KRATOS

INSTRUCTION MANUAL

Gas Ranges

This manual contains important information regarding your purchased equipment. Please read the manual thoroughly prior to equipment set–up, operation and maintenance. Failure to comply with regular maintenance guidelines outlined in this manual may void the warranty. Please keep it for future reference after installation and do not throw it away! This is a universal installation and operation instruction book which would apply to different models.

PLEASE READ!!!

Central Restaurant Products
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IMPORTANT FOR YOUR SAFETY

THIS MANUAL HAS BEEN PREPARED FOR PERSONNEL QUALIFIED TO INSTALL GAS EQUIPMENT, WHOU SHOULD PERFORM THE INITIAL FIELD START-UP AND ADJUSTMENTS OF THE EQUIPMENT AS COVERED BY THIS MANUAL.

IMPORTANT

IN THE EVENT A GAS ODOR IS DETECTED, SHUT DOWN UNITS AT MAIN SHUTOFF VALVE AND CONTACT THE LOCAL GAS COMPANY OR GAS SUPPLIER FOR SERVICE.

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.

IN THE EVENT OF A POWER FAILURE, DO NOT ATTEMPT TO OPERATE THIS DEVICE.

WARNINGS

- Do not touch any hot surfaces.
- Do not use this unit for any other than intended use.
- Do not use outdoors.
- Always use on a firm, dry and level surface.
- Keep the appliance area free and clear from combustibles
- The manual shall be retained for future reference
- Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other equipment.
- Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death.
- Read the installation and maintenance instructions thoroughly before installing or servicing this equipment.
- Have the equipment installed by a qualified installer in accordance with all federal, state and local codes.
- Do not install or use without all 4 legs.
- This equipment is for use in non-combustible locations only.
- Do not obstruct the flow of combustion and ventilation air.
- Do not spray controls or the outside of the equipment with liquids or cleaning agents
- Allow for hot parts to cool before cleaning or moving.
- This equipment should only be used in a flat, level position.
- Do not operate unattended.
- Any loose dirt or metal particles that are allowed to enter the gas lines on this equipment will damage the valve and affect its operation.
- If you smell gas, follow the instructions provided by the gas supplier. Do not touch any electrical switch; do not try to light the burner; do not use a telephone within close proximity.
- Never attempt to move grates while cooking.

BEFORE INSTALLATION

- Installation of this device should be performed by professional technicians
- Installation of this unit should conform to provisions of gas safety, installation and usage
- Check that electrical (if needed) and gas supply agree with the specifications on the rating plate located inside the kick panel of the unit. If the supply and equipment requirements do not agree, do not proceed with the installation. Contact your dealer immediately.
- Unit must be installed so that the flow of combustion and ventilation air will not be obstructed, ensure that there is an adequate supply of air in the room to allow proper combustion of gas at the burners.
- This device should be kept a minimum clearance of 12" from combustible construction at the sides and 10" at the rear. Clearance from non-combustible construction is 6" sides and 6"at the back. Do not install on a flammable floor or around other combustible objects.
- This item is intended to sit on a solid and level floor

  INSTALLATION:

- The installation of this equipment must conform with local codes, or with the National Gas Code, ANSIZ223.1/NFPA 54, or the
- Natural Gas and Propane Installation Code, CSA B149.1, as applicable.
- • The equipment 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 ½ psi (3.5 kPa).
- • The equipment 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 ½ psi (3.5 kPa).
- **Clearance and positioning around the equipment**:
- This equipment must be installed adjacent to non-combustible surfaces only with a minimum spacing of 6" from all sides. This equipment must be a distance of 6" from other equipment. The equipment must have the 4" legs installed and be placed on a non-combustible surface.
- For an oven equipped with casters, the installation shall be made with a connector that complies with the Standard for Connectors for Movable Gas Appliances, ANSI Z21.69/CSA 6.16 and a quick-disconnect device that complies with the Standard for Quick-Disconnect Devices for Use with Gas Fuel, ANSI Z21.4/CSA 6.9. When installing the oven with casters and quick-disconnect hose, adequate means must be provided to limit the movement of the oven without depending on the connector and the quick disconnect device or its associated piping to limit the oven movement. Restraining means may be attached to the vertical portion of the base frame in the rear of the oven.
- **Air Supply and ventilation**:
- The area in front and around the equipment 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 of and at the sides of the equipment for servicing and proper ventilation.

TO INSTALL

1. Level the device with a level gauge. The height can be adjusted by the adjustable feet. Unit should not sway or tilt during operation. Units that are not level will experience operational problems.
2. The mounting position should be well-ventilated with proper hood exhaust system.
3. Codes require that a gas shut off valve should be installed upstream the device where it is easily reached during operation.
4. Make sure you are using the correct gas supply that is specified for this model. If the gas supply is not intended for this model, do not proceed with installation.
5. This unit is applicable to low pressure regulating valves only. High pressure regulating valves and medium pressure regulating valves are not to be used.
6. Check to make sure the connection pipe to the unit has no leaks and that all connections and pipe joint compound used are resistant to the action of propane gases
7. A pressure regulator must be installed with this unit. Ensure that the regulator type is in agreement with the rating plate gas supply. Regulator must be upright after installation. If regulator is not level during operation, performance problems may result
8. After connecting the appliance to the gas system, check for leaks at joints and pipe fittings; to do so, use soapy water or a specific leak detector (spray).
9. Check the gas supply pressure after installation.
10. Gas supply pressure can be measured with a liquid-filled pressure gauge (e.g. a U shaped pressure gauge, minimum scale division0.1mbar) or a digital gauge. Procedure as follows:
    - Ensure gas is turned off
    - Remove the panel and unscrew the screw on the pressure port
    - Place the pressure gauge

- Start up the appliance by following the instructions in this owner's manual
- Check supply pressure. Pressure must agree with rating plate requirement when the unit is in full operation
- After the check, turn off gas and remove the pressure gauge
- Replace the sealing screw

IF UNIT HAS GRIDDLE TOP/GRIDDLE +Broiler:

11. Grease collects are packaged in oven for transport, remove from oven.
12. Place grease collector in the opening position. Ensure that grease collector moves freely and is properly positioned beneath griddle grease chute.

OPERATING INSTRUCTIONS AND CONTROLS

- When turning on for the first time please be advised that it might take a little longer to ignite due to the air existing in the pipe.

BURNERS

1. Turn on the gas supply and ignite the pilot flame with a lighter. If the unit hasn't been used in a while or if this is the first lighting, ignition might take a little longer (about two or three minutes).
2. Press the corresponding valve knob of burner and turn 90 degrees counterclockwise. The burner will be ignited and the flame will be at Max. To set the flame to Min, rotate counterclockwise another 90degrees.
3. When finished turnoff main burner by rotating the knob clockwise to off position. Pilot should remain lit.
4. For complete shutdown, ensure that all burner knobs are turned to the off position, and then turn main gas supply off.

OVEN

Before using the oven, please clean the unit completely, especially the oven chamber. Remove all the packing materials and film from shipping. Before cleaning the stainless steel accessories, please make sure that the used detergent contains no corrosive substance and is okay for stainless steel surface cleaning (no chlorine based cleaners). Then dry with a clean cloth.
When first using, it is normal that there is unpleasant smell that is produced by heating of the insulating material and oil residue on the metal. If the oven is used for the first time, do not put any food into the chamber, set the temperature to 500°F and heat till the smell is gone. When first using, the duration of ignition may be a little longer due to the air existing in the new pipe.

1. To ignite, open the kick panel, then press down the oven knob and rotate it counterclockwise to" ✶ ", align with the salient point and press down. Ignite the pilot flame with lighter via the ignition hole.
2. After the pilot flame is ignited, continue pressing the knob for around 30seconds to allow the thermocouple to heat. If the pilot goes out again when you release the knob, repeat this operation.
3. Once pilot remains lit, rotate the temperature control knob counter-clockwise to ignite the main burner of the oven. Select an appropriate temperature according to food requirement. The oven temperature can be controlled between 250°F and 500°F.
4. To turn off the burner: Rotate the knob clockwise to strip mark and align with the salient point.

IMPORTANT

Differences in gas supply, environment, and altitude can produce small changes in the set points of the oven, which may change the accuracy of the dial. For this reason, the temperature indications for the oven are able to be adjusted. If you notice a difference in your actual oven temperature from the set point indicated at the dial, remove the oven knob and loosen the screws holding the indication plate to the manifold cover. Rotate the indication plate until the actual temperature lines up with the position of the knob, then retighten the screws and replace the knob.



GRIDDLE

CAUTION: The plate is steel, but the surface is relatively soft and can be scored or dented by the careless use of a spatula or scraper. Do not try to knock off loose food that may be on the spatula by tapping the corner edge of the spatula on the griddle surface.

Before first use – Season the Griddle Plate. A new griddle surface must be seasoned to perform well in cooking. The metal surface of the griddle is porous and food will stick if the plate is not properly seasoned. Seasoning fills the pores of the metal with oil and gives the surface a slick, hard finish from which food will more easily release. To season the griddle plate, please heat griddle top on a low burner setting. Pour one ounce of cooking oil per square foot of surface onto the griddle and spread over the entire surface using an insulated cloth. Wipe away any excess oil with an insulated cloth. Repeat 2 to 3 times until griddle has a slick surface.

1. Ensure gas supply is on and ignite the pilot flame with a lighter. If the unit hasn't been used in a while or if this is the first lighting, ignition might take a little longer (about two or three minutes).
2. Press the corresponding valve knob of burner and turn 90 degrees counterclockwise. The burner will be ignited and the flame will be at Max. To set the flame to Min, rotate counterclockwise another 90degrees.
3. If the flame could not be maintained, turn burner off and wait 5 minutes, then repeat
4. When finished turn off main burner by rotating the knob clockwise to off position. Pilot should remain lit.
5. For complete shutdown, ensure that all burner knobs are turned to the off position, and then turn main gas supply off.

GASCONVERSION:

Conversion from Natural Gas to Liquid Propane (LP) or vice versa may only be performed by the factory or its authorized service agent.

CLEANING-

NOTE: It is important to check the machine daily. Checking the machine regularly can avoid serious accidents. Stop using if user feels that there are some problems with the unit. Check the condition of the machine before and after using every day.

1. Before cleaning, turn off all gas valves.
2. Please clean the burners and drip tray of all debris and spillage daily. A complete cleaning every day will ensure a good service and extend the service life of the unit.
3. Clean the stainless steel surface with warm soapy water every day and rinse it completely. Do not saturate range with water, excessive water will cause operational issues. During cleaning, do not clean the stainless steel surface with abrasive detergent, brush or scraper etc. The residual iron scale may cause rusting.
4. Do not clean the surface with chlorine cleanser (bleach, dish detergent, hydrochloric acid etc.). Do not clean the floor where the device locates with corrosive substance.
5. Do not change the burner shutter settings.
6. Accumulation of substances containing salt or acidic ingredients, e.g. vinegar, lemon juice, spices, salt etc. can cause corrosion. Thus, please do not allow these substances to have long contact with the unit.
7. After cleaning, ensure that the ports of the burners are open and clear of any residue.
8. Clean cast iron top grates with a mild soap and water solution. Rinse thoroughly and dry with a clean, water-absorbent towel. Immediately after drying, season grates lightly with liquid vegetable oil. After seasoning, replace grates on range and turn burners on LOW, allow grates to heat for 15 minutes before using pots or pans on the range top. Failure to season grates after cleaning will result in rust.
9. If unit will sit idle for a significant period of time, please turn off the gas valve upstream the device.

TROUBLESHOOTING

Problem	PossibleCauses	Solution

The pilot flame can't be ignited	The gas pressure is too low	Adjust the relieve valve to increase pressure
The pilot flame can't be ignited	The nozzle is clogged	Unclog the nozzle
The pilot flame can't be ignited	Connection of the thermocouple is loose	Tighten the thermocouple
The pilot flame can't be ignited	The thermocouple is defective	Replace the thermocouple
The pilot flame can't be ignited	The gas control valve is malfunctioning	Replace the gas control valve

Problem	PossibleCauses	Solution
The pilot flame is on but the main burner can't be ignited	The gas pressure is too low	Adjust the relieve valve to increase pressure
The pilot flame is on but the main burner can't be ignited	The main burner nozzle is clogged	Unclog the nozzle
The pilot flame is on but the main burner can't be ignited	The gas control valve is defective	Replace the gas control valve

Problem	PossibleCauses	Solution
It has a light back sound when the gas supply is turned off	Wrong orifice size for the gas supply	Install proper orifice
It has a light back sound when the gas supply is turned off	The air shutter is too open	Adjust the damper
It has a light back sound when the gas supply is turned off	Gas pressure too low	Increase the gas pressure
It has a light back sound when the gas supply is turned off	Gas pressure too low	Increase the gas pressure

Problem	PossibleCauses	Solution
It has a yellow flame and black smoke	Wrong orifice size for the gas supply	Install proper orifice
It has a yellow flame and black smoke	The air shutter is closed too far	Adjust the air shutter
It has a yellow flame and black smoke	Running out of gas/propane	Replace tank/ increase gas
It has a yellow flame and black smoke	High elevation	Install proper orifices for elevation
It has a yellow flame and black smoke	Bad air/gas mixture	Increase air flow/gas to the unit

SEPC SHEET

MODEL	STYLE	Open burner	Char Broiler	Griddle/Broiler	Oven
29R-057-LP 29R-057-NAT	2 burners with 24" char broiler + oven	30,000BTU/pcx2	32,000BTU/pcx2	N/A	30,000BTU/pc
29R-074-LP 29R-074-NAT	6 burners with 24" char broiler + oven	30,000BTU/pcx6	32,000BTU/pcx2	N/A	30,000BTU/pcx2

Warranty

1 Year Warranty – Commercial Applications Only

Kratos offers a warranty to the original purchaser of new equipment, that the model of equipment will be free of defects in material and workmanship for a period of 1 year from the original date of delivery. Equipment must be installed by a qualified installer where applicable. Warranty coverage is only valid in the Contiguous United States & Canada. It is for commercial customers and is not transferrable. Kratos will repair, provide replacement components, replace the entire unit, or refund the purchase price to satisfy the warranty obligation. Not to exceed the original price of the item purchased. Kratos makes no other warranties, express or implied, statutory, or otherwise, and hereby disclaims all implied warranties, including the implied warranties of merchantability and of fitness for a particular purpose.

The 1 Year warranty does not cover:

• Failure to install and/or use equipment within proper operating conditions as specified by Kratos. This includes but is not limited to mobile, outdoor, or mobile applications.

• For commercial use only, residential use voids warranty.

• Mobile applications fall under a different level of coverage as outlined below.

• Outdoor use will void the warranty.

• Issues related to improper installation which are the responsibility of the installer. To include improper voltage, phase, or fuel type.

• Damage caused by power surges, brownouts, or inconsistent voltage such as when connected to a generator. Also to include damage caused by vandalism; improper handling, maintenance, or storage; use of unauthorized parts, impacts by foreign objects, harmful chemicals, fire, flooding, or Acts of God.

• Failure to properly maintain equipment or failure due to lack of routine cleaning.

• Parts deemed by Kratos to be normal wear and tear parts including, but not limited to, casters, hoses, grates, glass, light bulbs, and rubber components.

• Products that have been modified, abused, or misused intentionally or accidentally. Any products that have been exposed to corrosive or other cleaners not intended for use on stainless steel will void the warranty.

• Any products sold outside the contiguous United States OR Canada.

• Any products where the original sale cannot be determined. No order #, invoice or receipt to provide proof of purchase will result in no warranty coverage.

• Service requires prior notice to Kratos and within 30 days of discovery of the defect, not to exceed the length of the warranty following the original date of delivery.

• Repair service must be through authorized Kratos services and not by unauthorized or unqualified persons. Repairs must be completed using parts consistent with Kratos OEM parts, except where permissible by state law.

• Rust or other damage caused by exposure to moisture.

• Freight damage must be made at time of delivery and addressed with the carrier for compensation.

• Kratos will not be liable for any parties that experience loss of product, consequential damage, lost business, or any other expenses.

The warranty does not cover overtime, holiday or weekend rates or other off-hour rates. Kratos reserves the right to deny coverage after a service technician is on site based on the above exclusions. Kratos will not be responsible for any service charges from non-warranty related labor and/or parts.

Food Truck/Mobile Application Warranty

Valid only in Contiguous United States

Kratos warrants all new equipment sold to food truck or other mobile applications for a period of 90 days from the date of delivery and proper installation. Contact your authorized place of purchase for assistance.

For Warranty Inquiries or Service: Have your model number, serial number, and original order number ready to make an inquiry or claim. If possible, include pictures, a video and description of the problem to help expedite the processing time. Kratos reserves the right to investigate any warranty claim and evaluate the defective product to authenticate the problems found. Failure to permit this investigation and allow access to the defective item will void this warranty. Return authorization must be received from Kratos prior to returning any item. Any item that arrives without prior authorization will be refused and shipping costs will not be covered by Kratos.

• Call 1-800-215-9293 • Email crpcustomerservice@takktfoodservices.com