

**GO TRANSIT SIGNALS & COMMUNICATIONS
GENERAL INSTRUCTIONS**

GI-611(a)-F Inspection form for Hellfire SCD Systems

Subdivision		Mileage	
Location Name		SCD/Switch ID	
Inspected by		Date of Inspection	

Subject	Action	Check
General	New Installation	<input type="checkbox"/>
	Existing Installation	<input type="checkbox"/>
	Planned Repairs	<input type="checkbox"/>
	Spring Shutdown	<input type="checkbox"/>
	Remove Track Ducting	<input type="checkbox"/>
	Winter Startup	<input type="checkbox"/>
Visual	Area around SCD, fuel supply or tank is free of combustible material & liquids.	<input type="checkbox"/>
Fuel Supply Line	Verify the fuel supply pipeline leak tests have been completed before starting the SCD inspection. Pipeline tests are performed on initial installation by a qualified gas company. If gaseous odor is detected refer to GI 602 Emergency Procedures for Gas Leaks at Snow Clearing Device (SCD) Facilities	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Clearance	Horizontal and vertical clearance of Hellfire housing and ducting does not impose on Metrolinx's track clearance envelope. Refer to GI-601 Dynamic Clearance Envelope.	<input type="checkbox"/>
Air Intake Nozzles	Hood, Intake and plenum are unobstructed and in good condition.	<input type="checkbox"/>
Point Nozzles	Point nozzles installed.	<input type="checkbox"/>
	Directed at, and tip within 2" to 6" of points, and clear of rail head by 2.5"	<input type="checkbox"/>
	Rodent screens installed between duct and silicone gasket under adaptor collars	<input type="checkbox"/>
	Electrical isolation shoulder washers installed.	<input type="checkbox"/>
Track Duct	Track duct installed	<input type="checkbox"/>
	Rodent screens installed between duct and silicone gasket under elbows.	<input type="checkbox"/>
	Access joint gap of 3".	<input type="checkbox"/>
	Appropriate vents open and directing air at switch plates and rods. Keep all openings closed between the ducts, except where the switch rods are located. Open vent openings no more than 1/4".	<input type="checkbox"/>
	Ductwork below top of rail and not interfering with switch operation.	<input type="checkbox"/>
	Track duct deflectors installed, 18" wide at points protecting point nozzles and track duct and 8" at heel protecting track duct.	<input type="checkbox"/>
	Ducting condition is acceptable and clear of any obstructions.	<input type="checkbox"/>
Tie Duct	All clips and insulators installed. There is no evidence of cracks or obstructions.	<input type="checkbox"/>



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Flex Duct	Flex duct is secured properly. Duct and ballast retainer is in good condition.	<input type="checkbox"/>
Sensor Duct	Sensor duct is secured properly and in good condition. Precipitation detector properly mounted and clear of debris.	<input type="checkbox"/>
Gas Manifold	Flame signal strength is at appropriate rating and stable.	<input type="checkbox"/>
	Ignition wires clean and no sign of corrosion.	<input type="checkbox"/>
	Ensure manifold pressure is at maximum nameplate setting.	<input type="checkbox"/>
Thermostats	Rail and sensor duct thermostats are properly enclosed and/ or fastened and have full contact with the component surface.	<input type="checkbox"/>
Electrical Power	Voltage between 85% and 115% of nominal voltage with all connected loads operating.	<input type="checkbox"/>
	Record measured Voltage _____	<input type="checkbox"/>
	Ground installed.	<input type="checkbox"/>
Fuel System	LPG Fuel tank filled, or NG service on.	<input type="checkbox"/>
	Supply pressure is at rated supply pressure with all connected loads operating.	<input type="checkbox"/>
Heater	Unit is level (horizontal and vertical)	<input type="checkbox"/>
	Heater functions properly in "Manual".	<input type="checkbox"/>
	"Run" indication function. With the heater running, the contact between terminals A3 and A4 will close. Check for continuity.	<input type="checkbox"/>
	"Alarm indication function. Put the heater into alarm by turning the gas supply off. The heater retries three times. Then the FSR will indicate alarm, and the alarm LED on the controller will light. The contact between terminals A5 and A6 will close. Check for continuity.	<input type="checkbox"/>
	Heater functions in "Remote" control. Toggle mode selector switch to "REMOTE/AUTO". If connected to dispatch, have dispatch start heater.	<input type="checkbox"/>
	With heater running for at least 15 minutes, temperature at closest point nozzle is 93°C - 121°C (200°F - 250°F) above ambient	<input type="checkbox"/>
	Air switch calibration completed.	<input type="checkbox"/>
	Aggressive retry tested.	<input type="checkbox"/>



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EMS	Ensure connection with POWER LED lit.	<input type="checkbox"/>
	Precipitation detector installed on the transition duct, as low to the ground and as close to the switch as possible, and in the heated zone.	<input type="checkbox"/>
	Drop snow (or water) on precipitation detector sensing grid. Snow melts and "SENSOR WET" LED lights on EMS module.	<input type="checkbox"/>
	Ambient temperature sensor installed.	<input type="checkbox"/>
	Ambient temperature sensor tested to ensure that the SCD operates at a temperature below 38°F and turns off at a temperature above 45°F.	<input type="checkbox"/>
	Raise "SNOW-RAIN" set point, if required, above the ambient temperature. The "AMBIENT" LED lights.	<input type="checkbox"/>
	Rail thermostat, if supplied, installed on rail flange.	<input type="checkbox"/>
	Return set points to desired settings.	<input type="checkbox"/>
Flame Safety Relay Burner Control	<i>For Hellfire 900 Only:</i> Check and record the last (6) Honeywell display fault history error codes.. H1 Code Hour Cycle H2 Code Hour Cycle H3 Code Hour Cycle H4 Code Hour Cycle H5 Code Hour Cycle H6 Code Hour Cycle	<input type="checkbox"/>
RTC	Request RTC to turn on SCD(s) at control location.	<input type="checkbox"/>
	Confirm SCD(s) operate with RTC control.	<input type="checkbox"/>
	Contact RTC to ensure that the SCD(s) displays as running.	<input type="checkbox"/>
If LP-G Tank	For Winter Season Operation - Check Protective Service Valve Cover is unlocked and valve is open.	<input type="checkbox"/>
	For Non-Winter season inspection or repairs - Check Protective Service Valve Cover is locked and valve is closed.	<input type="checkbox"/>
Legend (✓) - Check complete, equipment in satisfactory condition. (X) - Check complete, equipment requires repair or replacement. Indicate in the Comments/Observations table below, the issue and corrective action.		



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Comments /Observations:

