3245 Corridor Drive, Eastvale, CA 91752
800.769.2414 • 951.360.1600
951.360.7500 (Fax)

OWNER'S MANUAL
INSTRUCTIONS, INSTALLATION, OPERATION, MAINTENANCE
RHEF SERIES (EM, DM-2 & CM)

****READ THIS MANUAL IN ITS ENTIRETY BEFORE USING THIS FRYER****

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.

"Instructions to be followed in the event the user smells gas" shall be posted in a prominent location. This shall be obtained by consulting the local gas supplier. This equipment is design engineered for commercial use only.

RETAIN THIS MANUAL FOR FUTURE REFERENCES.

IMPORTANT. Installing, Operating and Service Personnel:

Qualified, certified, licensed and/or authorized personnel who are familiar with and experienced in state/local installation codes should perform installation of the equipment. Qualified or authorized personnel who have read this manual and are familiar with functions of the equipment should perform operation of the equipment. Qualified personnel who are knowledgeable with ROYAL RANGE OF CALIFORNIA, INC. equipment should perform Service of the equipment.

SHIPPING DAMAGE CLAIM PROCEDURE

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

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

INSTALLATION INSTRUCTION

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 adequate supply of fresh air and adequate clearance for air openings into the combustion chamber, for proper combustion, and ventilation.

For proper operation of the appliance, do not obstruct the flow of combustion and ventilation air.

The installation must conform with local codes, or in the absence of local codes, to the national fuel gas code, ANSIZ223.1-1988 (or latest addenda), national gas installation code, CAN/CGA-B 149,1, or the propane installation code, CAN/CGA-B 149.2 as applicable.

The appliance and its individual shut off valve must be disconnected from the gas supply piping system during any pressure testing of that system in excess of ½ PSI.

The gas supply line must be at least the same size as the inlet of the appliance.

CLEARANCE:	Combustible	Non-Combustible
Sides	6"	0"
Rear	6"	0"
Floor	6"	0"

Installation on non-combustible floor shall be with factory supplied legs or casters.

OPERATING INSTRUCTIONS

WARNING: Hot oil and hot surfaces can cause severe burns. Use caution when operating the fryer.
Do not attempt to move the fryer filled with hot oil or shortening.
Do not go near the area directly above the flue when fryer is in operation. Severe burns may be caused.
Drain hot oil in metal contains, do not use plastic buckets or glass containers.

CAUTION: Main burners shall not be "ON" when the vessel is empty. During testing, fill the vessel with liquid (oil or water).

LIGHTING INSTRUCTION (EM OPTION):

1. Press the power switch to the "ON" position.
2. Turn Thermostat dial to desired temperature setting and observe the burners ignition. Burners should ignite within 4 seconds.

** For complete **SHUT DOWN,** press "ON/OFF" button on Thermostat control and turn the gas cock dial of the combination gas valve to the "OFF" position. **

LIGHTING INSTRUCTION (DM, DM-2 OPTION):

1. Press the power switch to the "ON" position.
2. Press ON/OFF button on Thermostat control, burners will come on and preheat shortening/oil to set temperature. (DM-2 models will go into the melt cycle unless the oil temperature is above 120°F.)
3. When shortening/oil reaches the set temperature, the Fryer is ready to Cook after the shortening/oil is thoroughly stirred.

** For complete **SHUT DOWN,** press the power switch to the "OFF" position. **

LIGHTING INSTRUCTION (CM OPTION):

1. Press the power switch to the "ON" position.
2. Press ON/OFF button on computer board to start the fryer. The computer will initiate the MELT MODE cycle and the display will read **"MELT G"**. This mode is used to gently melt solid or congealed shortening. Each time the Fryer is turned on, the computer will enter the MELT MODE. The burners will turn ON and OFF periodically to gently melt and heat the shortening/oil to a preset temperature.

** NOTE: Upon starting the fryer, if the oil temperature is greater than 135°F, the user will be prompted to exit the Melt Mode. **

The Computer will keep the Fryer in the MELT MODE until the Melt Release Temperature is reached, at which time the display will read **"EXIT"** (until then the Fryer CANNOT exit from MELT MODE). Melt Release Temperature is factory set to (135°F, 57°C). This is user changeable. Once the Melt Release Temperature is reached, the user must exit the Melt Mode by pressing the OK/EXIT button.

3. When shortening/oil reaches the Melt Release Temperature, the display will read **"EXIT".** Press the OK/EXIT button. The display will read **"HEATING"** and the burners will turn on until the set temperature is reached.
4. When shortening/oil reaches the set temperature, the display will read **"READY"** and the Fryer is ready to Cook after the shortening/oil is thoroughly stirred.

** For complete **SHUT DOWN,** press the power switch to the "OFF" position. **

COOKING:

1. To **START a cook cycle**, press a product button. If that button is programmed, its LED will rapidly blink during cooking, the set cooking time will be displayed, (e.g. 5:30) and the countdown will begin. The computer will count down to 00:00, an alarm will SOUND and "**DONE"** will appear in the display. Press the blinking button to silence the alarm and reset that product button for another cook cycle.

2. To **CANCEL a cook cycle**, press and hold the product button for 3 seconds. Display will read **"READY"**.

** For complete **SHUT DOWN,** press "ON/OFF" button on Computer control and turn the gas cock dial of the combination gas valve to the "OFF" position. **

FLEXIBLE COUPLINGS, CONNECTORS AND CASTERS:

If the unit is to be installed with casters, the installation shall be made with a connector that complies with the Standard for Connectors for Movable Gas Appliances, ANSI Z21.69 or Connectors for Moveable Gas Appliances, CAN/CGA-6.16, and a quick-disconnect device that complies with the Standard or Quick-Disconnect Devices for Use With Gas Fuel, ANSI Z21.41, or Quick Disconnect Devices For Use with Gas Fuel CAN1-6.9. Locking front casters are provided to limit the movement of the appliances without depending on the connector or associated piping. A suitable strain relief must be installed with the flexible connector.
Restraining device may be attached to the back frame/panel of the unit.
All connections must be sealed with a joint compound suitable for LP gas and all connections must be tested with a soapy water solution before lighting pilots.

PREPARATION FOR USE:

New units have a coating of oil on the interior of the vessel. Remove this coating with hot soapy water, washing soda, or any other grease dissolving liquid. Rinse thoroughly and drain until all residues are removed. Wipe dry. Clean the baskets, crumb screen.

PILOT OPERATION:

Check and make sure the pilot is lit. If not, refer to previous section for the lighting the pilot.

BEFORE TURNING THE BURNERS ON:

Fill the vessel with liquid shortening or oil up to the "oil level" marking. Cut solid shortening into small pieces and pack tightly. Turn the burner "ON" for 10 seconds and turn off for about a minute. Repeat this "ON-OFF". Cycle until all the shortening is melted. If scorching occurs, lower the "ON" time. Do not overfill the vessel.

MAIN BURNER OPERATION:

After the vessel is filled with liquid shortening or oil, set the gas cock dial on the combination gas valve to the "ON" position.

DAILY SHUT DOWN:

At the end of the day, turn the gas cock dial on the combination gas valve and the thermostat to "OFF" position. Where applicable turn the power switch to "OFF" position. Filter the oil in all fryers.

MAINTENANCE INSTRUCTIONS: CLEANING:

For continued performance efficiency and longevity of your Fryer it is essential to carry out a good maintenance program.

DAILY:

1. Remove and wash thoroughly all "LOOSE" parts (Basket hangers, baskets, crumb screen, etc.).
2. Wipe clean all exterior and interior accessible surfaces and parts.
3. Filter the liquid oil/shortening at the end of the day, replace if necessary. If fryer is under heavy use, filter more often during the day.

WEEKLY:

1. Shut down the fryer by turning off the gas cock dial and power supply, where applicable.
2. Drain the fryer in a filter pan or steel container. Flush out sediments at the bottom of the vessel with liquid oil.
3. Close the drain valve and fill the vessel with a mixture of boil-out solution and water.
4. Relight the pilot and turn on the burner.
5. When the solution starts to boil, turn off the thermostat and let the vessel soak to soften the deposit and/or carbon spots (Approximately 1 hour).
6. Drain off solution, scrub the insides with a brush and rinse thoroughly.
7. If equipped with filter system, **NEVER** filter water through pump/motor.
8. Repeat the cleaning procedure, if necessary.
9. Wipe dry with soft towels and refills with clean oil/shortening.

WARNING: All water must be removed before adding oil or shortening. Not doing so can result in splattering of hot oil.

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 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.

Contact the factory, factory representative or a local service company to perform maintenance and repairs.