



INSTALLATION MANUAL



THERMAL SAFETY SWITCH

Models: FTS-4 & FTS-6

READ THESE INSTRUCTIONS CAREFULLY AND COMPLETELY BEFORE PROCEEDING WITH THE INSTALLATION

This device **MUST** be installed by a qualified agency in accordance with the manufacturer's installation instructions. The definition of a qualified agency is: any individual, firm, corporation or company which either in person or through a representative is engaged in, and is responsible for, the installation and operation of HVAC appliances, who is experienced in such work, familiar with all the precautions required, and has complied with all the requirements of the authority having jurisdiction. Please retain these instructions after installation.

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The Thermal Safety Switch you have purchased has been designed to be simple to install, operate, and maintain. Read this manual before you install the Thermal Safety Switch.

This product should be installed according to National Fuel Gas Code NFPA54/ANSI Z223.1 - most current addition.



Parts included in Thermal Safety Switch package:

1. Thermal Safety Switch
2. Mounting Hardware
3. Installation Manual



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PRODUCT OVERVIEW

The Field Controls Thermal Safety Switch is a reliable flue gas spillage safety device designed to protect occupants from flue gases. Installed on either a draft control or draft hood, the switch monitors for the presence of hot flue gases caused by blocked vents or inadequate draft. If spillage is detected, the switch quickly responds by interrupting the burner control circuit, shutting down the system within approximately two minutes to prevent unsafe operation. These switches offer flexible application options while supporting safe, code-compliant installation and dependable performance across a range of heating systems.

ELECTRICAL DATA

THERMAL SAFETY SWITCHES								
MODEL	PART NUMBER	CONTACT MATERIAL	LOAD-RATING		NORMALLY CLOSED SWITCH		SWITCH TYPE	APPLICATION
			AMP	VOLTS	OPENS	CLOSES		
FTS-4	01170004	Silver	12 6	120 AC 240 AC	140°F	Manual Reset	SPST	Draft Control or Draft Hood mounting manual reset. 24/120/240 Volt
FTS-6	01170006	Silver	12 6	120 AC 240 AC	180°F	Manual Reset	SPST	Draft control or draft hood mounting manual reset. For use on 24/120/240 Volt



The Thermal Switch should be mounted on the bottom of a draft control or draft hood (See Figure 1 & 2). Field Controls M+MG2 have a hole provided on bottom of the ring for switch attachment. Mounting the switch onto a draft hood requires drilling of two 1/4 inch diameter holes. All required mounting hardware is included. Refer to Figures 3 and 4 for bracket location.

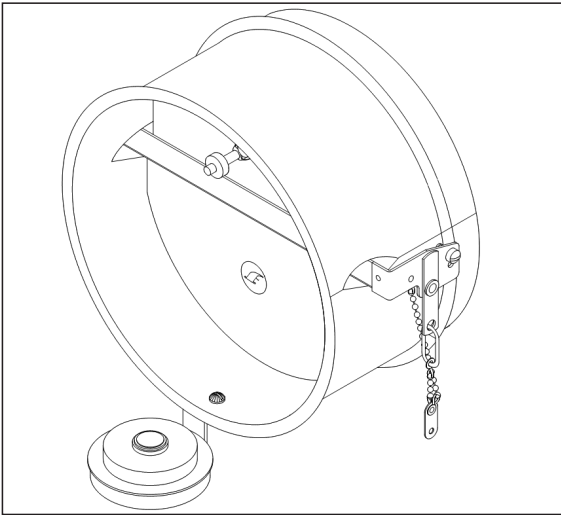


Figure 1 - Draft Control



Figure 2 - Draft Hood



Figure 3 - Draft Control Mounting



Figure 4 - Draft Hood Mounting

**CONTROL
WIRING
SOLUTIONS**





WIRING

WARNING: Disconnect electrical power when wiring.

Wire Thermal Switch in accordance with National Fuel Gas Code NFPA54/ANSI Z223.1 - Most Current Addition. All switches should be wired in series with the gas burner control. Refer to Diagram 1.

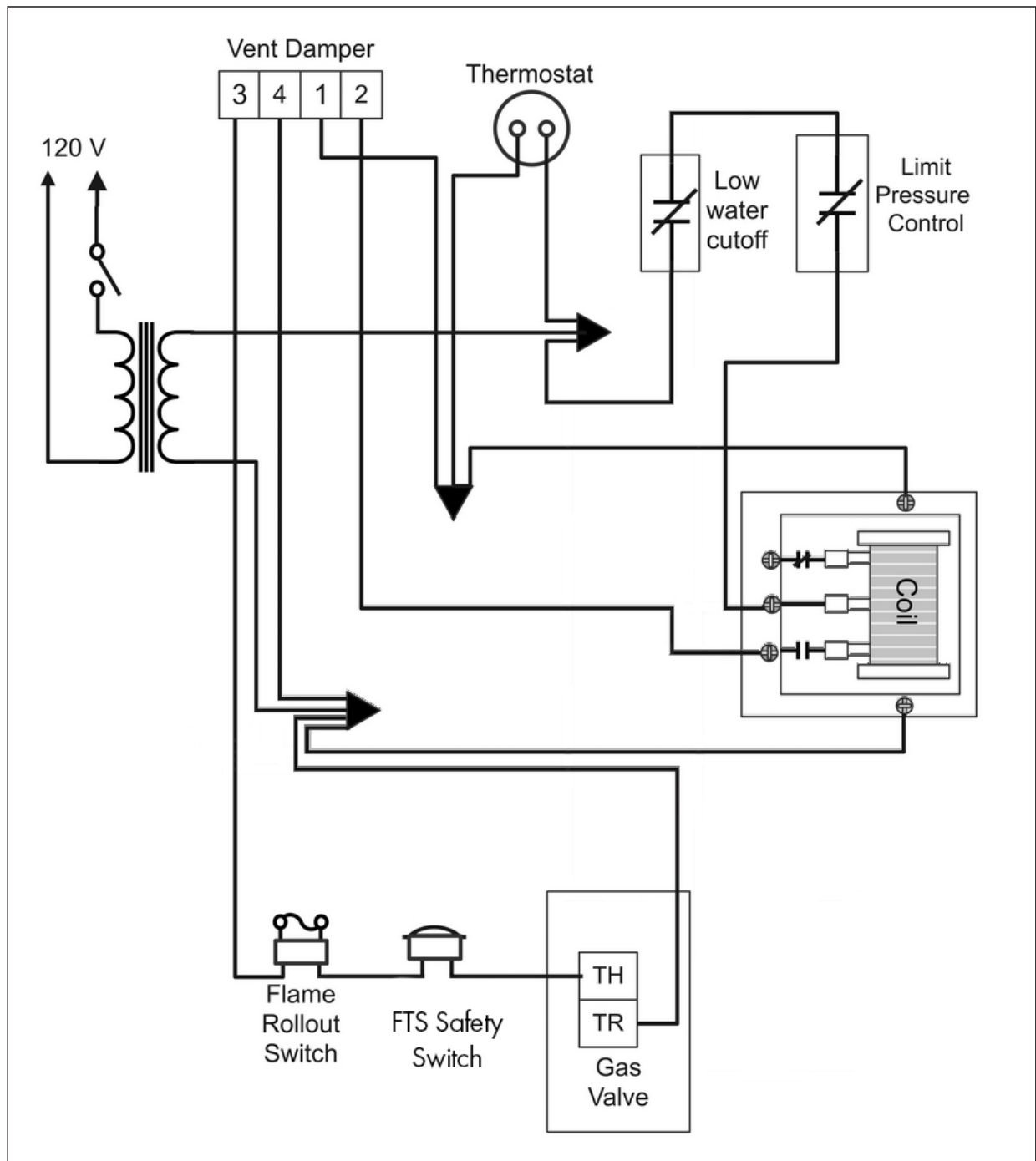


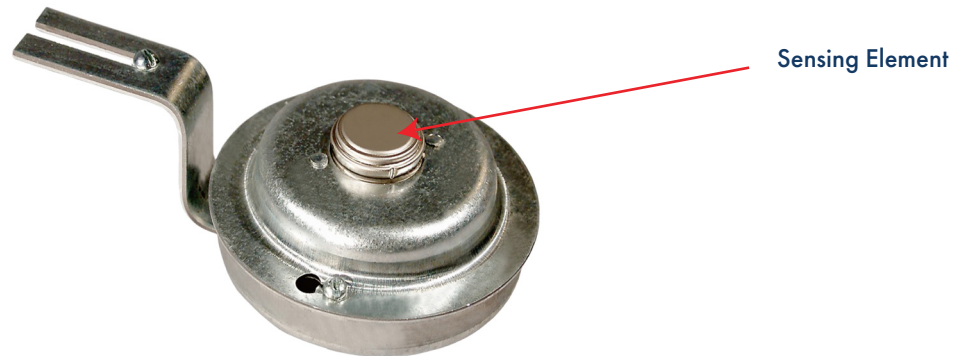
Diagram 1: Wiring Diagram



SYSTEM CHECKOUT PROCEDURE

1. Adjust thermostat to call for heat.
2. After appliance main burner fires, apply heat source i.e (cigarette lighter, torch, etc.) to FTS sensing element (See Figure 5).
3. Reset the FTS per the manual reset procedure below.

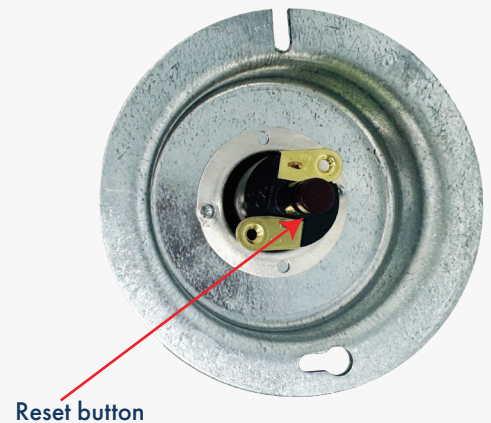
NOTE: If system does not shut down after heat has been applied for approximately 2 minutes, contact Field Controls Technical Support.



MANUAL RESET

NOTE: The FTS needs to be at room temperature before it can be reset.

1. Shut OFF power to main appliance.
2. Loosen screws and separate the cover from the housing.
3. Press the red button to reset thermal switch.
4. Reassemble FTS.
5. Restore power to appliance.
6. Cycle system to verify proper operation.



TROUBLESHOOTING

In the event the appliance does not fire, refer to the troubleshooting section below.

SYMPTOM	CAUSE	SOLUTION
FTS contact closed	Miswired, loose or broken wire/connection	Correct wiring issue (See Diagram 1 for reference)
FTS contact open	Blocked chimney vent	Clear obstruction
	Inadequate draft or backdrafting	Contact Field Controls Technical Support regarding Combustion/Makeup Air Solutions
FTS contact open and will not reset	Defective switch	Replace FTS

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This manual may be downloaded and printed from the Field Controls website (www.fieldcontrols.com)

WARRANTY

For warranty information about this or any Field Controls product, visit:
www.fieldcontrols.com/

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FIELDCONTROLS

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