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HEAT PUMPS
KITS AND ACCESSORIES

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**FM21™ HEAT PUMP CONTROL
SLC1 SERVICE LIGHT KIT**

**INSTALLATION INSTRUCTIONS FOR SERVICE LIGHT OPTION FOR USE WITH
LENNOX FM21™ SYSTEM**

Shipping & Packing List

Package 1 of 1 contains:

- 1 - SLC1-service light control board (with stand-offs)

Application

Some heat pump thermostats are equipped with a service light which comes on if the heat pump fails to start or if it has lost its charge. The light is controlled by the service light control thermostat located in the heat pump. The control thermostat closes if the compressor is not operating or if the heat pump has lost the refrigerant. Because the control thermostat is always closed for a short time after a call for heat, most room thermostats are wired so that the service light will not be allowed to turn on until the second stage of heating is called (W1).

By design, the FM21 will turn off the heat pump when there is a call for second stage heat (W1). If the service light control thermostat in the outdoor unit were wired directly to the indoor thermostat, the light would be falsely energized during second stage heating. The SLC1 allows the use of standard thermostats with service lights by latching on a relay if the service light control thermostat is still closed 5-1/2 minutes after a call for heat (Y1). If later there is a call for second stage heat (W1) and the relay is latched, the service light will turn on indicating a problem with the heat pump.

It is important to note that for the SLC1 to operate, the service light thermostat located in the heat pump MUST be connected to common. (When the thermostat closes, the "L" terminal is connected to the 24VAC common). Lennox heat pumps are factory wired this way.

Installation

- 1 - Disconnect electrical power.
- 2 - Insert pins from the SLC1 board into the plug location on the FM21 board. The connection will click into place when secure.
- 3 - Insert stand-offs into provided holes in Fuelmaster mounting box.

- 4 - Wire thermostat terminal "L" to the "L STAT" terminal on the SLC1 board using thermostat wire. See figure 1.
- 5 - Make wire connection from "L" wire of heat pump to the "L HP" terminal on the SLC1 board with thermostat wire. Heat pump units may or may not have terminal strips; refer to heat pump wiring diagram for location and color of service light "L" wire.

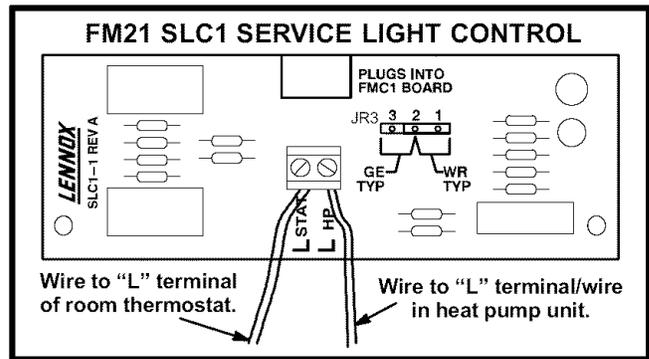


FIGURE 1

- 6 - Locate jumper JR3 on the SLC1 board. This jumper must be set according to the typical thermostat used. If a GE thermostat is used, the jumper should be across pins 3 and 2. If a White Rodgers thermostat is used, the jumper should be across pins 2 and 1. Refer to table 1 to identify thermostat as GE or White Rodgers. See figure 2 for wiring examples.

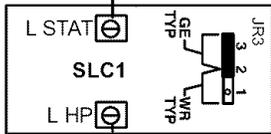
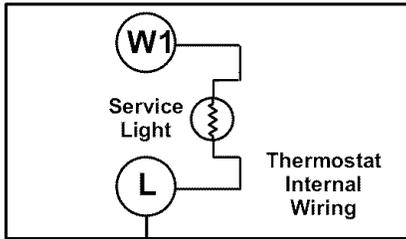
**TABLE 1
FM21 SERVICE LIGHT KIT JUMPER SETTING**

Room Thermostat Lennox Part No.	JR3 SETTING	
	White Rodgers (Pins 2 & 1)	GE (Pins 3 & 2)
43H98	✓	
18H12	✓	
18H13	✓	
51H46		✓
51H43		✓
91H72	✓	
91H73	✓	
43H99	✓	
27H30*	✓	

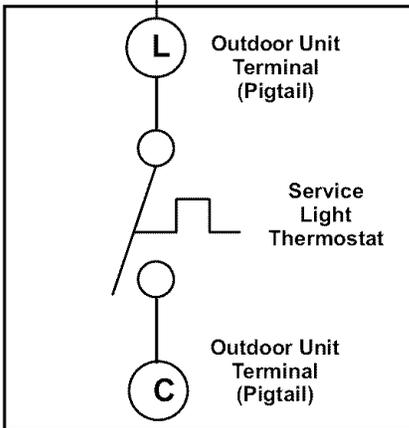
*Connect terminal "L STAT" of FM21 to terminal "X1" of 27H30 thermostat. Do NOT Use "L" terminal on 27H30. Connect terminal "X2" of 27H30 to terminal "C" of 27H30.

THERMOSTAT WIRING

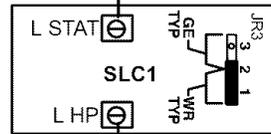
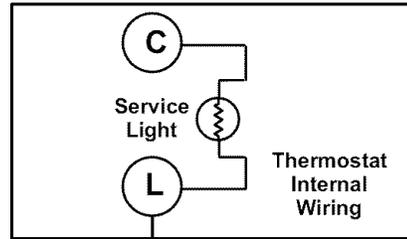
G.E. Typical



JR3 Jumper Over Pins 3 & 2.



W.R. Typical



JR3 Jumper Over Pins 1 & 2.

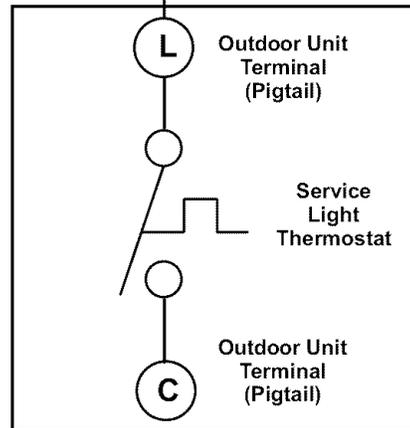


FIGURE 2