

INSTALLATION INSTRUCTIONS

Installation And Operation Instructions

Unvented Gas Log Room Heaters

VFL/VFGL/FVFGL-18M-2* Series
VFL/VFGL/FVFGL-24M-2* Series
VFL/VFGL/FVFGL-28M-2* Series
VFL/VFGL/FVFGL-21M-2* Series
VFL/VFGL/FVFGL-18T-2 Series
VFL/VFGL/FVFGL-24T-2 Series
VFL/VFGL/FVFGL-28T-2 Series

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.

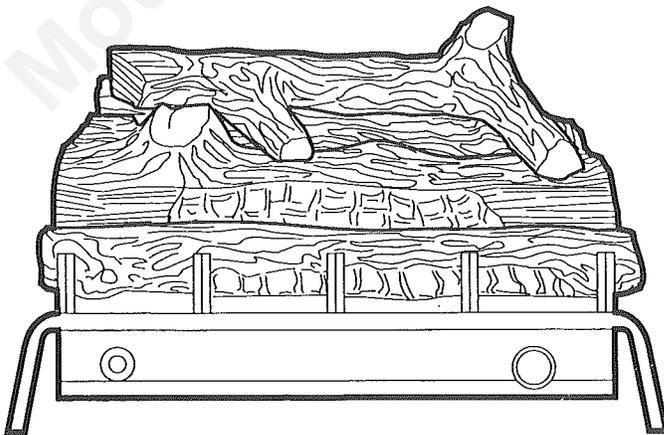
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS**
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's 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.

This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to combustion and ventilation air section, page 3.

Due to high temperatures, the appliance should be located out of traffic and away from furniture or draperies.

Do not place clothing or other materials on or near this appliance.

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE.



*Note: Manual control models are also design certified for use as vented gas log sets.

Your options are:

- a. Rework equations adding the space of adjoining room(s). If the extra volume provides an unconfined space, then remove door or add ventilation grills between rooms. Refer to National Fuel Gas Code, ANSI Z223.1 1992, Section 5.3.
- b. Vent room directly to the outdoors. Refer to National Fuel Gas Code, ANSI Z223.1 1992, Section 5.3.
- c. Install a lower BTU/Hr heater, such as a 24,000 BTU/Hr, to make the area an unconfined space.

If the actual BTU/Hr used is less than the maximum BTU/Hr the space can support, then the space is an unconfined space. You will need no additional fresh air ventilation for an unconfined space.

WARNING: IF THE AREA IN WHICH THE HEATER MAY BE OPERATED IS SMALLER THAN THAT DEFINED AS AN UNCONFINED SPACE OR IF THE BUILDING IS OF UNUSUALLY TIGHT CONSTRUCTION, PROVIDE ADEQUATE COMBUSTION AND VENTILATION AIR BY ONE OF THE METHODS DESCRIBED IN THE NATIONAL FUEL GAS CODE, ANSI Z223.1 1992, SECTION 5.3 OR APPLICABLE LOCAL CODES.

PREINSTALLATION

WARNING: BEFORE INSTALLING IN A SOLID FUEL BURNING FIREPLACE, THE CHIMNEY FLUE AND FIREBOX MUST BE CLEANED OF SOOT, CREOSOTE, ASHES AND LOOSE PAINT BY A QUALIFIED CHIMNEY CLEANER.

Note: Illustrations shown in this manual reflect "typical" installations with nominal dimensions and are for reference only. Actual installations may vary due to individual design preferences. However, always maintain minimum clearances to combustible materials and do not violate any specific installation requirements. Refer to Figures 1 through 7 for clearances.

Note: The following steps represent the normal sequence of installation. Each installation is unique, however, and might require a different sequence.

When local codes require the damper to be fixed open, a damper stop must be installed to prevent full closure of the fireplace damper and provide a minimum 29 square inch flue opening at all times. Refer to accessories for damper clamp.

If damper clamp is not available, the damper may be fixed open in the following manner. Drill a hole in the end of the damper. Screw in a bolt of sufficient size and adjust to provide the minimum 29 square inches of flue opening.

CAUTION: HEATERS CREATE WARM AIR CURRENTS. THESE CURRENTS MOVE HEAT TO WALL SURFACES NEXT TO HEATER. INSTALLING HEATER NEXT TO VINYL OR CLOTH WALL COVERINGS OR OPERATING HEATER WHERE IMPURITIES IN THE AIR (SUCH AS TOBACCO SMOKE) EXISTS, MAY DISCOLOR WALLS.

Step 1. Turn off gas supply to the fireplace or firebox.

Step 2. Install and secure heater in fireplace or firebox.

Step 3. Connect gas line.

Step 4. Assemble logs and test flame.

Step 5. Sprinkle volcanic rock over base plate in front of and below the main burner.

Check Gas Type

This heater can only be connected to the gas type specified on the heater rating plate. This heater can not be modified in the field for a different gas type. If the gas supply differs, **DO NOT INSTALL** the heater. Contact your dealer to obtain the correct heater.

CLEARANCES

WARNING: DO NOT INSTALL THIS GAS HEATER:

- IN SLEEPING QUARTERS, BATHROOMS, A MOBILE HOME, OR A RECREATIONAL VEHICLE.
- WHERE CURTAINS, FURNITURE, CLOTHING OR OTHER FLAMMABLE OBJECTS ARE LESS THAN 42" FROM THE FRONT OF THE GAS HEATER.
- IN HIGH TRAFFIC AREAS.
- IN WINDY OR DRAFTY AREAS.

Ensure the minimum clearances shown in Figures 1 through 7 are maintained. Left and right clearances are determined when facing the front of the heater.

Follow these instructions carefully to ensure safe installation. Failure to follow these requirements may create a fire hazard.

Step 1. Sidewall Clearances: The sides of the fireplace opening must be at least 16" from any combustible side wall (Figure 1).

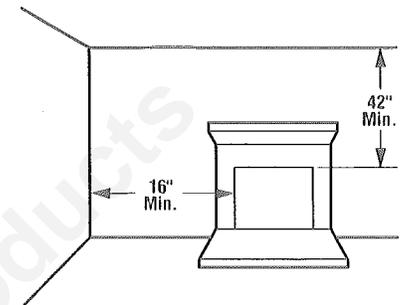


Figure 1

Step 2. Ceiling Clearance: The ceiling must be at least 42" from the top of the heater opening (Figure 1).

Step 3. Noncombustible materials (minimum requirements): To install the room heater without wood mantels, shelves or other combustible projections directly above the opening of the fireplace (firebox) refer to Figure 2 and Table 2. Note that at least 8" of noncombustible material must be installed above the heaters described in this manual.

Noncombustible materials, such as slate and marble, must be at least 1/2" thick.

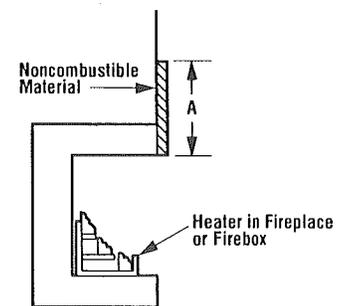


Figure 2

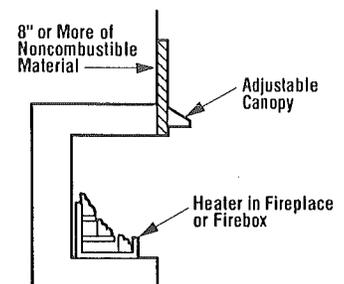


Figure 3

NOTE: DIAGRAMS & ILLUSTRATION NOT TO SCALE.

Noncombustible Material Requirements with No Mantel Installed

(A) Noncombustible Material Measurement	Requirements for Safe Installation
12" or more	Adjustable canopy not required.
8" minimum to 12"	Install adjustable canopy, P/N 053751 or P/N 053752 (Figure 3).
Less than 8"	Extend noncombustible material to at least 8" and install adjustable canopy (Figure 3). or Extend noncombustible material to a height of at least 12".

Table 2

Noncombustible Material Heights and Mantel Location

Noncombustible Material Measurement	Requirements for Safe Installation with Wood Mantel, Shelf or Other Combustible Projection
12" or more	Adjustable canopy not required. Observe profiles shown in Figure 4.
8" minimum to 12"	Install adjustable canopy and observe profiles shown in Figure 5. or Extend heat resistant material to at least 12" and observe profiles shown in Figure 4.

Table 3

Step 4. Wood mantel, shelf or combustible projection requirements: To install a wood mantel, shelf or other combustible projection directly above the fireplace (firebox), refer to Table 3 and to Figures 4 and 5 for installation profiles.

If your mantel profile is unsafe, you may either:

- Raise the mantel to an acceptable height, or
- Remove the mantel.

Example: The bottom of the mantel may project from the wall a maximum of 2 1/2" at a minimum of 28" above the opening. The top shelf of the mantel may project a maximum of 6" at a minimum of 34 1/2" above the opening.

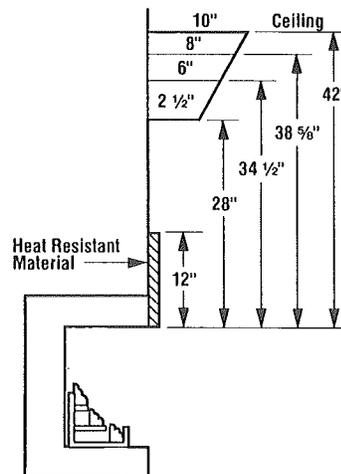


Figure 4

NOTE: DIAGRAMS & ILLUSTRATION NOT TO SCALE.

Example: The bottom of the mantel may project from the wall a maximum of 2 1/2" at a minimum of 8" above the opening. The top shelf of the mantel may project a maximum of 6" at a minimum of 14 1/2" above the opening.

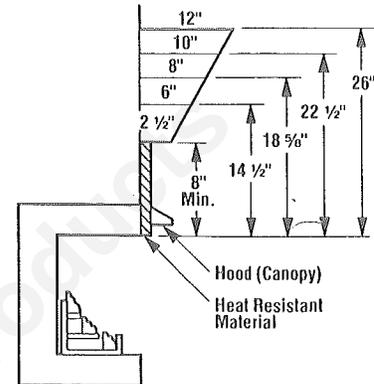


Figure 5

Step 5. Floor clearance: If combustible flooring materials, such as carpeting or asphalt tile, are to be located within 14" of the fireplace or firebox opening, the room heater base must be at least 5" above the combustible flooring material (Figure 6).

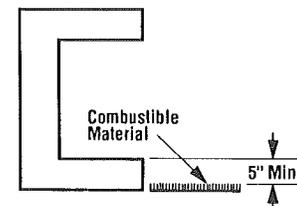


Figure 6

The room heater base may be lower than 5" above the combustible flooring materials if the combustible flooring materials are more than 14" from the fireplace or firebox opening (Figure 7).

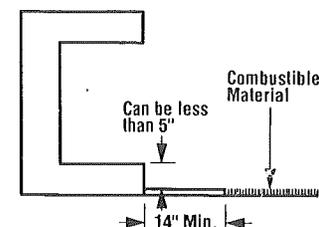


Figure 7

INSTALLATION

WARNING: DO NOT ALLOW FANS TO BLOW DIRECTLY INTO THE FIREPLACE. AVOID ANY DRAFTS THAT ALTER BURNER FLAME PATTERNS.

WARNING: DO NOT USE A BLOWER INSERT, HEAT EXCHANGER INSERT OR OTHER ACCESSORY NOT APPROVED FOR USE WITH THIS HEATER.

This appliance must not be operated without a fireplace screen installed. Fireplace screens must not impair the free flow of combustion air to the appliance.

Do not burn solid fuels in any fireplace equipped with this listed unvented gas room heater.

Installed decorative glass door enclosures must be fully opened when operating this listed unvented gas room heater.

Any outside air ducts and/or ash dumps that are part of the original solid fuel burning fireplace system must be fully closed and sealed at the time of installation of this listed unvented gas room heater.

WARNING: SPECIAL CARE IS REQUIRED IF YOU ARE INSTALLING THE UNIT INTO A SUNKEN FIREPLACE. YOU MUST RAISE THE FIREPLACE FLOOR TO ALLOW ACCESS TO GAS LOG CONTROLS. THIS WILL INSURE ADEQUATE AIR FLOW AND GUARD AGAINST SOOTING. RAISE THE FIREPLACE FLOOR USING NONCOMBUSTIBLE MATERIALS.

A qualified gas appliance installer must install this heater.

Check gas type: The gas supply must be the same as stated on the heater's rating plate. If the gas supply is different, **DO NOT INSTALL** the heater. Contact your dealer for the correct model.

Step 1. Placement and Securing Heater – Center the heater in the fireplace or firebox. Make certain the grate front feet sit inside the front edge of the fireplace or firebox.

To avoid any movement of the heater during operation, attach the grate to the floor of the fireplace or firebox using the screws provided. An anchor hole is provided on the two (2) bottom members of the grate. After centering the grate correctly, mark the hole positions on the fireplace/firebox floor. Drill two (2) $\frac{3}{4}$ " diameter holes approximately $\frac{1}{2}$ " deep.

Anchor the grate to the fireplace/firebox floor with the two (2) screws provided (Figure 8).

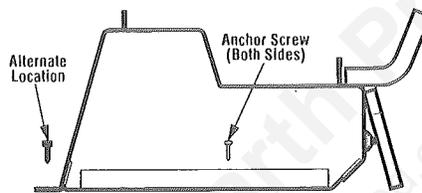


Figure 8

Step 2. Connecting Gas Line – A qualified gas appliance installer must connect the gas room heater to the gas supply.

Consult all local codes.

Route gas line using techniques and materials prescribed by local and/or national codes. Only use pipe of $\frac{1}{2}$ " or greater diameter to allow full gas volume to the gas fireplace. Undue pressure loss will occur if the pipe is too small.

An ANSI approved manual shut-off valve and union must be installed upstream of the heater within the fireplace cavity when rigid pipe is used.

A sediment trap must be installed upstream of the heater to prevent moisture and contaminants from passing through the pipe to the heater controls and burners (Figure 9). Failure to do so could prevent the heater from operating reliably.

IMPORTANT: HOLD HEATER REGULATOR WITH A WRENCH TO PREVENT MOVEMENT WHEN CONNECTING TO INLET PIPING

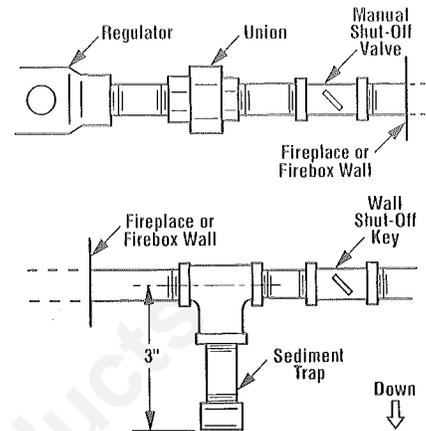


Figure 9

An external regulator must be used on all propane (L.P.G.) heaters, in addition to the regulator fitted to the heater, to reduce the supply tank pressure to 13" w.c. (maximum).

WARNING: CONNECTING DIRECTLY TO AN UNREGULATED PROPANE TANK MAY CAUSE AN EXPLOSION.

The heater gas inlet connection is $\frac{3}{4}$ " NPT at the regulator, located on the right side facing the heater. If a left side connection is required, the connection pipe may be piped under the rear of the appliance to end at the left hand side for connection to the inlet.

When tightening up the joint to the regulator hold the regulator securely with a wrench to prevent the regulator from moving.

Checking Gas Connections: Test all gas joints from the gas meter to the gas fireplace regulator for leaks using soap and water solution after completing connection. **DO NOT USE AN OPEN FLAME.**

A. Mix a 50% dish soap, 50% water solution.

B. Light the appliance (see safety and lighting instructions on pages 12 and 14).

C. Brush all joints and connections with the soapy water solution to check for leaks. If bubbles are formed, or gas odor is detected, turn the gas control knob to the "OFF" position. Either tighten or refasten the leaking connection and retest as described above.

D. When the gas lines are tested and leak free, observe the individual tongues of flame on the burner. Make sure all ports are open and producing flame evenly across the burner. If any ports are blocked, or partially blocked, clean out the ports.

NOTE: DIAGRAMS & ILLUSTRATION NOT TO SCALE.

Gas Pressure Check

The heater regulator controls the burner pressure which should be checked at the pressure test point ($\frac{1}{8}$ " NPT plugged tap) located at the bottom of the regulator (on manual models) or on the control valve itself (on T-Stat models).

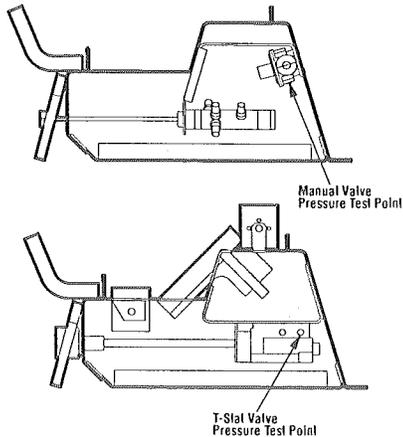


Figure 10

The pressure should be checked with the gas heater burning and the control set to high (3).

The pressure regulator on manual models is preset and locked to avoid tampering. If the pressure is not as specified in the Technical Details Chart on page 10, replace the regulator with P/N 110351 for natural gas and P/N 110352 for propane (L.P.G.) heaters.

Replace the test point plug after pressure measurement ensuring no gas leaks.

Step 3. Assembling the Logs

WARNING: DO NOT ADD EXTRA LOGS OR ORNAMENTS SUCH AS PINE CONES, VERMICULITE OR ROCK WOOL. USING THESE ADDED ITEMS CAN CAUSE SOOTING.

WARNING: DO NOT PLACE ANY LAVA ROCK ON LOGS OR BURNERS. THIS MAY CAUSE SOOTING. ONLY PLACE LAVA ROCK ON FLOOR OF FIREPLACE.

Each heater includes a set of four ceramic fiber logs. The heater and logs are assembled as shown in *Figures 11 and 12*. Handle these logs with great care. The logs can be easily damaged, but when handled properly they can provide years of performance and enjoyment.

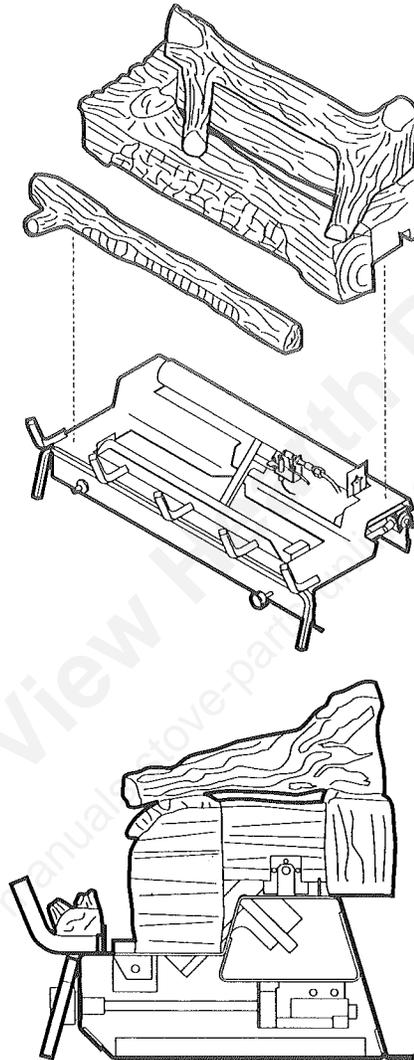


Figure 11

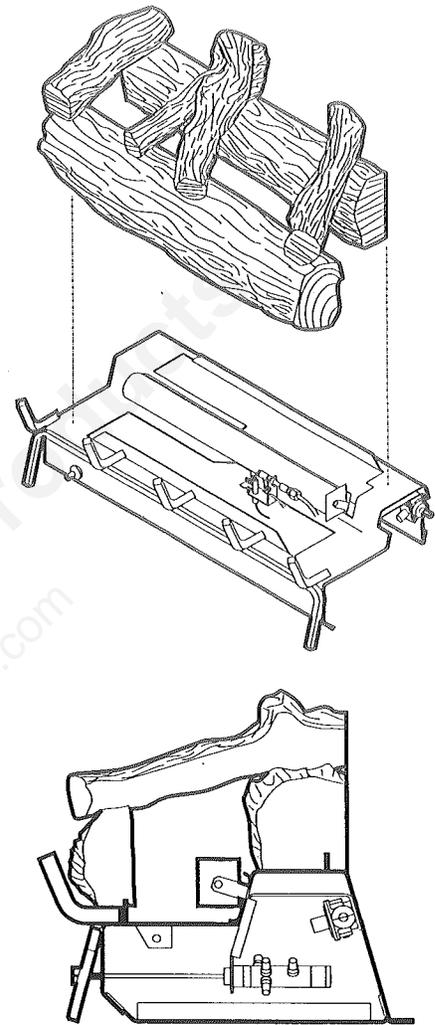


Figure 12

WARNING: FAILURE TO POSITION THE PARTS IN ACCORDANCE WITH THESE DIAGRAMS OR FAILURE TO USE ONLY PARTS SPECIFICALLY APPROVED WITH THIS HEATER MAY RESULT IN PROPERTY DAMAGE OR PERSONAL INJURY.

Periodically check the positioning of all logs.

Flame Appearance

REFER TO THE OPERATING INSTRUCTIONS LOCATED AT THE BACK OF THIS MANUAL BEFORE LIGHTING THE HEATER TO OBSERVE THE FLAMES.

Flames from the pilot, front and rear burner should be visually checked as soon as the heater is installed. In addition a periodic visual check of the flames should be made. The pilot flame should always be present when the heater is in operation (Figure 13).

WARNING: NO ADJUSTMENTS ARE TO BE MADE TO THE ODS PILOT SYSTEM. TAMPERING WITH THIS SYSTEM CAN BE EXTREMELY HAZARDOUS.

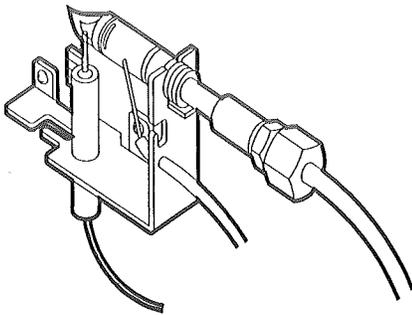


Figure 13

An incorrect pilot flame pattern is shown in Figure 14. This pilot flame will cause the thermocouple to cool. When the thermocouple cools, the log set will shut off. If pilot flame pattern is incorrect, or if log set shuts off, contact your service representative.

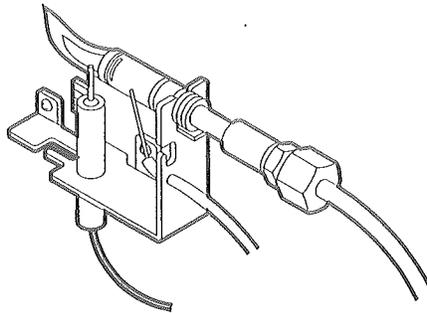
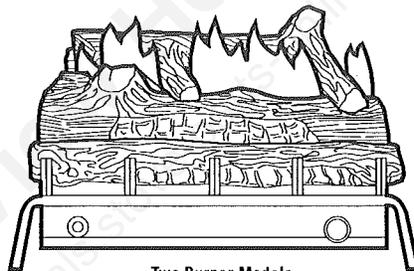


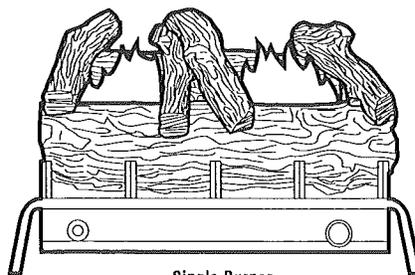
Figure 14

In normal operation, at full rate, after 15 minutes the following flame appearance should be observed:

Rear Burner (Two Burner Models) or Single Burner Flame Characteristics— The rear flames should be yellow. The flames should extend about 3 – 4" above the front log for natural gas and 2 – 3" above for propane (L.P.G.) gas (Figure 15).



Two Burner Models



Single Burner

Figure 15

Main Burner Characteristics (Two Burner Models)— The flames at the front burner holes will be blue becoming orange as they hit the bark-like texture of the base and front face of the log.

THERMOSTATIC OPERATION (T-STAT UNITS)

Heaters equipped with the T-stat option are fitted with a temperature sensing modulating gas valve. This option allows the heater to alternately cycle through four (4) operating modes. They are: Off (pilot only), Low, Medium and High, dependent upon the thermostatic control knob setting (Figure 16).

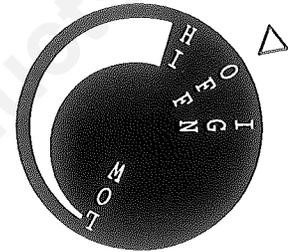


Figure 16

When the thermostat control knob is set to Low, the heater will maintain room temperature between 50°F and approximately 60°F. When the room temperature falls below 50°F, the heater will cycle on and remain on until the ambient room temperature reaches 55°F–60°F.

When the thermostat control knob is set to Medium, the heater will maintain room temperature between 73°F and approximately 90°F. When the room temperature falls below 73°F, the heater will cycle on and remain on until the ambient room temperature reaches 85°F–90°F.

When the thermostat control knob is set to High, the heater will maintain room temperature between 90°F and approximately 105°F. When the room temperature falls below 90°F, the heater will cycle on and remain on until the ambient room temperature reaches 105°F.

To set your heater to the desired comfort setting, turn on the unit by setting the control knob to High. When the room reaches the desired temperature, slowly turn the control knob toward the Medium/Low settings until the heater cycles off (pilot only). The heater will automatically cycle on and off maintaining the room temperature to the desired level.

Note: It may be desirable to mark the control knob indicating this setting, to allow this temperature setting to be found with ease again.

CLEANING AND SERVICING

WARNING: TURN OFF THE UNVENTED GAS ROOM HEATER AND ALLOW TO COOL BEFORE CLEANING.

CAUTION: YOU MUST KEEP CONTROL AREAS, BURNERS AND CIRCULATING AIR PASSAGEWAYS OF FIREPLACE CLEAN. INSPECT THESE AREAS OF FIREPLACE BEFORE EACH USE. HAVE FIREPLACE AND CHIMNEY (IF APPLICABLE) INSPECTED YEARLY BY A QUALIFIED SERVICE PERSON. FIREPLACE MAY NEED MORE FREQUENT CLEANING DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIAL, ETC.

Only limited cleaning will be required under the normal use of the heater. Dust the front grate, the top of the piezo cover and the control knob occasionally. Do not use cleaning fluids to clean the logs or any other part of the room heater.

Remove the logs, gently handling at each end. Use a vacuum cleaner to remove loose particles from the base and from around the burners. Gloves are recommended to prevent the fibers from pricking your skin. If the skin is pricked, wash gently with soap and water. Replace the logs as detailed in Step 3 Assembling the Logs.

If, after a period of use, the flames start to exhibit unusual shapes and behavior, or the burners fail to ignite smoothly, then the burner holes may require some cleaning. If this happens, it is preferable to contact your nearest dealer to get the appliance serviced.

REPLACEMENT PARTS

An exploded view of the room heater with numbered parts and a parts list can be found on page 16. All parts should be ordered through your Superior distributor or dealer. Parts will be shipped at prevailing prices at time of order.

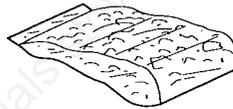
When ordering repair parts, always give the following information:

1. The model number of the heater.
2. The serial number of the heater.
3. The part number.
4. The description of the part.
5. The quantity required.
6. The installation date of the heater.

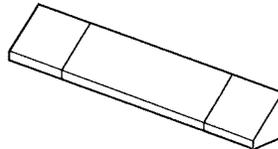
If you encounter any problems or have any questions concerning the installation of this heater, please contact your distributor. For the name of your nearest distributor contact:

SFC
4325 Artesia Avenue
Fullerton, CA 92633
(714) 521-7302

ACCESSORIES



Decorative
Volcanic Stone P/N 110791 VFVS



Adjustable Canopy
Brass P/N 053751 AC - SPB
Black P/N 053752 AC - BLK



Damper Clamp P/N 110701 DCK

NOTE: DIAGRAMS & ILLUSTRATION NOT TO SCALE.

UNVENTED GAS LOG ROOM HEATER SPECIFICATION CHART

Model No.	Valve Operation	BTU/hr Input	Gas Type
VFL / VFGL / FVFGL - 18 MSN-2	Manual*	14,000 - 25,000	Natural
VFL / VFGL / FVFGL - 18 MSP-2	Manual*	14,000 - 25,000	Propane/LPG
VFL / VFGL / FVFGL - 24 MSN-2	Manual*	17,000 - 32,000	Natural
VFL / VFGL / FVFGL - 24 MSP-2	Manual*	17,000 - 32,000	Propane/LPG
VFL / VFGL / FVFGL - 28 MSN-2	Manual*	17,000 - 32,000	Natural
VFL / VFGL / FVFGL - 28 MSP-2	Manual*	17,000 - 32,000	Propane/LPG
VFL / VFGL / FVFGL - 21MN-2	Manual*	15,750 - 21,000	Natural
VFL / VFGL / FVFGL - 21MP-2	Manual*	15,750 - 21,000	Propane/LPG
VFL / VFGL / FVFGL - 24 MN-2	Manual*	17,000 - 32,000	Natural
VFL / VFGL / FVFGL - 24 MP-2	Manual*	17,000 - 32,000	Propane/LPG
VFL / VFGL / FVFGL - 18 TSN-2	T-stat	14,000 - 25,000	Natural
VFL / VFGL / FVFGL - 18 TSP-2	T-stat	14,000 - 25,000	Propane/LPG
VFL / VFGL / FVFGL - 24 TSN-2	T-stat	17,000 - 32,000	Natural
VFL / VFGL / FVFGL - 24 TSP-2	T-stat	17,000 - 32,000	Propane/LPG
VFL / VFGL / FVFGL - 28 TSN-2	T-stat	17,000 - 32,000	Natural
VFL / VFGL / FVFGL - 28 TSP-2	T-stat	17,000 - 32,000	Propane/LPG

* Manual control models are also design certified for use as vented gas log sets.

UNVENTED GAS LOG ROOM HEATER TECHNICAL CHART

Model No.	BTU/HR High	Gas Type	Ignition	Regulator Pres. Setting	Gas Inlet Pressure**	Valve Operation
VFL / VFGL / FVFGL - 18N	25,000	Natural	Piezo	5" w.c.	Max. 10.5" w.c. Min. 6" w.c.	Manual*/T-stat
VFL / VFGL / FVFGL - 18P	25,000	Propane/LPG	Piezo	10" w.c.	Max. 13" w.c. Min. 11" w.c.	Manual*/T-stat
VFL / VFGL / FVFGL - 24N	32,000	Natural	Piezo	5" w.c.	Max. 10.5" w.c. Min. 6" w.c.	Manual*/T-stat
VFL / VFGL / FVFGL - 24P	32,000	Propane/LPG	Piezo	10" w.c.	Max. 13" w.c. Min. 11" w.c.	Manual*/T-stat
VFL / VFGL / FVFGL - 28N	32,000	Natural	Piezo	5" w.c.	Max. 10.5" w.c. Min. 6" w.c.	Manual*/T-stat
VFL / VFGL / FVFGL - 28P	32,000	Propane/LPG	Piezo	10" w.c.	Max. 13" w.c. Min. 11" w.c.	Manual*/T-stat
VFL / VFGL / FVFGL - 21N	21,000	Natural	Piezo	5" w.c.	Max. 10.5" w.c. Min. 6" w.c.	Manual*
VFL / VFGL / FVFGL - 21P	21,000	Propane/LPG	Piezo	10" w.c.	Max. 13" w.c. Min. 11" w.c.	Manual*

* Manual control models are also design certified for use as vented gas log sets.

** For the purpose of input adjustment.

TROUBLESHOOTING GUIDE FOR VENT-FREE GAS PRODUCTS

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
1. When igniter button is pressed, there is no spark at ODS/pilot.	A. Igniter electrode positioned wrong.	Replace igniter.
	B. Igniter electrode broken.	Replace igniter.
	C. Igniter electrode not connected to igniter cable.	Reconnect igniter cable.
	D. Igniter cable pinched or wet.	Free igniter cable if pinched by any metal or tubing. Keep igniter cable dry.
	E. Piezo igniter nut is loose.	Tighten nut.
	F. Broken igniter cable.	Replace igniter cable.
	G. Bad piezo igniter.	Replace piezo igniter.
2. Heater produces unwanted odors.	A. Heater burning vapors from paint, hair spray, glues, etc.	Ventilate room. Stop using odor-causing products while fireplace is running.
	B. Gas leak. See Warning statement on the front page.	Locate and correct all leaks.
3. Heater shuts off in use (ODS operates).	A. Not enough fresh air is available.	Open window and/or door for ventilation.
	B. Low line pressure.	Contact local gas company.
	C. ODS/pilot is partially clogged.	Clean ODS/pilot.
4. Gas odor even when control knob is in "OFF" position.	A. Gas leak. See Warning statement on the front page.	Locate and correct all leaks (see Checking Gas Connections, page 6).
	B. Control valve defective.	Replace control valve.
5. When igniter button is pressed, there is spark at ODS/pilot, but no ignition.	A. Gas supply turned off or manual shut-off valve closed.	Turn on gas supply or open manual shut-off valve.
	B. Control knob not in "PILOT" position.	Turn control knob to pilot position.
	C. Control knob not pressed in while in "PILOT" position.	Press in control knob while in pilot position.
	D. Air in gas lines when installed.	Continue holding down control knob. Repeat igniting operation until air is removed.
	E. ODS/pilot is clogged.	Replace ODS/pilot assembly or get it serviced.
	F. Gas regulator setting is not correct.	Replace gas regulator.
6. ODS/pilot lights, but flame goes out when control knob is released.	A. Control knob not fully pressed in.	Press in control knob fully.
	B. Control knob not pressed in long enough.	After ODS/pilot lights, keep control knob pressed in 30 seconds.
	C. Manual shut-off valve not fully open.	Fully open manual shut-off valve.
	D. Thermocouple connection loose at control valve.	Hand tighten until snug, then tighten ¼ turn more.
	E. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following: 1). Low gas pressure 2). Dirty or partially clogged ODS/pilot	1). Contact local gas company. 2). Replace ODS/pilot assembly or get pilot serviced.
	F. Thermocouple damaged.	Replace thermocouple.
	G. Control valve damaged.	Replace control valve.
7. Burner does not light after ODS/pilot is lit.	A. Burner orifice is clogged.	Clean burner or replace burner orifice.
	B. Burner orifice diameter is too small.	Replace burner orifice.
	C. Inlet gas pressure is too low.	Contact local gas company.
8. Delayed ignition of burner.	A. Manifold pressure is too low.	Contact local gas company.
	B. Burner orifice is clogged.	Clean burner or replace burner orifice.
9. Burner backfiring during combustion.	A. Burner orifice is clogged or damaged.	Clean burner or replace burner orifice.
	B. Burner damaged.	Replace burner.
	C. Gas regulator defective.	Replace gas regulator.
10. Slight smoke or odor during initial operation.	A. Vapors from paint or curing process of logs.	Problem will stop after a few hours of operation. Superior recommends running the heater with the excess ventilation for the first few hours.
11. Heater produces a whistling noise when burner is lit.	A. Turning control knob to "HI" position when burner is cold.	Turn control knob to "LO" position and let warm up for a minute.
	B. Air in gas line.	Operate burner until air is removed from line. Have gas line checked by local gas company.
	C. Dirty or partially clogged burner orifice.	Clean burner or replace burner orifice.

OPERATING INSTRUCTIONS — MANUAL CONTROL MODELS

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 heater has a pilot which must be lit by hand. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE OPERATING** smell all around the heater 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, do not try to repair it, call a qualified service technician. Forced or attempted repair may result in a fire or explosion.
- D. Do not use this heater 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

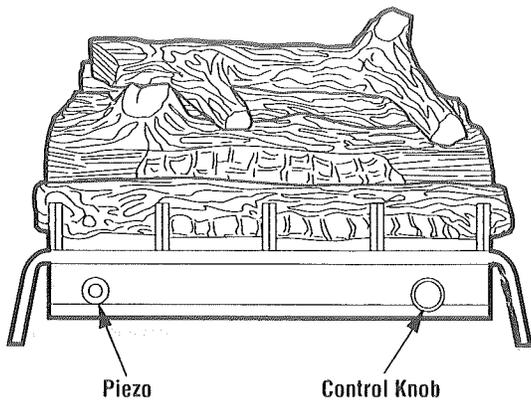
1. Stop! Read the safety information above.
 2. Make sure manual shut-off valve is fully open.
 3. Refer to *Figure 17* to locate gas control knob and piezo.
 4. Depress control knob in and turn clockwise  to the "OFF" position (*Figure 18*).
 5. Wait 5 minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow "B" in the safety information above. If you do not smell gas, go to the next step.
 6. The pilot is located on the right side in front of the burner (*Figure 19*).
 7. Depress control knob in and turn counterclockwise  to the "IGN" position (*Figure 20*). Press the control knob all the way in for 5 seconds.
- Note: If you are running the heater for the first time it will be necessary to press the control knob all the way in for 30 seconds to allow air to bleed out of the gas piping.*
8. With the control knob pressed in, push in and release the piezo igniter button to light the pilot.
 9. Hold the control knob in for a further 10 seconds to prevent the flame failure detector from shutting off the gas while the probe is warming up.
 10. Release the control knob while turning counterclockwise  to the preferred setting.
 - If the knob does not pop out when released, stop and immediately call your service technician or gas supplier.
 - If the pilot will not stay lit after several tries, depress and turn the gas control knob clockwise  to "OFF" and wait 30 seconds. Depress and turn knob counterclockwise  to "IGN" and press igniter button again. If your pilot does not relight depress and turn control knob clockwise  to "OFF" and call your service technician or gas supplier.
 11. Wait 30 seconds before readjusting the heater when the control knob has been turned down to a lower setting.

TO TURN OFF GAS TO HEATER

1. Depress and turn control knob clockwise  to the "OFF" position (*Figure 18*).

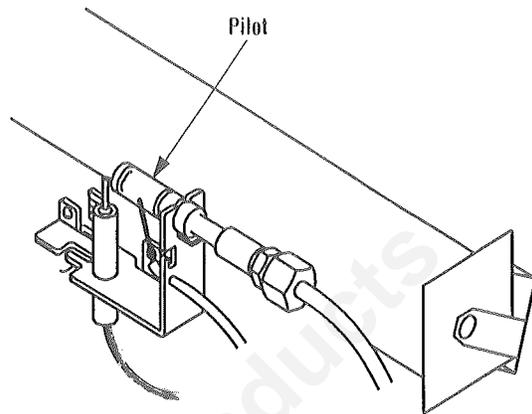
MANUAL MATCH LIGHTING PROCEDURE — EMERGENCY ONLY

1. If the pilot cannot be lit with the piezo igniter, the heater can be manually lit with a match.
2. With the right hand, depress and turn the control knob counterclockwise  to the "IGN" position. Hold in the knob.
3. Light the match and hold the flame to the end of the pilot and ignite the pilot.
4. Continue to hold control knob for an additional 10 seconds to insure pilot remains lit.
5. Release the control while turning control knob to desired setting.



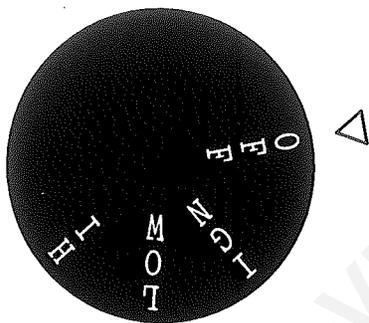
Gas Control Knob Location

Figure 17



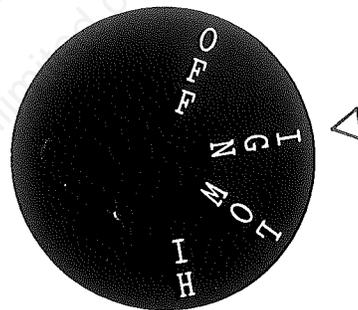
Pilot Location

Figure 19



Turn Control Knob to "OFF" Position (Manual)

Figure 18



Turn Control Knob to "IGN" Position (Manual)

Figure 20

LIGHTING INSTRUCTIONS — T-STAT MODELS (Refer to page 7 for 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 heater has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE OPERATING** 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, do not 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. Make sure manual shut-off valve is fully open.
 3. Refer to *Figure 21* to locate the gas control knob and piezo.
 4. Turn control knob clockwise  to the "OFF" position (*Figure 22*).
 5. Wait 5 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. If you do not smell gas, go to the next step.
 6. The pilot is located on the right side in front of the burner (*Figures 23*).
 7. Turn control knob counterclockwise  to the "PILOT" position. Press in control knob for 5 seconds (*Figure 24*).
- Note: If you are running the heater for the first time it will be necessary to press in the control knob for 30 seconds to allow air to bleed out of the gas piping.*
8. With the control knob pressed in, push down and release the piezo igniter button to light the pilot.
 9. Hold the control knob down for a further 10 seconds to prevent the flame failure detector from shutting off the gas while the probe is warming up.
 10. Release the control knob and turn counterclockwise  to adjust thermostat to desired setting, from low (LO) to high (HI).
 - If the knob does not pop up when released, stop and immediately call your service technician or gas supplier.
 - The T-stat valve is equipped with a built-in "LOCK-OUT" feature. To relight turn the gas control knob clockwise to "OFF" and wait 30 seconds to reset the "LOCK-OUT." Turn knob counterclockwise to "IGN" and press igniter button again. If your pilot does not relight after several tries, turn control knob clockwise to "OFF" and call your service technician or gas supplier.
 11. Wait 30 seconds before readjusting the heater when the control knob has been turned down to a lower setting.

TO TURN OFF THE GAS HEATER

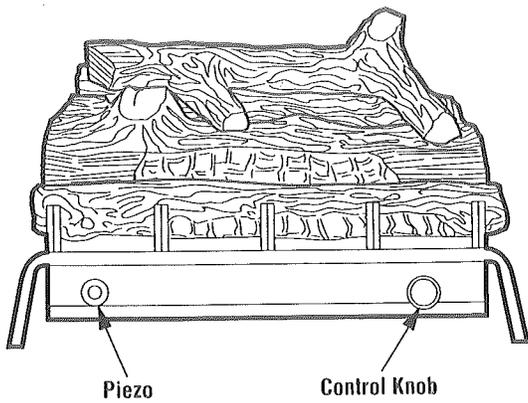
1. Turn control knob clockwise  to the "OFF" position (*Figure 22*).

TO TURN GAS OFF TO BURNERS ONLY

2. Turn control knob clockwise  to the "PILOT" position (*Figure 24*).

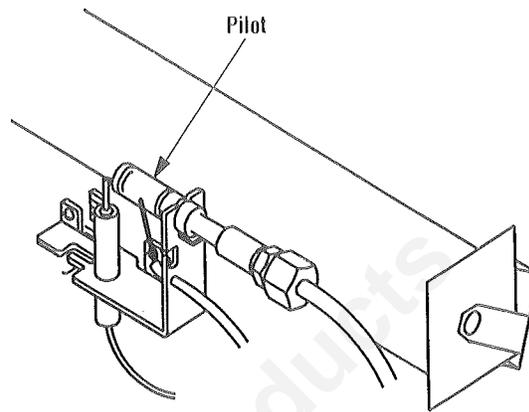
MANUAL MATCH LIGHTING PROCEDURE — EMERGENCY ONLY

1. The pilot is located on the right side in front of the burner (*Figure 23*).
2. Using a match holder, light the match and insert it into the holder. Offer lighted match to the end of the pilot.
3. Turn control knob counterclockwise  to the "PILOT" position. Press in the control knob for at least 5 seconds. The pilot will light.
4. Hold the control knob down for a further 10 seconds to prevent the flame failure detector from shutting off while the probe is warming up.
5. Release the control.
6. Turn control knob to desired setting.



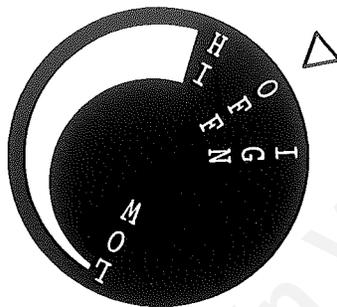
Gas Control Knob Location

Figure 21



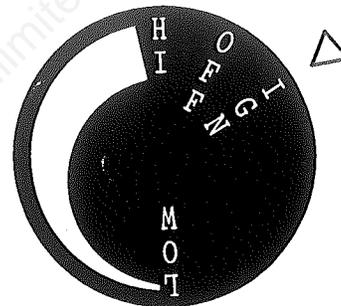
Pilot Location

Figure 23



Turn Control Knob to "OFF" Position (T-stat)

Figure 22



Turn Control Knob to "IGN" Position (T-stat)

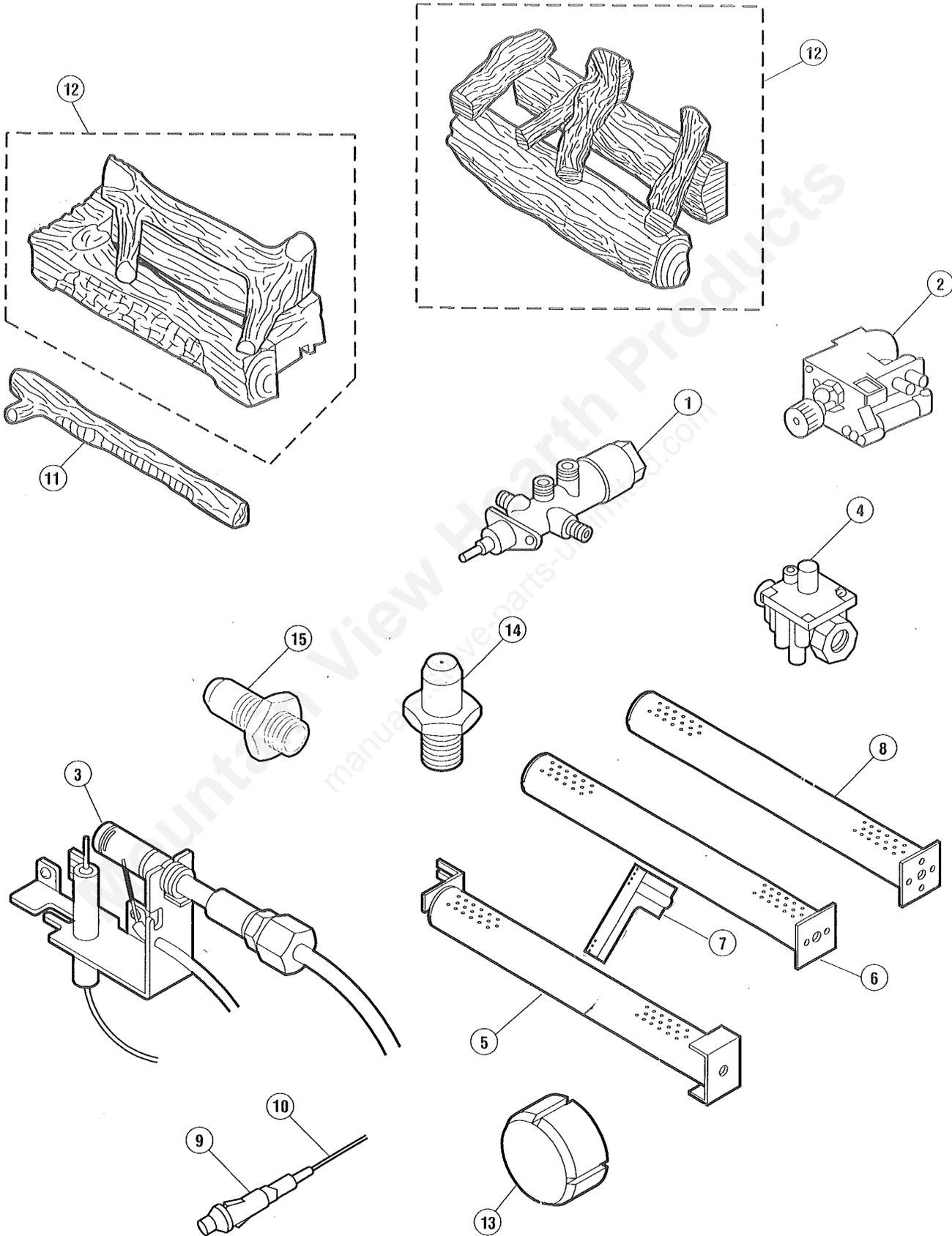
Figure 24

REPLACEMENT PARTS LIST

No.	Description	18N/18P Part No.	24N/24P Part No.	28N/28P Part No.	21N/21P Part No.
1.	Valve - Manual (Natural)	110331	110331	110331	110671
	Valve - Manual (Propane, L.P.G.)	110331	110331	110331	110672
2.	Valve, Thermostat (Natural)	110711	110713	110713	-
	Valve, Thermostat (Propane, L.P.G.)	110712	110714	110714	-
3.	Pilot (Natural) LP	110341	110341	110341	110341
	Pilot (Propane, L.P.G.) NAT	110342	110342	110342	110342
4.	Regulator (Natural)	110351	110351	110351	110351
	Regulator (Propane, L.P.G.)	110352	110352	110352	110352
5.	Front Burner	110281	110282	110282	-
6.	Rear Burner (Natural)	110681	110682	110682	-
	Rear Burner (Propane, L.P.G.)	110301	110302	110302	-
7.	Crossover Burner	110321	110321	110321	-
8.	Main Burner (Natural)	-	-	-	110691
	Main Burner (Propane, L.P.G.)	-	-	-	110661
9.	Piezo	111061	111061	111061	111061
10.	Piezo Wire	110361	110361	110361	110361
11.	Front Twig - Split Oak	110151	110171	110181	-
	Front Twig - Rustic Oak	-	110172	-	-
12.	Log Assembly - Split Oak	110151	110152	110153	110611
	Log Assembly - Rustic Oak	-	110154	-	-
13.	Control Knob - Manual	110401	110401	110401	110401
	Control Knob - Thermostat	110402	110402	110402	-
14.	Injector, Burner (Natural)	110381	110383	110383	110385
	Injector, Burner (Propane, L.P.G.)	110382	110384	110384	110386
15.	Injector, Crossover Burner (Natural)	110387	110387	110387	-
	Injector, Crossover Burner (Propane, L.P.G.)	110388	110388	110388	-

VFGL - 2
models

REPLACEMENT PARTS



NOTE: DIAGRAMS & ILLUSTRATION NOT TO SCALE.

Manufacturer's Unvented Gas Room Heater Limited Warranty 1 Year

THE WARRANTY

The Manufacturer warrants this Unvented Gas Room Heater to be free from defects in materials and workmanship at the time of manufacture.

REMEDY AND EXCLUSIONS

The coverage of this Warranty is limited to all components of the Unvented Gas Room Heater supplied by the Manufacturer.

This Warranty only covers Unvented Gas Room Heaters installed in the United States or Canada.

If the Unvented Gas Room Heater covered by this Warranty is found to be defective within one year from the date of installation (see manufacturer's right of investigation outlined below), the manufacturer will, at its option, replace or repair defective components of the Unvented Gas Room Heater supplied by the manufacturer at no charge and will also pay for reasonable labor costs incurred in replacing or repairing such components. If repair or replacement is not commercially practical, the manufacturer will, at its option, refund the purchase price of the manufacturer's Unvented Gas Room Heater.

This Warranty covers only parts and labor as provided above. In no case shall the manufacturer be responsible for materials, components, or construction which are not manufactured or supplied by the Manufacturer, or for the labor necessary to install, repair, or remove such materials, components or construction. All replacement or repair components will be shipped F.O.B. The nearest Manufacturer's factory.

QUALIFICATIONS TO THE WARRANTY

The Unvented Gas Room Heater Warranty outlined above is further subject to the following qualifications:

- (1) The Unvented Gas Room Heater must be installed in accordance with the Manufacturer's installation instructions and local building codes. The Warranty on this Manufacturer's Unvented Gas Room Heater covers only the component parts supplied by the Manufacturer. The use of components manufactured by others with this Manufacturer's Unvented Gas Room Heater could create serious safety hazards, may result in the denial of certification by recognized national safety agencies, and could be in violation of local building codes. This Warranty does not cover any damages occurring from the use of any components not manufactured or supplied by the Manufacturer.
- (2) The Unvented Gas Room Heater must be subjected to normal use. The Unvented Gas Room Heaters are designed to burn either natural or propane gas only. Burning conventional fireplace fuels such as wood, coal, or any other solid fuel will cause damage to the Unvented Gas Room Heater, will produce unsafe levels of carbon monoxide and will result in a fire hazard.

LIMITATION ON LIABILITY

It is expressly agreed and understood that the Manufacturer's sole obligation and purchaser's exclusive remedy under this warranty, under any other warranty, expressed or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above.

In no event shall The Manufacturer be responsible for any incidental or consequential damages caused by defects in its products, whether such damage occurs or is discovered before or after replacement or repair, and whether or not such damage is caused by the Manufacturer's negligence. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. The duration of any implied warranty with respect to this Unvented Gas Room Heater is limited to the duration of the foregoing warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above may not apply to you.

INVESTIGATION OF CLAIMS AGAINST WARRANTY

The Manufacturer reserves the right to investigate any and all claims against this Warranty and to decide upon method of settlement.

THE MANUFACTURER NOT RESPONSIBLE FOR WORK DONE WITHOUT WRITTEN CONSENT

The Manufacturer shall in no event be responsible for any warranty work done without first obtaining Superior's written consent.

DEALERS HAVE NO AUTHORITY TO ALTER THIS WARRANTY

The Manufacturer's employees and dealers have no authority to make any warranties nor to authorize any remedies in addition to or inconsistent with those stated above.

HOW TO REGISTER A CLAIM AGAINST WARRANTY

In order for any claim under this Warranty to be valid, The Manufacturer must be notified of the claimed defect in writing or by telephone to SFC, attention Customer Service Department, 4325 Artesia Avenue, Fullerton, California 92633, Telephone: 714-521-7302, as soon as reasonably possible after the defect is discovered. Claims against this Warranty in writing should include the date of installation, product serial number and a description of the defect.

OTHER RIGHTS

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

SFC reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products. Consult your local distributor for fireplace code information.

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