

# OWNER'S MANUAL INSTRUCTIONS, INSTALLATION, OPERATION, MAINTENANCE RHPE & RTGE SERIES (ELECTRIC COUNTERTOPS)

#### FOR YOUR SAFETY

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

#### 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.

#### RETAIN THIS MANUAL FOR FUTURE REFERENCES.

#### **IMPORTANT.** Installing, Operating and Service Personnel:

Safe and satisfactory operation of your equipment depends to a great extent on its proper installation. Installation must conform with local codes, or in the absence of local codes, to the **National Electrical Code**, **ANSI/NFPA-70** (latest edition). In Canada, Installation should conform to **Canadian Electrical Code CSA-C22.2.** 

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 local codes, with the **National Electrical Code ANSI/NFPA-70** (latest edition) or the **Canadian Electrical Code CSA-C22.2.** 

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 functions of the equipment.

Service of the equipment should be performed by qualified personnel who are knowledgeable with ROYAL RANGE OF CALIFORNIA, INC.

#### **SHIPPING DAMAGE:**

The equipment is inspected and crated carefully by skilled personnel before leaving the factory. The transportation company assumes full responsibility for safe delivery upon acceptance of this equipment. Upon receipt of shipment, immediately unpack and check for possible shipping damage. If the equipment is found to be damaged, save the packaging material and contact the carrier immediately.

#### **RATING PLATE:**

The rating plate is located on the right side of the appliance. Information on this plate includes the model, serial number, power input, ampere draw and clearances. This data is essential for proper identification when communicating with the factory regarding a unit, requesting parts or information.

ROYAL RANGE COOKING APPLIANCES MUST BE CONNECTED ONLY TO THE POWER INPUT IDENTIFIED ON THE RATING PLATE.

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#### **CLEARENCES:**

The appliance area must be kept free and clear of all combustibles.

Install only in noncombustible surroundings.

#### **LEVELING:**

Place a Carpenter's level on the top of the appliance. The appliance should be leveled both front-to-back and side-to-side for optimum performance. The appliance may be leveled by adjusting the foot of the leg. An appliance may not return to the same position after being moved, requiring re-leveling after each and every move.

#### **ASSEMBLY:**

The appliance is shipped fully assembled, except for the legs. The appliance is provided with 4" adjustable steel legs.

#### **INSTALLATION OF LEGS:**

- 1. Carefully lift appliance to access the bottom for leg installation.
- 2. Thread leg into insert nut located in each of the four corners. NOTE: 60" and 72" appliances have (2) additional legs to support and distribute the weight.

#### **INSTALLATION INSTRUCTIONS:**

The area around the appliance must be kept free and clear of combustibles such as solvents, cleaning liquid, broom, rags, etc. Proper clearances must be provided at the front of the appliance for servicing and proper operation.

Provisions shall be incorporated in the design of the kitchen, to ensure that the electrical service agrees with the specifications on the rating plate located on the right side.

The installation must conform to local codes, or in the absence of local codes, to the National Electrical Code ANSI/NFPA 70-(latest edition) or the Canadian Electrical Code CSA-C22.2.

#### **ELECTRICAL CONNECTION:**

**WARNING:** Electrical and grounding connections must comply with the applicable portions of the National Electrical Code and/or other local electrical codes.

**WARNING**: Disconnect electrical power supply and place a tag at the disconnect switch to indicate that you are working on the circuit.

Position the appliance in its final location. Bring conduit containing the proper wire supply to the appliance through the hole located on the terminal block bracket on the back of the appliance. Select the size and type of field wire in accordance with the National Electrical code suitable for carrying the equipment's rated amps and voltage. Use field wires suitable for 75°C on units carrying more than 80 amps.

Royal Range Electrical appliances have a single point power connection at the terminal block. Check for single phase or three phase connection and connect accordingly. 208V or 240V single and three phase wires must be properly connected as shown in the wiring diagram located on the back of the appliance. Do not cut or remove the grounding wire. Disconnect power supply before cleaning or servicing. The electrical service in the building must be equipped with a properly grounded receptacle, in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70-(latest edition) or the Canadian Electrical Codes, CSA-C22.1.

**NOTE:** If you have purchased a 48", 60" or 72" model, it will have two (2) electrical connections. The left and right portions of the appliance are supplied with individual branch circuits, the connection points are found on the back of the appliance on the left and right sides.

**NOTE:** The 48", 60" and 72" appliances have more than one source of electrical supply. Each source MUST be connected in accordance with the **National Electric Code (latest edition)** or other local codes.

Connect supply leads to terminal block and green grounding lead to the labeled ground lug. The supply wire should be anchored through the access hole with a bulkhead fitting. Appliances are shipped wired for 3 phase or 1 phase service but may be changed in the field. Refer to wiring diagram and schematic decal attached to the appliance for necessary alterations.

#### **OPERATION:**

**WARNING:** The appliance and its parts are hot. Be very careful when operating, cleaning or servicing the appliance.

#### **CONTROLS:**

**Hot Plate Controls:** Infinite heat switches that control and maintain heat to the hot plate (top

surface heaters). The controls are arranged in pairs; the left knob controls the

rear hot plate and the right knob controls the front hot plate.

**Griddle Thermostat:** Regulates the amount of heat needed to maintain the set temperature. Each 12"

section of the griddle has its own thermostat with a temperature range of 200°F

to 500°F.

#### **HOT PLATE ELEMENTS:**

Hot Plate elements are most efficient when used with utensils having a maximum inside diameter of 10" (254 mm) or a minimum inside diameter of 9".

<u>NOTE:</u> It is important that the utensils used have a flat bottom that sits uniformly on the surface of the plate. Utensils with curved bottoms (either through design or warped from use) will have poor heat transfer. This will result in poor cooking performance.

The hot plates are rated for 2000 watts each and are controlled by an infinite heat switch. Each switch has a HI and LO setting. The HI setting is full heat. A hot plate will reach cooking temperature from room temperature in 5 to 7 minutes at a HI switch setting. Use the HI setting to start cooking quickly and to bring water to a boil.

#### **TIPS FOR HOT PLATE COOKING:**

- 1. Cooking utensils used should fit the hot plate inside diameter.
- 2. Use straight-sided pots and pans with flat-bottoms.
- 3. For stock pot work, use covers. Water will boil much sooner and much less heat is required for cooking in a covered container.
- 4. Turn OFF hot plates a few minutes before cooking is completed to use the heat stored in the plate.
- 5. A hot plate should not idle unloaded. The hot plate will reach very high temperatures, which can cause the casting to warp or dome.

#### **GRIDDLE:**

Griddles are supplied with a 3400 watt heating element per 12" of griddle surface. Each heating element is individually controlled by a thermostat with a range of 200°F to 500°F.

#### **POWER OUTAGE:**

If the appliance is left unattended during the power outage, turn all control knobs/switches OFF. When power is restored, turn desired control knobs/switches back on.

#### **FINAL PREPARATION:**

#### **TOP SECTION:**

New units are wiped clean with solvents at the factory to remove any visible signs of dirt, oil or grease. Food preparation surface should be washed thoroughly with hot soapy water before using.

#### **GRIDDLE:**

New griddles should be seasoned by following these steps and start from cold:

- 1. Clean the griddle surface thoroughly with hot soapy water to remove the protective oil coating applied at the factory.
- 2. Rinse with a mixture of ¼ cup vinegar to one quart water.
- 3. Apply unsalted solid shortening or liquid frying oil evenly over the entire griddle surface.
- 4. Turn ON all griddle thermostats to 350°F, wait until the shortening/oil begins to smoke, then turn the thermostats OFF.
- 5. Carefully rub the now-melted shortening into the griddle surface with a soft cloth, moving in the direction of the surface polish marks and covering the entire surface.
- 6. Let the griddle cool, then repeat steps 3, 4 & 5 as needed.

#### **CLEANING AND MAINTENANCE:**

**WARNING:** Disconnect electrical power supply before cleaning.

**<u>CAUTION:</u>** Never use ammonia on an appliance that is warmer than room temperature and always have direct ventilation.

Any piece of equipment works better and lasts longer when maintained properly. Cooking equipment is no exception. Your Royal Range appliance must be kept clean during the working day and thoroughly cleaned at the end of the day.

#### **DAILY:**

#### **TOP SECTION:**

Establish a regular cleaning schedule. Any spills should be wiped off immediately. The unit should be allowed to cool down before cleaning any exterior surfaces. Wipe exposed cleanable surfaces when cool with mild detergent and hot water. Dry thoroughly with a cloth.

#### **GRIDDLE:**

- 1. Scrape with a nylon griddle scrapper to remove cooked on spills. Use a fine grained stone only when absolutely necessary.
- 2. Wipe away any griddle stone dust and food particles with a soft cloth.
- 3. Wash with hot soapy water, then rinse with vinegar and water.
- 4. Rinse again with clear water.
- 5. Re-season with shortening/oil.

**WARNING:** Do not apply cold water to a hot griddle. This promotes griddle warping and can cause the griddle to crack.

#### **PERIODIC CLEANING:**

Wipe exposed, cleanable surface when cool.

#### **STAINLESS STEEL PARTS**

Do not use steel wool, abrasive cloths, cleaners or powders to clean stainless steel surfaces. All stainless steel parts should be wiped regularly with hot soapy water during the day and with a stainless steel liquid cleaner at the end of the day. 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.

#### **SHUTDOWN:**

#### **HOT PLATES:**

Turn all switches to the OFF position.

#### GRIDDLES

Turn all thermostats to the OFF position.

### **ELECTRICAL DATA:**

STANDARD VOLTAGES - 208 VOLTS, 240 VOLTS, 50/60 Hz, SINGLE OR THREE PAHSE											
MODEL	TOTAL	208 VOLTS 3 PH			<b>208 VOLTS 1 PH</b>		240 VOLTS 3 PH			240 VOLTS 1 PH	
	KW	L1	L2	L3	L1	L3	L1	L2	L3	L1	L3
RHPE-12-1	2				10	10				9	9
RHPE-12-2	4	10	20	10	20	20	9	18	9	18	18
RHPE-24-4	8	20	37	20	40	40	18	33	18	35	35
RHPE-36-6	12	35	35	35	61	61	32	32	32	53	53
RTGE-12	3.4				17	17				15	15
RTGE-24	6.8	17	27	17	33	33	15	24	15	29	29
RTGE-36	10.2	29	29	29	50	50	25	25	25	43	43

## **NOTES**