LENNOX®

**GAS UNITS
KITS & ACCESSORIES**

DISCHARGE AIR TEMPERATURE SENSOR KIT

INSTALLATION INSTRUCTIONS FOR DISCHARGE AIR TEMPERATURE SENSOR KIT 20A60 USED WITH SLP99UHV & SLP99DFV MODEL UNITS

⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a licensed professional HVAC installer or equivalent, service agency, or the gas supplier

⚠ CAUTION

As with any mechanical equipment, contact with sharp sheet metal edges can result in personal injury. Take care while handling this equipment and wear gloves and protective clothing.

Shipping and Packing List

Package 1 of 1 contains:

1 - Discharge air temperature sensor

Application

Use discharge air temperature sensor kit 20A60 to measure temperature rise in the heating mode and temperature drop in the cooling mode.

Installation

1 - Shut off all power to the unit.

New installation

2 - See tables 1 through 4 and figures 2 through 5 for location of discharge air sensor.

3 - Drill a 3/8 inch diameter hole in the supply duct based on the specified location.

4 - Center the discharge air temperature sensor in the middle of the hole and use two field provided screws to secure in place

   NOTE - The orientation of the sensor mounting flange is not critical and can be oriented to whatever position is needed to prevent interference with the evaporator coil, air duct etc.

5 - Connect field supplied wiring to the discharge air temperature sensor terminals on the integrated control board. See figure 1.

Replacement

6 - Remove the current discharge air temperature sensor. Set scews aside. *Compare to the provided replacement sensor. If not the same type then new locations holes must be drilled and current*

holes MUST be sealed. See steps 2 through 5. If the sensor is the same type continue to step 7.

7 - Install the new discharge air temperature sensor and secure using the same screws from step 6.

   NOTE- Insert sensor FULLY into the plenum.

8 - Connect field supplied wiring to the discharge air temperature sensor terminals on the integrated control board. See figure 1.

9 - Return power to unit.

NOTE - If the system does not include an evaporation coil, the sensor should be installed according to the following:

1.Place the sensor as far away from the direct heat source in the main plenum as possible. A minimum of 19" is recommended but up to 36" is preferred.

2. Offset the sensor 1/4 of the width of the plenum from the left edge of the plenum in upflow, top edge of the plenum in horizontal right and bottom of the plenum in horizontal left. For example, if the plenum is 16" wide then offset the sensor 4" from the edge. The sensor should report a temperature within the rise range of the furnace. If the readings from the sensor appear to be below the rise range of the furnace, move Wthe sensor in 1" increments towards the center of the plenum until the sensed temperature is within the rise range of the furnace. If the sensor reading appears to be too high, move the sensor in 1" increments towards the edge of the plenum until the sensed temperature is within the rise range of the furnace.


Discharge Air Temperature Sensor Field Wiring

7 SEGEMENT LED

DISCHARGE AIR TEMPERATURE SENSOR TERMINALS
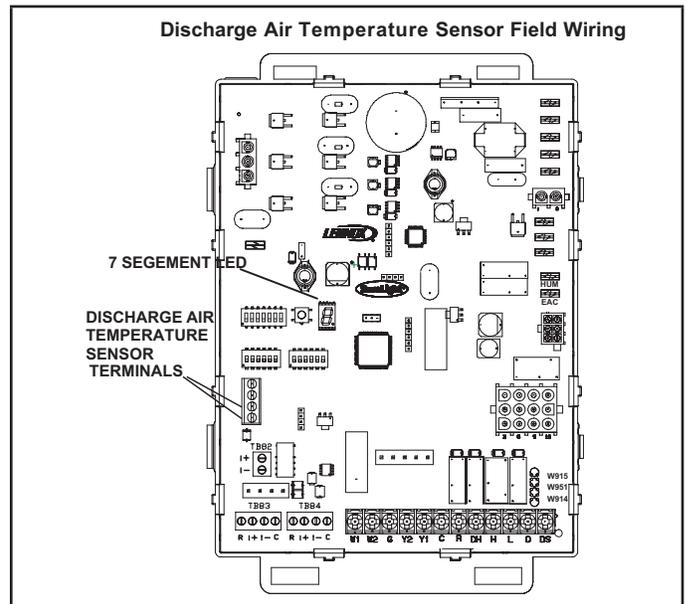
FIGURE 1

TABLE 1
Discharge Air Temperature Sensor Location Upflow

SLP99UH Model	"a"	"b"	Mounting Surface
070XV36B	2"	Center	Plenum Duct
090XV36C	3"	Center	
090XV48C	2"	7" from right	
090XV60C	3"	4" from left	
110XV60C	2"	8" from right	
135XV60D	2"	7" from left	

Discharge Air Temperature Sensor Location

Upflow
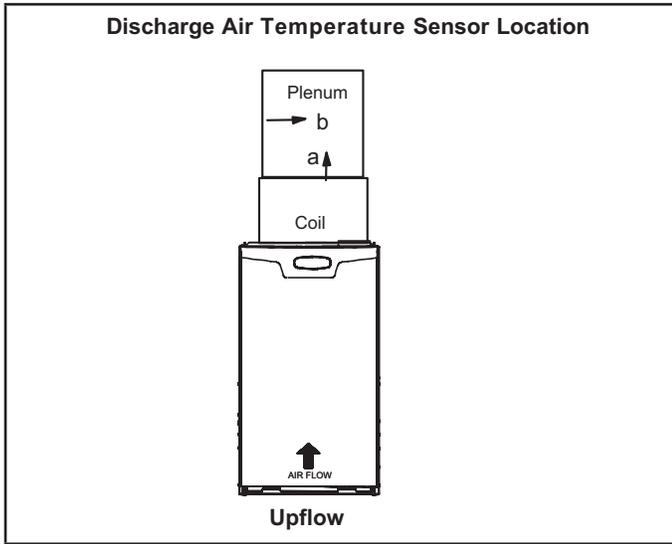
FIGURE 2

TABLE 2
Discharge Air Temperature Sensor Location Horizontal Left

SLP99UH Model	"a"	"b"	Mounting Surface
070XV36B	5"	Center	Plenum Duct
090XV36C	3"	4" from bottom	
090XV48C	2"	7" from bottom	
090XV60C	4"	3" from bottom	
110XV60C	3"	8" from bottom	
135XV60D	2"	7" from bottom	

Discharge Air Temperature Sensor Location
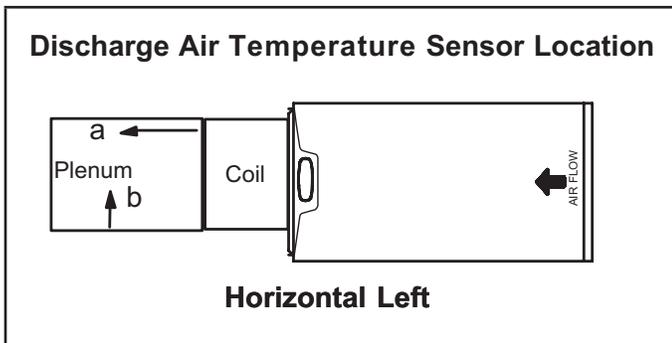
Horizontal Left

FIGURE 3

TABLE 3
Discharge Air Temperature Sensor Location Horizontal Right

SLP99UH Model	"a"	"b"	Mounting Surface
070XV36B	5"	Center	Plenum Duct
090XV36C	2"	8" from bottom	
090XV48C	3"	Center	
090XV60C	3"	7" from top	
110XV60C	3"	Center	
135XV60D	2"	7" from top	

Discharge Air Temperature Sensor Location

Horizontal Right
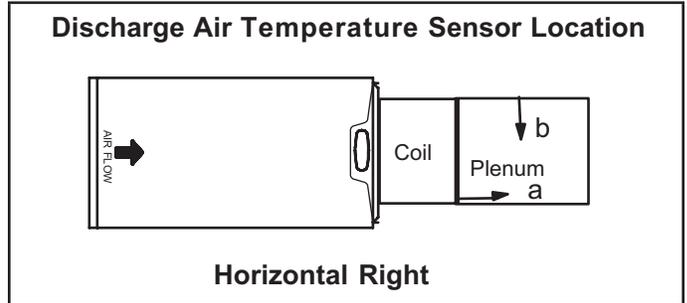
FIGURE 4

TABLE 4
Discharge Air Temperature Sensor Location Downflow

SLP99DF Model	"a"	"b"	[1]Mounting Surface
070XV36B	6"	Center	Plenum Duct
090XV36C			
090XV48C			
090XV60C			
110XV60C			

[1]*If unable to mount at specified location, sensor can be mounted in the coil cabinet 1" from the bottom and 5" from the right side. Care must be exercised to avoid hitting the coil/drainpan while drilling through the cabinet.*


Downflow

FIGURE 5