

LENNOX G-16

MODEL NUMBER:	Upflow - "Conservator III"
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BTU SIZES:	50,000 to 100,000 BTU's
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ACCESSIBILITY CLEARANCE

Service access to the front of unit is to be 36"

CLEARANCE FROM COMBUSTIBLE MATERIAL

To Combustible material:

TOP	1"
SIDE	1"
REAR	1"
FLUE	4"

COLD AIR RETURN AIR DUCTS

Sealed to the furnace and terminating outside the space containing the furnace.

GARAGE

Approved. Must meet requirements in the UMC and the Good Practice Book.

GENERAL

Category I appliance with either a dedicated or common vent.

HIGH ALTITUDE INSTALLATIONS

Deration	Elevation of 2,000 feet or above, derate regulator only - See Chart.
Orifice	Do not change from factory installed orifices.
Regulator Pressure	Depends on altitude at which unit is installed - See Deration Chart.
Pressure Switch	Induced draft motor proving switch (normally open).

MOBILE HOME

Not approved.

VENTING MATERIAL AND REQUIREMENTS

Vent Pipe

Type C, Type B-1

Vent Fittings

Type C, Type B-1

Vent connector must be at least as large as the flue outlet (3") and a 9" minimum length must be installed before the first elbow.

All horizontal vent connector joints must be sealed with pressure sensitive aluminum foil tape (with a temperature rating of 400 degrees F) or silicone rubber sealant.

Vent connector cannot exceed 15 feet with 4 elbows (1 elbow = 5 feet)

Vertical vent must be at least 5 feet higher than vent connection point. Vertical vent does not need to be sealed.

VENT CLEARANCE FROM COMBUSTIBLE MATERIAL

Type C single wall = 6"

Type B double wall = 1"

VENTING PROCEDURE

No portion of venting should enter or pass through any circulating air duct or plenum. Venting must terminate in a listed cap.

G-16 and G-16R units cannot be vented with more than 2 other gas appliances. Do not common vent 3 G-16 or G-16R units.

When common venting the G-16, all other vent connectors must be at least 4" above G-16 or G-16R venting. (Do not attach G-16 and G-16R to the bottom of the common vent.)

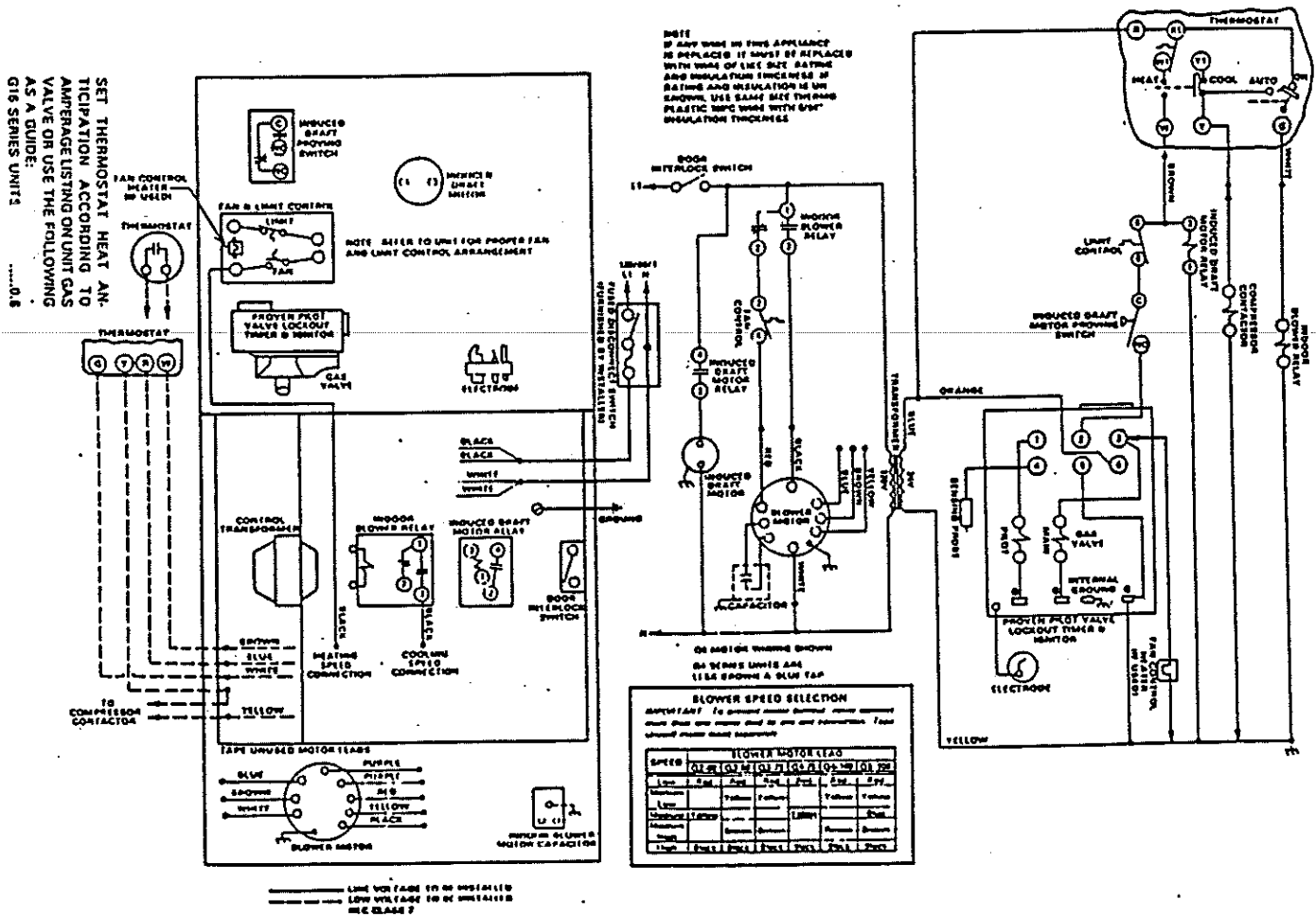
Dedicated vertical vent (B-1) not to exceed 6" diameter.

Common vent not to exceed 8" diameter.

MISCELLANEOUS INFORMATION/NOTES

ALTITUDE (FT.)	HEATING VALUE (BTU/FT)		
	900	950	1000
0	4.32" W.C.	3.88" W.C.	3.5" W.C.
1000	4.32" W.C.	3.88" W.C.	3.5" W.C.
2000	3.65" W.C.	3.30" W.C.	2.95" W.C.
3000	3.35" W.C.	3.00" W.C.	2.70" W.C.
4000	3.05" W.C.	2.75" W.C.	2.45" W.C.
5000	2.77" W.C.	2.48" W.C.	2.25" W.C.
6000	2.50" W.C.	2.25" W.C.	2.00" W.C.

* Heating value based on atmospheric pressure of 30" mercury and temperature of 60 degrees F (16 degrees C).



LENNOX G-16
Schematic Explanation

Line voltage power enters at "L1" passing through the fan door interlock switch (Fan door must be in place). From the fan door switch power goes 2 ways. One to the open set of contacts at terminal "4" on the induced draft motor relay. Power continues to terminal "1" on the indoor blower relay through the normally closed set of contacts at terminal "2" of the indoor blower relay and on to the open set of contacts at terminal "2" of the fan limit control. Line voltage power also goes over to provide 110 volts to the line voltage side of the transformer and then completes back to "N".

Low voltage power leaves the secondary side of the transformer and goes to the "R" terminal of the thermostat, low voltage power also goes to terminal "6" of the gas valve/module.

As the thermostat closes power goes from "R" to "W" and leaves the thermostat where it goes 2 ways. One to terminal "3" of the induced draft motor relay energizing the coil which completes from terminal "2" of the induced draft motor relay back to the transformer, this coil closes the open set of contacts between terminals "4" & "2" of the induced draft motor relay energizing the induced draft motor, which completes back to "N". The other one goes through the normally closed set of contacts at terminals "5" and "6" of the fan/limit control to terminal "C" of the induced draft motor proving switch.

With the inducer motor running, the 24 volt power is sent through the induced draft motor proving switch to terminal "2" of the gas valve/module which completes from terminal "5" to "G" and back to the transformer.

With 24 volts across terminals "2" and "5" low voltage power is sent from terminal "6" to terminal "1" energizing the pilot valve which completes to "G" and back to the transformer. At the same time power is sent to the electrode producing spark.

The pilot flame is verified at terminal "4" of the gas valve/module, as the pilot flame is sensed, 24 volts is sent from terminal "6" to terminal "3" energizing the main gas valve and fan control heater (if used). which complete back to the transformer.

After approximately 30 seconds the fan control heater will close the normally open contacts of the fan control causing power to be sent from terminal "2" through terminal "4" of the fan/limit control to the blower motor and capacitor which completes back to "N".

After the thermostat is satisfied and opens removing power from the module. The indoor blower will continue to run until the air temperature lowers to 90 degrees.