# Owner's **Double Face Custom Flaming Ember Burner** Manual DECORATIVE VENTED GAS LOG SET General Assembly, Installation, and Operation Instructions 'Rasmussen® THE GAS LOG COMPANY

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# ATTENTION! READ INSTRUCTIONS CAREFULLY BEFORE ASSEMBLY OR USE

**Models:** DF-CF15, 18, 20, 24, 30, 36, 42, 48, 54, 60 -N (Natural) / P (Propane)

# Available (DF-CF) log set styles and sizes

15" Models: Lonestar, Manzanita. 18" Models: Bonfire, CrossFire, Frosted Oak, Lone Star, Manzanita, Prestige Oak, White Birch. 20/21" Models: Evening CampFire, Evening CrossFire, Evening Desire, Evening LoneStar, Evening Prestige and Frosted Oak. 24/27" and 30" Models: Bonfire, CrossFire, Evening CampFire, Evening CrossFire, Evening Desire, Evening LoneStar, Evening Prestige, Frosted Oak, LoneStar, Manzanita, Prestige Oak and White Birch. 33"Models: Frosted Oak. 36/38" Models: Bonfire, Evening Prestige, Frosted Oak, Manzanita, and Presitage Oak. 42", 48", 54", 60" Models: Bonfire and Prestige Oak.

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

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS
  - Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

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

Improper installation, alteration, service or maintenance can cause property damage, personal injury or loss of life. Read these instructions thoroughly before installation. For assistance or additional information, consult your gas log dealer, qualified installer, service agency or gas supplier.

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

This appliance is only for use with type of gas indicated on the rating plate.

Installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54.

# In the Commonwealth of Massachusetts:

- Installation must be performed by a licensed plumber or gas fitter.
- The chimney flue damper, when used with gas logs, will be welded open or completely removed.
- A CO detector shall be installed in the room where the appliance is installed.

# WARNING

This is a vented gas appliance for use only in a solid-fuel burning fireplace constructed on non-combustible material with a fully functional chimney flue which must vent all of the products of combustion. WHEN OPERATING, THE CHIMNEY DAMPER MUST BE FULLY OPEN

# MINIMUM FIREPLACE FLUE REQUIREMENTS

The minimum permanent chimney or damper opening is the minimum permanent free opening required by Standards or Codes to ensure safe operation of the appliance and must be at least 39 square inches for 18"-20" models, 51 square inches on 24" models and 64" on 30" models based on a minimum chimney height of 10 feet. It is **NOT** the minimum operating damper position, which should be wide open when burning.

# IMPORTANT INFORMATION

- 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 hazard 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 with the appliance.
- Do not place clothing or other flammable material on or near the appliance.
- **Any safety screen** or guard removed for servicing an appliance must be replaced prior to operating the 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 professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.
- **WARNING:** Any change to this appliance or its controls can be dangerous.
- **WARNING:** Failure to keep the primary air opening(s) of the burner clean may result in sooting and property damage.
- Keep appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- **DO NOT** use this room 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 that has been under water.
- **WARNING:** Before installing in a solid-fuel burning fireplace, the chimney flue and firebox must be cleaned of soot, creosote, ashes and loose paint by a qualified chimney cleaner.
- WARNING: Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.
- **WARNING:** Do not use a blower insert, heat exchanger insert or any other accessory not approved for use with this heater.
- A fireplace screen must be in place when the appliance is operating and, unless other provisions for combustion air are provided, the screen shall have an opening(s) for introduction of combustion air.
- **Solid fuels** shall not be burned in a fireplace where this appliance is installed.
- WARNING: Glass doors must be fully opened when appliance is in operation to allow for safe combustion, cooling of components and venting.
- Any outside air ducts and/or ash dumps in the fireplace shall be permanently closed at the time of appliance installation.
- This appliance may be used in sleeping quarters and bathrooms if used in a vented application, subject to local codes.
- Avoid contact with the objects, chassis or another part which may be hot during operation.

Designed to be an ATTENDED appliance. Do not leave this unit burning when unattended or while anyone is sleeping. Young children MUST be supervised when in the same room with the appliance and are NOT to operate this unit.

# CARBON MONOXIDE POISONING MAY LEAD TO DEATH

When used without fresh air, decorative gas appliances may give off carbon monoxide, an odorless, colorless, poisonous gas. Some people, pregnant women, persons with heart or lung disease, anemia, persons under the influence of alcohol and persons who live at high altitudes are more affected by carbon monoxide than others. Early signs of carbon monoxide poisoning resemble the flu and include; headache, dizziness and/or nausea. If you have these symptoms, the burner or the appliance may not be installed or working properly, or the flue may be blocked. GET FRESH AIR AT ONCE! Verify that the gas log set is properly arranged and have the heater and chimney flue serviced before using again.

### WARNING

During manufacturing, assembly and packaging, various components of this appliance are exposed to certain oils or films. These 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, eye or lung irritation. This is a normal occurrance and only temporary. The initial break-in operation should last 2-3 hours with the burner at the highest setting. Provide maximum ventilation by opening windows, doors and the chimney flue (if using a vented model) to allow odors to dissipate. The only odor remaining after this initial break-in period will be the normal odors associated with the combustion of Natural or Propane Gas and/or related to your indoor environment (see page 12).

# **WARNING—Proposition 65 Statement**

If not installed, operated and maintained in accordance with these instructions, this product could expose you to substances in fuel or from fuel combustion which are known to the State of California to cause cancer, birth defects or other reproductive harm.

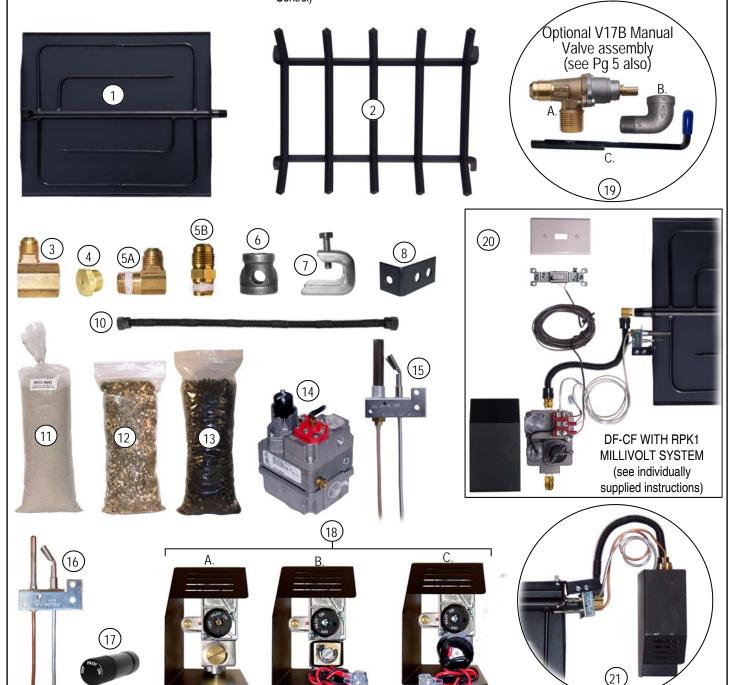
# **PARTS LIST**

# **REQUIRED TOOLS AND MATERIALS**

Adjustable Wrench and Pipe Wrench. Pipe Sealing compound is **required** if fittings not already pre-threaded with Teflon tape to prevent gas leaks. **DO NOT** use Teflon tape or pipe compound on other tapered fittings.

- Burner Pan (DF-CF18, 20, 24, 30, 36, 1.
- Grate (DF-HFG18, 20, 24, 30, 36, 42, 48) 3/8" x 1/2" FIP Flared Brass Fitting (A1) 2. 3.
- Orifice Spud
- 5A. Orifice Holder (Internally Tapped 3/8" x 3/8" Flared MIP Fitting) (A2T)
- Orifice holder for Burners 36" and over (150-8-8)
- 6. Air Mixer for **Propane** Gas burners (MA2)
- Damper Clamp (DC1) Pilot Bracket (PB-2) 7.
- 8.
- Flex Connector (SSCB-14) sets under 30" (SSCB-18-12) sets over 30"
- White Silica Sand (Natural Gas burners)

- Ember Magic (EMX1)
  Black Volcanic Ash (Propane burners)
  High Capacity Millivolt Gas Valve
  Control (V11)(Units 36" thru 60")
- Pilot Thermogenerator for Millivolt System (JPG9-NG/LP)
- Pilot Thermocouple (J95R-NG/LP)
  Valve Knob Extender for Optional
  Manual "EASY" Safety Valve (STV-KE2)
  All **Propane** Burners 30" and under require
- an "EASY" Safety Pilot Kit, shown below. Optional for Natural Gas. A) SPK3E (Manual "EASY" Control), B) RPK3E (Remote Ready "EASY" Control), C) RMC1E (Variable Flame Height "EASY" Control)
- 19. Optional V17B Manual Valve Kit
  - A) 3/8" MIP x 3/8" MIP Valve (V17)
  - B) 3/8" x 3/8" Street Elbow
  - C) 9" long Key (K2)
- 20. RPK1 Millivolt systems come pre-assembled with "Easy" Safety Control attached upon request, or purchased separately as an upgrade kit. (required for sets 36" and over)
- Optional -SPK3E, -RPK3E and -RMC1E models come pre-assembled with "Easy" Safety Control attached upon request, or purchased separately as an upgrade kit.



# **GENERAL INSTALLATION INSTRUCTIONS**

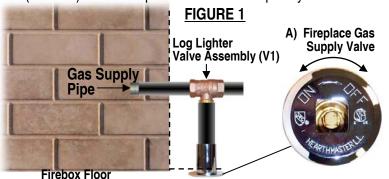
WARNING: Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

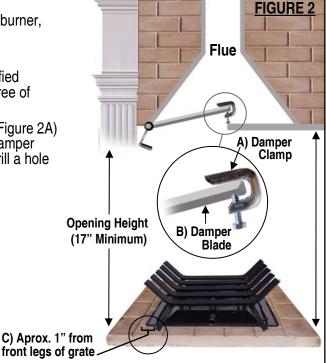
The appliance and it's appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi. The appliance must be isolated from the gas piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi.

<u>Natural Gas Operating Pressures:</u> Minimum inlet gas supply pressure = 6 inches of water column. Maximum inlet gas supply pressure is 7 inches of water column. <u>Propane Gas Operating Pressures:</u> Minimum inlet gas supply pressure = 11 inches of water column. The maximum inlet gas supply pressure is 14 inches of water column.

# **STEP ONE: PREPARATION (ALL MODELS)**

- 1. Verify that the Valve Assembly is correctly matched to the set, burner, and gas supply.
- 2. Insure that **Fireplace Gas Supply** is off (Figure 1A).
- Thoroughly clean fireplace floor of any ashes and have a qualified chimney cleaner insure that the chimney flue and firebox are free of soot, creosote, ashes and loose paint.
- (VENTED INSTALLATIONS ONLY) Attach Damper Clamp (Figure 2A) over edge of fireplace Damper Blade (Figure 2B) to prevent damper from closing accidentally. If unable to attach damper clamp, drill a hole (or holes) in the damper or remove it completely.





The minimum permanent free opening of the fireplace chimney or chimney damper must be **29 sq. inches** based upon a minimum chimney height of at least 10 feet. Solid Fuels shall not be burned in a masonry or UL 127 factory built fire place where a is installed.

# In the Commonwealth of Massachusetts:

- Installation must be performed by a licensed plumber or gas fitter.
- The chimney flue damper, when used with gas logs, will be welded open or completely removed.
- A CO detector shall be installed in the room where the appliance is installed.

## **IMPORTANT:**

THE CHIMNEY DAMPER MUST BE WIDE OPEN AND FIXED IN A MANNER TO MAINTAIN A PERMANENT FREE OPENING AT ALL TIMES AS OUTLINED ABOVE. THE AREA OF THE FLUE MUST BE NOT LESS THAN 1/10 THE AREA OF THE FIREPLACE OPENING. THIS GAS LOG SET MUST BE INSTALLED IN A FULLY VENTED METAL OR MASONRY FIREPLACE WITH A WORKING FLUE THAT IS SAFE FOR BURNING A WOOD FIRE. THE FLUE MUST BE FREE OF ANY OBSTRUCTIONS AND MUST EXHAUST ALL PRODUCTS OF COMBUSTION. DAMPER AND GLASS DOORS MUST BE FULLY OPEN BEFORE LIGHTING OR BURNING FOR PROPER VENTILATION AND TO PREVENT HEAT DAMAGE TO THE VALVE.

### WARNING! CHECK FOR PROPER VENTING

A properly sized, unobstructed chimney will normally vent all products of combustion. Any odor or smoke detected inside the room is an indication that the flue is not functioning properly.

SHUT OFF THE BURNER IMMEDIATELY! THE CAUSE OF THE VENTING PROBLEM MUST BE DISCOVERED AND CORRECTED BEFORE CONTINUED USE OF THE GAS LOG SET.

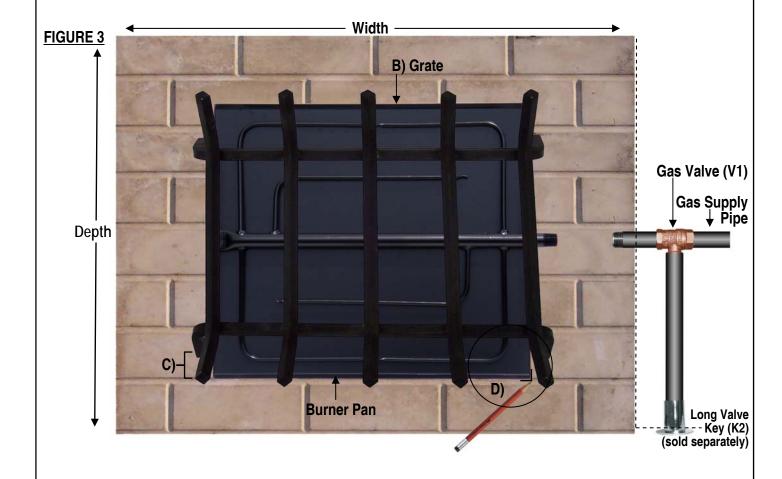
Continued use with improper venting may cause damage to your fireplace, room furnishings and could cause serious illness. IF IMPROPER VENTING IS SUSPECTED, IMMEDIATELY HAVE LOG SET AND CHIMNEY FLUE SERVICED.

The installation and the provisions for combustion and ventilation air must conform with *The National Fuel Gas Code ANSI Z223.1 / NFPA54*, or *The CSA B149.1*, *Natural Gas and Propane Installation Code*, latest edition.

# **INSTALLATION AND GAS SUPPLY CONNECTION**

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

- 1. Place **Grate** inside the firebox, centered from left to right. (Figure 3B).
- 2. Place **Burner Pan** beneath grate with open edges facing out approximately one inch forward of front legs of grate. (Figure 2 and 3C) Mark positions of Grate and Burner Pan on fireplace floor with pencil then remove from the firebox (Figure 3D). If using an Easy Safety Pilot Kit or a Millivolt System with this unit consult those instructions now, then continue with "Pan Medium Placement" on pages 9 and 10.



# MINIMUM FIREPLACE REQUIREMENTS

The Minimum permanent chimney or damper opening is the minimum permanent free opening required by Standards or Codes to ensure safe operation of the appliance and must be at least 39 square inches on 15", 51" square inches for 18"-20" models, 64 square inches on 24" models and 30" models based on a minimum chimney height of 10 feet. It is **NOT** the minimum operating damper position.

Model Number	Log Set Size	Opening Height	Firebox Depth	Firebox Width	Chimney Diameter	Min. Permanent Chimney Opening	Btu / Hour Max. Input Natural Gas	Btu / Hour Max. Input Propane Gas
DF-CF15	15"	16"	18"	21"	9"	67 Sq. in.	50,000	40,000
DF-CF18	18"	16"	18"	24"	10"	77 Sq. in.	60,000	45,000
DF-CF20	20", 21"	16"	18"	26"	10"	83 Sq. in.	75,000	50,000
DF-CF24	24", 27"	16"	18"	30"	11"	96 Sq. in.	85,000	60,000
DF-CF30	30", 33"	16"	18"	36"	12"	115 Sq. in.	90,000	70,000
DF-CF36	36"	16"	18"	42"	13"	134 Sq. in.	180,000	130,000
DF-CF42	42"	16"	18"	48"	14"	196 Sq. in.	200,000	140,000
DF-CF48	48"	16"	18"	54"	15"	225 Sq. in.	260,000	155,000

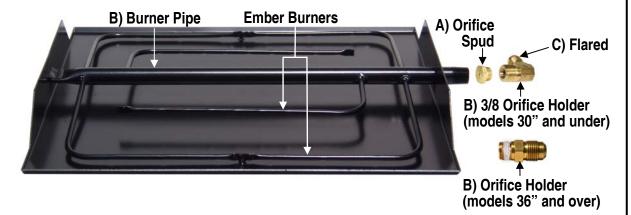
# STANDARD MATCH LIGHTED (NATURAL GAS MODELS ONLY)

### STEP THREE: BURNER PAN ASSEMBLY

**NOTE:** If fittings do not come pre-wrapped with Teflon threaded tape, pipe compound MUST be applied to all tapered pipe threads (except in #2 of Step 3) to prevent gas leaks. **DO NOT** use Teflon tape or pipe compound on any flared fitting threads.

- 1. Thread **Orifice Spud** (Figure 4A) into **3/8**" **Orifice Holder** (Figure 4B) (Do not use pipe compound or Teflon tape here)
- 2. Thread Orifice Holder into Burner Pipe and wrench tighten with the flared end facing rear wall of firebox (Figure 4C).

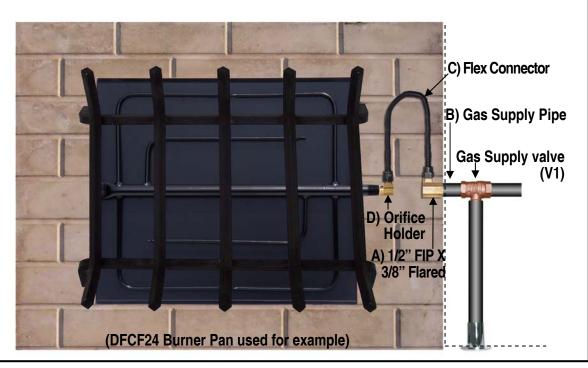
# FIGURE 4



# STEP FOUR: GAS SUPPLY CONNECTION (NOTE: ENSURE THAT GAS SUPPLY TO FIREPLACE IS OFF)

- Thread 1/2" FIP x 3/8" Flared Elbow (Figures 5A) onto the Gas Supply Pipe (Figures 5B) and wrench tighten. If space between Gas Supply Pipe and Firebox floor allows, the flared end of the 1/2" FIP x 3/8" Elbow should face down. (Figure 5A)
- With Burner Pan inside firebox at previously marked position thread one end of the Flex Connector (Figures 5C) to the 1/2" FIP x 3/8" Flared Elbow and wrench tighten. Do not use pipe compound or tape on any flared threads.
- Thread **Orifice Holder** (Figure 5D) into burner pipe and wrench tighten with the flared end facing rear wall of firebox. Carefully bend the **Flex Connector** into position, connect to the **Orifice holder** and wrench tighten. If Flex Connector is bent into too small a radius it may kink or break causing air flow noise and/or gas leaks.
- Proceed to Pages 10 and 11 "Pan Medium Installation")

# FIGURE 5

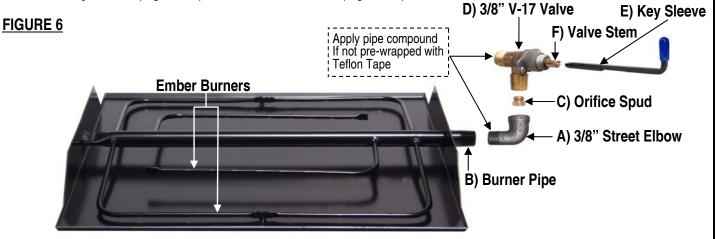


# OPTIONAL ACCESSORY MATCH LIGHTED WITH MANUAL "V-17" VALVE (NATURAL GAS MODELS 30" OR UNDER <u>ONLY</u>)

### STEP THREE: BURNER PAN ASSEMBLY

**NOTE:** If fittings do not come pre-wrapped with Teflon threaded tape, pipe compound MUST be applied to all tapered pipe threads (except in #2 of Step 3) to prevent gas leaks. **DO NOT** use Teflon tape or pipe compound on *any* flared fitting threads.

- 1. Thread 3/8" Street Elbow (Figure 6A) into Burner Pipe (Figure 6B) and wrench tighten into position shown.
- 2. Thread **Orifice Spud** (Figure 6C) (*Without* using pipe compound or Teflon tape) into **3/8**" **V-17 Valve** (Figure 6D), then thread Valve into 3/8" Elbow and wrench tighten into position shown.
- 3. Insert **Key Sleeve** (Figure 6E) over **V-17 Valve Stem** (Figure 6F)



# STEP FOUR: GAS SUPPLY CONNECTION (ENSURE THAT GAS SUPPLY TO FIREPLACE IS OFF)

**NOTE:** If fittings do not come pre-wrapped with Teflon threaded tape, pipe compound MUST be applied to all tapered pipe threads to prevent gas leaks. **DO NOT** use Teflon tape or pipe compound on *any* flared fitting threads.

- 1. Thread 1/2" FIP x 3/8" Flared Elbow (Figure 7A) onto the Gas Supply Pipe (Figure 7B) and wrench tighten. If space between Gas Supply Pipe and Firebox floor allows, the flared end of the 1/2" FIP x 3/8" Elbow should face down toward firebox floor.
- 2. With Burner Pan inside firebox at previously marked position thread one end of the **Flex Connector** (Figure 7C) to the **1/2**" **FIP x 3/8**" **Flared Elbow** and wrench tighten. Do not use pipe compound or tape on *any* flared threads.
- 3. Attach the other end of the **Flex connector** to the tapered end of the V17 Valve (Figure 7D). Remember, If Flex Connector is bent into too small a radius it may kink or break causing air flow noise and/or gas leaks. (Proceed to Pages 10 and 11 "Pan Medium Installation")

### FIGURE 7



# **WARNING:**

AN "EASY" SAFETY PILOT MUST BE INSTALLED ON ALL UNITS 30" OR UNDER DESIGNED OR CONVERTED TO BURN PROPANE GAS. THE "EASY" SAFETY PILOT CONTROL SYSTEM IS OPTIONAL FOR NATURAL GAS UNITS.

If utilizing the "EASY" Safety Pilot System with your Flaming Ember Burner use the individually supplied instructions in conjunction with this instruction manual before continuing.

# SPK3E

Manual Safety Pilot Control

The Manual Safety Pilot Control (standing pilot) provides safety shutdown in the event of an interruption of the gas supply or flameout. It also provides a convenient means of lighting the burner and controlling flame height. A safety control is required for all propane installations, advisable for natural gas, and is required for certain jurisdictions. "EASY" control allows for upgrade to remote operation at a later time. Refer to individually supplied instructions.



# RMC1E

Wireless Variable Flame Height Remote Safety Pilot "EASY" Control.





Light the burner and adjust the flame height with the hand-held wireless remote transmitter. Provides safety shutdown in the event of an interruption in the gas supply or flameout. It also provides a convenient means of lighting the main burner. A safety control is required for all Propane installations, is advisable for natural gas, and is required in certain jurisdictions. (Comes with Variable Flame Height Remote Control Transmitter, and Remote Receiver) Refer to individually supplied instructions.

# RPK3E

Remote Ready Safety Pilot "EASY" Control.

Requires one of the Wireless Remoter Transmitter Devices (below) to light the main burner. Adjust the flame height manually by turning the knob at the valve. Provides safety shutdown in the event of an interruption in the gas supply or flameout. Also provides a convenient means of lighting the main burner. A safety control is required for all Propane installations, is advisable for natural gas, and is reguired in certain jurisdictions. The RPK3E Model comes with the Remote Receiver shown below left and may be controlled by any one of the five Wireless Remote Transmitter Devices shown here (each sold separately) Refer to individually supplied instructions.







Wireless



Wireless





Switch

Wireless Wall Thermostat (TS-2R)



# PROPANE BURNER PAN ASSEMBLY

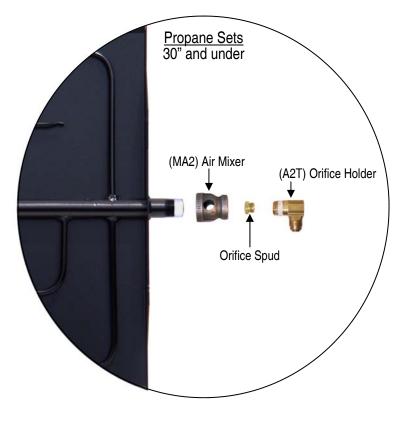
Propane sets 30" and under must use an "EASY" Safety Pilot Kit.

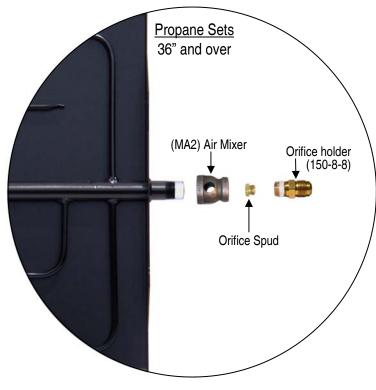
Propane sets 36" and over must use an RPK1 Millivolt system.

Both are optional for natural gas. The EIS (Electronic Ignition System) is optional for all sizes

Natural Gas or Propane. Consult individually supplied instructions when using any control system.

NOTE: If fittings do not come pre-wrapped with Teflon threaded tape, pipe compound must be applied to all non-flared threads.





### **WARNING:**

AN RPK1 MILLIVOLT SYSTEM MUST BE INSTALLED ON ALL PROPANE UNITS 36" OR OVER AND IS OPTIONAL FOR NATURAL GAS. CONSULT INDIVIDUALLY SUPPLIED INSTRUCTIONS IN CONJUCTION WITH THIS INSTRUCTION MANUAL BEFORE CONTINUING. (DF-CF24 USED BELOW FOR EXAMPLE ONLY)

# **RPK1 MILLIVOLT SAFETY PILOT LIGHTING CONTROL**

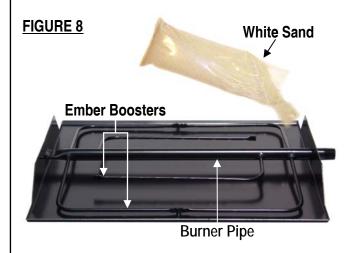
On / Off Control with switch or remote lighting (bottom of page). Flame adjusts by turning knob.

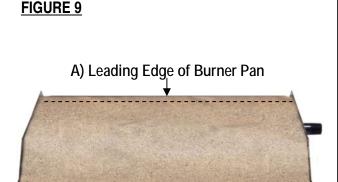


# STEP FIVE: PAN MEDIUM (NATURAL GAS MODELS)

If using a Natural Gas model, the Pan Medium used will be White Sand. The Volcanic Ash supplied may *only* be used as dressing for the firebox floor ( Page 11, Figure 13) **NEVER** use Volcanic ash inside a natural gas burner pan.

1. Completely cover **Burner Pipe** and **Ember Boosters** with Pan Medium (White Sand) (Figure 8) Starting from one leading edge of Burner Pan and moving toward the other leading edge. Use entire contents of bag provided, allowing medium to spill over leading edges of burner pan (Figure 9). (Amount supplied will vary with each style burner)





A) Leading Edge of Burner Pan

2. Sprinkle a light covering of "Ember Magic" over the Pan Medium (Figure 10 below). Pull apart "Ember Magic" fiber material to enhance the glowing ember effect. Spread remaining "Ember Magic" around ends of pan to add to the ember bed appearance. When done the Burner Pan should look somewhat like the illustration below.

# FIGURE 10





**NOTE:** Thinner, less densely packed pieces of Ember Material will enhance the overall glowing ember effect, e.g., the looser the pieces, the better the glowing ember effect!

WARNING: Wash hands after handling "Ember Magic" as it may cause skin irritation. When pouring Pan Medium (White Sand) into burner pan do so slowly as it may stir up dust particles. Careful not to breath in dust.

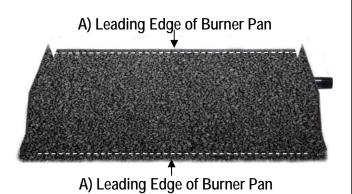
# STEP FIVE: PAN MEDIUM (PROPANE MODELS)

If using a Propane burner, the Pan Medium used will be Volcanic Ash. (Amount supplied will vary with each style burner) **NEVER** use White Sand inside a propane burner, pan.

1. Completely cover **Burner Pipe** and **Ember Boosters** with Pan Medium (Volcanic Ash) (Figure 11) Starting from one leading edge of Burner Pan and moving toward the other leading edge. Use entire contents of bag provided, allowing medium to spill over leading edges of burner pan (Figure 12). (Amount supplied will vary with each style burner)



# FIGURE 12



2. Sprinkle a light covering of "Ember Magic" over the Black Volcanic Ash. Pull apart "Ember Magic" fiber material to enhance the glowing ember effect. Spread remaining "Ember Magic" around ends of pan to add to the ember bed appearance. When done the Burner Pan should look somewhat like the illustration below.

# FIGURE 13





**NOTE:** Thinner, less densely packed pieces of Ember Material will enhance the overall glowing ember effect, e.g., the looser the pieces, the better the glowing ember effect!

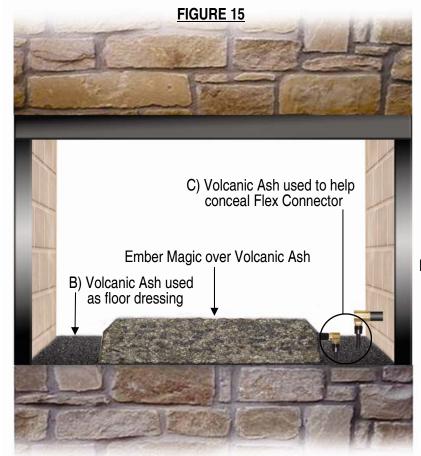
WARNING: Wash hands after handling "Ember Magic" as it may cause skin irritation.

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

Natural Gas model (Standard Match Lit) (Right) with White Sand used inside burner pan as pan medium and Volcanic Ash (Figure 14B) sprinkled around the **outside** of the Burner Pan for a decorative effect. Volcanic Ash may also be used to conceal the Flex Connector (Figure 14C).

**NEVER** use Volvanic Ash inside a Natural Gas burner pan.





Propane model (Standard Match Lit) (left) with Volcanic Ash used inside the Burner Pan as pan medium and sprinkled around the outside of the Burner Pan for a decorative effect. Volcanic Ash may also be used to conceal the Flex Connector (Figure 15C below).

**NEVER** use White Sand inside a propane burner pan

# **STEP 6: LOG PLACEMENT**

CAUTION: Crowded logs will cause poor combustion and result in excessive soot formation.

Depending on the log style and size, log sets contain from 6 to 10 individual logs and sometimes pinecones. The largest two logs will be the **Front Logs**. Some log sets have two separate front logs which simulate a charred/burnt effect between the two halves. (Figure 20A) Place the 2 **Longest Logs** (or 4 largest "charred" logs if applicable) as far forward and apart from each other on the Grate as possible. The remaining logs, or "**Top Logs**" are placed diagonally across the Front logs with the larger top logs placed first allowing flame to pass freely between them. Several examples are provided below.

FIGURE 18
Top View of 24" Double Face Lone Star log set

Large Top Log Small Top Log

Front Logs

Small Top Log

FIGURE 19
Top View of 24" Double Face Crossfire log set

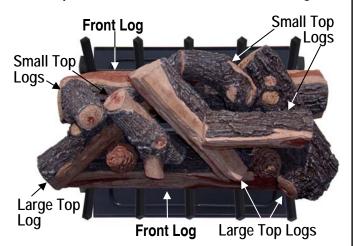
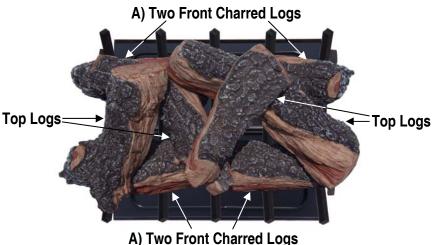


FIGURE 20
Top View of 24" Double Face Evening Desire log set



# **WARNING**

During manufacturing, assembly and packaging, various components of this appliance are exposed to certain oils or films. These 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, eye or lung irritation. This is a normal occurrance and only temporary. The initial break-in operation should last 2-3 hours with the burner at the highest setting. Provide maximum ventilation by opening windows, doors and the chimney flue (if using a vented model) to allow odors to dissipate. The only odor remaining after this initial break-in period will be the normal odors associated with the combustion of Natural or Propane Gas and/or related to your indoor environment (see page 12).

DAMPER AND GLASS DOORS MUST BE FULLY OPEN BEFORE LIGHTING OR BURNING FOR PROPER VENTALATION AND TO PREVENT HEAT DAMAGE TO THE VALVE.

IMPORTANT: YOUR GAS LOG SET SHOULD BE OPERATED FOR THE FIRST 2-3 HOURS AT A LOW FLAME SETTING TO ALLOW TEMPERING OF THE REFRACTORY LOGS.

# STEP SEVEN: LIGHTING AND OPERATION INSTRUCTIONS

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

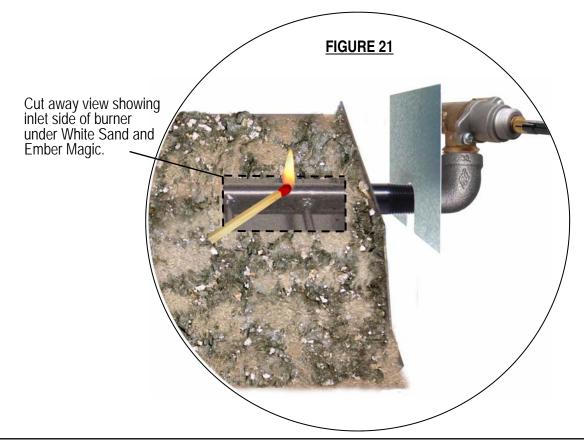
**BEFORE LIGHTING**, Smell around the burner area and next to floor for gas. Some gas is heavier than air and may settle on the floor. If you smell gas follow the instructions on page 2.

# STANDARD MATCH LIGHTING

- 1. Place lighted match on embers near inlet end of burner (Figure 21). **DO NOT HOLD MATCH IN HAND!** Move away from front of fireplace.
- 2. Slowly open Fireplace Gas Supply Valve and wait for burner to light.
- 3. Adjust Fireplace Gas Supply Valve for desired flame height.
- 4. To shutdown close Fireplace Gas Supply Valve completely.

# MATCH LIGHTING WITH OPTIONAL ACCESSORY V-17 VALVE

- 1. Ensure that the Manual V-17 Valve is completely closed.
- 2. Open Fireplace Gas Supply Valve.
- 3. Place lighted match on embers near inlet end of burner (Figure 21) **DO NOT HOLD MATCH IN HAND!** Move away from front of fireplace.
- 4. Slowly open Manual V-17 Valve and wait for burner to light.
- Adjust Fireplace Manual V-17 Valve for desired flame height.
- 6. To shutdown close both Manual V-17 Valve and Fireplace Gas Supply Valve completely.



### PROPER MAINTANANCE

- Keep the area around the log set clean and clear of debris.
- When logs develop soot, turn burner on for 15 minutes then lightly spray with water. Soot will then evaporate.
- Periodically examine and clean the venting system. Once every year, a qualified agency or certified chimney sweep should
  examine and clean the venting system of the solid fuel burning fireplace in which the log set is installed.

### **APPLIANCE BREAK-IN**

During the 2-3 hour appliance break-in period, you may detect an odor from the appliance as the various water- based paints used in the manufacture of this log set cure. This is normal and temporary situation that is not a cause for alarm. However, you may want to provide extra ventilation to the room during this time.

# To ensure proper curing of the logs:

- 1) Ignite a 2" flame and maintain it for 1/2 hour.
- 2) Burn the logs in consecutive 1/2 hour periods, raising the flame an additional 2" to full flame height for a total of three hours.

### TROUBLE SHOOTING

# Log Set is Smoking/Sooting Excessively

It is natural and unavoidable for vented log sets to produce moderate levels of carbon (soot) where flame contacts the logs. However, if soot is produced where there is no flame impingement, one of the following may be the cause;

**Fireplace venting system not drafting properly:** Make sure the damper is wide open at all times. Preheat the flue in very cold weather by burning the log set at very low level, then slowly increasing the flame height over a matter of hours. Have the fireplace and the venting system professionally cleaned.

**Excessive flame impingement or blockage:** Make sure there is proper spacing between the logs so they are not smothering the flame. Rearrange the logs so they are touched less by the flames.

**Excessive gas supply/pressure:** Make sure the gas pressure coming into the fireplace does not exceed the maximum pressure allowed with this gas set (refer to top of page 5). If you are using the gas logs with an "EASY" Safety Pilot Kit, make sure you installed the correct orifice into the set (refer to table on page 4).

# **Burner is Excessively Noisy**

Please Note: The movement and combustion of gas will create low, unavoidable levels of noise.

**Excessive gas pressure:** Make sure the gas pressure coming into the fireplace does not exceed the maximum pressure allowed with this gas set (refer to top of page 5). If you are using the gas logs with an "EASY" Safety Pilot Kit, make sure you installed the correct orifice into the set (refer to the table on page 4).

**Passage of air/gas across irregular surfaces:** There may be burrs, paint or other blockages on the burner bar ports. Check these ports and remove any blockage.

**Gas Connector:** Relieve any tight bends or kinks in the Flex Connector or switch to a smooth aluminum or copper connector, which can be purchased at any hardware or home improvement store.

# Burner Flame is Too High (8-12" Above Top Logs) or Too Low (Below Top Logs)

**Incorrect gas supply, pressure, or burner orifice used:** Make sure the gas pressure coming into the fireplace falls between the minimum and maximum pressures allowed with this gas set (refer to the table page 3). If you are using the gas logs with a safety pilot kit, make sure you installed the correct orifice (refer to the table on page 4).

Blocked ports (low flame only): Free the main burner orifice and burner bar ports of any burrs, paint or other blockage.

# SERVICE AND TROUBLESHOOTING GUIDE FOR MODELS USING THE "EASY" SAFETY PILOT KIT

Analysis and correction of control of service problems must be made by qualified gas service technicians only. Attempts to service or repair the "EASY" Safety Pilot Kit by other than authorized service personnel will void the manufacture's warranty. In general, failure of "EASY" Safety Pilot Control may be due to the reasons noted below:

- 1. Pilot will not light initially:
  - Check for loose Thermocouple terminal nut connection. Finger tip tighten plus 1/4 turn with wrench.
  - Check for improper pilot flame adjustment.
  - Check that Valve Knob is fully depressed during pilot lighting operation and held depressed for 30 to 60 seconds.
  - Check for defective Thermocouple.
  - Check for defective thermo magnet unit.
- 2. Pilot / Main burner clicks off after 5 to 30 minutes of burning:
  - Valve and Thermocouple are not defective, otherwise pilot would not initially light.
  - Thermocouple loses temperature difference between hot tip and cold junction (base).
  - Check that only tip of Thermocouple is in main burner flame.
  - Remove then replace logs to alter heat radiation pattern. Ensure that glass doors are open.
  - Ensure that proper size gas log set is installed. Too large of a set decreases cooling air flow.

# TWO YEAR CONSUMER PRODUCT WARRANTY

The following warranty has been drafted to comply with the MAGNUSON-MOSS WARRANTY ACT applicable to products manufactured after July 4, 1975, It replaces and supersedes any warranty in this package or in any printed literature.

### LIMITED WARRANTY:

RASMUSSEN IRON WORKS INC, 12028 E. Philadelphia Street, Whittier California, U.S.A., warrants this Gas Fire Set and accessories against defects in materials and workmanship, and suitable for a particular purpose, for a period of:

- OBJECT CASTING All logs are guaranteed against burnout in the original installation for 2 years from the date of initial purchase.
- (2) BURNERS, SHEET METAL, SAFETY CONTROLS AND ALL OTHER COMPONENTS 2 Years from date of initial purchase.

When used in an outdoors or commercial installation, the warranty period shall be six (6) months. Warranty does not extend to corrosion of parts used in outdoor environment.

# THIS WARRANTY IS FOR THE BENEFIT OF THE ORIGINAL PURCHASER.

### WARRANTY ADJUSTMENT:

- RASMUSSEN agrees to repair or furnish a replacement for, but not remove or install any product or component which proves defective within the above warranty and appropriate time periods stated.
- (2) BUYER notify RASMUSSEN of any defect within this warranty no later than thirty (30) days after a defect is discovered.
- (3) No product will be accepted for return or replacement without written authorization of RASMUSSEN. Before returning merchandise, write to RASMUSSEN Giving us full details of the complaint and a copy of the sales receipt or other evidence of the purchase date. Merchandise returned without proof of purchase date will be serviced out-of-warranty at our prevailing service and parts rates. If merchandise was damaged in transit, the file claim must be addressed as follows:

RASMUSSEN IRON WORKS INC 12028 E. PHILADELPHIA STREET WHITTIER, CALIFORNIA 90601

Shipping charges must be pre-paid by the buyer.
REPAIR OR REPLACMENT UNDER THIS WARRANTY
WILL BE SHIPPED FREIGHT COLLECT.

### **EXCLUSIONS FROM WARRANTY:**

- (1) The foregoing warranty is limited solely as set forth herein and applies only for the designated above.
- (2) RASMUSSEN shall not be liable for any loss, damage incidental or consequential damages of any kind, whether based upon warranty, contract, or negligence, arising in connection with the sale, use or repair of the product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
- (3) The maximum liability of RASMUSSEN in connection with this limited warranty shall not in any case exceed the contract price paid for the product claimed to be defective or unsuitable.
- (4) This warranty does not extend to any product manufactured by RASMUSSEN which has been subjected to misuse, neglect, accident improper installation, or use in violation of instructions furnished by RASMUSSEN. Do not remove Rating Plate/Warning Tags. These tags serve you and any future user as an integral Safety and identification component of the CHILLBUSTER gas log heater.
  - Removing these tags voids the warranty.
- (5) This warranty does not extend to or apply to any unit which has been repaired or altered in any place other that RASMUSSEN IRON WORKS INC. factory, or by persons not expressly approved by RASMUSSEN.
- (6) Components manufactured by any supplier other than RASMUSSEN shall bear only that warranty made by the manufacturer of that product.
- (7) Freight damage, cracking from thermal shock, and color changes occur from causes beyond manufacturer's control and are not covered by any warranty.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

RASMUSSEN IRON WORKS, INC. shall be held harmless from any and all claims by the buyer as a result of injury or damage to an ultimate user or other person caused by the product sold herein by the seller to the buyer, whether the injury or damage results from the assembly, product installation, operation, shipment, storage or manufacture of this product. RASMUSSEN IRON WORKS, INC makes no warranties, expressed or implied, other than those expressly stated herein.

# FOR CUSTOMER RECORDS ONLY. DO NOT SEND THIS CARD TO MANUFACTURER LOG MODEL: SAFETY CONTROL: DATE OF PURCHASE: INSTALLER: