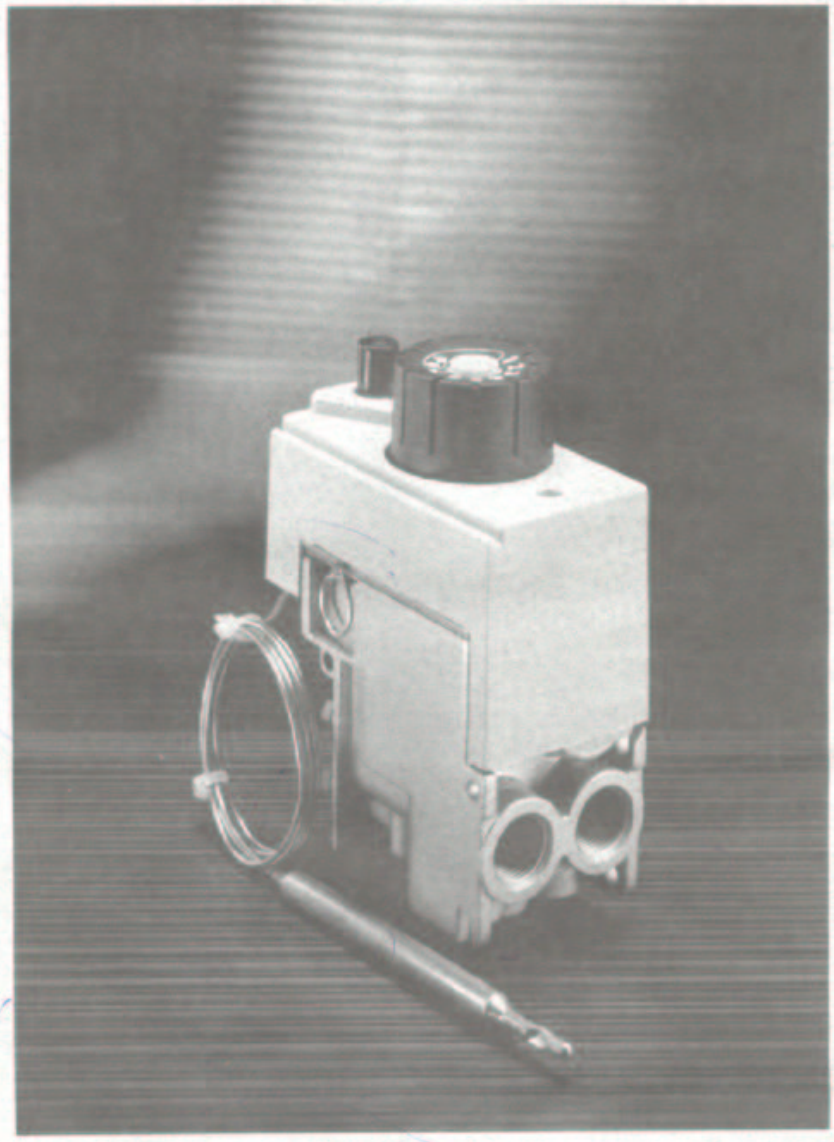
SIT 630 EUROSIT
TROUBLE-SHOOTING GUIDE



630 EUROSIT
TROUBLE-SHOOTING GUIDE

The 630 Eurosit is a multi-functional gas control for use in vented or un-vented appliances. It is available in both manual and thermostat versions, and is powered by a single thermocouple. By changing the minimum rate screw the control can be changed from On/Off control, to modulating control. Various safety magnets, pressure regulator settings, and piping configurations are also offered as options.

GENERAL GUIDE FOR SET-UP OF EUROSIT SYSTEM

1. Bleed all air from gas lines.
2. With the main burner functioning, verify the inlet gas pressure to the appliance. Adjust the service regulator to the appliance manufacturers specifications. (Typically 7" for NG, and 11" for LPG).
3. Make certain that the thermocouple is fully inserted and tightened into it's receptacles in the pilot head. The thermocouple should be threaded into the valve hand–tight, plus ¼ turn with a wrench.
4. From the OFF position, rotate the control knob counter-clockwise to the PILOT position, and depress knob, while lighting the pilot with a match or piezo igniter.
5. Continue to hold the knob down until enough current is generated to engage the safety magnet.
6. Tune the pilot adjustment screw until the pilot flame engulfs the upper 3/8" of the thermocouple tip.(Counter-clockwise increases mV reading, clockwise decreases.)
7. Rotate control knob to the ON position. Main burner will light.
8. Adjust the Eurosit pressure regulator to supply gas to the heating appliance within the appliance manufacturers design parameters. Rotating the pressure regulator adjustment screw clockwise increases the outlet pressure of the valve, while rotating the screw counter -clockwise decreases the pressure.
9. Rotate the control knob to the OFF position. Both the pilot and main burner will be extinguished.
10. Field replacement of Eurosit controls must be performed using only valves of the same part number, and minimum rate screw/plug as specified by the appliance manufacturer.

SYSTEM CHECKS:

PROBLEM	POSSIBLE CAUSE	SOLUTION
Pilot will not light.	Air in gas lines.	Refer to item # 1 in the set-up guide.
	Defective spill switch.	Check for continuity across spill switch leads. Replace spill switch if excessive resistance is present, or if circuit is electrically open.
	Wrong inlet pressure.	Refer to item # 2 in the set-up guide.
	Defective spark electrode.	Replace electrode if the insulator is cracked or the tip is corroded. Verify that the spark gap between the pilot and the electrode is correct.
	Defective piezo wire.	Replace piezo wire if insulation is damaged, or the wire is broken or corroded.
	Safety interlock function engaged.	Allow thermocouple to cool until the mV drops below the hold-in requirements of the safety magnet, (30 seconds or less). Re-light pilot.
Pilot will not hold.	Wrong inlet pressure.	Refer to item # 2 in the set-up guide.

Pilot will not hold. Continued...	Pilot adjustment screw not adjusted properly.	Refer to item # 6 in the set-up guide.
	Thermocouple not properly inserted into the pilot housing.	Refer to item # 3 in the set-up guide.
	Thermocouple has film build-up on tip.	With the thermocouple tip cool, clean the upper 3/8" with an a very fine emery cloth.
	Electrical resistance too high.	Using a very fine emery cloth, clean thermocouple connection at valve. Repeat Item # 3 in the set-up guide.
	Defective thermocouple.	Verify that thermocouple is not kinked or damaged. Check open circuit voltage of thermocouple. Voltage should be between 18mVand 28mv. If voltage is less than 14mV, replace thermocouple.
	Defective safety magnet.	Verify operation of safety magnet in the following manner. (A) Depress and hold pilot button. (B) Verify open-circuit thermocouple voltage as described in previous step. (C) Reconnect thermocouple to valve. (D) Insert an interrupter block into the thermocouple circuit. (E) Read the voltage between the valve body and the interrupter block. If the mV reading is above 7mV and the safety magnet does not hold, replace the valve. (F) If closed circuit mV reading is the same as the open circuit reading, the coil is electrically open. Replace the valve.
	Pilot orifice blocked.	Replace orifice with a new orifice of the exact size and type.
Pilot drops out.	Wrong pilot orifice.	Replace the orifice with a new orifice supplied specifically for the appliance and gas type in question.
	Spill switch activated.	Examine venting system. Repair as necessary.
No gas to main burner.	Pilot not lit.	Light pilot and wait for thermocouple to heat up sufficiently to power the safety magnet.
	Control knob not in thermostat range.	Rotate control knob into the thermostat range.
	Diastat bulb crushed.	Replace valve.
Comfort zone varies.	Capillary exposed to hot spot.	Reroute capillary tube away from heat source.
	Kinked or crushed capillary tube.	Replace valve.
Main burner does not shut off when the thermostat is satisfied.	Diastat damaged.	Replace valve.
Small main burner flame.	Dented diastat bulb.	Replace valve.
Main burner lights in the PILOT position.	Debris on seat of main valve.	Replace valve.