

OWNERS MANUAL  
INSTALLATION, OPERATION, & MAINTENANCE INSTRUCTIONS



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**ICVE & ICVE-2**

**ELECTRIC CONVECTION OVENS**

**WARNING:** Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

**FOR YOUR SAFETY**

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

**PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE**

**IMPORTANT**

Electrical wiring from the electric meter, main control box or service outlet to appliance must be electrically grounded in accordance with local codes, or in the absence of service of local codes, with the National Electrical Code ANSI/NFPA 70(latest edition). In Canada, conform with Canadian Electrical code CSA-C22.2.

**IMPORTANT**

Installing, Operating and Service Personnel:

Installation of the equipment should be performed by qualified, certified, licensed and/or authorized personnel who are familiar with and experienced in state/local installation codes. Operation of the equipment should be performed by qualified or authorized personnel who have read this manual and are familiar with the function of the equipment. Service of the equipment should be performed by qualified personnel who are knowledgeable with Imperial Ranges

**SHIPPING DAMAGE CLAIM PROCEDURE**

The equipment is inspected & crated carefully by skilled personnel before leaving factory. The transportation company assumes full responsibility for safe delivery upon acceptance of this equipment. If shipment arrives damaged:

1. Visible loss or damage: Note on freight bill or express delivery and have signed by person making delivery.
2. File claim for damages immediately: Regardless of extent of damages.
3. Concealed loss or damage: If damage is noticed after unpacking, notify transportation company immediately and file "Concealed Damage" claim with them. This should be done within fifteen (15) days from date delivery is made to you. Retain container for inspection.

## **GENERAL**

The ICVE-Series Electric Convection Ovens features a 500°F thermostat, timer, porcelain interior and a two-speed, ½ HP blower motor as standard equipment. Ovens equipped with standard voltages are 208 or 240 V, 60 Hz, single-or three-phase. Ovens equipped for 480 V, 60 Hz, three-phase electrical specifications are optional.

The ICVE-Series Oven is a single cavity oven furnished with five racks. The ovens that have simultaneously opening doors with chain mechanism above are standard; independently opening doors are optional. Oven lights with on-off switch are standard on all models.

An open stand with lower storage rack is available as an option.

Stacked ovens are furnished with either Stacking Kit using (6" legs) or Stacking Kit using (casters) for mounting one oven on top of the other.

Additional racks are available as accessories.

## **INSTALLATION**

### **UNPACKING**

Immediately after unpacking the oven, check for possible shipping damage. If the oven is found to be damaged, follow the shipping damage claim procedure.

Prior to installation, verify that the electrical service agrees with the specifications on the oven data plate, located in the front of the oven below the oven section.

### **LOCATION**

The installation location must allow adequate clearances for servicing and proper operation. For solid state and digitally controlled models, there must be 18" (45cm) of clearance on the right side of the oven from any open flame.

### **INSTALLATION CODES AND STANDARDS**

In the United States, install the oven in accordance with: 1) State and local codes; 2) National Electrical code, NFPA-70 (latest edition); 3) NFPA Standard #96, Vapor Removal from Cooking Equipment (latest edition), available from National Fire Protection Association, Bartterymarch Park, Quincy, MA 02269.

In Canada, install the oven in accordance with: 1) Local codes; 2) Canadian Electrical code, CSA Standard C22.2 No. 1 (latest edition) and 3) Canadian Standard for Commercial Cooking Equipment, CSA Standard C22.2 No. 109 (latest edition)

### **INSTALLING BASIC OVEN**

The basic oven must be installed on legs or mounted on a modular stand. Installations on concrete bases or other supports restricting air circulation underneath the oven is not advisable and may void the warranty. If using the modular stand, set the oven on the stand after unpacking.

### **CLEARANCES**

The appliance area must be kept free and clear of all combustibles. This unit is design-certified for the following installations only:

The clearances from **combustible** and **noncombustible** construction are as follows:

	<u>Combustible</u>	<u>Noncombustible</u>
Back	6"	0
Sides	6"	0

**DO NOT MOUNT** oven on a curb base. Use legs/casters provided. Adequate air space at the bottom and rear of the unit must be provided for proper venting of the blower motor.

**ASSEMBLY**

DO NOT USE door to lift or move oven. All ovens must be installed on leg assembly or casters shipped with the unit. The leg/stand assembly pans or casters are shipped separately.

**SINGLE OVEN ICVE-1**

Assemble the leg/stand assembly as follows:

1. Remove legs from the package.
2. Bolt legs directly to bottom of oven.

If provided with optional bottom shelf and rack support check instructions included in the shipment.

**DOUBLE OVEN ICVE-2**

6" leg assembly is provided.

1. Match holes on the legs with oven bottom base and screw with bolts provided.
2. Set top oven on bottom oven.
3. Bolt down at rear and front. Remove top kick plate to access screwing the front bolts.

**CASTER INSTALLATION**

If casters are provided, match holes on the caster with holes on the oven bottom base and fasten with bolts provided. **NOTE:** Front casters are locking type.

**ELECTRICAL CONNECTIONS**

**WARNING**  
ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE ANSI/NFPA 70(LATEST EDITION) AND/OR OTHER LOCAL CODES.

**WARNING**  
DISCONNECT ELECTRICAL POWER SUPPLY AND PLACE A TAG AT THE DISCONNECT SWITCH TO INDICATE THAT YOU ARE WORKING ON THE CIRCUIT.

A terminal block is provided on the back of the appliance for connecting to the power supply. Follow the electrical schematic diagram located on the rear panel of the appliance when making connections to the supply lines.

**ELECTRICAL DATA**

TOTAL KW	208-240 V			480 V			NOMINAL AMPERES PER LINE WIRE											
	3-PHASE LOADING			3-PHASE LOADING			3-PHASE									1-PHASE		
	KW PER PHASE			KW PER PHASE			208 V			240 V			480 V			208 V	240 V	
	L-1-L-2	L-2-L-3	L-1-L-3	L-1-L-2	L-2-L-3	L-1-L-3	L1	L2	L3	L1	L2	L3	L1	L2	L3			
PER OVEN	11	4	4	4.5	4	4	4.5	26	26	29	25	22	24	11	13	12	48	42

## **ELECTRICAL CONNECTIONS (Stacked Ovens)**

### **WARNING**

ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE ANSI/NFPA 70(LATEST EDITION) AND/OR OTHER LOCAL CODES.

### **WARNING**

DISCONNECT ELECTRICAL POWER SUPPLY AND PLACE A TAG AT THE DISCONNECT SWITCH TO INDICATE THAT YOU ARE WORKING ON THE CIRCUIT.

Make sure that electrical power supply agrees with the specifications on the oven data plate, the wiring diagram on the oven and Electrical Data.

Each oven is supplied with a separate terminal block proved on the back of the appliance. Connections to the supply lines are the same as described for the single oven. Refer to reference drawing supplied with stacking kit for electrical connection instructions.

### **LEVELING**

A carpenter's level should be placed on the center across the range top and the unit leveled both front-to-back and side-to-side. If it is not level, cakes, casseroles, and any other liquid or semi-liquid batter will not bake evenly, burner combustion may be erratic and the unit will not function efficiently.

If the floor is relatively smooth and level, the unit may be further leveled with adjustment in the foot of the leg. Adjust to the high corner and level the unit with metal shims if the adjustment required exceeds the 1 ¼" adjustment available. Units with casters must be leveled with shims. A unit will probably not return to the same position after being moved, requiring re-leveling after each move.

### **AIR SUPPLY & VENTILATION**

The area in front of, around, and above the appliance must be kept clear to avoid any obstruction of the flow of combustion and ventilation air. Adequate clearance must be maintained at all times in front and at the sides of the appliances for servicing and proper operation.

Means must be provided for any commercial, heavy-duty cooking appliance to exhaust combustion waste products to the outside of the building. Usual practice is to place the unit under an exhaust hood. Filters and drip troughs should be part of any industrial hood, but consult local codes before construction and installing a hood.

Strong exhaust fans in this hood or in the overall air conditioning system can produce a slight vacuum in the room and/or cause air drafts, either of which can interfere with pilot or burner performance and can also be hard to diagnose. Air movement should be checked during installation; if pilot or burner outage problems persist, make-up air opening or baffles may have to be provided in the room.

### **FINAL PREPARATION**

On initial installation, turn the oven to 250° and operate for about 1 hour, then reset the thermostat to its maximum and operate for another hour. This will drive off any solvents remaining in the unit. At the end of this second hour, turn the thermostat OFF, open the door and allow the unit to cool. Oven should then be thoroughly washed using hot, soapy water before being used.

## OPERATING LIGHTING INSTRUCTIONS

### Preheating:

1. Turn POWER SWITCH to ON. Motor will come on, indicating that power to oven is on.
2. Set thermostat to desired temperature. The red light comes on indicating calling for heat.
3. Prepare product and place in suitable pans. When RED HEAT light goes off, oven has reached desired preheat temperature.

### Cooking:

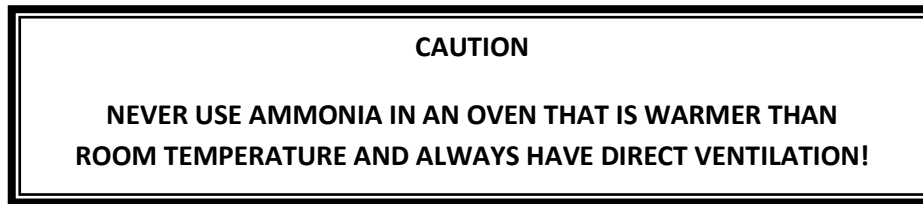
1. Open doors and load the product into the oven. Place pans in the center of the racks. Close doors.
2. Set the timer. After the preset time lapses, turn TIMER to OFF position to stop alarm.
3. When product is done, open doors and carefully remove cooked product from the oven. Care should be taken when wiping up any spills, as oven is still hot.

### End of Day:

1. Turn thermostat to OFF.
2. Turn POWER SWITCH to COOLDOWN. Leave doors open while the fan is on to cool the oven.
3. When oven has cooled sufficiently, turn POWER SWITCH to OFF and clean the oven.

## CLEANING AND MAINTENANCE

Any piece of equipment works better and lasts longer when maintained properly. Cooking equipment is no exception. You Imperial range and oven must be kept clean during the working day and thoroughly cleaned at the end of the day.



### DAILY:

#### OVENS

1. Remove the baking racks. Wash in hot soapy water and replace after the rest of the oven is cleaned.
2. Scrape off any food particles with a nylon griddle scraper. Be very careful about scratching the porcelain finish on the oven liner panels.
3. Wash all the above with hot soapy water, then reassemble.
4. Baked on spills may be loosened and stubborn stains removed with ordinary household ammonia and scrubbing with a nylon pad in a cold oven only.
5. Do not allow spray type oven cleaners to come into contact with the temperature probe in the oven.
6. After cleaning the oven, rinse well with ¼ cup of vinegar to one quart of clear water solution to neutralize any caustic residue of the cleaning compound. Wipe dry.
7. To increase the life of the motor, follow these instructions:
  - a. Never run oven with motor off.
  - b. After you finish cooling and the oven is not to be used for more than ½ hour, place the toggle switch to the “COOL DOWN” position and open the door. When oven temperature is equal to room temperature turn unit off.

### **PERIODIC CLEANING:**

Check the ventilation system periodically to see that nothing has fallen down into the exhaust vents.

Lubricate the pivot pins of the oven door hinge where the right and left arms connect to the door. Use a multipurpose lubricating oil sparingly so as to not drip oil needlessly.

Your Imperial range should be checked for safe and efficient operation at least yearly by a qualified service company.

### **STAINLESS STEEL:**

All stainless steel body parts should be wiped regularly with hot soapy water during the day and with a liquid cleaner designed for this material at the end of each day. **DO NOT USE** steel wool. Abrasive cloths, cleansers or powders to clean stainless surface! If it is necessary to scrape stainless steel to remove encrusted materials, soak in hot water to loosen the material, then use a wood or nylon scraper. **DO NOT USE** a metal knife, spatula, or any other metal tool to scrape stainless steel! Scratches are almost impossible to remove.

## **TIPS ON USING IMPERIAL CONVECTION OVEN**

1. In general, reduce temperature 50° from conventional recipe.
  - a. Bakery products, reduce temperature 50° and time 25 to 33% less.
  - b. Casserole cookery, reduce temperature about 50° and time 25 to 50%
  - c. Meat roasting, reduce temperature to 275° - 300°. Use meat thermometer. Cooking time may be reduced up to 50%.
2. Use fan for preheating and baking.
3. Check product at ½ stated time of regular recipe.
4. Level pans bake more evenly: warped pans will give uneven baking results.