

COMFORTEC MODEL C30

APPROVED FOR INSTALLATION IN SOLID FUEL BURNING MASONRY OR FACTORY BUILT ZERO-CLEARANCE FIREPLACES.

MINIMUM FIREPLACE OPENING:

WIDTH – 30"
HEIGHT – 20½"
DEPTH – 16"

THIS APPLIANCE IS FOR USE WITH NATURAL OR PROPANE GAS ONLY AS INDICATED ON RATING PLATE.

GAS SPECIFICATIONS**MODEL C30 TN NATURAL GAS THERMOSTAT CONTROL**

	MAX. INPUT	OUTPUT
FAN OFF	30,000 BTUH	21,150 BTUH
FAN ON	30,000 BTUH	22,300 BTUH

MODEL C30 TP PROPANE GAS THERMOSTAT CONTROL

	MAX. INPUT	OUTPUT
FAN OFF	21,000 BTUH	15,850 BTUH
FAN ON	21,000 BTUH	16,800 BTUH

Manifold Pressure - Natural Gas 3.5" W.C.

- Propane Gas 10.5" W.C.

Gas Inlet - 3/8" N.P.T.

Supply	Minimum Pressure	Maximum Pressure
Natural Gas	4.5" W.C.	7.0" W.C.
Propane Gas	11.0" W.C.	13.0" W.C.

FOR SAFE INSTALLATION AND OPERATION OF YOUR COMFORTEC™ APPLIANCE PLEASE NOTE THE FOLLOWING:

1. This appliance should only be installed by a qualified installer. Installation must conform with the local codes, or in the absence of local codes, with the latest edition of the National Fuel Gas Code, ANSI 223.1
2. This appliance gives off high temperatures and should be located out of heavy traffic areas and away from furniture and draperies.
3. Children and adults should be alerted to the hazards of the high surface temperatures of this appliance and should stay away to avoid burns or ignition of clothing.
4. Children should be carefully supervised when they are in the same room as your fireplace appliance.
5. Under no circumstances should this appliance be modified. Parts that have to be removed for servicing should be replaced prior to operating this appliance again.
6. Installation and any repairs to this appliance should be done by a qualified service person. A professional service person should be called to inspect this appliance annually. Make it a practice to have all of your gas appliances checked annually.
7. Control compartments, burners and air passages in this appliance should be kept clean and free of dust and lint. Make sure that the gas valve and pilot light are turned off before your attempt to clean this unit.
8. The venting system (chimney) of this appliance should be inspected by a qualified agency at least once a year and if needed, your venting system should be cleaned.
9. Never connect a gas appliance to a chimney flue serving a separate solid-fuel burning appliance.
10. Keep the area around your appliance clear of combustible materials, gasoline and other flammable vapors and liquids. This appliance should not be used as a drying rack for clothing, nor should Christmas stockings or decoration be hung in the area of it.
11. Do not operate this appliance without glass in place. Replace glass only with "CERAMIC" glass with the original thickness and size (available from your Comfortec™ dealer).
12. Under no circumstances should any solid fuels (wood, paper, cardboard, coal) be used in this appliance.
13. Do not use this appliance if any part has been underwater. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been underwater.
14. This appliance requires an adequate supply of air for proper combustion, ventilation and safe operation. Because a lot of today's homes are tightly sealed and heavily insulated a source of make-up air may be required.

WARNING: Improper installation, adjustment, alteration, service or maintenance may void warranty and can cause injury or property damage.

Refer to this manual.

For assistance or additional information consult a qualified installer, service agency or the gas supplier.

INSTALLATION AND VENTING OF MODEL C30 AS A FIREPLACE INSERT

1. The Model C30 may be installed and vented into any solid fuel fireplace that meets national, state, and local building codes and that is constructed of non-combustible materials.
2. To assure top performance, safety and efficiency, it is required that all C30 Inserts be installed with Comfortec™ Model C20ALK Flue Liner Kit or an approved 4" diameter flue liner.
3. Any flue damper must be removed or blocked open.
4. The chimney must be clean, in good working order and constructed of non-combustible materials.
5. Make sure that all chimney cleanouts are tight fitting so no air can leak into the chimney.
6. Install the appliance without the faceplate trim kit and make all gas fittings and electrical connections.
7. Install the faceplate trim kit. Refer to the assembly instructions included with the trim kit.

PREPARATION

Before beginning, remove glass door and logs from unit. Also check to make sure there are no hidden damages to the unit. Take a minute and plan out the gas and venting route. It is best to start with the gas line first followed by the chimney liner.

GLASS DOOR REMOVAL

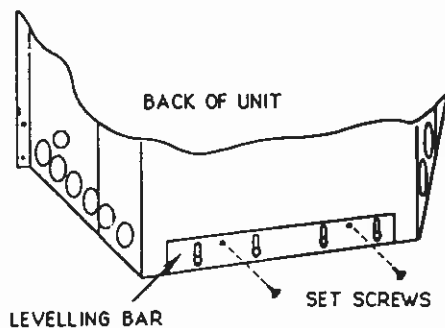
1. Open lower control door.
2. Remove the two (2) bottom glass frame retaining screws.
3. Lift up and unhook door frame at the top.
4. To replace glass and frame reverse the above procedure.

CAUTION: Except for servicing, never operate this appliance with the front glass removed or broken.

NOTE: See Faceplate Kit Instructions for installing brass trim on glass frame.

ADJUSTMENT OF REAR LEVELLING BAR (IF REQUIRED)

1. Determine height of adjustment.
2. Loosen the four (4) screws.
3. Set bar at proper height and tighten the screws.
4. Add two (2) extra set screws to prevent possible slippage. (These screws are packed in the Faceplate Kit.)

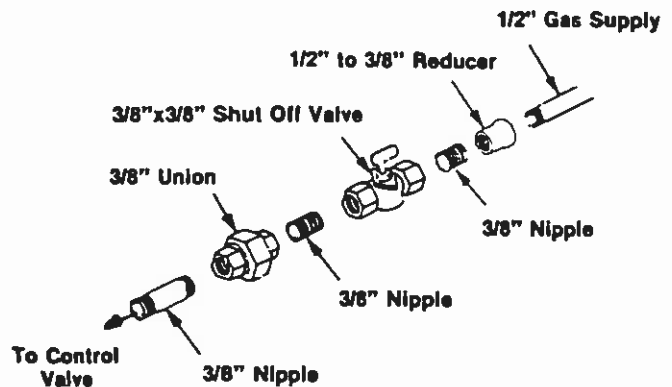


GAS SUPPLY LINE INSTALLATION

The installation must conform with local codes or, in the absence of local codes, with the latest edition of the National Fuel Gas Code, ANSI Z223.1.

- a) The gas supply line can be brought into either the left or right side of the fireplace. (It is recommended that the line be brought into the right side.)
- b) A length of flexible gas line may be used in the firebox only if local codes approve.
- c) An accessible manual shut-off valve is required in the gas supply line. A ground joint union is required in the gas supply line to provide for burner removal or servicing.
- d) When a vertical section of piping is required for installation, a condensation trap is needed.
- e) For natural gas, a minimum of 3/8" iron pipe with a minimum gas pressure of 4.5" W.C. must be used for supply from the meter. Consult with the local gas utility if any question arises concerning pipe size.
- f) A 1/8" N.P.T. plugged tapping, accessible for test gauge connection, must be installed immediately upstream of the gas supply connection to the appliance.
- g) Make gas connection to the appliance with pipe or listed flexible connection.
- h) Turn gas supply on and check for leaks (DO NOT USE AN OPEN FLAME). Use soap and water solution.

NOTE: The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig. The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas piping system at test pressures equal to or less than 1/2 psig.



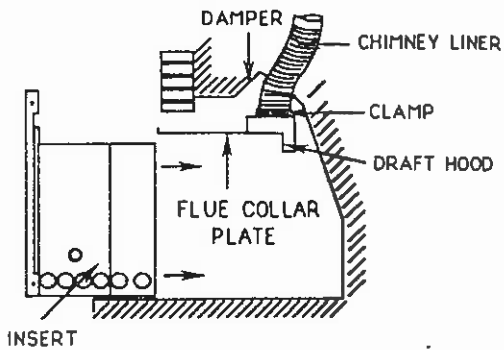
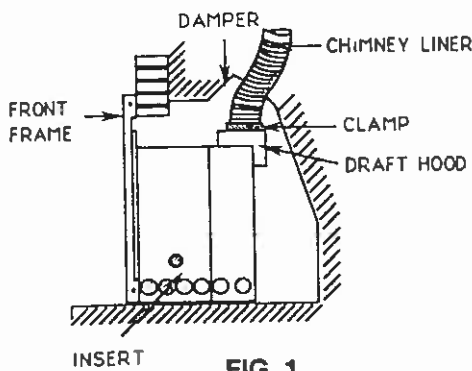
TYPICAL LAYOUT FOR RIGID PIPE INSTALLATION

LINER INSTALLATION

Insert liner from top of chimney through the damper opening and attach to 4" flue collar. For best results use 3 sheet metal screws or clamp. (see Figure 1)

In case the fireplace opening is only minimum height 20½" and access from the front is not possible, remove the draft hood assembly — unscrew and slide out from the back of the unit. Now attach the liner to the flue collar, lift up and simply slide draft hood assembly back onto the unit top. It is important that the plate is completely inserted and the front screw is fastened again in order to line up the flue outlet and the liner properly. (see Figure 2)

NOTE: If fireplace lintel is wider than 8", the height of the fireplace opening must be 26" to allow for a 4" x 90" offset elbow to be installed.



COMBUSTION AIR

It is very important that an adequate supply of combustion air is available when the fireplace is being operated. Since most homes of today are tightly sealed and insulated, additional make-up air may be required.

WARNING: This unit has been designed to operate by drawing dilution air for proper venting and room air for proper heat circulation from the front and its outer perimeters. Insulating around the unit will result in over heating and possible malfunctioning of the circulating fan.

BLOWER FAN

115 Volt, 60 Hz., 56 Watts

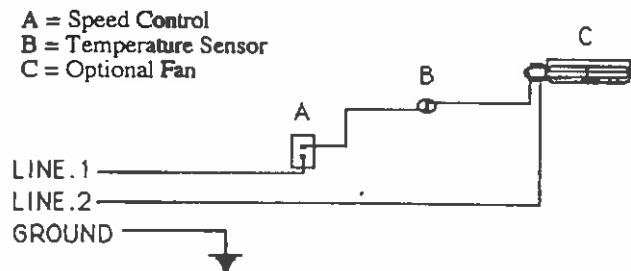
The blower fan which is factory installed includes: fan, temperature sensor, speed control and a three wire grounded power cord.

This appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the latest edition of the National Electric Code, ANSI/NFPA 70.

WARNING

Electrical Grounding Instructions

This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.



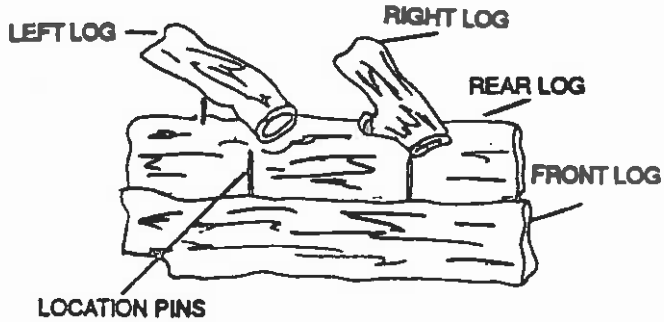
FAN WIRING DIAGRAM

This fan does not need regular maintenance.

NOTE: Fan will not operate until the appliance reaches the proper temperature.

INSTALLATION OF LOGS

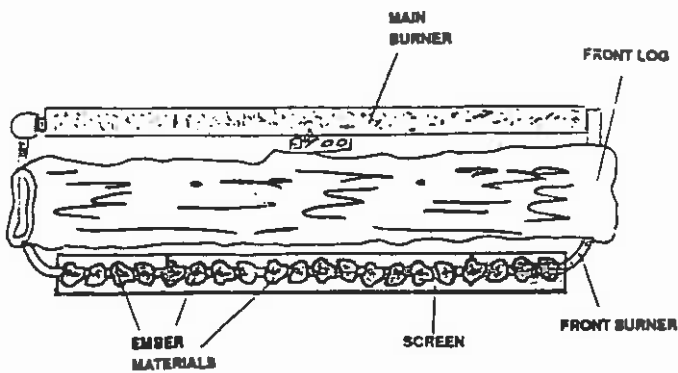
1. Slide the rear (long) log onto the rear locating pins.
2. Slide the front log (long log with notch) onto the front locating pins with the notch on the left.
3. Place both the upper logs in position on the locating pins as shown below. The log with the branch must be placed on the right side.



GLOWING EMBERS

Ember Material Placement:

Separate ember material (contained in the small plastic bag) into small pieces, roughly $\frac{1}{2}$ " in diameter and place onto front burner as shown below. Do not pack down. Leave in fluffy, loose condition for the most realistic ember effect. Do NOT place ember materials on main burner.



NOTE: Once the logs and ember material are in position, light the burner and observe the flame pattern. Flames must not impinge on (touch) the logs.

OPERATING INSTRUCTIONS

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

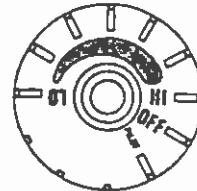
- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

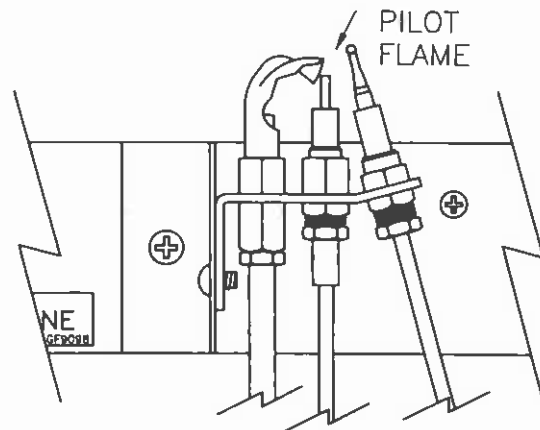
- Do not try to light any appliance.
 - Do not touch any electric switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
 - D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.



LIGHTING INSTRUCTIONS

1. **STOP!** Read the safety information above.
2. Turn gas control knob clockwise \curvearrowright to "OFF."




3. Wait five (5) minutes to clear out any gas. If you then smell gas, **STOP!** Follow "B" in the safety information above. If you don't smell gas, go to next step.
4. Find pilot: The pilot is in the center of the main burner.




5. Turn knob on gas control counter clockwise  to "PILOT."
6. Push in control knob all the way and hold in. Immediately light pilot by pushing the Piezo-electric spark lighter (black button with red star). Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 2 through 6.
 - If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
 - If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
7. Turn gas control knob counter clockwise  to select the desired temperature.

NOTE: This control is equipped with a safety interlock mechanism that prevents unsafe operation. All lighting instructions must be followed or control will not operate.

SHUT-DOWN PROCEDURE

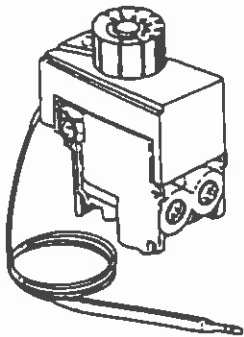
To turn off Main Burner only, turn the control knob clockwise  to 'PILOT'.

For complete shut-down, turn the control knob clockwise  to 'OFF'.

The control has the interlock device. So after shutting off the gas flow the appliance cannot be relit before the Safety Magnet Unit is released (approximately 60 sec.).

The gas control knob is designed to be operated by hand. **NO TOOLS ARE TO BE USED DURING OPERATION.** Damaged knobs may result in serious injury.

THE CONTROL IS NOT FIELD SERVICEABLE.



DO NOT FORCE CONTROL DIAL

In order to reduce gas consumption and increase room heating comfort this control is equipped with a flame modulating device. Once set room temperature is achieved the gas input is reduced and temperature is maintained with a lower flame. When the thermostat calls for heat after shut down the burner will start at the lower flame and will maintain room temperature at set level. In order to have full flame, gas control knob must be turned to HI. At this setting unit will shut down only when room temperatures reach in excess of 100°F. - 120°F

The C30 Burner Assembly has been engineered and permanently adjusted for proper flame control. **DO NOT ALTER GAS ORIFICE.**

Periodic visual checks of the Pilot Flame should be conducted to ensure that the flame is continuously present except when the Valve Knob is in the "OFF" position.

NOTE: It is normal for the new fireplace to give off some odor the first time it is burned. This is due to the curing of the paint and any undetected oil from the manufacturing process

Please ensure that your room is well ventilated — open all windows.

It is recommended that you burn your new fireplace for at least four (4) hours the first time you use it WITHOUT THE FAN ON.

PLEASE NOTE THAT IT IS QUITE NORMAL FOR APPLIANCES FABRICATED OF STEEL TO GIVE OFF SOME EXPANSION AND/OR CONTRACTION NOISES DURING THE START UP OR COOL DOWN CYCLE.

DRAFT-RELIEF OPENING

This fireplace insert is equipped with a draft-relief opening which operates through the side openings of the frame. These openings must not be obstructed or altered in any way.

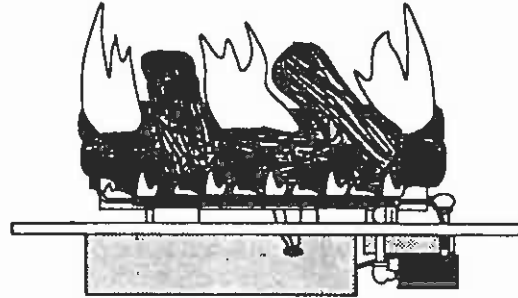
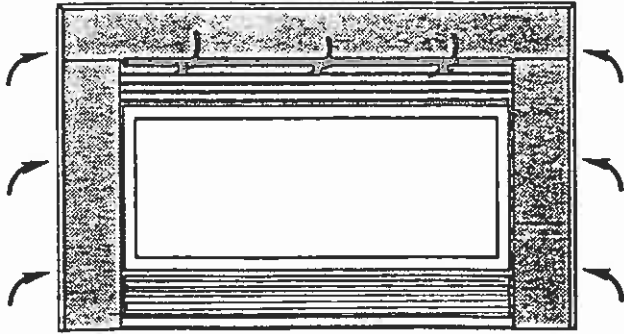
TEST CHIMNEY DRAW

A "Chimney Draw" test must be made before the installation is complete.

- a. Close all doors and windows in the home and start exhaust fans in the kitchen and bathroom.
- b. Light unit and operate for 5 minutes.
- c. Hold an ignited match or cigarette in front of the fireplace. See drawing for the location of the draft hood opening.

- d. Check to make sure smoke from the match or cigarette is drawn into the fireplace. If it is not, turn the unit off and check for causes creating the lack of adequate draft. **DO NOT OPERATE THE UNIT.**

NOTE: It is important to periodically perform a visual check of the pilot and the burner flame and to compare them with the pictorial illustration shown below.



FAN OPERATION

1. Start gas fire.
2. Turn on fan speed control.
3. Wait until the unit has warmed up sufficiently to activate the temperature sensor.
4. Once fan starts adjust speed control to desired fan speed. The fan will now automatically come on every time the fireplace is in operation. Should the fan not be needed simply turn off the speed control.

HEAT BY-PASS CONTROL

In order to increase the comfort level of your C30 during the off season (Spring and Fall) this unit has a heat by-pass control located at the lower left hand side of the appliance. When placed in the OPEN position the heat output is reduced to approximately one-third of the heat output in the CLOSED position.

MAINTENANCE

It is important to keep burner and the burner compartment clean. This must be done periodically, at least once per season.

Steps for Cleaning Procedure

1. Turn off pilot
2. Remove Glass (see instructions)
3. Remove logs
4. Vacuum burner compartment, especially around the orifice opening.
5. Re-install logs
6. Replace glass
7. Ignite pilot — see Operating Section of the Manual
8. Operate the burner and visually check to make sure the flame pattern appears similar to the pictorial illustration shown below.

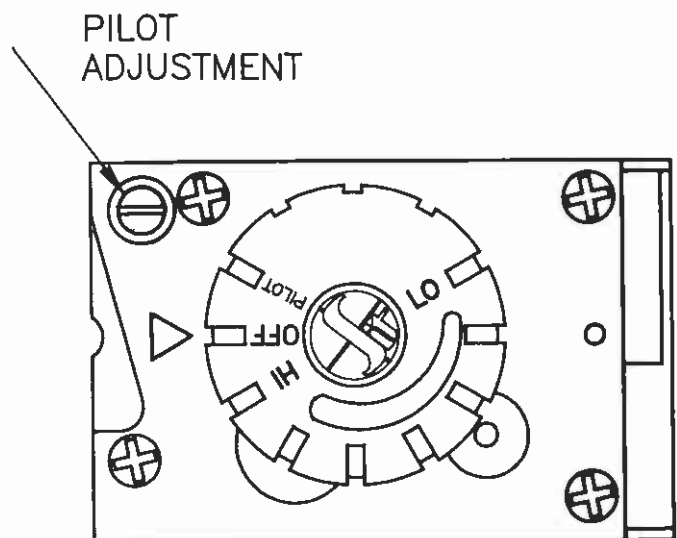
GLASS CLEANING

It will be necessary to clean the glass periodically. During start-up, condensation forms on the inside of the glass and causes dust, lint, etc. to cling to the glass surface. This is normal. Also initial paint curing can deposit a slight film on the glass.

NOTE: Do not use abrasives or abrasive type cleaners which can harm the glass surface.

PILOT BURNER ADJUSTMENT

1. Remove brown plastic cover from control valve.
2. Locate pilot adjustment screw at upper left corner of control valve face.
3. Adjust pilot screw to provide properly sized flame.
4. Replace control cover.



FAN REMOVAL INSTRUCTIONS

DANGER: Risk of electric shock. Disconnect power before servicing unit.

1. Turn off gas. (See shut down procedure.)
2. Remove glass and frame.
3. Remove all four logs.
4. Disconnect gas supply line.
5. Remove burner base assembly (4 screws) and carefully remove temperature sensing bulb from bracket.
6. Remove rear log pin support bracket (2 screws).
7. Remove the fan access cover plate (9 screws in back).
8. Remove the two fan mounting nuts.
9. Pull off the electrical cord terminals at the motor.
10. Lift out fan assembly.

NOTE: To reinstall, reverse procedure.

NOTE: Check for leaks after reconnecting the gas supply line as outlined in this manual.

OPTIONAL EQUIPMENT

Available from your Comfortec™ dealer.

MODEL #C30TK TRIM KIT

Includes glass frame trim, upper grill panel and faceplate for fireplaces smaller than 32" high x 44" wide.

MODEL #C30ADKPB ARCHED DOOR KIT, POLISHED BRASS

MODEL #C30ADKBL ARCHED DOOR KIT, BLACK

MODEL #C20ALK30 CHIMNEY LINER KIT

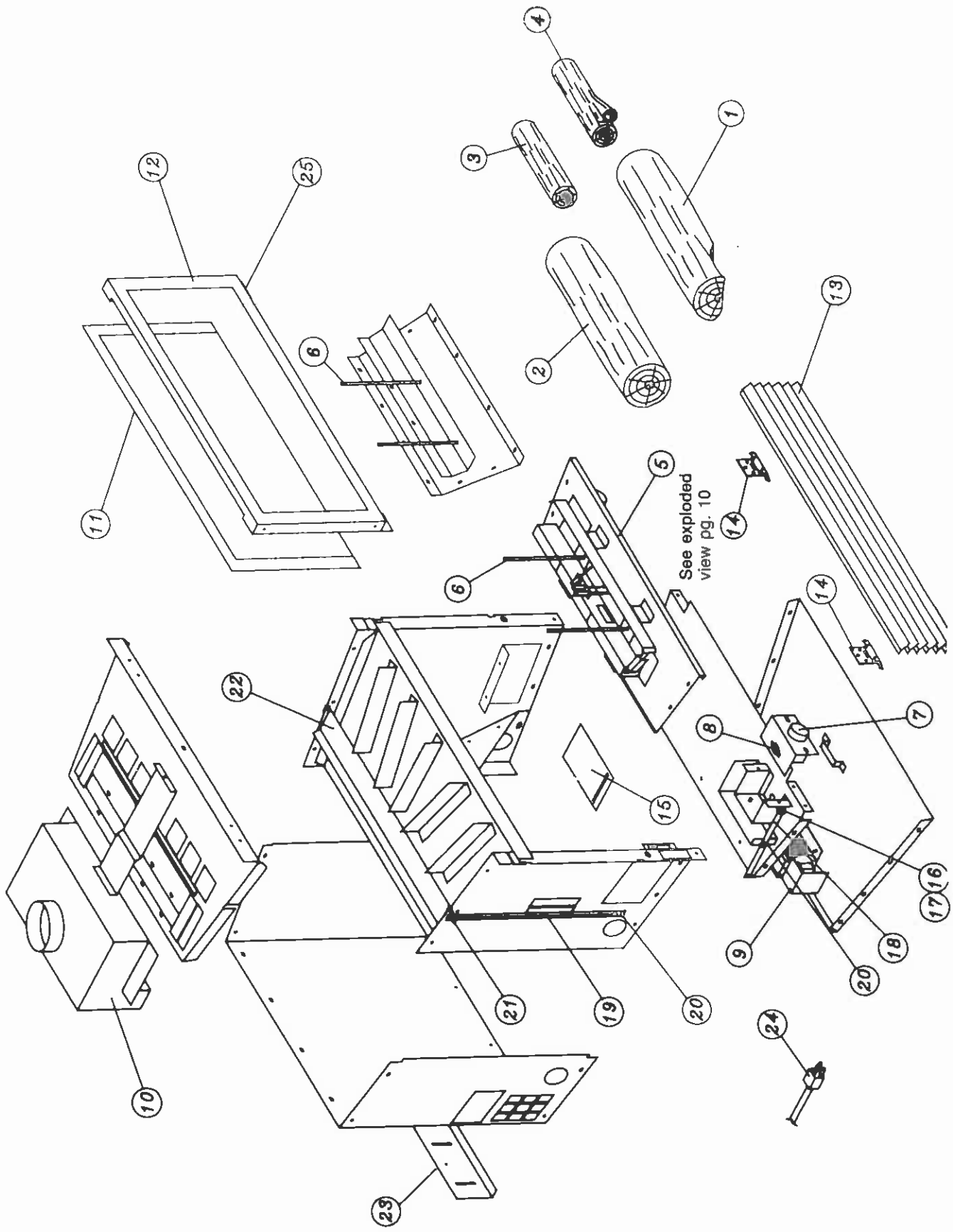
Includes 30 feet of 4 inch diameter 2-ply aluminum vent pipe, chimney top flashing, rain cap and installation nose cone.

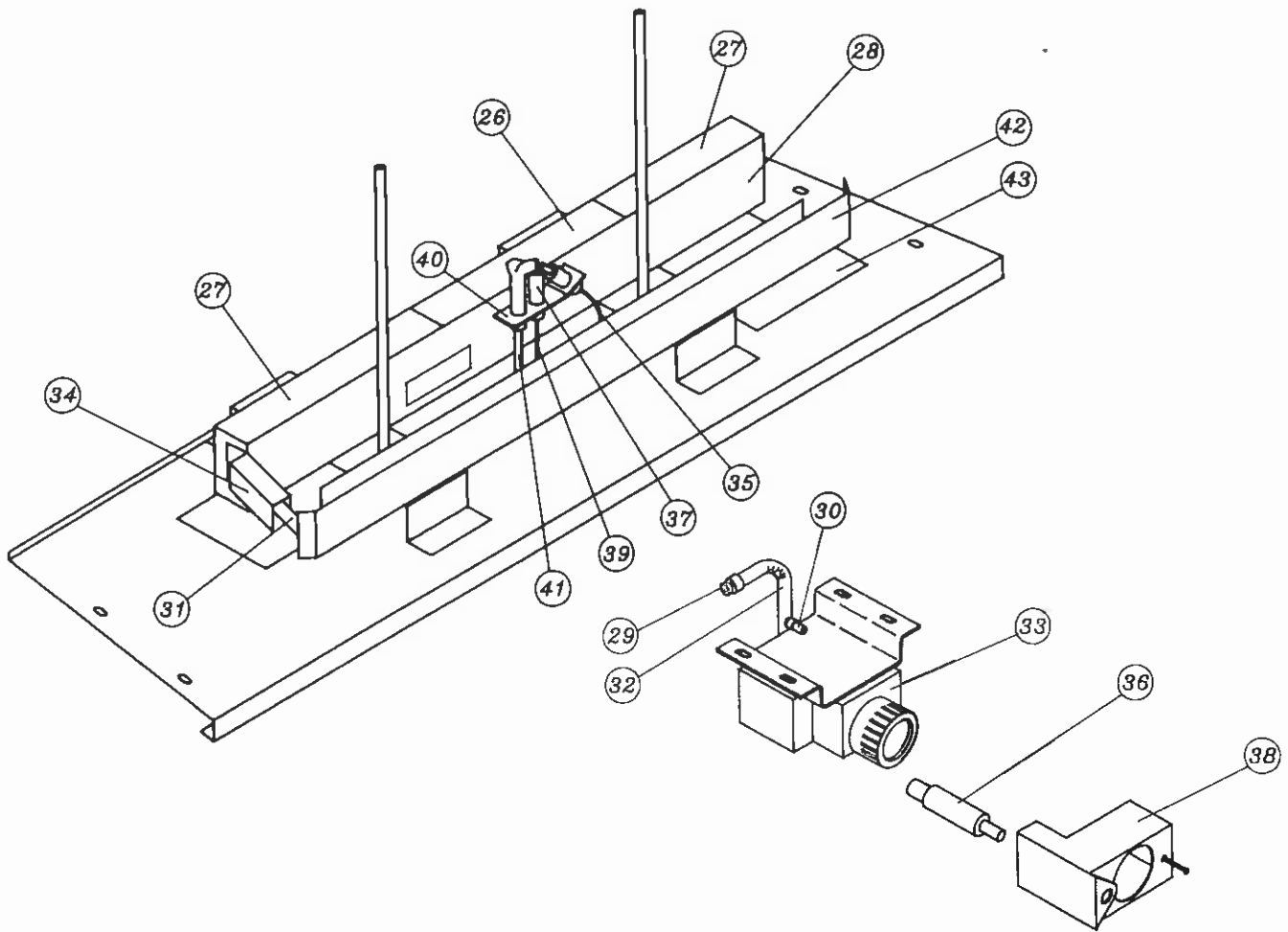
REPAIR PARTS LIST

All repair parts will be available from your local dealer. When ordering, always give the following information: (a) part number, (b) part description and (c) model number.

ITEM	QTY.	PART No.	DESCRIPTION
1	1	GF6018P12	Front Log with Notch
2	1	GF6018P11	Rear Log
3	1	GF6008P4	Left Top Log
4	1	GF6008P5	Right Top Log with Limb
Not Shown	1	GF1008P1-3	Carton with Front and Rear Logs
Not Shown	1	GF1008P1-2	Carton with Right and Left Top Logs
5	1	GF1085	Burner Valve Assembly, Complete - Natural Gas
5	1	GF1086	Burner Valve Assembly, Complete - Propane Gas
6	4	GF3131	6" Log Pin
7	1	GF7579	Fan Speed Control with Knob
8	1	GF7578	Temp Switch - Fan
9	1	GF1091	Fan Ass'y
10	1	GF2090W	Flue Box Weldment
11	1	GF1082	Ceramic Glass Window and Seal Ass'y
12	1	GF2092W	Glass Frame Weldment
13	1	GF2095W	Bottom Grill Door Weldment
14	2	GF8505	Hinge - Bottom Grill Door
15	1	GF1081	Bag of Glowing Ember Material
16	1	GF3395	Ball Knob - Bypass Arm
17	1	130AX800	Screw - Ball Knob
18	1	GF3394	Damper Bypass Arm
19	1	GF2097W	Control Rod Weldment
20	2	OB355X2	Hex Flange Nut
21	1	123AX41	Palnut
22	1	GF2100W	Bypass Plate Weldment
23	1	GF3404	Leveling Strip
24	1	CC9002	Cord Set, Power Supply Cord
25	2	OB23X70BLX	Glass Frame Mounting Screws
26	1	GF7602	Ceramic Tile - Center
27	2	GF7602P8	Ceramic Tile - Ends
28	1	GF1089	Burner Assembly, Includes Items #26 & #27
29	1	GF7610P7	Main Burner Orifice - Natural Gas
29	1	GF7610P8	Main Burner Orifice - Propane
30	1	GF7611P3	Front Burner Orifice - Natural Gas
30	1	GF7611P4	Front Burner Orifice - Propane
31	1	GF7596	Front Burner - Natural Gas
31	1	GF7596P2	Front Burner - Propane
32	1	GF7589	Burner Supply Tube
33	1	GF7503S	Control Valve Assembly - Natural Gas
33	1	GF7503P2S	Control Valve Assembly - Propane
34	1	GF3196P2	Front Burner Guard
35	1	GF7541	Thermocouple 18"
36	1	GF7574	Piezo Push Button Ignitor
37	1	GF7563	Ignitor Electrode
38	1	GF7573	Valve Cover with Screw
39	1	GF7595	Electrode Cable 16"
40	1	GF7561	Pilot Assembly - Natural Gas includes item #37
40	1	GF7561P2	Pilot Assembly - Propane includes item #37
41	1	OB331X12	Pilot Supply Line 12" Length
42	1	GF2098W	Ember Channel Weldment
43	1	GF3397	Cover Plate

NOTE: When Ordering Gas Control, Orifices or Burners always specify Natural or Propane Gas.





BURNER/VALVE ILLUSTRATION

