



Gas Restaurant Ranges

Models: 29Y-043, 29Y-044, 29Y-045, 29Y-046, 29Y-047

User's Manual

Congratulations on your purchase of this Kratos Gas Range!

All the information and guidelines in this user manual comply with applicable regulations, which are the result long-term accumulated knowledge and experience in the project field. Should you have any questions, please do not hesitate to contact the manufacturer via the method shown in back cover page of this manual.

For safety purposes and efficient operation, please make this document available to users for reference. All users should read this manual carefully before carrying out any action on this oven, especially during the initial use.

The manufacturer declines any responsibility in the event users do not follow the instructions or guidelines stated here.

The user's manual should be placed close to the device, in convenience of users' reading before operation. We have the full authority to reserve the further technical changes of the device, in the scope of further performance improvement characteristic development.

⚠️ 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.

⚠️ WARNING

- ◆ Any self-modification, wrong installation, adjustment, or maintenance can lead to property loss or casualty. Please contact the manufacturer for any adjustment or maintenance, and have the work done by a trained & qualified person.
- ◆ For safety purposes, keep the Range away from any liquid, gas or other object, which is flammable or explosive.
- ◆ This appliance should not be operated by those who have physiological, perceptual, or mental disabilities or those who have insufficient experience or knowledge (including children). Only in conditions of being given sufficient supervise & guarantee of personal safety, as well as proper instructions & guidance, those who were mentioned above can make some operation of this device.
- ◆ Keep children away from the Range.
- ◆ Preserve this manual in a safe location, preferably near the oven. When passing on/selling the Range to a third party, the manuals must be handed over along with the device. All users must operate the device complying with the user's manual and related safety guidelines.

- ◆ Do not store or use gas, liquid or object that is flammable or explosive in vicinity of the mounting position.
- ◆ If the appliance is placed near walls, partitions or kitchen furniture and the like, it is advisable to make these facilities with non-combustible material, otherwise cover them with non-combustible heat-resistant material, and pay attention to fire prevention regulations.
- ◆ The appliance should be installed in a well-ventilated area with exhausting facilities, which may ensure that all burnt gases produced during combustion process are completely exhausted.
- ◆ The appliance is only applicable to low-pressure gas regulating valve. It may lead to loss and casualty if other regulating valves are used.
- ◆ Do not seal the screw on the gas valve with seal welding.
- ◆ Fire warning: If you smell the gas, turn off the gas supply immediately. Close the main gas valve immediately and call the professional personnel to maintain it. Operating by force or maintaining improperly will lead to large gas leakage or deflagration easily. The manufacturer won't bear any responsibility for fire accidents caused by improper operation or maintenance.

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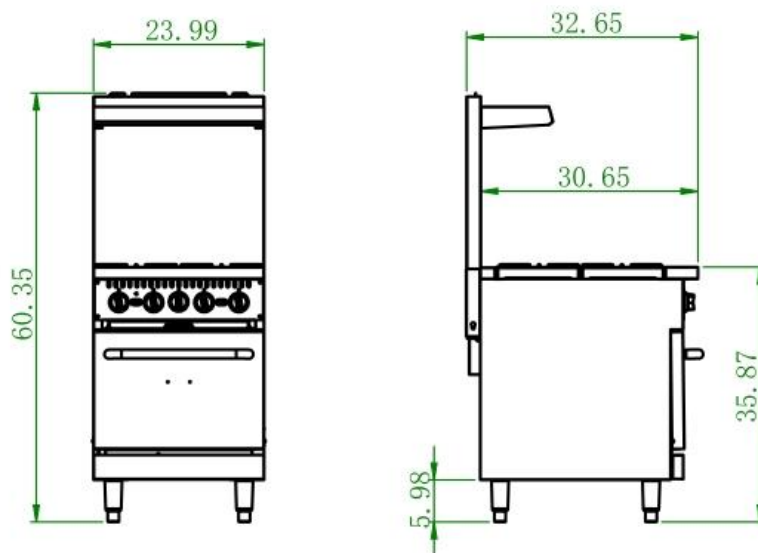
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1. Range Overview

This Kratos product is manufactured to be a staple in your commercial kitchen and boost efficiency. Configurations include standard ovens with anywhere from 4 to 10 burners as well as the option 24" griddle top. They are available in widths of 24", 36" or 60" to find the perfect fit for your kitchen. These ranges are made of durable stainless steel construction to withstand daily use. They are easy to clean with removable cast iron grates and metal knobs. Adjustable legs allow for stability and a back shelf serves as extra storage in the kitchen. You will find this Kratos Range to be the most versatile equipment in your kitchen!

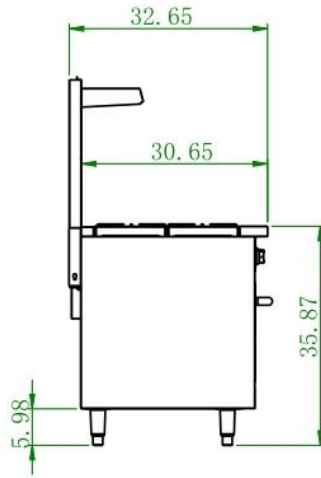
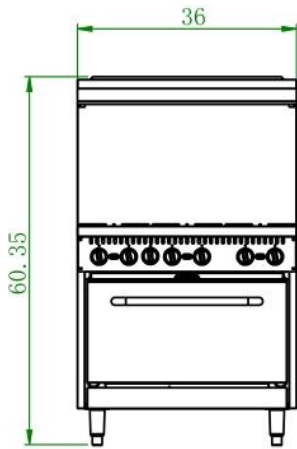
2. Structure Schematic Diagram

29Y-043

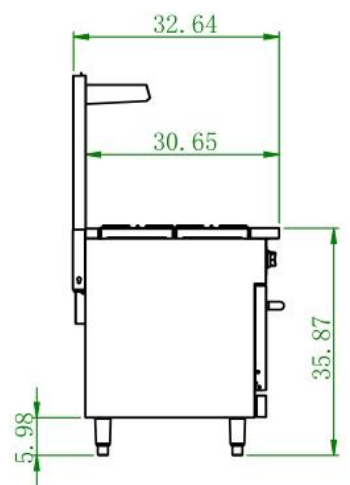
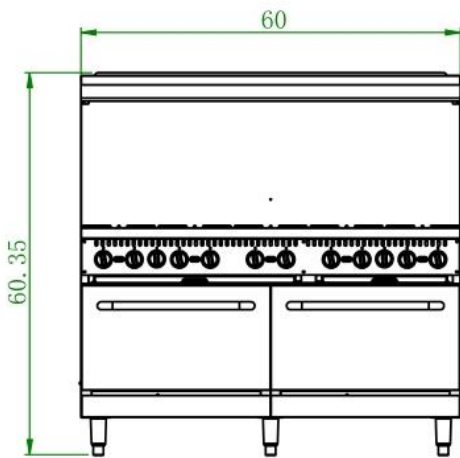


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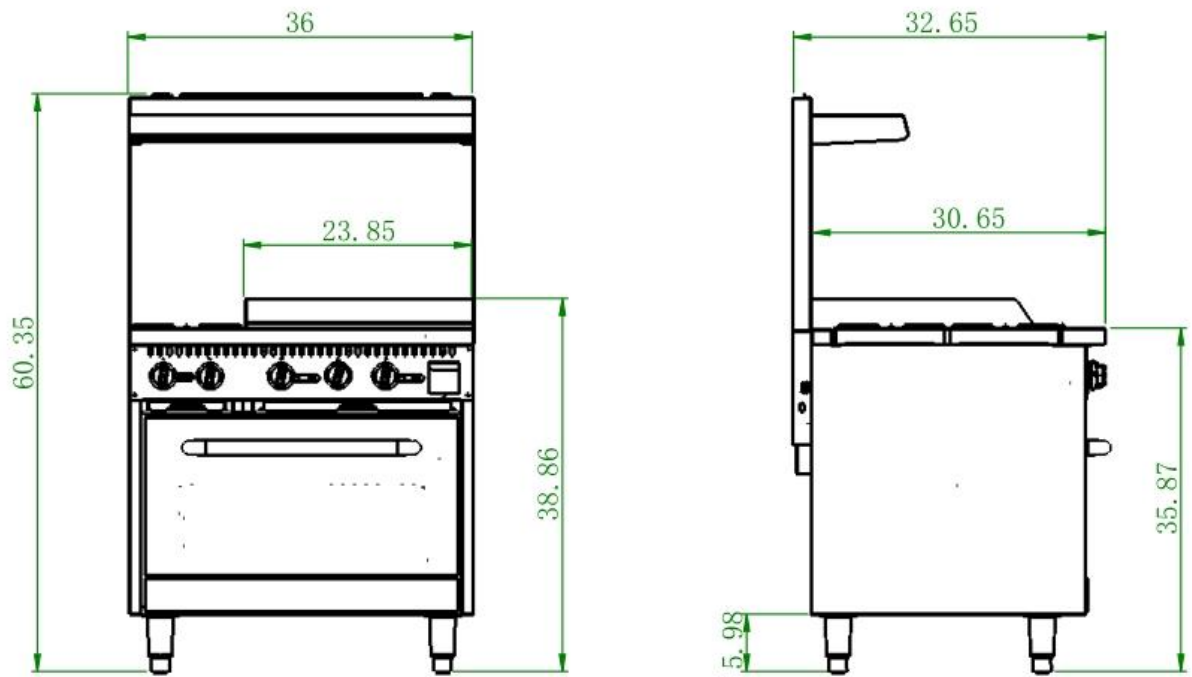
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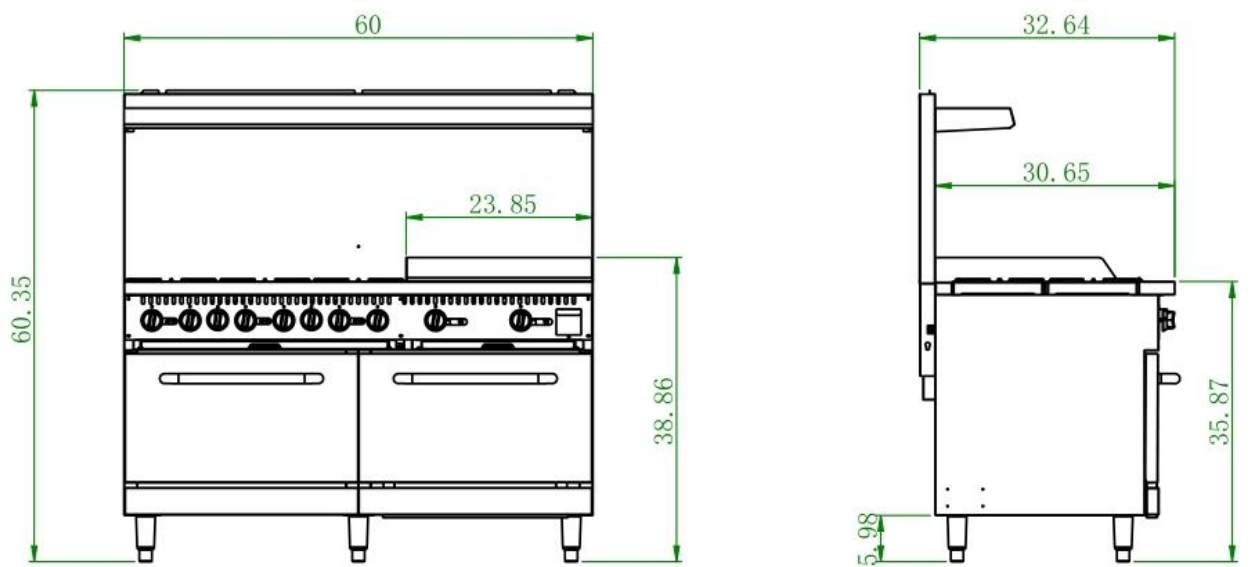
29Y-045



29Y-047



29Y-046



3. Basic Features & Parameters

Model			29Y-043	29Y-044	29Y-045
Dimension (inch)			23.99*32.65*60.35	36*32.65*60.35	60*32.64*60.35
Oven Size (inch)			20.6*25.8*13.7	26.8*25.8*13.7	26.8*25.8*13.7
Oven Type			Standard	Standard	Standard
Temperature (F)			250-550	250-550	250-550
Power		Oven	30000BTU	30000BTU	2*30000BTU
		Gas Range	4*30000BTU	6*30000BTU	10*30000BTU
Gas Type	LP (propane)	Pressure	10" WC	10" WC	10" WC
		Gas Consumption (kg/h)	3.4	4.75	8.15
	NG	Pressure	4" WC	4" WC	4" WC
		Gas Consumption (M ³ /h)	3.94	5.52	9.46
Orifice Size /MM	LP (propane)	Oven	50#	50#	50#
		Gas Range	51#	51#	51#
	NG	Oven	36#	36#	36#
		Gas Range	36#	36#	36#
Model				29Y-047	29Y-046
Dimension (inch)				36*32.65*60.35	60*32.64*60.35
Oven Size (inch)				26.8*25.8*13.7	26.8*25.8*13.7
Oven Type				Standard	Standard
Temperature (F)				250-550	250-550
Power		Oven		30000BTU	30000BTU
		Gas Range		2*30000BTU	6*30000BTU
		Griddle		2*20000BTU	2*20000BTU

Gas Type	LP (propane)	Pressure		10" WC	10" WC
		Gas Consumption (kg/h)		2.94	6.15
	NG	Pressure		4" WC	4" WC
		Gas Consumption (M ³ /h)		3.39	7.15
Orifice Size /MM	LP (propane)	Oven		50#	50#
		Gas Range		51#	51#
		Griddle		54#	59#
	NG	Oven		36#	36#
		Gas Range		36#	36#
		Griddle		44#	51#

4. Precautions & Recommendations

4.1 Transportation

During transportation, the machine should be carefully handled and not placed on its side or upside down to prevent damage to the exterior and interior. Upon receiving, the range needs to be inspected for any damage that may have occurred during shipment. Do not use damaged equipment and submit freight claim immediately.

4.2 Notice for Installment

1. Installation of this range should be operated by professional technicians.
2. This Range is suitable for area whose altitude is lower than 2000m. If it is higher than this altitude, please contact the manufacturer.
3. Connection of this device should conform to provisions of gas safety, installation, and usage.

4. This device should be kept a minimum clearance of 3.93" away from non-combustible objects on both sides and 7.87" at the back (e.g. walls, windows etc.). Do not install it on flammable floor or other combustible objects.
5. These Ranges must be installed on the floor and not a counter or other surface.
6. Level the device with a level gauge. The height can be adjusted by the adjustable feet. For models with a griddle, feet need adjusted to make the griddle plate horizontal before using.
7. The mounting position should be well-ventilated and with ventilation facilities, which will ensure that all the burnt gases produced during combustion process are completely exhausted.
8. After installation, level the Range and keep stable. Do not sway or tilt during operation.
9. A quick-acting switching-off gas valve should be installed upstream from the Range where is easy to be reached before installation.
10. The gas supply must match the gas type specified on the data plate.
11. Do not use gas that not applicable for this device as fuel. Neither does high pressure regulating valve nor medium pressure regulating valve. (This device is applicable to low pressure regulating valve only.)
12. The gas pipeline that connects to the device should be connected with proper gas metal piping to ensure no leakage.
13. If the pipeline pressure is 10% higher or lower than the rated pressure, a certified technician must install a pressure regulator to adjust the gas pressure to reach the rated one.
14. 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).
15. Check the gas supply pressure after installation.

4.3 Additional Notices

1. Installation, first use and maintenance of this Range should be operated by professional personnel or qualified people.
2. Remove all outer packing and protective wrap before use. If you have any questions, call the Manufacturer and stop using the appliance.
3. When first using, the duration of ignition may be a little longer due to the air existing in the new pipe. If the ignition cannot be lit, turn off the ignition switch and turn it on 3 minutes later to prevent from deflagration.
4. Do not use gas that not applicable for this device as fuel. Make sure that the gas supply is the same as the gas listed on the data plate.
5. During operation, do not leave unattended. If not in use or leaving the area, please turn off the Range.
6. This product is a commercial machine that needs to be operated by trained cook, not applicable for home use.
7. This device is for commercial use only, not applicable for other usage.
8. Do not sway or tilt during operation.

9. Do not dismantle or self-modify the device. Dismantlement and self-modification may cause severe injury or death.
10. Do not shake the Range or put any heavy objects onto it. Abnormal operation may cause damage and danger to operator.
11. Do not put any objects in the vent, which may block the flue and do harm to your health.
12. High temperature may cause scalding. Do not touch the appliance directly due to high temperature during or after operation. Do not move the device if it is still hot.
13. Do not spray the device with water directly. Clean the stainless steel surface regularly to prevent damage caused by surface oxidation and chemical reaction.
14. Do not cause damage to the control panel with hard or sharp objects.
15. If the Range is malfunctioning, turn off the gas main valve upstream the device and contact with the manufacturer to repair.
16. Material used to package the Range is recyclable and does not contain any harmful or toxic substance. During dealing with the device and its packing material, please follow close to the line of the prevailing provisions. The packing material should be classified and sent to a specific collecting site. Make sure that it conforms to the local environmental regulations.
17. Do not put any flammable objects (towel, boxes, etc.) on anywhere of the surface, or it may cause fire.
18. After use, turn off the gas valve immediately.
19. If any gas leakage is found, please turn off the gas valve and open the window to ventilate.

4.4 Griddle seasoning (Models 29Y-046, 29Y-047)

Caution: This griddle plate is steel, but the surface is relatively soft and can be scored or dented by the careless use of a spatula or scraper. Be careful not to dent, scratch, or gouge the plate surface. 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.

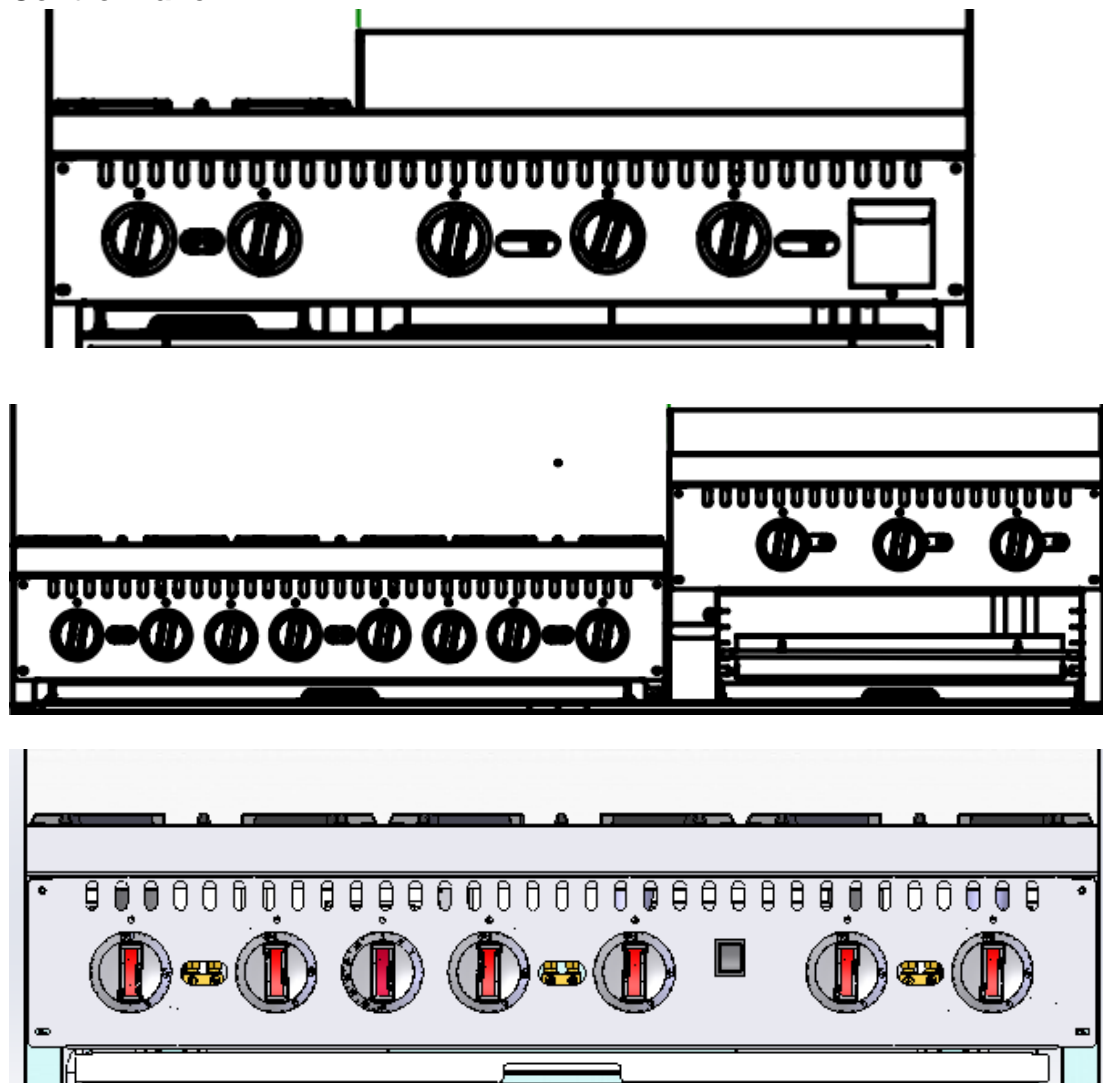
A new griddle surface must be seasoned before use. The metal surface of the griddle is porous. Food tends to get trapped in these pores and stick; therefore, it is important to season or fill up these pores with cooking oil before cooking. Seasoning gives the surface a slick, hard finish from which the food will release easily.

To season, heat griddle top section at low burner setting. Pour one ounce of cooking oil per square foot of surface over the griddle top section. With an insulated cloth, spread the oil over the entire griddle surface to create a thin film. Wipe off any excess oil with an insulated cloth. Be careful to not touch the griddle during this process. Using a spatula or grill scraper with an insulated cloth on the end is good practice.




Repeat this procedure 2 to 3 times until the griddle has a slick surface.

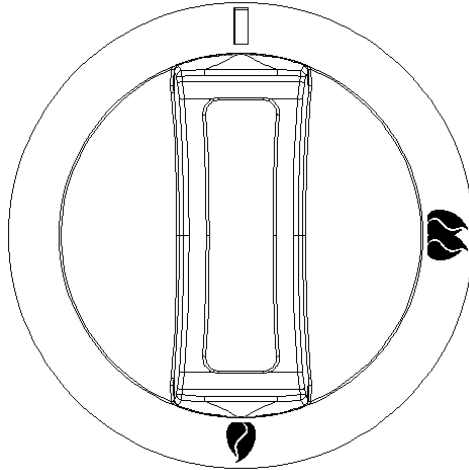
5. Working Instructions & Operation

Control Panel:



Gas Range:

1. Turn on the gas valve and light up the pilot flame (kindling) with an ignitor. If the appliance is idle for a long period of time or used for the first time, duration of ignition may be a little longer than usual (appropriately 2-3 min), which is normal.
2. Press the valve knob for corresponding burner axially and turn it counterclockwise for 90° to light up the burner. To turn the flame to MAX, rotate the knob to align “ ” on knob with the round dot on panel; to turn it to MIN, rotate the knob counterclockwise to “”.
3. After working, turn off the main burner: rotate the knob clockwise to the round dot position.
4. If the Range is not in use, turn off the quick acting disconnecting valve.






Hot Top and Griddle Top Burners:

1. Connect the gas supply and ignite the pilot flame with a lighter. If the device is stopped using for a long time or used for the first time, it is normal that the duration of ignition may be a little longer (about two or three minutes).


Use a long stick lighter to ignite the Griddle pilot through the pilot holes, see below Figure. DO NOT leave the gas on for an extended period before lighting. Light the pilot with 30 seconds of turning on the gas.



2. Press the corresponding valve knob of burner axially; 90 degrees anticlockwise, the burner will be ignited. If “ ” on the knob is aligned with the round dot on the panel, the flame is Max. To set the flame to Min, rotate anticlockwise to the Min flame position. “” is Min.
3. After using, turn off the main burner. To shut down, rotate the knob clockwise to origin position.

4. If the Range is not in use, turn off the quick-acting switching-off valve.

Oven (Standard):

1. Before using, please clean the Equipment completely, especially the oven chamber. Remove all the packing materials and film. Before cleaning the stainless steel accessories, make sure that the used detergent contains no corrosive substance and suits to the stainless steel surface cleaning. Then dry the device with clean cloth.
2. When first using, it is normal that there is unpleasant smell. (Make sure that the smell is not caused by gas leakage.) In fact, that is produced by overheating of the insulating material and oil residue during heating process of the metal. If the oven is used at the first time, do not put any food into the chamber, set the temperature to 550F and heat until the smell is gone.
3. When first using, the duration of ignition may be a little longer due to the air existing in the new pipe. It cannot be ignited until all the air is exhausted.
4. Responding temperature of the chamber center on the oven knob: 250-550 F
5. During ignition, please open the lid under the door downward, press down the knob and rotate it anticlockwise to “”, align with the salient point and press down. Ignite the pilot flame with lighter via the ignition hole.
6. After the pilot flame is ignited, press the knob for more than 20 seconds to heat up the thermocouple. If the ignition is out when you loosen the knob, repeat this operation.
7. Keep rotating the temperature control knob counterclockwise to ignite the main burner of the oven. Select appropriate temperature according to food requirement. The oven temperature can be controlled between 250F and 550F.
8. To turn off the burner: Rotate the knob clockwise to strip mark and align with the salient point.

Note: If the gas type needs to be changed from NG to LPG, the nozzles of main burner and pilot flame should be replaced.

6. Routine Inspection

It is necessary to check the machine daily.

Check the machine regularly can avoid serious accidents and prolong the life of the Range.

Stop using if there is noticeable damage or a malfunction with the Range.

Check the below statuses of the Range before or after using every day.

Before using: Whether the machine is level?

Whether the control panel is damaged?

Make sure the grease tray is clean and empty.

During using: Whether there is strange smell or vibration noise?

Whether the flame of burner is normal? Any light back or flameout?

Whether the power is normal?

Dump the grease in the grease tray regularly to avoid the grease spill out

7. Cleaning & Maintenance

1. Before cleaning, please turn off the Range and the gas valve upstream it.
2. Clean the burners and tray regularly to prevent excess build-up.
3. Clean the stainless steel surface with warm soap every day and rinse it completely.
(Do not spray the Range with a hose directly.)
4. During cleaning, do not clean the stainless steel surface with abrasive detergent, brush or scraper etc. The residual iron scale may cause rusting. Scrub it according to direction of satin. Do not clean the surface with chlorine cleanser (bleach, hydrochloric acid etc.) even though these products are dilute.
5. Do not clean the floor where the device locates with corrosive substance.
6. Do not clean motor and electronic devices with any conductive substance.
7. Clean the grease/dirt on the burners and baffle regularly.
8. Do not modify the ventilation volume needed during combustion.
9. Accumulation of the iron substance (e.g. Material that formed by iron rust dissolving in water in the pipe, especially when the Range is not used for a long time.). Therefore, to avoid accumulation of such substance, clean the food swill that is difficult to clean with stainless steel scraper or brush containing no iron substance instead of steel brush.
10. Accumulation of substance containing acidic ingredient, e.g. vinegar, lemon juice, spices, salt etc. Thus, please keep these substances away from long contacting with the stainless steel accessories. Vapor of acid solution will damage the surface of the device seriously.
11. A complete cleaning every day will ensure a good service and extend the service life of the Range. Clean the Range with a wet towel containing suds or detergent, rinse it with clear water and dry it with clean cloth. Empty the drip pan on time to avoid overflow from fire risks, especially for griddle products. Do not clean the Range with steel brush, which may cause rust. Similarly, do not contact the Range with substances containing iron.

12. To avoid rusting of the equipment, please make sure that the residual salt inside or outside the Range and oven is cleared away.
13. After cleaning, to avoid short-time incomplete combustion, the fire hole of the burner should be clean and unblock.
14. If not going to use the Range at any time, please turn off the gas valve upstream the device or the power main switch.
15. If not going to use the Range for a long time, clean the stainless steel surface with a soft cloth and store it in a well-ventilated warehouse without corrosive gas.

8. Failure Analysis & Trouble Shooting

Symptoms	Causes	Solutions
The pilot flame cannot be ignited.	<ol style="list-style-type: none"> 1. The gas pressure is not enough. 2. The nozzle is blocked. 3. Connection of the thermocouple is loose. 4. The thermocouple is defective. 5. The gas control valve is malfunctioning. 	<ol style="list-style-type: none"> 1. Adjust the relief valve to get a proper pressure. 2. Unblock the nozzle. 3. Please screw the thermocouple. 4. Replace the thermocouple 5. Please replace the gas control valve.
The pilot flame is on but the main burner cannot be ignited.	<ol style="list-style-type: none"> 1. The gas pressure is not enough. 2. The main burner nozzle is blocked. 3. The gas control valve is defective. 	<ol style="list-style-type: none"> 1. Adjust the relieve valve to get a proper pressure. 2. Unblock the nozzle. 3. Replace the gas control valve.
It has a light-back sound when the gas supply is turned off.	<ol style="list-style-type: none"> 1. The diameter of nozzle does not match with the gas supply. 2. The damper is too large. 3. The gas pressure is too low. 4. The flow of the connected pipe is not enough. 	<ol style="list-style-type: none"> 1. Please adjust the nozzle diameter. 2. Adjust the damper. 3. Adjust the relieve valve. 4. Increase the permitted flow.
It has red flame, and black smoke.	<ol style="list-style-type: none"> 1. The diameter of nozzle does not match with the gas supply. 2. The damper is too small. 3. The gas nearly runs out. Please replace the gas. 4. The gas ingredient reduces the gas flow in gas peak demand. 	<ol style="list-style-type: none"> 1. Please adjust the nozzle diameter. 2. Adjust the damper. 3. Replace the gas. 4. Decrease the gas flow and increase it after the peak demand of the gas.

Aforementioned troubles are just for reference. If any failure occurs, please stop using, and inform the professional technicians to check and repair. Safety is first and maintenance should be done after the power supply and gas supply are shut down.



1 year Equipment Limited Warranty

Kratos offers a 1 year warranty to the original purchaser of new equipment, the model of equipment will be free of defects in material and workmanship for a period of 1 year from the date of delivery. Warranty is not transferrable. Kratos, at its own discretion, will provide service inclusive of parts & Labor, replace the entire unit or refund the purchase price to satisfy the warranty obligation.

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 year limited warranty does not cover:

- Failure to install and/or use equipment within proper operating conditions as specified by Kratos.
- Outdoor use will void the warranty. The finish is not guaranteed in mobile applications where the table can be damaged due to not being secured to the floor.
- Products that have been modified, abused, or misused. 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.
- 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.
- Labor or service not authorized by Kratos is not covered under this warranty.
- 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.
- Defects or damage due to improper maintenance, wear and tear, abuse, misuse, vandalism, or Act of God

For Warranty Inquiries

To obtain warranty information or make a claim against this warranty, please contact the location where you purchased the product.

If purchased on www.centralrestaurant.com, call 800-215-9293 or email sales@centralrestaurant.com