

# Unvented Gas Log Heater or Vented Decora- tive

## Appliance

Models: 18NB, 24NB,  
18NBSC, 24NBSC,  
18NBSCR, 24NBSCR  
Installation and Operating  
Instructions



## 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.
- **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 appliance may be installed in an aftermarket, permanently located, manufactured (mobile) home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

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 Page 4.

**INSTALLER:** Leave this manual with the appliance.  
**CONSUMER:** Retain this manual for future reference.

## Thank you and congratulations on your purchase of a Majestic Log Set

Please read the Installation and Operation Instructions before using the appliance!

**IMPORTANT:** Read all instructions and warnings carefully before starting installation.

Failure to follow these instructions may result in a possible fire hazard and will void the warranty.

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**INSTALLER**

Please leave these instructions with the appliance.

**OWNER**

Please retain these instructions for future reference.

**IMPORTANT**

Read these instructions carefully before installing or trying to operate this vent-free gas heater.

**WARNING**

- **Any change to this 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.**
- **Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.**
- **Do not use a blower insert, heat exchanger insert or other accessory, not approved for use with this heater where applicable.**

1. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
2. Children and adults should be alerted to the hazard of high surface temperature and should stay away to avoid burns or clothing ignition.
3. Young children should be carefully supervised when they are in the same room with the appliance.
4. Do not place clothing or other flammable material on or near the appliance.
5. Any safety screen or guard removed for servicing an appliance, must be replaced prior to operating the heater.
6. Installation and repair should be done by a qualified service person.
7. To prevent malfunction and/or sooting, an unvented gas heater should be cleaned before 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 imperative that control compartments, burners and circulating air passageways be kept clean.
8. **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.
9. The installation must conform with local codes or, in the absence of local codes, with the **National Fuel Gas Code, ANSI Z223.1/NFPA54.**
10. The (18,24)NB and (18,24)NBSC units comply with ANSI Z21.11.2 Unvented Heaters, latest edition and also complies with ANSI Z21.60 Decorative Vented Appliances for Solid Fuel Burning Fireplaces, latest edition. The (18,24)NBSCR units comply with ANSI Z21.11.2 Unvented Heaters, latest edition ONLY.
11. Do not install the heaters in a bathroom or bedroom.
12. Correct installation of the logs, proper location of the heater, and annual cleaning are necessary to avoid potential problems with sooting. Sooting, resulting from improper installation or operation, can settle on surfaces outside the fireplace. See log placement instructions for proper installation.
13. Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into fireplace. 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.
14. **Caution:** Candles, incense, oil lamps, etc. produce combustion by-products including soot. Vent-free appliances will not filter or clean soot produced by these types of products. In addition, the smoke and/or aromatics (scents) may be reburned in the vent-free appliance which can produce odors. It is recommended to minimize the use of candles, incense, etc. while the vent-free appliance is in operation.
15. 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.
16. This heater shall not be installed in a room or space unless the required volume of indoor combustion air is provided by the method described in the *National Fuel Gas Code, ANSI Z223.1/NFPA 54*, the *International Fuel Gas Code* or applicable local codes.
17. Keep room area clear and free from combustible materials, gasoline and other flammable vapors and liquids.

18. Unvented gas heaters are a supplemental zone heater. They are not intended to be the primary heating appliance.
19. Unvented gas heaters emit moisture into the living area. In most homes of average construction, this does not pose a problem. In houses of extremely tight construction, additional mechanical ventilation is recommended.
20. During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not harmful but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance; possibly causing headaches or eye or lung irritation. This is a normal and temporary occurrence. The initial break-in operation should last four hours to properly cure logs and rock wool, with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in period will be slight and will disappear with continued use.
21. 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.
22. The appliance and its appliance main gas 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).
23. The appliance must be isolated from the gas supply piping system by closing its equipment 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).
24. 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.
25. This appliance must not be used with glass doors in the closed position. This can lead to pilot outages and severe sooting outside the fireplace.
26. Never burn solid fuels in a fireplace where a unvented room heater is installed.
27. Always have a fireplace screen in place when the appliance is in operation and, unless other provisions for combustion air are provided, the screen must have an opening(s) for induction of combustion air.

**MASSACHUSETTS RESIDENTS ONLY:**  
Refer to Page 46 for additional information.

**WARNING**

**Never connect unit to private (non-utility) gas wells. This gas is commonly known as wellhead gas.**

**18NB, 18NBSC, 24NB, 24NBSC  
Certified To**

**ANSI Z21.11.2 Latest Edition  
Unvented Heaters &  
Z21.60 Latest Edition;  
CSA 2.26 Latest Edition**

**18NBSCR, 24NBSCR  
Certified To**

**ANSI Z21.11.2, Latest Edition  
Unvented Heaters**

**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**

**If the area in which the heater may be operated does not meet the required volume for indoor combustion air, combustion and ventilation air shall be provided by one of the methods described in the *National Fuel Gas Code, ANSI Z223.1/NFPA 54, the International Fuel Gas Code* or applicable local codes.**

**MAKE SURE YOU HAVE RECEIVED ALL PARTS:**

Check your packing list to verify that all listed parts have been received. You should have the following:

**NB Models**

- Unvented Gas Log Burner Assembly
- Two (2) Plastic Bags Containing Crushed Volcanic Rock
- Installation/Operating Instructions
- Two (2) Anchoring Screws
- Ceramic Fiber Logs / Refractory Logs
- Rock wool & Bright Embers
- Grate Assembly
- On/Off Log Switch Assembly (MV Models Only)
- Thermostat Remote Control (SCR Models Only)
- 'AA' Batteries (SC Models only)

The following options may be used with the millivolt controlled heater. These options are not packaged with the log set.

- Hand Held Remote with Receiver (MV)
- Wall Thermostat with 15' Wire
- Wall Switch with 15' Wire

Carefully inspect the contents for shipping damage. If any parts are missing or damaged, immediately inform the dealer from whom you purchased the appliance. **Do not attempt to install any part of the appliance unless you have all parts in good condition.**

**WHAT YOU WILL NEED FOR INSTALLATION:**

You should have the following items available before proceeding with installation:

- External regulator (for propane/LPG and 1/2 psi natural gas systems only)
- Piping which complies with local codes
- Sediment trap (recommended)
- Screwdriver
- Tee joint.
- Pipe sealant approved for use with propane/LPG (Resistant to sulfur compounds)
- Drill with 5/32 masonry bit
- Pipe wrench or appropriate size crescent wrench set
- Manual shutoff valve

**CAUTION** Gloves are recommended when handling ceramic fiber logs to prevent skin irritation from loose fibers. Logs are fragile — handle with care.

**GAS PRESSURES**

	Natural	Propane (LP)
Inlet Minimum	5.0" w.c.	11.0" w.c.
Inlet Maximum	10.5" w.c.	13.0" w.c.
Regulator Pressure Setting	3.5" w.c.	11.0" w.c.
Pilot Regulator	3.5" w.c.	n/a

**GAS SPECIFICATIONS**

		Gas Rate	
		Max. Input	Min. Input
Model	Fuel	BTU/h	BTU/h
18NB	Natural	28,000	19,000
24NB	Natural	37,000	25,000
18NB	LP	27,000	22,000
24NB	LP	36,000	28,000

**NATURAL GAS**

**NOTE:** An external regulator is required to reduce supply pressure to a maximum of 10½" w.c. on natural gas systems operating at higher pressure.

**PROPANE/LPG**

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

**MILLIVOLT IGNITION CONTROLS**

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

**Millivolt control has four (4) positions:**

- OFF** - All gas to the gas logs is shut off at the valve.
- IGN** - Valve position to light/maintain a standing pilot.
- ON** - Valve position to turn ON/OFF log set with remote switch/thermostat.
- LOW/HI** - Variable position to control flame height (heat output).

**SIGNATURE COMMAND CONTROLS**

Refer to Page 28

**PILOT/ODS**

The gas log heater is fitted with a specially designed safety pilot (ODS assembly) which senses the amount of oxygen available in the room and shuts the gas log heater off if the oxygen level begins to drop below a satisfactory level. The pilot can only be relit when adequate fresh air is available.

**THERMAL GENERATOR**

The millivolt gas log pilot is fitted with a millivolt (thermopile) generator to provide power for remote activation.



**WARNING**

This appliance is for installation only in a solid-fuel burning masonry or UL127 factory-built fireplace, vent free appliance, or in listed ventless firebox enclosure. It has been design certified for these installations.

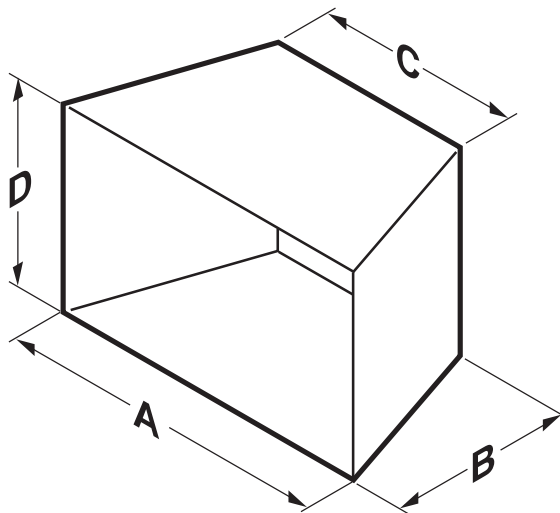
**Exception: DO NOT install this appliance in a factory-built fireplace that includes instructions stating it has not been tested or should not be used with unvented gas logs.**

Use manufacturer's installation and clearance requirements as defined in their manual.

The NB and NBSC/SCR Series unvented room heaters are approved for installation into the following unvented fireplaces:

**VF Series Fireboxes, Magnum36/42, Lo-Rider36 or BUF**

The NB and NBSC/SCR Series unvented room heaters may also be installed into a Ventless Firebox Enclosure for Gas Fired Decorative Type Unvented Room Heaters per ANSI Z21.91 (typically referred to as a "Universal Firebox"), as long as firebox hearth dimensions meet the minimum hearth dimensions shown below.



Model	A	B	C	D
18NB w/18" Log	26"	13"	18"	17"
24NB w/24" Log	29"	13"	22¼"	17"
24NB w/30" Log	33"	13"	25¼"	17"
18NBSC,SCR w/18" Log	28½"	13"	20¼"	17"
24NBSC/SCR w/24" Log	31"	13"	25¼"	17"
24NBSC/SCR w/30" Log	35"	13"	25¼"	17"

Figure 1 - Minimum Hearth Dimensions

**IMPORTANT INFORMATION FOR THE INSTALLATION OF THIS GAS LOG SET PLACEMENT IN FIREPLACE WITH A RESTRICTIVE BARRIER**

The following are guidelines for placing a gas log set in a fireplace that has a restrictive barrier along the bottom front opening of the fireplace. Some examples of barriers are glass/screen door frames and sunken/recessed fireplaces.

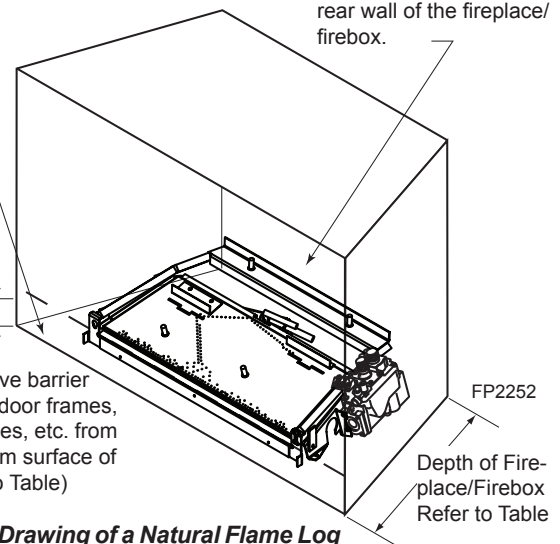
Height of Restriction (x)	Minimum Depth of Fireplace/Firebox
No Restriction	13"
0" to 1½"	16"
Greater than 1½" to 3"	16"
Greater than 3"	*

\*Any barrier greater than 3" placed in front of the gas log set is not recommended by the manufacturer.

**NOTE:** Non combustible material such as refractory brick may be used to line the floor of the fireplace in order to raise the height of the gas log set in relation to a restrictive barrier. If the unit is raised, the minimum height dimension listed in the homeowner's manual must not be exceeded.

**NOTE:** If the log set is equipped with a remote receiver, a restrictive barrier may reduce the battery life by increasing the ambient temperature inside the fireplace. Placement of the receiver outside of the fireplace will extend the battery life.

Glass door frames with adjustable louvers should have the louvers fully open while the unit is in operation



Height of restrictive barrier caused by glass door frames, recessed fireplaces, etc. from the base or bottom surface of the unit. (Refer to Table)

Figure 2 - Reference Drawing of a Natural Flame Log Set in an Enclosure

**WARNING**

Barriers such as the bottom of a glass door frame placed in front of a gas log set can change the air flow characteristics of the fireplace which in turn can cause the unit to overheat and malfunction.

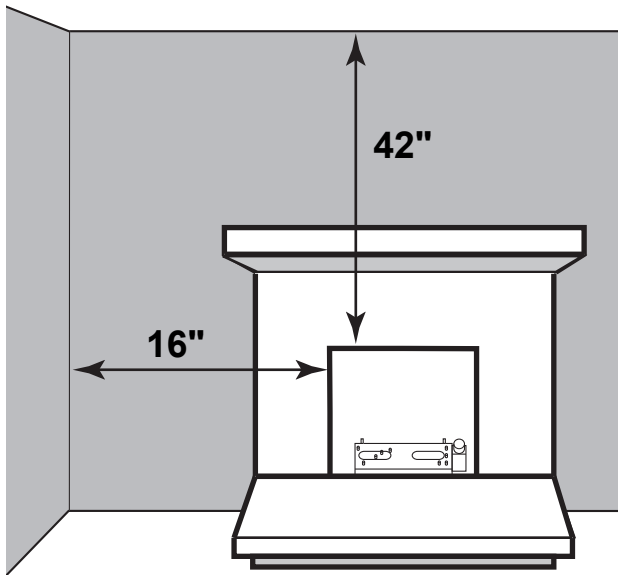
**WARNING**

The dimensions shown in *Figures 3 through 11* and defined in the fireplace manufacturer's instructions are minimum clearances to maintain when installing this heater. Left and right clearances are determined when facing the front of the heater.

When heater is installed into a ventless firebox, minimum clearances, as specified by the ventless firebox manufacturer, must be met.

Follow these instructions carefully to ensure safe installation. Failure to follow instructions exactly can create a fire hazard.

**Sidewall and ceiling clearances:** The *sides* of the fireplace opening must be **at least 16"** from any combustible wall. The *ceiling* must be **at least 42"** from the top of the fireplace opening.



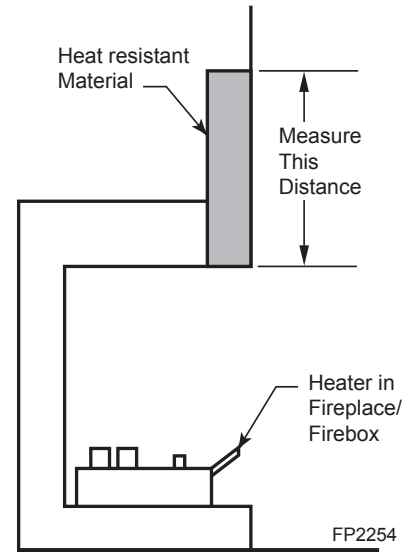
**Figure 3 - Sidewall and Ceiling Clearances**

**Heat resistant material (minimum requirements) with no wooden mantel or other combustible projection:**

To install the gas logs into a fireplace with no wooden mantel, shelf or other combustible projection above the fireplace opening, measure the heat resistant material height, according to *Figure 4* and **TABLE A**.

Heat resistant materials such as slate and marble must be **at least 1/2"** thick. **Sheet metal should not be installed onto combustible material.**

**IMPORTANT:** If you cannot meet these minimum clearances you must operate the heater with chimney flue damper open. Refer to "Installing Vented Applications" found on Page 17.



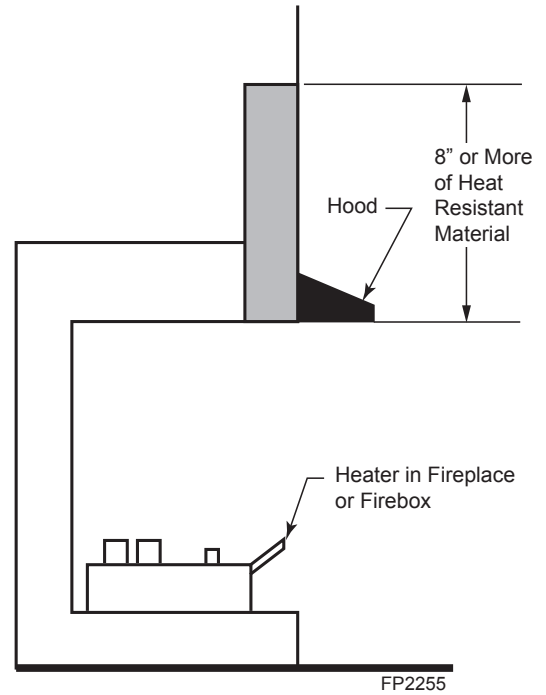
**Figure 4 - Measure Heat Resistant Material**

**Table A - Heat Resistant Material Requirements with No Mantel or Combustible Projection**

Heat Resistant Material Measurement	Requirements for Safe Installation	
	18NB	24NB
12" or more	Hood not required	Hood not required
8" or less than 12"	Hood not required	Extend heat resistant material to 12" or install hood. Figure 4
Less than 8"	Extend heat resistant material to 8" AND install hood. Figure 4	Extend heat resistant material to 8" AND install hood. Figure 5. OR, extend heat resistant material to a height of at least 12"

**Heat resistant material (minimum requirements) with wooden mantel or other combustible projection:**

To install the heater with a wooden mantel, shelf or other combustible projection above, first measure the heat resistant material shown in *Figure 5*, then refer to Table B.

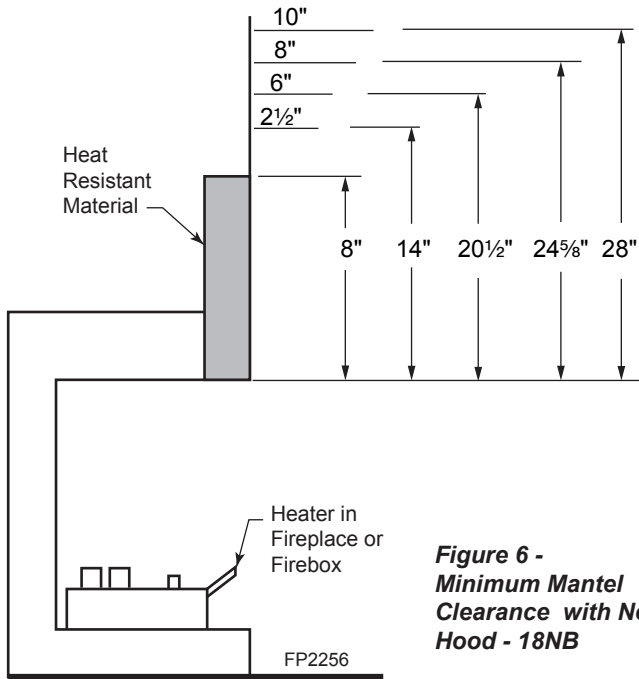


**Figure 5 -**  
**Measuring Heat Resistant Material for Mantel**

**Table B - Heat Resistant Material Requirements Height and Mantel Location**

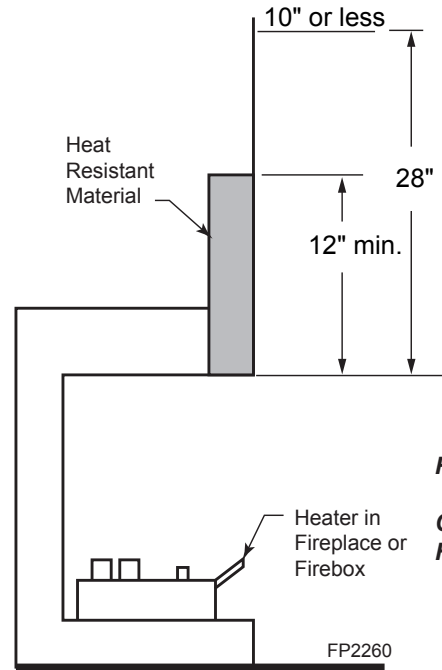
Heat Resistant Material Measurement	Requirements for Safe Installation with Wooden Mantel, Shelf or other Combustible Projection	
	18NB	24NB
12" or more	Hood not required. Observe profiles (side elevations) shown in Figure 6	Hood not required. Observe profile (side elevations shown on Figure 8
8" or less than 12"	Install hood and observe profiles shown in Figure 7 <b>OR</b> extend heat resistant material to at least 12" and observe profiles	Install hood and observe profiles shown in Figure 7; <b>OR</b> extend heat resistant material to at least 12" and observe profiles shown in Figure 8
Less than 8"	Extend heat resistant to at least 8", install hood and observe profiles shown in Figure 7; <b>OR</b> extend heat resistant material to at least 12" and observe profiles shown in Figure 6	Extend heat resistant material to at least 8", install hood and observe profiles shown in Figure 7; <b>OR</b> extend heat resistant material to at least 12" and observe profiles shown in Figure 8





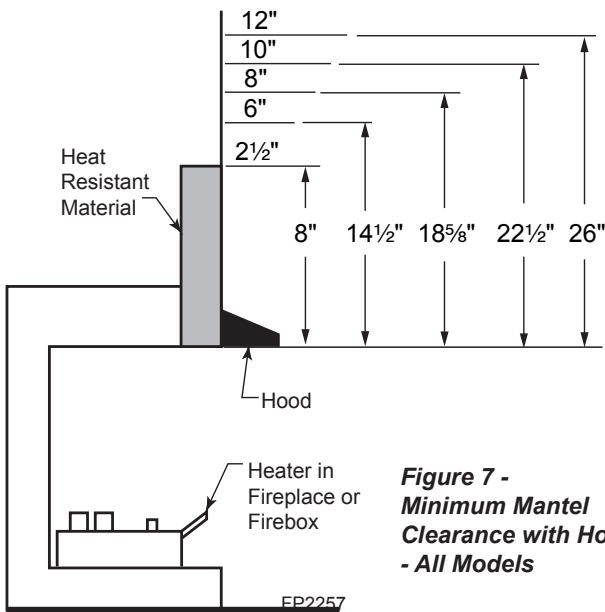
**Figure 6 - Minimum Mantel Clearance with No Hood - 18NB**

**Example:** A mantel may project from the wall a maximum of 2½" at a minimum of 14" above the opening, and a maximum of 6" at a minimum of 20½" above the opening.



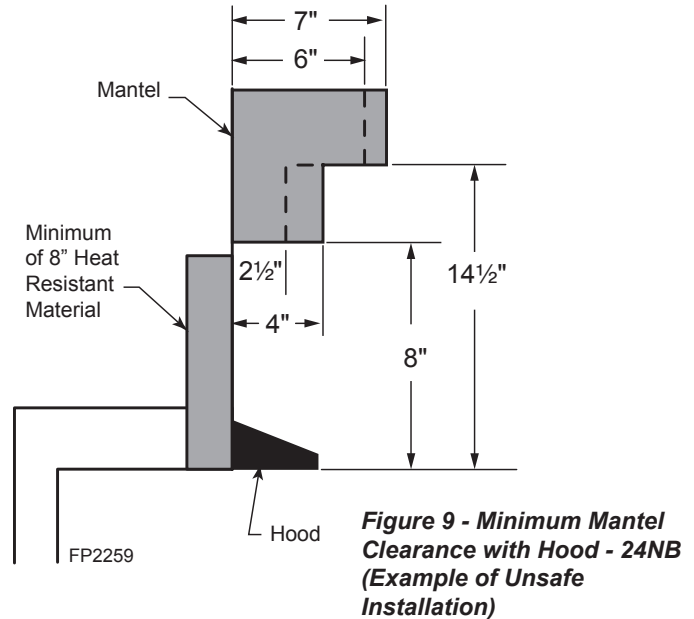
**Figure 8 - Minimum Mantel Clearance with No Hood — 24NB**

**Example:** The bottom of the mantel may project from the wall a maximum of 10" at a minimum of 28" above the opening.



**Figure 7 - Minimum Mantel Clearance with Hood - All Models**

**Example:** A mantel may project from the wall a maximum of 2½" at a minimum of 8" above the opening, and a maximum of 6" at a minimum of 14½" above the opening.



**Figure 9 - Minimum Mantel Clearance with Hood - 24NB (Example of Unsafe Installation)**

**Figure 9 is an example of an unsafe mantel installation.** This mantel projects 4" at 8" above the opening, exceeding the maximum acceptable depth of 2½". The mantel also projects 7" at 14½" above the opening, exceeding the maximum acceptable depth of 6".

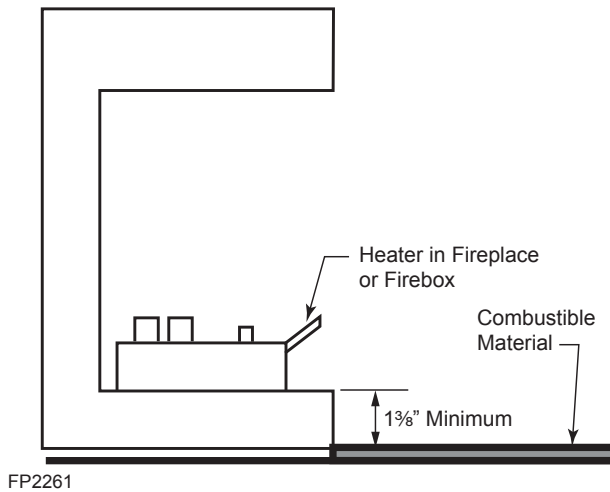
If your mantel profile is unsafe, you may either:

- Raise the mantel to an acceptable height
- OR**
- Remove the mantel

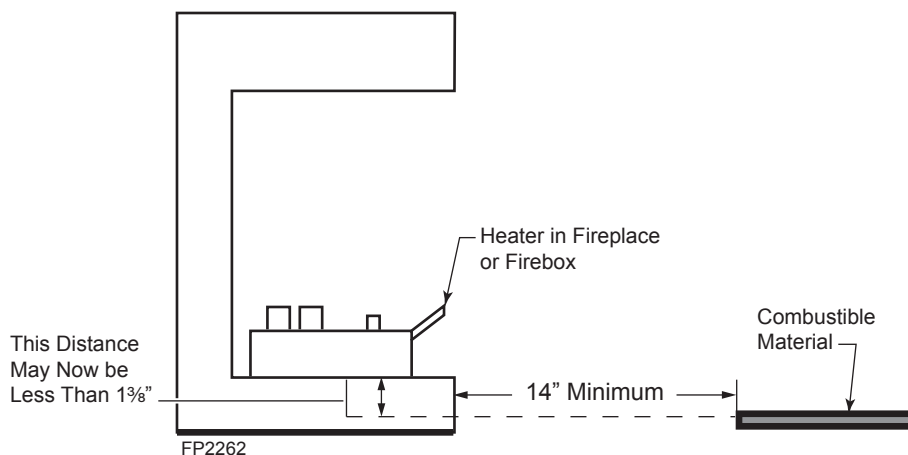
The gas log heater must be installed at least  $1\frac{3}{8}$ " above any combustible flooring material, such as carpeting or tile, which is closer than 14" to the base of the fireplace. The minimum distance must be maintained from the top surface of carpeting, tile, etc. *Figure 10*

**OR**

The gas log heater may be installed nearer to the floor if a minimum of 14" of noncombustible material such as slate or marble is installed between the base of the fireplace and the combustible flooring. *Figure 11*



**Figure 10 -**  
**Minimum Clearance above Combustible Flooring**



**Figure 11 -**  
**Minimum Clearance above Combustible Flooring with**  
**Noncombustible Material Installed at Base of Fireplace**

**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.

**WARNING** This appliance is for installation only in a solid fuel burning fireplace (masonry fireplace or manufactured fireplace) with a working flue and constructed of noncombustible material.  
**Exception:** DO NOT install this appliance in a factory-built fireplace that includes instructions stating that it has not been tested or should not be used with unvented gas logs. This log set may be installed as a vented log set.

**BEFORE FULLY INSTALLING THE UNIT:**

- Turn **OFF** the gas supply to the fireplace or firebox.
- Seal any fresh air vents and/or ash clean-out doors located on the floor or wall of the fireplace. If left unsealed, drafting may cause pilot outage or soot-ing. Use a heat resistant sealant. **Do not seal the chimney flue damper.**

**INSTALLING VENTED APPLICATIONS - NB & NBSC ONLY**

Manual and millivolt controlled gas logs may be installed as a vented decorative log set in compliance with ANSI Z21.60 and National Fuel Gas Code, Section 6.6. **Since, the gas logs are operated with the damper open, non-combustible material and minimum mantel requirements do not apply.**

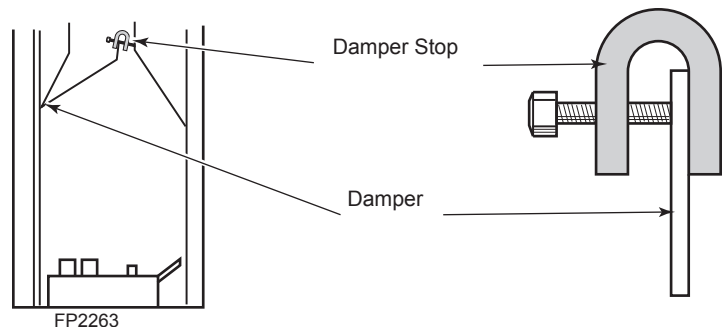
**Before installing the appliance:**

- Turn off gas supply to fireplace or firebox.
- Have the fireplace floor and chimney professionally cleaned to remove ashes, soot, creosote or other obstructions. Have this cleaning performed annually after installation.
- Seal any fresh air vents or ash clean-out doors located on floor or wall of fireplace. If not, drafting may cause pilot outage or sooting. Use a heat-resistant sealant.

Install and operate the appliance as directed in this manual.

**DAMPER STOP INSTALLATION**

A damper stop must be provided with the unit. Contact your dealer to obtain one. The damper stop must be installed as shown in *Figure 12* to prevent full closure of the fireplace damper blade and provide a minimum 29 square inch flue opening.



**Figure 12 - Damper Stop Installation.**

## VENTED APPLICATIONS ONLY

### WARNING

The fireplace and gas logs function as a system. If the fireplace is spilling into the room (check with a match or a smoke stick), reposition the damper clamp until a positive draft is obtained by opening the damper. If negative pressure in home prevents having a positive draft, contact your dealer for assistance.

### WARNING

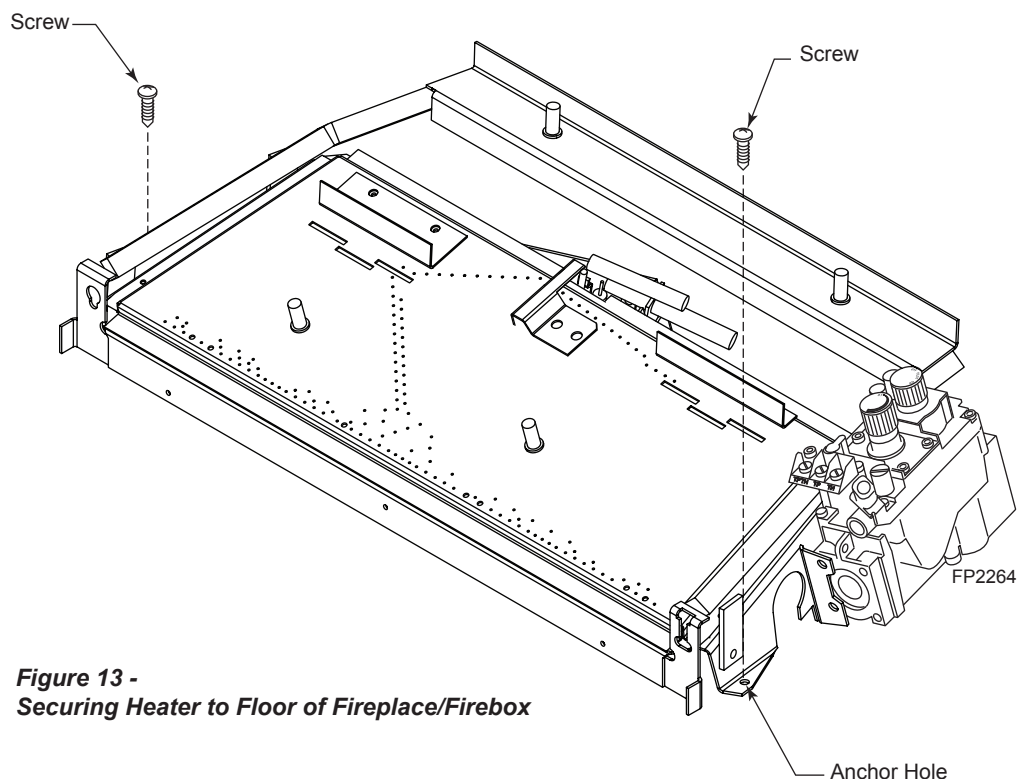
You must secure the gas log heater to the fireplace floor. If not, the entire unit may move when you adjust the controls. Movement of unit may cause shifting of the gas logs which leads to sooting and improper burning. Grate movement could cause a gas leak.

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, as described in Placement in a Fireplace with Restrictive Barrier on Page 6.

## ASSEMBLY PROCEDURE

1. Center the gas log unit on the fireplace or firebox. Make certain the front of the burner sits inside the front edge of the fireplace or firebox.
2. Anchor holes are located on the right and left sides of the unit. After centering the burner correctly, mark the hole positions on the fireplace/firebox floor. Drill two (2) 5/32" diameter holes approximately 1½" deep.
3. Anchor the grate to the fireplace/firebox floor using the screws provided. *Figure 13*

**Proper installation of the grate is essential to prevent any movement of the gas logs and controls during operation.**



**Figure 13 -  
Securing Heater to Floor of Fireplace/Firebox**

**WARNING**

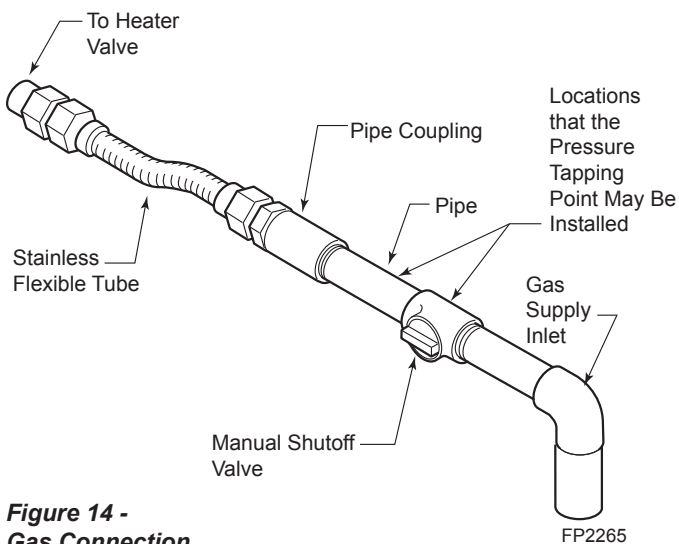
Use new black iron or steel pipe. Internally tinned copper or copper tubing can be used per National Fuel Code, section 2.6.3, providing gas meets hydrogen sulfide limits, and where permitted by local codes. Gas piping system must be sized to provide minimum inlet pressure (Listed on Data Plate) at the maximum flow rate (BTU/hr). Undue pressure loss will occur if the pipe is too small.

A manual shutoff valve must be installed upstream of the appliance. Union tee and plugged 1/8" NPT pressure tapping point should be installed upstream of the appliance. *Figure 14*

**NOTICE:** A qualified gas appliance installer must connect the heater to the gas supply. Consult all local codes.

**IMPORTANT:** Hold heater valve firmly with a wrench to prevent movement when connecting to inlet pipe.

Always use an external regulator for all propane/LPG heaters and high pressure one to two-pound systems only, to reduce the supply tank pressure to a maximum of 13" w.c. This is in addition to the internal regulator in the heater valve.



**Figure 14 - Gas Connection**

**WARNING**

**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.

**WARNING**

Connecting directly to an unregulated propane/LPG tank can cause an explosion.

The heater gas inlet connection is a 3/8" NPT at the valve. On all control type units, the inlet connection is on the right side of unit. To connect from the opposite side, route the pipe around the back portion of the unit.

When tightening up the joint to the valve, hold the valve securely to prevent movement.

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

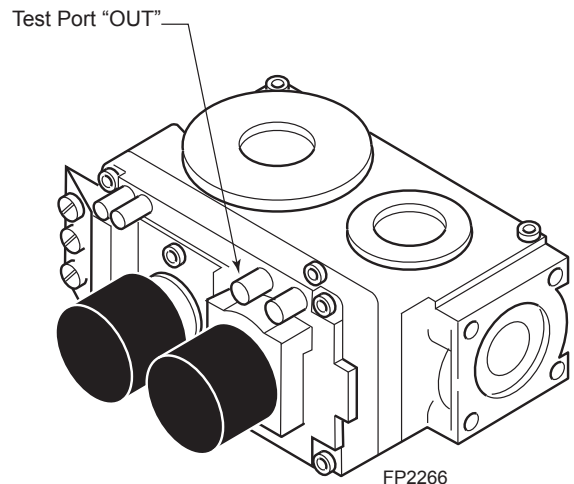
Check the gas pressure with the appliance burning and the control set to **HIGH**.

**MILLIVOLT VALVE CONTROL**

*Figure 15*

The valve regulator controls the burner pressure which should be checked at the pressure test point.

Turn captured screw counter clockwise two or three turns and then place tubing to pressure gauge over test point (Use test point "OUT" closest to control knob). After taking pressure reading, be sure and turn captured screw clockwise firmly to re-seal. Do not over torque. Check for gas leaks.



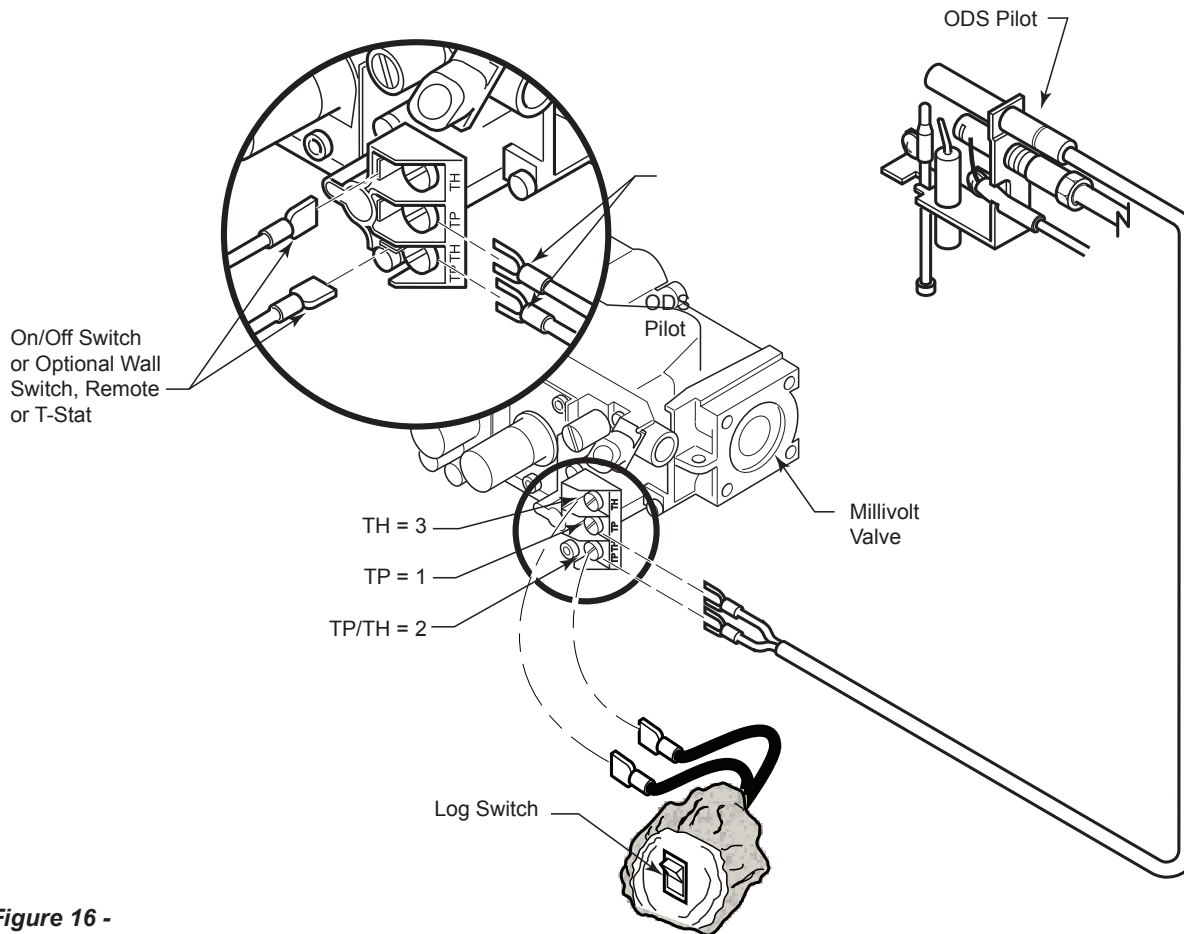
**Figure 15 - Pressure Test Point Location Millivolt Control**



**CAUTION**

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

The millivolt valve is a self-powered combination gas control **THAT DOES NOT REQUIRE 110 VAC TO OPERATE.**



**Figure 16 -  
Wiring Diagram**

**NOTE:** Log switch wires are not factory connected.  
Connect log switch wires to the TH/TP and TH valve terminals as shown.

## CONNECT OPTIONAL WALL SWITCH OR THERMOSTAT

1. Use 18 awg, two-wire cable, 15 feet maximum length.
2. At one end of the cable, connect both wires to the wall switch or thermostat. At the other end, connect one wire to TP/TH and one wire to TH, or connect the wall switch/thermostat to the two male (0.25") terminals on the left side of the unit. The color of the wires does not matter.

**CONNECT REMOTE RECEIVER**

1. Set remote receiver. See instructions included in receiver kit.
2. Connect the two (2) 1/4" female connectors to the TP/TH and TH terminals on the control valve.

**NOTICE** Do not allow wires touch grate or burner.

**NOTE:** Heat reduces battery life. You can protect the receiver and extend battery life by mounting receiver in wall or other location outside the fireplace.

**CHECK SYSTEM OPERATION**

The millivolt system and individual components may be checked with a millivolt meter having a 0-1000 mV range. Conduct each check shown in chart below by connection meter test leads to terminals as indicated.

Check Test	To Test	Connect Meter Leads To Terminals	Switch or Thermostat Contacts	Meter Reading Should Be
A	Complete System	2 & 3	Closed	Minimum 175
B	Thermopile Output	1 & 2	Open	Minimum 500

**A. Complete Millivolt System Check**

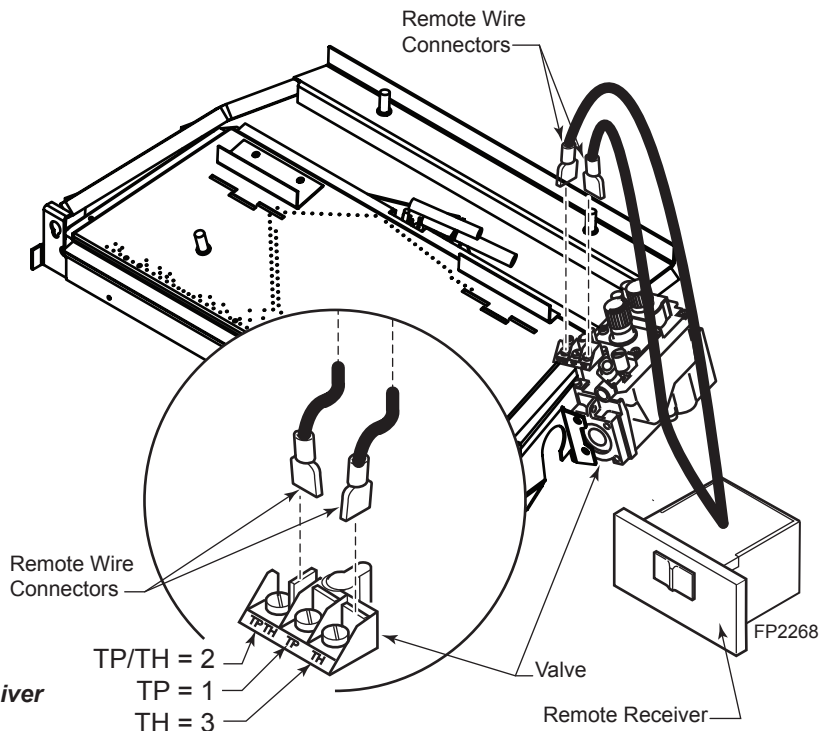
**(“A” Reading - Thermostat contacts CLOSED - Control Knob “ON” - Main burner should turn ON)**

- a. If the reading is more than 175 millivolts and the automatic valve still does not come on, replace the control.
- b. If the closed circuit reading (“A” reading) is less than 175 millivolts, determine cause for low reading, proceed to Section B below.

**B. Thermopile Output Reading Check**

**(“B” Reading - Thermostat contacts OPEN - Main burner OFF)**

1. Check gas pressure to the unit. If gas pressure is within minimum and maximum on data plate, then check pilot voltage, 500 millivolts minimum. If the minimum millivolt reading is not obtainable, replace pilot.



**Figure 17 - Installing Remote Receiver**

**WARNING**

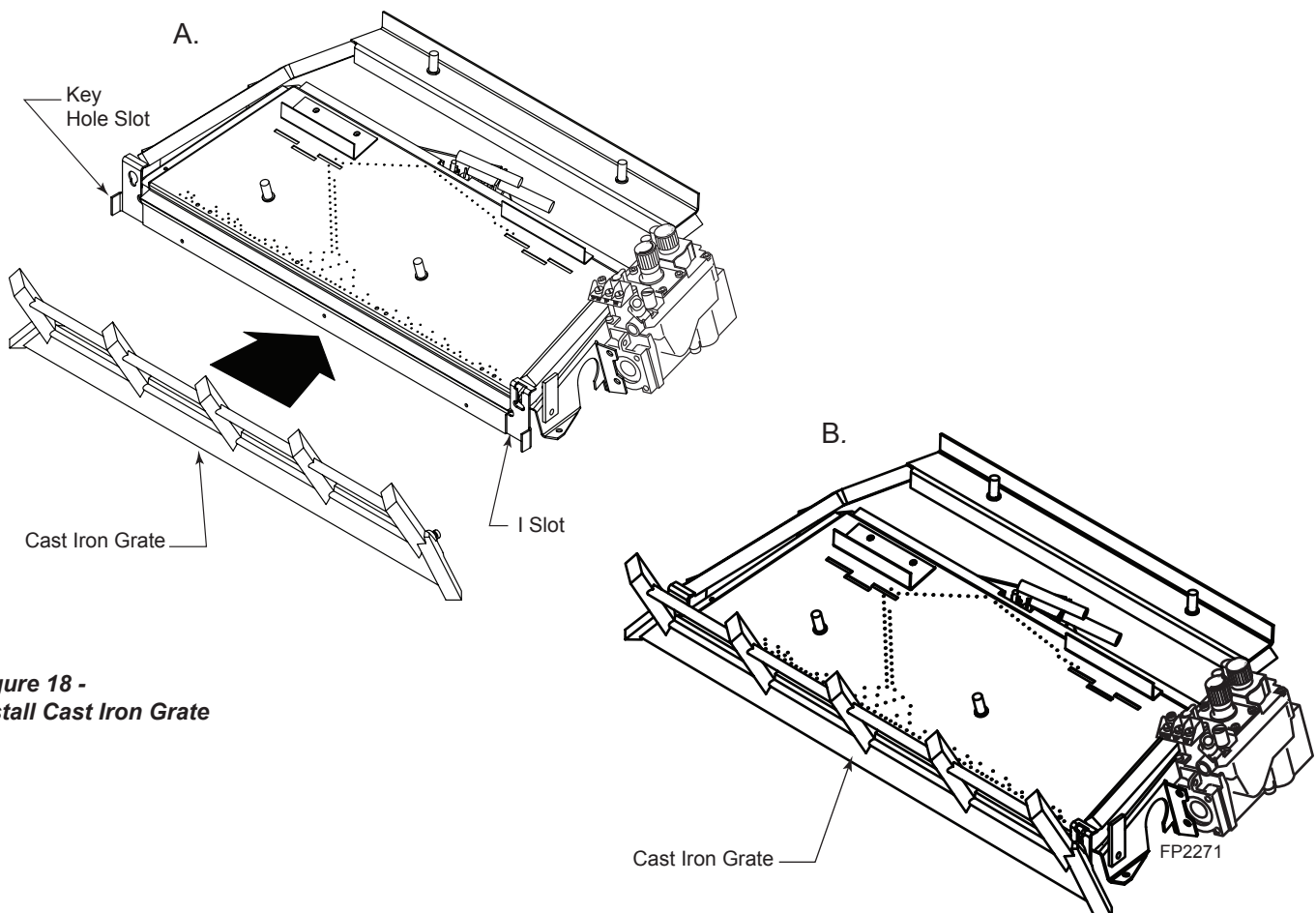
The positioning of the logs is critical to the safe and clean operation of this heater. Sooting and other problems may result if the logs are not properly and firmly positioned in the appliance. Never add additional logs or embellishments such as pine cones, vermiculite or rock wool to the heater. Only use the logs and 2G-RW rock wool (for 18NB), or 3G-RW rock wool (for 24NB) supplied with the unit.

Failure to position the parts in accordance with diagrams below or to use only parts specifically approved for this heater may result in property damage or personal injury.

**Before you begin** — This unit is supplied with seven (7) ceramic fiber logs. Do not handle these logs with your bare hands. **Always wear gloves to prevent skin irritation from ceramic fibers.** After handling the logs, wash your hands gently with soap and water to remove any traces of fibers.

### CAST IRON GRATE INSTALLATION

Install the cast iron grate by inserting screw head on back of right side of grate into the “I” shaped slot on front right corner of unit. After moving screw head to the bottom of the “I” slot, insert the screw head on the back of the left side of grate into the keyhole slot on the left front of unit. *Figure 18*

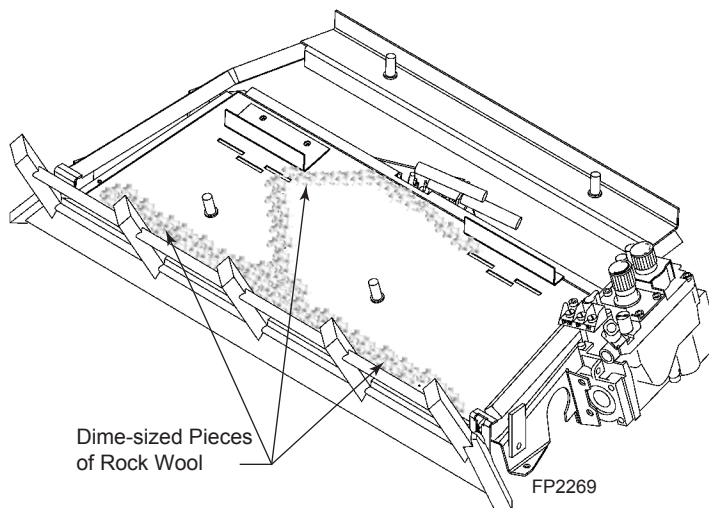


**Figure 18 -  
Install Cast Iron Grate**

**ROCK WOOL PLACEMENT**

Before installing logs, place rockwool in dime size pieces evenly over small burner ports starting in the rear of the burner going towards the front. Avoid placing rock wool on slots on each side of rear burner and on large yellow flame ports on front of burner. After covering small burner ports, discard any excess rock wool.

Wash hands after placing rock wool. Itching may occur.  
**NOTE: Installation instructions are the same for 18", 24", and 30" log sets. Pictures used in this manual illustrate the 24" set. Some variation may exist between the images and the set included with this manual.**



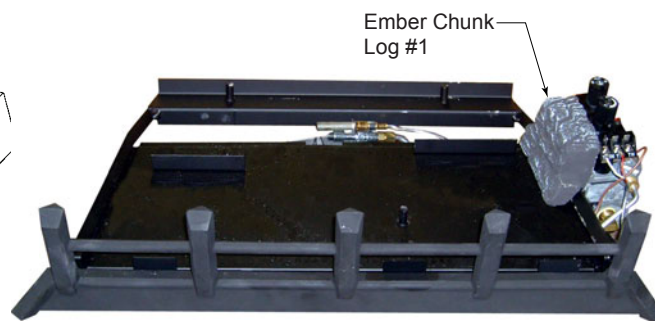
**Figure 19 - Place Rock Wool**

**WARNING**

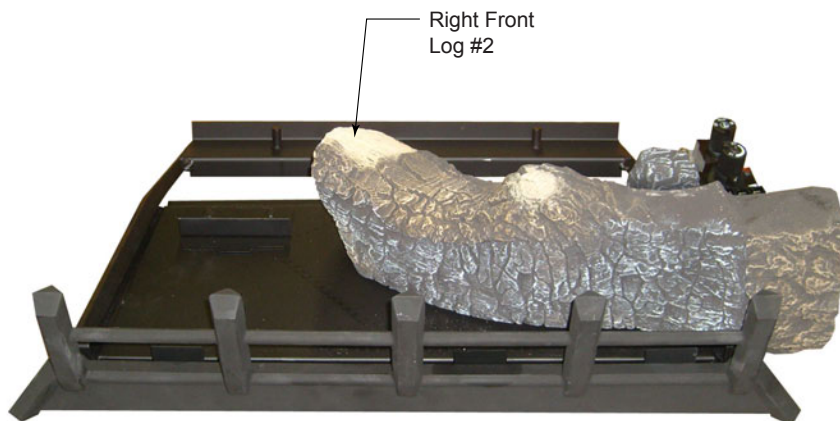
- Use only rock wool provided with log set.
- Do not add additional rock wool.

**INSTALL 18", 24" AND 30" (F,R) HIGHLAND OAK LOGS ON NATURAL BLAZE BURNER**

1. Place the #1 log (the "chunk") on the grate bar right side of the burner adjacent to the controls. *Figure 20*
2. Place front right log (#2) on right pin located on burner and right grate bar. *Figure 21*. After placing front right log, ensure log is fully upright and tilting towards the back of the burner.



**Figure 20**



**Figure 21**

3. Place right rear log (#3) on pin located on rear support bracket and rest left side of log on front right log. *Figure 22*. After



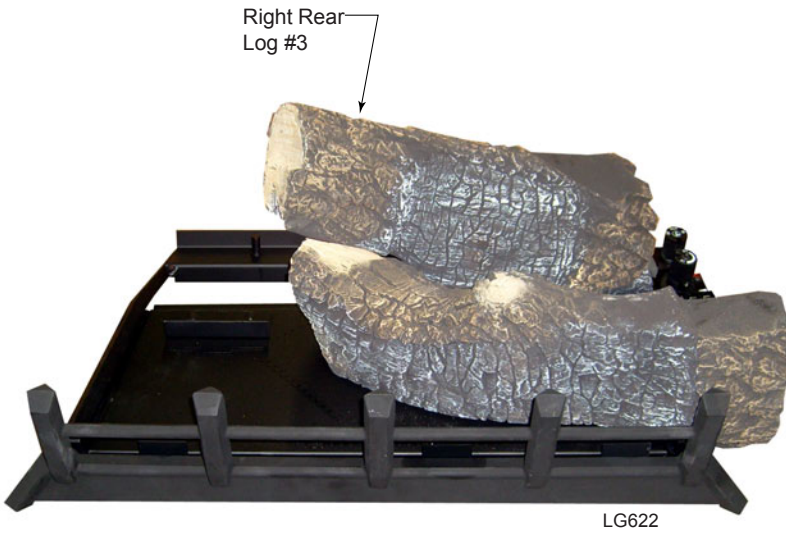


Figure 22

placing right rear log, ensure log is fully upright and does not tilt forward. Slide #1 log ember chunk back to contact right rear log.

- 4. Place left rear log (#4) on pin located on rear support bracket on left side and left grate bar. *Figure 23*

- 5. Place left front log (#5) on left pin located on burner and left grate bar. Rest top right portion of log on right front log. *Figure*

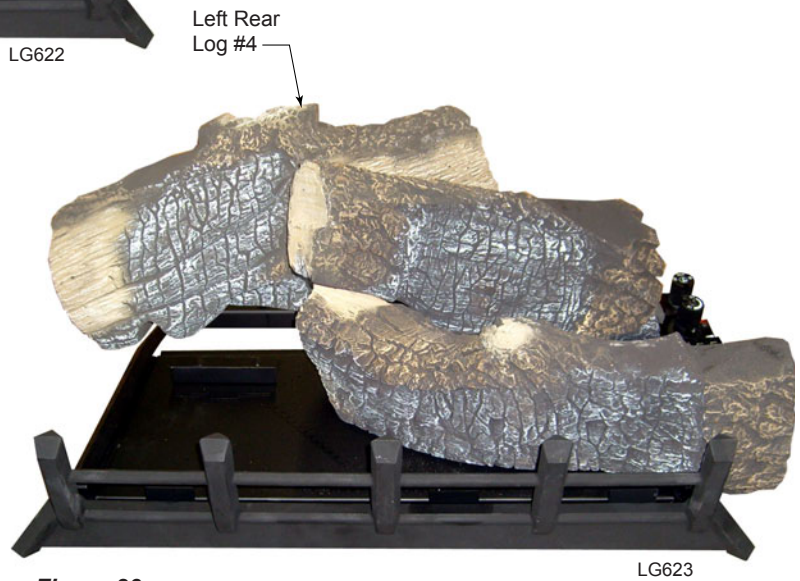


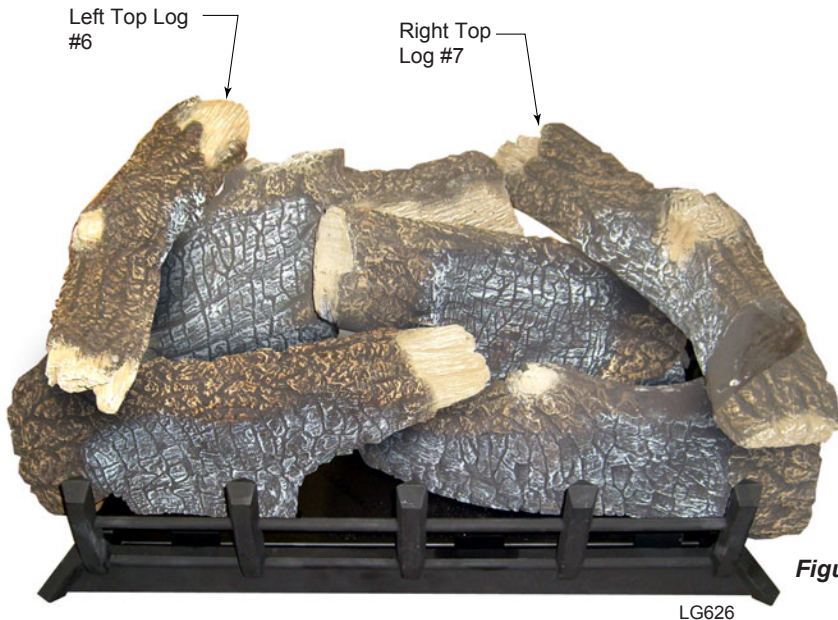
Figure 23



24

Figure 24





**Figure 25**

LG626

6. Place top left log (#6) on left rear log (#4) and left front log (#5) using locating grooves on bottom of #6 and locating blocks on logs #4 and #5. *Figure 25*
7. Place right top log (#7) on right rear log (#3) and right front log (#2) using locators on the bottom of log #7 and locators on logs #2 and #3. *Figure 25*

8. Place small right front top log (#8) on log #7 and log #2 using locating grooves on the bottom of log #8 and locating blocks on log #7 and log #2. *Figure 26*

**PLACE FLICKERING EMBERS**

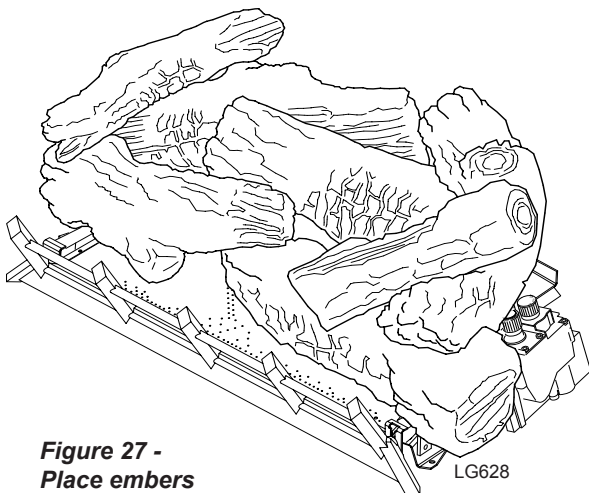
Place flickering bright embers (FBE-.1G) after placing logs on burner. Pull apart into small strands and place on top of existing rock wool in front of and between front logs where they can be seen. Try to avoid stacking these embers on top of each other. Use smaller and stringier strands for maximum effect. Use as much as needed until desired effect is achieved.



**Figure 26**

LG627

**PLACE THE DECORATIVE ROCK**



**Figure 27 - Place embers**

LG628

**CAUTION**

**DO NOT** sprinkle volcanic rock on the logs, around the pilot, or on or near burners. This may cause sooting. Place volcanic rock only on the floor of the fireplace.

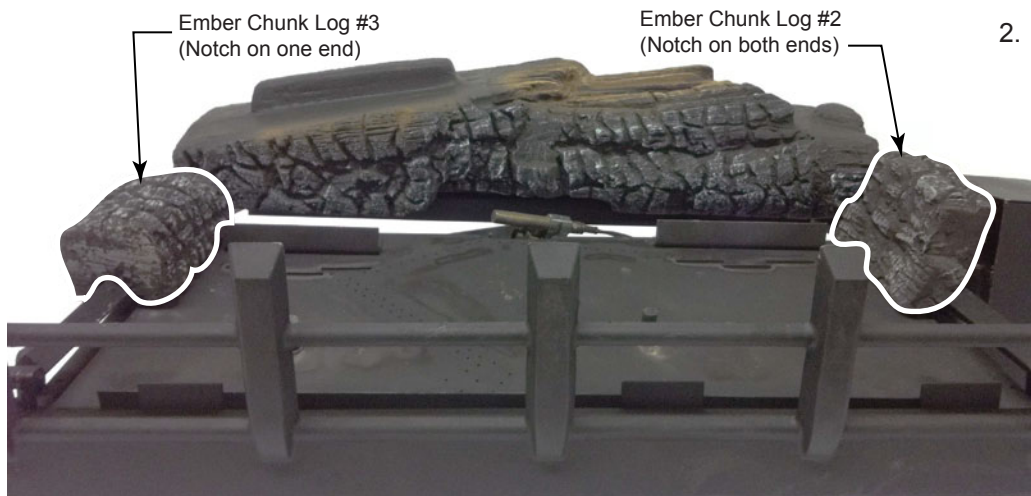
During initial operation of the new heater, new burning logs and/or rock wool will give off a paper burning smell and orange flames will be present. Simply open the windows for a few hours to vent the odor.

**PLACE SPLIT TIMBER 18/24/30ST-R LOGS**

1. Place bottom log (#1) on two (2) pins on rear of grate assembly and push towards rear as far as possible.

*Figure 28*

LG1074



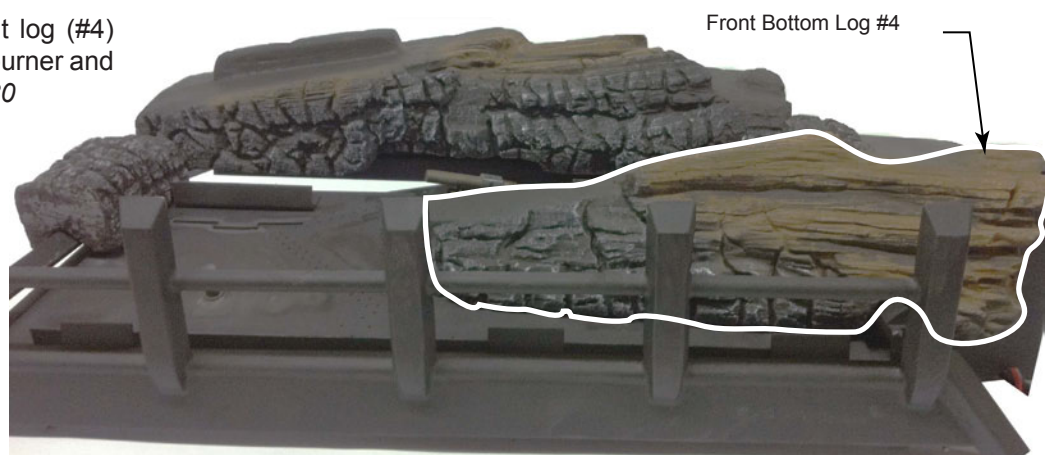
LG1075

2. Place the ember chunk (#2) with notch on both ends on the grate bar right side of the burner adjacent to the controls. Push towards rear as far as possible. *Figure 29*

3. Place the ember chunk (#3) with notch on one end on the grate bar left side of the burner with notch towards rear. Push towards rear as far as possible. *Figure 29*

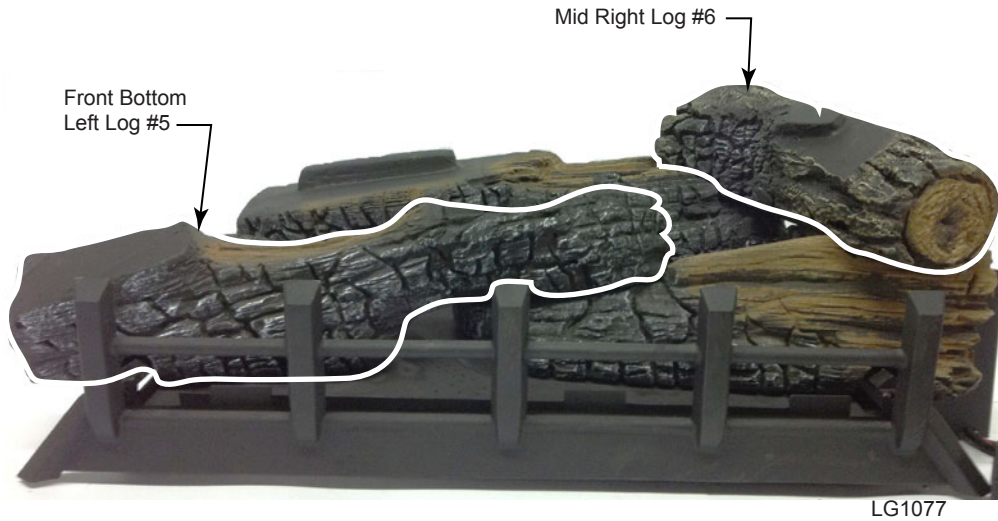
*Figure 29*

4. Place front bottom right log (#4) on right pin located on burner and right grate bar. *Figure 30*

*Figure 30*

LG1076



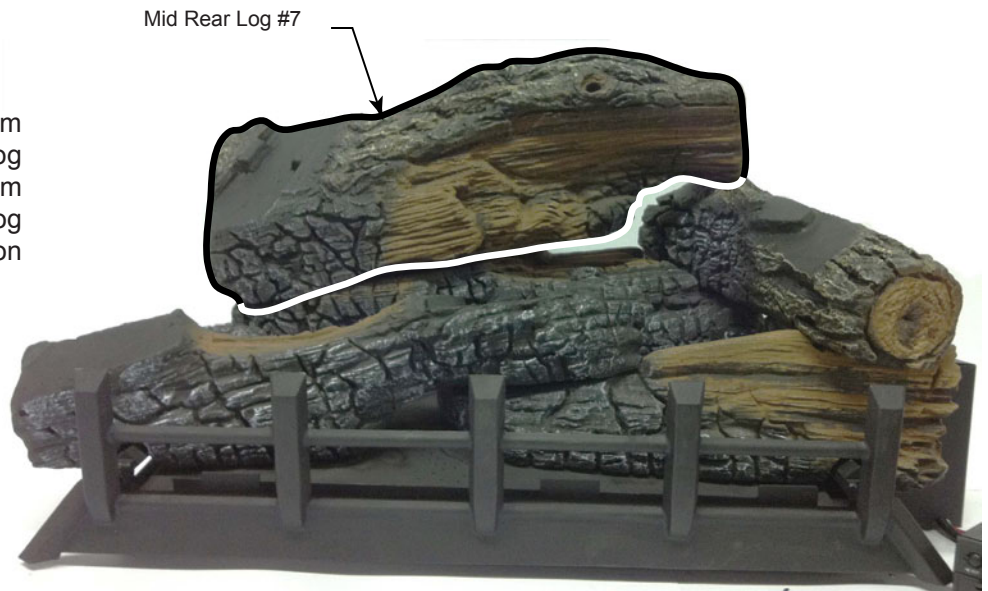


5. Place front bottom left log (#5) on left pin located on burner and left grate bar. The right side of the log should rest on log #4. *Figure 31*
6. Place mid right log (#6) on bottom rear log (#1) and front bottom right log (#4) by placing notch on bottom of log on locating block on log #1. Place front of log in notch of log #4. *Figure 31*

**Figure 31**

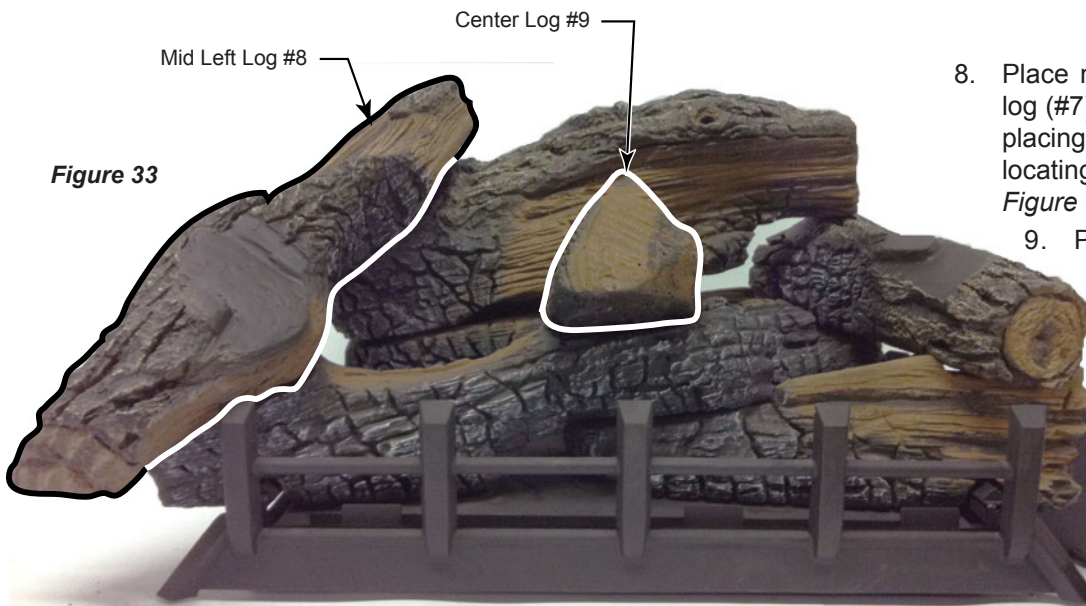
LG1077

7. Place mid rear log (#7) on bottom rear log (#1) and mid right log (#6) by placing notch on bottom of log onto locating block on log #1. Right side of log will rest on log #6. *Figure 32*



**Figure 32**

LG1078

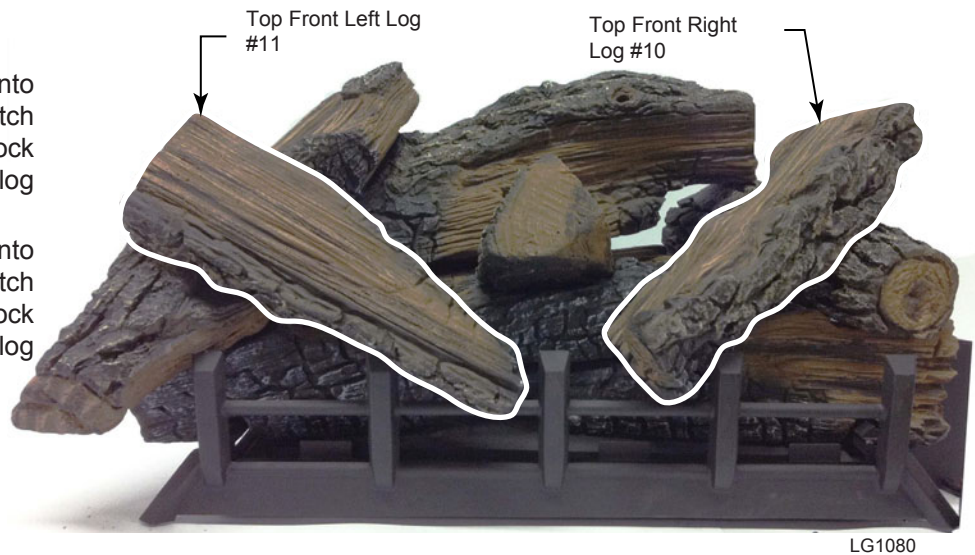


**Figure 33**

8. Place mid left log (#8) on mid rear log (#7) and front bottom log (#5) by placing notches on bottom of log onto locating blocks on log #7 and log #5. *Figure 33*
9. Place center log (#9) onto front bottom left log (#5) by placing notch on bottom of log #9 onto locating block on log #5. The flat triangle-shaped end of log #9 should be towards front with pointed end of log resting on bottom rear log (#1). *Figure 33*

LG1079

10. Place top front right log (#10) onto mid right log (#6) by placing notch on bottom of log onto locating block on log #6. Rest bottom end of log onto grate bar. *Figure 34*
11. Place top front left log (#11) onto mid left log (#8) by placing notch on bottom of log onto locating block on log #8. Rest bottom end of log onto grate bar. *Figure 34*

**Figure 34**

Log #12  
(2430STEK  
Enhancement Kit)

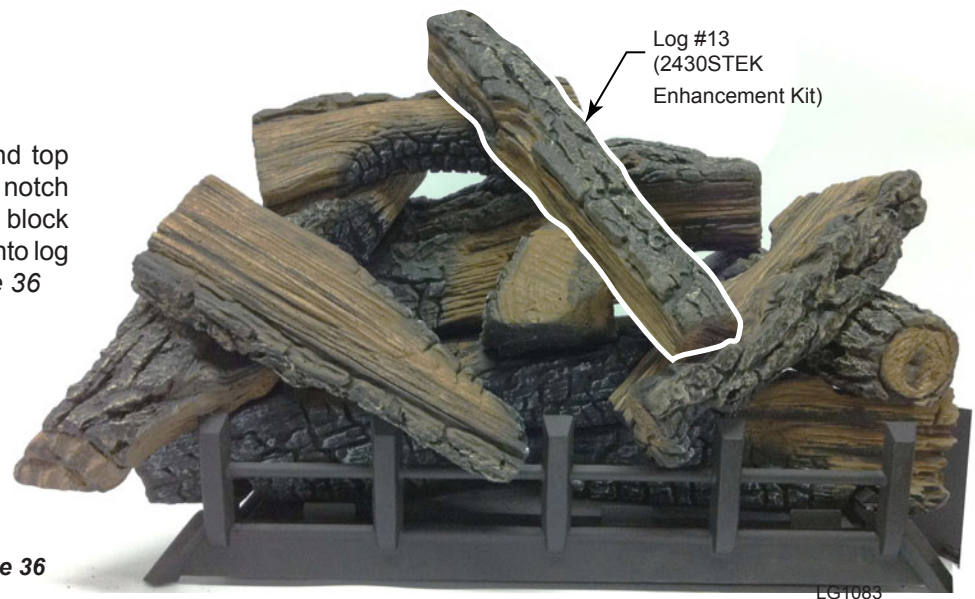
LG1080

12. Place log #12 onto mid left log (#8) and mid rear log (#7) by placing notch on bottom of log onto locating block on log #8. Rest right end of log onto top of log #7. *Figure 35*

**Figure 35**

LG1081

13. Place log #13 onto log #12 and top front right log (#10) by placing notch on bottom of log onto locating block on log #12. Rest bottom of log onto log #10 and center log (#9). *Figure 36*

**Figure 36**

LG1085

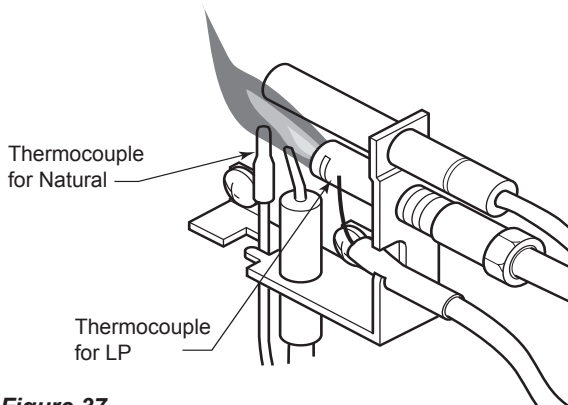


Flames from the pilot and burner should be visually checked as soon as the heater is installed. In addition, periodically check the flames visually during operation.

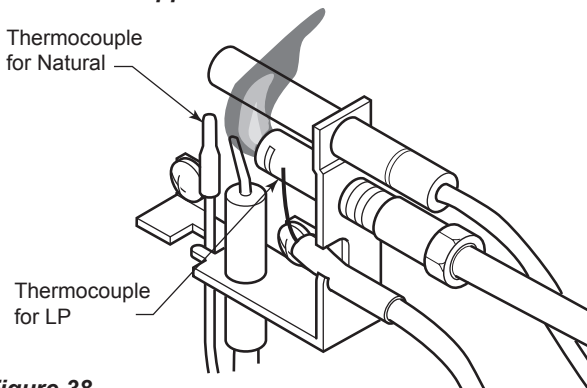
**CHECK THE PILOT FLAME**

The pilot flame must always be present when the heater is in operation. It should just touch the top of the thermocouple tip for natural. Refer to *Figure 37* for correct pilot flame.

If the pilot flame does not touch the thermocouple, then the main burner cannot function reliably. *Figure 38* for incorrect shape of pilot flame.



**Figure 37 - Correct Appearance of Pilot Flame**

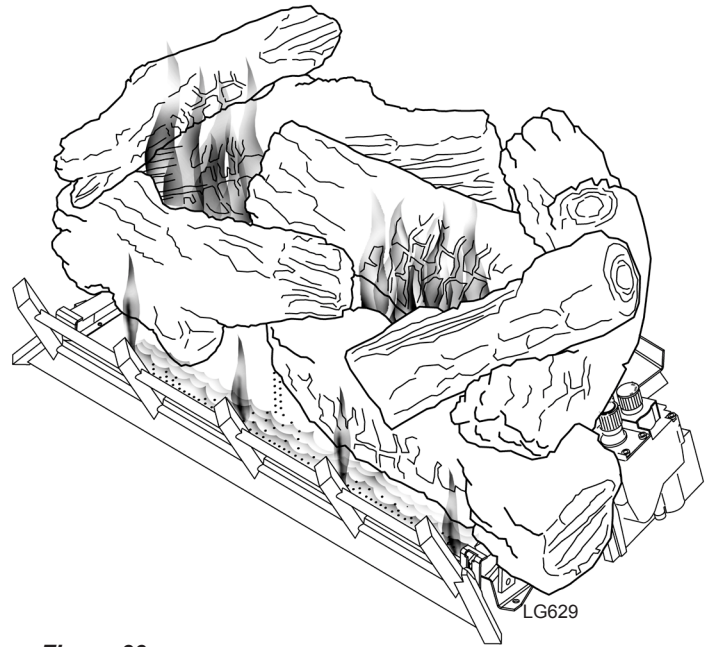


**Figure 38 - Incorrect Appearance of Pilot Flame**

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

Burner will have a random pattern of yellow flames as shown in *Figure 39*. There should be glowing embers on the front burner. **NOTE: The front flames and embers will be an opaque orange color during the burn off time.**

**CAUTION:** After a 15 minute pre-heat period, observe all yellow flames to ensure there is no impingement with any log. If any yellow flame is contacting any log, turn off log set and allow to cool. Remove all logs and carefully reinstall following log placement instructions precisely. Relight burner and check again for impingement of any flame on



**Figure 39 - Correct Appearance of Rear Flames for Highland Oak**

log. If flame impingement cannot be eliminated, contact your installer or dealer for assistance. Flame impingement on logs may create soot and possible property damage.

**OPERATING INSTRUCTIONS**

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

During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not harmful, but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance, possibly causing headaches or eye or lung irritation. *This is a normal and temporary occurrence.*

The initial break-in operation should last four hours with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in will be slight and will disappear with continued use.

This appliance must not be used with glass doors in the closed position. This can lead to pilot outages and severe sooting outside the fireplace. *Page 6, Figure 2*



## FOR YOUR SAFETY READ BEFORE LIGHTING

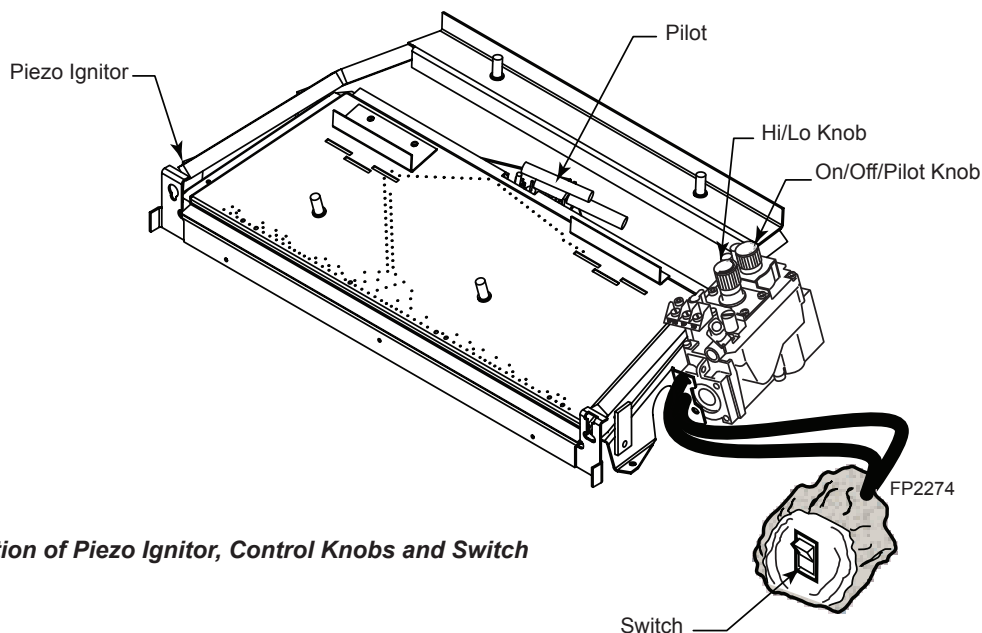
### WARNING

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

- A.** This appliance is equipped with a piezo ignitor device which lights the pilot. If piezo is not working properly see *Match Lighting Instructions, Page 26*.
- 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.

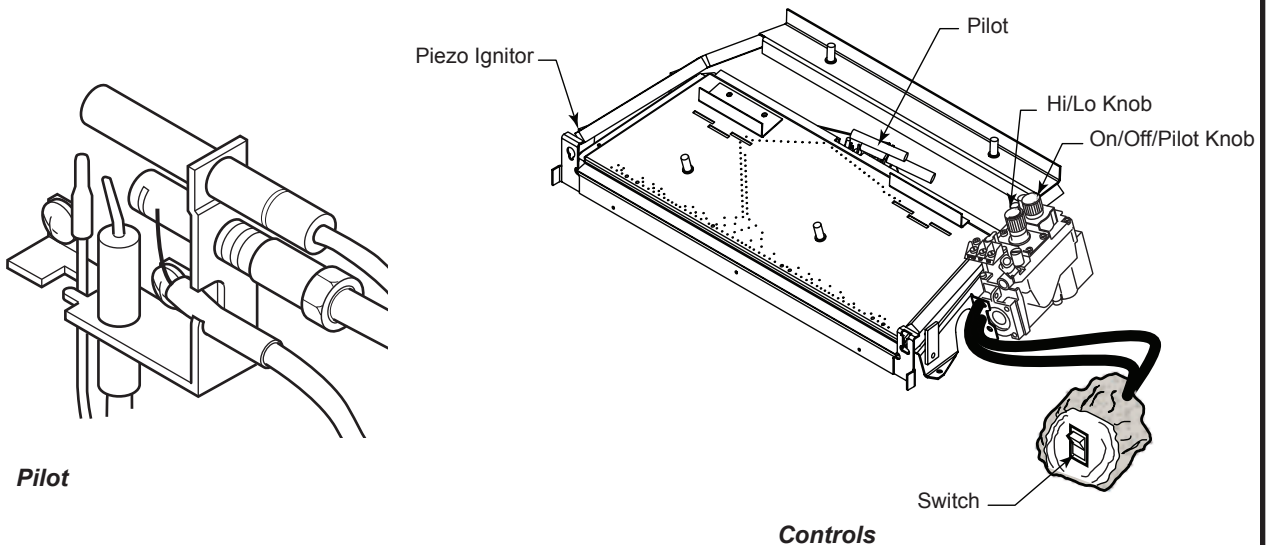
### WHAT TO DO IF YOU SMELL GAS:

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



## MILLIVOLT CONTROL LIGHTING INSTRUCTIONS

1. STOP! Read the safety information label.
2. Make sure the manual shutoff valve is fully open.
3. This gas log set is equipped with an ignition device (piezo) which automatically lights the pilot. If piezo ignitor does not light the pilot, refer to instructions for *Match Lighting Instructions, Page 26*.
4. Turn gas control knob clockwise ↻ to the OFF position and turn ON/OFF switch to OFF position.
5. 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, Page 24*.
6. From OFF position, turn the gas control knob counterclockwise ↻ to IGN position. Push in control knob for 5 seconds. **NOTE: If you are running the heater for the first time, it may be necessary to press in the control knob for 30 seconds or longer to allow air to bleed out of the gas piping.**
7. With the control knob pushed in, push in and release the piezo ignitor button to light the pilot.
8. Continue pushing the control knob in for a further 60 seconds to prevent the flame detector from shutting off the gas while the probe is warming up. Release the control knob.
9. Turn gas control knob counterclockwise ↻ to the ON position.
10. After the pilot has been lit for one minute, the burners can be turned on. Turn the ON/OFF switch to ON position.
11. If the gas logs will not operate, follow the instructions To Turn Off Gas To Heater below and call your service technician or gas supplier.



## TO TURN OFF GAS TO HEATER

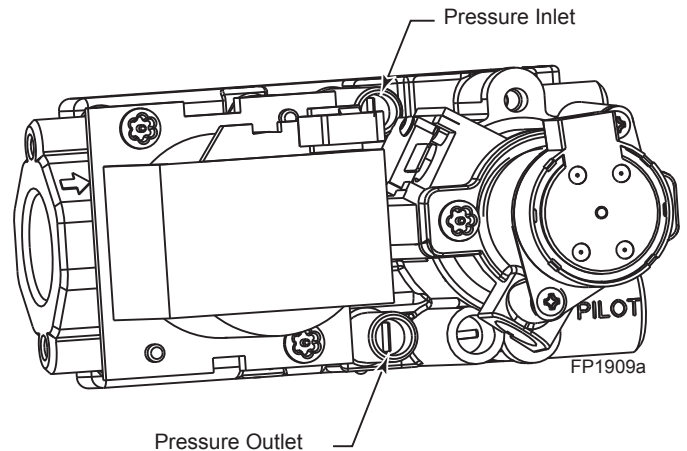
1. Turn control knob clockwise ↻ to OFF position to completely shut off the heater.
2. If applicable: Turn ON/OFF switch to OFF position and/or set thermostat (if present) to lowest setting.
3. If applicable: Turn off all electric power to the heater.

## MATCH LIGHTING INSTRUCTIONS

1. Remove any items necessary for easy access to the pilot (for example: logs, screens, etc.).
2. Follow appropriate lighting instructions found previously. Instead of pushing and releasing the piezo button, light a match and hold the flame to the end of the pilot and ignite the pilot.
3. After control knob has been released and pilot stays lit, reinstall any items that were removed for pilot access.
4. Call a qualified service technician for repair or replacement of the piezo ignitor.

## CHECK GAS PRESSURE & ELECTRICAL INSTALLATION - SIGNATURE COMMAND

1. Check gas type. The gas supply must be the same as stated on the appliance's rating decal. If the gas supply is different from the fireplace, **STOP!** Do not install the appliance. Contact your dealer immediately.
2. After completing gas line connection, purge air from gas line and test all gas joints from the gas meter to the fireplace for leaks. Use a solution of 50/50 water and soap solution or a gas sniffer.
3. To check gas pressures at valve, turn captured screw counter clockwise 2 or 3 turns and then place tubing to pressure gauge over test point. Turn unit to high. *Figure 40.* After taking pressure reading, be sure and turn captured screw clockwise firmly to reseal. Do not over torque. Check test points for gas leaks.



*Figure 40 -  
Signature Command Valve*

## ELECTRICAL WIRING

### General

This fireplace is equipped with the Signature Control valve which operates on 6 volts. Four (4) "AA" batteries are used to power control.

### Optional Accessory Requirements

1. This fireplace may be used with a wall switch and/or Signature Command wireless controls.
2. The command center control may be mounted on the wall with the use of the SCSWEK 15ft. wall mount extension kit.

## COMMAND CENTER WALL INSTALLATION

The command center may be mounted on the wall with the use of the SCSWEK Kit (15ft. cable, junction box, wall cover).

Mount the junction box provided at the desired location on the wall. Do not extend beyond the 15 ft. wire cable provided. If a longer distance is required, the 15 ft. may be extended up to 30 ft. maximum by using two (2) SCSWEK cables plugged together.

Route the wire from junction box to the burner control in the fireplace. Unplug the 12" cable from the command center. Attach the connector to the pins from wire by pushing in to connector making sure to follow the color code on connector. Plug the 15 ft. extension cable into the 2 ft. cable. Remove command center from the fireplace and plug the other end of the extension cable into the command center. Snap on wall cover provided and screw to junction box.

**WARNING**

**Do not use open flame to check for gas leaks.**

**CAUTION**

**Label all wires before disconnecting when servicing controls. Wiring errors can cause improper and dangerous operation.**

## WALL SWITCH INSTALLATION

The wall switch wire connection is located off the 2 ft. wire harness from the control box to the command center. *Figure 41.* The connection is labeled "Wall Switch". Unplug the male and female connectors and connect the two (2) low voltage wires not provided. Run wire to desired location on wall. Up to 50 ft. of 18 ga. wire may be used if necessary. Attach wires to wall switch. Mount the wall switch in to junction box and screw on cover.

**WARNING**

**Do not connect wall switch to 110 V circuit.**

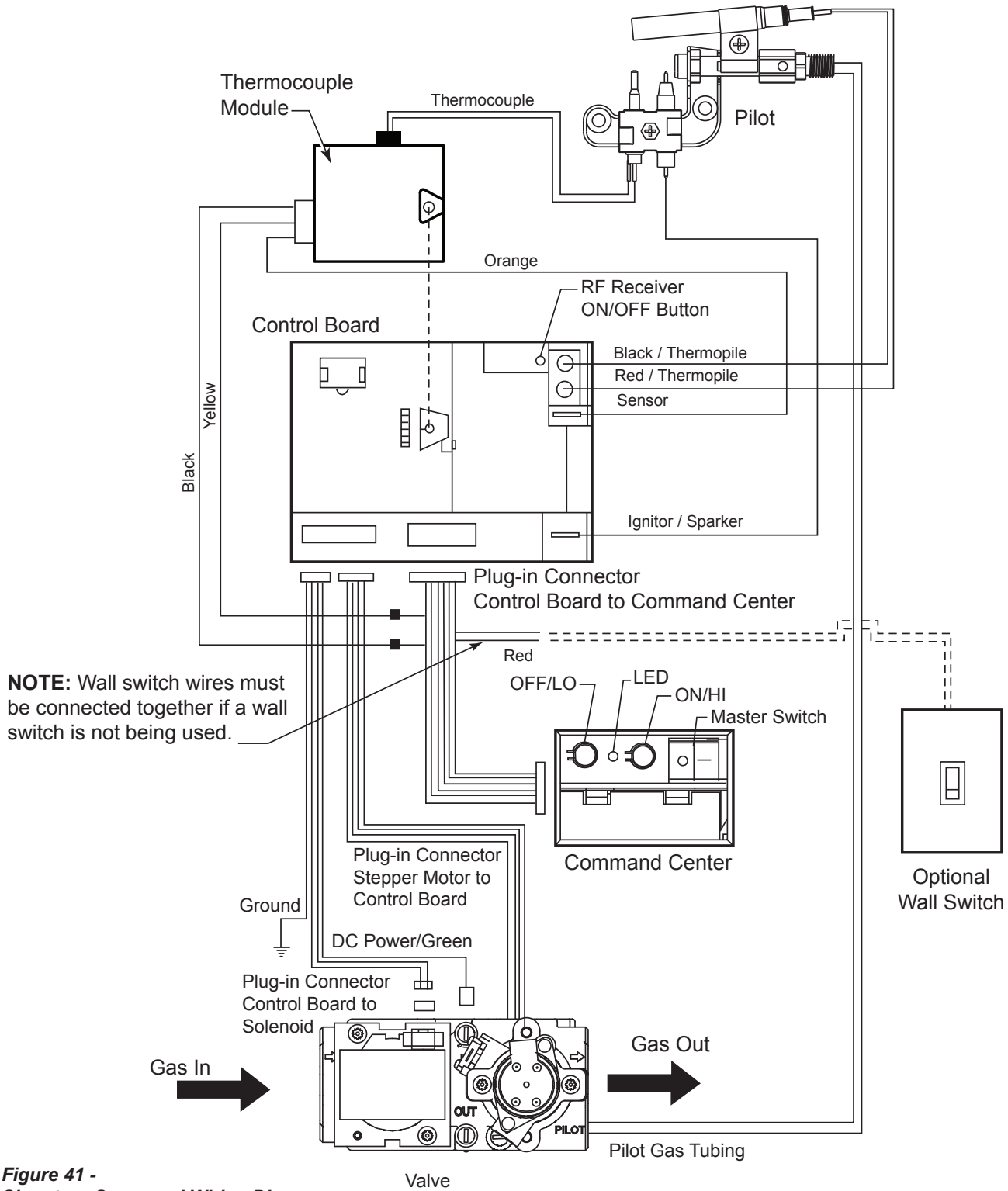


Figure 41 - Signature Command Wiring Diagram

**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 is equipped with an ignition device which automatically lights the pilot. Refer to the instructions.
- 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.

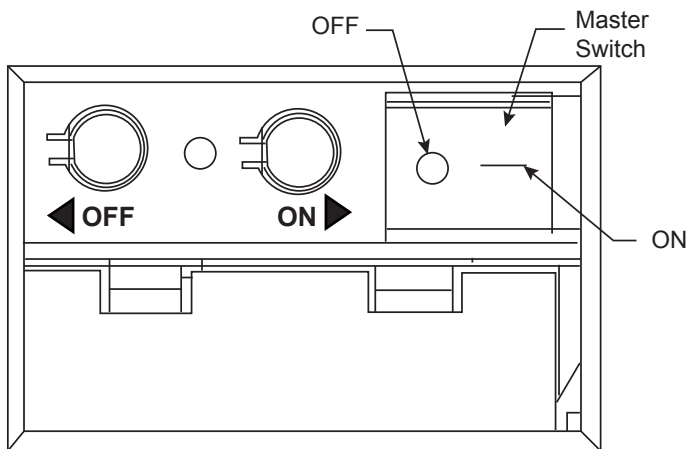
**WHAT TO DO IF YOU SMELL GAS:**

- Do not attempt 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 finger to push in the master switch. Never use tools. If the switch will not function 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 of it 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 that has been under water.

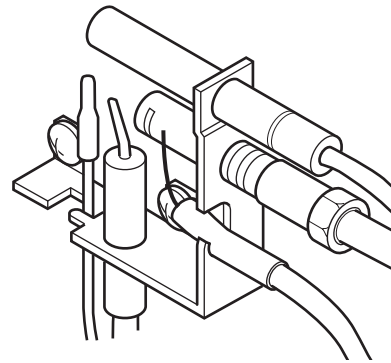


## OPERATING INSTRUCTIONS

1. **STOP!** Read the safety information above.
2. This appliance is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.
3. With five (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 on Page 29. If you do not smell gas, go to next step.
4. Press the master switch to the "ON" (-) position. Within eight (8) seconds it will beep once. This indicates the system is ready.
5. Press "ON" button. Sparker will spark and pilot flame will light.
6. Once pilot flame is established, the main burner flame will light automatically.
7. If the pilot will not stay lit after several tries, turn the master switch to "OFF" and call your service technician or gas supplier.



Command Center



## TO TURN OFF GAS TO APPLIANCE

1. Turn master switch to "OFF".
2. Turn off all electrical power to the appliance if service is to be performed.

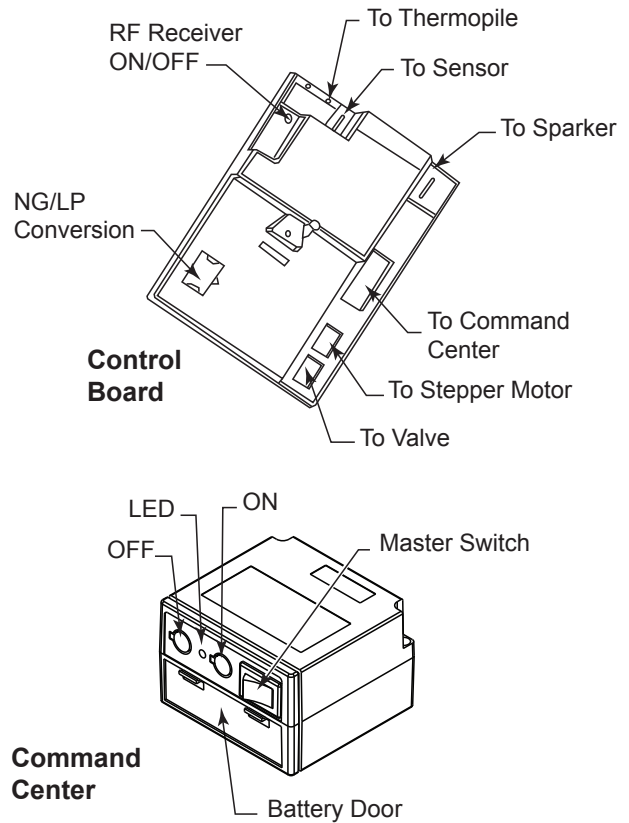
**FEATURES**

**Command Center**

- Easy Access Function Operation and System Configuration
- Operation Confirmation/Fault Diagnostic Indications (LED/Buzzer)
- ON/OFF/Hi/Med/Low Operation
- Optional Wall Mounting

**Control Board**

- Electronic Ignition
- Pilot Lockout safety feature
- Electric Power Regeneration from Thermopile to save battery
- 6-hour Automatic Shut Down Option
- Standing Pilot/Intermittent pilot Conversion
- Previous settings Restoration Ability (Memory Off)
- ON/OFF RF Remote Receiver
- Optional Transmitter Learn Capability



**Figure 42 - Signature Command System Components**

**Transmitter (Options)**

(TSTSC is supplied with R-Models)

	TSTSC	TMSC
Three Flame Height Settings	X	X
Low battery Indication for Transmitter	X	X
Child Proof Lock-out	X	X
LCD Backlight	X	X
Security Codes 10,000	X	X
Countdown 6 hr Timer	X	X
Standard Thermostatic Control Mode	X	--
Smart Mode® Thermostat (Auto Flame)	X	--

**BATTERY INSTALLATION**

The Command Center uses four (4) "AA" batteries to operate the system.

**To Install Batteries:**

1. Press down the battery door tabs and pull out to remove battery door.
2. Install the batteries as indicated on Command Center.
3. Close battery door by snapping in place.
4. When the four (4) batteries are installed the system is ready to operate.
5. The batteries should be replaced when the LED indicates low battery or at least once a year.

## SYSTEM CONFIGURATION/SETUP

All System configuration/setup is done on the Command Center.

**NOTE:** When using On/Off wall switch, the switch must be in the ON position to perform all configuration set ups at the command center.

### Intermittent/Standing Pilot Setup (Default intermittent)

1. Holding the ON button on the Command Center while turning on the master switch will toggle between standing pilot and intermittent pilot.
2. After the above operation, one beep (for standing pilot) or two beeps (for intermittent pilot) will be given as confirmation.

### Six-hour Safety Shutdown Option (Default ON)

1. The system comes preset from the factory with a six (6) hour shutdown from its last command of operation. This is done to prevent the fireplace from continuing to operate if unattended. You may disable this feature if you wish.

**NOTE:** By disabling this feature, your fireplace may continue to operate unattended.

2. When the master switch is in the ON position (“-”), pressing the ON button and the OFF button on the Command Center simultaneously will toggle between enabling and disabling the six-hour shutdown option.
3. After the above operation, one beep (for enabling the six-hour shutdown option) or two beeps (for disabling the six-hour shutdown option) will be given as confirmation.

### Remote Transmitter Learn Function (Default OFF; unless packed with remote default will be on)

1. The RF receiver button located on the Control Board must be in the on position before the learn function can begin. Use paper clip to depress button. One beep for RF receiver ON or two beeps for RF receiver OFF will be given as confirmation. Refer to Figure 42 for location.
2. After the RF receiver is on, holding the OFF button on the Command Center while turning on the master switch will activate the learn function for the transmitter.
3. After the above operation, two beeps will be given and the green LED on the Command Center will flash for 10 seconds.
4. During the 10 seconds, press the OFF button on a transmitter to learn. Another two beeps will be given to confirm a successful learning. Refer to transmitter instructions for remote operations.

### Shutting Off the Standing Pilot (Temporary Shut Off)

To shut off the standing pilot for service or summer shut down, press and hold the ON button on the Command Center for 3 seconds when the master switch is in the ON position (“-”) and the main burner is off.

**Note:** Pilot will resume the next time system is turned on.

## Key Combinations for System Settings

**NOTE:** When On/Off wall switch is used, it must be in the On position to perform all system setups.

Function	Operation	Default Setting
Intermittent/Standing Pilot Setup	Hold the ON ▲ button while turning on the master switch (Beep once for standing pilot, twice for intermittent pilot)	Intermittent Pilot
Standing Pilot Temp. Shutoff	Hold the ON ▲ button 3 seconds (when the master switch on the main burner is off)	
RF Remote Receiver On/Off	Push the RF receiver On/Off button on the control board Beep once for ON and beep twice for OFF	RF OFF
Learn Remote Transmitter	Hold the OFF ▼ button while turning on the master switch (Beep twice then press any handheld remote button)	
6-hour safety shutdown setup	Press the ON ▲ button and OFF ▼ button simultaneously (Beep once for ON, twice for OFF)	ON

**FUNCTIONS/OPERATION (from the Command Center)****Turning on the fireplace**

1. Turn on the master switch and wait for a beep.
2. Press the ON button on the Command Center or turn on wall switch. Pilot will light and burner will come on High setting or last memory setting (See Turning Off Fireplace below). For memory feature.

**Pilot Safety Lockout Function**

1. If the pilot doesn't light after sparking for 30 seconds, pilot trial lockout happens. The LED on the Command Center flashes Green once every 2 seconds, until reset.
2. If the pilot flame is lost during normal operation, the system will try three (3) times to relight after three (3) failures, flame loss lockout happens. The LED on the Command Center flashes Red-Green once every 2 seconds, until reset.
3. Turning the master switch on the Command Center to the off position, then ON again will reset the system.

**Flame Height Control**

1. Press the ON button (on the Command Center) once to turn on the main burner with maximum flame height.
2. Press the OFF button to decrease flame height. The first two presses will decrease the flame height to medium and low.
3. The third press on OFF will turn off the main burner. In standing pilot configuration, the pilot will stay; in intermittent pilot configuration, the pilot will be shut off.

**Turning the Fireplace Off**

There are three ways to turn the fireplace off.

1. Flip the master switch to the off ("O") position. (This will turn the entire system OFF.)
2. Press the OFF button to Medium, Low, then Off.
3. Hold the OFF button anytime for three seconds or by turning off the wall switch. These two commands of OFF are (Memory Off) the system will remember all last settings before turning off. The next time the fireplace is turned on, all settings will resume. To reset, change to the desired settings and shut off by using the Memory Off commands and the system will be reset to those new settings.

**NOTE:** After turning off there may be up to a two (2) minute delay before the burner can be relit. There will be three (3) red flashes if the on button is pressed before the safety control is automatically reset.

**Command Center Operations:**

The following functions are available on the Command Center.

Function	Operation
Power Up	Flip the master switch to the ON (" ") position to power up the system
Fireplace ON	Press the ON ▲ button on the Command Center or turn on wall switch to turn the fireplace on
Fireplace OFF	Flip the master switch to the OFF ("o") position OR press the OFF ▼ button 3 times OR for Memory Off, hold the OFF ▼ button 3 seconds, or turn off wall switch
Flame Height Up	Press the ON ▲ button once to turn on the fireplace with maximum flame height
Flame Height Down	Press the OFF ▼ button to lower the flame height to Medium and Low

**Self Diagnostics Chart:**

The Command Center has a self-diagnostic LED enabling you to troubleshoot problems and potentially avoid a service call. Please refer to the charts below for indicator reference.

Fault	LED Indication
Conversion Cover Missing	One RED (1 time)
Spark Fail	Two RED (1 time)
No Sensor Signal or 2 min. safety	Three RED (1 time)
Pilot Lockout - trial	One GREEN, every 2 sec. (until manual reset)
Pilot Lockout - flame loss	One RED-GREEN, every 2 sec. (until manual reset)
Low Battery	One RED, every 10s (continuously)
No or Low Thermopile Power	Two RED, every 10s (continuously)
Learning	GREEN Flashes, every 1 sec. (for 10 sec.)
AC Power On	GREEN solid
Pressure Switch Failed (Power Vent only)	One RED every 2 sec. (until manual reset)



**NOTE**

Due to the sensitive temperature monitoring components in the transmitter, it is necessary to allow the transmitter to stabilize to room temperature before accurate room temperatures are displayed. If the transmitter is activated from a severe cold condition, allow 15 minutes for accurate temperature readings to appear on the LCD display.

**WARNING**

Turn appliance OFF (at the master switch) if you are away from your house for an extended period of time. Never leave anything on top of the surface of the transmitter.

### ■ Function Areas of the LCD Display

Figure 43 shows the display of the TSTSC LCD.

#### Information Bar

The information bar shows the room temperature, the “sending signal” radio icon, the low battery indication icon, the child-proof icon, and the flame icon. This area doesn’t have touch buttons.

- The room temperature will always be shown after power-up. It displays the room temperature from 40 °F to 99 °F. “Lo” and “HI” will be displayed when the room temperature is lower than 40°F or higher than 99°F, respectively.
- The radio icon will be shown when the transmitter is sending a signal.
- The low battery indication icon will be shown when the battery voltage is low.
- The child-proof icon will be shown when the child-proof mode is activated.
- The flame icon indicates the current flame height - Off, Low, Medium and High

#### Touch Area

The touch area contains all touch buttons to control the transmitter. It consists of two categories: menus and adjustment arrows. The blue LED backlight lights up for 8 seconds when any of the touch buttons is pressed.

- The menus include TIMER and THERMO buttons.
- The adjustment arrows include ON/up and OFF/down. Their default function is to turn on/off the flame. When a button from the menu is pressed, the ON/up and OFF/down buttons will temporarily become adjustment controls for the selected item. When the adjustment is done, the ON/up and OFF/down buttons go back to flame controller again.

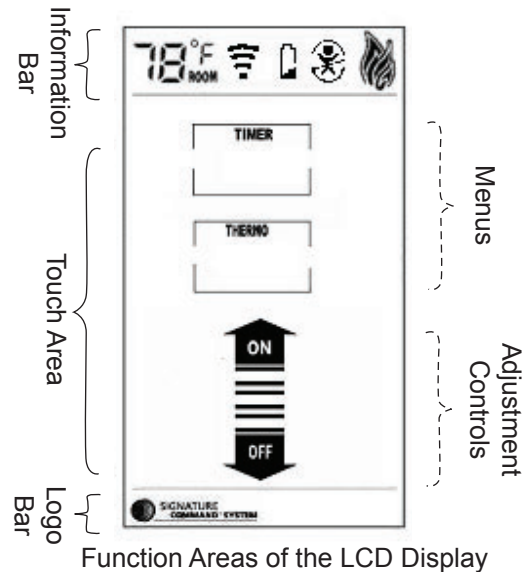


Figure 43

#### Logo Bar

The Logo Bar contains the brand logo: Signature Command.

### ■ Initialization and Setting up

#### Installing Batteries

Figure 44

The remote transmitter has two battery compartments, one on each end of the transmitter. **Always change all four (4) batteries at the same time.**

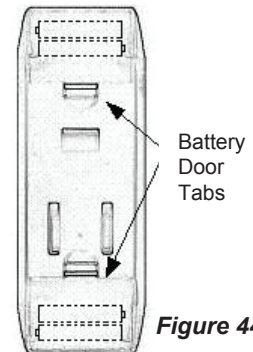


Figure 44

To install batteries,

1. Press down the battery door tab and pull out to remove the battery door.
2. Install the batteries as indicated inside the battery compartments.
3. Close the battery door by snapping in place.
4. When all **four** batteries are installed, the transmitter will initialize for 5 seconds and then is ready for use.
5. The batteries should be replaced every 12 months or when the low battery icon indicator is displayed.

#### Changing Temperature Unit

When batteries are installed in the transmitter,

1. All available icons on the LCD will be turned on then be cleared.
2. The LCD will display temperature unit: °F. Use ON Δ to toggle the units between °F and °C within the first 5 seconds.
3. The transmitter enters Manual Mode
4. The LCD displays room temperature with the chosen unit.

### Setting Privacy Code on Transmitter

Figure 45

The remote transmitter privacy code is preset in factory. In the event of activation or interference from other nearby transmissions, change the code using the following procedures (learn function must be performed after changing the code):

1. Press the ON/arrow button and the TIMER button at the same time to enter privacy code setup mode.
2. The setup display is shown in the figure. The four digits on the top stand for the privacy code. The default values of the four digits will be all "1".
3. The first digit will be flashing upon entering the setup mode. Push the ON button to toggle its value between "0" and "9", and push the "OFF" button to jump to the next digit. The next digit will then start flashing and the first one stops flashing. Set up the four digits to your choice between "0" and "9".
4. After setting up all the four digits, push "OFF" to finish the process and return to the previous mode.
5. The Signature Command control board then needs to re-learn the new setting.

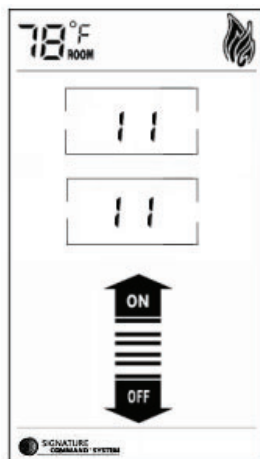
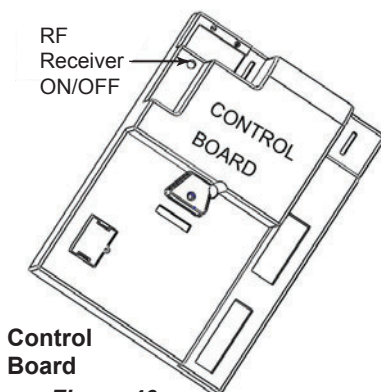


Figure 45

### Performing Learn Function

1. The RF receiver button on the control board in the fireplace must be in the on position before the learn function can begin (refer to figure for location). With the Command Center master switch in the ON position, use paper clip to depress the recessed button on Control Board, one beep for RF receiver ON or two beeps for RF receiver OFF.
2. Holding the OFF button on the Command Center while turning on the master switch will activate the learn function for the transmitter.
3. After the above operation, two beeps will be given and the green LED on the Command Center will flash for 10 seconds.



Control Board  
Figure 46

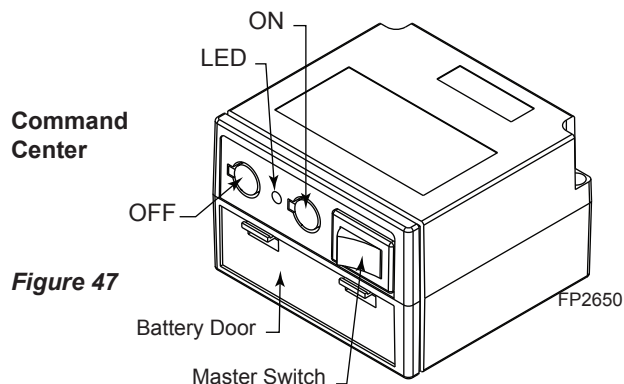


Figure 47

4. During the 10 seconds, press the OFF button on the transmitter to learn. Another two beeps will be given to confirm a successful learning.

### WARNING

**Do not use two (2) or more remote control systems in the same area with the same privacy code setting, as they will communicate with each other. This may cause the appliances to malfunction.**

### Resetting the transmitter

If the transmitter is not working properly, reinstall the batteries to reset the transmitter.

1. Pull out at least one of the batteries.
2. Press any key on the screen to discharge.
3. Wait for 10 seconds and reinstall the batteries.

Pushing and holding any key for more than 10 seconds until the display refreshes will also reset the transmitter.

### Functions and Operations

#### General

The TSTSC Remote Control has four (4) operating modes: Manual, Timer, Thermostatic and Smart Mode. The control system can be set to temperature range between 45° F and 90° F. The flame height can be adjusted in the manual and thermostatic mode. The Smart Mode will automatically adjust flame height according to the difference between Set and Room temperatures.

The transmitter will operate the remote receiver from 1 foot to a maximum of 30 feet. The distance is reduced when batteries are low.

#### Manual Mode

Figure 48

In this mode, the TIMER/THERMO buttons will only display "TIMER" / "THERMO", without showing the time and the SET temperature. Pressing the ON/up and OFF/down buttons will change the flame height and turn on/off the fireplace if the TIMER/THERMO buttons are not pressed and flashing.

1. Press the ON/up button to turn on the fireplace. The flame icon on the LCD displays High.
2. Press the OFF/down button to decrease the flame height and turn off the fireplace. When the OFF/down button is pressed for three times, the flame icon changes from High to Medium, to Low, then to Off.
3. If the OFF button is held for more than 3 seconds at any flame height, the fireplace will be turned off and the flame icon disappears.
4. Sliding up and down on the arrow buttons can also turn on or turn off the fireplace.
5. If the fireplace is shut off using the above methods in 3 and 4, all the settings will be remembered and will be resumed next time the fireplace is turned on (Memory Off).

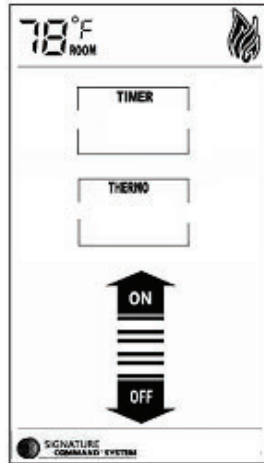


Figure 48

### Timer Mode

Figure 49

Press the TIMER button to enter timer mode. The fireplace will stay on for a period of time as specified by the timer and then be shut off by the transmitter when the timer counts down to zero.

1. When the TIMER button is pressed, the Set Time appears in the frame of the button and flashes.
2. Use ON and OFF arrows to increase or decrease the Set Time in 15 min. increments, between 0:00 to 6:00. Sliding up and down on the arrow buttons will increase or decrease the Set Time in 1 hour increments.
3. Push the TIMER button again to confirm the Set Time, the transmitter sends an ON signal to turn on the fireplace.
4. The flashing stops and the ON/up and OFF/down buttons become flame height controller again. The flame height will then stay as set up by the ON/up and OFF/down buttons.
5. The TIMER button can be used when the transmitter is in Manual Mode or in Thermostat Mode. In both modes, the fireplace will be shut down completely when the timer counts down to zero.
6. To exit Timer Mode,
  - a. Push and hold the TIMER button for 3 seconds Or



Figure 49

- b. Use the OFF/down buttons to decrease the Set Time to zero Or
- c. Slide down on the arrow buttons to exit TIMER mode and shut off the fireplace.

### Thermostat Mode

Figure 50

Press the THERMO button to set the transmitter in thermostat mode. The transmitter will automatically turn on the fireplace when the room temperature is below the set temperature and turn off the appliance when the room temperature is above the set temperature within one degree.

1. When the THERMO button is pressed, the Set temperature appears in the frame of the button and flashes.
2. Use ON and OFF to increase or decrease the Set temperature in 1 degree increments, between 45 degrees and 90 degrees. Sliding up and down on the arrow buttons will increase or decrease the Set Temperature in 10 degree increments.
3. Press the THERMO button again to confirm the Set Temperature. The transmitter will send out an On signal or an Off signal depending on the relationship between the Set temperature and the Room temperature.
4. The flashing stops and the ON and OFF buttons become flame controller again.
5. To exit Thermostat Mode and shut off the fireplace:
  - a. push and hold the THERMO button for 3 seconds Or
  - b. press the OFF button three times Or
  - b. slide down on the arrow buttons.

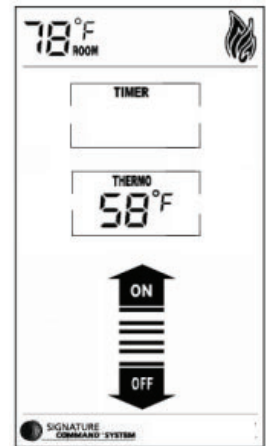


Figure 50

### Smart Mode Option for Thermostat Mode

Figure 51

Press and hold the THERMO button and the ON/UP button at the same time for 3 seconds to toggle between Smart Mode thermostat and the regular Thermostat Mode. The icon "Smart Mode" will appear under the Set Temperature. The transmitter will automatically adjust the flame height according to the difference between the Set temperature and the Room temperature.

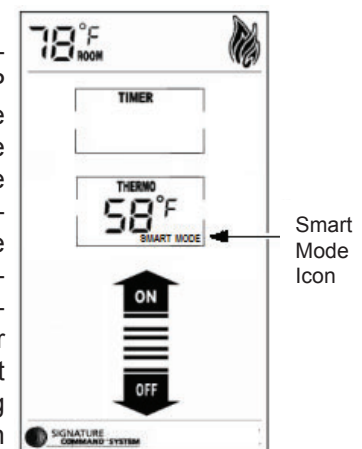


Figure 51

There is no manual flame height adjustment.

**NOTE:** there will a 10 second delay for the flame adjustment when the fireplace is turned on.

1. When Set Temp. is 3° F or higher than Room Temp., flame height will be on High.
2. When Set Temp. is 2° F higher than Room Temp., flame height will be on Medium.
3. When Set Temp. is 1° F higher than Room Temp., flame height will be on Low.
4. When Set Temp. is equal to Room Temp., flame height does not change (stays on low).
5. When Set Temp. is lower than Room Temp., the fireplace will be shut off.
6. When Set Temp. is 1° F higher than Room Temp., again the flame height will be on Low.

To exit Smart Mode and shut off the fireplace;

- a. push and hold the THERMO button for 3 seconds, Or
- b. press the OFF button, Or
- c. slide down on the arrow buttons.

To shut off the Smart Mode thermostat option and return to regular thermostat mode, press and hold the THERMO button and the ON/UP button at the same time for 3 seconds again.

### Setting up Blank Screen or Constant Display in Idle

Figure 52

There is an option to set up how the LCD displays and functions when the transmitter is in idle. There are two choices:



Figure 52

1. A) Mode. When the transmitter is in idle, the icons in the “touch area” (timer, thermostat and ON/OFF) will disappear, as shown in the figure on the left. When any of the touch buttons is pressed, those icons will appear and are ready to operate (default).
2. B) Mode. The transmitter always displays all available icons showing current status of timer and thermostat as shown in the figure on the right.

Press TIMER and THERMO buttons at the same time for 3 seconds to toggle between A) and B).

1. When the current setting is A), touch any place in the touch area to bring up the icons then press TIMER button and THERMO button at the same time for 3 seconds. The backlight will flash once to indicate that the setting has changed to B).

2. When the current setting is B), pressing TIMER button and THERMO button at the same time for 3 seconds will switch to A) Mode. The touch area icons will disappear.

## ■ Safety Features

1. Low Battery Detection

When low battery condition occurs, the transmitter will turn off the fireplace.



A) Battery voltage is checked every one minute. When the battery voltage is low, the LCD displays a low battery icon which will exist in all modes.

B) The transmitter will not operate with low battery voltage. Change the batteries before the batteries become too weak for normal operations.

2. Power On Initialization

After the power-on initialization, the transmitter sends a signal to turn off the fireplace.

3. Thermal Shutdown

When the ambient temperature is more than 99°F, the transmitter will turn off the fireplace.

A) The LCD will display “HI”.



B) The Transmitter will not function until the room temperature has dropped below 99 degree Fahrenheit.

4. Low Temperature Condition

When the ambient temperature is less than 40 degrees Fahrenheit, the LCD will display “LO”, and NO SIGNAL will be sent to turn on the appliance.



All functions still remain the same for both Manual Mode and Thermostat Mode

5. Child-proof Protection

The child-proof icon will be shown when the child-proof mode is activated by pressing the ON button and the OFF button at the same time for three seconds.



A) Enter childproof mode by pressing and holding both the ON button and the OFF button simultaneously for 3 seconds. The Childproof indicator will be shown on the LCD.

B) Deactivate childproof mode by pressing and holding the ON button and the OFF button simultaneously for 3 seconds again. The Childproof indicator disappears on the LCD.

C) The transmitter cannot be operated in childproof mode.



### ■ Using the Mounting Base

The transmitter comes with a mounting base which allows you to hang the transmitter on the wall.

1. Secure the mounting base on the wall with supplied screws. For best viewing angle, make it the same height as your eyes.
2. Hang the transmitter on the hook of the mounting base, then push down so the transmitter is flush to the mounting base.

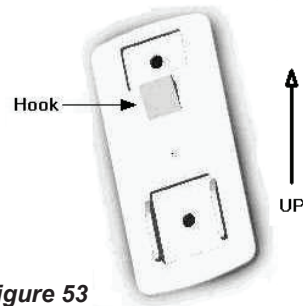


Figure 53

## TROUBLESHOOTING

Symptom	Causes	Action
1. Battery icon on LCD on transmitter 2. LCD display is blank 3. LCD display shows "funny" display	1. Low Battery	1. Replace batteries. Change batteries every 6 months. 2. Check battery installation or replace batteries. 3. Reset the transmitter (see "Resetting the Transmitter" section).
4. Appliance does not come on	2. The transmitter did not match with the receiver	1. Make sure the transmitter has learned to the receiver.
	3. Transmitter measures temperature exceeding 99 degrees Fahrenheit and shows "HI" on LCD	1. Move transmitter to a cooler place and wait until temperature drops below 99 degrees.
	4. Distance between the transmitter and receiver is more than 30 feet	1. Make sure the opening distance is less than 30 feet.



**CLEANING AND SERVICING**

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. Disconnect electrical power before cleaning or servicing.

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

**PERIODIC CLEANING - Refer to parts diagram for location of items discussed below.**

- Do not use cleaning fluid to clean logs or any part of heater.
- Brush logs 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 and clean burner air intake holes. Remove lint or particles with vacuum, brush, or pipe cleaners. **Failure to keep air intake holes clean will result in sooting and poor combustion.**
- External case should be dusted and wiped with a wet soapy cloth.

**ANNUAL CLEANING/INSPECTION - Refer to parts diagram for location of items discussed below.**

- Inspect and clean burner air intake holes. Remove lint or particles with vacuum, brush or pipe cleaners. **Failure to keep air intake holes clean will result in sooting and poor combustion.**
- 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.
- Replace battery in remote control device.

**WARNING**

Turn appliance OFF and allow to cool before servicing. Only a qualified service person should service and repair the heater.

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

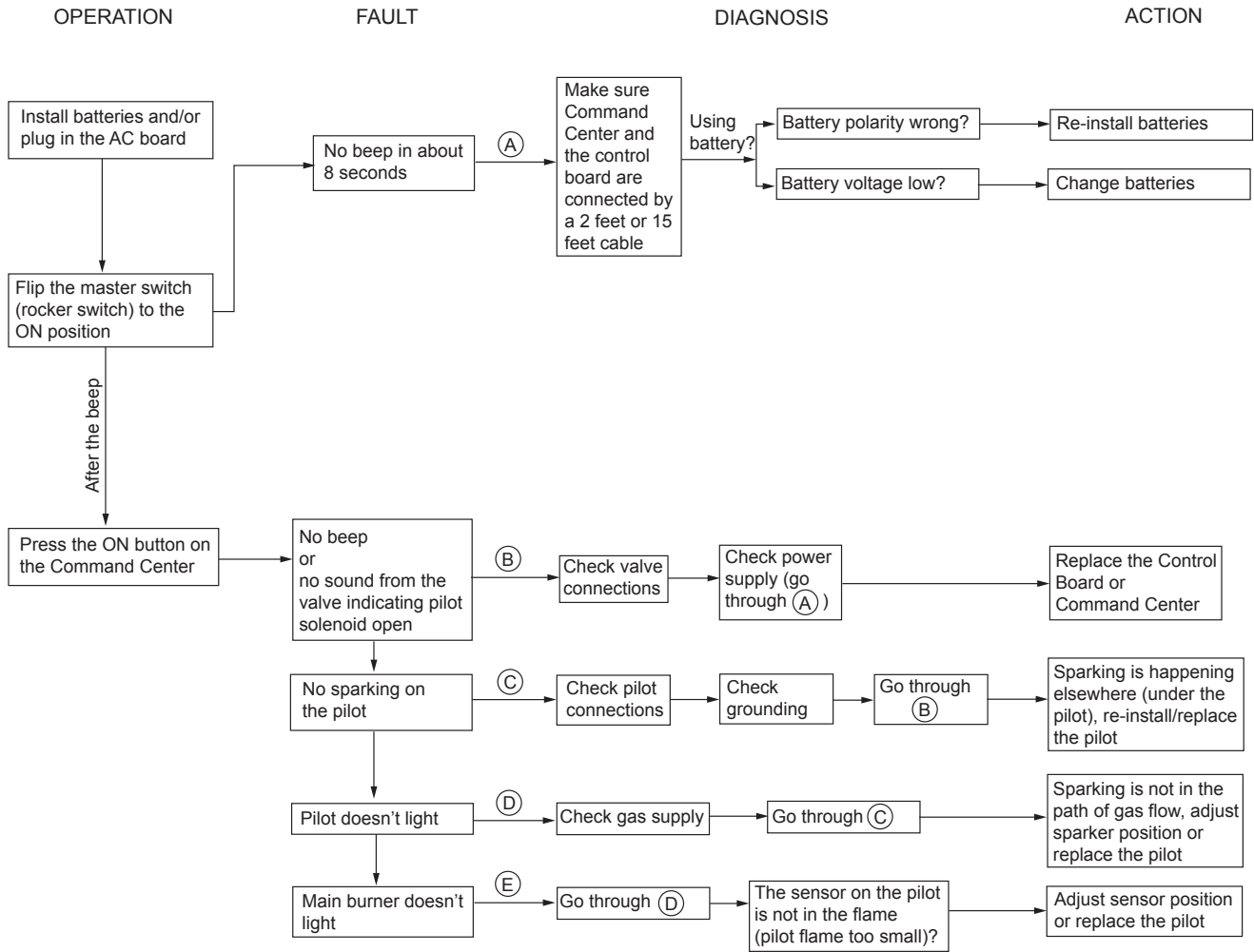
<b>Problem</b>	<b>Possible Cause</b>	<b>Solution</b>
When ignitor button is pressed, there is no spark at ODS/pilot.	1. Ignitor electrode positioned wrong.	1. Replace ignitor.
	2. Ignitor electrode is broken.	2. Replace ignitor.
	3. Ignitor electrode not connected to ignitor cable.	3. Reconnect ignitor cable.
	4. Ignitor cable pinched or wet. Keep ignitor cable dry.	4. Free ignitor cable if pinched by any metal or tubing.
	5. Broken ignitor cable.	5. Replace ignitor cable.
	6. Bad piezo ignitor.	6. Replace piezo ignitor.
Appliance produces unwanted odors.	1. Appliance burning vapors from paint, hair spray, glues, etc.	1. Ventilate room. Stop using odor causing products while heater is running.
	2. Gas leak.	2. Locate and correct all leaks.
	3. Initial burn off.	3. Ventilate room and turn unit on high until odor is gone. Odor should be gone after six hours of continuous use.
Appliance shuts off during use.	1. Not enough fresh air is available for ODS/pilot to operate.	1. Open window and/or door for ventilation.
	2. Low line pressure.	2. Contact local gas company.
	3. ODS/pilot is partially clogged.	3. Clean ODS/pilot.
	4. Defective thermopile.	4. Check wire connections. Check output should be 500 millivolts across TH/TP and TP Terminals with ON/OFF switches off.
	5. Restrictions in incoming air flow.	5. Check for bottom riser on glass door, sunken fireplace, excessive lava rock/cinders densely packed against grate.
Gas odor even when control knob is in OFF position.	1. Gas leak.	1. Locate and correct all leaks.
	2. Control valve defective.	2. Replace control valve.
When ignitor button is pressed, there is spark at ODS pilot, but no ignition.	1. Gas supply turned off or manual shutoff valve closed.	1. Turn on gas supply or open manual shutoff valve.
	2. Control knob not in PILOT position.	2. Turn control knob to PILOT position.
	3. Control knob not pressed in while in PILOT position.	3. Press in control knob while in PILOT position.
	4. Air in gas lines when installed.	4. Continue holding down control knob. Repeat igniting operation until air is removed.
	5. ODS/pilot is clogged.	5. Replace ODS/pilot assembly or get it serviced.
	6. Gas regulator setting is not correct.	6. Check incoming pressure. Replace gas regulator.

**WARNING**

**If the gas quality is bad, your pilot may not stay lit, the burners may produce soot and the heater may backfire when lit. If the gas quality or pressure is low, contact your local gas supplier immediately.**

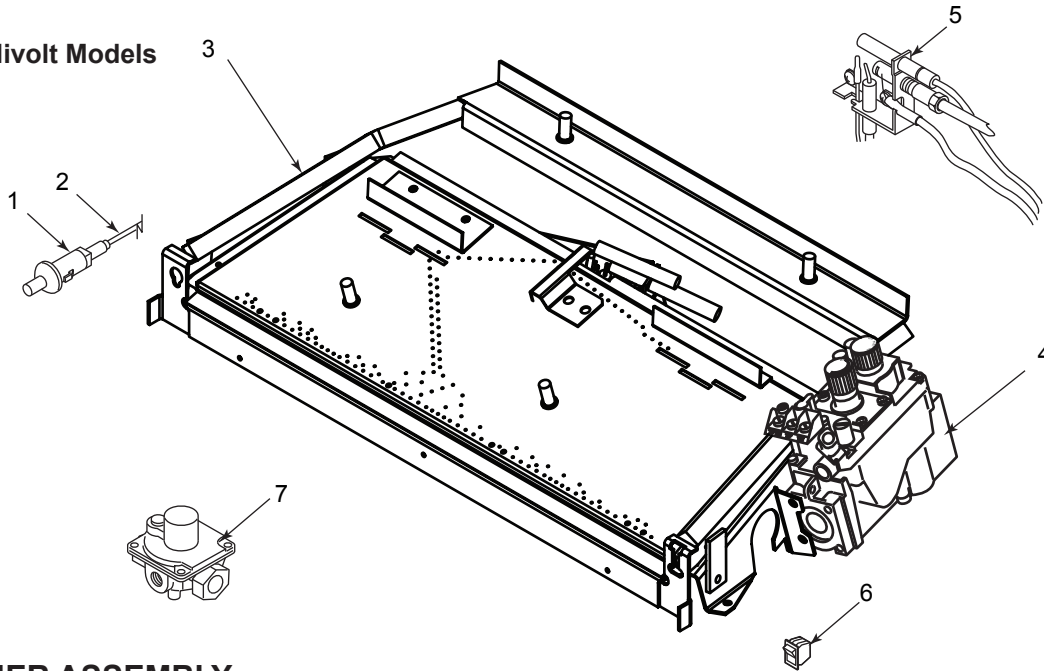
<b>Problem</b>	<b>Possible Cause</b>	<b>Solution</b>
ODS/pilot lights, but flame goes out when control knob is released.	1. Control knob not fully pressed in.	1. Press control knob in fully.
	2. Control knob not pressed in long enough.	2. After ODS/pilot lights, keep control knob pressed in for 30 seconds.
	3. Manual shutoff valve not fully open.	3. Fully open manual shutoff valve.
	4. Thermocouple connection loose at control valve.	4. Hand tighten thermocouple connection until snug, then tighten 1/4 turn more.
	5. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by either low gas pressure, or a dirty or partially clogged ODS/pilot.	5. Contract local gas company.
	6. Thermocouple damaged.	6. Replace thermocouple.
	7. Control valve damaged.	7. Replace control valve.
Burner does not light after ODS/pilot is lit.	1. Burner orifice is clogged.	1. Burner orifice is clogged.
	2. Burner orifice diameter is too small.	2. Burner orifice diameter is too small.
	3. Inlet gas pressure is too low.	3. Inlet gas pressure is too low.
Burner backfires during combustion.	1. Manifold pressure is too low.	1. Contact local gas company.
	2. Burner orifice is clogged.	2. Clean burner or replace burner orifice.
Slight smoke or odor combustion.	1. Burner orifice is clogged or damaged.	1. Clean burner or replace burner orifice.
	2. Burner is damaged.	2. Replace burner.
	3. Gas regulator defective.	3. Replace gas regulator.
Logs appear to smoke after initial operation.	1. Vapor from paint or curing process of logs.	1. 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. 2. Log heater is intended to be smokeless. Turn OFF heater and call qualified service person.
Heater produces a whistling noise when burner is lit.	1. Turning control knob to HIGH position when burner is cold.	1. Turn control knob to LOW position and let warm up for a minute.
	2. Air in gas line.	2. Operate burner until air is removed from line. Have gas line checked by local gas company.
	3. Dirty or partially clogged burner orifices.	3. Clean burner or replace burner orifice.
No gas to pilot.	1. LP-regulator shut down due to inlet pressure too high.	1. Verify LP tank regulator is installed and set at 11" to 13" w.c. 2. Replace regulator on heater.

SIGNATURE COMMAND SYSTEM



**BURNER ASSEMBLY**

NB Millivolt Models



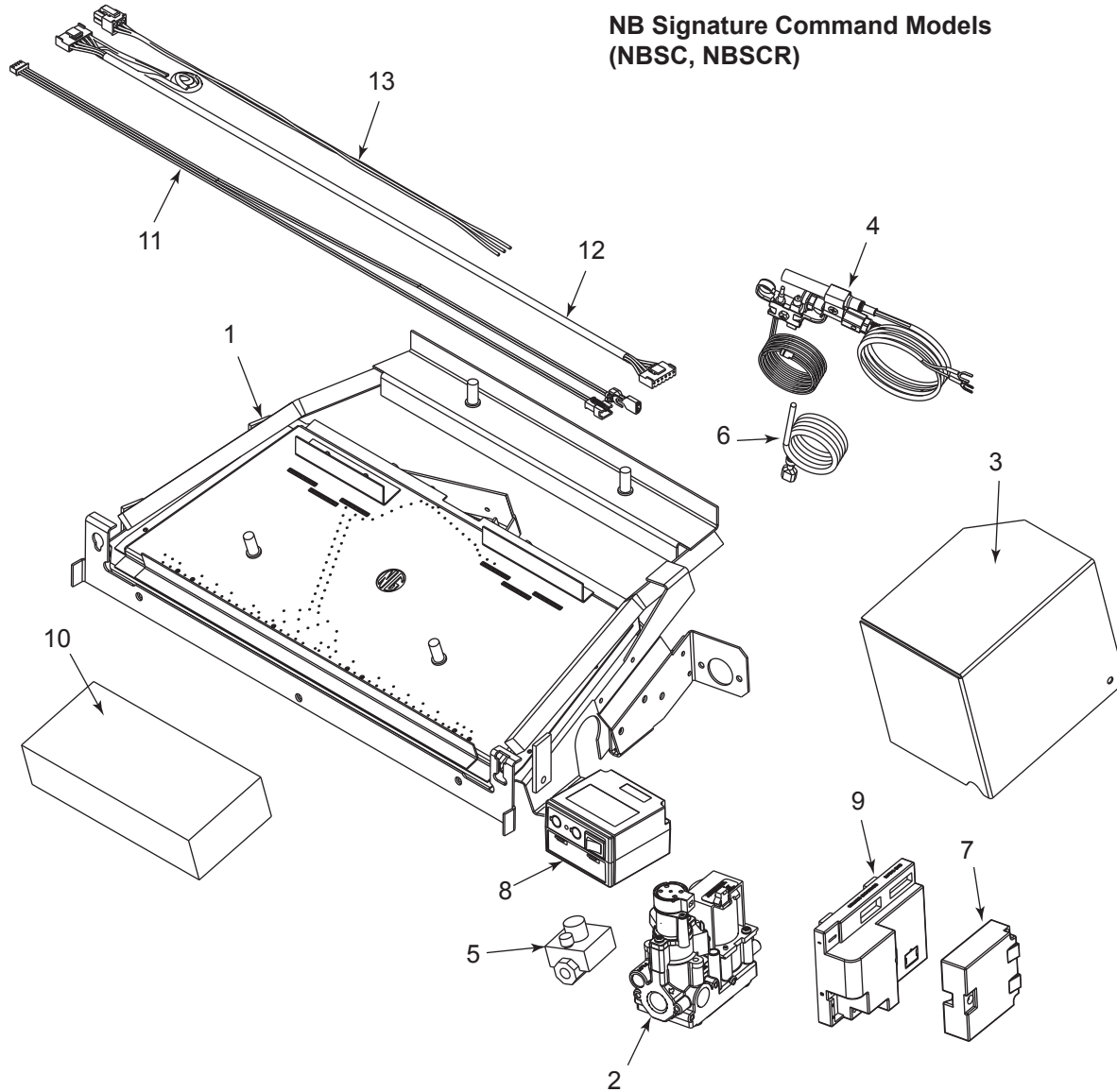
**BURNER ASSEMBLY**

Ref.	Description	Qty	18NBMV		24NBMV	
			Natural	Propane	Natural	Propane
1.	Piezo Ignitor	1	14D0503	014D0503	14D0503	14D0503
2.	Piezo Wire	1	00K0632	00K0632	00K0632	00K0632
3.	Burner	1	81D2004	81D2010	81D0515	81D0504
4.	Control Valve	1	14D0467	14D0468	14D0467	14D0468
5.	ODS Pilot Assy.	1	14D0473	14D0477	14D0473	14D0477
6.	On/Off Switch	1	32D0232	32D0232	32D0232	32D0232
7.	Pilot Regulator	1	14D0469	--	14D0469	--

**WARNING**

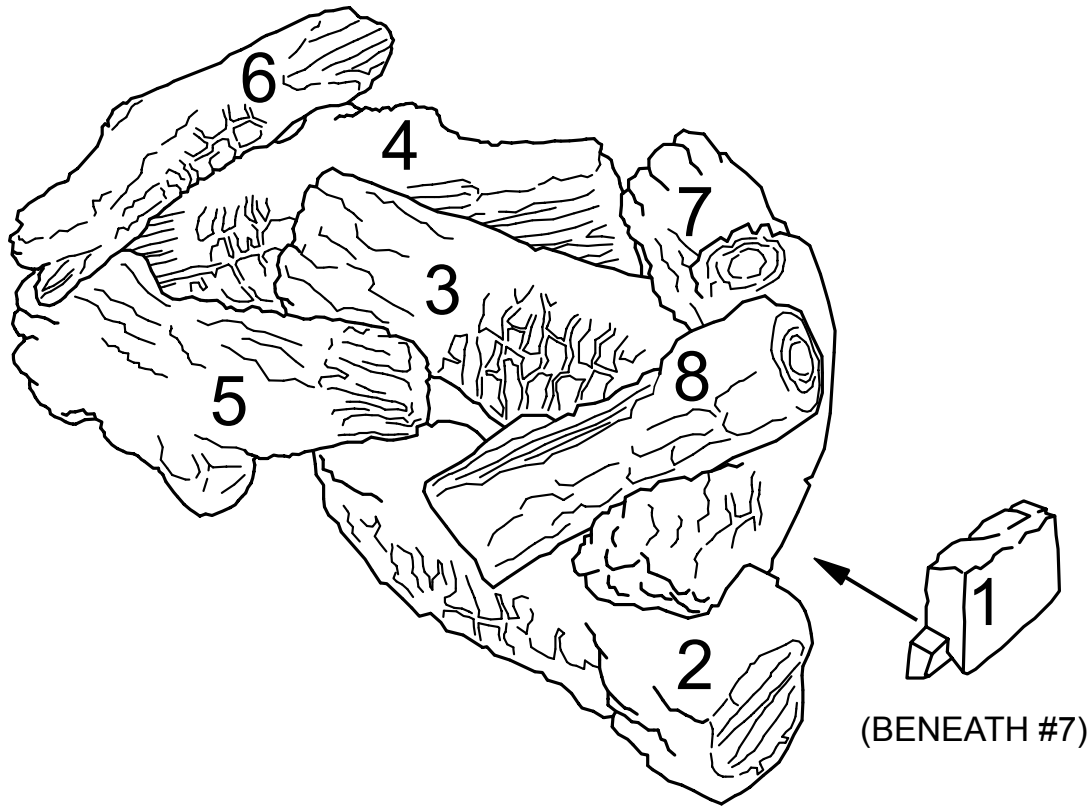
Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.





**BURNER ASSEMBLY**

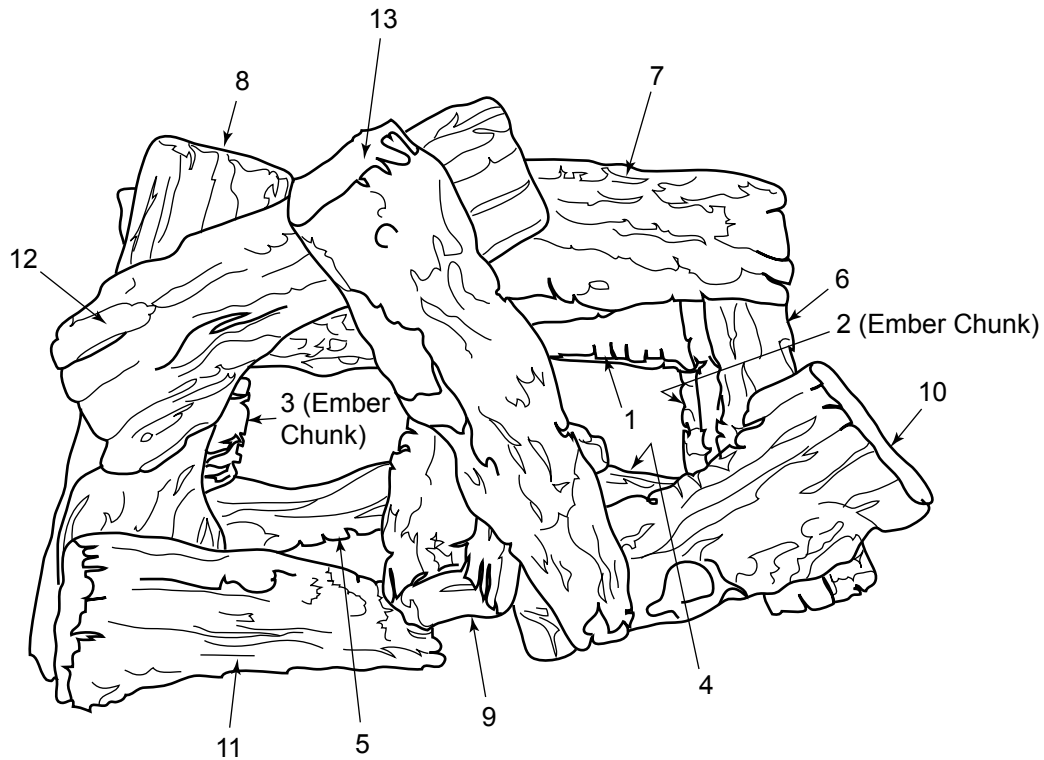
Ref.	Description	Qty.	18NBSC		18NBSCR		24NBSC		24NBSCR	
			Nat.	LP	Nat.	LP	Nat	LP	Nat.	LP
1.	Burner	1	20303243	20303247	20303243	20303247	20303180	20303187	20303180	20303187
2.	Control Valve	1	20303257	20303258	20303257	20303258	20303257	20303258	20303257	20303258
3.	Valve Cover	1	20302870	20302870	20302870	20302870	20302870	20302870	20302870	20302870
4.	ODS Pilot Assy	1	14D0473	14D0477	14D0473	14D0477	14D0473	14D0477	14D0473	14D0477
5.	Pilot Regulator	1	14D0469	--	14D0469	--	14D0469	--	14D0469	--
6.	Sparker Wire	1	00K0632	00K0632	00K0632	00K0632	00K0632	00K0632	00K0632	00K0632
7.	Thermocouple Module	1	20303179	20303179	20303179	20303179	20303179	20303179	20303179	20303179
8.	Command Center SCS	1	80D0005	80D0005	80D0005	80D0005	80D0005	80D0005	80D0005	80D0005
9.	Control Board SCS	1	80D0018	80D0019	80D0018	80D0019	80D0018	80D0019	80D0018	80D0019
10.	Remote Control	1	--	--	TSTSC	TSTSC	--	--	TSTSC	TSTSC
11.	Wire, Valve/Control Board SCS	1	80D0010	80D0010	80D0010	80D0010	80D0010	80D0010	80D0010	80D0010
12.	Wire, cc/cb 24" w/power leads SCS	1	20301889	20301889	20301889	20301889	20301889	20301889	20301889	20301889
13.	Wire, Thermocouple Module SCS	1	20301890	20301890	20301890	20301890	20301890	20301890	20301890	20301890



**HIGHLAND OAK REFRACTORY LOGS**

Item	Description	Qty.	HO18-R	HO18-F	HO24-R	HO24-F	HO30-R	HO30-F
1.	Ember Chunk	1	81D0110	81D0109	81D0110	81D0109	81D0110	81D0109
2.	Right Front Log	1	81D0011	81D0035	81D0019	81D0043	81D0027	81D0051
3.	Right Rear Log	1	81D0012	81D0036	81D0020	81D0044	81D0028	81D0052
4.	Left Rear Log	1	81D0013	81D0037	81D0021	81D0045	81D0029	81D0053
5.	Left Front Log	1	81D0014	81D0038	81D0022	81D0046	81D0030	81D0054
6.	Left Top Log	1	81D0015	81D0039	81D0023	81D0047	81D0023	81D0047
7.	Right Top Log	1	81D0016	81D0040	81D0024	81D0048	81D0024	81D0048
8.	Right Front Log	1	81D0017	81D0041	81D0025	81D0049	81D0025	81D0049

**WARNING** Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.



### SPLIT TIMBER REFRACTORY LOGS

Ref.	Description	Qty.	18ST-R	24ST-R	30ST-R
1.	Bottom Rear Log #1	1	20303581	20303592	20303592
2.	Ember Chunk #2 (notch on both ends)	1	81D0110	81D0110	81D0110
3.	Ember Chunk #3 (notch on one end)	1	81D0110	20303559	20303559
4.	Front Bottom Right Log #4	1	20303582	20303593	20303947
5.	Front Bottom Left Log #5	1	20303583	20303594	20303948
6.	Mid Right Log #6	1	20303584	20303595	20303595
7.	Mid Rear Log #7	1	20303585	20303596	20303596
8.	Mid Left Log #8	1	20303586	20303597	20303949
9.	Center Log #9	1	20303587	20303598	20303598
10.	Top Front Right Log #10	1	20303588	20303599	20303950
11.	Top Front Left Log #11	1	20303589	20303600	20303600
<b>Enhancement Kit SC2430EK</b>					
12.	Log #12	1	20303590	20303601	20303601
13.	Log #13	1	20303591	20303602	20303602









## Massachusetts Residents Only — Please read and follow these special requirements

### NOTE REGARDING VENTED PRODUCTS

This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts.

Any residence with a direct vent product must have a CO detector installed in the residence.

Installation of the fireplace or vented gas log in the State of Massachusetts requires the damper to be permanently removed or welded in the fully open position.

In addition, a naturally vented gas log may not be installed in a bedroom or bathroom in the State of Massachusetts.

Flex line installation must not exceed 36 inches and must have a T shutoff valve.

### NOTE REGARDING VENT FREE PRODUCTS

This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts.

In addition, vent free products may not be installed in a bedroom or bathroom regardless of size or type in the State of Massachusetts.

Flex line installation must not exceed 36 inches and must have a T shutoff valve.

### CARBON MONOXIDE DETECTOR REQUIREMENTS

(2) Revise 10.8.3 by adding the following additional requirements:

(a) For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

1. **Installation of carbon monoxide detectors.** At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas fitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors

a. In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

b. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

2. **Approved Carbon Monoxide Detectors.** Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

3. **Signage.** A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS."

4. **Inspection.** The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

(b) **Exemptions:** The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

1. The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and

2. Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

(c) **Manufacturer requirements — Gas Equipment Venting System Provided.** When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

1. Detailed instructions for the installation of the venting system design or the venting system components; and

2. A complete parts list for the venting system design or venting system.

(d) **Manufacturer requirements — Gas Equipment Venting System Not Provided.** When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems," the following requirements shall be satisfied by the manufacturer:

1. The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and

2. The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

(e) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design

# LIMITED LIFETIME WARRANTY POLICY

## LIFETIME WARRANTY

The following components are warranted for life to the original owner, subject of proof of purchase: Firebox, Combustion Chamber, Heat Exchanger, Grate, and Stainless Steel Burners.

## FIVE YEAR WARRANTY

The following components are warranted for 5 years to the original owner, subject of proof of purchase: Vent Free Ceramic Fiber Logs and Aluminized Burners.

## BASIC WARRANTY

MHSC warrants the components and materials in your gas appliance to be free from manufacturing and material defects for a period of two years from date of installation. After installation, if any of the components manufactured by MHSC in the appliance are found to be defective in materials or workmanship, MHSC will, at its option, replace or repair the defective components at no charge to the original owner. MHSC will also pay for reasonable labor costs incurred in replacing or repairing such components for a period of two years from the date of installation. Any products presented for warranty repair must be accompanied by a dated proof of purchase.

This Limited Lifetime Warranty will be void if the appliance is not installed by a qualified installer in accordance with the installation instructions. The Limited Lifetime Warranty will also be void if the appliance is not operated and maintained according to the operating instructions supplied with the appliance, and does not extend to (1) firebox/burner assembly damage by accident, neglect, misuse, abuse, alteration, negligence of others, including the installation thereof by unqualified installers, (2) the costs of removal, reinstallation or transportation of defective parts on the appliance, or (3) incidental or consequential damage. All service work must be performed by an authorized service representative.

This warranty is expressly in lieu of other warranties, express or implied, including the warranty of merchantability of fitness for purpose and of all other obligations or liabilities. MHSC does not assume for it any other obligations or liability in connection with the sale or use of the appliance. In states that do not allow limitations on how long an implied warranty lasts, or do not allow exclusion of indirect damage, those limitations of exclusions may not apply to you. You may also have additional rights not covered in this Limited Lifetime Warranty.

MHSC reserves the right to investigate any and all claims against the Limited Lifetime Warranty and decide upon method of settlement.

## IF WARRANTY SERVICE IS NEEDED...

1. Contact your supplier. Make sure you have your warranty, your sales receipt and the model/serial number of your MHSC product.
2. DO NOT ATTEMPT TO DO ANY SERVICE WORK YOURSELF.

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We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

## **MHSC**

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