

INSTALLATION OPERATION AND SERVICE MANUAL

VENTED DECORATIVE GAS APPLIANCE/ DECORATIVE COAL/LOG SET ***B30/B31/B32/B33/B34***



PLEASE READ THIS MANUAL CAREFULLY BEFORE INSTALLING AND OPERATING THE APPLIANCE.

ALWAYS RETAIN THE MANUAL WITH THE UNIT IN THE EVENT OF A CHANGE OF OWNERSHIP

WARNING: If the information in this manual is not followed exactly, a fire or [explosion may result causing property damage, personal injury or loss of life.

*Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance

WHAT TO DO IF YOU SMELL GAS:

*Do not try to light any appliance.

*Do not touch any electrical switch; do not use any phone in your building.

*Immediately call your gas supplier from a neighbors phone. Follow the gas suppliers instructions.

*If you cannot reach your gas supplier; call the fire department.

- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

Warning: This appliance is equipped for either Natural or Propane Gas. Field conversion is not permitted. This appliance can be returned for conversion.

This online installation manual is for planning purposes: We reserve the right to update and revise these instructions.

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1 INTRODUCTION

Please read this manual carefully before operation the product. Then relax, sit back and enjoy your new appliance.

1. GENERAL INSTRUCTIONS

- (a) This products should be installed by a competent gas appliance installer. When supplied as a decorative log-set, the product can only be installed in a non-combustible hearth with an adequately sized flue. The “draw” of which must be adequate to safely vent all emissions to the outside without spillage.
- (b) The installer should assure that the chimney is sound, free from obstructions and able to vent all flue products safely to the outside. The area of the hearth surrounding the fire should be of non-flammable material, such as fire resistant brick or refractory. The area immediately in front of the appliance should be made of nonflammable material as well. Carpets of flammable material should be at least (4) inches from either side of the appliance and one foot from the front.
- (c) Never throw cigarettes or any other flammable material in the fire as the buildup of ashes may choke the burner.
- (d) When supplied as a Vented Decorative Gas Appliance the product may be installed in a non-combustible hearth having an adequate masonry tile or lined chimney and when supplied with the zero clearance box the product may be installed in combustible construction using 6” diameter “B” vent. Clearance to flammable materials as detailed in (b) above should be maintained.
- (e) A smoke test must be conducted prior to leaving the connected appliance to assure that all flue products are exhausted properly and that there is no spillage of fumes back into the room. All dampers and restrictors should be removed from the chimney. Certain types of chimney caps and hoods have an adverse effect on the “draw” of the chimney, particularly with open decorative effect gas fires, and they should be removed if it is confirmed that they are adversely affecting the “draw” of the chimney. The chimney should serve only one fireplace; gas/coal fires should never be connected to an existing flue that is serving another appliance.

NOTE: THE INSTALLATION MUST CONFORM WITH LOCAL CODES OR IN THE ABSENCE OF LOCAL CODES, WITH THE CURRENT NATIONAL FUEL GAS CODE, ANSI 223 IN THE US AND THE B149 INSTALLATION CODES IN CANADA. A 1/8 INCH N.P.T. PLUGGED TAPPING, ACCESSIBLE FOR TEST GAGE CONNECTION MUST BE PROVIDED, IMMEDIATELY UPSTREAM OF THE GAS SUPPLY CONNECTION TO THE APPLIANCE.

Adequate combustion and ventilation air must be provided.

The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of 1/2 psig. (3.5kPa).

The appliance must be isolated from the gas supply system by closing its individual manual shutoff valve during any pressure testing of the gas supply system at test pressures equal to or less than 1/2 psig. (3.5kPa).

2) COMBUSTION AIR

In open rooms of normal construction (without storm windows or tightly fitting doors) sufficient combustion air can usually be supplied by infiltration. Ensure that the installation location is adequately ventilated and that air flow is not obstructed around the appliance.

3) APPLIANCE LOCATION CLEARANCE

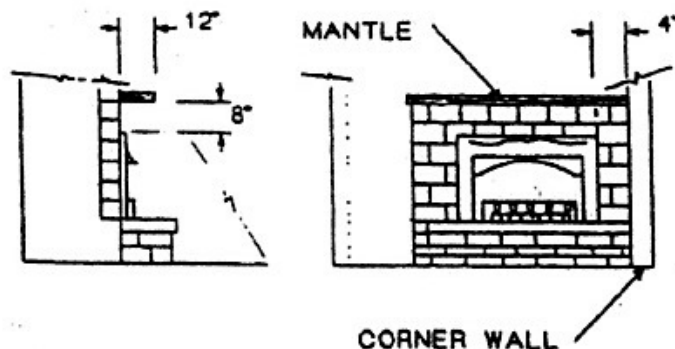
(a) Due to high temperatures the appliance should be located out of traffic areas and at least 36" away from furniture and draperies.

(b) Children and adults should be alerted to the hazards of high surface temperatures and open flames.

(c) Young children should be carefully supervised when they are in the same room as the appliance.

(d) MINIMUM CLEARANCES TO COMBUSTIBLES:

For Vented Decorative Appliance, installed in a vented fireplace constructed of a non-combustible material: back 0", floor 0", sides 0", to combustible mantle 8"; mantle may extend up to 12" maximum from the wall. When installed in a corner location the appliance may be located within 4" of the side wall. When there is no existing fireplace or in new construction, the appliance may be installed using a "B" vent and a zero clearance insert ZC-O1.



4) NATURAL GAS AND PROPANE PIPING

(a) The installation must conform with local codes or, in the absence of local codes, with the current National Fuel Gas Code ANSI Z223 in the US and the B149 Installation Codes in Canada.

(b) Before any system of gas piping is finally put to service, it should be carefully tested to ensure

it is gas tight. As an aid in determining where the gas may leak, it is recommended that a soapsuds solution be used. Under no conditions shall a live flame or fire be used to locate a gas leak.

- (c) The minimum inlet gas pressure permissible is 5" W.C. for natural gas and 11" W.C. for L.P. gas for the purpose of input adjustment
- (d) The maximum inlet gas supply pressure permissible is 14".
- (e) A 1/2" natural gas supply pipe is required to ensure adequate capacity. It is recommended that a union be placed in the supply piping to facilitate the easy removal and servicing of the burner assembly.
- (f) This appliance has been set for 30,000 btu/h for natural gas and 25,000 btu/h for propane at sea level rating. Adjustment to orifice size must be made for altitudes above 2000 feet. Consult with the manufacturer for recommendations.

5) VENTING

If installing the appliance into a fireplace, it is recommended that the chimney be thoroughly cleaned before installation and checked for soundness and general condition.

- (a) The flue diameter must be no less than 6 inches. The height of the chimney must be a minimum of 12 feet. The fireplace should be serviced annually and the chimney checked for soot buildup and/or chimney falls of material that could over a period, choke the burner. If the chimney shows signs of deterioration it is recommended that a suitable liner be installed.
- (b) Where there is no existing chimney or in new construction the appliance may be installed using 6" diameter "B" vent and the horizontal vent length is not to exceed 6 feet. Refer to detailed instructions provided with the Zero Clearance Insert.
- (c) Residents of the commonwealth of Massachusetts must weld their damper in an open position or remove it completely, if they have a fireplace with existing damper.

CAUTION: Do not connect this appliance to a chimney flue serving a separate solid-fuel burner appliance.

6) INSTALLATION INSTRUCTIONS

IMPORTANT: The main supply shut-off valve/tap must never be located inside the firebox and must be within arm's length from the fire and accessible at all times.

Four Seasons Supply cannot and will not accept any warranty claim if the appliance has not been installed to comply with the following instructions and with local and national codes as noted above.

- (a) If installing the firebox, lift into position inside the existing fireplace and level in place. Connect the flue outlet of the firebox to the chimney liner if one is provided.
- (b) If there is no existing fireplace, or in new construction, the appliance can be installed using

the zero clearance insert and a 6" diameter "B" vent. Additional installation instructions are provided with the zero clearance insert ZC-01.

(c) Check all screws and nuts on the burner for tightness of connection.

(d) With the controls facing the front, center the burner in the base of the firebox or fireplace. When properly positioned no part of the burner tray projects beyond the vertical opening of the fireplace or firebox. Carefully place the assembled cast iron grate over the burner making sure that there is at least a 3/4" gap between the grate and the back of the burner tray. Temporarily remove the grate and install the hold down screws.

(e) For a maximum realistic look, run the gas supply tube through the masonry or via the front of the chimney back wall into the fireplace opening to conceal the supply. All pipe work going through masonry should be sleeved in conduit. Where pipe work is liable to come into contact with fresh cement, cover with Denzo or similar electrical tape to protect the pipe from corrosion.

(f) The 3/8" pipe should be no longer than 6 feet. The supply pressure at the fire should be no less than 5 inches W.C. for Natural Gas and 11 inches for Propane. After correctly installing the appliance and before connecting the supply to the burner, "blow out" and dust particles that could have entered the new pipe work by opening up the gas supply for a few seconds so as not to clog the burner.

7) OPERATION

(a) Testing, adjusting and checking burner and controls. Follow the instructions and illustrations given in drawing GE-3003 to prepare the burner for firing.

To light the burner follow the instructions given on the plate attached to the appliance and shown below.

Test and adjust all controls under actual operating conditions and in accordance with applicable local and national installation codes for gas burner appliances.

When lighting the burner wait five (5) minutes to clear and any gas. If you then smell gas, stop. Follow "B" in the safety information above. If you don't smell gas, go to the next step in the lighting instructions.

NOTE: If the piezo igniter fails, the pilot can be lit manually as follows:

- 1) Position the control knob to "PILOT" position.
- 2) While depressing the control knob, light the pilot with a match.
- 3) Hold the control knob down for 60 seconds.
- 4) Contact your service technician or gas supplier to replace the defective igniter.

(b)DO NOT BURN YOUR FIIRE IN THE MAXIMUM POSITION FOR THE FIRST FIVE HOURS.

This will allow for the decorative coals to burn in slowly and be tempered. During this burning-in period, you may experience a slight smell due to the burning off of organic materials used in the manufacturing process; this is quite normal. When first lit, the fire will burn with a bluish flame while the coals are cold. Gradually as the fire settles down it will have a more realistic yellow flame. This may or may not produce a little soot on the coals as in the case of a real fire.

8) SMOKE TEST

This must be carried out after the appliance has been fully installed to make sure that no products of combustion spill into the room. The following test must be carried out on every installation.

- (a) Close all windows and doors leading to the room in which the appliance is installed.
- (b) If a connecting room is fitted with an extractor fan, the test must be conducted with the fan running and any connecting door left open.
- (c) Light the burner and turn to the highest setting, refer to the lighting instructions provided.
- (d) After 10 minutes of operation, apply a smoke pencil along the front of the fireplace, 2 inches below the arched opening and check that the smoke is all being drawn into the firebox. If a smoke pencil is not available a smoking cigarette or incense wand will suffice.
- (e) If the smoke is only partially being drawn into the flue, allow the appliance to run for an additional 10 minutes and repeat the test.
- (f) If the fumes are still not being exhausted completely by the flue, try opening a window slightly, if this clears up the problem then indications are that the room is tightly sealed and a permanent air opening must be supplied in the room where the appliance is installed. Otherwise, check the chimney for obstructions.
- (g) Disconnect the gas supply and obtain expert advice.

9) CLEANING PROCEDURE

- (a) Turn the control knob to the "OFF" position. This will extinguish the pilot flame.
- (b) Wait for appliance to cool. **DO NOT ATTEMPT TO CLEAN FIREPLACE WHEN HOT.**
- (c) Remove control access panel below grate. Any unwanted debris that may have fallen should be removed by hand.
- (d) Do not use a vacuum cleaner to clean any soot or debris from the coal set. The coals are made of a delicate material which becomes brittle after being heated, and must be treated gently. A light brushing with a soft brush is all that is required to remove any unwanted deposits. If it becomes necessary to replace chipped or damaged coals, additional coals are available together with vermiculite from Four Seasons.

- (e) Relight the fireplace referring to the lighting instruction plate attached to the unit or this manual.
- (f) Replace control access panel below grate.

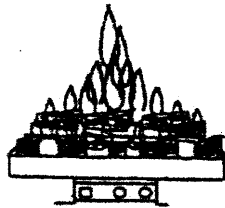
10) GENERAL MAINTENANCE

(a) INSTALLATION AND REPAIRS SHOULD BE DONE BY A QUALIFIED SERVICE PERSON. IT IS RECOMMENDED THAT THE APPLIANCE BE INSPECTED BEFORE FIRST USE AND AT LEAST ANNUALLY BY A PROFESSIONAL SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIAL, ETC. IT IS OF THE UTMOST IMPORTANCE THAT THE CONTROL COMPARTMENT AND CIRCULATION AIR PASSAGE WAYS OF THE APPLIANCE BE KEPT CLEAN.

(b) Keep burner and control compartment clean. CAUTION: When cleaning the burner area always make sure that the gas supply to the appliance is shut off. If the burner fails to light immediately or appears to be operating abnormally, do not tamper with it, call your licensed serviceman and have the problem remedied before placing the appliance into operation.

(c) Check periodically that the vent system is unrestricted and that a proper draught is present when the unit is in operation. All vented appliances require a source of fresh air in order to vent properly. Recent trends in home improvement and new tighter construction techniques have contributed to problems with chimneys venting properly. If you suspect your fireplace is not venting properly, do not operate the unit and seek expert advice.

(d) Periodically check the main burner flames. Flames should be evenly spread over the burner tray and there should be no evidence of significant soot deposit on the coals. See main burner diagram below.



(e) Keep the appliance area clear of combustible materials, gasoline and other flammable vapors and liquids.

(d) WARNING: Do not burn rubbish of any kind in this appliance. 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.

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

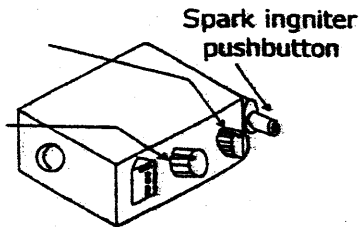
- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier call the fire department

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. Remove control access panel below grate.
3. Push in gas control knob slightly and turn clockwise to OFF..

GAS Control knob shown~ in "OFF" position~.

HI-LO flame control knob. burner



NOTE: Knob cannot be turned from "Pilot to OFF" unless knob is pushed in slightly. Do not force.

4. Wait five minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
5. Push in. gas control knob slightly and turn counter clockwise to "Pilot".
6. Depress the control knob fully and push spark igniter button several times to light the pilot.

- 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.

7. Continue to hold the control knob in for about 60 seconds after the pilot is lit.

NOTE: If the pilot extinguishes, repeat steps: 1,2,3 and 4.

8. Turn the control knob counter clockwise to "ON".
9. Adjust the HI-LO flame control knob to desired setting.

- NOTE: If the unit is hot; wait 5 minutes to relight the pilot.
- If control 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.

10. Replace control access panel below grate.

11. Wall switch may now be used to turn main flame ON and OFF.

TO TURN OFF GAS TO APPLIANCE

1. Remove control access panel below grate.
2. Push in gas control knob slightly and turn clockwise to "OFF". Do not force
3. Replace control access panel below grate.

12) TROUBLE SHOOTING

If the appliance fails to light or appears to be operating abnormally, do not tamper with it. Contact a licensed serviceman or your gas supplier.

To identify the problem with the appliance, you can check the following:

PROBLEM	PROBABLE CAUSE	REMEDY
Unit will not operate at all	* Gas may be shut off	* Check that main gas valve and appliance valve are on
Pilot will not remain lit	* Loose connection of thermopile * Defective thermopile * Pilot shield out of place (if supplied)	* Make sure the connections are tight * Replace if defective * Position shield in front of thermopile
No spark at pilot burner	* Piezo igniter has failed, loose or damaged cable or cracked porcelain	* Replace or repair as necessary
Smell raw gas	* Leak in supply line or unit. Check with soap	* Tighten connections

NOTE: THIS GUIDE IS ONLY A MEANS OF IDENTIFYING THE PROBLEM AND ITS PROBABLE CAUSE. REPAIRS SHOULD BE DONE BY A QUALIFIED SERVICE PERSON.

—FOR YOUR SAFETY—

IF YOU SMELL GAS:

- *open windows
- *don't touch any electrical switches; do not use any phone in your building
- *extinguish any open flame
- *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

13) GUARANTEE

Coals (Burner and fuel components only) are guaranteed against breakage in normal use at their replacement cost for a period of twelve months from the date of purchase. All other components are guaranteed against defect in materials and workmanship for one year from the date of purchase. Any other claim under this guarantee must be accompanied by a copy of the original retail purchase invoice, clearly showing the date of purchase and returned to the supplier. This guarantee will be invalidated if the appliance is not fitted by a certified technician in strict accordance with these instructions. If you have a problem, contact Four Seasons Supply

PLEASE NOTE

In the interest of product development and the introduction of any new relevant mandatory gas requirements the manufacturer reserves the right to modify and amend the appliance(s) and instructions as and when deemed necessary, without prior notice. Diligence has been taken to compile these instructions in order to cover all building/gas utilization code requirements. It is our intention to cover every occurrence of the Company's involvement with decorative effect fires. The Company will not accept In the interest of product development and the introduction of any new relevant mandatory gas requirements, we reserve the right to modify and amend the appliance(s) and instructions as and when any liability for any omissions in these instructions. It is the gas installation contractor that must check for current compliance with the legal requirements of installation. With these instructions we have made every effort to make sure that they relate to the North American market place, particularly where safety is concerned.

REPLACEMENT PARTS LIST

<i>Type of Control</i>	<i>Manufacturer of Control</i>	<i>Part Number</i>
Natural Gas or Propane Valve	SIT Controls	820.640, 820.639
Pilot Assembly	SIT Controls	.i 90.608, .190.607
Piezo Igniter	SIT Controls	073.953
Spill Switch	ThermoDisc	36T01B3
Thermopile	SIT Controls	Q313A

OPTIONAL
REMOTE
OR
WALL SWITCH

Wall Switch

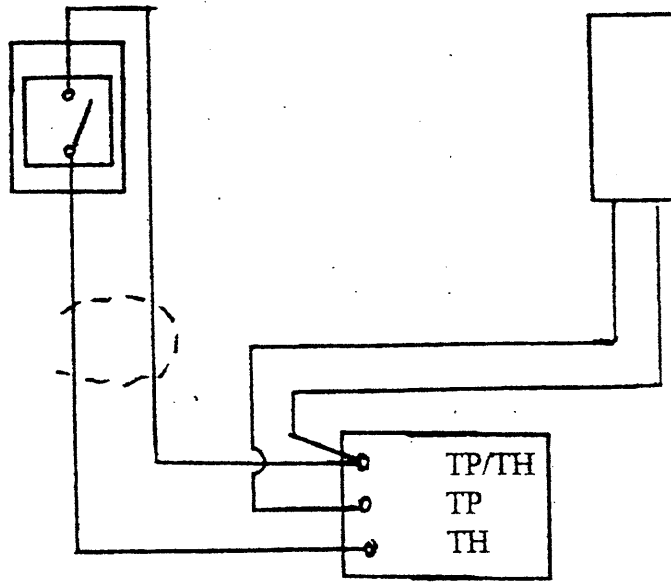
* 18 Gauge Wire
(Rated 237 Deg. 125
Deg. C)

F

* Supplied with
Remote

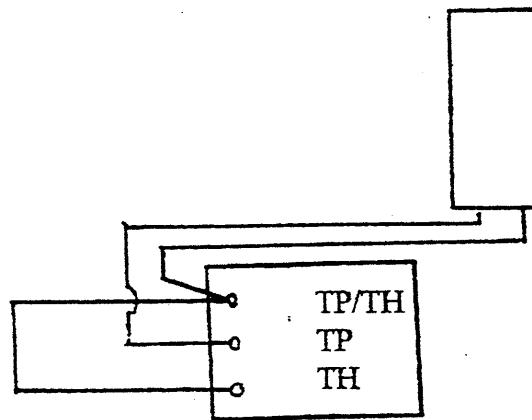
~ Supplied by
Installer for

JUMPER
GAS VALVE
(Shown configured
for wall switch or
remote)
THERMOPILE



GAS VALVE
(As delivered)

Schematic of the electrical connections for
installations.



various