



**Rasmussen**  
THE GAS LOG COMPANY

## Custom Embers Pan Burner

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# GENERAL INSTALLATION INSTRUCTIONS

ASSEMBLY, INSTALLATION, AND OPERATION INSTRUCTIONS FOR RASMUSSEN  
VENTED CUSTOM EMBERS PAN BURNER MODELS:

**CXF for use with Natural Gas; CXFA for use with Propane (LP) Gas**

**IMPORTANT** READ THESE INSTRUCTIONS CAREFULLY BEFORE  
STARTING INSTALLATION OF LOG SET.

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

## FOR YOUR SAFETY

### 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 neighbors phone. Follow the gas suppliers instructions.
- If you cannot reach your gas supplier, call the fire department.

## FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

## IMPORTANT INFORMATION

**THIS GAS LOG SET MUST BE INSTALLED IN A FULLY VENTED SOLID-FUEL BURNING FIREPLACE WITH A WORKING FLUE CONSTRUCTED OF NON COMBUSTIBLE MATERIAL.**

The minimum permanent free opening of the fireplace chimney or chimney damper must be at least the minimum Chimney Area shown below, based on a minimum chimney height of at least 8 feet. The area of the flue must not be less than 1/10 the area of the fireplace opening. **The flue must exhaust all products of combustion.**

The chimney damper must be fixed in a manner to maintain permanent free opening as outlined above at all times. To accomplish this, install the damper clamp (provided) on the edge of the damper blade to prevent its closing, drill a hole or holes in the damper, or remove damper completely.

The minimum size of the fireplace in which the log set is to be installed must be as follows:

### MINIMUM FIREPLACE SIZE IN INCHES

Model/Set Size	HEIGHT	DEPTH	REAR WIDTH	FRONT WIDTH	GAS PIPING	CHIMNEY AREA
CXF12 - 12 INCH	16	12	12	16	½" i.d.	6 INCH DIAMETER
CXF15 - 15 INCH	16	12	15	20	½" i.d.	7 INCH DIAMETER
CXF18 - 18 INCH	16	14	18	24	½" i.d.	7 INCH DIAMETER
CXF21 - 21 INCH	16	14	21	27	½" i.d.	8 INCH DIAMETER
CXF24 - 24 INCH	16	14	24	32	½" i.d.	8 INCH DIAMETER
CXF30 - 30 INCH	16	14	30	38	½" i.d.	9 INCH DIAMETER
CXF36 - 36 INCH	18	16	36	44	½" i.d.	10 INCH DIAMETER

**Glass doors must be wide open when burner is lighted to allow air for safe combustion, venting and cooling of valves.**

**THIS BURNER IS FOR USE IN FULLY FUNCTIONING WOOD BURNING  
FIREPLACE WITH THE DAMPER WIDE OPEN.  
THE FLUE MUST VENT ALL PRODUCTS OF COMBUSTION.**

### **IMPORTANT INFORMATION (continued)**

A fireplace screen must be in place when the log set is in operation and, unless other provisions for combustion air are provided, the screen shall have opening(s) for introduction of combustion air.

The minimum inlet gas supply pressure for the purpose of input adjustment shall be 6 inches of water column on natural gas and 11 inches of water column on propane gas.

The maximum inlet gas supply pressure shall be 7 inches of water column on natural gas and 14 inches of water column on propane gas.

The installation and the provision for combustion and ventilation air must conform with the NATIONAL FUEL GAS CODE ANSI Z223.1 latest edition.

The gas log set 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). The gas log set 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).

The area around the gas log set must be clear and free from combustible materials, gasoline and any other flammable vapors and liquids.

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.

**WARNING: A SAFETY PILOT MUST BE INSTALLED ON ALL UNITS DESIGNED OR CONVERTED TO  
BURN PROPANE/LP GAS**

**When used with LP (Propane) Gas, ensure that the Burner Pan is filled with the  
BLACK VOLCANIC ASH. White Sand is ONLY for use with Natural Gas.**

### **WARNING: CARBON MONOXIDE POISONING MAY LEAD TO DEATH**

When used without fresh air, gas log set may give off carbon monoxide, an odorless, colorless, poisonous gas. Some people - pregnant women, persons with heart or lung disease, anemia, or under the influence of alcohol and persons at high altitudes are more affected by carbon monoxide than others.

Early signs of carbon monoxide poisoning resemble the flu: Headache, dizziness, and/or nausea. If you have these signs, the gas log may not be installed or working properly, or the chimney flue may be blocked.

**GET FRESH AIR AT ONCE!** Have gas log set and chimney flue serviced before using again.

**DAMPER MUST BE WIDE OPEN WHILE BURNING  
OPEN A WINDOW AN INCH OR TWO FOR  
FRESH AIR WHEN USING YOUR GAS LOG  
SOLID FUELS SHALL NOT BE BURNED IN A FIREPLACE  
WHERE A DECORATIVE APPLIANCE IS INSTALLED.**

**WARNING:** 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.

## WARNING! CHECK FOR PROPER VENTING

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

**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 and furnishings and could cause serious illness. If improper venting is suspected, **IMMEDIATELY HAVE LOG SET AND CHIMNEY FLUE SERVICED.**

Periodically examine and clean the venting system. Once a year, a qualified agency should examine and clean the venting system of your solid fuel burning fireplace.

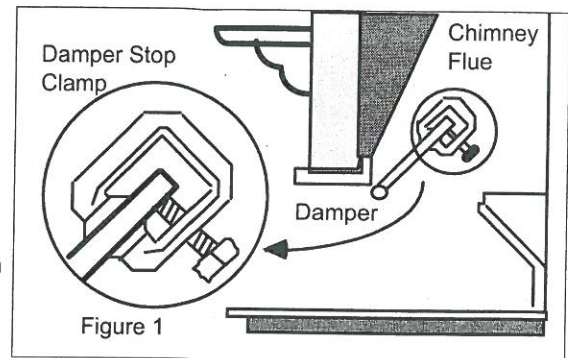
# ATTENTION

READ THESE INSTRUCTIONS  
CAREFULLY BEFORE ASSEMBLY

**REQUIRED TOOLS AND MATERIALS:** Screwdriver, Adjustable Wrench, Pipe Wrench, Pipe Sealing Compound, Matches.

## PREPARATION:

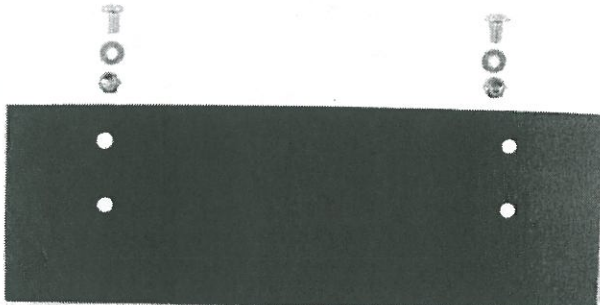
1. This Gas Log set must be **INSTALLED IN A FULLY VENTED METAL OR MASONRY FIREPLACE WITH A WORKING FLUE THAT IS SAFE FOR BURNING A WOOD FIRE.** The Flue **MUST BE FREE OF ALL OBSTRUCTIONS.**
2. Turn off gas supply to fireplace.
3. Clean fireplace floor of any ashes.
4. Attach damper clamp over edge of fireplace damper blade as shown. When installed properly, damper clamp prevents accidental full closure of damper. If unable to install provided damper clamp, consult **IMPORTANT INFORMATION** on front page of these directions for alternatives.



## STEP ONE: Burner Pan Assembly

### Attaching Rear Burner Pan Leg

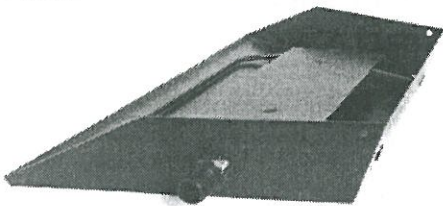
Photo 1



The Custom Embers Burner Pan has an adjustable rear leg (see Photo 1) that provides either a flat or an angled surface, with two different angles, depending on the orientation of the leg.

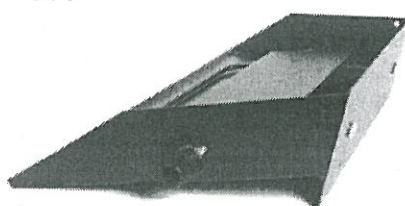
1. Insert two **BOLTS** through the **WASHERS** and the holes in leg at desired height (see photos below). The height of the back wall of the burner pan when **flat** on the ground is 2 5/8"; in the **medium** position is 3 3/4"; and is 5 1/8" in the **high** position (see photos 2, 3, and 4)
2. Wrench tighten **NUTS** securely to ensure mechanical strength and a tight gas seal.

Photo 2



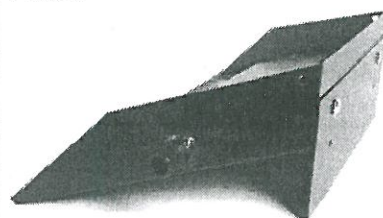
**Pan Flat** (install Bolts, Washers and Nuts to make a gas-tight seal in the holes in the back wall of burner.

Photo 3



**Medium Position**

Photo 4



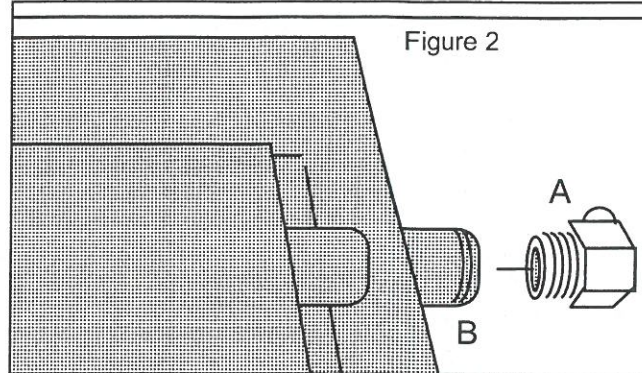
**High Position**

## Standard Match Lighted

- (For use only with Natural Gas Models CXF)

**WARNING: A SAFETY PILOT CONTROL MUST BE INSTALLED ON ALL UNITS DESIGNED OR CONVERTED TO BURN PROPANE/LP GAS**

1. Apply pipe compound to threaded end of **3/8" FLARED BRASS ELBOW (A)**. Do not apply pipe compound to flared end. Thread into **BURNER PAN INLET (B)** and wrench tighten. See Figure 2



Refer to assembly and installation instructions that come with kits when installing accessory safety pilot lighting kits.

- SPK3-CS, RPK3-CS, RPK-F10-CS, RMC1-CS (For use with Natural Gas Models CXF)
- SPK3-CA, RPK3-CA, RPK-F10-CA, RMC1-CA (For use with Propane Gas Models CXFA)

## STEP TWO: Burner Pan Positioning.

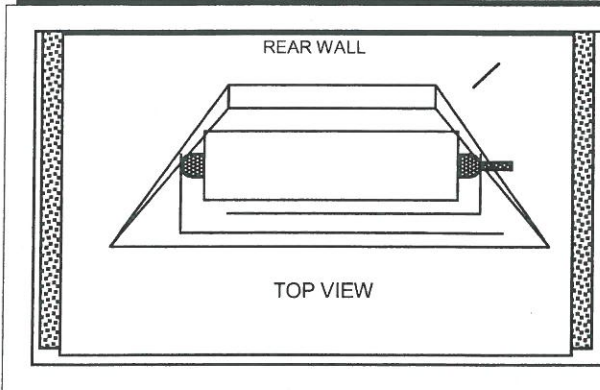


Figure 3

1. Place **BURNER PAN** inside firebox as far to the rear as possible. Then center **BURNER PAN** left to right.

See Figures 3 and 4.

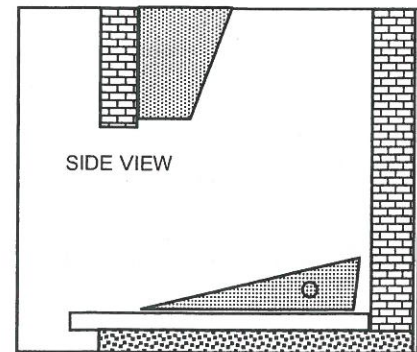


Figure 4

## STEP THREE: Gas Supply Connection

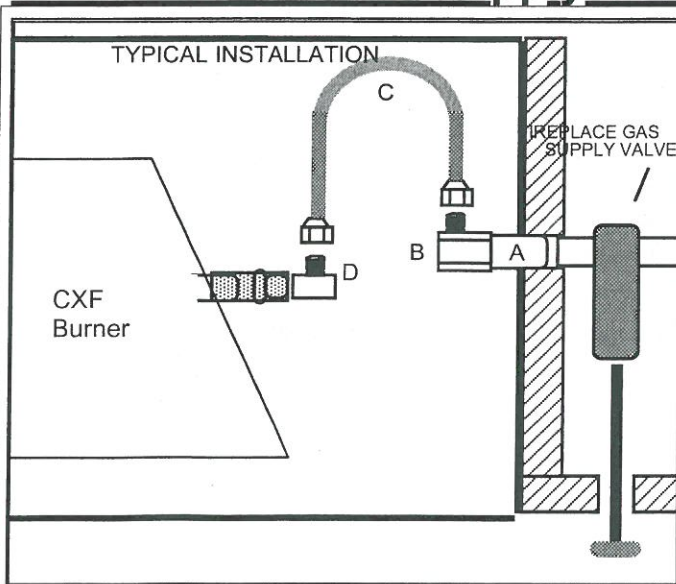


Figure 5

**ENSURE THAT GAS SUPPLY TO FIREPLACE IS TURNED OFF**

1. Apply pipe compound to threaded end of **GAS SUPPLY PIPE (A)**. Thread **1/2" FIP x 3/8" FLARE ELBOW (B)** onto **GAS SUPPLY PIPE (A)** and wrench tighten. See Figure 12.
2. With **BURNER PAN** inside firebox, thread (without pipe compound) one end of the **ALUMINUM CONNECTOR TUBE (C)** to the **1/2" FIP x 3/8" FLARE ELBOW (B)** and wrench tighten.
3. Carefully bending **ALUMINUM CONNECTOR TUBE (C)**, align and connect, without pipe compound, to the **FLARED BURNER INPUT FITTING (D)**. Wrench tighten. Figure 5

**NOTE:** If bent into too small of a radius the **ALUMINUM CONNECTOR TUBE (C)** may kink or break, causing a gas leak.

4. Turn gas supply to fireplace on.
5. Test all connections for leaks with soapy water solution. If solution bubbles, turn off gas supply, re-tighten fitting and recheck.

**WARNING: DO NOT FLAME TEST FOR LEAKS.**

## **STEP FOUR: White Sand, Black Volcanic Ash and Ember Magic Placement.**

1. Completely fill **BURNER PAN**, including underneath the **BAFFLE PLATE**, with the appropriate **PAN MEDIUM**. The **WHITE SAND** is for use with **Natural Gas**, the **BLACK VOLCANIC ASH** is for use with **Propane/LP Gas**. Use the **ENTIRE CONTENTS** of the bag provided with the burner.

Be sure to completely cover **BURNER TUBES** (main and ember boosters). See Figure 13.

2. Sprinkle a light covering of "**EMBER MAGIC**" over the **PAN MEDIUM**. Pull apart "**EMBER MAGIC**" fiber material to enhance the glowing ember effect.

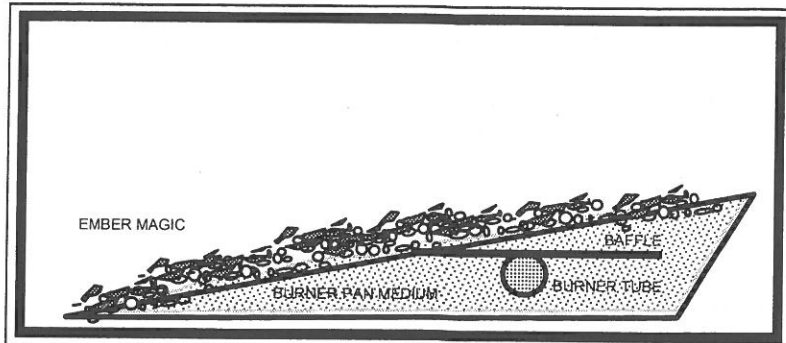
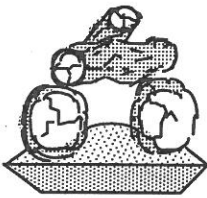
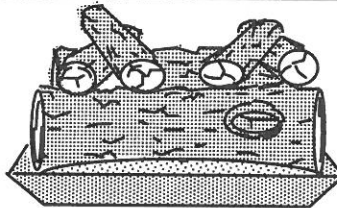


Figure 6

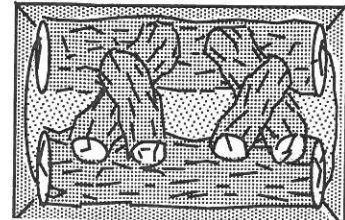
## **STEP FIVE: Log Placement.**



SIDE VIEW



FRONT VIEW



TOP VIEW

(1) **LOG SET.** Place large **LOGS** on filled **BURNER PAN**. Allow 2" to 3" space between front and rear logs. Lay smaller logs on bottom in cross position. **CAUTION:** Crowded logs will cause poor combustion and result in excessive soot formation.

(2) **Pine Cones, FireBalls, FireShapes and FireStones:** Spread **EMBER MAGIC** across **PAN**. Place large **Shapes** to form a base, then fill in gaps with smaller **Shapes**.

## **STEP SIX: Lighting Instructions and Operation.**

**IMPORTANT: CHIMNEY DAMPER MUST BE WIDE OPEN**

### **MANUAL MATCH LIGHTING.**

#### **• Standard Match Lit Set**

**(Applies only to Natural Gas Models CXF)**

1. Place lighted match on embers near inlet end of burner. **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. (See **FIGURE 7**)
3. Adjust **FIREPLACE GAS SUPPLY VALVE** for desired flame height.
4. **SHUTDOWN:** Close **FIREPLACE GAS SUPPLY VALVE** completely.

Refer to the lighting and operation instructions that come with kits when using an accessory safety pilot lighting kits.

- **SPK3-CS, RPK3-CS, RPK-F10-CS, RMC1-CS** (For use with Natural Gas Models CXF)
- **SPK3-CA, RPK3-CA, RPK-F10-CA, RMC1-CA** (For use with Propane Gas Models CXFA)

### **CUSTOMER RESPONSIBILITY:**

**THIS BURNER IS FOR USE FOR USE IN A FULLY FUNCTIONING WOOD BURNING FIREPLACE WITH THE DAMPER WIDE OPEN. THE FLUE MUST VENT ALL PRODUCTS OF COMBUSTION..**

Your Gas Log Set is designed to burn with a natural smoky yellow flame that produces carbon soot. Like a wood fire, burning a gas log set with the flue undersized, blocked or closed will cause fumes, smoke and soot to enter into the living space, which may be harmful to health and property.

Crowding of the logs and too little pan filler over the burner tube can result in greater amounts of soot, but there is no adjustment that will eliminate soot from a vented pan burner set. Many people feel that the soot makes the logs look more natural, just like a real wood fire. For those who do not, the soot can be either brushed or vacuumed away. You can also remove the logs from the fireplace, hose them off and brush away the soot with a soft bristle brush. Alternatively, and more easily, after burning the logs for a few minutes to get them hot, you can spray the sooty area with water from a spray bottle. The soot dislodges and goes up the chimney.

If you are experiencing any soot into the room, this is an indication of problems with the performance of your chimney. You should not have any soot enter into in your room if the fireplace chimney is venting properly. There are only two places for the soot to go: (1) up the chimney, or (2) into the room. The reasons for soot going into the room may include:

- Damper not open or not open far enough.
- Too small of a flue.
- Too large of a fireplace opening in comparison to the flue opening (1/10 rule).
- Obstruction in the chimney. Bird nest, creosote build-up, etc.
- Negative room pressure created by kitchen exhaust fans, ceiling fans, etc.
- Log set installed too close to the opening.
- Air flows outside the house that do not promote proper draft. May require lengthening the chimney stack or the installation of a chimney cap.
- Chronic "smoking fireplace". Fireplace design related.
- Chimney "cold block" that inhibits air flow up the chimney.

The cause of the soot entering the living space must be corrected before resuming use of your fireplace.

**DAMPER MUST BE FULLY OPEN WHEN BURNING A GAS LOG SET.** Never burn wood with your gas log set as this will reduce the life of your Gas Log Set and will void any warranty.

## **CUSTOMER MAINTENANCE:**

Periodically examine and clean the venting system. Once a year, a qualified agency should examine and clean the venting system of your solid fuel burning fireplace.

Periodically check the pilot burner (if equipped) and main burner flames. The pilot burner should be free of lint and dirt for best performance. The main burner should produce a relatively even flame from side to side. If not, the sand-granules may have become packed and can be loosened by working a wire or knife blade under the sand or by refilling the pan as described in section four.

### **PARTS LIST:**

- |                       |  |   |
|-----------------------|--|---|
| - Burner Pan          | - Brass Connector Fitting  | - Logs: Specify Front, Rear or Top and style/size and shape (Top logs). |
| - Rear Leg            | - Damper Stop Clamp (DC1)  | - Instructions  |
| - Nuts/Bolts (2 each) | - Ember Magic  | With CXFA:  |
| - Connector Tube      | - Pan Filler: White Sand (Natural Gas-CXF) or Black Volcanic Ash (LP Gas-CXFA) | - Mixer Assembly (MA)   |

# LIMITED LIFETIME 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 Log Set and accessories against defects in materials and workmanship, and suitable for a particular purpose, for a period of:

- (1) LOG CASTING - All logs are guaranteed against burnout in the original installation for the lifetime of the initial purchaser.
- (2) BURNERS/GRATES - 2 years from date of purchase.
- (3) SAFETY CONTROLS - Pilots and safety controls are covered by warranty of the original manufacturer only.

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

## WARRANTY ADJUSTMENT:

- (1) 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 shall 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 full details of the complaint and a copy of sales receipt or other evidence of 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, file claim immediately with the carrier. Products returned 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 REPLACEMENT 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 periods 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.
- (5) This warranty does not extend to or apply to any unit which has been repaired or altered at any place other than 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, 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.

## CONSUMER RECORD CARD



**FOR CUSTOMER RECORDS ONLY  
DO NOT SEND THIS CARD TO MANUFACTURER**

LOG MODEL: \_\_\_\_\_

SAFETY CONTROL: \_\_\_\_\_

DATE OF PURCHASE: \_\_\_\_\_

DEALER: \_\_\_\_\_

INSTALLER: \_\_\_\_\_

