

# LENNOX G-23

MODEL NUMBER:	G-23 Upflow
BTU SIZES:	50,000 to 125,000 BTU's

## ACCESSIBILITY CLEARANCE

Service access 36"

## CLEARANCE FROM COMBUSTIBLE MATERIAL

See Rating Plate

Appliance shall not be installed directly on carpeting, tile, or other material other than wood flooring.

## COLD AIR RETURN AIR DUCTS

Secured to furnace.

## GARAGE

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

## GENERAL

Must be electrically grounded.  
 Must not be used as a construction heater.  
 Furnace must be level.

## HIGH ALTITUDE INSTALLATIONS

Deration	4% deration for each 1,000 feet above sea level if above 2,000 feet.
Orifice	Standard orifice - change
Regulator Pressure	3.5
Pressure Switch	Normally open contacts - prove operation of combustion blower motor.

## MOBILE HOME

Not approved.

VENTING MATERIAL AND REQUIREMENTS

Vent Pipe	Type "C" Type "B-1"
Vent Fittings	Type "C" Type "B"

50,000 to 125,000 BTU models can be horizontally vented with correct adapter kit.

VENT CLEARANCE FROM COMBUSTIBLE MATERIAL

"C" - 6"  
"B-1" - 1"

VENTING PROCEDURE

Refer to the GAMA vent tables

MISCELLANEOUS INFORMATION/NOTES

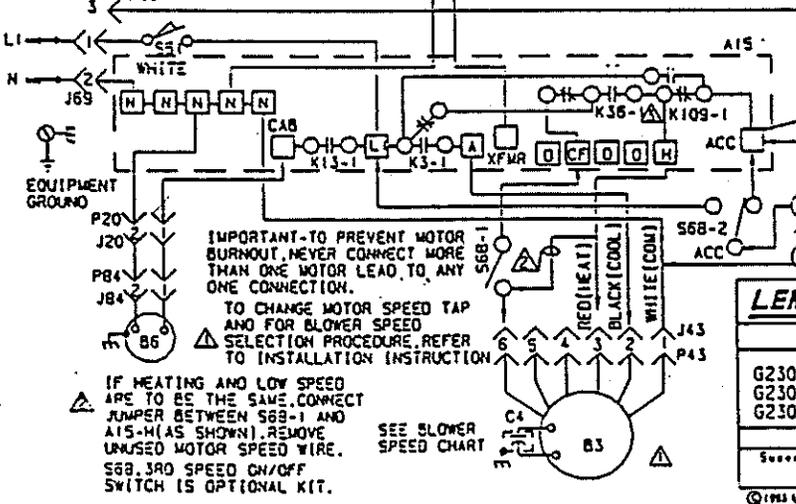
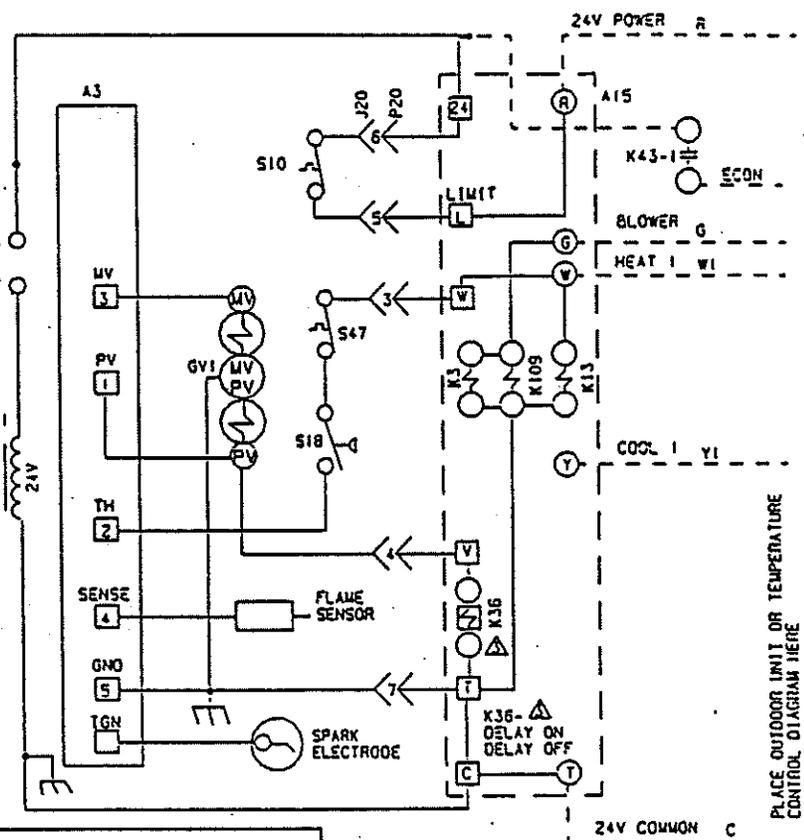
# TYPICAL G23 WIRING DIAGRAM

KEY	COMPONENT
A3	CONTROL, BURNER IGNITION
A15	CONTROL, BLOWER, ECC2
B3	MOTOR, BLOWER
B5	MOTOR, COMBUSTION AIR BLOWER
C1	CAPACITOR, BLOWER MOTOR
P20	CIRCUIT BREAKER-TRANS. TI
GVI	VALVE, GAS
J20	JACK, GAS
J43	JACK, BLOWER MOTOR
J89	JACK, BLOWER DECK
J84	JACK, COMB. AIR BLOWER
K3, -1	RELAY, BLOWER
K13, -1	RELAY, COMBUSTION AIR
K36, -1	RELAY, HEAT BLOWER
K43, -1	RELAY, ECONOMIZER
K109, -1	RELAY, ACCESSORY
P20	PLUG, GAS
P43	PLUG, BLOWER MOTOR
P89	PLUG, BLOWER DECK
P84	PLUG, COMB. AIR BLOWER
S10	LIMIT, PRIMARY GAS
S18	SWITCH, COMB. AIR PROVE
S47	SWITCH, FLAME ROLLOUT
S51	SWITCH, DOOR INTERLOCK
S68, -1, 2	SWITCH, 3rd SPEED, ON-OFF
T1	TRANSFORMER, CONTROL

UNIT	FACTORY CONNECTED SPEED TAPS		MOTOR SPEEDS AVAILABLE
	COOL	HEAT	
03-50			4
02/3-75	2	4	4
1-100		3	3
3/5-100		5	5
05/6-125		4	5

SPEED TAPS	HI					LO				
	2	3	4	5	6	1	2	3	4	5
2										
3										
4										
5										
6										



SET THERMOSTAT HEAT ANTICIPATION FOR G23 SERIES UNITS... 0.55 AVPS

**NOTE-**  
IF ANY WIRE IN THIS APPLIANCE IS REPLACED, IT MUST BE REPLACED WITH WIRE OF LIKE SIZE, RATING AND INSULATION THICKNESS. IF RATING AND INSULATION ARE UNKNOWN, USE SAME SIZE THERMOPLASTIC 105°C WIRE WITH 4/64" INSULATION THICKNESS.

— LINE VOLTAGE FIELD INSTALLED  
- - - CLASS II VOLTAGE FIELD WIRING

<b>LENNOX</b> Industries Inc. WIRING DIAGRAM 8/93	
HEATING UNITS-GAS	
G2303-50-1	G2304/5-100-1
G2302/3-75-1	G2305/6-125-1
G2303-100-1	
SECTION A	
Successor Form No.	New Form No. 529.435W

FIGURE 21

LENNOX G-23  
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 continues over to the "L1" terminal providing line voltage at the blower control which completes back to "N". From this terminal power goes four ways. One to the open set of "K-13" contacts. One to the open set of "K-3" contacts of the blower control. One to terminal "2" of the speed switch. One through the closed set of "K-3" contacts and over to the open set of "K-36" contacts. Power also leaves one side of the "K-36" relay and goes through terminal "CF" of the blower control to the speed switch. At the same time line voltage leaves the blower control at terminal "XFMR" and provides power to the line voltage side of the transformer which completes back to "N".

Low voltage power leaves the secondary side of the transformer and goes through the 2.0 amp fuse to the "24" terminal of the blower control through terminal "6" of the blower connector through the normally closed contacts of the primary limit and back through the blower connector at terminal "5" to terminal "L" and then "R" of the blower control. From terminal "R" of the blower control low voltage power is sent up to the "R" terminal of the thermostat, completion for the low voltage system is at terminal "C".

As the thermostat closes power goes from "R" to "W" and leaves the thermostat and goes back to the "W" terminal of the blower control through terminal "3" of the blower connector through the normally closed contacts of the roll out switch and to the pressure switch. At the same time low voltage is sent to the "K-13" coil which completes to "C" and back to the transformer closing the line voltage "K-13" contacts sending power out the "CAB" terminal of the blower control the combustion blower motor which closes the contacts of the pressure switch sending power to the "TH" terminal of the burner control.

With power at "TH" and after a 30 second pre-purge power is sent out from "PV" to the pilot valve and the "K-36" coil both of which complete through "PV/MV" to "C" and back to the transformer, at the same time power is sent out from the "IGN" terminal energizing the spark plug. The presence of a pilot flame is sensed at the "Sense" terminal verifying ignition which send out low voltage power from terminal "MV" energizing the main gas valve which also completes through "C". With the "K-36" coil energized and after 45 seconds the normally open "K-36" contacts close sending line voltage to the circulation blower. The blower will continue to run until the air temperature lowers to 90 degrees.

**LENNOX** *Industries Inc.*

CORPORATE OFFICES

HEATING AND AIR CONDITIONING  
ESTABLISHED 1895P.O. BOX 799900  
DALLAS, TEXAS 75379-9900  
PHONE: 214-497-5000  
FAX: 214-497-5799

March 28, 1994

Dear Lennox Dealer:

Current unresolved issues concerning safety and reliability of plastic vent pipe have come to our attention through recent announcements in the province of Ontario, Canada.

Effective immediately, and until all issues are resolved, do not sidewall vent any Lennox mid-efficiency natural gas or propane furnace, unit heater or boiler. This notice applies to any metal vent material and any plastic vent products sold under the trade names of Plexvent, Ultravent or Sel-vent. This would include all G23, G24M, 80MGF, LF24, CXEB and CMWB units approved for horizontal vent. All information included in installation instructions is superseded by this bulletin.

We would recommend that the above products be vented through a vertical vent in accordance with the latest vent sizing tables.

As a part of this notification, any previous certification for installation of plastic vent pipe provided by Lennox Industries is hereby withdrawn.

When all issues have been satisfactorily resolved, recertification by the vent pipe manufacturers will be required for use of this product in the horizontal vent application.

All questions concerning integrity of current installations using plastic vent pipe should be forwarded to the vent pipe manufacturer.

Yours truly,

LENNOX INDUSTRIES INC.

