

# INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL



## INSTALLER:

Leave this manual with the appliance.

## CONSUMER:

Retain this manual for future reference.

### ⚠ WARNING

#### FIRE OR EXPLOSION HAZARD

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.

**General Information:** These instructions are intended as a general guide and do not supersede national or local codes in any way. Authorities having jurisdiction should be consulted before installation. Installation and provision for combustion and ventilation air must conform to the *National Fuel Gas Code, ANSI Z223.1, or CAN/CGA-B149.1, Natural Gas Installation Code.*

## TRIPLE BURNER

(REQUIRES VENTED DECORATIVE LOG SET)  
FOR INSTALLATION IN  
SOLID-FUEL BURNING FIREPLACES  
MODELS  
AVL(21,24,30)MTEKN-1

**CONGRATULATIONS** on the purchase of your new **DOUBLE GAS BURNER!** Your Decorative Gas Burner is designed and intended for installation in an approved, existing, fully vented, wood-burning fireplace, with a gas hook-up.

**IMPORTANT!** Read these instructions carefully before installing or operating this gas appliance. These instructions should be left with the homeowner for future reference.

### ⚠ WARNING

This log set is to be installed only in a solid-fuel burning fireplace with a working flue constructed of non-combustible material. The vent damper must also have a damper clamp attached to it to keep the damper from accidentally closing during operation.

### ⚠ WARNING

If not installed, operated and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or from fuel combustion which can cause death or serious illness.

### ⚠ WARNING

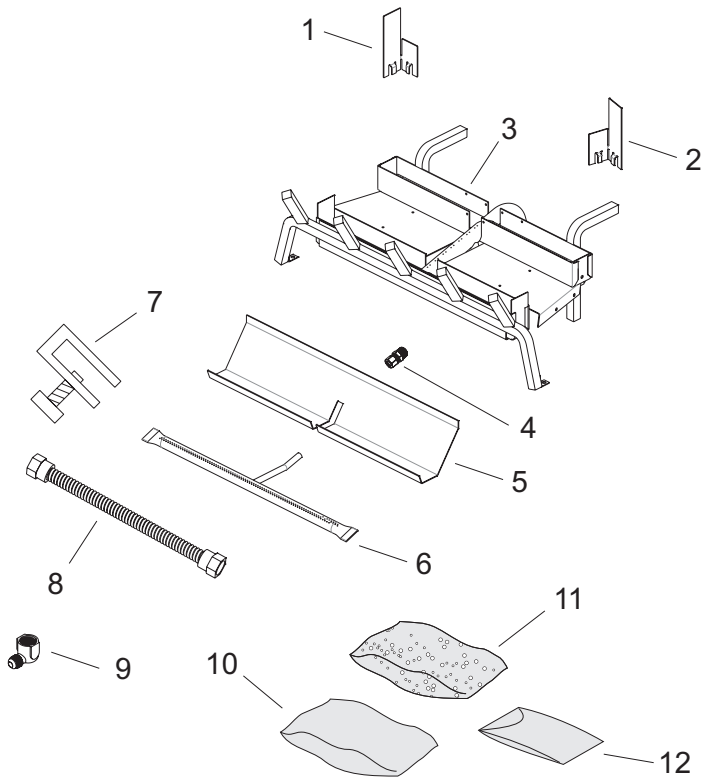
This appliance must be installed only in a solid-fuel burning fireplace with a working flue and construction of noncombustible materials. This unit is **NOT** for use with solid fuel. Solid fuels shall **NOT** be burned in a fireplace where a decorative appliance is installed.

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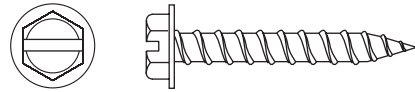
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# CARTON CONTENTS & HARDWARE PACK

## CARTON CONTENTS



## HARDWARE PACK CONTENTS



1/4" X 1 1/4" SLOTTED HEX HEAD ANCHOR SCREW

Items not shown to scale.

Index Number	Description	Quantity Supplied	
		AVL(21,24)	AVL30
1	Clip - Left	1	1
2	Clip - Right	1	1
3	Triple Burner Assembly	1	1
4	Compression Fitting	1	1
5	Ember Burner Pan	1	1
6	Ember Burner	1	1
7	Dampner Clamp	1	1
8	Flexline	1	1
9	Street Elbow, 1/2 X 3/8	1	1
10	Rockwool Mix	1	1
12	Decorative Rock	3	3
13	Crushed Glass	1	2

See Parts Lists on page 17 for ordering replacement parts. Do not order batteries, bolts, screws, washers or nuts. They are standard hardware items and can be purchased at any local hardware store.

# IMPORTANT SAFETY INFORMATION

**Installer:** Please leave these instructions with the owner for future reference.

For Installation In Solid Fuel Burning Fireplaces. Do not burn wood or solid fuels in a fireplace where a decorative gas log set is installed. This appliance is for installation only in a solid fuel burning fireplace, masonry fireplace or manufactured fireplace.

## WARNING

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

1. Please follow all local codes regarding installation, combustion and ventilation air or in the absence of local codes follow the National Fuel Gas Code ANSI Z223.1(U.S. installation), or CAN/CGA-B149, Installation Code (Canada installation) and with ANSI Z21.60 Decorative Vented Appliances for Solid Fuel Burning Fireplaces.
2. Proper installation, burner pan location and log placement is important to achieve optimum look and performance of your gas log set. The logs have been designed for easy location and placement on the grate and must be followed for proper operation.
3. Do not operate this log set with glass doors in the closed position. A fireplace screen must be in place when the log set is burning. Adequate combustion air must be provided for proper venting. All flames should go up and out the top of the firebox into the flue vent. If any flames float or curl forward into the room **do not operate appliance**. Check for an open flue and adequate combustion air into the room. A damper clamp must be installed on the firebox damper to maintain an open flue vent condition.
4. Young children must be carefully supervised when they are in the same room as the gas log while in operation. Do not place stockings, clothing or any flammable material above or near the fireplace.
5. Do not substitute or use materials other than those supplied for use with the log set.

**DO NOT OPERATE THIS GAS LOG SET WITH GLASS DOORS CLOSED.**

- **Due to high temperatures the appliance should be located out of traffic and away from furniture and draperies.**
- **Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.**
- **Young children should be carefully supervised when they are in the same room as the appliance.**
- **Clothing or other flammable material should not be placed on or near the appliance.**
- **Do not place trash or other articles on the log set during operation.**

- **During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These bonding agents are not harmful but may produce annoying smoke and smells as they are burned off during initial operation of the appliance. This is a normal temporary occurrence. A window should be opened during the initial bake out period.**
- **Keep burner and control compartment clean.**

## 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.**
- **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 appliance.**
- **Installation and repair should be done by a QUALIFIED SERVICE PERSON. The appliance should be inspected before use and at least annually by a qualified 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 of the appliance be kept clean.**
- **DO NOT put anything around the fireplace that will obstruct the flow of ventilation air.**
- **DO keep the appliance area clear and free from combustible material, gasoline and other flammable vapors and liquids.**
- **A yearly examination and cleaning of the venting system of the solid-fuel burning fireplace must be performed by a qualified agency.**
- **DO make a periodic visual check of pilot and burners. Clean and replace damaged parts.**
- **DO NOT use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.**

# IMPORTANT SAFETY INFORMATION

## WARNING

Follow all gas leak check procedures in this manual, prior to operation.

## WARNING

Fuels used in gas or oil-fired appliances, and the products of combustion of such fuels, contain chemicals known to the State of California to cause cancer, birth defects, and/or other reproductive harm. This warning is issued pursuant to California Health & Safety Code Sec. 25249.6.

While this appliance is not in use, the gas must be turned off at the gas supply.

DO NOT ATTEMPT TO DISCONNECT THE GAS OR ANY GAS FITTING WHILE THIS APPLIANCE IS IN OPERATION.

NEVER leave the decorative gas log set unattended while in operation.

NEVER allow children to operate this decorative gas log set.

NEVER place hands or fingers on the front edge of this decorative gas log set.

NEVER use liquid propane gas in a natural gas unit, or natural gas in a liquid propane unit.

DO NOT use solid-fuel or lighter fluid in any decorative gas log set.

Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the appliance.

During manufacturing, fabrication, 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. This may possibly cause headaches, and eye or lung irritation. This is a normal and temporary occurrence. The initial break-in period should last three to four hours. During this period, provide maximum ventilation by opening a window or door, to allow odors to dissipate. Any odor remaining after this initial break-in period, will be slight and will disappear with continued use.

PROPER CLEARANCES FROM COMBUSTIBLE CONSTRUCTION AND MATERIALS MUST BE MAINTAINED FROM ALL SIDES, TOP, AND BOTTOM OF THIS APPLIANCE.

THIS APPLIANCE SHOULD NEVER BE PLACED NEAR ANY COMBUSTIBLE SURFACE.

THIS APPLIANCE SHOULD NEVER BE PLACED UNDER ANY COMBUSTIBLE CONSTRUCTION OR MATERIALS.

NEVER PLACE ANY COMBUSTIBLE MATERIAL WITHIN TWENTY-FOUR INCHES (24") FROM THE FRONT OF THE FIREPLACE ENCLOSURE.

## WARNING

The Commonwealth of Massachusetts requires that the chimney flue damper, when used with decorative gas log sets, be welded open or completely removed. In the Commonwealth of Massachusetts, this appliance must be installed by a licensed plumber or gasfitter.

## WARNING

Improper installation, adjustment, alteration, service or maintenance, can cause property damage, personal injury or loss of life. Refer to the owner's information manual, provided with this appliance. Installation and service must be performed by a qualified installer, service agency or the gas supplier.

# GENERAL INFORMATION

## Qualified Installing Agency

Installation and replacement of gas piping, gas utilization equipment or accessories and repair and servicing of equipment shall be performed only by a qualified agency. The term "qualified agency" means any individual, firm, corporation or company which either in person or through a representative is engaged in and is responsible for (a) the installation or replacement of gas piping or (b) the connection, installation, repair or servicing of equipment, who is experienced in such work, familiar with all precautions required and has complied with all the requirements of the authority having jurisdiction.

**Commonwealth of Massachusetts:** The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts.

The installation and the provisions for combustion and ventilation air must conform with the *National Fuel Gas Code, ANSI Z223.1/ NFPA54\** Canadian Installation Code *CAN/CGA B149*.  
\*Available from the American National Standards Institute, Inc. 11 West 42nd St., New York, N.Y. 10018.

## High Altitude Installation

When installing this unit at an elevation above 2000 feet (in the United States) it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Generally, input should be reduced 4 percent for each 1000 feet above sea level. However, if the heating value of the gas has been reduced, this general rule may not apply. Check with local gas utility for proper orifice size identification.

For Canadian high altitude applications, this appliance is suitable for installation at elevations between 0 feet (0m) and 4,500 (1,370m) without change.

When installing this unit at an elevation above 4500 feet (1,370m) (in Canada), check with local authorities.

Consult your local gas utility for assistance in determining the proper orifice for location.

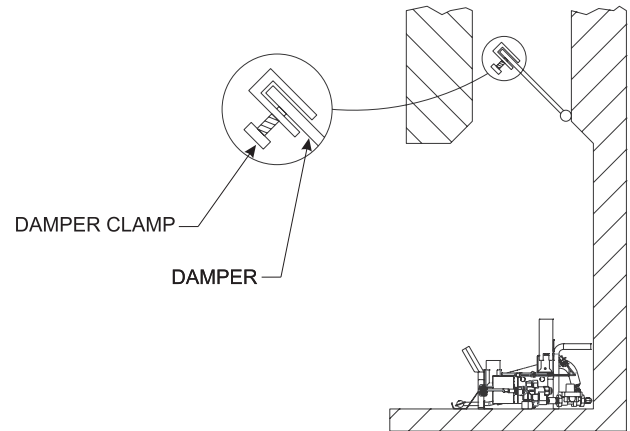
# FIREPLACE PREPARATION

- 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. Do not seal chimney flue damper.

## Installing Damper Clamp (Figure 2)

Remove all ashes or other debris from the fireplace. If the fireplace is equipped with an ash dump be sure to seal the door with furnace cement or high temperature silicone. Be sure to check the damper for proper operation and verify that the flue passageway is open. Attach damper clamp to the vent damper and tighten hold down bolt.

Place the clamp over the lip of the damper and tighten the hold down bolt until the clamp is securely attached to the damper. This will prevent the damper from accidentally closing.



TYPICAL FIREPLACE

Figure 2

# INTRODUCTION

## Introduction

Always consult your local Building Department regarding regulations, codes or ordinances which apply to the installation of a vented decorative gas log set in a solid-fuel burning fireplace. This appliance is only for use with the type of gas indicated on the rating plate.

## Instructions to Installer

1. Installer must leave instruction manual with owner after installation.
2. Installer must have owner fill out and mail warranty card supplied with the fireplace.
3. Installer should show owner how to start and operate the fireplace.

### **⚠ WARNING**

**ANY CHANGE TO THIS APPLIANCE OR ITS CONTROLS CAN BE DANGEROUS.** Improper installation or use of the appliance can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.

## General Information

**Any alteration of the original design, installed other than as shown in these instructions or use with a type of gas not shown on the rating plate is the responsibility of the person and company making the change.**

### **Important**

All correspondence should refer to complete Model No., Serial No. and type of gas.

**NOTICE:** During initial use of the ceramic logs and branches you will detect an odor as the ceramic logs and branches are cured.

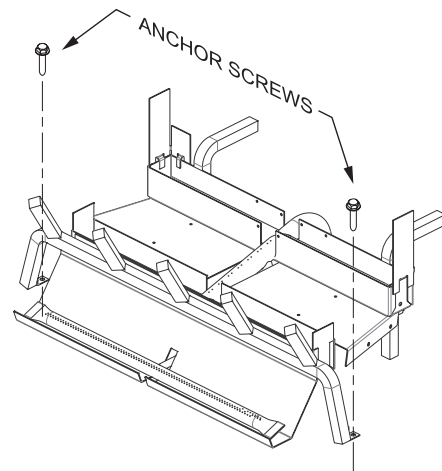
## BEFORE FULLY INSTALLING THE APPLIANCE

You must secure the gas burner 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.

### **Assembly Procedure:**

1. Center the gas log unit in the fireplace or firebox. Make certain the front feet of the grate sit inside the front edge of the fireplace or firebox.
2. An anchor hole is provided in the two bottom side members of the grate frame. After centering the grate correctly, mark the hole positions on the fireplace/firebox floor. Drill two (2) 5/32" diameter holes approximately 1-1/2" deep for masonry screws or 1/8" hole for sheet metal screws.
3. Anchor the grate to the fireplace/firebox floor using the screws provided. Refer to **Figure 13**.

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



**Figure 13**

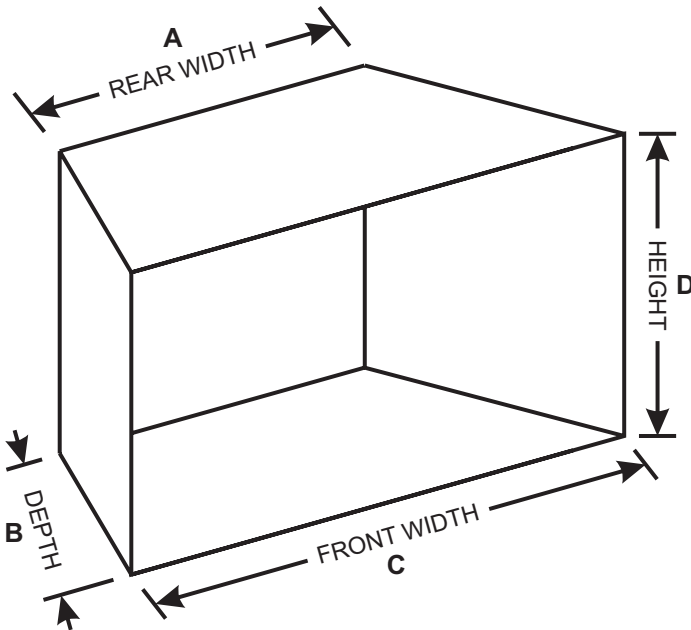
# PRODUCT SPECIFICATIONS

NATURAL GAS		
Gas Inlet Pressure	Max.	10.5"
	Min.	7.0"

Model	Gas Type	Valve Type	Orifice	Manifold Pressure (w.c.)	BTUH Max. Rate
AVL21	NAT	Manual	25	4.5"	75,000
AVL24	NAT	Manual	25	4.5"	75,000
AVL30	NAT	Manual	21	4.5"	90,000

MINIMUM FIREPLACE DIMENSIONS MASONRY BUILT FIREPLACES Chimney Height Minimum of 6 Feet					
Log Set Size	Rear Width A	Depth B	Front Width C	Height D	Minimum Vent in Sq. Inches
21	22	18	26	18	49
24	26	18	30	19	71
30	30	18	36	21	71

For Triple Burners without control valves (match-light) the fireplace minimum front width above allows for centering the log set. When adding valve kit to a Triple Burner, add 6 inches to minimum fireplace width shown above.



MINIMUM FIREPLACE DIMENSIONS MASONRY BUILT FIREPLACES Chimney Height Minimum of 10 Feet					
Log Set Size	Rear Width A	Depth B	Front Width C	Height D	Minimum Vent in Sq. Inches
21	22	18	26	18	49
24	26	18	30	19	71
30	30	18	36	21	71

For Triple Burners without control valves (match-light) the fireplace minimum front width above allows for centering the log set. When adding valve kit to a Triple Burner, add 6 inches to minimum fireplace width shown above.

**NOTICE:** Natural gas match throw sets may be used in some areas. Check your local codes for this configuration.



# GAS SUPPLY

Check all local codes for requirements, especially for the size and type of gas supply line required.

## Recommended Gas Pipe Diameter

Pipe Length	Schedule 40 Pipe Inside Diameter		Tubing, Type L Outside Diameter	
	Nat.	L.P.	Nat.	L.P.
0-10 feet 0-3 meters	1/2" 12.7mm	3/8" 9.5mm	1/2" 12.7mm	3/8" 9.5mm
10-40 feet 4-12 meters	1/2" 12.7mm	1/2" 12.7mm	5/8" 15.9mm	1/2" 12.7mm
40-100 feet 13-30 meters	1/2" 12.7mm	1/2" 12.7mm	3/4" 19mm	1/2" 12.7mm
100-150 feet 31-46 meters	3/4" 19mm	1/2" 12.7mm	7/8" 22.2mm	3/4" 19mm

**NOTICE:** Never use plastic pipe. Check to confirm whether your local codes allow copper tubing or galvanized.

**NOTICE:** Since some municipalities have additional local codes, it is always best to consult your local authority and installation code.

### Installing a New Main Gas Cock

Each appliance should have its own manual gas cock.

In the Commonwealth of Massachusetts the gas cock must be a T handle type.

A manual main gas cock should be located in the vicinity of the unit. Where none exists, or where its size or location is not adequate, contact your local authorized installer for installation or relocation.

Compounds used on threaded joints of gas piping shall be resistant to the action of liquefied petroleum gases. The gas lines must be checked for leaks by the installer. This should be done with a soap solution watching for bubbles on all exposed connections, and if unexposed, a pressure test should be made.

**Never use an exposed flame to check for leaks. Appliance must be disconnected from piping at inlet of control valve and pipe capped or plugged for pressure test. Never pressure test with appliance connected; control valve will sustain damage!**

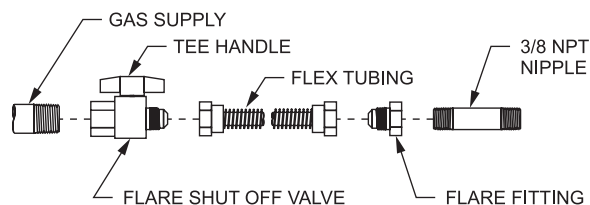
A gas valve and ground joint union should be installed in the gas line upstream of the gas control to aid in servicing. It is required by the National Fuel Gas Code that a drip line be installed near the gas inlet. This should consist of a vertical length of pipe tee connected into the gas line that is capped on the bottom in which condensation and foreign particles may collect.

The use of the following gas connectors is recommended:

- ANS Z21.24 Appliance Connectors of Corrugated Metal Tubing and Fittings
- ANS Z21.45 Assembled Flexible Appliance Connectors of Other Than All-Metal Construction

The above connectors may be used if acceptable by the authority having jurisdiction. The Commonwealth of Massachusetts requires that a flexible appliance connector cannot exceed three feet in length.

### FLEXIBLE GAS LINE CONNECTION



### RIGID GAS LINE CONNECTION

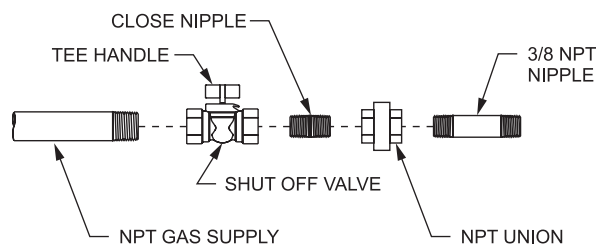


Figure 4

### Pressure Testing of the Gas Supply System

1. To check the inlet pressure to the gas valve, a 1/8" (3.175mm) N.P.T. plugged tapping, accessible for test gauge connection, must be placed immediately upstream of the gas supply connection to the appliance.
2. The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).
3. The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

**Attention!** If one of the procedures results in pressures in excess of 1/2 psig (14" w.c.) (3.5 kPa) on the appliance gas valve, it will result in a hazardous condition.

### Checking Manifold Pressure

**Millivolt** Natural gas models will have a manifold pressure of approximately 3.5" w.c. (.871kPa) at the pressure regulator outlet with the inlet pressure to the pressure regulator from a minimum of 4.5" w.c. (1.120kPa) for the purpose of input adjustment to a maximum of 10.5" w.c. (2.615kPa). **Manual** Natural gas models will have a manifold pressure of approximately 4.5" w.c. (1.12kPa) at the pressure regulator outlet with the inlet pressure to the pressure regulator from a minimum of 7.0" w.c. (1.74kPa) for the purpose of input adjustment to a maximum of 10.5" w.c. (2.615kPa).

### Manual

**NOTICE:** A test gage connection is located downstream of the gas appliance pressure regulator for measuring gas pressure. The connection is a 1/8 inch (3mm) N.P.T. plugged tapping.

### Millivolt

**NOTICE:** The gas control is equipped with a captured screw type pressure test point, therefore it is not necessary to provide a 1/8" test point up stream of the control.

# INSTALLATION

**NOTICE:** Installation can be made easier if two or more people cooperate in locating and installing the unit.

## LOCATING THE UNIT

This appliance must be installed only in a solid-fuel burning fireplace, which contains a working flue, and is constructed of non-combustible materials.

### IMPORTANT

Before installing this appliance, have the fireplace and chimney professionally cleaned to remove any ashes, soot, creosote, or other obstructions. Perform this cleaning annually after installation.

### IMPORTANT

For units with valve applications, complete pilot placement and gas train assembly before you place the unit into the fireplace.

### IMPORTANT

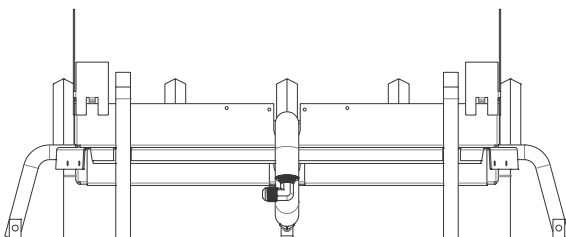
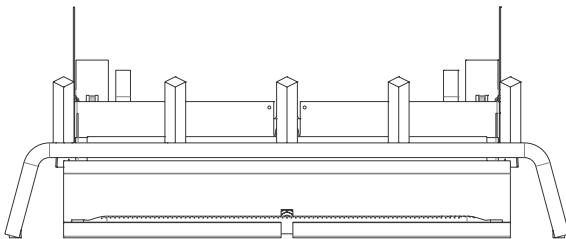
Seal any fresh air vents or ash clean-out doors located on the floor or wall of the fireplace. If this is not performed, drafting may cause pilot outage or sooting. Use a heat-resistant sealant. **DO NOT** seal the chimney flue damper.

### ⚠ WARNING

**Gas supply system must be installed in accordance with the U.S. National Fuel Gas Code. This appliance and its individual shut off valve must be disconnected from the gas supply piping system during any system pressure test in excess of 1/2 PSI (3.5 KPA). Use a system manual shut off valve to shut off the gas supply to this gas appliance before continuing with installation procedures.**

### ⚠ WARNING

**When installing the appliance, DO NOT obstruct the flow of combustion and ventilation air.**



**Figure 5 - Advantage Burner Pan with Natural Gas Millivolt Control Valve - Front & Rear View**

## SET UP AND ASSEMBLY

Your Advantage Decorative Gas Log Hearth Kit comes ready for gas assembly connection particular for use in your area.

### IMPORTANT

**BEFORE YOU BEGIN** - Audit the gas pressure at the fireplace stub to insure proper minimum gas pressure (see the specifications beginning on page 6 of this manual).

### IMPORTANT

**BEFORE YOU BEGIN** - Insure that the firebox meets the minimum specifications of the appliance (see the specifications beginning on page 6 of this manual).

### IMPORTANT

This appliance when first installed may produce unpleasant odors; these will gradually diminish.

### IMPORTANT

Decorative Gas Log Sets are shipped with the appropriate gas connections for each type of gas (Natural Gas). If you have purchased an inappropriate unit for your application, contact your retailer, installer or the Customer Service Center.

## TOOLS NEEDED

- 2 Adjustable Wrench (at least one of which has a range of 3/4" for gas fittings)
- 2 Adjustable Pipe Wrenches
- 1 3/8" Nut Driver or Socket (for damper clamp)

# INSTALLATION

## BEGINNING INSTALLATION

1. Remove all contents from the burner shipping container (Box One).
2. Check the contents of the shipping container against the shipping and packing list or the parts list in this manual. Report any missing or damaged parts to your retailer.
3. Remove any and all protective wrapping from the appliance.
4. **TURN OFF THE GAS SUPPLY SYSTEM.**
5. Place the fireplace damper in the fully open position and install the damper clamp over the lip of the damper (**the damper must be in a fully open position any time that this appliance is in operation**). Using a 3/8" nut driver or socket and turning in a clockwise direction, tighten the damper clamp bolt until the clamp is secure. The damper clamp must be in place to maintain the minimum permanent vent opening. See the chart "Minimum Fireplace Dimensions" on page 6 for correct venting.  
Notice: The State of Massachusetts requires that the chimney flue damper, when used with decorative gas log sets, be welded open or completely removed.
6. Using two adjustable pipe wrenches (one wrench on the gas stub, and one wrench on the fitting), remove the existing cap or gas jet assembly from the gas stub in the fireplace by turning the wrench on the gas cap in a counterclockwise direction.
7. Clean the pipe threads on the gas stub using either a wire brush or steel wool. Apply Teflon tape or pipe dope to the steel fittings before making any connection.  
Notice: All gas connections (except for brass to brass) require Teflon tape or pipe dope.

## FOR EMBER BURNER INSTALLATIONS

1. Place the burner upside down with the grate tines facing you, on the floor outside of the fireplace.
2. Using an adjustable wrench, and turning in a counter-clockwise direction, remove the ember burner gas feed plug. **See Figure 7.**
3. Apply Teflon tape or pipe dope to the 3/8" NPT base (the large end) of the compression fitting.
4. Using an adjustable wrench, and turning in a clockwise direction, install the compression fitting into the ember burner gas feed (where the plug was removed in Step 2). **See Figure 8.**
5. Slide the compression fitting hex cap, threads facing out, over the end of the ember burner pipe.
6. Slide the compression ring over the end of the burner pipe.

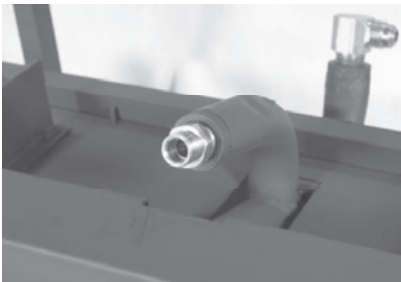


Figure 8

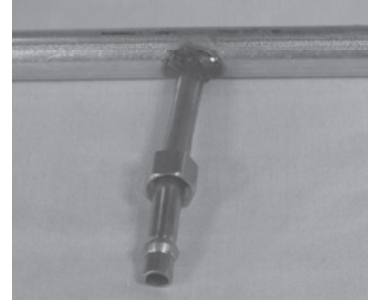


Figure 9

7. Place the ember burner pipe, PORT HOLES DOWN or facing the floor, into the compression fitting, on the end of the ember burner gas feed. **See Figure 9.**
8. Using two adjustable wrenches, one to hold the compression base and the other turning in a clockwise direction, install the ember burner into the ember burner gas feed. **See Figure 10.**

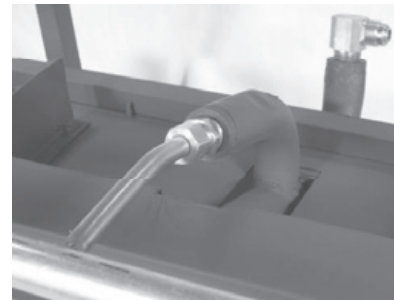


Figure 10



Figure 11

**FOR MATCH THROW INSTALLATIONS, CONTINUE WITH THE NEXT THREE STEPS IN THE SECTION "FOR EMBER PAN INSTALLATION."**

**FOR VALVE/PILOT INSTALLATIONS, GO TO THE SECTION "FOR VALVE/PILOT INSTALLATIONS" ON PAGE 8, AND THEN RETURN TO THE SECTION "FOR EMBER PAN INSTALLATIONS."**

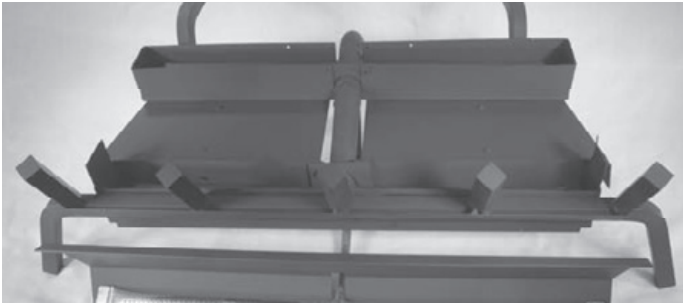
# INSTALLATION

## FOR EMBER BED INSTALLATIONS

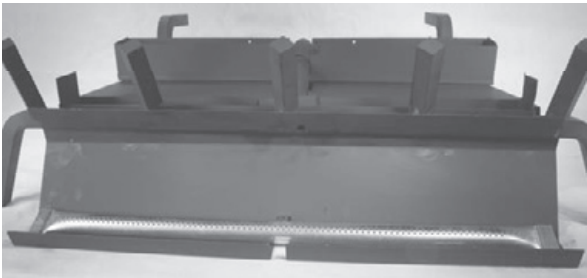
1. Place the burner in the upright position.
2. Insert the bottom lip of the ember burner pan under the ember burner. **See Figure 12.**
3. Push the ember burner pan backwards, towards the main burner, snapping the top of the ember burner pan beneath the grate support. **See Figure 13.**

**FOR MATCH THROW INSTALLATIONS, GO TO THE SECTION “FOR MATCH THROW INSTALLATIONS ON PAGE 7.**

**FOR VALVE/PILOT INSTALLATIONS, GO TO THE SECTION “FOR VALVE/PILOT INSTALLATIONS” ON PAGE 8.**



**Figure 12**



**Figure 13**

# FINAL SET UP

## **⚠ WARNING**

Failure to position the parts in accordance with all included pictures, diagrams and drawings, or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

1. Pour the provided glass over each burner filling the burner pans. The glass should follow the slope of each burner pan, covering each burner completely.

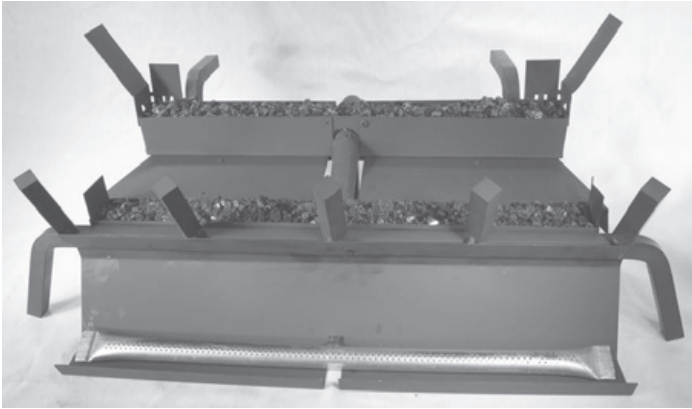


Figure 35

2. Spread the glowing embers over the ember burner.

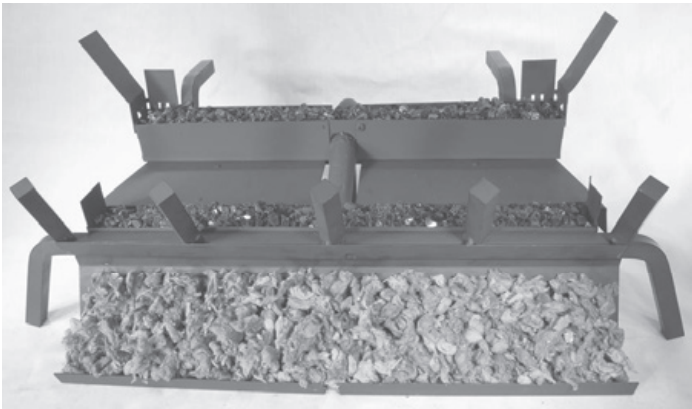


Figure 36

3. Place the lava rock (cinders) around the burner assembly.

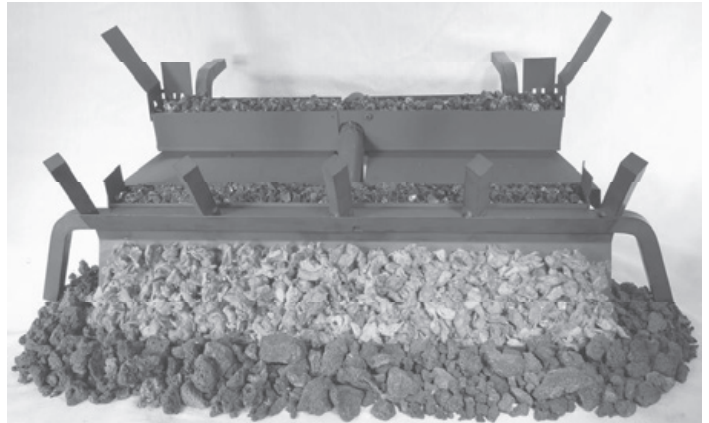


Figure 37

## **⚠ WARNING**

Apply loose material (embers and lava rock [cinders]) per instruction manual. DO NOT apply extra material not supplied with this appliance. All previously applied loose material (embers) must be removed prior to reapplication.

## **⚠ CAUTION**

DO NOT place glowing embers, sand, rockwool mix, or lava rock (cinders) in the area of the safety pilot assembly.

## **STOP!**

Refer to the log set up instructions packaged with your Decorative Gas Logs (Box Two).

4. Remove all contents from the Decorative Gas Log shipping container (Box Two).
5. Check the contents of the shipping container against the shipping and packing list or the parts list in this manual. Report any missing or damaged parts to your retailer.
6. Remove any and all protective wrapping from the gas logs.
7. Arrange the decorative gas logs on the grate.
8. When you have completed setting up the logs, proceed to the operation section, on page 15 for Match Throw Units, and page 16 for units with gas control valves.

# OPERATION

## **⚠ WARNING**

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

All units with gas control valves must be lit by a Safety Pilot. For standard units, the pilot is located at the right, rear, center of the unit.

Follow these instructions exactly when lighting the appliance. BEFORE LIGHTING, smell around the appliance area for gas. Be sure to smell next to the floor, as L.P. gas is heavier than air and will settle to the floor. Use only your hand to rotate the gas control knob. Never use tools. If the knob will not turn by hand, do not try to repair it; call a qualified service technician or installer. Force or attempted repair may result in a fire or explosion.

## **⚠ WARNING**

**All gas burning appliances produce smoke and carbon monoxide gas during operation. These fumes can be harmful if the appliance is used in any other than a fully vented fireplace.**

## **⚠ WARNING**

**A fireplace screen must be in place when this appliance is in operation. Unless other provisions for combustion air are provided, the screen shall have an opening(s) for introduction of combustion air.**

## **⚠ WARNING**

**When this decorative gas appliance is used in a fireplace equipped with a combustion air kit and glass doors, the glass doors should remain open during log set operation. This will maximize the radiant heat provided to the surrounding area, and minimize overheating of any valve installation. The glass doors may be closed when the log set is not in use.**

# MAINTENANCE & SERVICE

The Decorative Gas Log Set should be thoroughly inspected on a regular basis at least once a year by a qualified installer. At the beginning of each season, the system should be checked as follows:

1. Check the chimney flue or vent pipe to make sure that the flue is drawing properly, and that any vent pipe connections are tight.
2. Check to see that there are no blockages at the chimney or vent termination.
3. Check for creosote and soot build-up in chimney and/or vents and clean if necessary.
4. Inspect the pilot and burners (if applicable).

The burner system has been adjusted for proper operation at the factory. No adjustment is necessary, other than altitude de-rate or pilot flame.

**NEVER** enlarge valve orifices or burner ports.

## **SOOTING**

Some sooting of your log set is normal, adding to the appearance of burned wood. If excessive sooting accumulates, clean the logs using either of the following options::

- A. While the logs are burning and hot, spray the logs with clean water. The soot will lift off and burn off.
- B. When the logs are cold, brush the soot off with a stiff brush. Do not use water or soot cleaners at the same time as a brush.

# CLEANING AND SERVICING

Keep the control compartment, logs and burner area surrounding the logs clean.

## **THE LOGS CAN GET VERY HOT—HANDLE ONLY WHEN COOL.**

Always keep the appliance area clear and free from combustible materials, gasoline, and other flammable vapors and liquids.

Never obstruct the flow of combustion and ventilation air. Keep the front of the appliance clear of all obstacles and materials.

## **INSPECTING VENTING SYSTEM**

A vented fireplace venting system is designed and constructed to develop a positive flow adequate to remove flue gases to the outside atmosphere.

Any foreign objects in the venting system, may cause spillage of the flue gases into the room.

Periodic examination and/or cleaning of the venting system of the solid-fuel burning fireplace must be done by a qualified service person. Visually inspect the damper and flue area for excessive soot build-up. This soot (carbon) may be removed by brushing with a soft bristle brush.

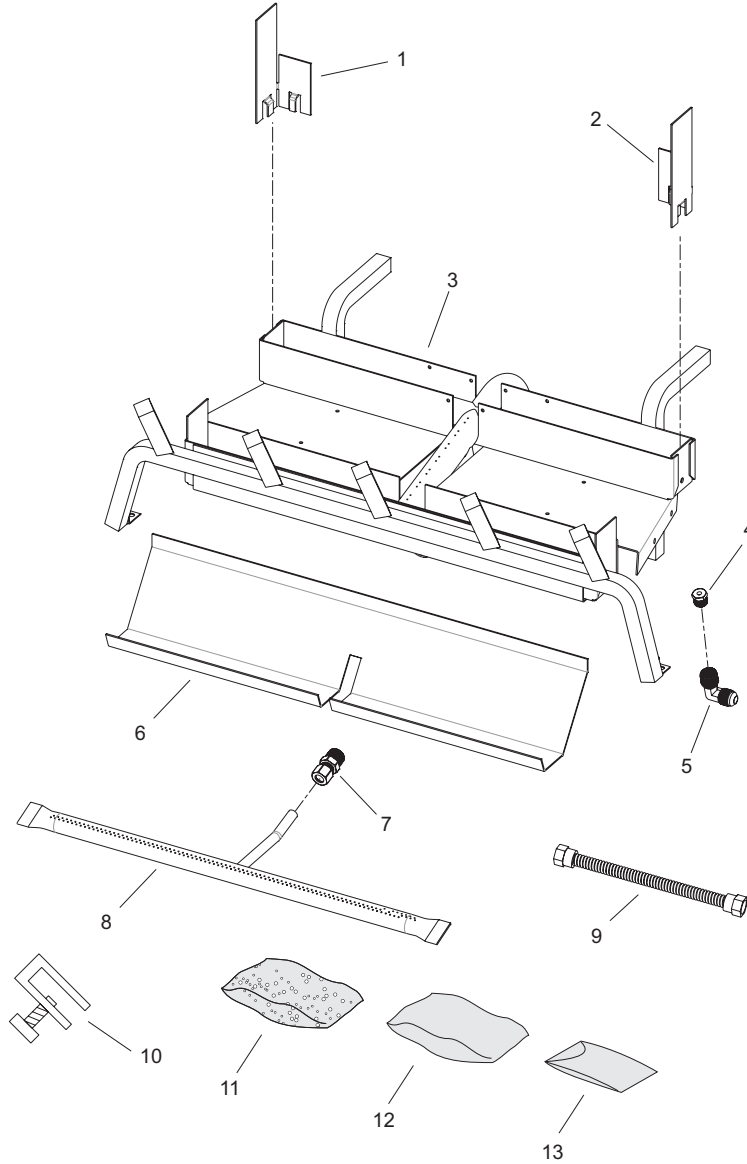


# TROUBLESHOOTING

PROBLEM OBSERVED	POSSIBLE CAUSE	CORRECTIVE MEASURE
Gas odor during setup	Gas Leak	See "What to do if you smell gas" Pages 4 - 5. Check all gas connections
Gas odor before first ignition	Gas Leak	See "What to do if you smell gas" Pages 4 - 5. Check all gas connections
Pilot will not ignite, or will not stay lit	No gas to pilot	Make sure gas is on, in pilot position
	Thermocouple not hot	Depress valve knob for at least 1 minute
	Improper pilot flame adjustment	See Pilot Characteristics - adjust flame
	Loose connections on the thermocouple	Check gas connections
	Faulty pilot or thermocouple	Replace Safety Pilot
	Faulty valve	Replace Valve
Delayed ignition	Low gas pressure	Check gas supply pressure
	Clogged or dirty burner ports	Clean burner ports
	Blocked orifice	Check orifice opening
	Faulty valve	Replace valve
Burner does not light but pilot remains on	Low gas pressure	Check gas supply pressure
	Clogged or dirty burner ports	Clean burner ports
	Blocked orifice	Check orifice opening
	Faulty pilot or thermocouple	Replace safety pilot
	Faulty valve	Replace valve
Burner lights but does not stay lit while pilot remains on	Low gas pressure	Check gas supply pressure
	Faulty valve	Replace valve
	Faulty pilot or thermocouple	Replace Safety pilot
	Clogged or dirty burner ports	Clean burner ports
Burner & pilot light but will not stay on	Low gas pressure	Check gas supply pressure
	Not enough fresh air for pilot	Open door or window - ventilate
	Faulty valve	Replace valve
	Faulty pilot or thermocouple	Replace safety pilot
	Clogged or dirty burner ports	Clean burner ports
	Remote control overheating	Move away from flame
	Remote control batteries failing	Replace batteries
Incorrect burner flame	Incorrect gas supply or pressure	Check gas supply pressure
	Blocked orifice	Check orifice opening
	Clogged or dirty burner ports	Clean burner ports
	Faulty valve	Replace valve
	High altitude	Adjust orifice size for altitude
Backfire of burner	Blocked orifice	Check orifice opening
	Clogged or dirty burner ports	Clean burner ports
	Low gas pressure	Check gas supply pressure
Appliance produces unwanted odors	Vapors from paint, hair spray, glues, etc.	Ventilate room
	Initial burn-off of manufacturing chemicals	Ventilate room
Logs appear to smoke	Vapors from manufacturing chemicals	Ventilate room
	Logs curing	See "Curing of Refractory Logs"
Whistle noise from appliance	Air in gas line	Bleed lines
	Control knob not in fully open position	Open control knob to full position
	Spiral gas flex line	Replace gas feed line



# EXPLODED VIEW & PARTS LIST



INDEX NO	PART NO			DESCRIPTION
	AVL21	AVL24	AVL30	
1	R12114	R12114	R12114	Clip - Left
2	R12115	R12115	R12115	Clip - Right
3	R12104	R12105	R12106	Triple Burner Assembly
4	R12047	R12047	R12224	Orifice
5	R12055	R12055	R12055	Orifice Holder
6	R12083	R12083	R12083	Flexline
7	R12162	R12163	R12164	Ember Burner Pan
8	R12116	R12116	R12116	Compression Fitting
9	R12157	R12158	R12159	Ember Burner
10	R2809	R2809	R2809	Damper Clamp
11	R12057	R12057	R12057	Rockwool Mix
12	11788	11788	11788	Decorative Rock
13	R11769	R11769	R11769	Crushed Glass

N/S - NOT SHOWN

# MASTER PARTS DISTRIBUTOR LIST

To Order Parts Under Warranty, please contact your local Empire dealer. See the dealer locator at [www.empirecomfort.com](http://www.empirecomfort.com). To provide warranty service, your dealer will need your name and address, purchase date and serial number, and the nature of the problem with the unit.

To Order Parts After the Warranty Period, please contact your dealer or one of the Master Parts Distributors listed below. This list changes from time to time. For the current list, please click on the Master Parts button at [www.empirecomfort.com](http://www.empirecomfort.com). Please note: Master Parts Distributors are independent businesses that stock the most commonly ordered Original Equipment repair parts for Heaters, Grills, and Fireplaces manufactured by Empire Comfort Systems Inc.

## Dey Distributing

1401 Willow Lake Boulevard  
Vadnais Heights, MN 55101

**Phone:** 651-490-9191

**Toll Free:** 800-397-1339

**Website:** [www.deydistributing.com](http://www.deydistributing.com)

**Parts: Heater, Hearth and Grills**

## F. W. Webb Company

200 Locust Street  
Hartford, CT 06114

**Phone:** 860-722-2433

**Toll Free:** 800-243-9360

**Fax:** 860-293-0479

**Toll Free Fax:** 800-274-2004

**Websites:** [www.fwwebb.com](http://www.fwwebb.com) & [www.victormfg.com](http://www.victormfg.com)

**Parts: Heater, Hearth and Grills**

## East Coast Energy Products

10 East Route 36  
West Long Branch, NJ 07764

**Phone:** 732-870-8809

**Toll Free:** 800-755-8809

**Fax:** 732-870-8811

**Website:** [www.eastcoastenergy.com](http://www.eastcoastenergy.com)

**Parts: Heater, Hearth and Grills**

# HOW TO ORDER REPAIR PARTS

## Parts Not Under Warranty

Parts can be ordered through your Service Person, Dealer, or a Master Parts Distributor. See this page for the Master Parts Distributors list. For best results, the **service person or dealer** should order parts through the distributor. Parts can be shipped directly to the **service person/dealer**.

## Warranty Parts

Warranty parts will need a proof of purchase and can be ordered by your Service Person or Dealer. Proof of purchase is **required** for warranty parts.

All parts listed in the Parts List have a Part Number. When ordering parts, first obtain the Model Number and Serial Number from the name plate on your equipment. Then determine the Part Number (**not** the Index Number) and the Description of each part from the following illustration and part list. Be sure to give all this information . . .

Appliance Model Number \_\_\_\_\_ Part Description \_\_\_\_\_

Appliance Serial Number \_\_\_\_\_ Part Number \_\_\_\_\_

Type of Gas - Natural \_\_\_\_\_

Do not order bolts, screws, washers or nuts. They are standard hardware items and can be purchased at any local hardware store.

Shipments contingent upon strikes, fires and all causes beyond our control.

# WARRANTY

Empire Comfort Systems Inc. warrants this hearth product to be free from defects at the time of purchase and for the periods specified below. Hearth products must be installed by a qualified technician and must be maintained and operated safely, in accordance with the instructions in the owner's manual. This warranty applies to the original purchaser only and is not transferable. All warranty repairs must be accomplished by a qualified gas appliance technician.

## **Limited Lifetime – Refractory Logs**

Should any part fail because of defective workmanship or material during the normal life of this product, Empire will repair or replace at Empire's option.

## **Limited Five-Year Parts Warranty – Burners, Grates, Ceramic Fiber Logs**

Should any part fail because of defective workmanship or material within five years from the date of purchase, Empire will repair or replace at Empire's option.

## **Limited Two-Year Parts Warranty – Valves**

Should the valve fail because of defective workmanship or material within two years from the date of purchase, Empire will repair or replace at Empire's option.

## **Limited One-Year Parts Warranty – Remote Controls, Accessories, and Parts**

Should any remote control, thermostat, accessory, or other part fail because of defective workmanship within one year from the date of purchase, Empire will repair or replace at Empire's option.

## **Duties of the Owner**

The appliance must be installed by a qualified installer and operated in accordance with the instructions furnished with the appliance. A bill of sale, cancelled check, or payment record should be kept to verify purchase date and establish warranty period. Ready access to the appliance for service.

## **What Is Not Covered**

Damages that might result from the use, misuse, or improper installation of this appliance.  
Travel, diagnostic costs and freight charges on warranted parts to and from the factory.  
Claims that do not involve defective workmanship or materials.  
Unauthorized service or parts replacements.  
Removal and reinstallation cost.  
Inoperable due to improper or lack of maintenance.

## **How To Get Service**

To make a claim under this warranty, please have your receipt available and contact your installing dealer. Provide the dealer with the model number, serial number, type of gas, and purchase verification. The installing dealer is responsible for providing service and will contact the factory to initiate any warranted parts replacements. Empire will make replacement parts available at the factory. Shipping expenses are not covered.

If, after contacting your Empire dealer, service received has not been satisfactory, contact: Consumer Relations Department, Empire Comfort Systems Inc., PO Box 529, Belleville, Illinois 62222, or send an e-mail to [info@empirecomfort.com](mailto:info@empirecomfort.com) with "Consumer Relations" in the subject line.

## **Your Rights Under State Law**

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



**Empire Comfort Systems Inc.  
Belleville, IL**

If you have a general question  
about our products, please e-mail  
us at [info@empirecomfort.com](mailto:info@empirecomfort.com).

If you have a service or repair  
question, please contact your dealer.

SINCE 1932

**[www.empirecomfort.com](http://www.empirecomfort.com)**