completing an electrical circuit.</p>	
	Facts and evidence	The adjacent appliance power cord melted against the toaster ovens rear metal case. Once melted, the power cord energized the metal case of the toaster oven. The toaster oven was sitting on the counter energized continuously until the homeowners completed an electrical circuit by touching the electric range and the toaster oven at the same time receiving an electrical shock.	

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### Causes and contributing factors

The probable cause of the incident was an adjacent appliance power cord contacting the rear metal case of a toaster oven. The appliance cord melted through and energized the metal case of the toaster oven with 120 volts. In addition, the certified metal toaster oven was approved for use with only a two-prong power cord which does not contain a bonding conductor.

If the metal toaster oven had a three-prong (grounded type) power cord bonding, it is likely the counter outlet circuit breaker may have tripped as soon as the adjacent appliance cord melted into the metal exterior of the toaster oven.



Image 1 - Label on the lighting fixture.



Image 2 - Burnt end of the adjacent kitchen counter appliance.



Image 3 - Metal enclosed toaster oven with only a two-prong attachment cord.



Image 4 - Front view of metal toaster oven.