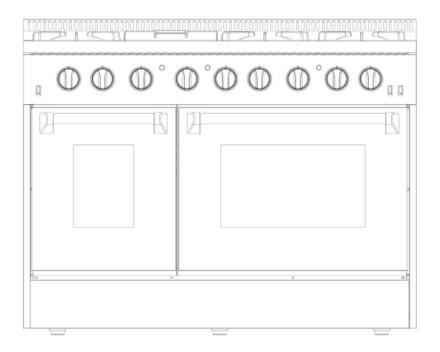


Professional Dual Fuel Convection Range User Manual



Model:

HRD3001U HRD3002U HRD3004U HRD3031U HRD3088U
HRD3604U HRD3605U HRD3606U HRD3618U HRD3620U
HRD4801U HRD4802U HRD4803U HRD4804U HRD4806U
HRD3031U-A HRD4804U-A HRD3618U-A

Thank you for purchasing your HRD indoor dual fuel range. We appreciate your business and we recommend that you read this entire User's Manual before operating your new appliance for the first time.

This manual contains instructions on how to properly install and set up your new range, as well as insights into the unique features that our product offers. Please keep this manual for future reference, as it contains answers to questions that you might have as you begin to cook.

Thank you!

Thor Group

Content

1. Safety and Warning	1
The Anti-Tip Bracket	3
Important Safety instruction	4
2. Installation Instruction	6
Range Dimension	7
Positioning the Range	8
Important Notes to the Installer	10
Power Supply Cord Kit	12
Electrical Connection	13
Gas Supply Requirement	14
3. Range Overview	16
Cooktop Equipment	18
4. First Use	19
Surface Burner Ignition	24
Oven Use	26
Oven Function	29
5. Care and Cleaning	30
6. Trouble Shooting	36
7. Warranty	37

Safety and Warning

Your safety and the safety of others are very important. We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.



This is the safety alert symbol.

This symbol alerts you to potential hazards that can kill or hurt you and others. All safety messages will follow the safety alert symbol and either the word "DANGER" or 'WARNING'.

These words mean:

ADANGER

You can be killed or seriously injured if you don't immediately follow instructions.

AWARNING

You can be killed or seriously injured if you don't follow instructions

All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

- -Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- -WHAT TO DO IF YOU SMELL GAS:
- •Do not try to light any appliance.
- •Do not touch any electrical switch.
- Do not use any phone in your building.
- •Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- •If you cannot reach your gas supplier, call the fire department.
- -Installation and service must be performed by a qualified installer, service agency or the gas supplier.

AWARNING: Gas leaks cannot always be detected by smell.

Gas suppliers recommend that you use a gas detector approved by UL or CSA. For more information, contact your gas supplier.

If a gas leak is detected, follow the "What to do if you smell gas" instructions

State of California Proposition 65 Warnings:

AWARNING This product contains one or more chemicals known to the State of California to cause cancer.

AWARNING This product contains one or more chemicals known to the State of California to cause birth defects or other reproductive harm.

AWARNING

Electric Grounding Instructions

This appliance is equipped with a four- prong grounding plug for your protection against shock hazard and should be plugged directly into a properly grounded receptacle. Do not cut or move the grounding prong from this plug (Only for the appliance with four- prong grounding plug).

The Anti-Tip Bracket

The range will not tip during normal use. However, the range can tip if you apply too much force or weight to the open door without the anti-tip bracket fastened down properly:

AWARNING



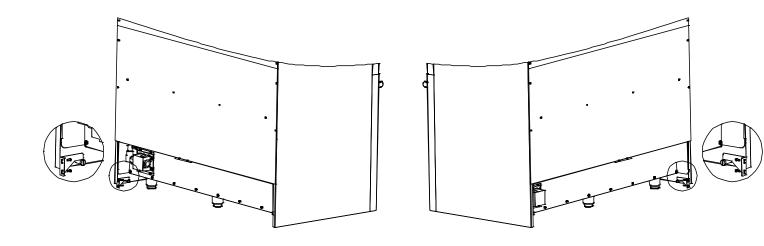
A child or adult can tip the range over and be killed.

Verify that the anti-tip bracket is securely installed.

Ensure the anti-tip bracket is engaged when the range is moved.

Do not operate the range without the anti-tip brackets in place. Failure to follow the instructions in this manual can result in death or serious burns to children and adults.

Check the below for the proper installation and use of anti-tip brackets.



Find the two anti-tip brackets and screws placed in the plastic bag with manual.

Fasten the two anti-tip brackets to the wall with the screws, two screws for each bracket.

Slide range completely back, make sure the fore-end of the brackets withhold the two screws on side panel of range

Important Safety instruction

WARNING: To reduce the risk of fire, electrical shock, injury to persons, or damage when using the range, follow basic precautions, including the following:

■ WARNING:

- a) A child or adult can tip the range and be killed.
- b) Verify the anti-tip device has been properly installed and engaged
- c) Ensure the anti-tip device is re-engaged when the range is moved
- d) Do not operate the range without the anti-tip device in place and engaged.
- e) Failure to do so can result in death or serious burns to children or adults.
- f) check if the fore end of anti-tip device withholds the two screws on side panel of range
- WARNING: TO REDUCE THE RISK OF TIPPING OF THE RANGE, THE RANGE MUST BE SECURED BY PROPERLY INSTALLED ANTI-TIP DEVICES. TO CHECK IF THE DEVICES ARE INSTALLED PROPERLY, SLIDE RANGE FORWARD, LOOK FOR ANTI-TIP BRACKET SECURELY ATTACHED TO FLOOR OR WALL, AND SLIDE RANGE BACK SO REAR RANGE FOOT IS UNDER ANTI-TIP BRACKET.
- WARNING: TO REDUCE THE RISK OF BURNS, DO NOT MOVE THE RANGE WHILE HOT. TO REDUCE THE RISK OF INJURY DUE TO TIPPING OF THE APPLIANCE, VERIFY THE REINSTALLATION OF THE RANGE INTO THE ANTI-TIP DEVICE PROVIDED, AND EXTEND LEVELING FEET AFTER RETURNING THE RANGE TO THE ORIGINAL INSTALLED POSITION.
- WARNING: NEVER use this appliance as a space heater to heat or warm the room. Doing so may result in carbon monoxide poisoning and overheating of the oven.
- WARNING: NEVER cover any slots, holes or passages in the oven bottom or cover an entire rack with materials such as aluminum foil. Doing so blocks air flow through the oven and may cause carbon monoxide poisoning. Aluminum foil linings

may also trap heat, causing a fire hazard.

- **CAUTION:** Do not store items of interest to children in cabinets above a range or on the back guard of a range children climbing on the range to reach items could be seriously injured.
- Do Not Leave Children Alone Children should not be left alone or unattended in area where the range is in use. They should never be allowed to sit or stand on any part of the range.
- Wear Proper Apparel Loose-fitting or hanging garments should never be worn while using the range.
- User Servicing Do not repair or replace any part of the range unless specifically recommended in the manual. All other servicing should be referred to a qualified technician.
- Storage in or on the Range Flammable materials should not be stored in an oven or near surface units.
- Do not use water on grease fires Smother fire or flame or use dry chemical or foam-type extinguisher.
- Use Only Dry Potholders Moist or damp potholders on hot surfaces may result in burns from steam. Do not let potholder touch hot heating elements. Do not use a towel or other bulky cloth.
- DO NOT TOUCH SURFACE UNITS OR AREAS NEAR UNITS Surface units may be hot even though they are dark in color. Areas near surface units may become hot enough to cause burns. During and after use,

do not touch or let clothing or other flammable materials contact surface units or areas near units until they have had sufficient time to cool. Among those areas are the cooktop and surfaces facing the cooktop.

- Never Leave Surface Units Unattended at High Heat Settings Boil over causes smoking and greasy spillovers that may ignite.
- Glazed Cooking Utensils Only certain types of glass, glass/ceramic, ceramic, earthenware, or other glazed utensils are suitable for range-top service without breaking due to the sudden change in temperature.
- Utensil Handles Should Be Turned Inward and Not Extend Over Adjacent Surface Units To reduce the risk of burns, ignition of flammable materials, and spillage due to unintentional contact with the utensil, the handle of a utensil should be positioned so that it is turned inward, and does not extend over adjacent surface units.
- Clean Cooktop with Caution If a wet sponge or cloth is used to wipe spills on a hot cooking area, be careful to avoid steam burn. Some cleaners can produce noxious fumes if applied to a hot surface.
- Use Care When Opening Door Let hot air or steam escape before removing or replacing food.
- Do Not Heat Unopened Food Containers—Build-up of pressure may cause container to burst and result in injury.
- Keep Oven Vent Ducts Unobstructed.
- Placement of Oven Racks—Always place oven racks in desired location while oven is cool. If rack must be moved while oven is hot, do not let potholder contact hot heating element in oven.
- DO NOT TOUCH HEATING ELEMENTS OR INTERIOR SURFACES OF OVEN Heating elements may be hot even though they are dark in color. Interior surfaces of an oven become hot enough to cause burns. During and after use, do not touch, or let clothing or other flammable materials contact heating elements or interior surfaces of oven until they have had sufficient time to cool. Other surfaces of the appliance may become hot enough to cause burns among these surfaces are oven vent openings and surfaces near these openings, oven doors, and windows of oven doors.
- Proper Installation The range, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70. In Canada, the range must be electrically grounded in accordance with Canadian Electrical Code. Be sure the range is properly installed and grounded by a qualified technician.
- Disconnect the electrical supply before servicing the appliance.
- Injuries may result from the misuse of appliance doors or drawers such as stepping, leaning, or sitting on the doors or drawers.
- Maintenance Keep range area clear and free from combustible materials, gasoline, and other flammable vapors and liquids.
- Top burner flame size should be adjusted so it does not extend beyond the edge of the cooking utensil.
- A manual valve must be installed in an accessible location in the gas piping external to the appliance for turning on or shutting off gas to the appliance.
- Any opening in the wall behind the appliance and in the floor under the appliance shall be sealed.

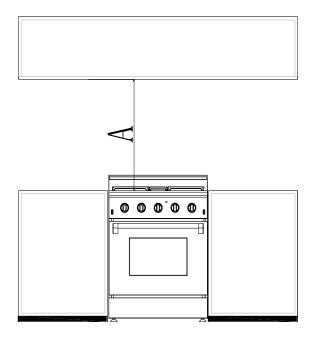
Installation Instruction

Important – Save for the local electrical inspector's use

■ WARNING:

- a) A child or adult can tip the range and be killed.
- b) Install the anti-tip device to the structure and/or the range.
- c) Engage the range to the anti-tip device.
- d) Re-engage the anti-tip device if the range is moved.
- e) See installation instructions for details.
- f) Failure to do so can result in death or serious burns to children or adults.
- g) check if the fore end of anti-tip device withholds the two screws on side panel of range.

To eliminate the risk of burns or fire by reaching over heated surface units, cabinet storage space located above the surface units should be avoided. If cabinet storage is to be provided, the risk can be reduced by installing a range hood that projects horizontally a minimum of 5 inches beyond the bottom of the cabinets.



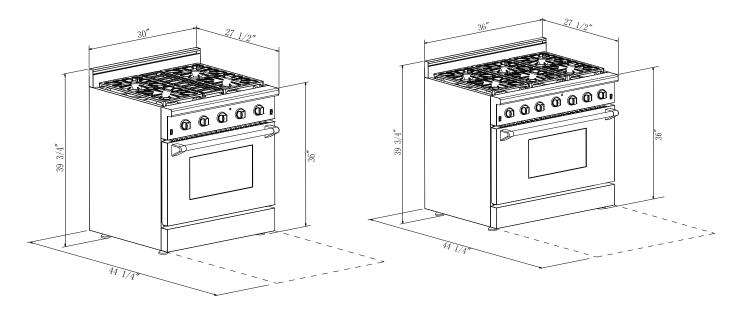
A = 30 inches' minimum clearance between the top of the cooking surface and the bottom of an unprotected wood or metal cabinet; or

A = 24 inches minimum when bottom of wood or metal cabinet is protected by not less than 1/4-inch-thick flame-retardant millboard covered with not less than No. 28 MSG sheet steel, 0.015-inch-thick stainless steel, 0.024-inch-thick aluminum, or 0.020-inch-thick copper.

A = 40 inches' minimum clearance between the top of the cooking surface and the bottom of an unprotected wood or metal cabinet, if your used one of the four model dual fuel range -HRD3620U, HRD3604U, HRD4801U and HRD4802U.

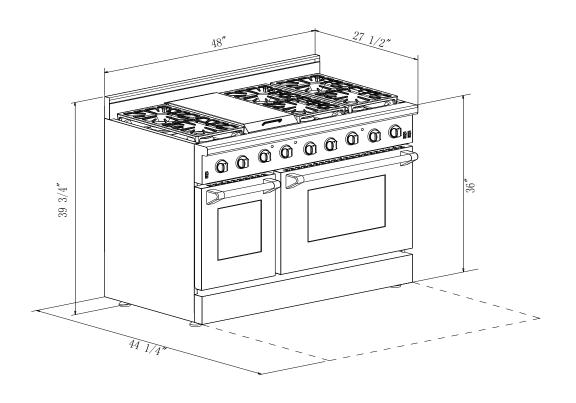
Range Dimension

The depth of the range is 27 $\frac{1}{2}$ " (69.8 cm) overall.



30 inch dual fuel range

36 inch dual fuel range



48-inch dual fuel range

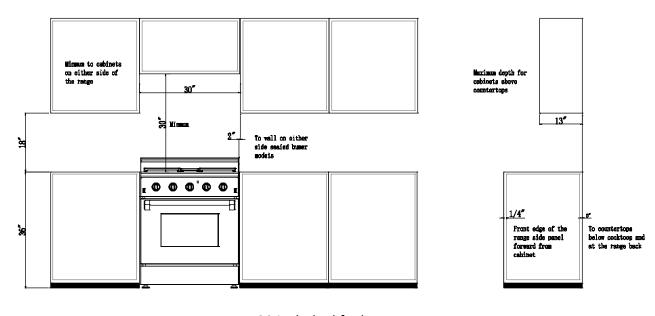
Positioning the Range

You may install a non-combustible material on the rear wall above the range and up the vent hood. It is not necessary to install non-combustible materials behind the range below the counter top height.

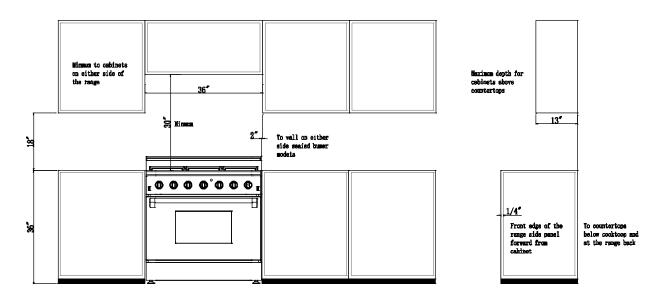
DO NOT INSTALL CLOSER THAN 12 MM FROM ANY ADJACENT SURFACE.

The minimum vertical distance between adjacent cabinets and the cooking surface must be 18".

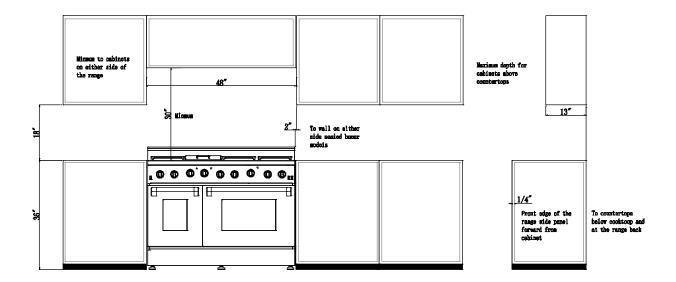
The maximum depth of adjacent cabinets installed above cooking tops should be less than 13 inch.



30 inch dual fuel range

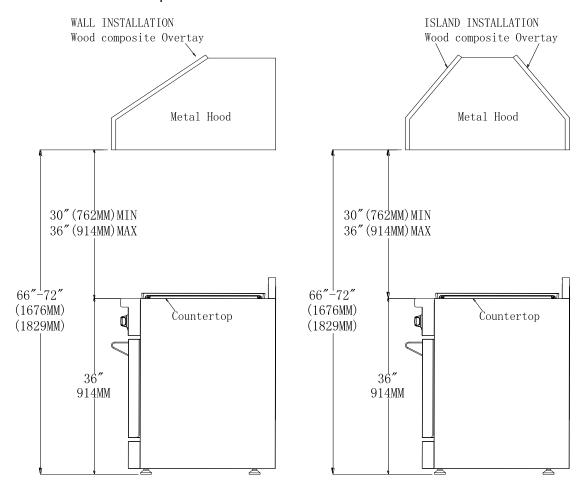


36 inch dual fuel range



48-inch dual fuel range

The bottom of the hood should be 30-inch min. to 36 inch above the counter top. This would typically result in the bottom of the hood being 66 inch to 72 inch above the floor, which provides safe and efficient operation of the hood.



Important Notes to the Installer

- 1. Read all instructions contained in these installation instructions before installing range.
- 2. Remove all packing material from the oven compartments before connecting the electrical supply to the range
- 3. Anti-tip brackets MUST be installed
- 4. Observe all governing codes and ordinances.
- 5.Be sure to leave these instructions with the consumer.

Important Note to the Consumer

Keep these instructions with your owner's guide for future reference.

IMPORTANT SAFETY INSTRUCTIONS

Installation of this range must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code ANSI Z223.1-latest edition.

This range has been designed certified by the American Gas Association. As with any appliance using gas and generating heat, there are certain safety precautions you should follow. You will find them in the Use and Care Guide, read it carefully.

- •Air curtain or other overhead hoods, which operate by blowing a downward air flow on to a range, shall not be used in conjunction with gas ranges other than when the hood and range have been designed, tested and listen by an independent test laboratory for use in combination with each other.
- •Be sure your range is installed and grounded properly by a qualified installer or service technician.
- •This range must be electrically grounded in accordance with local codes or, in their absence, with the National Electrical Code ANSI/NFPA No. 70—latest edition
- •The installation of appliances designed for manufactured (mobile) home installation must conform with Manufactured Home Construction and Safety Standard, title 24CFR, part 3280 [Formerly the Federal Standard for Mobile Home Construction and Safety, title 24, HUD (part 280)] or when such standard is not applicable, the Standard for Manufactured Home Installation 1982 (Manufactured Home Sites, Communities and Setups), ANSI Z225.1/NFPA 501Alatest edition, or with local codes.
- Make sure the wall coverings around the range can withstand the heat generated by the range.
- •Before installing the range in an area covered with linoleum or any other synthetic floor covering, make sure the floor covering can withstand heat at least 90°F/32°C above room temperature without shrinking, warping or discoloring. Do not install the range over carpeting unless you place an insulating pad or sheet of 1/4" (6.4 mm) thick plywood between the range and carpeting.
- •Do not obstruct the flow of combustion air at the oven vent nor around the base or beneath the lower front panel of the range. Avoid touching the vent openings or nearby surfaces as they may become hot while the oven is in operation. This range requires fresh air for proper burner combustion.

AWARNING Never leave children alone or unattended in the area where an appliance is in use. As children grow, teach them the proper, safe use of all appliances. Never leave the oven door open when the range is unattended.

AWARNING Stepping, leaning or sitting on the door(s) or drawer of this range can result in serious injuries and can also cause damage to the range.

- •Do not store items of interest to children in the cabinets above the range. Children could be seriously burned climbing on the range to reach items.
- Toeliminate the need to reach over the surface units, cabinet storage space above the units should be avoided.
- •Adjust surface burner flame size so it does not extend beyond the edge of the cooking utensil.

Excessive flame is hazardous.

- Do not use the oven as a storage space. This creates a potentially hazardous situation.
- •Never use your range for warming or heating the room. Prolonged use of the range without adequate ventilation can be dangerous.
- •Do not store or use gasoline or other flammable vapors and liquids near this or any other appliance. Explosions or fires could result.
- •In the event of an electrical power outage, the surface burners can be lit manually. To light a surface burner, hold a lit match to the burner head and slowly turn the Surface Control knob to Lite. Use caution when lighting surface burners manually.

Model and Serial Number Location

Find the model and serial numbers on the CSA label in the bottom right-hand corner of the backboard. Note these numbers down for future reference in the space provided in section 'Warranty and service'.

Power Supply Cord Kit

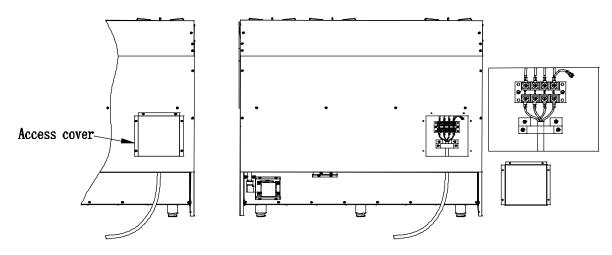
The power supply cord will be connected to the terminal connection block located behind the back-panel access cover by manufacture. This appliance should be connected by means of permanent "hard wiring" or by means of a power supply cord kit.

AWARNING Risk of fire or electrical shock exists if an incorrect size range cord kit is used, the Installation Instructions are not followed, or the strain relief bracket is discarded.

Terminal on end of wires must be either closed loop or open spade lug with upturned ends. Cord must have strain-relief clamp.

CAUTION: Do not loosen the nuts which secure the factory-installed range wiring to terminal block while connecting range. Electrical failure or loss of electrical connection may occur.

Access to Terminal Block



Remove the screws at the lower end of the rear access cover and take it down to expose range terminal connection block.

⚠ WARNING

a) For 30-inch and 36-inch Dual Fuel Range, only a 4-conductor power-supply cord kit rated <u>240</u> volts, <u>30A</u> amperes **minimum** and marked for use with ranges shall be used;

For 48-inch Dual Fuel Range, it should be equipped with a <u>240</u> volts rate, <u>40A</u> amperes minimum 4-conductor power-supply cord kit.

b) used closed-loop terminal that the cord kit is to employ, as appropriate for the appliance supply terminals.

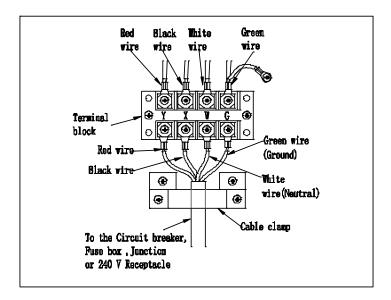
⚠ WARNING Electrical Shock Hazard

- Electrical ground is required on this appliance.
- Do not connect to the electrical supply until appliance is permanently grounded.
- Disconnect power to the circuit breaker or fuse box before making the electrical connection.
- This appliance must be connected to a grounded, metallic, permanent wiring system, or a grounding connector should be connected to the grounding terminal or wire lead on the appliance. Failure to do any of the above could result in a fire, personal injury or electrical shock.

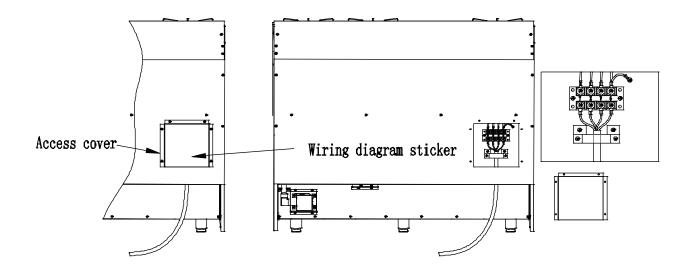
Electrical Connection

Four Conductor Wire Connection to Range

- 1. Remove the screws at the lower end of the rear access cover and take it down to expose range terminal connection block.
- 2. Remove the screws to loosen the cable clamp and pass through the four-conductor wire from the bottom of the range.
- 3. Loose the screws on the terminal block and connect the wire to terminals, after then, tighten the screws of cable clamp and terminal block, please make sure that match the wire and terminals by color.
- 4. Put back the terminal cover and tighten the screws.



The wiring diagram for the terminal connection block stick on the access cover .



Gas Supply Requirement

Installation of this range must conform with local codes, or in the absence of local codes, with national Fuel Gas Code, ANSIZ223.1 / NFPA 54. In Canada, installation must conform to the current natural Gas Installation /code, CAN 1-1.1-M81 and with local codes where applicable. This range has been design-certified per ANSIZ21.1a, latest edition.

MAXIMUM GAS SUPPLY PRESSURE TO APPLIANCE FOR LP GAS---13.0 IN.W.C.

MAXIMUM GAS SUPPLY PRESSURE TO APPLIANCE FOR NG GAS---10.0 IN.W.C.

APPLIANCE REGULATOR IS SET AT 10.0IN.W.C. OUTLET PRESSURE FOR LP.

APPLIANCE REGULATOR IS SET AT 5.0IN.W.C. OUTLET PRESSURE FOR NG.

Keep appliance area clear and free from combustible materials, gasoline, and other flammable vapors.

Do not obstruct the flow of combustion air into the range and ventilation air away from the range.

Ventilation: it is recommended that the unit be set under a powered, vented exhaust hood of sufficient size and capacity.

Before installing the range, you must locate and secure the included anti-tip bracket to the wall for your range.

Caution: The use of cabinets for storage above the appliance may result in a potential burn hazard. Combustible items may ignite; metallic items may become hot and cause burns. If a cabinet storage is to be provided, the risk can be reduced by installing a range hood that projects horizontally a minimum of 5" (12.7cm) beyond the bottom of the cabinets.

Connect Range to Gas Supply

- 1. Install a manual gas line shut-off valve in the gas line in an easily accessed location outside the range in the gas piping external to the appliance for turning on or shutting off gas to the appliance.
- 2. Install male $^{1}/_{2}$ inch flare union adapter to $^{1}/_{2}$ inch NPT internal thread elbow at inlet of regulator. On models equipped with standard twin burners, install the male pipe thread end of the $^{1}/_{2}$ inch flare union adapter to the $^{1}/_{2}$ inch NPT internal thread at inlet of pressure regulator. Use a wrench on the regulator fitting to avoid damage.
- 3. Install male $^{1}/_{2}$ inch or $^{3}/_{4}$ inch flare union adapter to the NPT internal thread of the manual shut-off valve, taking care to secure the shut-off valve to keep it from turning.
- 4. The gas supply pressure for checking the regulator setting is 6 in.w.c. (Nature Gas) and 11 inch.w.c. (LP gas) connect flexible gas line connector to the regulator on the range. Position range to permit connection at the shut-off valve.

When all connections have been made, make sure all range controls are in the position and turn on main gas supply valve.

5. Leak testing of the appliance shall be conducted per the manufacturer's instructions. Use some soap water (50% water and 50% soap) or a leak detector at all joints and connections to check for leaks in the system. Do not use a flame to check for gas leaks.

6. The appliance must be isolated from the building's gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressure equal to or less than $^{1}/_{2}$ psig(3.5kPa).

After installation:

Check ignition of cooktop burners.

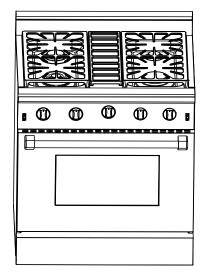
Check ignition of oven burner.

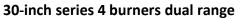
Visually check tubular burner (oven burner) re-ignition to be sure both rows of burner ports are relighting each time.

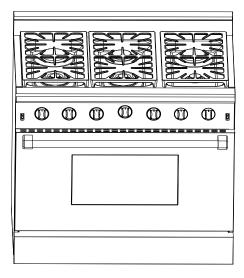
Check for gas leaks at all gas connections (using a gas detector, never a flame).

Check oven bake and convection bake function.

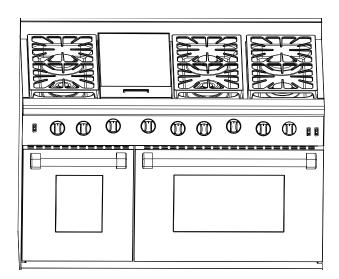
Range Overview





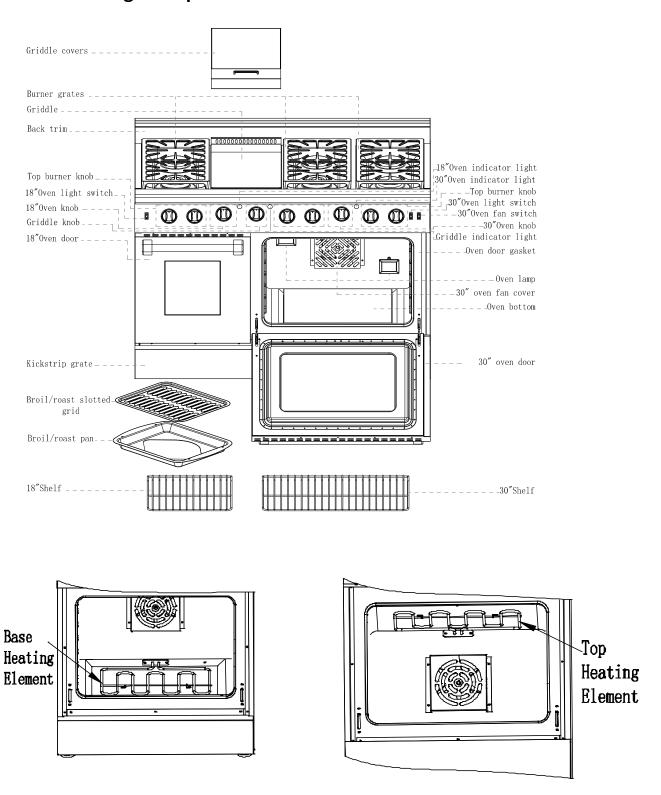


36-inch series 6 burners dual range



48-inch series with griddle two oven dual range

48-inch dual range sample



Electric Broiler (Top) Heating Element: 1@3 500 W.

Oven Electric Heating Element: 1@850 W(Top) & 3 000 W (Base), apply to 30 inch and 36 inch oven. 1@2 500 W (Base), apply to 48-inch dual fuel range which has 18 inch oven.

Cooktop Equipment

Dual fuel range cooktop burner equipment as below:

Model	1 2000 BTU	1 5000 BTU	1 8000 BTU	Griddle(1 5000 BTU)
HRD3001U			4	No
HRD3002U		2	2	No
HRD3004U		4		No
HRD3031U	2	2		No
HRD3088U	2	1	1	No
HRD3604U			6	No
HRD3605U		6		No
HRD3606U	1	2	3	No
HRD3618U	3	2	1	No
HRD3620U		3	3	No
HRD4801U			6	1
HRD4802U		6		1
HRD4803U	2	2	2	1
HRD4804U	3	3		1
HRD4806U		3	3	1
HRD3031U-A	2	2		No
HRD3618U-A	3	2	1	No
HRD4804U-A	3	3		1

First Use

Before you start

- 1. Make sure that the anti-tip of the range has been properly installed.
- 2. Find the model and serial numbers on the CSA label. Note these numbers down for future reference in the space provided in section 'Warranty and service'.
- 3. Read this guide, taking special note of the 'Safety and warnings' section.
- 4. Remove all the packaging from the oven(s) and cooktop. Recycle items that you can. If any adhesive residue is left on surfaces, remove this using dish washing liquid on a soft cloth. Do not use any harsh or abrasive cleaners.
- 5. Make sure you follow the instructions under 'First use' before using your range for cooking.

Conditioning the oven

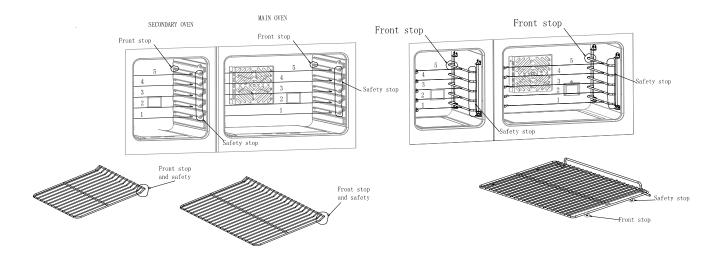
Conditioning will burn off any manufacturing residues and ensure that you get the best results right from the start.

- 1.Insert all the shelves. See 'Positioning the shelves' for instructions.
- 2. Turn on the ventilation hood above your range on high.
- 3. Heat the empty oven at the highest temperature for:
- 30 minutes using BAKE.
- 30 minutes using BROIL (some ovens only).

There will be a distinctive smell while you are conditioning the oven. This is normal, but make sure the kitchen is well ventilated during the conditioning.

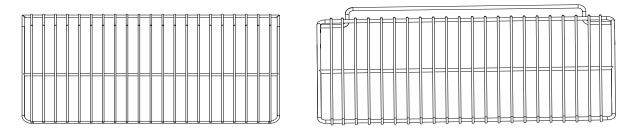
4.Once cooled, wipe out the oven with a damp cloth and mild detergent, and dry thoroughly.

Positioning the shelves

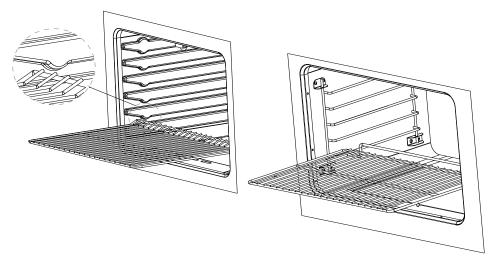


Both the sides panel and shelves with safety stop to keep them sliding out of the oven when pulled forward; And the front stop prevent the shelves from against hitting the back of the oven.

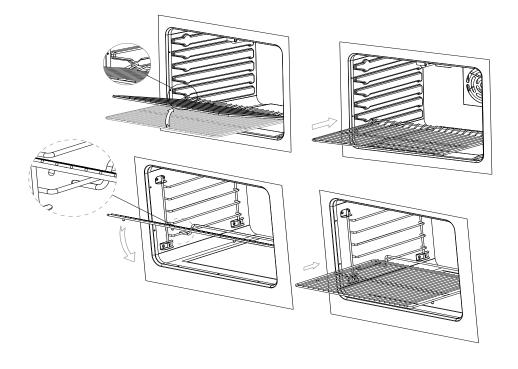
Insert the shelves



1. Hold the front of both sides of the shelf firmly to keep it in horizontal.



2. Put the shelf on the slot horizontally.



3. Lift the front about 15°upward till the tag of the shelf clear the safety stop of the side rack. Then lower the shelf horizontally and slide all the way into the oven. Other shelves can be installed by this way.

Guidelines for using the cooktop burners

There are dual ring burners have the same low turn-down setting (SIM) for gentle simmering (680 BTU/hr.). Use the SIM setting for melting chocolate and butter, cooking rice and delicate sauces, simmering soups and stews, and keeping cooked food hot.

Never leave the cooktop unattended when in use. Boil over causes smoking and greasy spills that may ignite.

Never allow flames to extend beyond cookware or curl up its sides. This could discolor and damage the utensil and you may get burned touching a hot handle.

Keep handles out of the way. Turn handles so that they don't extend over the edge of the range or another burner that is on.

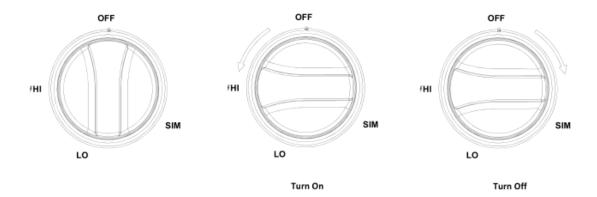
Take care when deep-frying. Oil or fat can overheat very quickly, particularly on a high setting.

Make sure that all burner parts are properly in place. Incorrectly or incompletely assembled burners may produce dangerous flames. See 'Replacing the burner parts' in 'Care and cleaning'.

Keep the burners clean. Especially after a spill or boil over, make sure you clean the affected burners before using them again. Food residue may clog the igniter and the notches of the flame spreader, stopping the burner from functioning correctly. See 'Care and cleaning' for instructions.

Check that the burner flames are regular. They should be blue with no yellow tipping, and burn without fluttering all around the burner cap. If not, see 'Troubleshooting' for advice.

Surface Burner Ignition



To light the top burners, push and turn the appropriate control knob counter clockwise to the 'HI' position. You will hear a clicking noise—the sound of the electric spark igniting the burner. Once burner ignition has been achieved, then turn the burner control knob to adjust the desired heat setting.

NOTE: When one burner is turned to the 'HI' position, the burner ignition will spark. Do not attempt to disassemble or clean around any burner while another burner is on. Do not touch any burner cap, burner base, or igniter while the ignitor is sparking.

Simmer and Boil

- 1. A smaller flame will give the best simmer results. Small flames offer precise cooking performance for delicate foods, keeping food warm, melting chocolate or butter, and for cooking that need to cook over low heat for a long time.
- 2. The highest (larger) flame settings provide the maximum heat that is available on your range. This setting should be used for heavy cooking loads such as water boiling or pasta cooking.

Flame Size

When you select the flame size, watch the flame when you turn the knob.

Any flame larger than the bottom of the cookware is wasted.

The flame should be steady and blue in color. Foreign material in the gas line may cause an orange flame during initial operation.



Power Failure

If the gas does not ignite within four seconds, turn off the valve and allow at least five minutes for any gas to dissipate. Repeat the lighting procedure.

If the power fails, it is not capable of being safely placed in operation and user that no attempt should be made to operate during power failure.

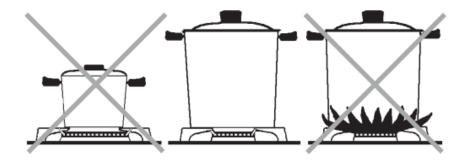
Cooktop

To prevent the cooktop from discoloring or staining, clean cooktop after each use, and wipe up acidic or sugary spills as soon as the cooktop has cooled.

The sealed burners of your range are not sealed to your cooktop and are designed to be removed. Boil overs or spills will not seep underneath the cooktop. The burners should be cleaned after each use.

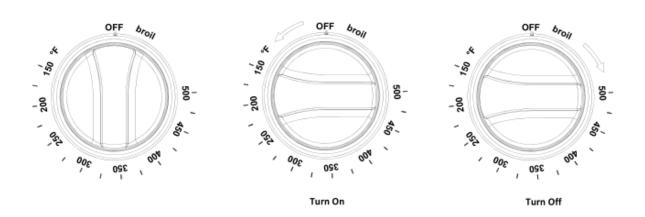
Burner Grates

The grates must be properly positioned before cooking. Improper installation of the grates may result in scratching of the cooktop and / or poor combustion.



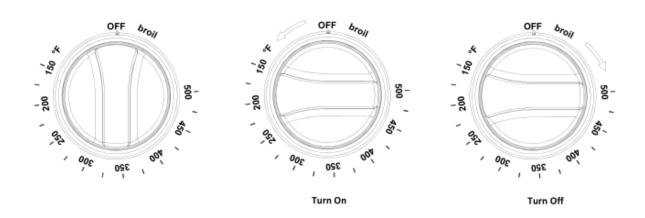
Oven Use

Oven bake heat element operation



Push and turn the appropriate control knob counter clockwise to the temperature position (150° Fo 500° F). You will see the upper heat element and down heat element both turn red gradually, which means that it is heating. The oven indicator light will light. You can turn the control knob to adjust the desired heat setting. When you need to turn it off, just turn the control knob clockwise back to 'OFF' position (clockwise), the oven indicator light does not light, or continue to turn the control knob counter clockwise to the 'broil position', which the upper heat element works, the oven indicator light will also light.

Oven broil heat element operation



Push and turn the appropriate control knob counter clockwise to the 'broil' position, Only the top heat element start to turn red gradually, which means that it is heating, the oven indicator light will light, when you need to turn it off, just turn the control knob clockwise back to 'OFF' position, the oven indicator light does not light or turn the control knob clockwise to the temperature position (150°Fo 500°F), which the down heat element operation, the oven indicator light will also light.

Oven cooking guidelines

Important!

The oven vent releases hot air and moisture from the oven, and should not be blocked or covered. Blocking or covering the vent will cause poor air circulation, affecting cooking and cleaning results. Do not set plastics, paper or other items that could melt or burn near the oven vent.

Use all the oven modes with the oven door closed.

Never use aluminum foil to cover the oven shelves or to line the floor of the oven. The trapped heat can irreversibly damage the enamel and may even cause fire.

Do not place water, ice, or any dish or tray directly on the oven floor, as this will irreversibly damage the enamel.

Do not use plastic wrap or wax paper in the oven.

For food safety reasons, do not leave food in the oven for longer than two hours before and after cooking or defrosting. This is to avoid contamination by organisms which may cause food poisoning. Take care during warmer weather.

According to the United Sates Department of Agriculture: DO NOT hold foods at temperatures between 40°F to 140°F more than 2 hours. Cooking raw foods below 275°F is not recommended.

Never cover any slots, holes or passages in the oven bottom or cover an entire rack with materials such as aluminum foil. Doing so blocks air flow through the oven and may cause carbon monoxide poisoning.

Aluminum foil lining may also trap heat, causing a fire hazard.

Oven Temperature

While in use, the oven elements will cycle on and off as needed to maintain a consistent temperature, but they may run slightly hot or cool at any point in time due to this cycling. Opening the oven door while in use will release the hot air and cool the oven which could impact the cooking time and performance. It is recommended to use the oven light to monitor cooking progress.

Oven Function

Natural Airflow Bake

Occurs when heat is transferred into the oven from the bake burners in the bottom of the oven cavity. Heat is then circulated by natural airflow. This is a traditional bake setting.

Infrared Broil

The broil burner is located at the top of the oven. This burner heats the metal screen until it glows. The glowing screen produces the infrared heat, searing the outside of broiled foods and sealing in juices.

Convection Bake

Heat is transferred from the bake burners in the bottom of the oven cavity to the oven cavity itself. The convection fan in the rear of the oven then circulates it. This convection process provides more even heat distribution throughout the oven cavity. Multiple rack use is possible for the largest baking job. Convection cooking is faster, can be accomplished at lower temperatures and provides more even temperatures than with regular cooking.

Position the oven bottom cover and the oven shelf/shelves before using oven. And remove any unused shelves and baking utensils from the oven.

Preheat the oven to the temperature stated in the recipe before most baking, depending on the temperature and the size of the oven.

Arrange pans and food items evenly on the shelves. Make sure pans do not touch each other or the sides of the oven. When baking a single item, always center the item on the oven shelf. If baking on multiple shelves, make sure you stagger items on the shelves so that one is never directly above another.

CONVECTION, either reduce the temperature stated in the recipe and leave the baking time unchanged, or reduce the baking time by several minutes and leave the temperature unchanged. For foods with a baking time of over an hour, reducing both the temperature and time slightly may give the best results.

Dark metal baking pans or those with a dull finish absorb heat faster than shiny pans, and are excellent for pies and breads, or anything that needs browning or a crisper crust.

A shiny finish may work best for foods that require lighter, delicate browning (e.g. cakes and cookies), as it reflects some heat and gives a less intense baking surface.

Avoid opening the oven door frequently during baking.

Convection Roast

The convection fan circulates the heated air evenly over and around the food. Using the cover and broiler pan provided, heated air will be circulated over the around the food being roasted. The heated air seals in juices quickly for a moist and tender product while, at the same time, creating a rich golden brown exterior. When convection roasting, it is important that you use the broiler pan for best convection roasting results. The pan is used to catch grease spills and has a cover to prevent grease splatter.

Use the broil/roast pan and slotted grid supplied with the range when roasting, elevating the meat on a metal roasting rack. This allows hot air to circulate around the meat, giving a more even browning and a

result similar to a rotisserie.

When roasting larger items like a whole turkey, use only the pan and grid for greater stability.

Convection Defrost

Turn on the convection fan in the rear of the oven circulates the air. The fan accelerates natural defrosting of the food without heat. To avoid illness and food waste, do not allow defrost food to remain in the oven for more than two hours without being cooked.

Defrosting

To thaw uncooked frozen food, set the oven temperature to 100-150°F. Once thawed, cook the food immediately and do not refreeze.

To prevent liquid from thawing food dripping on the oven floor, be sure any uncooked food is tightly wrapped in foil and/or placed in a container.

Convection Dehydrate

With the temperature control on 175° F, warm air is radiated from the bake heat element in the bottom of the oven and is circulated by a convection fan in the rear of the oven. Over a period, the water is removed from the food by evaporation. Removal of water inhibits growth of microorganisms and retards the enzymes activity.

Oven top heat element operation

Note: Door must be closed during upper heat element operation

Broiling is a method of cooking tender cuts of meat directly under the broiler in the oven. Broiling in the oven is accomplished with the oven door closed. It is normal and necessary for some smoke to be present to give the food a broiled flavor.

If you open the oven door to check the food, have it open for as short a time as possible. This is to prevent the control panel from overheating.

Use both the broil/roast pan and slotted grid supplied. The grid helps to reduce smoking and splatter by letting grease drip into the bottom of the pan, away from intense heat. To prevent food sticking, spray the grid with a light coating of non-stick cooking spray.

Preheating

Preheating is suggested when searing rare steaks (Remove the broiler pan before preheating with the infrared broiler. Foods will stick on hard metal). To preheat, turn the "Oven" selector knob to the 'Broil' position. Wait for the burner to become hot, approximately 2 minutes. Preheating is not necessary when broiling meat well-done.

To Broil

Broil one side until the food is browned; turn and cook on the second side. Season and serve. Always pull the rack out to the "stop" position before turning or removing food.

Setting Broil

The **'Oven'** selector knob controls the Broil feature. When broiling, heat radiates downward from the oven broiler for even coverage. The Broil feature temperature is 500° F.

The broil pan and insert used together allow dripping grease to drain and be kept away from the high heat of the oven broiler. **DO NOT** use the broil pan without the insert.

DO NOT cover the broil pan insert with foil. The exposed grease could catch fire.

To set the oven to Broil:

- 1. Place the broiler pan insert on the broiler pan. Then place the food on the broiler pan insert.
- 2. Arrange the interior oven rack and place the broiler pan on the rack. Be sure to center the broiler pan and position directly under the broil burner. If preheating the broil burner first, position the broiler pan after the broil burner is preheated.
- 3. Turn selector knob to Broil.

The oven indicator light will remain on until the selector knob is turned to the off position or the temperature control cycles off.

Broiling guidelines

Choose a suitable shelf position. To ensure that meat is cooked through rather than just browned on the outside, broil thick pieces of meat and poultry on shelf positions 2 or 3. Use shelf position 4 for thinner items that need less cooking time like steaks, chops, or hamburger patties.

When finishing off meals by browning the top under the broiler, use metal or glass-ceramic bakeware. Do not use heatproof glass or earthenware, as these cannot withstand the intense heat of the broiler.

Center the item in the oven, so that it is directly under the broiler.

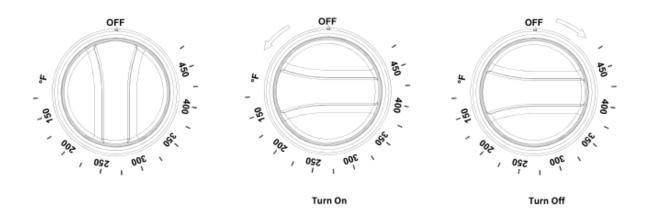
Griddle Use

For the models with Griddle

Before Using the Griddle

- 1. Clean the griddle thoroughly with warm, soapy water to remove dust or any protective coating.
- 2. Rinse with clean water and wipe off to dry with soft, clean, lint-free cloth.
- 3. A stainless-steel cover that is sized to fit on top of the surface when the griddle is not being used is provided. Please note that the cover must be removed before turning the griddle on.
- 4. Make sure the grease tray is under the front edge of the griddle. Position the tray under the griddle overhang to catch grease or food residue.

Use of the griddle



- 1. Push and turn the control knob counter-clockwise to the preferred cooking temperature.
- 2. Preheat the griddle for 10-12 minutes.
- 3. When the griddle is preheated to the desired temperature, the indicator light will turn on.
- 4. Butter or cooking oil can be added for more flavor, then plate the food to cook.

Caution: The surface of the griddle is hot after use. Please allow sufficient time for the griddle to cool prior to cleaning.

WARNING When using the appliance or the first time. The oven and broiler burners should be turned on to burn off the manufacturing oils. Turn the oven on to 450° F(230° C) for 20 to 30 minutes. Then turn the oven control knob to "Broil" for the same length of time. It is recommended to turn on the ventilator above the range at this time.

Must be sured disconnect the electrical supply before servicing or cleaning the appliance. Failure to follow this advice may result in injury or death.

Care and Cleaning

Do

Read these cleaning instructions and the 'Safety and warnings' section before you start cleaning your range.

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Unless suggested otherwise in the chart in the following, allow any part to cool to a safe temperature before cleaning. If you do need to handle a warm or hot part (e.g. grill or griddle), take extreme care. Wear long protective mitts to avoid burns from steam or hot surfaces.

Try using any cleaner on a small area first, to ensure it doesn't stain. See the pages following this chart for instructions on removing and replacing different parts of the range for cleaning or maintenance.

To help you identify any parts, see illustrations in section 'Introduction' and after this cleaning chart.

Don't

Do not let soiling or grease accumulates anywhere in or on the range. This will make future cleaning more difficult and may present a fire hazard.

Do not use any abrasive or harsh cleaners, cloths, scouring pads or steel wool. These will scratch your range and damage its appearance.

Do not use a steam cleaner to clean any part of the range.

Do not perform any cleaning or maintenance on parts not specifically named in the chart below. If in doubt, contact Customer Care.

Do not lift the black grill and griddle frames off the cooktop and warnings' section before you start cleaning your range.

Burner caps and brass flame spreaders

Check that the burner is turned off and allow it to cool. Lift off the burner cap and brass flame spreader. Wash them in hot soapy water, rinse, and dry.

Use a stiff nylon brush or straight-ended paper clip to clear the notches of a flame spreader. Replace the flame spreader and burner cap correctly.

To avoid electrical shock or burns, turn off controls and ensure the cooktop is cool before cleaning.

Before cleaning the cooktop, ensure that all burners are turned off and that all components are cool enough to safely touch.

Do not use harsh or abrasive cleaning agents, waxes, polishes, or commercial cooktop cleaners to clean the cooktop.

Use only a sponge, soft cloth, fibrous or plastic brush, and nylon pad for cleaning.

Always dry components completely before using the cooktop.

Control Panel, Door Handle, Control Housing

Clean the control panel, door handle and control housing with a solution of mild detergent and warm water.

Do not use abrasive cleaners or scrubbers; they may permanently damage the finish.

Dry the components with a soft, lint-free cloth.

Side racks

Pre-soak any stubborn, burnt-on soiling, then clean with a solution of mild detergent and hot water and wipe dry with a microfiber cloth.

Alternatively, clean these in the dishwasher.

Oven shelves

To remove stubborn or 'baked-on' soiling, scrub with a dampened, soap-filled, non- metal, non-abrasive pad, then wipe dry.

Apply chrome cleaner with a damp sponge or cloth following manufacturer instruction to wipe and dry.

Broil/roast pan and slotted grid

Pre-soak any stubborn soiling in a solution of mild detergent and hot water. Wash by hand or in a dishwasher.

Bake and broil burners

Do not clean these parts. They self-clean during normal use.

Porcelain Surfaces

Clean oven interior and inner door liners with a solution of mild detergents and hot water. Rinse and dry with a soft, lint-free cloth. Do not use abrasives or commercial oven cleaners.

Oven Window

Clean all glass surfaces with a solution of mild detergent and hot water. Use a mild glass cleaner to remove fingerprint or smears.

Dry completely with a soft, lint-free cloth.

Oven door gasket

Avoid cleaning this part. If you need to remove large food particles off it, proceed as follows:

- 1. Dampen a sponge with clean hot water.
- 2. Gently wipe off the soiling, but do not rub.
- 3. Press a dry towel gently on the gasket to dry.

Do not use any cleaning agent on the gasket.

The gasket is essential for a good seal. Take care not to rub, displace, or damage it.

Stainless steel surfaces cleaning

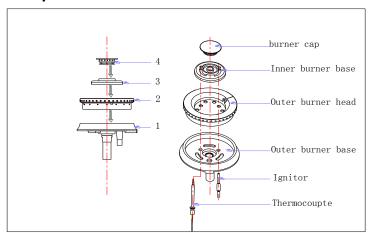
Do not use any cleaning product with chlorine bleach.

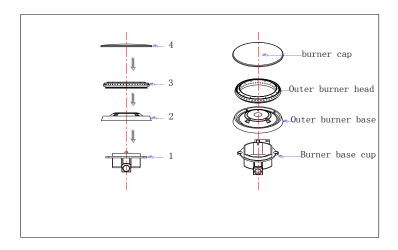
Do not use a steel wool pad; it will scratch the surface.

Use a hot, damp cloth with a mild detergent.

Use a clean, hot, damp cloth to remove soap. Dry with a dry, clean cloth.

Replacing the burner parts





Removing and replacing the oven door

Important!

Do not lift the oven door by its handle. Doing so may damage the door.

Make sure the oven and the door are cool before you begin to remove the door.

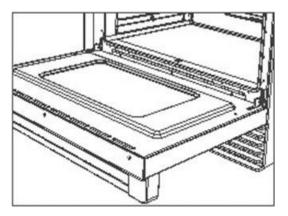
Before removing the door, make sure there is a large enough clear, protected surface in the kitchen to rest the door on.

Take care, the oven door is heavy!

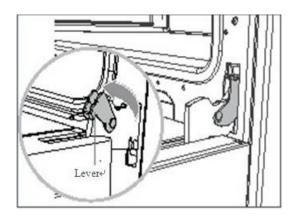
When replacing the burners, make sure that the two locating pins on the bottom of the brass flame spreader are properly aligned with the locating pin holes on the top of the simmer ring.

Incorrect alignment will produce a potentially dangerous flame and poor burner performance.

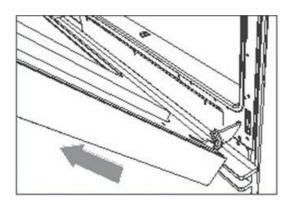
Removing the oven door



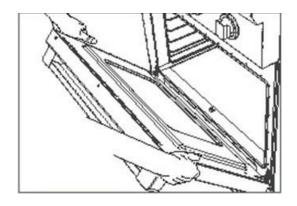
1. Open the door fully.



2. Open the levers fully on both sides.

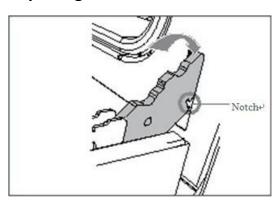


3. Holding the door firmly on both sides. door, gently close it about halfway.

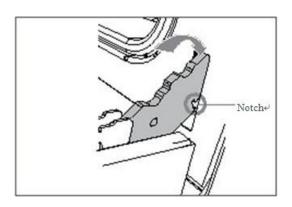


4. Disengage the hinges and remove the door, place on a protected surface.

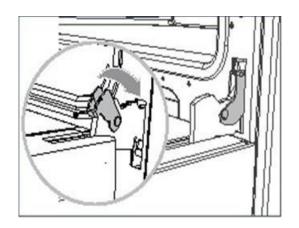
Replacing the oven door



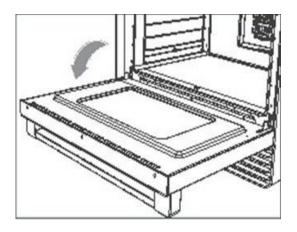
1. Hold the door firmly in an approximately halfway open position.



2.Insert the hinge tongues into the slots, making sure that the notches on both sides drop into place as shown.



3. Open the door fully.



4. Fully close the levers on the left and right hinges, as shown, then close the door.

Replacing the oven light bulb

When replace bulbs, release the glass cover on the lamp holder first, and then remove the bulb to replace new light bulb. (see figure 1 and figure 2)

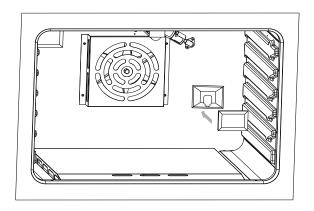


Figure 1

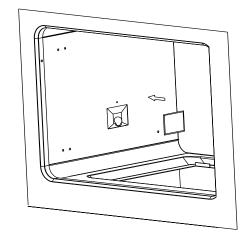


Figure 2

Trouble Shooting

Cooktop ignition or hotplate burners faulty

Is the power on? If not, there maybe something wrong with the power supply.

Are the sparker (ignition electrode) or burner slots blocked by debris?

Are the burner trim and caps correctly located? See thesection on 'Cleaning'.

Cooktop burners will not light.

Make sure that the burner parts have been replaced correctly after wiping or removing for cleaning.

Check that there is not a problem with your gas supply. You can do this by making sure that other gas appliances you may have are working.

Do the burners spark when you push in the control knob? If not, check the power is on.

Cooktop burner flames are very large and yellow.

Check that the burner head and caps have been replaced correctly after cleaning.

Ensure the burner ports are not blocked. Clean using a piece of fuse wire.

What cleaning materials are recommended for the range?

See the 'Cleaning' section for recommended cleaning materials.

Caution: Never use caustic or abrasive cleaners as these will damage the surface.

An oven fan is noisy

The note of the oven fan may change as the oven heats up – this is perfectly normal.

If there is an installation problem and I don't get my original installer to come back to fix it who pays?

You do. Service organizations will charge for their call outs if they are correcting work carried out by your original installer. It is in your interest to track down your original installer.

Food is cooking too slowly, too quickly, or burning

Cooking times may differ from your previous oven.

Check that you are using the recommended temperatures and shelf positions —The oven control settings and cooking times are intended to be used **only** as a guide.

Individual tastes may require the temperature to be altered either way, to get the results you want.

The oven is not cooking evenly

If you are cooking a large item, be prepared to turn it round during cooking.

If two shelves are used, check that space has been left for the heat to circulate. When a baking tray is put into the oven, make sure that it is placed centrally on the shelf.

Check that the door seal is not damaged.

A dish of water when placed on the shelf should be the same depth all over. (For example, if it is deeper at the back, then the back of the range should be raised up or the front lowered.) If the range is not level, arrange for your supplier to level it for you.

Oven not coming on

Is the power on? If not, there may be something wrong with the power supply.

Is the range supply on at the circuit breaker?

Oven temperature getting hotter as the range gets older

If turning the temperature down using the oven control knob has not worked, or has only worked for a short time, then you may need a new thermostat. This should be fitted by a qualified service person.

An oven light is not working

The bulb has probably burnt out. You can buy a replacement bulb (which is not covered under the warranty) from a good electrical shop.

Turn off the power at the circuit breaker.

Before removing the existing bulb, turn off the power supply and make sure that the oven is cool. Open the oven door and remove the oven shelves. Gently prize off the glass cover to expose the bulb.

Pull the bulb from its housing to remove. Insert the replacement bulb and replace the glass cover .

Warranty

This product has been manufactured by Thor Group, 13831 Oaks Ave, Chino, California 91710.

Thor Group disclaims all express warranties except for the following:

This warranty applies to products purchased and located in the United States. Products purchased or located outside this area are excluded.

The warranty does not apply to damage resulting from abuse, accident, natural disaster, loss of electrical power to the product for any reason, alteration, outdoor use, improper installation, and improper operation, repair or service of the product by anyone other than an authorized Thor Group, service agency or representative.

Warranties and Duration

Full warranty for Parts and Labor: 2 year.

Implied warranties terminate upon expiration of the limited warranty. Some states do not allow limitations on how long implied warranty lasts, so the above limitation may not apply to your implied warranty.

Thor Group will pay for:

All repair labor and cost of replacement parts found to be defective due to material and workmanship. Service must be provided by a Thor Group Authorized Service Agency during normal working hours.

For a Service Agency nearest you, please call 877-288-8099.

Thor Group will not pay for:

This limited warranty does not cover:

- 1. Service to instruct you on how to use your range to correct house wiring, replace or repair house fuses, service to correct the installation of your range.
- 2. Repairs when your range is used for other than normal, single-family household use or when it is used in a manner that is contrary to published user or operator instructions and/or installation instructions.
- 3. Cosmetic damage, including chips, dents, scratches or other damage to the finish of your range, unless such damage results from defects in materials or workmanship and is reported to Thor Group within 30 days from the date of purchase.
- 4. Costs associated with the removal from your home of your range for repairs. This range is designed to be repaired in the home and only in-home service is covered by this warranty.
- 5. Damage resulting from misuse, alteration, accident, abuse, fire, flood, acts of God, improper installation, installation not in accordance with electrical, or use of consumables or cleaning products not approved by Thor Group.
- 6. Service to repair or replace consumable parts. Consumable parts are not included in the warranty coverage.

- 7. The removal and reinstallation of your range if it is installed in an inaccessible location or is not installed in accordance with published installation instructions.
- 8. This warranty is void if the factory applied serial number has been altered or removed from your range.
- 9. Repairs to parts or systems resulting from unauthorized modifications made to the appliance.
- 10. Expenses for travel and transportation for product service if your range is located in a remote area where service by an authorized Thor Group servicer is not available.

The warranty applies to appliances purchased and used for personal, family or household purposes only. It does not cover appliances used for commercial applications.

Should the appliance be sold by the original purchaser during the warranty period, warranty shall extend to the new owner until the expiration date of the original purchaser warranty period.

Warranty and Product Registration

Thor Group is not responsible for incidental or consequential damages. Under no circumstances will Thor Kitchen's liability exceed the cost that you paid for the product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state. Whenever you call our customer service at 877-288-8099 (THORKITCHEN RANGE) for technical information and parts sales in the United States or to request service for your appliance, please have your complete model number and serial number ready. The model and serial number can be found on the product data plate. Please enter the information requested in the spaces provided.

Model No	Serial No
Date of Purchase	Purchaser
Dealer	Suburb
Town	Country

Note: You must provide proof of purchase and installation date for in-warranty service.



Back-of-the-Range Information

1. Dual Fuel Range Regulator



The Regulator Part for all Dual Fuel Ranges (HRD4803U/HRD3606U/HRD3088U) are located at bottom right of the front oven, which is covered by the kick panel.



2. HRD4803U 48-inch Dual Fuel Range



Distance from inlet gas pipe to right side of the range is 11.5".

Distance from inlet gas pipe to ground is 4.5".

The size of the pipe is ¾ inch (exterior).



3. HRD3606U 36-inch Dual Fuel Range



Distance from inlet gas pipe to right side of the range is 11.5".

Distance from inlet gas pipe to ground is 4.5".

The size of the pipe is ¾ inch (exterior).



4. HRD3088U 30-inch Dual Fuel Range



Distance from inlet gas pipe to right side of the range is 11.5".

Distance from inlet gas pipe to ground is 4.5".

The size of the pipe is ¾ inch (exterior).