## GAS UNITS KITS AND ACCESSORIES

506876-01 09/2011 Supersedes 503,289M

## **HEAT CABLE KIT**

# INSTALLATION INSTRUCTIONS FOR HEAT CABLE KIT (LB-88643A, B & C) USED WITH HIGH EFFICIENCY GAS FURNACES

### **Shipping & Packing List**

Package 1 of 1 contains:

1 - Heat cable

#### **Application**

Heat cable kit protects drip leg assembly, condensate line, flue pipe and vent terminations when the unit is installed in unconditioned spaces where freezing is possible. When installed as outlined in manufacturer's instructions, the heat cable will protect PVC and CPVC lines from freezing without causing damage to pipes. The heat cable is 120VAC pre-assembled self-regulating electric cable. There are three heat cable kits available in 6 ft., 24 ft. and 50 ft. lengths (excluding 30" long cord set). Fiberglass and aluminum tape are needed for each installation. Table 1 lists all kits available from Lennox.

TABLE 1

Description	CAT Number		
6 ft. Heat Cable Kit	26K68		
24 ft. Heat Cable Kit	26K69		
50 ft. Heat Cable Kit	26K70		
66 ft. Fiberglass Tape Kit	39G04		
60 ft. Aluminum Foil Tape Kit	39G03		

#### Installation

NOTE - Before installing heat cable kit, installer must provide a 120V power source with either a circuit breaker or fuse suitable for handling required cable length. **Do not use an extension cord to reach the receptacle**. For additional safety, a ground-fault protection device should be installed. See heat cable manufacturer's installation instructions.

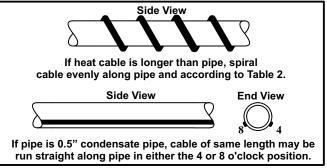
See table 2 to determine the length of heat cable needed for specific run of PVC pipe.

TABLE 2
Length Of Pipe Covered For Length Of Heat Cable

Pipe Size	Cable Length						
	6 ft.	12 ft.	18 ft.	24 ft.	50 ft	100 ft.	
1/2"	6	12	18	24	50	100	
Run Cable Straight (1 ft. of cable to 1 ft. of pipe)							
2"	3	6	9	12	25	50	
Spiral Cable (2 ft. of cable to 1 ft. of pipe)							
3"	2	4	6	8	16.7	33.3	
Spiral Cable (3 ft. of cable to 1 ft. of pipe)							

Table 2 assumes lowest outside temperature of  $0^{\circ}F$  with a minimum of  $1/2^{\circ}$  fiberglass insulation or equivalent (i.e. Armaflex.) For protection to  $-20^{\circ}F$ , use 1" fiberglass insulation or equivalent. Multiple heat cable may be needed for longer runs of pipe.

- 1 The first 30" from plug end of the heat cable is the cord set. This section does not get hot and should not be wound around the pipe. To prevent damage to the cord set, provide a strain relief using plastic cable ties, or three thicknesses of either, vinyl, glass cloth or heavy duct tape.
- 2 Wrap heat cable around pipe, condensate trap assembly or vent termination, so that the cable is pulled tight to ensure continuous contact between the cable and the pipe. See figure 1.



#### FIGURE 1

3 - After wrapping heat cable around pipe, secure cable to the pipe using fiberglass tape. Wrap tape around the pipe and cable using approximately 1-1/2 wraps every foot. See figure 2. Do not use electrician's tape, duct tape, vinyl tape, metal clamps or any wire. Heat from the cable breaks down adhesive properties of these tapes.



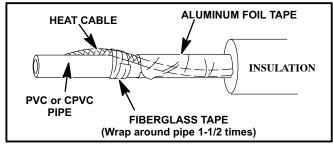


FIGURE 2

- 4 Apply aluminum foil tape in linear strips over pipe and cable. Do not spiral wrap foil tape over pipe. It may be necessary to fold one strip up from the bottom and one strip down from the top of the pipe to ensure complete coverage. See figure 2.
- 5 Insulate pipe using fiberglass insulation or equivalent, i.e. Armaflex. For protection to 0°F use minimum of 1/2" fiberglass insulation or equivalent (i.e. Armaflex.) For protection to -20°F, use 1" fiberglass insulation or equivalent. For protection to -40°F, use 1-1/2" fiberglass insulation or equivalent. See figure 2.
- 6 Use waterproofing materials such as polyethylene sheets or other vapor barriers to protect insulation in areas exposed to moisture (vent termination).
- 7 Refer to figure 3 for condensate trap assembly.

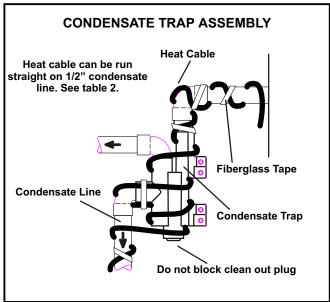


FIGURE 3

8 - Two methods may be used to apply the heat cable to concentric vent terminations. See figures 4 and 5. Figure 4 shows wrapping the heat cable around a concentric vent termination that has already been installed. The 24ft. heat cable is recommended for this method.

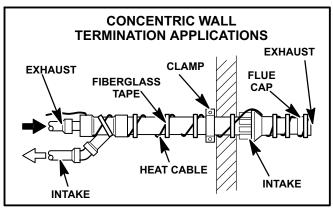


FIGURE 4

9 - Figure 5 shows wrapping a concentric vent termination before it has been installed. The 6 ft. cable is sufficient for this method. If allowable, this method is recommended over the first method because it provides better flue pipe protection.

NOTE- The wall or roof hole may need to be enlarged to provide enough clearance for the heat cable and insulation. The heat cable can be installed over the mounting clamp or the clamp can be opened up to provide enough clearance for the heat cable and insulation.

# **A** IMPORTANT

Do not block air intake opening under rain shield. Wrap only waterproofing material, not insulation, around the heat cable where it crosses the air intake opening. Neither the heat cable nor the insulation should protrude above the flue cap.

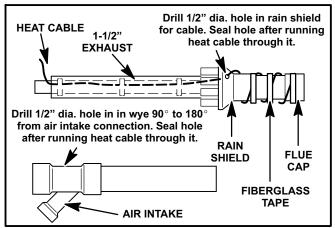


FIGURE 5