

INSTALLATION AND OPERATING INSTRUCTIONS

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.

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

1. This appliance should only be installed by a qualified installer. Installation must conform with 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 appliance 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 you attempt to clean this unit.
8. The venting system (chimney) of this appliance should be inspected 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 decorations 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 heater if any part has been underwater. Immediately call a qualified service technician to inspect the heater and to replace any part of the control system and any gas control which has been under water.

GAS SPECIFICATIONS

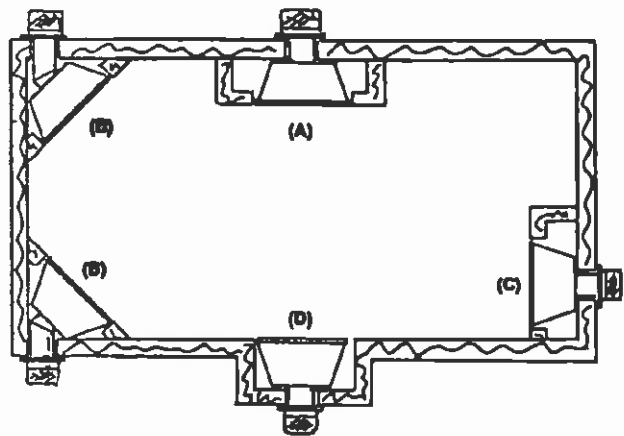
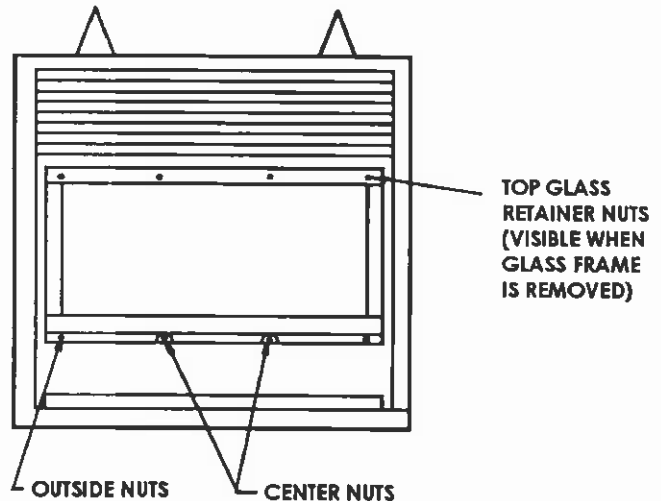
MODEL	FUEL	MAXIMUM INPUT
CDV34RN	NATURAL GAS	20,000 BTU/HR
CDV34RP	PROPANE GAS	18,000 BTU/HR

fanifold 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.	11.0" W.C.

GLASS FRONT-REMOVAL AND REPLACEMENT

1. Open bottom grill door by pulling outward at the top of the grill.
The grill will hinge outward and downward.
2. Remove the two (2) outside nuts at the bottom of the glass frame and remove the glass frame by pulling the frame outward and downward.
3. Now that the glass frame is removed, remove the six (6) nuts holding the glass retainer and carefully remove the glass retainer and glass. **CAUTION:** Be careful to support the glass to prevent it from breaking.
4. To replace glass front reverse the above procedure.
CAUTION: Except for servicing, never operate this appliance with front glass removed or broken.



(A) Flat on wall; (B)* Cross corner; (C)* Flat on wall corner
(D) cantilever

* When you install your fireplace flat on the wall, or corner positions, a minimum of 6 inches clearance must be maintained from the perpendicular wall and the front of the appliance.

The Comfortec fireplace may be installed flat on a combustible floor or raised up on the wall to keep the flame at eye level. Do not install this unit directly on carpets or vinyl flooring.

HEARTH

A hearth is not mandatory but it is recommended for aesthetics and for added safety. We recommend a noncombustible hearth which comes out a minimum of 12 inches in front of the appliance.

MANTELS

Depending on the depth of the fireplace mantel it may be installed higher or lower from the top of the fireplace opening. See drawing below for proper installation height of your combustible mantel piece. Non-combustible mantels may be installed at any height above the fireplace opening.

NOTE: Paint or finish used on the mantel must be heat resistant (250°F) to prevent discoloration.

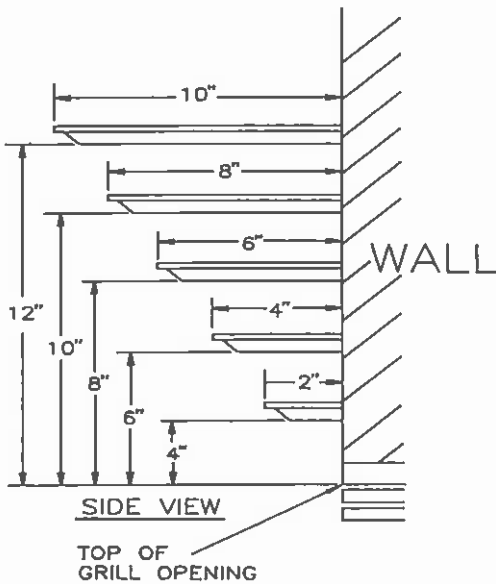
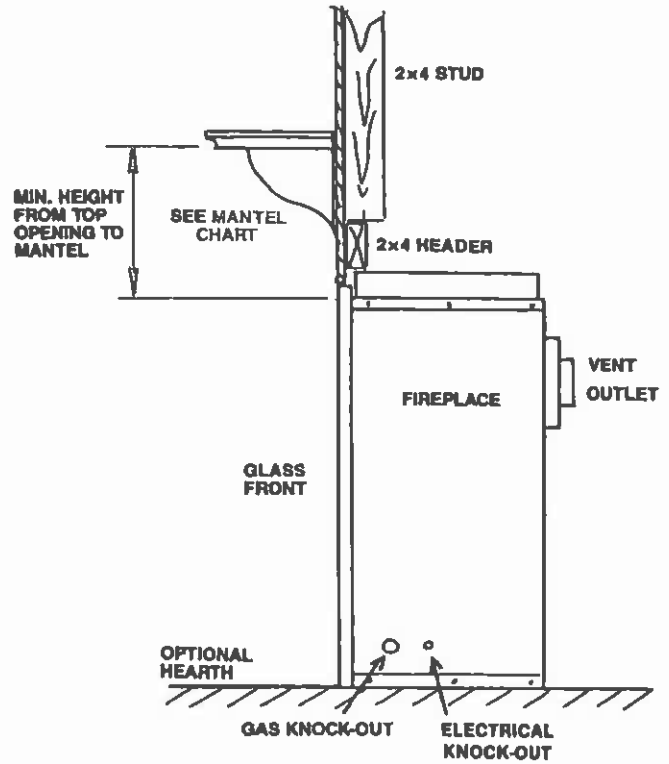
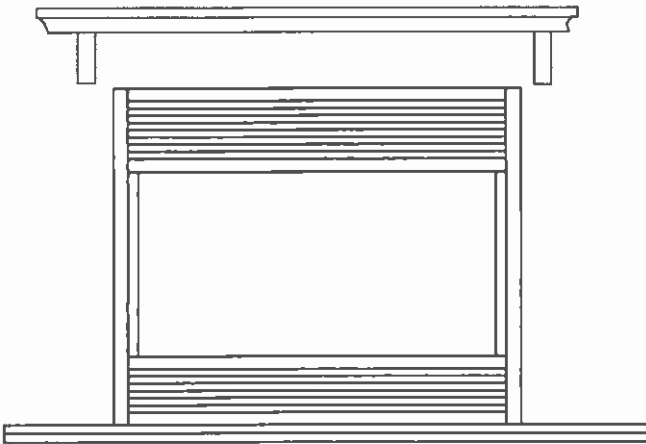
CLEARANCES TO COMBUSTIBLES

Back	0 inches (from standoffs)
Sides	0 inches (from standoffs)
Floor	0 inches
Top	0 inches (from standoffs)

Drywall can extend flush with appliance on all 4 sides of front face.

Noncombustible materials such as brick, stone or tile may project in front of and/or on the face of the fireplace but must not block any of the grill openings or fire chamber opening. If a Brass Trim Kit is going to be installed, brick, stone or tile will have to be installed flush with the sides and top of the fireplace.

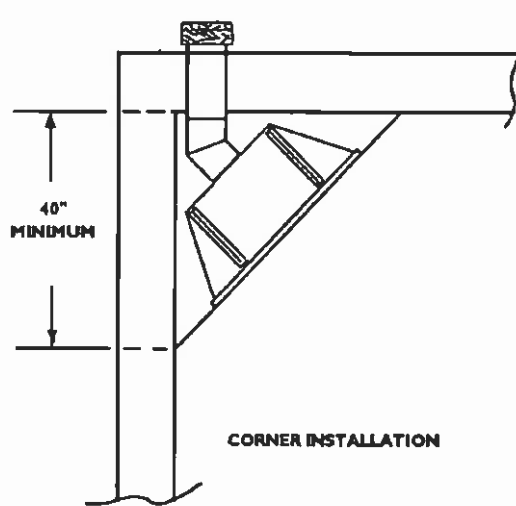
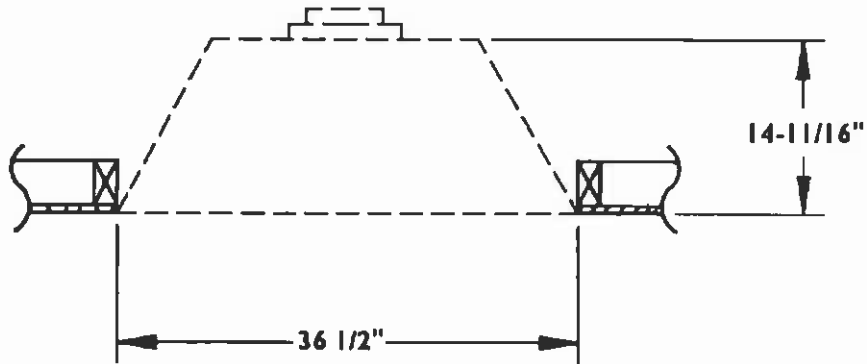
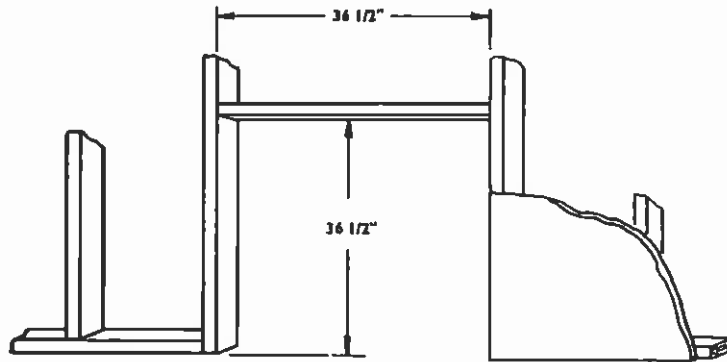
When this appliance is being installed in a non-insulated wall or chase, fiberglass insulation should be installed around body of fireplace.



FRAMING AND FINISHING

1. Choose fireplace location and frame to provide 36½" wide x 36½" high opening.
2. Place fireplace into position and secure to floor and to wall studs.

3. Cold climate installation recommendation: When installing this fireplace against a non-insulated exterior wall or chase, it is recommended that the outer walls be insulated to conform to applicable insulation codes.



GENERAL VENTING SPECIFICATIONS

- Maximum Vent Length 20" - Fig.1
- Maximum Number of elbows One 45° Elbow - Fig. 2
- Maximum Wall thickness 20" - No Elbow
..... 16" - With 45° Elbow

VENTING INSTRUCTIONS

The Model CDV34 fireplace is approved to be vented only through a side wall.

Only venting components specifically approved and labelled for this fireplace may be used.

CAUTION: Minimum clearance between vent pipes and combustible materials is one (1) inch on sides and bottom and two (2) inches on top.

LOCATION OF VENT TERMINATION

It is imperative that the vent termination be located observing the minimum clearances as stated below and shown on pages 5 and 6. There must not be any obstruction such as bushes, garden sheds, fences, decks, or utility buildings within 24" from the front of the termination hood.

Do not locate termination hood where excessive snow or ice buildup may occur. Be sure to check vent termination area after snow falls, and clear to prevent accidental blockage of venting system. When using snow blowers, make sure snow is not directed towards vent termination area.

SIDING SHIELD (Part Number C42DVSS)

The Direct Vent Siding Shield (C42DVSS) must be used whenever the exterior wall has vinyl siding directly above the vent termination cap. The shield will protect the area directly above the termination from exposure to heat exiting from the flue pipe.

The vent termination must not be located:

1. Less than 7 feet above a paved sidewalk or a paved driveway located on public property;
2. Within 6 feet of a mechanical air supply inlet to any building;
3. Above a meter/regulator assembly within 3 feet horizontally of the vertical center-line of the regulator;
4. Within 6 feet of any gas service regulator vent outlet;
5. Less than 1 foot above grade level.
6. Within the following distances of a window or a door which can be opened, any non-mechanical air supply inlet or the combustion air inlet of another appliance;
 - a. 12 inches top and sides;
 - b. 4 feet below;
7. Underneath a veranda, porch or deck where,
 - a. the veranda, porch or deck is not fully open on a minimum two sides beneath the floor; and
 - b. the distance between the top of the vent termination and the underside of the veranda, porch or deck is less than 4 feet.

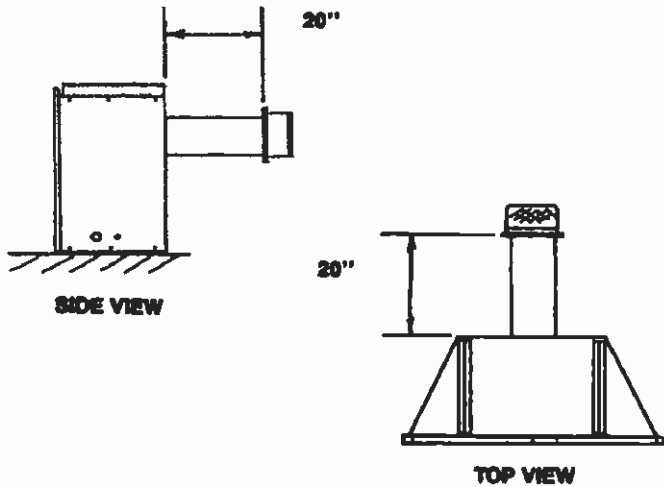


FIGURE 1

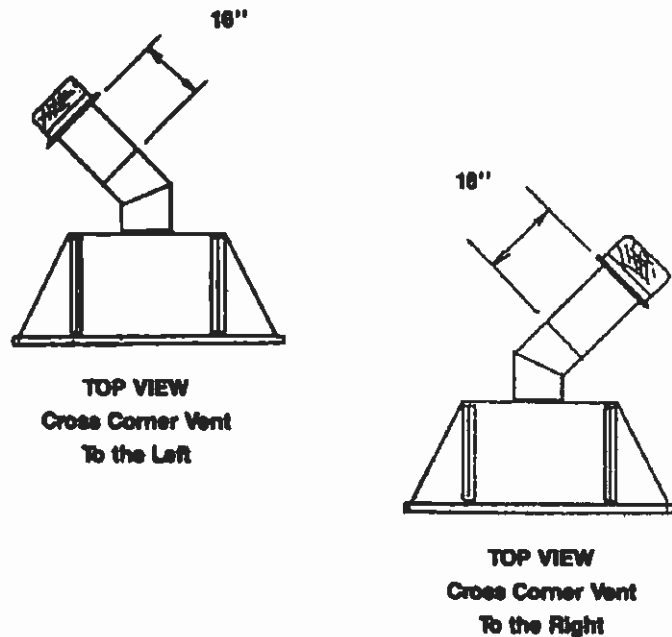
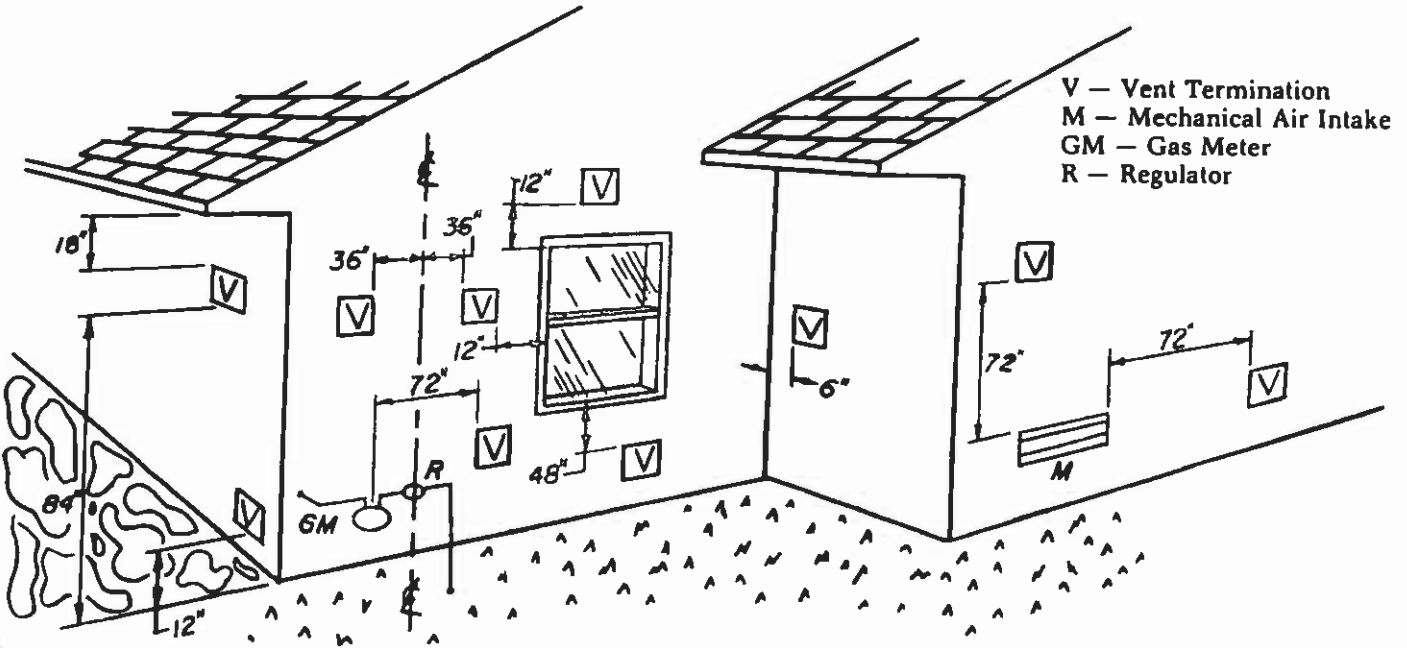


FIGURE 2

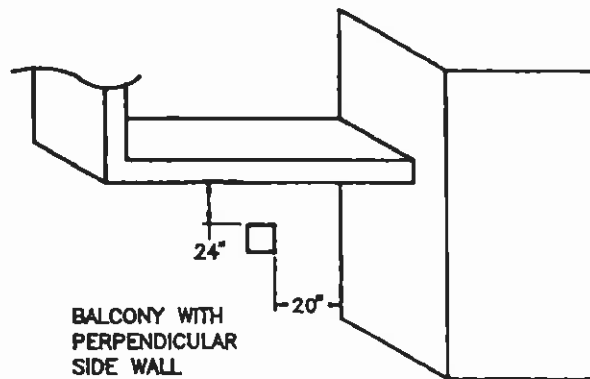
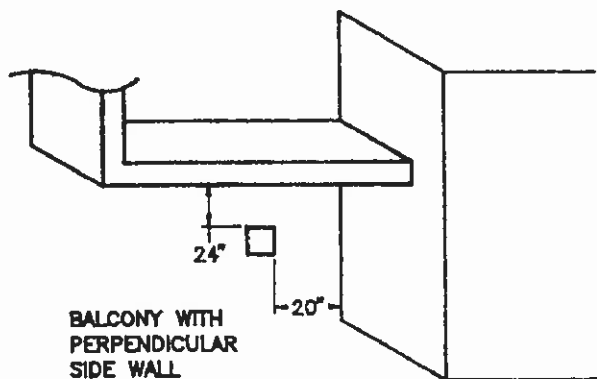
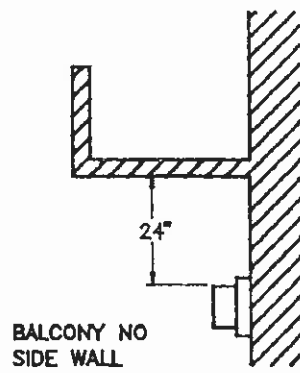
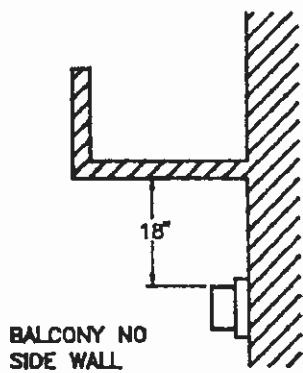
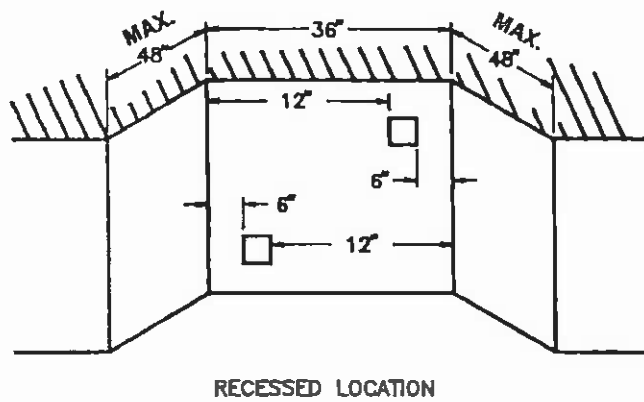
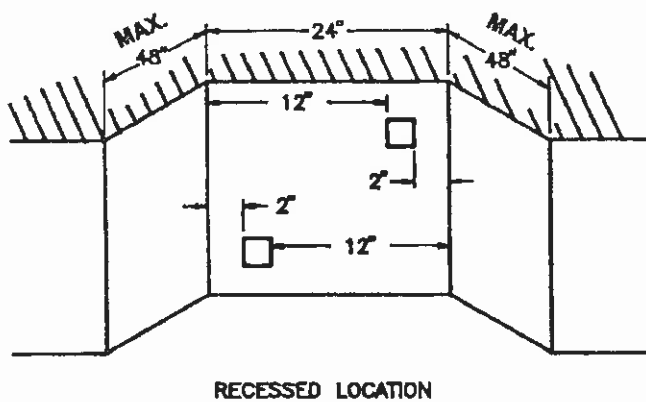
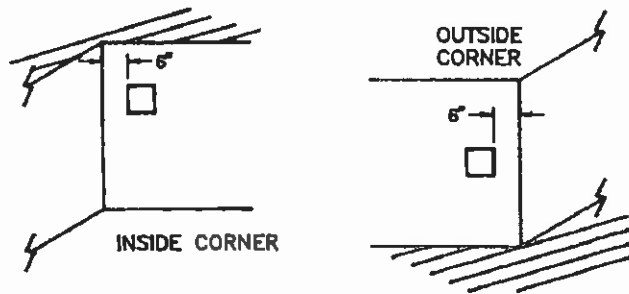
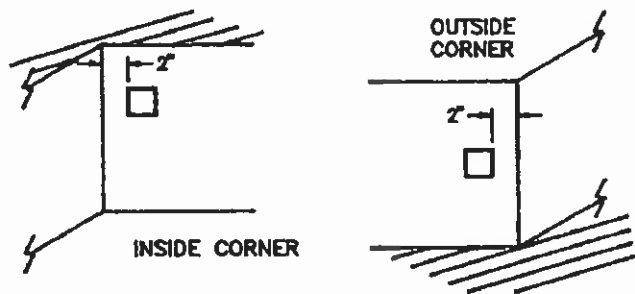
MINIMUM VENT TERMINATION CLEARANCES

From combustibles exterior surfaces, gas meters, air intakes, ect.



If the exterior of the building is noncombustibles the following minimum clearances are applicable:

If the exterior of the building is combustible the following minimum clearances are applicable.



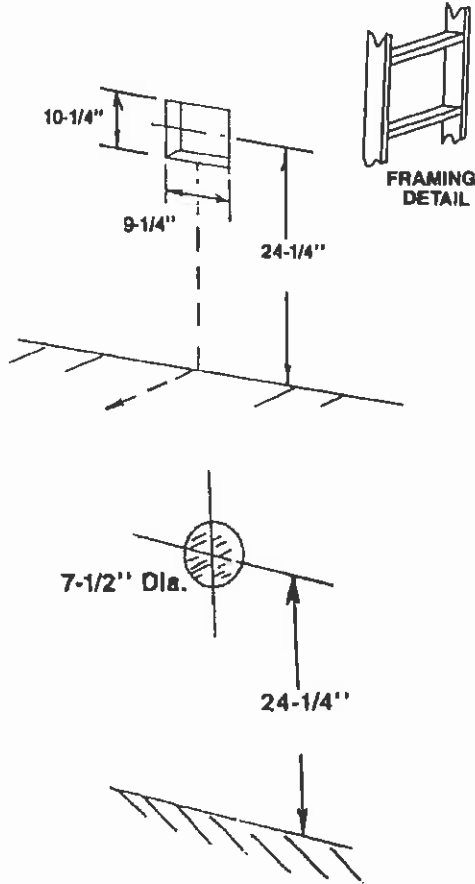
INSTALLATION

The final location of the fireplace must be such that the horizontal vent dimensions fall within those stated on page 4, and shown on pages 5 and 6.

CAUTION: Minimum clearance between vent pipes and combustible materials is one (1) inch on sides and bottom and two (2) inches on top.

STEP 1

Locate vent opening on the wall.

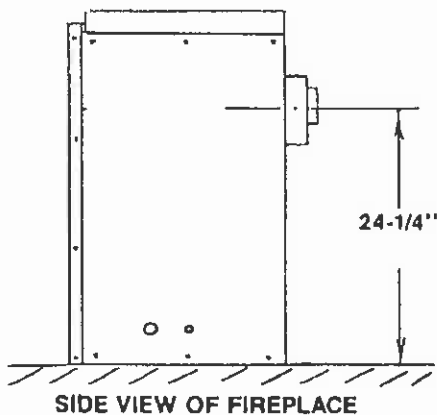


OPENING WHEN THE WALL IS NON-COMBUSTIBLE

STEP 2

COMBUSTIBLE WALLS: Cut a 9 1/4" x 10 1/4" hole through the exterior wall frame as shown.

NONCOMBUSTIBLE WALLS: Hole openings must be 7 1/2" in diameter at 24 1/4" center from the floor the fireplace sits on.



SIDE VIEW OF FIREPLACE

STEP 3

Slip the 4" and 7" pipes onto the respective flue collars. Make sure they are pushed all the way in.

STEP 4

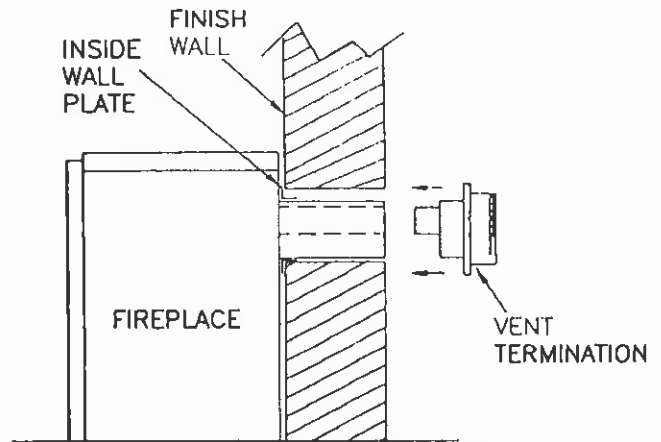
Measure the total wall thickness. Mark both pipes and cut to length. It is very important that the two pipes are flush with the outside wall once the fireplace is in its final location.

STEP 5

Mount the inside wall plate (proper side up) with nails or screws.

STEP 6

After having made sure that the pipes are fully inserted onto the respective flue collars, secure same with three (3) sheetmetal screws. Be sure to check that both pipes are perfectly horizontal. Secure the 4" pipe first and then the 7" outer pipe



SIDE VIEW OF FINAL FIREPLACE LOCATION

STEP 7

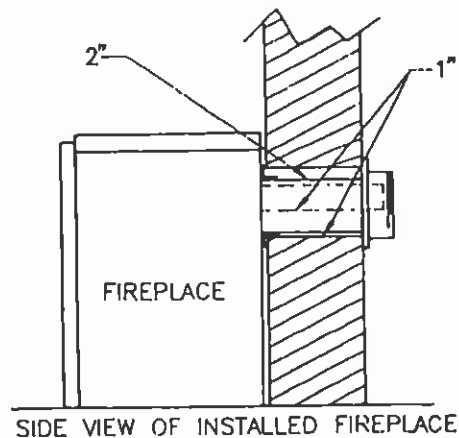
Secure fireplace to floor by installing screws through the two slots provided in the base of unit.

STEP 8

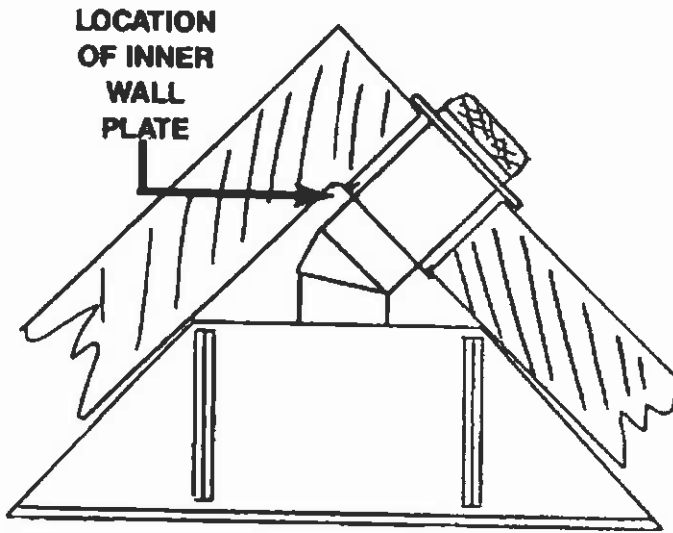
Mount vent termination, proper side up - note label on deflector plate - and seal wall plate.

NOTE: When the fireplace is installed cross corner it is necessary to use a 45° Elbow Kit - C42DV45. The kit includes one 4" x 45° elbow and one 7" x 45° elbow.

AIRSPACE (COMBUSTIBLE WALL)



SIDE VIEW OF INSTALLED FIREPLACE



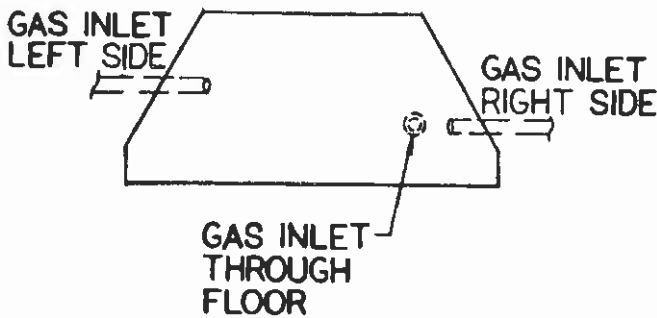
TOP VIEW OF INSTALLED FIREPLACE

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 223.1

NOTE: If you plan to install the optional C42FK fan kit, it is recommended that it be installed prior to final gas pipe connection. If this option is added at a later date, the gas line must be temporarily removed to locate and install this option.

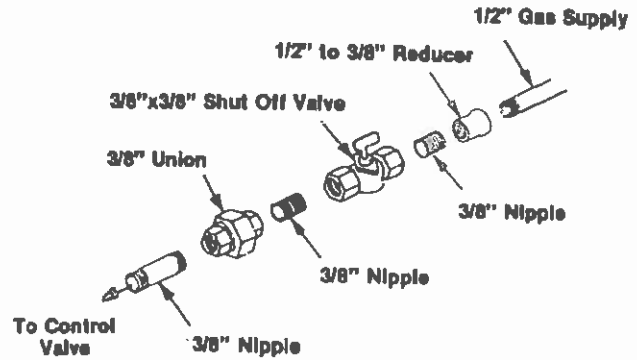
- a) Knockouts are provided to allow the gas supply line to be brought into either the left or right side or floor of the fireplace. (It is recommended that the line be brought into the right side.)



- 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 local gas utility if any question arises concerning pipe size.
- f) A 1/8" N.P.T. plugged tapping, Accessible for test gauges 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 a 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 supply piping system at test pressures equal to or less than 1/2 psig.

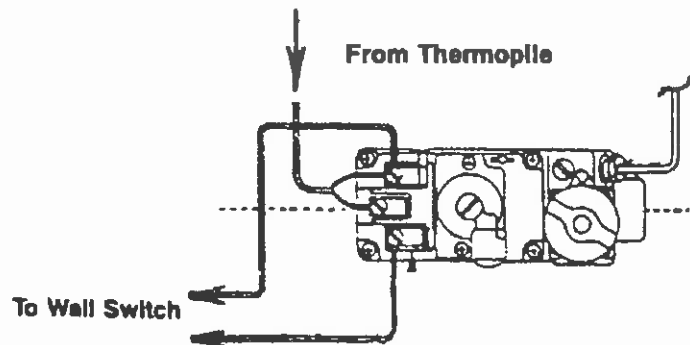


TYPICAL LAYOUT FOR RIGID PIPE INSTALLATION

INSTALLATION OF MILLIVOLT REMOTE WALL SWITCH FOR AUTOMATIC GAS VALVE

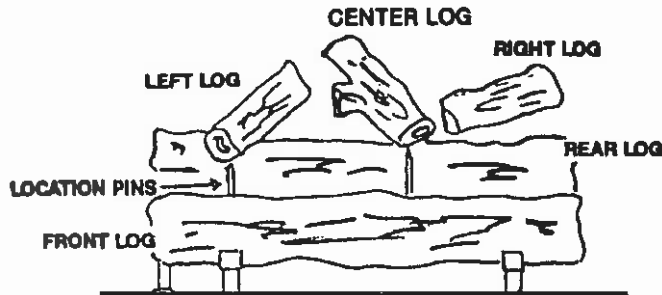
1. Thread wire through gas inlet opening. Be sure not to cut wire. Lead same to a conveniently located wall receptacle box. For best long term results, switch must not be more than 10 feet from fireplace.
2. Attach wire to switch, install switch in receptacle box and mount switch cover plate.
3. Connect wires to gas valve. One wire to the top terminal and one wire to the bottom terminal.

CAUTION: Do not wire millivolt remote wall switch or gas valve to a 110 volt power supply. Electrical current used to operate this appliance is generated by the thermopile.



INSTALLATION OF LOGS

1. Remove the five (5) logs from carton.
2. Place the rear log onto the three (3) pins behind the main burner. (The rear log has three (3) pre-punched holes.)
3. Place the front log onto the two (2) pins in front of the main burner. (The front log has two (2) pre-punched holes.)
4. Place the upper three (3) logs. Start with the left log first, then the center log (the log with the branch) and then the right log.
5. With the logs in position light the burner and observe the flame pattern. Flames must not impinge on (touch) logs.
6. Now re-install the glass, glass retainer and frame.



OPERATING AND MAINTENANCE INSTRUCTIONS

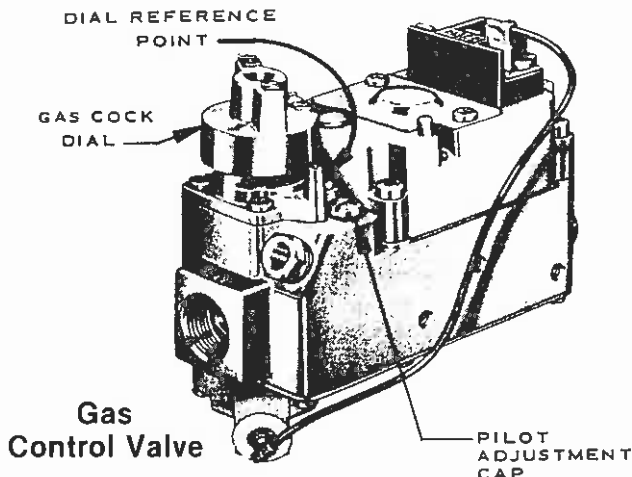
WARNING: WHEN PURGING THE GAS LINE, THE GLASS FRONT MUST BE REMOVED.

INSTRUCTIONS

LIGHTING PROCEDURE

1. Depress and turn gas valve knob to "off". Wait sufficient time to allow gas which may have accumulated in the burner compartment to escape. (At least 60 minutes.)
2. Depress valve knob and turn to "pilot".
3. Depress and hold valve knob while pushing Piezo-electric spark lighter (red button). Hold valve knob depressed until pilot remains lit when knob is released (approximately one minute).
4. Turn valve knob to "on".
5. If unit fails to start, repeat steps one through four.

NOTE: If unit is equipped with remote "On-off" wall switch, main burner will not ignite if wall switch is off.



NOTE: The gas control is designed to be either fully on or off. Never use control to vary flame height, ect.

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.

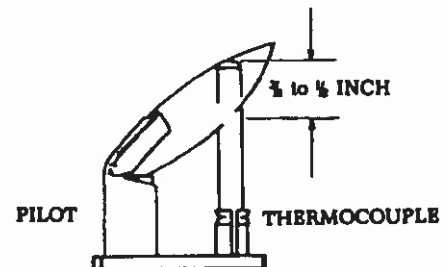
It is recommended that you burn your new fireplace for at least four (4) hours the first time you use it **WITHOUT THE FAN ON.**

SHUT-DOWN PROCEDURE

1. To turn off Main Burner only, turn Valve Knob to "PILOT" position.
2. For complete shut down, slightly depress Valve Knob, turn to "OFF" position.
3. The CDV34 Burner Assembly has been engineered and permanently adjusted for proper flame control. **DO NOT ALTER GAS ORIFICE.**
4. 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.

PILOT BURNER ADJUSTMENT

1. Remove Pilot Adjustment Cap.
2. Adjust pilot key to provide properly sized flame.
3. Replace Pilot Adjustment Cap.
4. Leak Test.



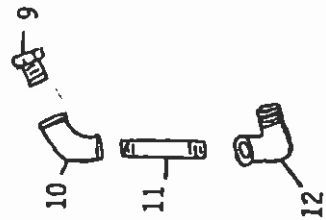
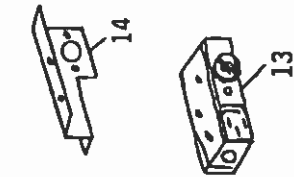
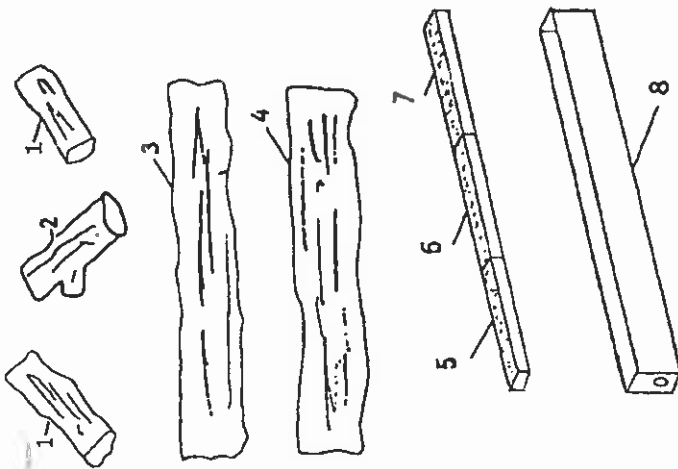
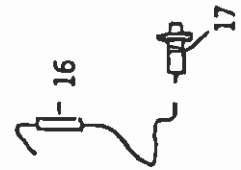
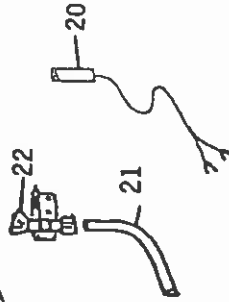
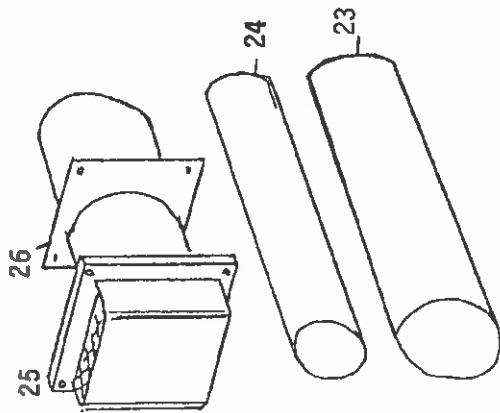
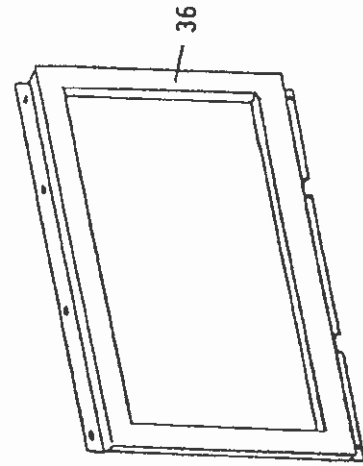
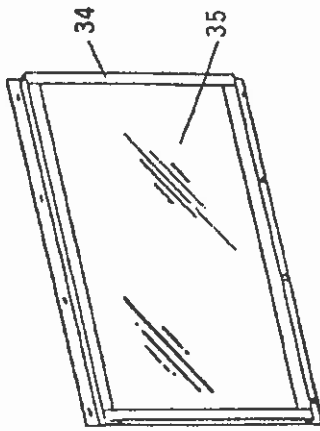
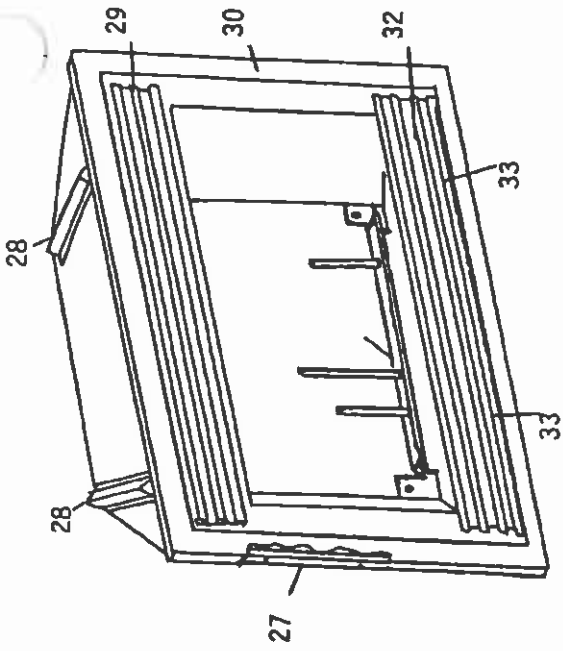
INSTRUCTIONS
CONTINUED ON
PAGE 12

REPAIR PARTS LIST

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

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	2	GF6008P3	Left and Right Top Logs
2	1	GF6008P2	Center Top Log with Limb
3	1	GF6018P9	Rear Log
4	1	GF6018P8	Front Log
Not Shown	1	GF1004P5	Log Set - Carton of 5 Logs
Not Shown	1	GF1040	Burner Valve Assembly, Complete - Natural Gas
Not Shown	1	GF1043	Burner Valve Assembly, - Complete - Propane
Not Shown	1	GF8017	Burner Plate Gasket
5	1	GF7602P2	Ceramic Tile - Natural Gas
5	1	GF7602P5	Ceramic Tile - Propane
6	1	GF7602P3	Ceramic Tile - Natural Gas
6	1	GF7602P6	Ceramic Tile - Propane Gas
7	1	GF7602P4	Ceramic Tile - Natural Gas
7	1	GF7602P7	Ceramic Tile - Propane Gas
8	1	GF1047	Burner Assembly - Natural Gas - Includes Items 5,6 & 7
8	1	GF1048	Burner Assembly - Natural Gas - Includes Items 5,6 & 7
9	1	GF7610P9	Main Burner Orifice - Natural Gas
9	1	GF7610P2	Main Burner Orifice - Propane Gas
10	1	OB330X1	Reducing Elbow 90°
11	1	OB340X15	3/8" Pipe Nipple 4" Long
12	1	OB351X1	3/8" Street Elbow 90°
13	1	GF7500	Control Valve - Natural Gas
13	1	GF7500P2	Control Valve - Propane Gas
14	1	GF3130	Gas Valve Bracket
15	1	GF7571	Mercury Flame Switch
16	1	GF7590	Ignitor Electrode Assembly
17	1	GF7570	Piezo Push Button Ignitor
18	1	OB345X1	Remote Wall Switch (Toggle)
19	1	OB333X15	Remote Switch Wire 15'
20	1	GF7520	Thermopile 18"
21	1	OB331X9	Pilot Supply Line - 9" Length
22	1	GF7560	Pilot Assembly - Natural Gas
22	1	GF7560P2	Pilot Assembly - Propane Gas
23	1	GF1064	7" Diameter Pipe - 19 1/4" Long
24	1	GF3268	4" Diameter Pipe - 19 1/4" Long
25	1	C34VT	Vent Termination Cap Assembly
26	1	GF3296	Inner Wall Plate
27	1	GF3276	Outer Body Wrap
28	1	GF7230	Top Stand-off Spacer
29	1	GF2024W	Top Grill Weldment
30	1	GF2020W	Front Face Weldment
31	1	GF1065	Rear Log Support Assembly
32	1	GF2023W	Bottom Grill Door Weldment
33	1	GF8505	Bottom Grill Door Hinge
34	1	GF2073W	Glass Retainer Weldment
35	1	GF1021	Ceramic Glass Window & Seal Assembly
36	1	GF2022W	Glass Frame Weldment
Not Shown	2	GF3278	Side Stand-off Spacer

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



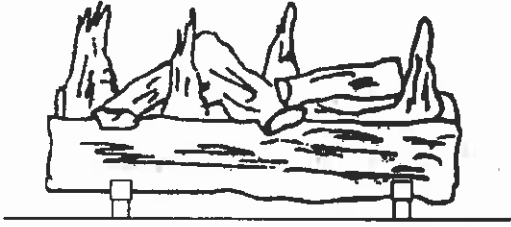
MAINTENANCE

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

Steps for Cleaning Procedure

1. Turn off pilot.
2. Remove glass front.
3. Remove logs.
4. Vacuum burner compartment, especially around the orifice opening.
5. Re-install logs.
6. Re-install glass front.
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.

NOTE: It is important to periodically preform a visual check of the pilot and the burner flame and to compare them with 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, ect. 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.

INSTALLATION INSTRUCTIONS FOR OPTIONAL MODEL C42FK FAN KIT

Kit Includes:

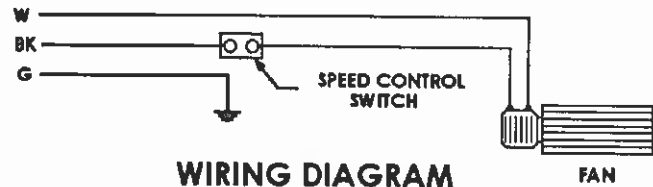
- 1 - Fan Assembly
- 1 - Speed Control Switch
- 1 - Hardware Pack

The 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 Electrical Code, ASNI/NFPA70.

INSTALLATION

1. Open bottom louver door.
2. Slide fan assembly into opening, line up the mounting holes with the screw studs protruding from the floor panel and secure with the (2) nuts provided.
3. Install electrical wiring. It is recommended that the fan speed control switch be mounted in a wall receptacle box near the fireplace for convenient operation.

NOTE: When installing this fan kit in an operating fireplace, it will be necessary to remove the gas supply line to fit fan assembly in place. Check for leaks after replacing the gas supply line as outlined in this manual.



NOTE: Electrical wiring and installation must conform to all applicable codes and ordinances and must be done by a qualified electrician.

CAUTION: Electrical power supply must be disconnected prior to servicing of this fan.