

OWNER'S MANUAL
With installation and operation
instructions for
VENT FREE GAS FIRED STERLING

This is an un-vented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provision for adequate combustion and ventilation air must be provided.

Manufactured by
Hearthstone/NHC, Inc.
Stafford Avenue, P.O. Box 1069
Morrisville, Vermont 05661
Telephone 1-802-888-5232



WARNINGS

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.
- 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.
- **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.

READ AND SAVE THESE INSTRUCTIONS

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IMPORTANT SAFETY INFORMATION

INSTALLER: Please leave these instructions with the owner.

OWNER: Please retain these instructions for future reference.

IMPORTANT: Read these instructions carefully before installing or trying to operate this unvented gas heater.

WARNING

Any modification to this unvented gas heater or its controls can be dangerous. Improper installation or use of the heater can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.

1. **CARBON MONOXIDE POISONING:** Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, obtain fresh air immediately. Have the heater serviced as it may not be operating properly.
2. The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1.
3. The Sterling unvented gas heater system must not be installed in a bedroom.
4. Do not install the heater in a bathroom or a bedroom.
5. Installation and repair should be done by a qualified service person.
6. To prevent malfunction and/or sooting, an unvented gas heater should be cleaned at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, etc. It is imperative that control compartments, burners and circulating air passages be kept clean.
7. Correct placement of the ceramic fiber logs is necessary to avoid problems with sooting. Sooting can settle on surfaces outside the heater and cause discoloration. See the appropriate sections of this manual for instructions.
8. Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into the heater. Do not place a blower inside burn area of firebox. Ceiling fans may create drafts that alter burner flame patterns. Sooting and improper burning will occur.
9. 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 installation guidelines.
10. Children and adults should be alerted to the hazard of high surface temperature and should stay away to avoid burns or clothing ignition.
11. Young children should be carefully supervised when they are in the same room with the heater.

IMPORTANT SAFETY INFORMATION

12. Do not place clothing or other flammable material on or near the heater when the heater is in use.
13. Keep room area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
14. Any safety screen or guard removed for servicing, must be replaced prior to operating the heater.
15. This unvented gas heater is intended to be smokeless. If logs appear to smoke, turn off the heater and call a qualified service person. Initial burn off may cause slight smoke and odor during the first four hours of operation.
16. Input ratings are shown in BTU per hour and are for elevations up to 2,000 feet. For elevations above 2,000 feet, input ratings should be reduced 4 percent for each 1,000 feet above sea level. Refer to the National Fuel Gas Code.
17. The heater 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 (3.5 kPa).
18. The heater 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 (3.5 kPa).
19. Do not use this room heater if any part has been under water. Immediately call a qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.
20. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
21. When the heater is installed directly on carpeting, tile or other combustible material, other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.

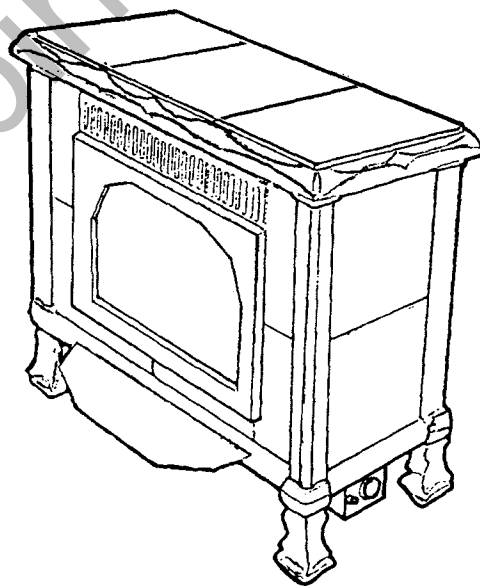


FIGURE 1. Unvented Gas Heater

OPERATION

OPERATION

This unvented gas heater requires no outside venting and burns cleanly with high heating efficiency.

Model No.	Type	Gas Rate		Number of Burners
		Max BTU/Hr	Min BTU/Hr	
Sterling	T-stat	20,000	15,000	2

Natural Gas

Regulator Pressure Setting 3" w.c.

Gas Inlet Pressure Maximum 10 1/2" w.c.
Minimum 5" w.c. for the purpose of input adjustment.

Model No.	Type	Gas Rate		Number of Burners
		Max BTU/Hr	Min BTU/Hr	
Sterling	T-stat	20,000	15,000	2

Propane / LPG

Note: An external regulator is required to reduce supply pressure to a maximum of 13" w.c.

Regulator Pressure Setting 10" w.c.

Gas Inlet Pressure Maximum 13" w.c.
Minimum 10" w.c. for the purpose of input adjustment.

Ignition - Piezo ignitor allows ignition of the pilot without the use of matches or batteries.

Controls- Thermostat Control has 3 positions:

1. **OFF** - All gas to the gas logs is shut off at the valve
2. **IGN** - Valve position to light / maintain a standing pilot
3. **LOW/HI** - Variable position adjustable to a comfortable room temperature, both front and rear burners are in operation to provide realistic glow and yellow flame.

Sterling Contents

1. Packet containing Homeowners/Installation instructions and two anchoring screws.
2. Sterling unvented gas heater.

CHECK THAT ALL LISTED PARTS HAVE BEEN RECEIVED.

CAUTION

GLOVES ARE RECOMMENDED WHEN HANDLING CERAMIC FIBER LOGS TO PREVENT SKIN IRRITATION FROM LOOSE FIBERS. LOGS ARE FRAGILE, HANDLE WITH CARE.

Carefully inspect the contents for shipping damage and immediately inform your dealer if any damage is found.

ITEMS REQUIRED FOR INSTALLATION

ITEMS REQUIRED FOR INSTALLATION

Ensure that the following items are available before proceeding with installation:

- External regulator (for propane/L.P.G. only)
- Piping which complies with local codes
- Pipe sealant approved for use with propane/L.P.G. (resistant to sulfur compounds)
- Manual shutoff valve
- Sediment trap
- Tee joint
- Pipe wrench
- Phillips head screwdriver
- 1/4" nut driver or wrench

CODES

Adhere to all local codes or, in their absence, the latest edition of THE NATIONAL FUEL GAS CODE ANSI Z223.1 or NFPA54 which can be obtained from:

American National Standards Institute, Inc.

1430 Broadway
New York, NY 10018

or

National Fire Protection Association, Inc.

Batterymarch Park
Quincy, MA 02269

WARNING

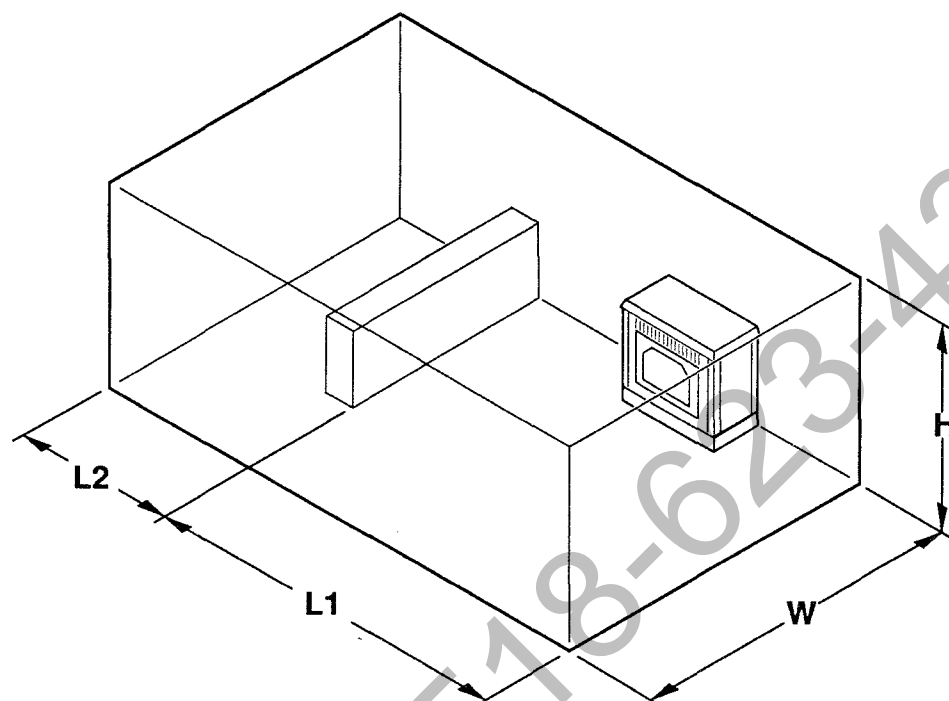
Do not install the heater:

- Where curtains, furniture, clothing, or other flammable objects are less than 42" from the front of the heater.
- In high traffic areas.
- In windy or drafty areas.

ADEQUATE COMBUSTION AND VENTILATION AIR

This heater shall not be installed in a confined space unless provisions are provided for adequate combustion and ventilation air.

The National Fuel Gas Code defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 BTU per hour (4.8 m³ per kw) of the aggregate input rating of all appliances installed in that space and an unconfined space is defined as a space whose volume is not less than 50 cubic feet per 1,000 BTU per hour (4.8 m³ per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.



The following formula can be used to determine the maximum heater rating per the definition of unconfined space:

$$\text{BTU/HR} = \frac{(L1 + L2) \text{ Ft} \times (W) \text{ Ft} \times (H) \text{ Ft} \times 1000}{50}$$

Consider two connecting rooms with an open area between, with the following dimensions:
 $L1 = 15 \frac{1}{2} \text{ Ft.}$, $L2 = 12 \text{ Ft.}$, $W = 12 \text{ Ft.}$, $H = 8 \text{ Ft.}$

$$\begin{aligned} \text{BTU/HR} &= \frac{(15 \frac{1}{2} + 12) \times (12) \times (8) \times 1000}{50} \\ &= 52800 \text{ BTU/HR} \end{aligned}$$

If there were a door between the two rooms the calculation would be based only on the room with the heater.

$$\begin{aligned} \text{BTU/HR} &= \frac{(15 \frac{1}{2}) \times (12) \times (8) \times 1000}{50} \\ &= 29760 \text{ BTU/HR} \end{aligned}$$

WARNING

If the area in which the heater may be operated is smaller than that defined as an unconfined space, 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.

INSTALLATION

WARNING

Ensure the minimum clearances shown in FIGURES 2 are maintained. Left and right clearances are determined when facing the front of the heater.

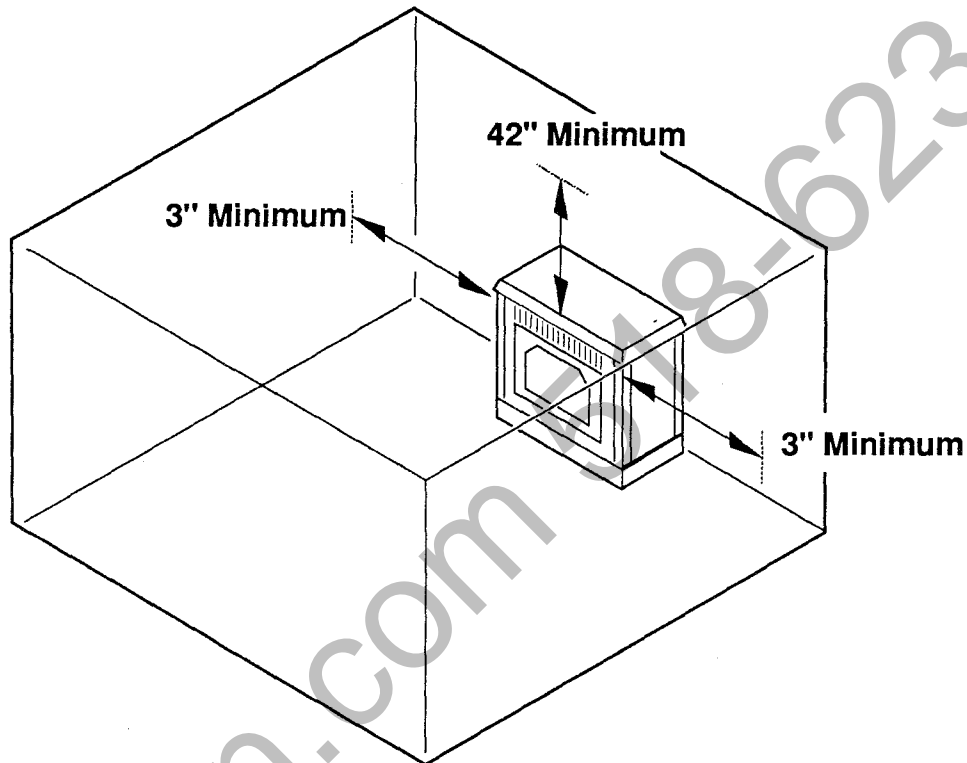


FIGURE 2. Minimum Clearances - Top and Sides of Room Heater to Ceiling and Walls

NOTE: Minimum clearance to an over hang protruding to the edge of the heater is 14".

GAS CONNECTION

NOTICE

A qualified gas appliance installer must connect the fireplace to the gas supply.

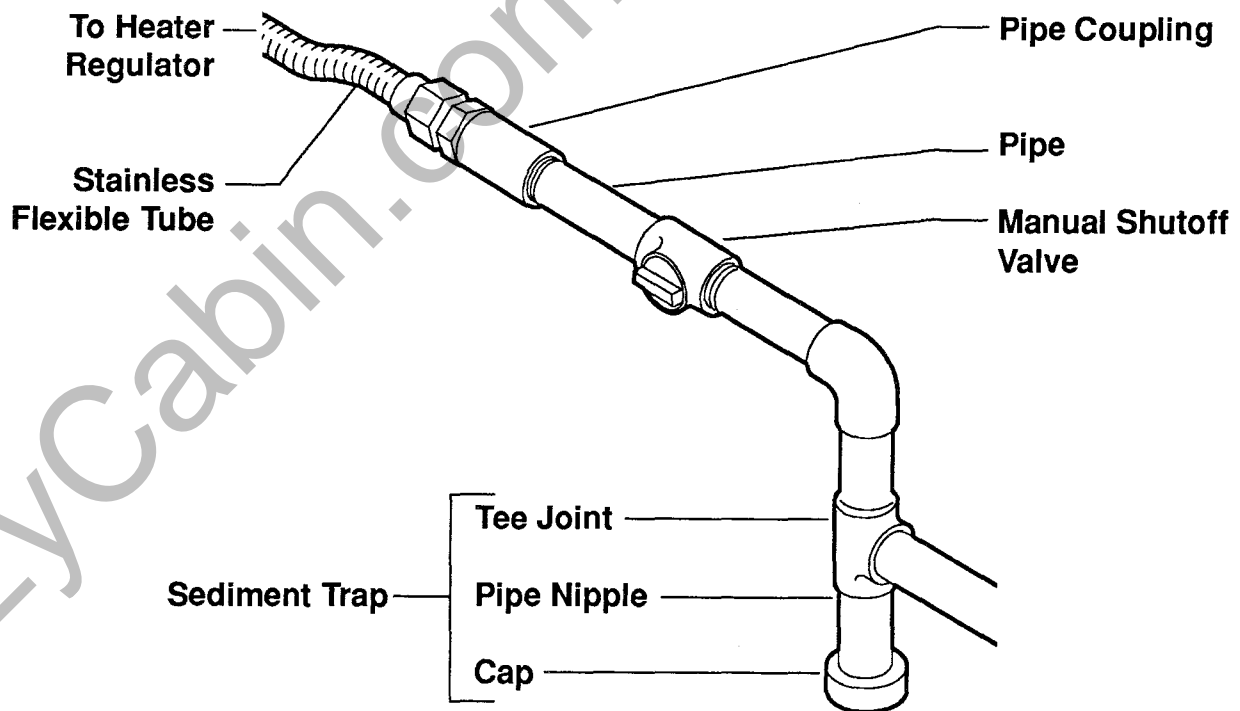
Consult all local codes.

CAUTION

Use new black iron or steel pipe only. Internally tinned copper tubing can be used in some areas when permitted by local codes. Only use pipe of 1/2" or greater diameter to allow full gas volume to heater. Excessive pressure loss will occur if the pipe is too small.

A manual shutoff valve, union and plugged 1/8" NPT pressure tapping point must be installed upstream of the heater (FIGURE 3).

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. Failure to do so could prevent the heater from operating reliably (FIGURE 3).



IMPORTANT: Loosen the pipe adapter on the flex tube before installing to the system piping. The stainless steel flex tube must be listed by a nationally recognized testing agency.

FIGURE 3. Gas Connection

GAS PRESSURE CHECK

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

WARNING

Connecting directly to an unregulated propane/L.P.G. tank can cause an explosion.

The regulator can be accessed from the rear of the stove.

The regulator gas inlet connection is 3/8" NPT, made on the right rear facing the appliance.

Test all gas joints from the gas meter to the heater for leaks using soap and water solution after completing connection. DO NOT USE AN OPEN FLAME.

The heater regulator controls the burner pressure which should be checked at the pressure test point (1/8" NPT plug) located on the side of the regulator and is accessible from the side.

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

The pressure regulator is preset and locked to avoid tampering. If the pressure is not as specified in Product Specifications (page 3), contact your dealer and replace the regulator.

Replace the test plug after pressure measurement. Check for gas leaks.

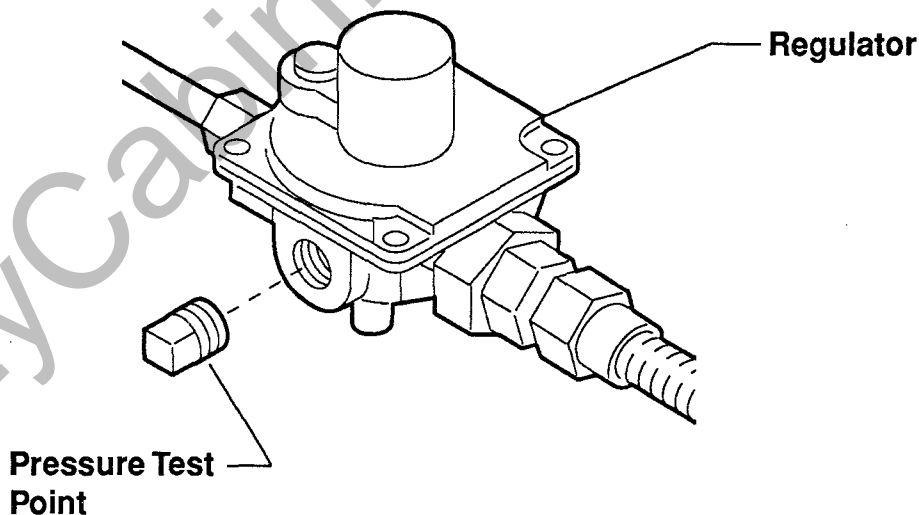


FIGURE 4. Pressure Test Point Location

Before you begin:

This unit is supplied with a set of two ceramic fiber logs. Do not handle these logs with your bare hands! **Always wear gloves to prevent skin irritation from ceramic fibers.** After handling logs, wash your hands gently with soap and water to remove any traces of fibers.

WARNING

The positioning of the logs is critical to the safe and clean operation of this heater. Sooting and other problems may result if the logs are not properly and firmly positioned in the heater. Never add additional logs or embellishment such as pine cones, vermiculite, volcanic rock or rock wool to the heater.

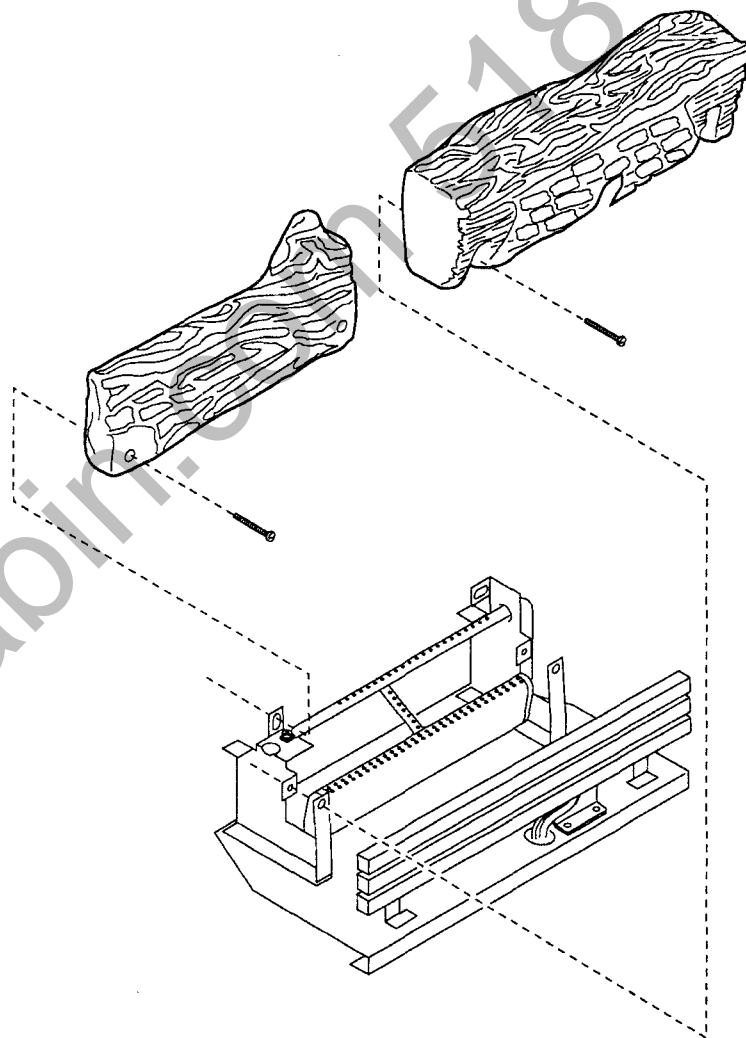


FIGURE 5. Log Placement

LOG PLACEMENT

Removal / Installation Sequence:

The heater is shipped with logs mounted with retaining screws. If necessary to remove the logs for cleaning or servicing the following sequence should be followed.

1. Open the front door by removing the phillips head screw.
2. Remove the two screws that retain the front log and lift the log vertically off the log bracket. Removal of front grate may be required.
3. Remove the two screws that retain the rear log and lift the log vertically off the log bracket.
4. Install the rear log in the rear log cavity. Install the two mounting screws, do not over tighten.
5. Position the front log into the front log cavity to center the log. Install the two mounting screws, do not over tighten.

WARNING

Do not operate the heater without the log mounting screws installed and tightened, and the screen installed.

OPERATING INSTRUCTIONS

Avoid any drafts that alter the burner flame patterns. Do not allow fans to blow directly into the fire-place. Do not place a blower inside burn area of firebox. Ceiling fans may create drafts that alter burner flame patterns. Sooting and improper burning will occur.

This unvented gas heater is intended to be smokeless. If logs appear to smoke, turn off the heater and call a qualified service person. Initial burn off may cause slight smoke and odor during the first four hours of operation.

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 is ignited by a hand operated piezo. When lighting the pilot, follow these instructions. Do not try to light the pilot by hand.
- B. BEFORE LIGHTING smell all around the heater area for gas. Be sure to smell next to the floor because propane/LPG is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

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

OPERATING INSTRUCTIONS

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. Make sure the manual shut off valve is fully open.
3. Turn control knob clockwise  to OFF position.
4. Wait 5 minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow the instructions under "WHAT TO DO IF YOU SMELL GAS". If you don't smell gas, go to the next step.
5. Turn the control knob counterclockwise  to the IGN position (FIGURE 6). Press in control knob for 5 seconds.
6. With the control knob pressed in and held, push and release the piezo ignitor button to light the ODS pilot.
7. Hold the control knob in for an additional 10 seconds to prevent the ODS pilot from shutting off the gas while the thermocouple is warming up.
8. Release the control knob.
 - If the knob does not pop out when released, stop and immediately call your service technician or gas supplier.
 - If the ODS pilot will not stay lit after several tries, press in and turn the control knob clockwise  to OFF release and wait 15 seconds. Repeat steps 5 through 8.
9. Turn control knob to any position between LOW or HIGH. The knob position controls the thermostat temperature.
10. The heater is now in proper operation. The following procedure should be used to achieve thermostatic control of the desired room temperature.
 - a. Operate unit at higher setting until desired room temperature is achieved.
 - b. At the desired temperature, slowly turn the control knob clockwise  and stop rotating when the flame disappears.
 - c. Thermostat is now set to maintain the current room temperature.
 - d. As the room temperature decreases, the thermostat valve will open to ignite the front and rear burner.
 - e. When the temperature reaches its set point (knob position) the thermostat valve will again shut off the front and rear burner.
 - f. This is the normal operating cycle of the heater.

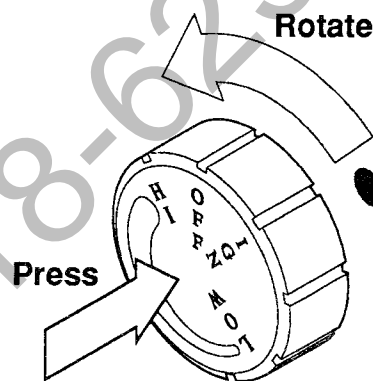



FIGURE 6. Control Knob

OPERATING INSTRUCTIONS

WARNING

Wait 30 seconds before readjusting the heater when the control has been turned down to a lower setting.

TO TURN GAS OFF

Turn control knob clockwise  to the OFF position.

CHECKING FLAME APPEARANCE

Flames from the pilot, front and rear burner should be visually checked when the heater is installed. In addition a periodic visual check of the flames should be made.

PILOT FLAME

The pilot flame should always be present when the heater is in operation and should just touch the top of the thermocouple tip (FIGURE 7).

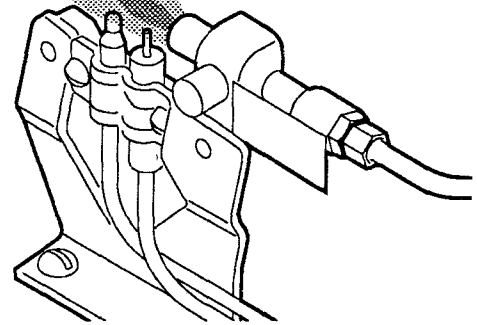


FIGURE 7. Pilot Flame

If the pilot flame does not touch the thermocouple, then the main burner is unlikely to function reliably (FIGURE 8).

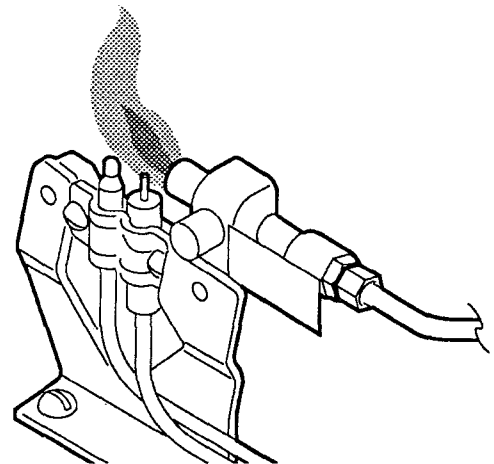


FIGURE 8. Incorrect Shape of Pilot Flame

FLAME APPEARANCE

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

REAR BURNER FLAMES

The rear flames above and behind Log No. 1, and in front of Log No. 2, may be yellow. The flames should extend about 2-3" above Log No. 1.

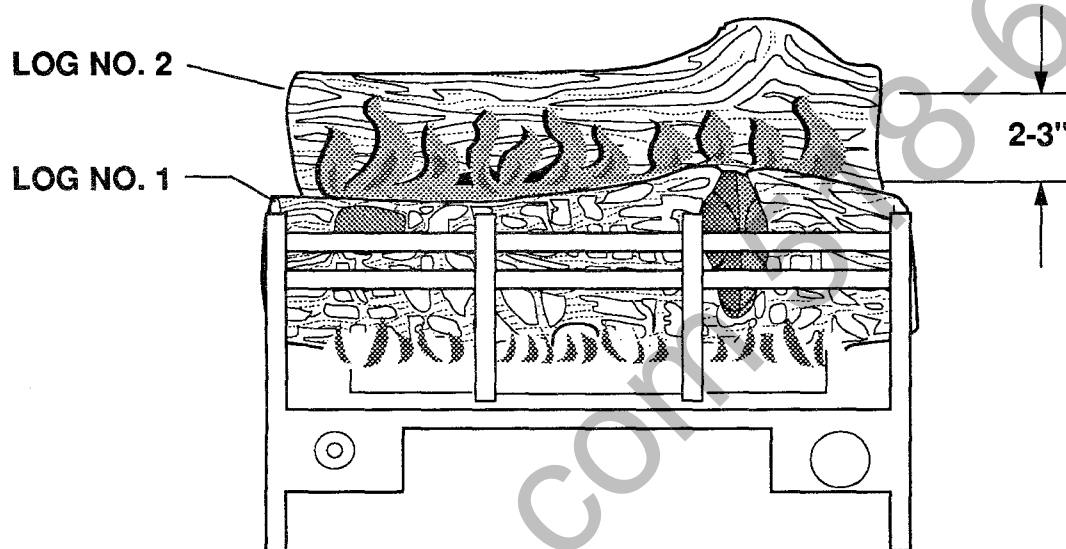


FIGURE 9 Main and Rear Burner Flame

MAIN BURNER FLAMES

The front burner flames are blue, and contact the face of the front log (FIGURE 9). The face of the front log will glow a bright reddish-orange when the heater is operated at the high setting.

Annual inspection and cleaning by your dealer or qualified service technician is recommended to prevent malfunction and/or sooting.

WARNING

Turn off heater and allow to cool before cleaning.

Remove fireplace screen, retaining screws. Carefully lower screen from mounting lugs and set aside during cleaning. Refer to instructions in manual for installation of screen. **Do not operate the unit with the screen removed.**

Remove logs, handling carefully by holding gently at each end. Gloves are recommended to prevent skin irritation from ceramic. If the skin becomes irritated, wash gently with soap and water. Refer to manual for correct log placement.

Periodic Cleaning

- Do not use cleaning fluid to clean logs or any part of heater.
- Logs - Brush with soft bristle brush or vacuum with brush attachment.
- Vacuum loose particles and dust from the front and rear burner, control, and piezo covers and grate weldment.
- Inspect rear burner and intake hole. Remove lint or particles with vacuum.
- External case should be dusted and wiped with a wet soapy cloth.

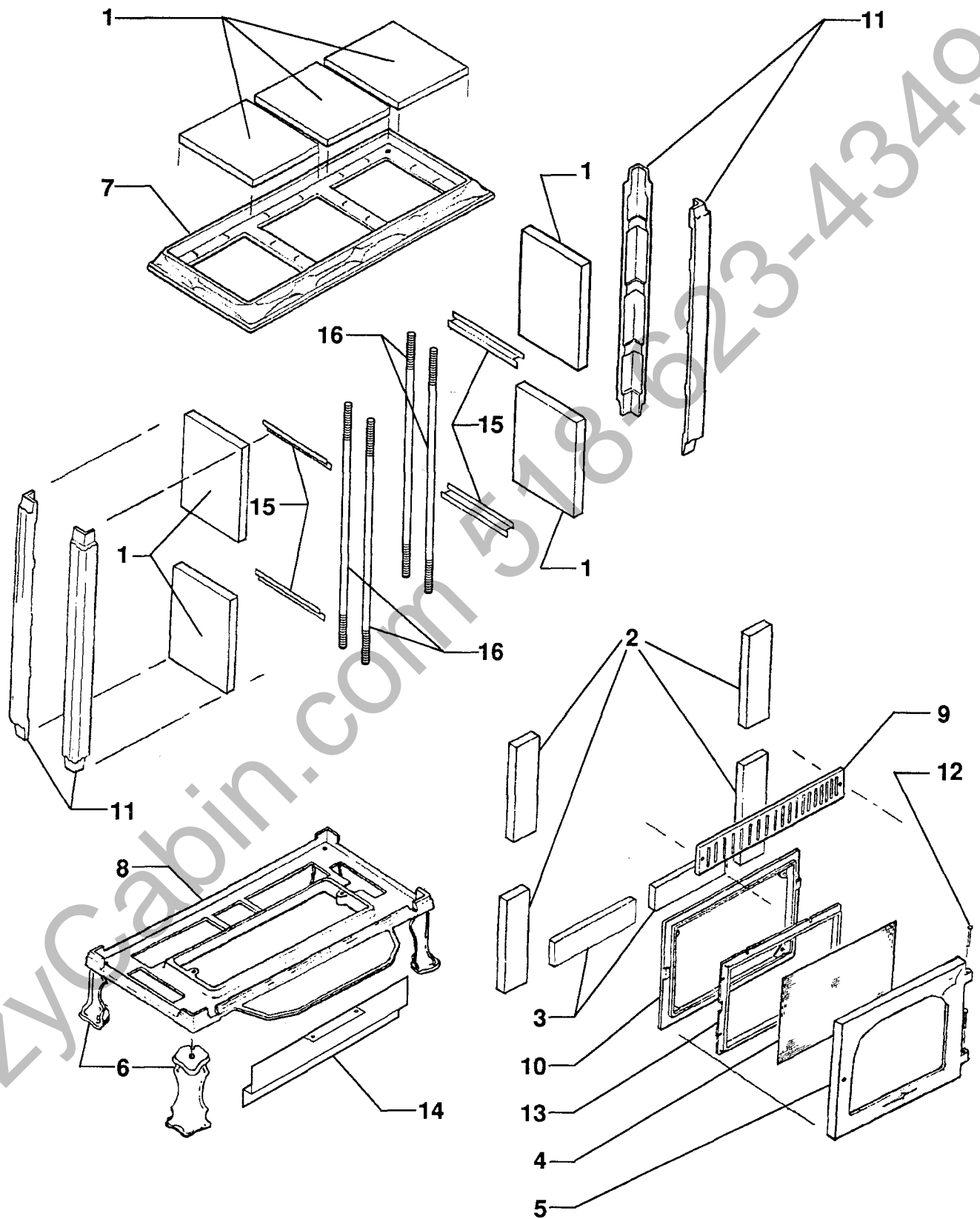
Annual Cleaning / Inspection

- Inspect and clean rear burner air intake holes.
- Inspect and clean all burner ports.
- Inspect ODS pilot for operation and accumulation of lint at air intake holes.
- Verify flame pattern and log placement for proper operation.
- Verify smooth and responsive ignition of main burner and rear burner.

STERLING ILLUSTRATION and PARTS LIST

ITEM	DESCRIPTION	QTY	P/N
1	Stone 8"x 9 1/2"	7	15XX-462X
2	Stone 3 1/2"x 9 1/2"	4	15XX-463
3	Stone 2 1/2"x 8 1/2"	2	15XX-464
4	Front Screen	1	22D0113
5	Front Door	1	2510-219-RS
6	Bottom Leg	4	2510-303
7	Top	1	2510-401
8	Bottom	1	2510-402
9	Grill	1	2510-403F
10	Front Door Frame	1	2510-411RF
11	Side Leg	4	2510-413
12	Front Door Pins	2	4400-0300
13	Front Screen Frame	1	2421-316
14	Control Valve Sheild	1	22D0111
15	Stone Clips	4	5500-2408
16	3/8" X 22" Rod 3/8-16	4	5210-2325

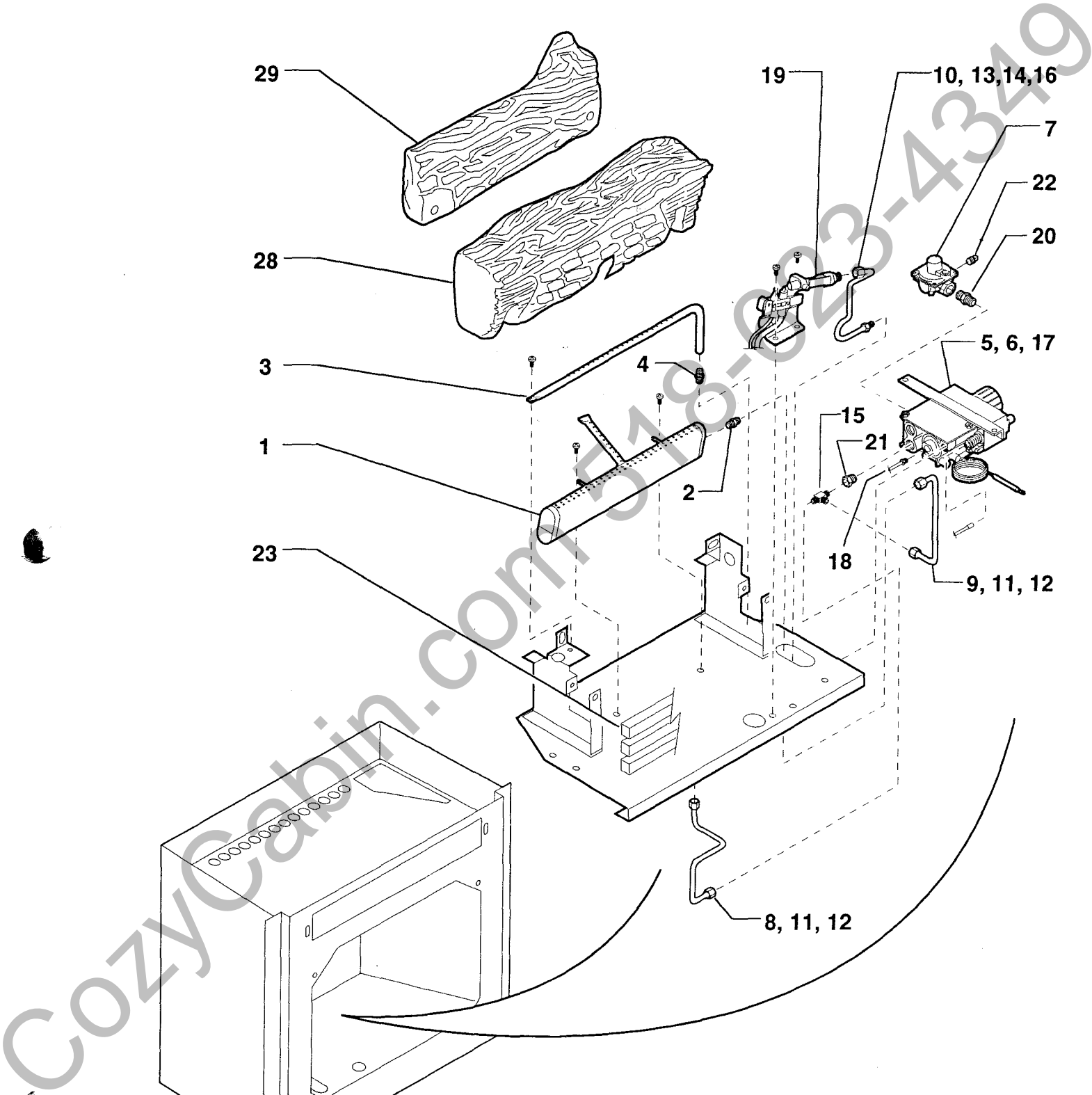
STERLING ILLUSTRATION and PARTS LIST



T-STAT CONTROL PARTS LISTS

ITEM	DESCRIPTION	QTY	NATURAL GAS	PROPANE
1	Burner Front	1	14D0516	14D0516
2	Injector Front	1	18D0510	18D0515
3	Burner Rear	1	18D0501	18D0501
4	Injector Rear	1	18D0514	18D0516
5	Valve Control T-Stat	1	11V0701	11V0701
6	Screw Modulating (Min Flow)	1	0945624	0945618
7	Valve Pressure Regulator	1	18D0351	18D0352
8	Tube 1/4 Tee/Rear	1	22D0302	22D0302
9	Tube 1/4 Tee/Front	1	22D0301	22D0301
10	Tube 3/16 T-Stat/Pilot	1	22D0303	18D0303
11	Nut 1/4 Tube	4	00F0079	00F0079
12	Ferrule 1/4 Tube	4	00F0080	00F0080
13	Nut 3/16 Tube	1	00F0077	00F0077
14	Ferrule 3/16 Tube	2	00F0078	00F0078
15	Male Run Tee	1	20H0070	20H0070
16	Reverse Flare Nut, 3/16 Tube	1	11V0314	11V0314
17	Piezo Kit	1	18D0402	18D0402
18	Wire, Piezo	1	00K0632	00K0632
19	ODS Pilot Assembly	1	15D1013	15D1022
20	Fitting - 3/8 NPT x 1 1/2"	1	18D0310	18D0310
21	Bushing-Brass	1	20H0069	20H0069
22	Plug Pipe 1/8 NPT	1	00F0092	00F0092
23	Front Grate Assembly	1	22D1001	22D1001
24	Tee-Nut 1/4 20 (N.S.)	2	20H0014	20H0014
25	Bolt 1/4 20 x 1 RSL-MS (N.S.)	2	20H0015	20H0015
26	Porcelain Panel (N.S.)	1	18D0129	18D0129
27	Screw #10 x 3" PPH SMS (N.S.)	2	20H0016	20H0016
Log Set Golden Oak				
28	Front Log	1	18D0903	18D0903
29	Rear Log	1	18D0904	18D0904

(N.S.) = Not Shown



TROUBLESHOOTING

WARNING

Turn off and let cool before servicing. Only a qualified service person should service and repair heater.

NOTE: All troubleshooting items are listed in order of operation.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at ODS/pilot.	<ol style="list-style-type: none"> 1. Ignitor electrode positioned wrong 2. Ignitor electrode is broken. 3. Ignitor electrode not connected to ignitor cable. 4. Ignitor cable pinched or wet. Keep ignitor cable dry 5. Piezo ignitor nut is loose. 6. Broken ignitor cable. 7. Bad piezo ignitor. 	<ol style="list-style-type: none"> 1. Replace ignitor. 2. Replace ignitor. 3. Reconnect ignitor cable. 4. Free ignitor cable if pinched by any metal or tubing. 5. Tighten nut. 6. Replace ignitor cable. 7. Replace piezo ignitor.
Appliance produces unwanted odors.	<ol style="list-style-type: none"> 1. Appliance burning vapors from paint, hair spray, glues, etc. 2. Gas leak. 	<ol style="list-style-type: none"> 1. Ventilate room. Stop using odor-causing products while heater is running. 2. Locate and correct all leaks.
Appliance shuts off in use.	<ol style="list-style-type: none"> 1. Not enough fresh air is available for ODS/pilot to operate. 2. Low line pressure. 3. ODS/pilot is partially clogged. 	<ol style="list-style-type: none"> 1. Open window and/or door ventilation 2. Contact local gas company. 3. Clean ODS/pilot.
Gas odor even when control knob is in OFF position.	<ol style="list-style-type: none"> 1. Gas leak. 2. Control valve defective. 	<ol style="list-style-type: none"> 1. Locate and correct all leaks. 2. Replace control valve.
When ignitor button is pressed, there is spark at ODS/pilot, but no ignition.	<ol style="list-style-type: none"> 1. Gas supply turned off or manual shutoff valve closed. 2. Control knob not in PILOT position. 3. Control knob not pressed in while in PILOT position. 4. Air in gas lines when installed. 5. ODS/pilot is clogged. 6. Gas regulator setting is not correct. 	<ol style="list-style-type: none"> 1. Turn on gas supply or open manual shutoff valve. 2. Turn control knob while in PILOT position. 3. Press in control knob while in PILOT position. 4. Continue holding down control knob. Repeat igniting operation until air is removed. 5. Replace ODS/pilot assembly or get it serviced. 6. Replace gas regulator.
ODS/pilot lights, but flame goes out when control knob is released.	<ol style="list-style-type: none"> 1. Control knob not fully pressed in. 2. Control knob not pressed in long enough. 3. Manual shutoff valve not fully open. 	<ol style="list-style-type: none"> 1. Press in control knob fully. 2. After ODS/pilot lights, keep control knob pressed in 30 seconds. 3. Fully open manual shutoff valve.

TROUBLESHOOTING

OBSERVED PROBLEM POSSIBLE CAUSE

REMEDY

	<ol style="list-style-type: none"> Thermocouple connection loose at valve. 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; <ol style="list-style-type: none"> Low gas pressure Dirty or partially clogged ODS/pilot. Thermocouple damaged. Control valve damaged. 	<ol style="list-style-type: none"> Hand tighten until snug, then tighten 1/4 turn more. Contact local gas company. Replace thermocouple. Replace control valve.
One or both burners do not light after ODS/Pilot is lit.	<ol style="list-style-type: none"> Burner orifice is clogged. Burner orifice diameter is too small. Inlet gas pressure is too low. 	<ol style="list-style-type: none"> Clean burner or replace light burner orifice. Replace burner orifice. Contact qualified service person.
Delayed ignition of burner.	<ol style="list-style-type: none"> Manifold pressure is too low. Burner orifice is clogged. 	<ol style="list-style-type: none"> Contact local gas company Clean burner or replace burner orifice.
Burner backfiring during combustion.	<ol style="list-style-type: none"> Burner orifice is clogged or damaged. Burner is damaged. Gas regulator defective 	<ol style="list-style-type: none"> Clean burner or replace burner orifice. Replace Burner. Replace gas regulator.
Slight smoke or odor during initial operation.	<ol style="list-style-type: none"> Vapors from paint or curing process of logs. 	<ol style="list-style-type: none"> Problem will stop after a few hours of operation. Run the heater with the damper open if you have one or open a window for the first few hours.
Logs appear to smoke (after initial operation).		<ol style="list-style-type: none"> Log heater is intended to be smokeless. Turn off heater and call qualified service person.
Heater produces a whistling noise when burner is lit.	<ol style="list-style-type: none"> Turning control knob to HI position when burner is cold. Air in gas line. Dirty or partially clogged burner orifice. 	<ol style="list-style-type: none"> Turn control knob to LO position and let warm up for a minute. Operate burner until air is removed from line. Have gas line checked by local gas company. Clean burner or replace burner orifice.
No Gas to Pilot	<ol style="list-style-type: none"> LP regulator shut down due to inlet pressure being too high 	<ol style="list-style-type: none"> Verify LP tank regulator is installed and set at 11 to 13 inches w.c. Replace LP regulator on heater.