This appliance has been retired.
Service parts pages within have been removed.
For replacement parts, please refer to the individual service parts list located on the brand websites.

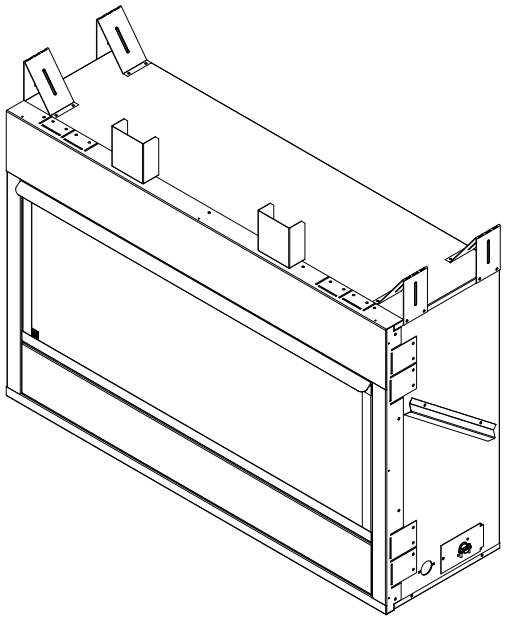
MONESSEN

AVFL Vent Free Fireplace System Installation & Operating Instructions

Models: AVFL42NTSC-SR

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

- **Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.**
- **WHAT TO DO IF YOU SMELL GAS**
  - **– Do not try to light any appliance.**
  - **– Do not touch any electrical switch; do not use any phone in your building.**
  - **– Leave the building immediately.**
  - **– 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.**



DESIGN CERTIFIED ®

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 8.*

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

Thank you and congratulations on your purchase of a Monessen fireplace.

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.

Standard Work Checklist 3
Important Safety Information 4
Building Code Information 5
Product Features 6
AVFL42 Controls 6
Gas Specifications & Orifice Size 6
Gas Pressures 6
Fireplace and Framing Dimensions 7
Pre-installation Information 8
Getting Started 8
What You Will Need 8
Planning the Installation 8
Adequate Combustion and Ventilation Air 8
Fireplace Location 9
Clearances & Height Requirements 10
Good Faith Guidelines for TV Installations 11
Fireplace Installation 12
Secure Fireplace to Framing 12
Finishing Material 12
Noncombustible Facing Installation 12
Connect the Gas 13
Check Gas Pressure 14
Electrical Installation 15
Wiring Junction Box 15
Signature Command® Wiring Diagram 16
Final Installation 17
Bulb Installation 17
Installation of Air Deflection Glass 19
Glass Only Placement 19
Glass & Optional Stone Kit Placement 19
Placement of Optional Logs 20
Operating Instructions 21
For Your Safety Read Before Lighting 21
Turning On Unit 22
To Turn Off Gas to Appliance 22
Signature Command® System Operation 23
Features 23
Battery Installation 23
System Configuration/Setup 23
Cold Climate Option 23
Functions/Operation 25
Touch Screen Remote Control Operation 26
Troubleshooting 31
Maintenance and Cleaning 32
Flame Appearance 32
Check the Pilot Flame 32
Check Burner Flame Appearance 32
Cleaning and Servicing 33
Replacing Light Bulbs 33
Operation and Optional Accessories 35
Operating Information 35
Optional Accessories 35
Troubleshooting 36
Signature Command® System 37
Service Parts 38
Firebox 38
Logs 39
Signature Command® System 40
► **Limited Lifetime Warranty Policy 41**

ATTENTION INSTALLER:

Follow this Standard Work Checklist

This standard work checklist is to be used by the installer in conjunction with, not instead of, the instructions contained in this installation manual.

Customer: _____
Lot/Address: _____
_____
Model (circle one): **AVFL42NTSC-SR**

Date Installed: _____
Location of Fireplace: _____
Installer: _____
Dealer/Distributor Phone # _____
Serial #: _____

⚠ ***WARNING! Risk of Fire or Explosion!*** *Failure to install appliance according to these instructions could lead to a fire or explosion.*

	YES	IF NO, WHY?
Appliance Install (Pg. 8-12)		
Verified that the chase is insulated and sealed.	☐	_____
Required non-combustible board is installed.	☐	_____
Verified clearances to combustibles.	☐	_____
Fireplace is leveled and secured.	☐	_____
Adequate provisions for combustion and ventilation air have been verified.	☐	_____
Gas (Pg 13-14)		
Proper appliance for fuel type.	☐	_____
Leak check performed and inlet pressure verified.	☐	_____
Verified proper air shutter setting for installation type.	☐	_____
Electrical (Pg 15)		
Unswitched power (110-120 VAC) provided to the appliance.	☐	_____
Switch wires properly installed.	☐	_____
Media & Accessories (Pg 17-21)		
All packaging and protective materials removed (inside & outside of appliance).	☐	_____
Media installed correctly.	☐	_____
Accessories installed properly.	☐	_____
Finishing (Pg 10-12)		
Verified all clearances meet installation manual requirements.	☐	_____
Mantels and wall projections comply with installation manual requirements.	☐	_____
Manual bag and all of its contents are removed from inside/ under the appliance and given to party responsible for use and operation. Started appliance and verified no gas leaks exist.	☐ ☐	_____ _____

Hearth & Home Technologies recommends the following:

- Photographing the installation and copying this checklist for your file.
- That this checklist remain visible at all times on the appliance until the installation is complete.

Comments: Further description of the issues, who is responsible (Installer/ Builder/ Other Trades, etc) and corrective action needed _____

Comments Communicated to party responsible _____ by _____ on _____
(Builder / Gen. Contractor/) (Installer) (Date)

➔ = Contains updated information.

INSTALLER

Please leave these instructions with the appliance.

OWNER

Please retain these instructions for future reference.

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. 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 materials, etc. It is imperative that control compartments, burners and circulating air passageways be kept clean.
7. WARNING: Any change to this heater or its controls can be dangerous.
8. Unvented gas heaters are a supplemental zone heater. They are not intended to be the primary heating appliance.
9. **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.
10. The installation must conform with local codes or, in the absence of local codes, with the **National Fuel Gas Code, ANSI Z223.I/NFPA54.**
11. This unit complies with ANSI Z21.11.2 *Unvented Heaters*, latest edition.
12. Do not install the heaters in a bathroom or bedroom.
13. Correct installation of the ceramic fiber 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. Refer to log placement instructions for proper installation.
14. 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.
15. **Caution:** Candles, incense, oil lamps, etc. produce combustion byproducts 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.
16. 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 8.*
17. 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.
18. Keep room area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
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 two to three hours. 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 ½ psig (3.5 kPa).
23. The appliance must be isolated from 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 ½ 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. Never burn solid fuels in a fireplace where a unvented room heater is installed.

This appliance may be installed in an after-market, 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.

BUILDING CODE INFORMATION

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: This product and the fuels used to operate this product (liquid propane or natural gas), and the products of combustion of such fuels, can expose you to chemicals including benzene, which is known to the State of California to cause cancer and reproductive harm. For more information go to: www.P65Warnings.ca.gov.

AVFL42 CONTROLS

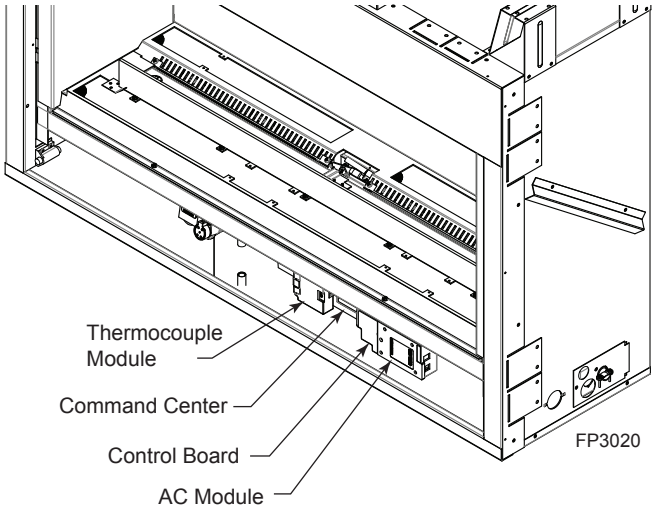


Figure 1 –
AVFL42 Controls (Control Access Door Shown Open)

GAS SPECIFICATIONS & ORIFICE SIZE

MODEL	FUEL	INPUT (BTU/h)	ORIFICE SIZE
AVFL42NTSC-SR	NAT.	24,500	#50

GAS PRESSURES

	NATURAL
Inlet Minimum	5.0" w.c.
Inlet Maximum	10.5" w.c.
Regulator Pressure Setting	3.5" w.c.
Pilot Regulator	3.5" w.c.

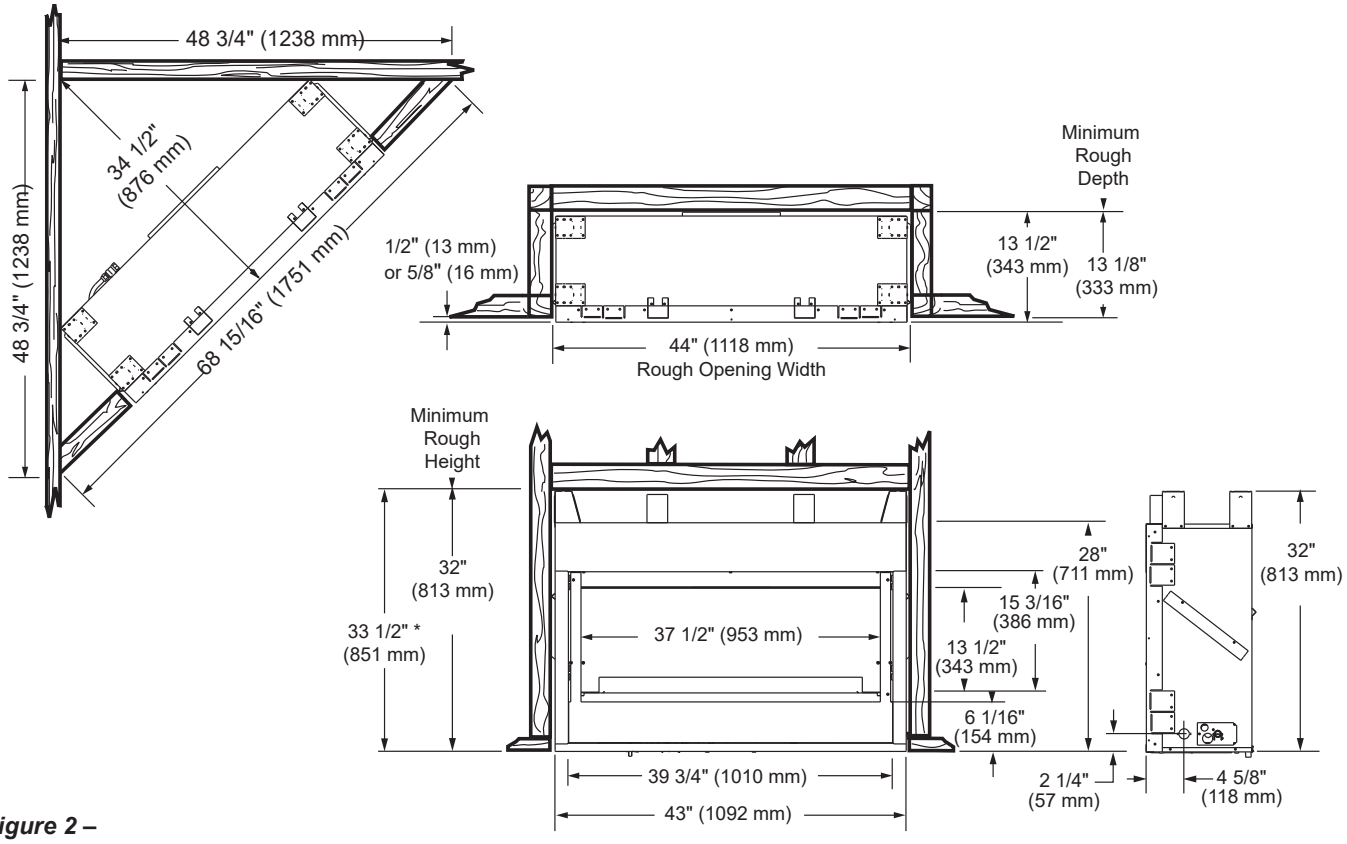


Figure 2 –
Fireplace and Framing Dimensions

*NOTE: The AVFL42 unit must be raised at least 1.5 inches above the top surface of the finished floor when using the AVFL42WFBT-A or AVFL42WCSS-A wide contemporary face..

GETTING STARTED

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

- Unvented gas heater
- Two (2) anchoring screws
- Installation/operating instructions
- 5" non-combustible board
- 2" x 32" deflector glass
- Two (2) bags fireglass
- Twelve (12) 15 watt bulbs
- One (1) 90 watt bulb
- TSFSC remote control
- One (1) 1-1/8" eyebrow

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

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

- Manual shutoff valve
- Piping which complies with local codes
- Sediment trap
- Phillips head screwdriver
- Tee joint.
- Pipe sealant approved for use with Natural Gas (Resistant to sulfur compounds)
- Pipe wrench

WARNING

Do not install the heater:

- **Where curtains, furniture, clothing, or other flammable objects are less than 36" from the front of the heater.**
- **In high traffic areas.**
- **In windy or drafty areas.**

WARNING

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

PLANNING THE INSTALLATION

In planning the installation for the fireplace it is necessary to determine where the unit is to be installed and whether optional accessories are desired. Gas supply piping should also be planned. The following steps represent the normal sequence of installation. Each installation is unique, however, and might require a different sequence.

1. Position fireplace in desired location. Refer to the *Fireplace Location* (*page 9, Figure 3)* and *Clearances* and *Height Requirements (page 10, Figure 5)* sections and *Fireplace and Framing Dimensions (page 7, Figure 2)* illustration found in this manual.

   NOTE: Be sure all packing material has been removed from under the unit.
2. Install following the instructions found in this manual.
3. Field wire main power supply to junction box. Refer to the *Electrical Installation* section *(page 15).* (Electrical connections should only be performed by an experienced, licensed certified service person).
4. Plumb gas line. Refer to the *Connect the Gas (page 13, Figure 7)* section found in this manual. (Gas connections should only be performed by an experienced, licensed/certified service person).
5. Complete finish wall material and/or surround.

ADEQUATE COMBUSTION AND VENTILATION AIR

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

The National Fuel Gas Code, (ANSI Z223.1/NFPA54), defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 BTU per hour (4.8m^3 per kw) of the aggregate input rating of all appliances installed in that pace, and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 BTU per hour (4.8 m^3 per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of a confined space.

Unusually tight construction is defined as construction where:

a. Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of 1 perm (6 x 10^{11} kg per pa/sec-m^2) or less with openings gasketed or sealed, and
b. Weather stripping has been added on openable windows and doors, and

c. Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines and other openings.

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

$$\frac{\text{BTU/Hr} = (L_1 + L_2)\ \text{Ft} \times (W)\ \text{Ft} \times (H)\ \text{Ft}}{50}$$

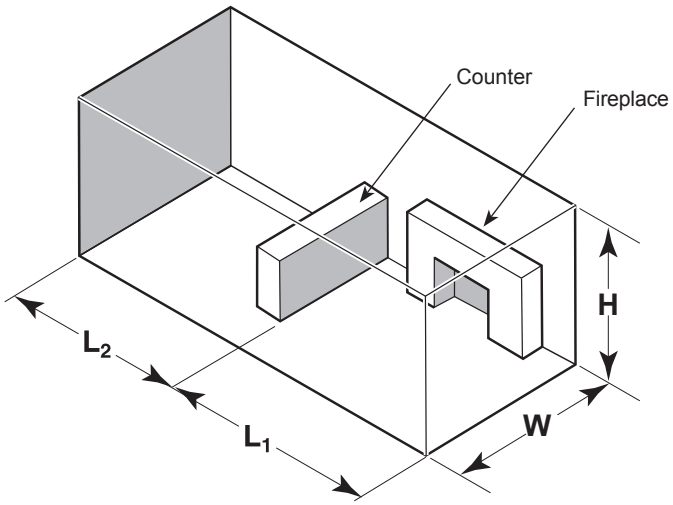
Consider two connecting rooms with an open area between, with the following dimensions:

$L_1 = 15\frac{1}{2}$ Ft., L_2 = 12 Ft., W = 12 Ft., H = 8 Ft.

$$\frac{\text{BTU/Hr} = (15\frac{1}{2} + 12) \times (12) \times (8)}{50}$$

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

$$\frac{\text{BTU/Hr} = (15\frac{1}{2}) \times (12) \times (8)}{50}$$



WARNING

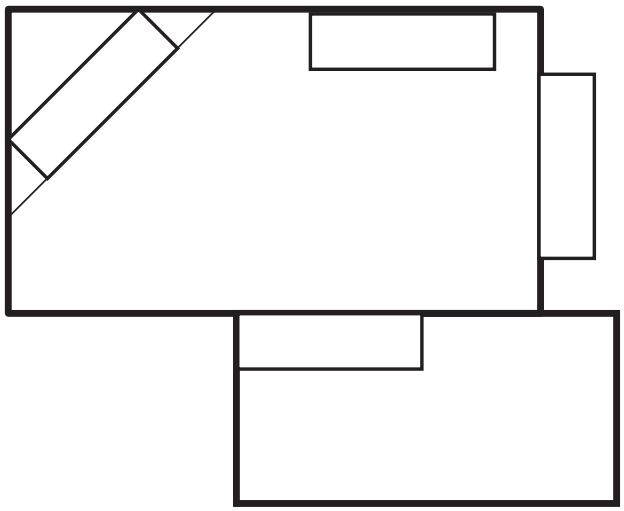
If the area in which the heater may be operated does not meet the required volume for indoor combustion air, combustion and ventilation air shall be provided by one of the methods described in the *National Fuel Gas Code, ANSI Z223.1/NFPA 54*, the *International Fuel Gas Code* or applicable local codes.

FIREPLACE LOCATION

This unvented gas heater requires no outside venting and burns cleanly and efficiency. As a zero-clearance unvented gas heater, it can be installed against (or recessed into) any wall that is accessible to a gas line.

Carefully select the best location for installation of your unvented fireplace. The following factors should be taken into consideration.

- Clearance to side wall, ceiling, woodwork and window or other combustibles. Refer to *Clearance and Height Requirements* section on *Page 10*. Minimum clearances to combustibles **must be maintained.**
- Location must not be affected by drafts caused by kitchen exhaust fans, ceiling fans, return air registers for forced air furnaces / air conditioners, windows or doors.
- Installation must provide adequate ventilation and combustion air.
- **DO NOT INSTALL THIS MODEL IN A BEDROOM OR BATHROOM.**
- Location should be out of high traffic areas and away from furniture and draperies due to heat from firebox.
- Never obstruct the front opening of the unvented fireplace or restrict the flow of combustion and ventilation air.
- Minimize modifications to existing construction. Refer to *Figure 3* below for location suggestions.
- Do not install in the vicinity where gasoline or other flammable liquids may be stored. The unvented firebox must be kept clear and free from the combustible materials.



FP3029

Figure 3 –
Possible Fireplace Locations

CLEARANCES AND HEIGHT REQUIREMENTS

Ensure that minimum clearances shown in *Figures 4 and 5* are maintained. Left and right clearances are determined when facing the front of the firebox.

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

Sidewall & Mantel Leg Clearances — The clearance from the inside of the appliance to any combustible adjacent wall should not be less than 6". Mantel leg clearances are projected out at a 45° angle. *Figure 5*

Ceiling Clearance — The ceiling must be at least 36" from the firebox opening. *Figure 5*

Back Wall Clearance — The appliance may be placed against a combustible back wall.

Eyebrow must be installed with the three (3) screws provided. *Figure 4*.

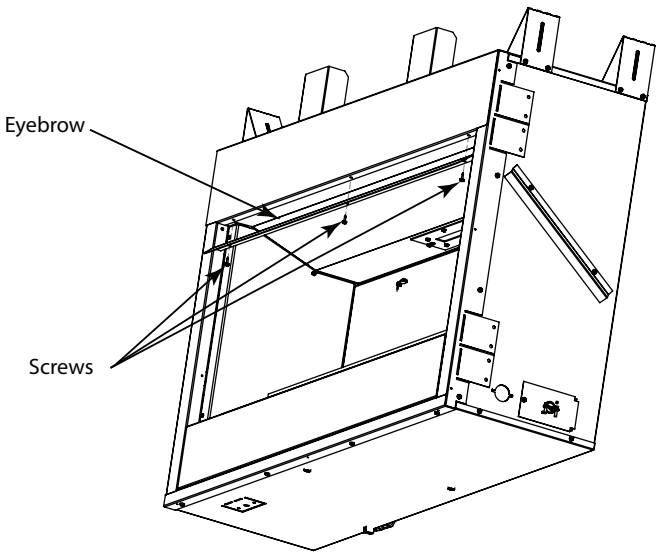


Figure 4 –
Eyebrow Installation

WARNING

The dimensions shown in *Figures 4 and 5* are minimum clearances to maintain when installing this heater. Left and right clearances are determined when facing the front of the heater.

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

Floor Clearance — The fireplace may be installed directly on a combustible floor or a raised platform of an appropriate height. Do not place fireplace on carpeting, vinyl, tile or other soft floor coverings. It may, however, be placed on flat wood, plywood, particle board or other hard surfaces. Be sure fireplace rests on a solid continuous floor or platform with appropriate framing for support so that no cold air can enter from under the firebox. See note below regarding floor installation with wide contemporary faces.

Mantel clearances — Must meet the clearance requirements detailed in *Figure 5.* This is for combustible and non-combustible mantels.

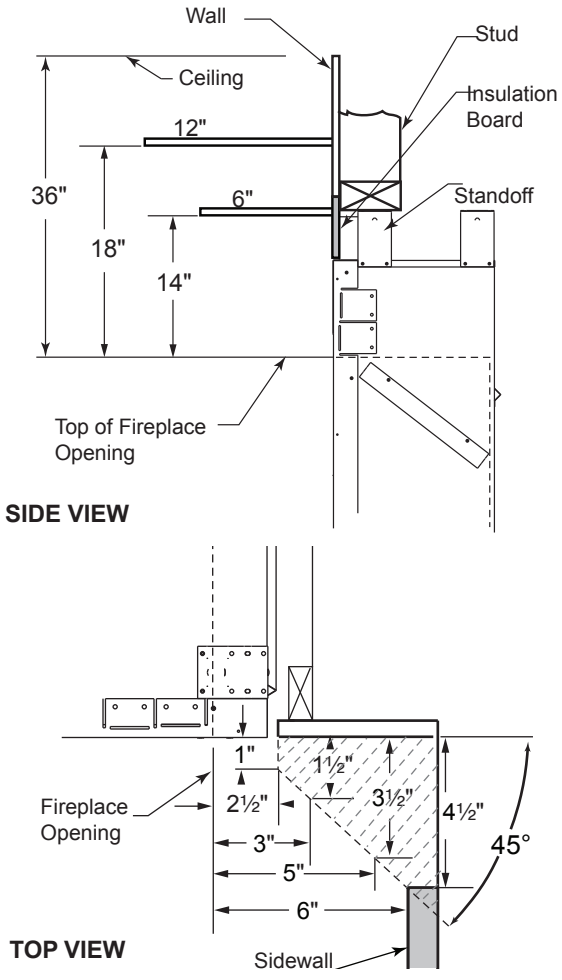
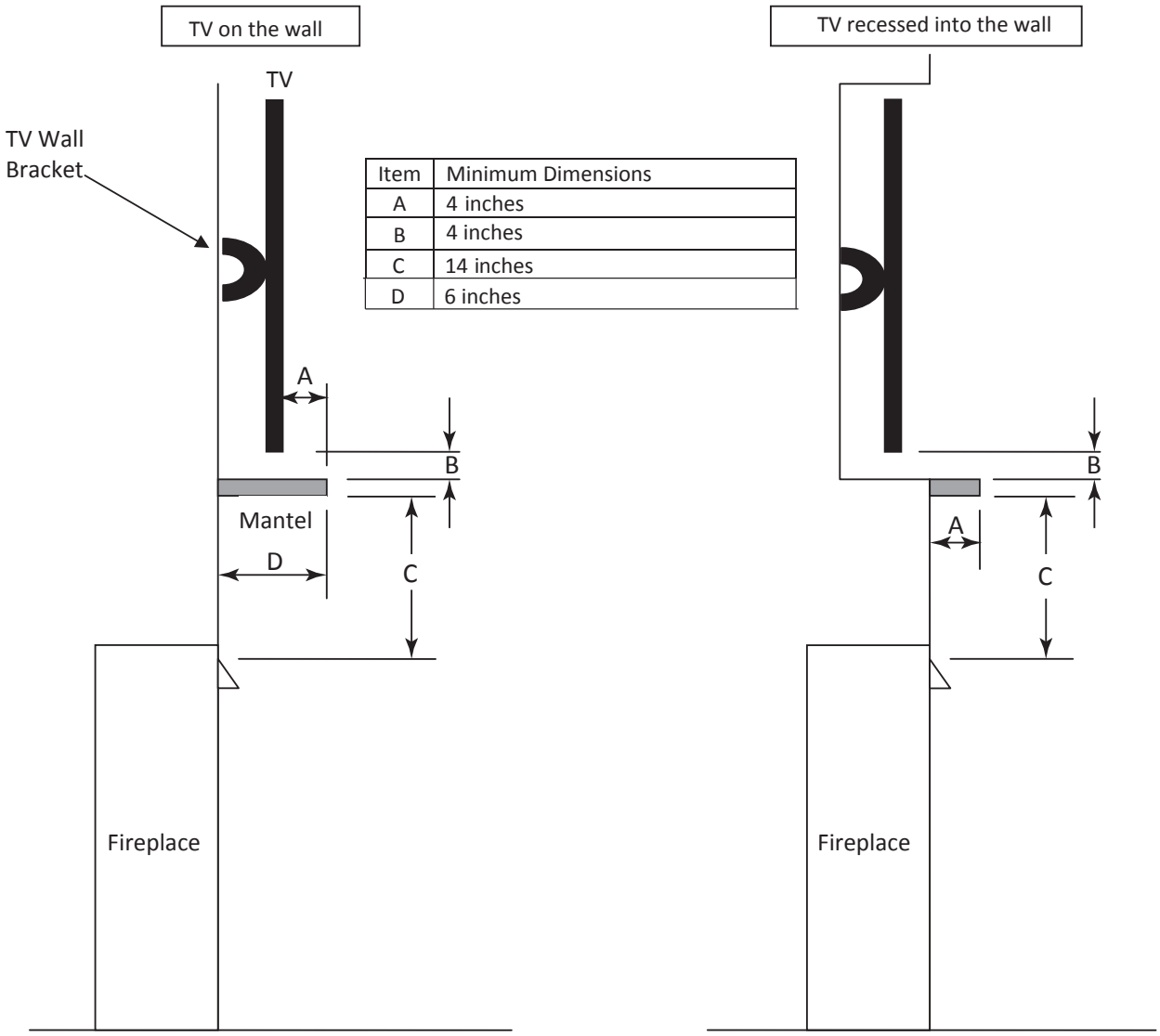


Figure 5 –
Sidewall, Mantel Leg and Ceiling Clearances

Good Faith Guidelines for TV Installations above a Typical Gas Fireplace



Notes:

1. These are good faith recommended clearances only and not a guarantee of compliance with all TV manufacturers' maximum allowable operating temperatures.
2. Since every home has unique air flow characteristics and maximum allowable operating temperatures can vary from manufacturer to manufacturer and from model to model, actual TV temperatures should be validated at the time of each installation. TVs should not be used in situations where the actual TV temperature exceeds the manufacturers' maximum allowable operating temperatures identified in the TV's technical specifications. Contact the TV's manufacturer directly if you cannot locate this information or have questions regarding the information.
3. Mantel height and depth must conform to mantle requirements specified in the fireplace installation manual.
4. "C" dimension taken from the top of the hood or fireplace opening.
5. Suggestions on how to further reduce TV temperatures:
    a. Increase "A" dimension.
    b. Increase "C" dimension, however, increasing "B" dimension beyond maximum recommended typically results in higher temperatures.

SECURE FIREPLACE TO FRAMING

The fireplace must be secured to the framing studs as shown in *Figure 6.* Use four (4) screws to attach fireplace to framing. The side nailing flanges are ½" or ⅝" to accommodate different wall thickness.

NOTE **Never install combustible materials over front face of fireplace.**

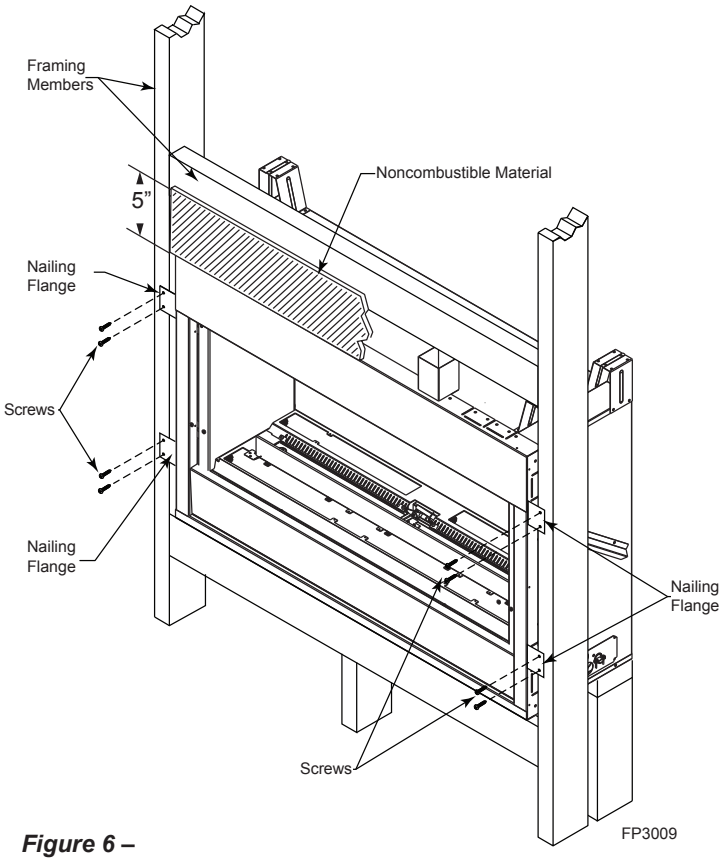


Figure 6 –
Secure Fireplace to Framing Studs

FINISHING MATERIAL

NOTE: Any remote wiring (i.e. remote control, wall switch), must be done prior to final finishing to avoid costly reconstruction.

Only noncombustible materials (i.e. brick, tile, slate, steel, or other materials with a UL fire rating of Zero) may be used to cover the black painted face of the appliance. It is permissible to bring combustible wall board to the top of the standoffs on the top and to the wall board stand-offs on the sides of the unit. A 300°F minimum adhesive may be used to attach facing materials to the black surface. If joints between the finished wall and the fireplace surround are sealed, a 300°F minimum sealant material (General Electric RTV103 or equivalent) must be used.

NOTE: Fireplace may be installed on top of framing or platform constructed of combustible materials which do not protrude beyond the face.

NONCOMBUSTIBLE FACING INSTALLATION

CAUTION: The noncombustible wall board supplied with this unit can be damaged if dropped or struck. Handle with care.

1. Using drywall screws secure noncombustible board to the two brackets on top of unit. **IMPORTANT**: To avoid cracking the board, pre-drill holes prior to securing to the unit/framing.
2. Wipe any debris or dust from the noncombustible board and drywall.
3. It is highly recommended to prime the facing using a quality primer prior to taping and mudding. This will ensure proper adhesion of both the tape and mud. The supplied board is very porous.
4. Tape the seams using a mesh type tape.
5. Mud seams as normal. We recommend using a product called Durabond high strength compound for the first coat. This product can be purchased at any hardware store. Follow manufacturer's recommendations for curing the mud. NOTE: Depending upon the final finishing method, use a minimum rated 300 degree sealant, drywall compound or thin set to seal the side and top joints.
6. Prime wall for a second time for proper adhesion of paint.

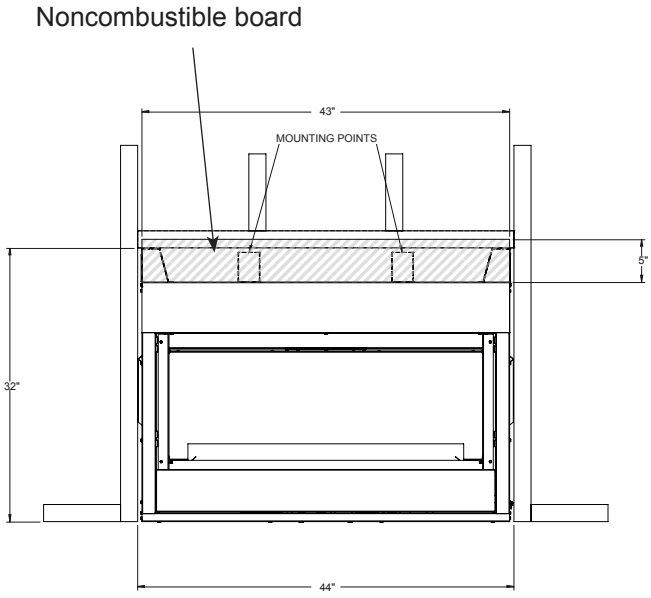


Figure 6A –
Noncombustible facing installation

CONNECT THE GAS

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

WARNING
This appliance is equipped for either natural gas. Field conversion is not permitted.

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 ⅛" NPT pressure tapping point should be installed upstream of the appliance. *Figure 7*

A sediment trap should be installed upstream to prevent moisture and contaminants from passing through the pipe to appliance controls and burners. Failure to do so could prevent the appliance from operating reliable. *Figure 7*

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.

IMPORTANT: Loosen the pipe adapter on the flex tube before installing to the system piping.

When tightening 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.**

WARNING

DO NOT USE OPEN FLAME TO CHECK FOR GAS LEAKS.

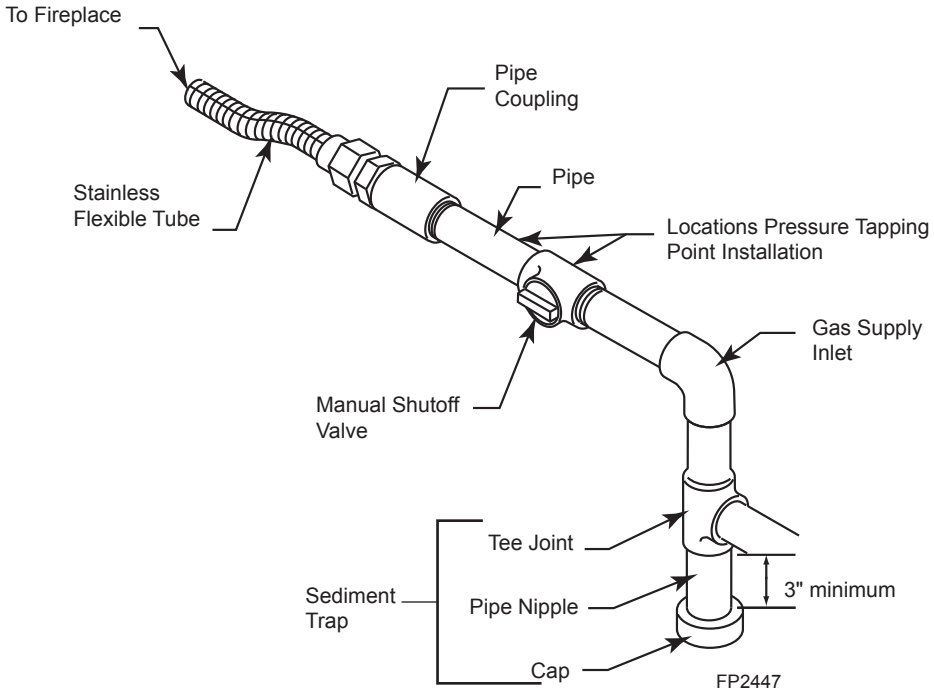


Figure 7 – Gas Connection

CHECK GAS PRESSURE

Figure 8

Check the gas pressure with the appliance burning.

Open control access door at bottom front of unit to find valve and regulator referred to below.

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

Turn captured screw counterclockwise two or three turns and then place tubing to pressure gauge over test point. Use test point “A” closest to gas inlet. After taking pressure reading, be sure and turn captured screw clockwise firmly to reseal. Do not over torque. Check for gas leaks.

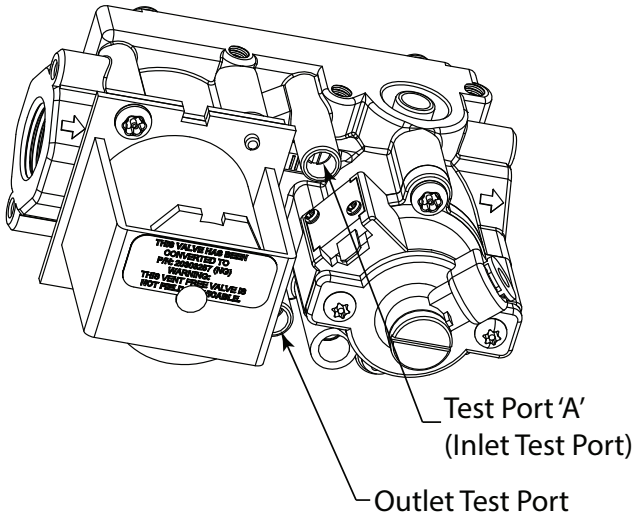


Figure 8 –
Pressure Test Point Location

WIRING JUNCTION BOX

1. Before installing, wire the receptacle into an electrical circuit. This should be done before framing the fireplace. Wire with minimum 60° C wire in accordance with prevailing codes.
2. Remove the external junction box cover by removing the screw from the right side of the outside firebox wall. Junction box was installed at the factory.
3. The junction box cover has a factory installed “romex” style strain relief connector. After connecting the wires, route the wire leads through this connector.

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

For vent free SC System, the unit will continue to burn during power loss to AC only with batteries installed. Without power, the unit will shut down without batteries installed but can be started with fresh batteries installed from the Command Center.

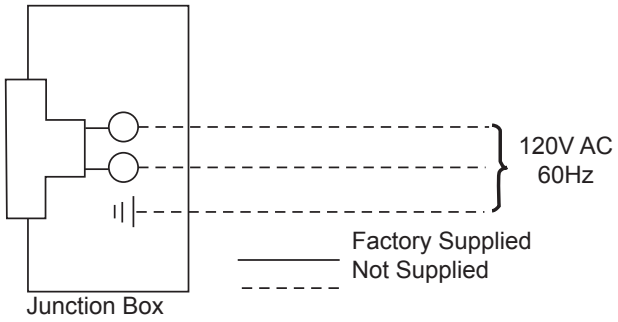


Figure 9 –
Junction Box Wiring Diagram

CAUTION **Electrical connections should only be performed by a qualified licensed electrician. Main power supply must be turned off before connecting to the main electrical power supply or performing service.**

WARNING **Electrical Grounding Instructions:**
This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three prong receptacle.

IMPORTANT: Always check local building codes. This installation must comply with local regulations as well as the National Electric Code.

SIGNATURE COMMAND WIRING DIAGRAM

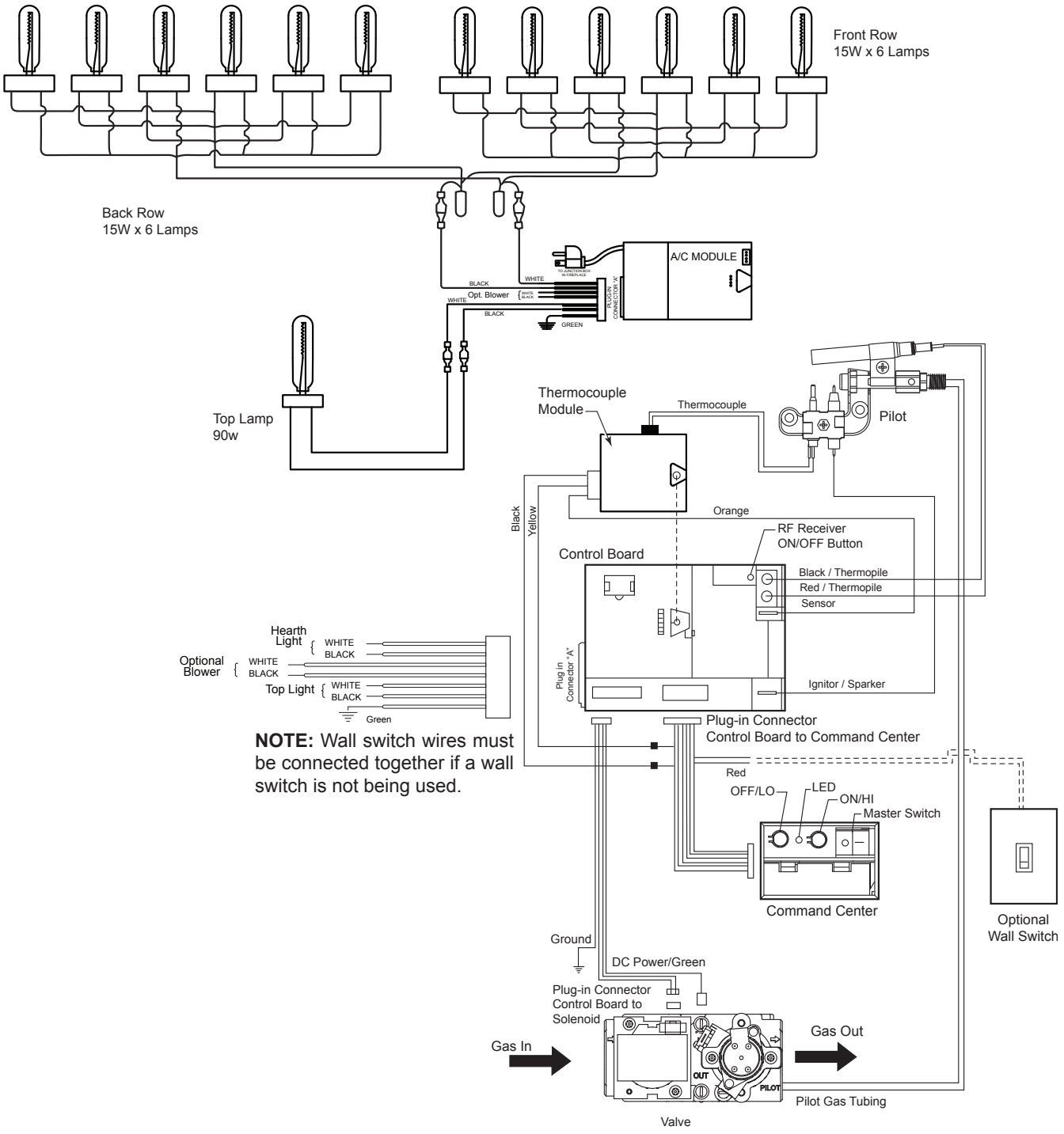


Figure 9 –
Signature Command® Wiring Diagram

BULB INSTALLATION

CAUTION Turn OFF the main power supply before performing any service work on the unit, including installing or replacing light bulbs.

NOTE: This unit is shipped without bulbs installed to prevent any damage to the bulb filament during transport. This unit is shipped with a total of 13 bulbs (twelve 15W bulbs and one 90W bulb). These instructions apply to new installations only. If replacing bulbs after the installation is complete, see page 33 for instructions.

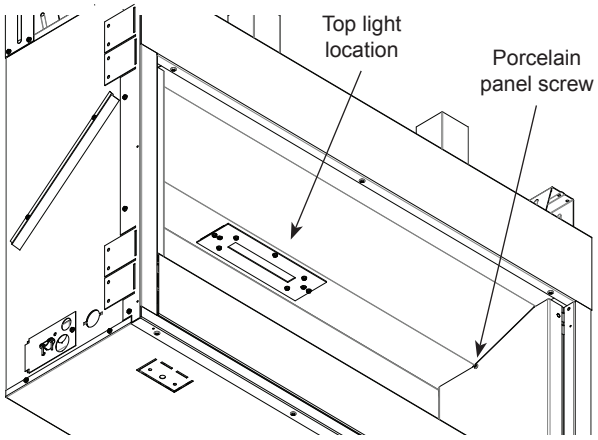


Figure 10–
Top Light Position; Porcelain Panel Screw Location

TOP LIGHT BULB INSTALLATION

1. Remove three screws holding light cover in place (as shown in Figure 11)
2. Insert (1) 90W bulb provided into socket
3. Replace top light cover with three screws

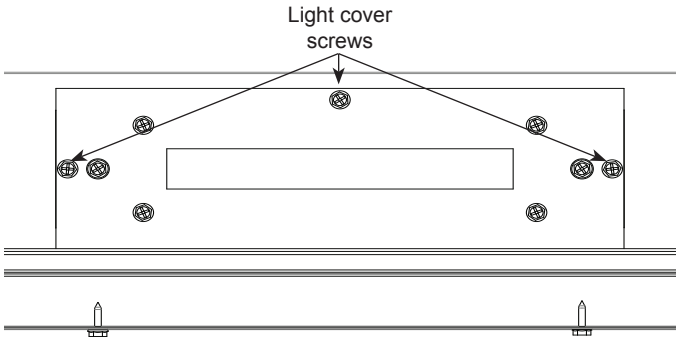


Figure 11–
Top Light Screws

LOWER LIGHT BAR BULB INSTALLATION

1. Remove air deflection glass from the unit and place on a flat, clean surface.
2. Using a Phillips screwdriver remove the screws (one each) holding the left and right porcelain panels in place.
3. Carefully remove the panels from the unit placing them on a clean level surface. **NOTE:** The rear porcelain panel is held in place by the left and right panel and could fall forward if not supported during removal of the side panels.

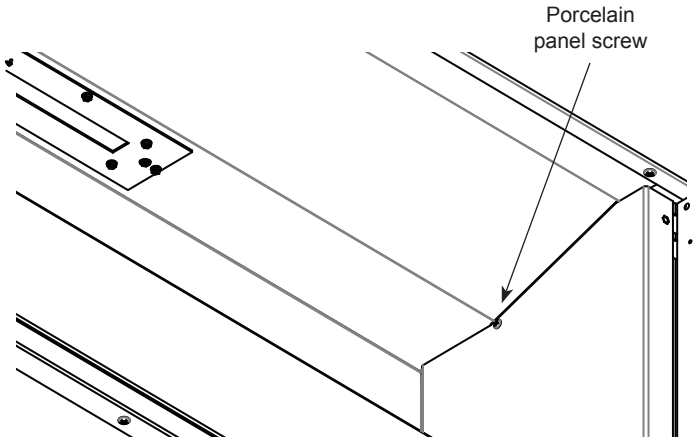


Figure 12–
Porcelain Panel Screw Location

4. With side panels removed the rear porcelain panel can be removed from the unit and placed on a clean, level surface.
5. Remove nine screws that secure the front hearth in place and remove from unit. *Figure 13*

6. Remove five screws that secure the rear hearth in place and remove from unit. *Figure 13*
7. Figure 14 shows bulb placement for front and rear light bars. Insert bulbs in sockets.
8. With (twelve 15W) bulbs installed in front and rear light bar, reinstall the rear hearth first with five screws that were removed earlier. *Figure 13*
9. Reinstall the front hearth with nine screws removed earlier. *Figure 13*
10. Place the rear porcelain panel back in place and reinstall the left and right side using same screws that were removed earlier.
11. Re-install the air deflection glass before proceeding to add decorative media (next page).

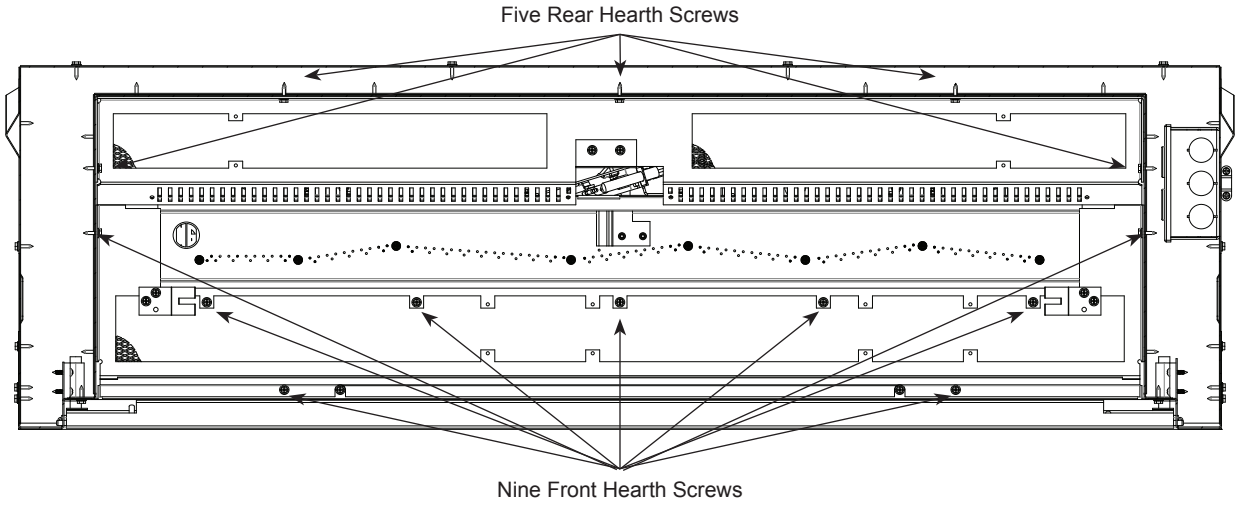


Figure 13–
Hearth Screw Locations

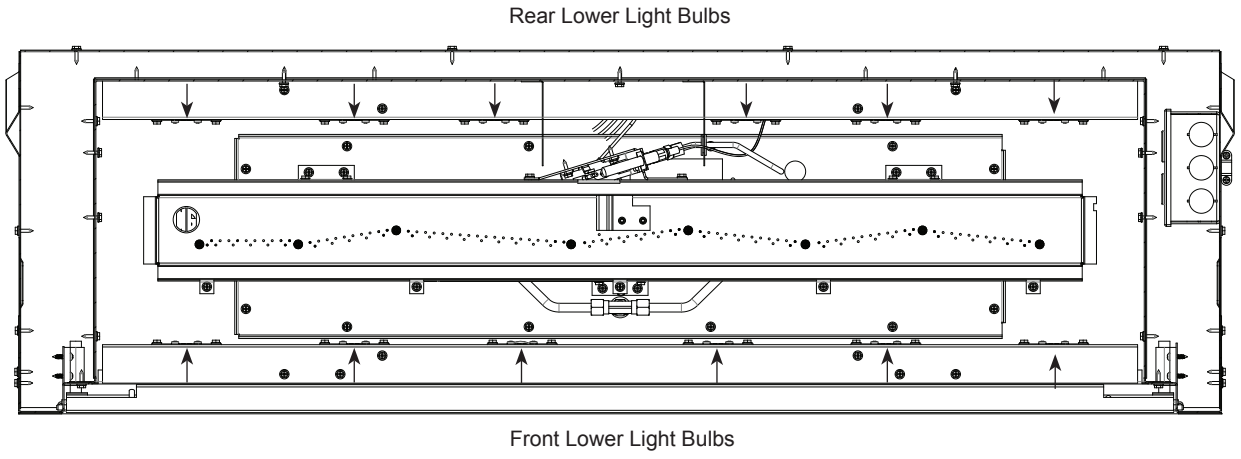


Figure 14–
Lower Light Bulb Location

INSTALLATION OF AIR DEFLECTION GLASS

NOTE: The 32" deflector glass must be installed prior to placing any fireglass or stone media on the burner. To install the air deflection glass simply place the tabs located at the bottom of the glass into the slots at either end of the burner floor, in front of the burner ports. The glass should stand upright, neither leaning forward nor backward.

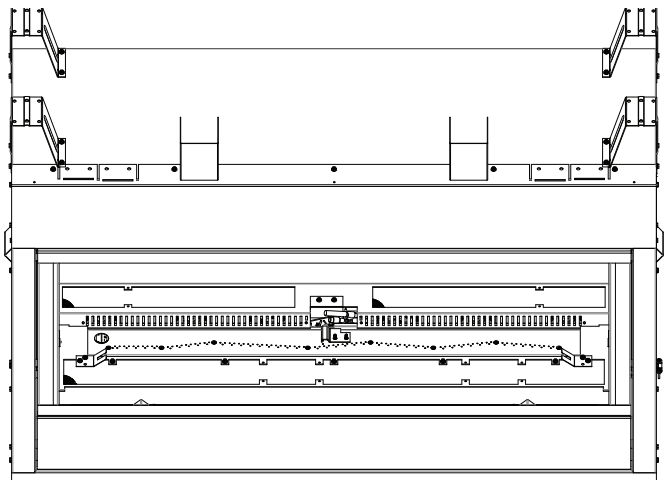
GLASS ONLY PLACEMENT

NOTE: Two (2) bags of glass are supplied with the fireplace. Both bags may be used to cover the entire floor and burner. We advise against using additional glass as too much can cut off the proper amount of air the burner needs to burn cleanly. This may cause sooting.

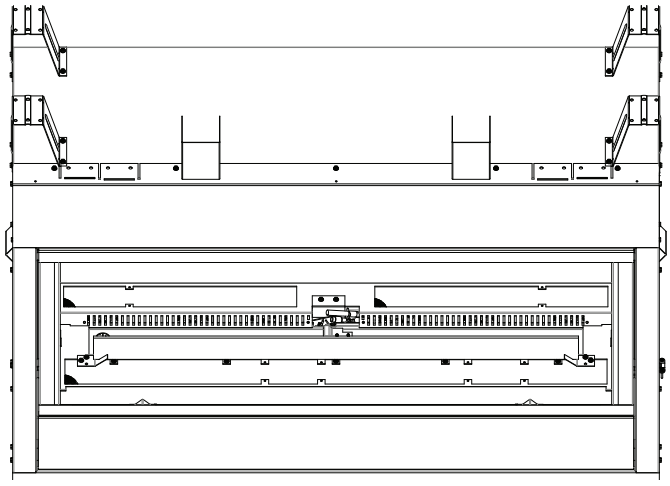
1. Spread glass evenly in one layer over the entire floor and burner. It is important to not have the glass too thick on ported area (single layer only).
2. Turn burner on and adjust glass over ported areas to achieve an even, clean flame.

GLASS AND OPTIONAL STONE KIT PLACEMENT

1. For best results, spread glass evenly over the entire floor and burner making sure the glass is not too thick over the burner ports (single layer only).
2. Place the stones randomly in front of and behind the burner. **CAUTION: Do not allow stones to sit directly on burner or in flame.** *Figure 15 and 16.*
3. Turn burner on and adjust glass over the ported area to achieve an even, clean flame. *Page 32, Figure 37*



Air Deflection Glass Placement (before)



Air Deflection Glass Placement (after)

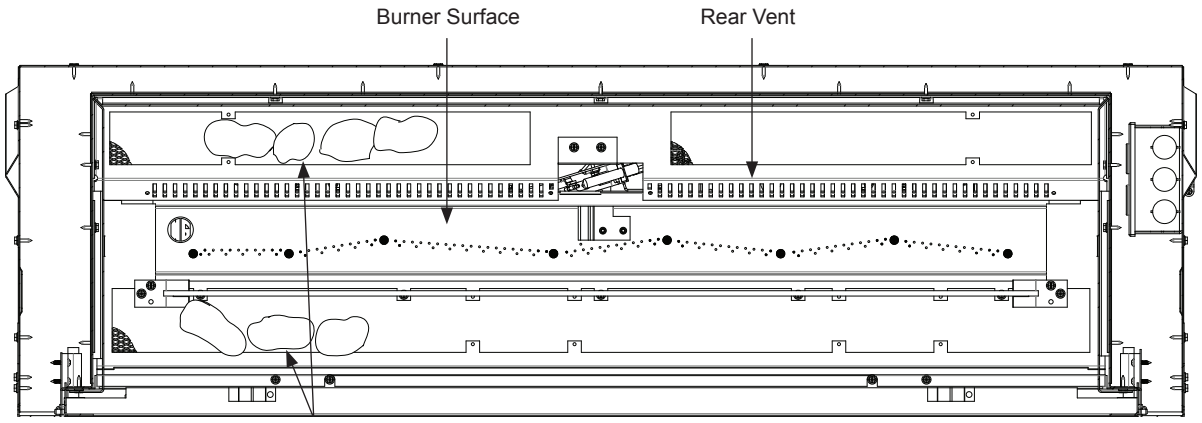


Figure 15 –
Air Deflection Glass and Stone Placement



Figure 16– Stone Placement

PLACEMENT OF OPTIONAL LOGS

WARNING: Turn off fireplace and allow to cool completely before beginning installation.

Kit Contents:

- Two (2) ceramic fiber driftwood logs
- Four (4) log support pin brackets
- Eight (8) #8 bracket mounting screws

NOTE — Do not handle logs with your bare hands. **Always wear gloves to prevent skin irritation from ceramic fibers.** After handling the logs, wash your hands with soap and water to remove any traces of fibers.

NOTE: Prior to installing the log set, you must first install the pin brackets on the burner. Fireglass and the air deflection glass should only be installed *after* the pin brackets are in place. The logs must then be placed in the unit after the fireglass and air deflection glass. If the optional logs are added after the air deflection glass and fireglass are in use, move the fireglass away from the areas in *Figure 17* and install the support brackets, then arrange fireglass evenly across burner again.

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 supplied with the optional log kit (AVFL42DLS).

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.

1. Mount the four log support pin brackets using mounting holes and screws provided in locations indicated in *Figure 18*. Note that the front log can be mounted in two different positions. The pin brackets can be moved to accommodate the preferred log placement.
2. Place the large rear log (#1) by aligning the holes in the bottom of the log with the two pins at the back of the burner. *Figure 19.*



Figure 17 – Log Pin Assembly

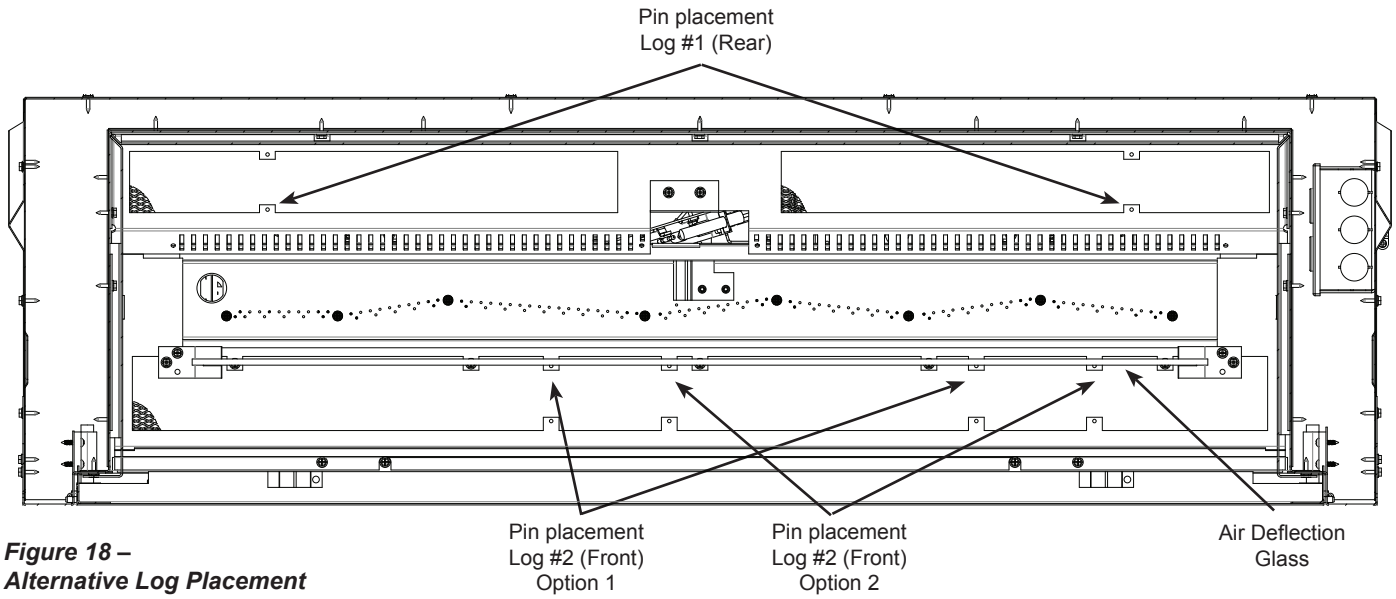


Figure 18 – Alternative Log Placement

3. Place the front log (#2) by aligning the holes in the bottom of the log with the two pins at the front of the burner. The front log may be placed in one of two positions on the burner depending on which two pin set locations are used.



Figure 19–
Front Log Placement



Figure 20 –
Alternative Front Log Placement

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:

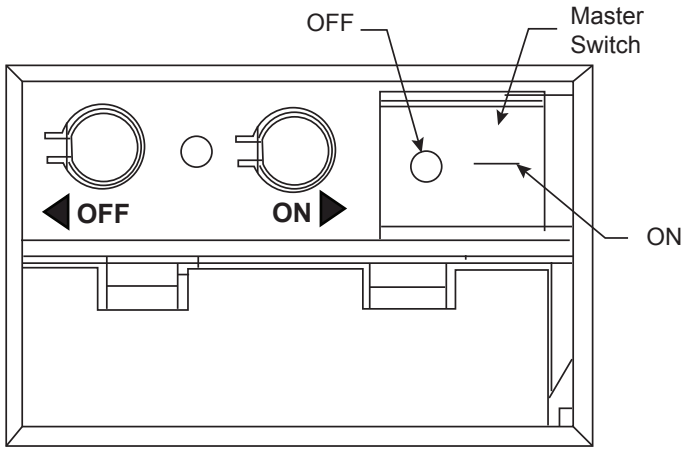
- Do not attempt to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

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.

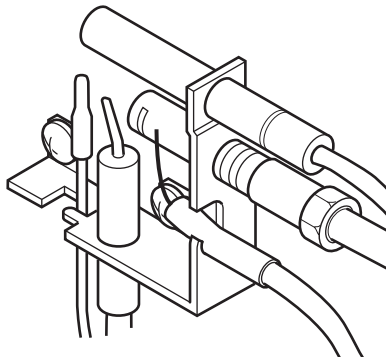
D. Do not use this appliance if any part of it has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been under water.

TURNING ON UNIT

1. **STOP!** Read the safety information on *Page 21*.
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 21*. 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



Pilot

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.

Figure 21 –
Command Center and Pilot

FEATURES

Command Center

- Easy Access Function Operation and System Configuration
- Operation Confirmation/Fault Diagnostic Indications (LED/Buzzer)
- ON/OFF 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)
- Uninterrupted Operation During Power Outage (Automatic Battery Backup)
- ON/OFF RF Remote Receiver
- Optional Transmitter Learn Capability

AC Module (Requires TSFSC Remote)

- Easy Snap-on Design
- Embedded Compact 120 VAC Adapter with Auto Battery Back up Feature
- Remote Controlled 3-step Blower, Lighting, and On/Off Auxiliary AC Outputs

Transmitter – TSFSC

- Low battery Indication for Transmitter
- Child Proof Lock-out
- LCD Backlight
- Security Codes 16
- Countdown 6 hr Timer
- Standard Thermostatic Control Mode
- Three Brightness Settings for Lights
- On/Off Auxiliary

BATTERY INSTALLATION

The Command Center uses four (4) "AA" batteries as back up for power outages. The system can operate for approximately six (6) months on battery power.

To Install Batteries (not included):

1. Press down the battery door tabs and pull out to remove battery door.

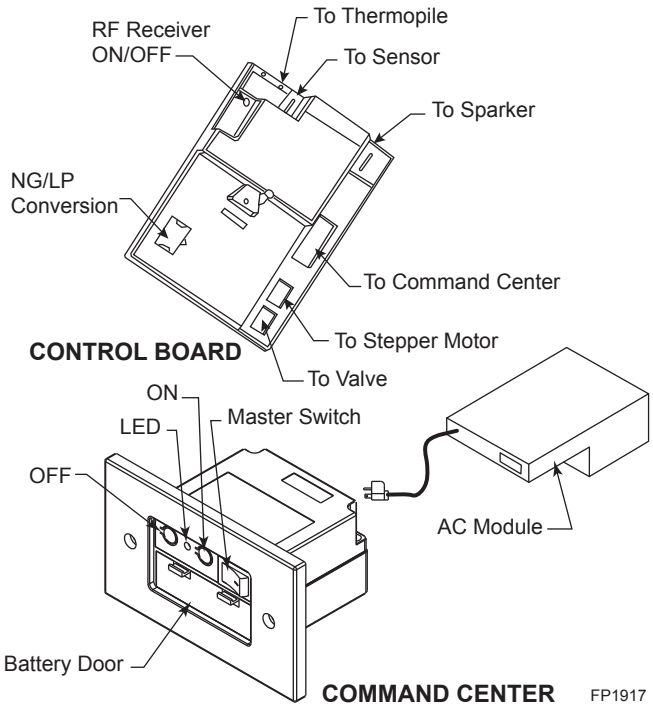


Figure 22 –
Signature Command® System Components

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 will operate without power.
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.

COLD CLIMATE OPTION

Choose the Mode That Best Suits Your Needs

The Signature Command® System is designed to operate in either Standing Pilot or Intermittent Pilot mode.

- The Standing Pilot Mode is best for colder climates when the pilot must remain on continuously to prevent condensation and ensure reliable operation.
- The Intermittent Pilot Mode is ideal for maximum efficiency, igniting the pilot only when needed to start your fireplace, lowering fuel consumption and reducing your carbon footprint.

Either mode benefits from the instantaneous battery back-up, so you never have to worry about a power outage.

NOTE: The Signature Command® System comes standard in the Intermittent Pilot mode, so you must follow the instructions below to switch to Standing Pilot Mode if needed.

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)

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 22 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 the master switch (It will beep once for standing pilot, twice for intermittent pilot.)	INTERMITTENT PILOT
Standing Pilot Temperature Shutoff	Hold the ON ↑ button for 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. (It will beep once for On and twice for OFF.)	RF OFF
Learn Remote Transmitter	Hold the OFF ↓ button while turning on the master switch (Listen for two beeps, then press any button on the remote.)	
6-Hour Safety Shutdown Setup	Press the ON ↑ button and OFF ↓ button simultaneously (It will 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) 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.

Turning on the Fireplace

1. Press the ON button (on the Command Center) once to turn on the main burner.

Turning Off the Fireplace

There are three ways to turn off the fireplace.

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. (flame height adjustment not available on AVFL42NTSC-SR)
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 ON ("_") position to power up the system.
Fireplace ON	Press the ON ↑ button on the Command Center or turn on wall switch.
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 ON	Press the ON button once to turn on the fireplace.
Flame OFF	Press the OFF button for three seconds.

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 chart below for indicator reference.

FAULT	LED INDICATOR
Conversion Cover Missing	One RED (1 time)
Spark Fail	Two RED (1 time)
No Sensor Signal	Three RED (1 time)
Pilot Lockout – trial	One GREEN, every 2 seconds until manual reset
Pilot Lockout – flame loss	One RED-GREEN every 2 seconds until manual reset
Low Battery	One RED every 10 seconds continuously
No or Low Thermopile Power	Two RED every 10 seconds continuously
Learning	GREEN flashes every 1 second for 10 seconds
AC Power On	GREEN solid
Pressure Switch Failed (Power Vent only)	One RED every 2 seconds 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 23 shows the display of the TSFSC 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 (flame height adjustment not available on AVFL42NTSC-SR)

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, THERMO, LIGHT and AUX.

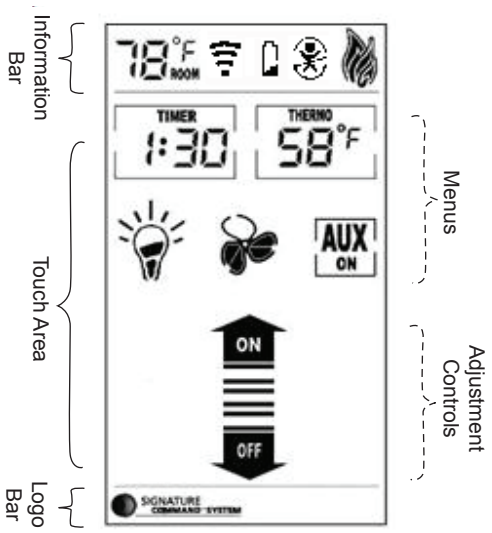


Figure 23 **Function Areas of the LCD Display**

Logo Bar

The Logo Bar contains the brand logo: Signature Command® System.

■ Initialization and Setting up

Installing Batteries:

Figure 24

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

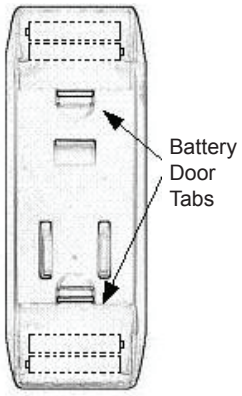


Figure 24

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 25

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):

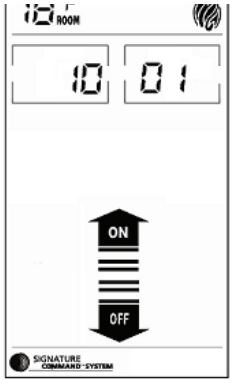


Figure 25

1. Press the ON/arrow button and the TIMER button at the same time to enter privacy code setup models.
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 "0."
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.

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. *Figure 25.* 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 sound and the green LED on the Command Center will flash for 10 seconds.
4. During the 10 seconds, press the OFF button on the transmitter to learn. Another two beeps will be sound confirming a successful learn function. *Figure 27*

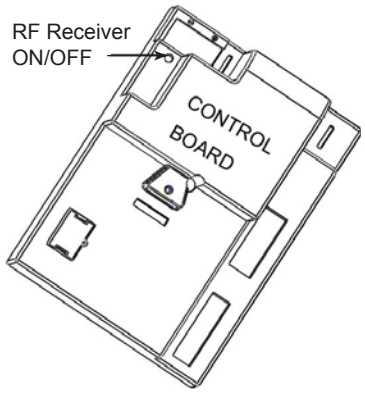


Figure 26

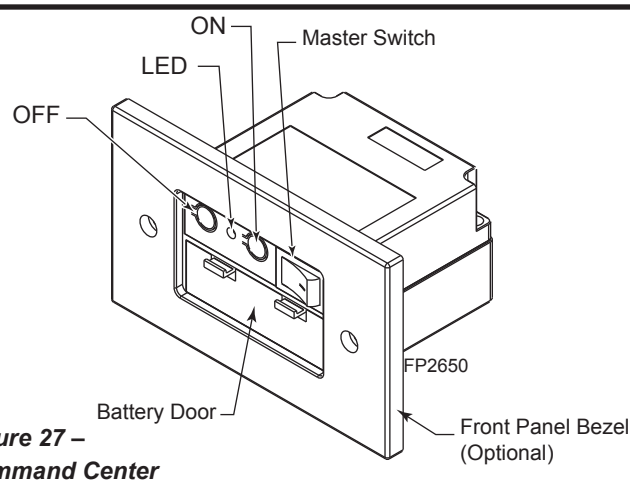


Figure 27 – Command Center

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 TSFSC 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, timer 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 (flame adjustment not available on AVFL-42NTSC-SR)

Figure 28

In this mode, the TIMER button and the THERMO button will only display "TIMER" and "THERMO," respectively without showing the time and the SET temperature. Pressing the ON/up and OFF/down buttons will change the flame height if none of the menu buttons (TIMER, THERMO, LIGHT, AUX) are 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 form 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).

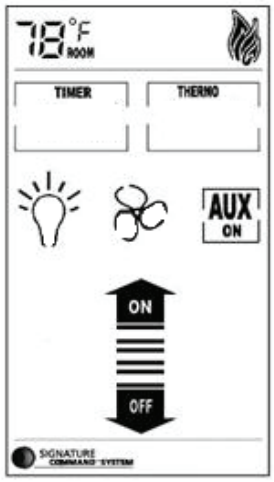


Figure 28

Timer Mode (flame adjustment not available on AVFL-42NTSC-SR)

Figure 29

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/up and OFF/down 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.

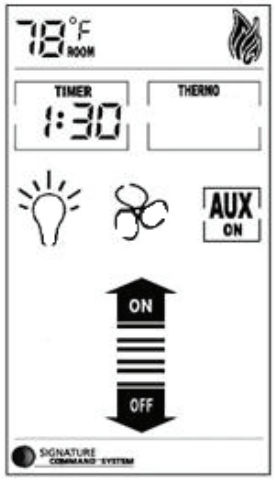


Figure 29

6. To exit Timer Mode:
   a. Push and hold the TIMER button for 3 seconds *or*
   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 30

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.



Figure 30

1. When the THERMO button is pressed, the Set temperature appears in the frame of the button and flashes.
2. Use ON/up and OFF/down to increase or decrease the Set temperature in 1 degree increments, between 45 degrees and 90 degrees. Slide up and down on the arrow buttons will increase or decrease the Set Temperature in 10 degrees 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/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. To exit Thermostat Mode:
   a. Push and hold the THERMO buttons for 3 seconds or
   b. Slide down on the arrow buttons to exit Thermostat mode and shut off the fireplace.

Smart Mode Option for Thermostat Mode

Figure 31

Press and hold the THERMO button and the ON/UP button at the same time for 3 seconds to toggle between Smart Mode 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. There is no manual flame height adjustment.

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

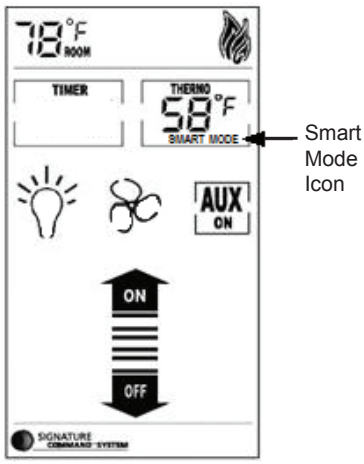


Figure 31

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 buttons for 3 seconds, or
b. Press the OFF button or
c. Slide down on the arrow buttons.

To shut off the Smart Mode 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.

Light Brightness Control
Figure 32

The light brightness control function is used to adjust the brightness of the light bulbs connected to the AC module on the Signature Command® System. There are four light brightness levels defined: Off, Low, Medium, High

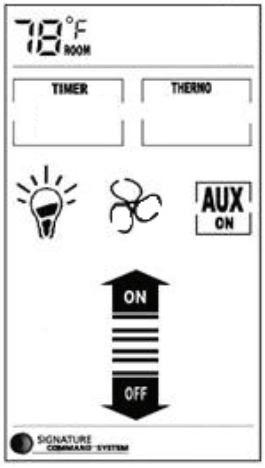


Figure 32

1. Press the LIGHT button to enter the light brightness control mode. The LIGHT icon will start flashing.
2. Press the On/up and OFF/down buttons to increase/decrease the light brightness (Off-Low-Medium-High).
3. Press the light button again to confirm the setting. The new setting will be transmitted to the receiver.
4. After the signal is sent, the On/up and Off/down buttons become flame height controller again.
5. When the light button is flashing, slide up and down on the arrow buttons will turn the light brightness to HIGH or Off directly without pressing the light button again to confirm.

AUX Control

The AUX control function is used to turn on or turn off the auxiliary component connected to the AC module of the Signature Command® System. Press the AUX button to turn on or turn off the auxiliary.



1. When the auxiliary is turned on, the icon will become solid text and the “ON” icon will appear below the “AUX” icon.
2. When the auxiliary is turned off, the icon will become hollow text and the “ON” icon will disappear.



NOTE: Some fireplaces use the AUX function to control options within the fireplace. Refer to fireplace manual for operation.

Setting up Blank Screen or Constant Display in Idle
Figure 33

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



Figure 33

1. A) Mode. When the transmitter is in idle, the icons in the “touch area” (timer, thermostat, blower, light and AUX) 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, thermostat, blower, light and AUX 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.

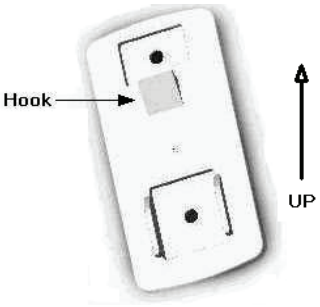


Figure 34

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.

FLAME APPEARANCE

Flames from the pilot, front and rear 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 gas. Refer to *Figure 35* for correct pilot flame.

If the pilot flame does not touch the thermocouple, then the main burner cannot function reliably. Refer to *Figure 36* for incorrect shape of pilot flame.

CHECK BURNER FLAME APPEARANCE

In normal operation, at full rate after 15 minutes, the flames should appear as shown in *Figure 37*.

If logs are installed, the flames should be yellow and should not impinge on the logs.

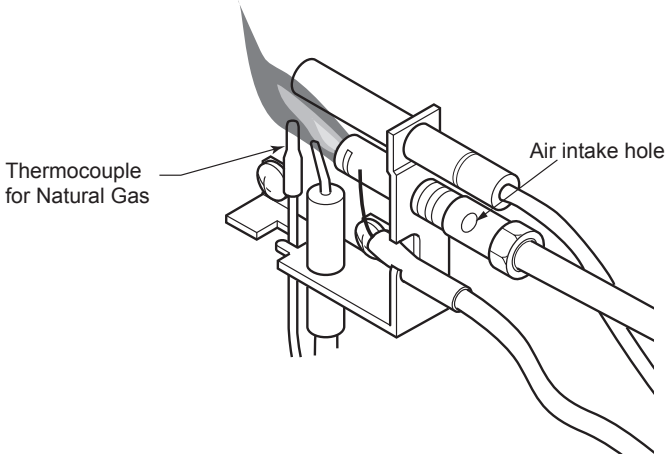


Figure 35 –
Correct Pilot Flame Appearance

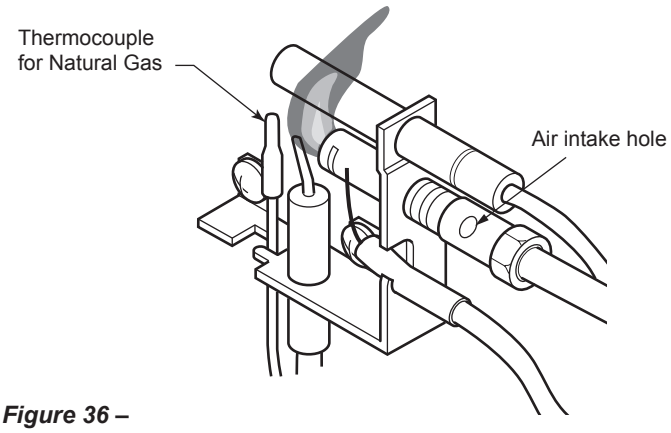


Figure 36 –
Incorrect Pilot Flame Appearance



Figure 37 –
Burner Flame Appearance
(Shown with fireglass only)

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, if installed, 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. Also remove glass, stones and/or glass chunks, as applicable. 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 and/or stones with soft bristle brush or vacuum with brush attachment.
- Clean iceberg glass with a soft wet cloth.
- Vacuum loose particles and dust from the burner, controls.
- 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.**
- The fireplace face 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.

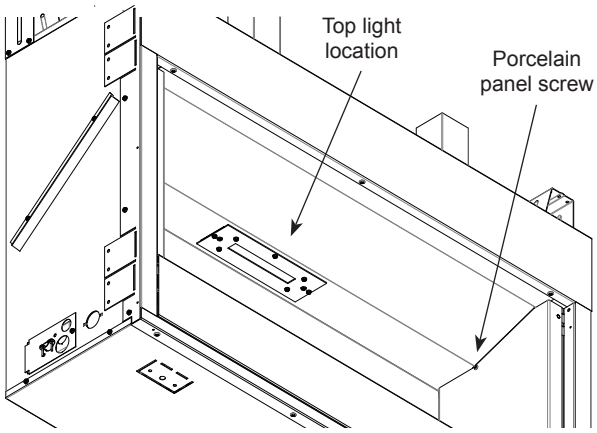


Figure 38–
Top Light Position; Porcelain Panel Screw Location

REPLACING LIGHT BULBS

TOP LIGHT BULB INSTALLATION

1. Remove three (3) screws holding light cover in place (as shown in Figure 39)
2. Insert (1) 90W bulb provided into socket
3. Replace top light cover with three screws

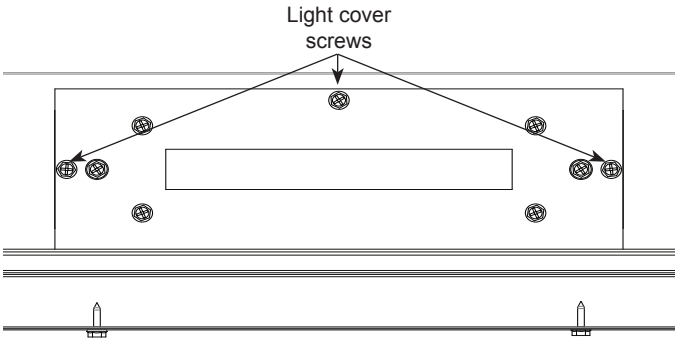


Figure 39–
Top Light Screws

LOWER LIGHT BAR BULB INSTALLATION

1. Remove air deflection glass from the unit and place on a flat, clean surface.
2. Remove any optional media already installed in the unit (e.g. stones, fireglass, log set, etc.).
3. Using a Phillips screwdriver remove the screws (one each) holding the left and right porcelain panels in place. *Figure 40*
4. Carefully remove the panels from the unit placing them on a clean level surface.

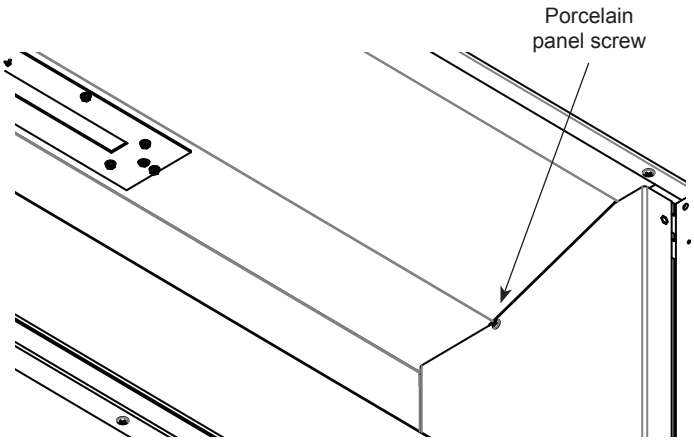


Figure 40–
Porcelain Panel Screw Location

NOTE: The rear porcelain panel is held in place by the left and right panel and could fall forward if not supported during removal of the side panels.

5. With side panels removed the rear porcelain panel can be removed from the unit and placed on a clean, level surface.
6. Remove nine screws that secure the front hearth in place and remove from unit. *Figure 41*
7. Remove five screws that secure the rear hearth in place and remove from unit. *Figure 41*
8. Figure 42 shows bulb placement for front and rear light bars. Insert bulbs in sockets.
9. With (twelve 15W) bulbs installed in front and rear light bar, reinstall the rear hearth first with five screws that were removed earlier. *Figure 41*
10. Reinstall the front hearth with nine screws removed earlier. *Figure 41*
11. Place the rear porcelain panel back in place and reinstall the left and right side using same screws that were removed earlier.
12. Re-install the air deflection glass and decorative media (see page 19).

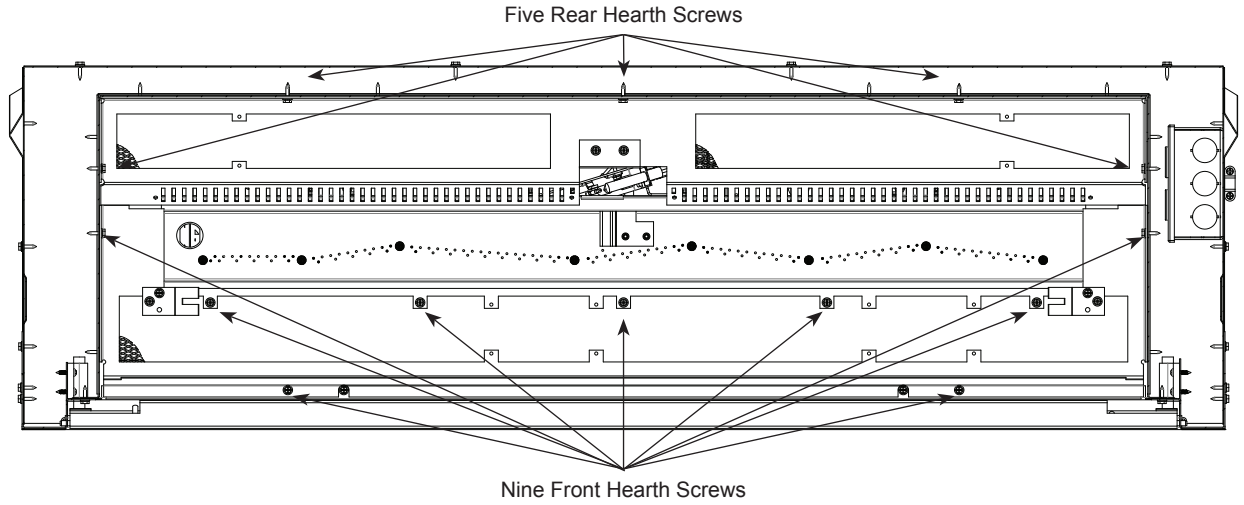


Figure 41–
Hearth Screw Locations

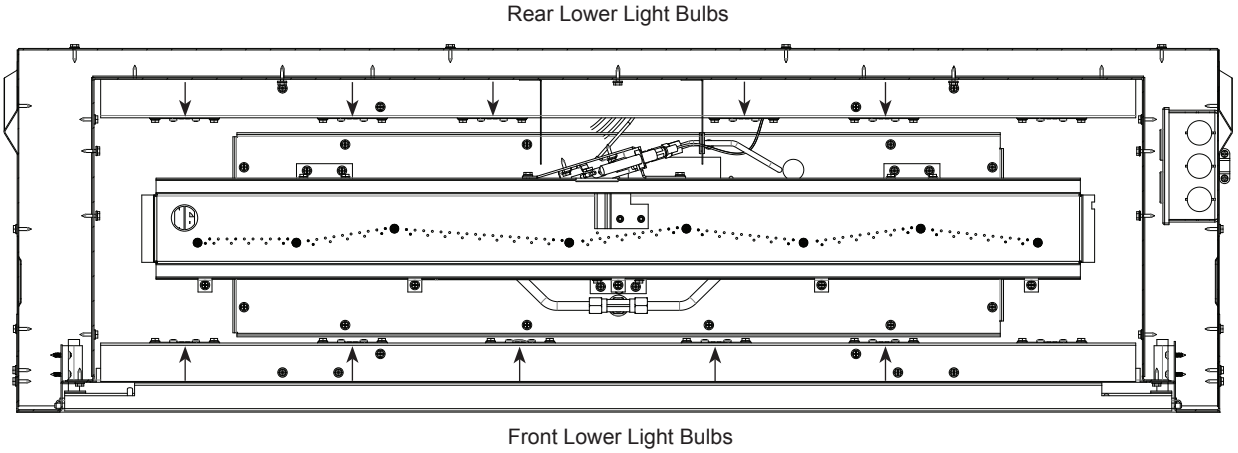


Figure 42–
Lower Light Bulb Location

OPERATING INFORMATION

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 two to three hours. 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.

This appliance must not be used with glass doors.

OPTIONAL ACCESSORIES

There are a wide range of optional accessories available for the AVFL Vent Free Fireplace. A variety of face and trim kits can change the appearance of the fireplace while the rope lighting kit can add ambiance and light, whether the unit is on or off.

Choose the stylish driftwood log set, rustic stone kit, shimmering iceberg glass or go minimalist with just a coating of crushed glass and transform the fireplace to suit your space.

NOTE: Rope lighting kits can only be installed on the wide contemporary faces listed below.

Faces and Trim Kits

Wide Contemporary Textured Black Face	AVFL42WFBT
Wide Contemporary Stainless Steel Face	AVFL42WCSS
Black Textured Inside Fit Trim Kit	AVFL42TKI
Rope Lighting Kit (requires wide contemporary face)	AVFL42RLK
Aged Driftwood Log	AVFL42DLS
Stone Kit	SKAVFL42
Glass Kits	
Glass Kit Bronze	GKB
Glass Kit Diamond	GKD
Glass Kit Onyx	GKO
Glass Kit Sapphire	GKS
Iceberg Kits	
Iceberg Kit Blue	IKB
Iceberg Kit Diamond	IKD
Iceberg Kit Sesame	IKS
SCS Wall Extension Kit (15' wire, rough-in box, wall cover)	SCSWEK

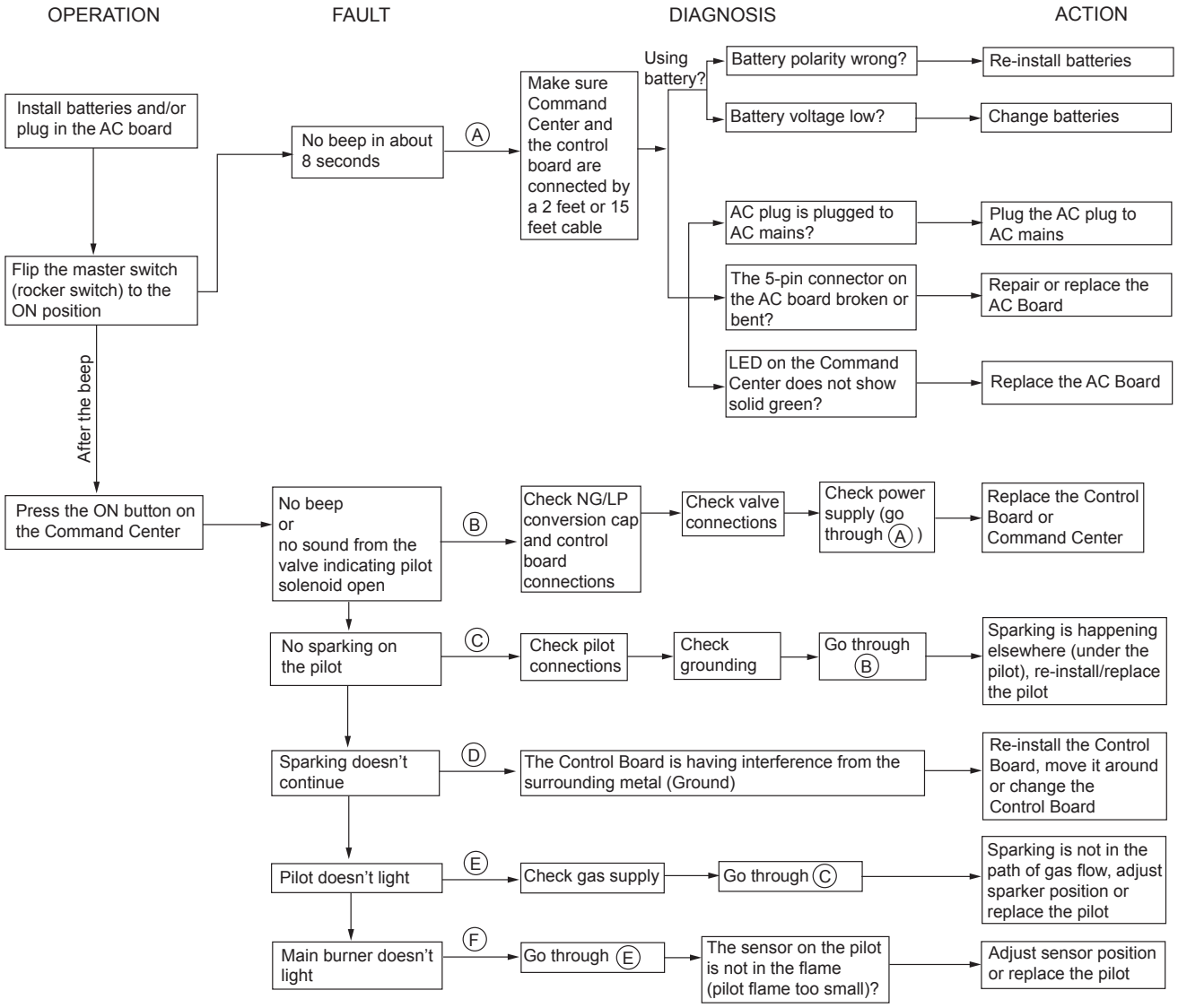
WARNING

- **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.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Appliance produces unwanted odors.	Appliance burning vapors from paint, hair spray, glues, etc.	Ventilate room. Stop using odor causing products while heater is running.
	Gas leak.	Locate and correct all leaks.
	Initial burn off.	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.	Not enough fresh air is available for ODS/pilot to operate.	Open window and/or door for ventilation.
	Low line pressure.	Contact local gas company.
	ODS/pilot is partially clogged.	Clean ODS/pilot.
	Defective thermopile.	Check wire connections. Check output should be 500 millivolts across thermopile leads with ON/OFF switches off.
Gas odor even when control knob is in OFF position.	Gas leak	Locate and correct all leaks.
	Control valve defective.	Replace control valve.
Burner does not light after ODS/pilot is lit.	Burner orifice is clogged.	Burner orifice is clogged.
	Burner orifice diameter is too small.	Burner orifice diameter is too small.
	Inlet gas pressure is too low.	Inlet gas pressure is too low.
Burner backfires during combustion.	Manifold gas pressure is too low.	Contact local gas company.
	Burner orifice is clogged.	Clean burner or replace burner orifice.
Slight smoke or odor combustion.	Burner orifice is clogged or damaged.	Clean burner or replace burner orifice.
	Burner is damaged.	Replace burner.
	Gas regulator defective.	Replace gas regulator.
Logs appear to smoke after initial operation.	Vapor from paint or curing process of logs.	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.
		Log heater is intended to be smokeless. Turn OFF heater and call qualified service person.
Heater produces a whistling noise when burner is lit.	Air in gas line.	Operate burner until air is removed from line. Have gas line checked by local gas company.
	Dirty of partially clogged burner orifices.	Clean burner or replace burner orifice.
No gas to pilot.	Pilot line is kinked and blocking gas flow to the pilot.	Replace pilot line.

SIGNATURE COMMAND SYSTEM



Hearth & Home Technologies

LIMITED LIFETIME WARRANTY

Hearth & Home Technologies, on behalf of its hearth brands ("HHT"), extends the following warranty for HHT gas, wood, pellet and electric hearth appliances that are purchased from an HHT authorized dealer.

WARRANTY COVERAGE:

HHT warrants to the original owner of the HHT appliance at the site of installation, and to any transferee taking ownership of the appliance at the site of installation within two years following the date of original purchase, that the HHT appliance will be free from defects in materials and workmanship at the time of manufacture. After installation, if covered components manufactured by HHT are found to be defective in materials or workmanship during the applicable warranty period, HHT will, at its option, repair or replace the covered components. HHT, at its own discretion, may fully discharge all of its obligations under such warranties by replacing the product itself or refunding the verified purchase price of the product itself. The maximum amount recoverable under this warranty is limited to the purchase price of the product. This warranty is subject to conditions, exclusions and limitations as described below.

WARRANTY PERIOD:

Warranty coverage for consumers begins at the date of installation. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the product by an independent, authorized HHT dealer/distributor, whichever occurs earlier. However, the warranty shall commence no later than 24 months following the date of product shipment from HHT, regardless of the installation or occupancy date. The warranty period for parts and labor for covered components is produced in the following table.

The term "Limited Lifetime" in the table below is defined as: 20 years from the beginning date of warranty coverage for gas appliances, and 10 years from the beginning date of warranty coverage for wood and pellet appliances. These time periods reflect the minimum expected useful lives of the designated components under normal operating conditions.

Warranty Period		**HHT Manufactured Appliances and Venting**					
Parts	Labor	Gas	Pellet	Wood	Electric	Venting	Components Covered
1 Year		X	X	X	X	x	All parts including handles, external enamaled components and other material except as covered by Conditions, Exclusions, and Limitations listed
2 years			**X**	**X**			Igniters, Auger Motors, Electronic Components, and Glass
		X					Electrical components limited to modules, remotes/wall switches, valves, pilots, blowers, junction boxes, wire harnesses, transformers and lights (excluding light bulbs)
		X		**X**			Molded Refractory Panels, Glass Liners
3 years			**X**				Firepots, burnpots, mechanical feeders/auger assemblies
5 years	1 year	**X**					Vent Free Burners, Vent Free Logs
			X	**X**			Castings, Medallions and Baffles
6 years	3 years			**X**			Catalyst - Limitations Listed
7 years	3 years		**X**	**X**			Manifold tubes, HHT Chimney and Terminations
10 years	1 year	**X**					Burners, logs and refractory
Limited Lifetime	3 years	**X**	**X**	**X**			Firebox and heat exchanger, FlexBurn® System (engine, inner cover,access cover and fireback)
1 Year	None	**X**	**X**	**X**	**X**	**X**	All replacement parts beyond warranty period

See conditions, exclusions and limitations on the next page

WARRANTY CONDITIONS:

- This warranty only covers HHT appliances that are purchased through an HHT authorized dealer or distributor. A list of HHT authorized dealers is available on the HHT branded websites.
- This warranty is only valid while the HHT appliance remains at the site of original installation.
- This warranty is only valid in the country in which the HHT authorized dealer or distributor that sold the appliance resides.
- Contact your installing dealer for warranty service. If the installing dealer or distributor is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking warranty service from a dealer other than the dealer from whom you originally purchased the product.
- Check with your dealer in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this warranty.
- Limited Catalyst Warranty
  - o For wood burning products containing a catalyst, the catalyst will be warranted for a six-year period to the original purchaser at the site of original installation. The purchaser must provide the name, address, and telephone number of the location where the product is installed, proof of original purchase date, date of failure, and any relevant information regarding the failure of the catalyst.

WARRANTY EXCLUSIONS:

This warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items, or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the warranty period are not covered. These parts include: paint, wood and pellet gaskets, firebricks, grates, flame guides, batteries and the discoloration of glass.
- Expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the appliance in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the appliance; (2) failure to install the appliance in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operation instructions; (7) installation or use of components not supplied with the appliance or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the appliance.
- Non-HHT venting components, hearth connections or other accessories used in conjunction with the appliance.
- Any part of a pre-existing fireplace system in which an insert or a decorative gas appliance is installed.
- HHT's obligation under this warranty does not extend to the appliance's capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper appliance for the application. Consideration must be given to the appliance location and configuration, environmental conditions, insulation and air tightness of the structure.

This warranty is void if:

- The appliance has been over-fired, operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, deformation/warping of interior cast iron structure or components, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The appliance is subjected to prolonged periods of dampness or condensation.
- There is any damage to the appliance or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

LIMITATIONS OF LIABILITY

- The owner's exclusive remedy and HHT's sole obligation under this warranty, under any other warranty, express or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above. In no event will HHT be liable for any incidental or consequential damages caused by defects in the appliance. Some states do not allow exclusions or limitation of incidental or consequential damages, so these limitations may not apply to you. This warranty gives you specific rights; you may also have other rights, which vary from state to state. EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFICED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE.

This page intentionally left blank.

Monessen, a brand of Hearth & Home Technologies
7571 215th Street West, Lakeville, MN 50044
www.monessenhearth.com