INSTALLATION DATA

780-002
IGNITION CONTROL UNI-KIT®
ADDENDUM

The SP845 replaces the SP745 in this 780-002 (lockout) kit. The SP845 ignition control module incorporates microprocessor technology and replaces the SP745 in fit, form and function in most applications. The SP845 includes a diagnostic LED display to assist in trouble-shooting the module. Please review the differences in the SP845 and SP745 units to confirm its proper use.

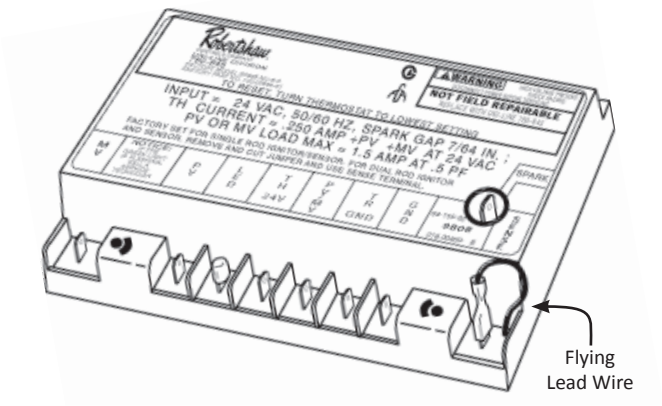
The SP845 lockout ignition control provides 90 seconds of spark, followed by a 6 minute time delay (purge) between ignition attempts. After three tries, if no pilot flame is sensed, the SP845 goes into a one-hour lockout period. At the end of the lockout period, if the demand for heat is still present, the unit will repeat the three tries for ignition.

Note: During lockout, you may override the auto-system, and manually reset the unit at the thermostat.

The SP745 lockout ignition control provides 60 seconds of spark, followed by a 5 minute time delay (purge) between ignition attempts. After three tries, if no pilot flame is sensed, the SP745 goes into lockout and must be reset at the thermostat.

SP845 SPECIFICATIONS

Input Voltage	24 VAC to 50/60 Hz
Transformer	24 VAC / 20 VA
Safety lockout timing (780-002 only)	90 seconds
Spark rate	4 to 15 sparks per second
Relay contact ratings	
Pilot valve	1 amp at .5 PF
Main valve	1 amp at .5 PF
Combined load	1.5 at .4 PF
Flame sense current	.7 µA DC @ 25°C / 24 VAC
Maximum total current load	1.5 amp
Flame failure reignition time	2 seconds maximum
Ambient temperature rating	-40 to 175°F (-40 to 80°C)
Relative humidity	95% noncondensing at 104°



780-845 (Model SP845)

NOTE: The green diagnostic LED will be on continuously for normal operation. The LED will be off for internal lockout and will flash continuously for problems external to the control (i.e. not sensing flame).

NOTE ON SENSOR TERMINAL AND FLYING LEAD WIRE
If a remote sensor is present from a previous installation, attach the remaining wire from the old board to the 1/4" sense terminal labeled REMOTE SENSE. Leave the flying lead wire alone.

If the flame sensing mechanism is a LOCAL sensor, attach the black flying lead wire to the 1/4" sensing terminal labeled REMOTE SENSE. This will complete the circuit so the ignition module senses flame from a local sensor.

IDENTIFYING YOUR ROBERTSHAW ICU TERMINALS

MV	Main valve
PV	Pilot valve
LED	Diagnostic LED
TH	24V thermostat
PV-MV	Gas valve common
TR	Transformer ground
GND	Main burner ground
SENSE	Internal/external sense terminal
SPARK	Spark output

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