

Incident Summary #II-858266-2019 (#12804) (FINAL)

SUPPORTING INFORMATION	Incident Date	May 28, 2019	
	Location	Victoria	
	Regulated industry sector	Gas - Propane system	
	Impact	Qty injuries	0
		Injury description	none
		Injury rating	None
	Damage	Damage description	Minor damage to range wiring.(charred insulation)
		Damage rating	Minor
Incident rating	Minor		
Incident overview	<p>User turned the range knob to pilot setting and clicked the ignitor to light the pilot. The pilot setting allows gas to flow to the pilot burner. Once pilot was lit, the user turned the valve to on, allowing gas to flow to the main burner. This flow of gas was allowed to escape from the section of piping containing the leaking fitting. Once the fuel found a source of ignition (believed to be either the pilot or main burner). The ignition caused flames to exit from the back of the range to where the user was standing.</p>		
INVESTIGATION CONCLUSIONS	Site, system and components	Propane range with three burner cook top. Oven is set to the pilot position while simultaneously cycling the rotary igniter to light the pilot. Once pilot has established, the dial is rotated to the desired temperature. The range will cycle the main burner off on to maintain the set temperature.	
	Failure scenario(s)	The compression nut/sleeve assemble for the main burner was found to have been loose and allowed gas to be released between the back of the range and the interior compartment/counter top. This occurred when the dial was moved from pilot to oven as the pilot and oven are supplied by separate gas lines.	
	Facts and evidence	Compression nut was found loose on main burner orifice assembly. This type of fitting has a compression sleeve which fits over the exterior portion of the tubing which is compressed into both the machined portion of the fitting and tubing. If the nut is not properly tightened, the joint is not sealed resulting in a leak. As this fitting is located down stream of an appliance control valve, a leak would not be identified unless the appliance was in use and the range was removed from its enclosure. It was not determined if this fitting was misassembled in the field or the factory.	
	Causes and contributing factors	The incident was likely due to a nut that appeared to have been cross threaded when assembled. Nut was removed and correctly threaded back onto the fitting and leak test while on the test bench.	

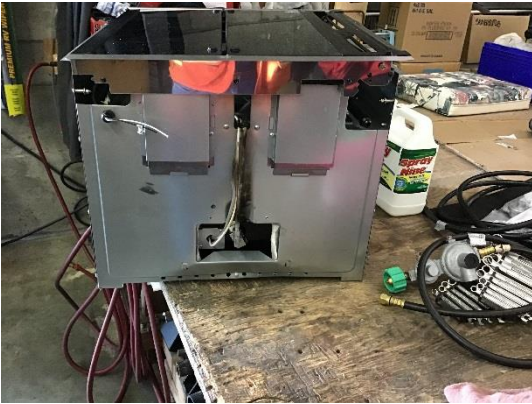


Photo 1: Back of range



Photo 2: Back of range

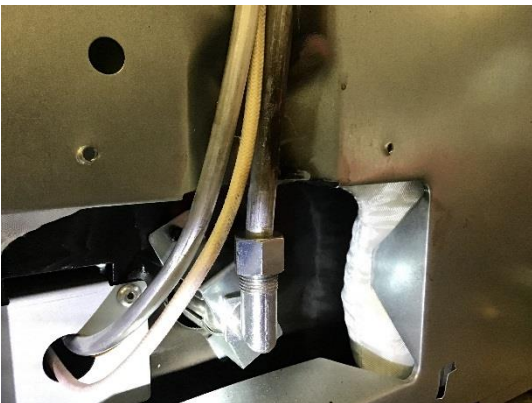


Photo 3: Close up of leaking fitting.