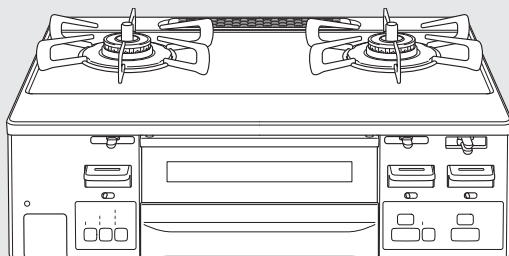


Model: RTC-6912SG-EWS-RM

HOWARO



For Household Use Only

Gas Cooktop with Grill Instruction Manual

Rinnai



(For factory use)

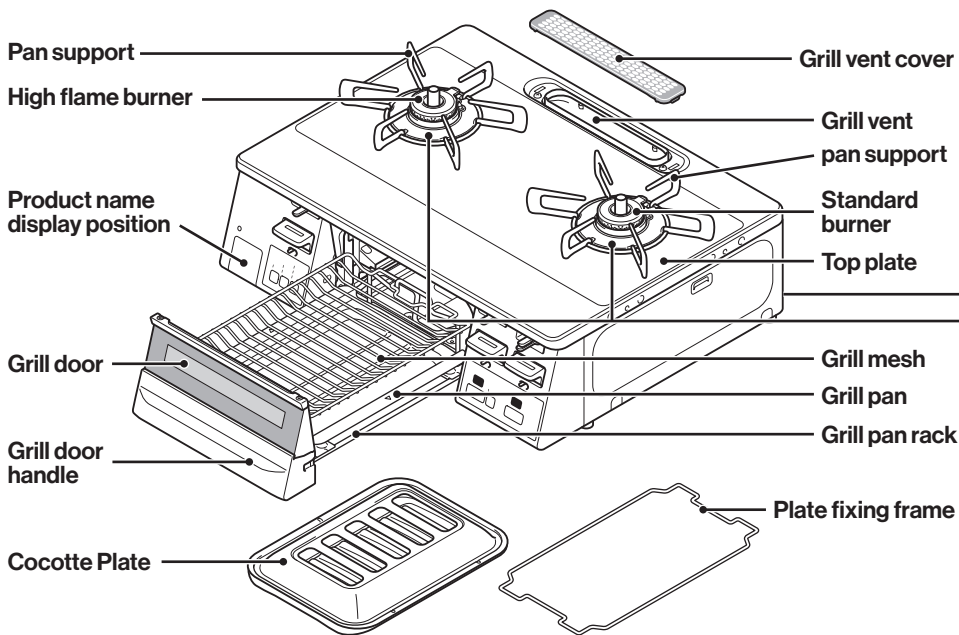
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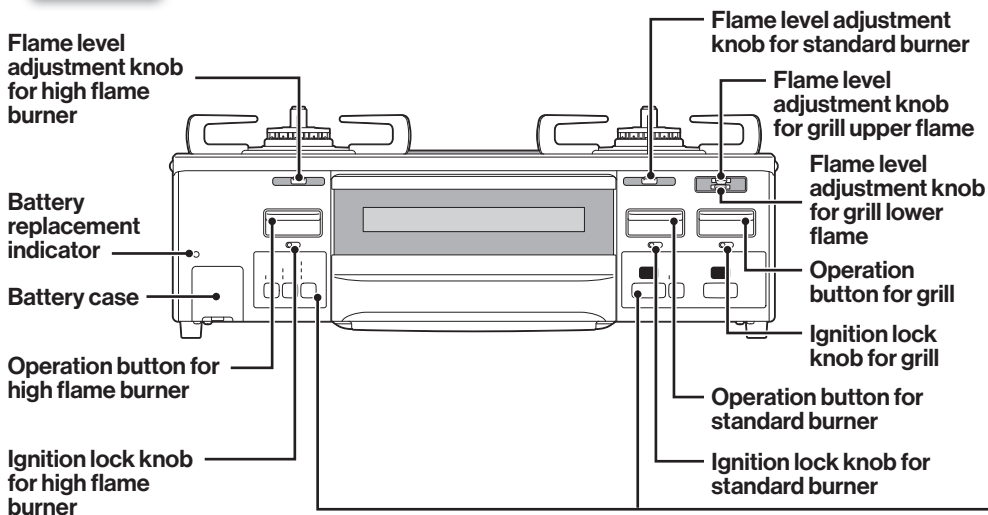
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Parts Name

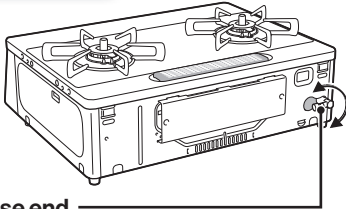
• The figure illustrates an appliance with a high flame burner on the left hob.



Front



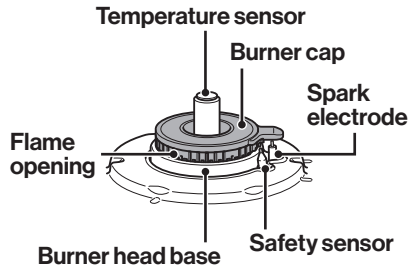
Rear



Hose end

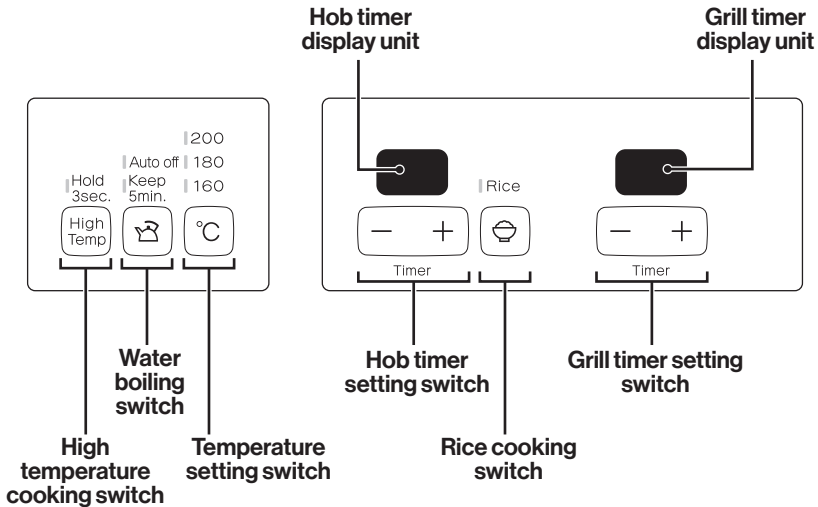
- The hose end can be rotated.
- To use the hose end, remove the cap. Store the cap in a safe place as the cap is needed if the appliance is not used for a long period.

Burner













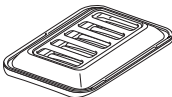


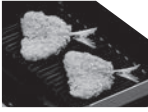

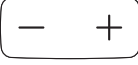

Control Panel

For appliances with the high flame burner on the left hob.



Enjoy Cooking with Convenient Functions


Make good use of these convenient functions and enjoy your cooking.

When using the hob	Frying food	Temperature setting mode 		Useful even for grilling dumplings and okonomiyaki
	Cooking food by boiling	Hob timer mode 		Convenient even for boiling eggs
	Stir-frying, roasting and broiling	High temperature cooking mode 		Even for roasting ginkgo nuts and sesame seeds
	Boiling water	Water boiling mode 		When boiling water for coffee and tea
	Cooking rice or porridge	Rice cooking mode 		Useful even for cooking rice mixed with various grains and barley
When using the grill	Cooking with the cocotte plate  Accessory	Grill timer mode 	 	For grilling fish and toasting For reheating cold food
	Cooking with the grill mesh  Accessory	Grill timer mode 		For grilling fish


Safety Precautions (Be Sure to Follow These Precautions)

■ The following describes precautions that must be followed to prevent injury to you or others and damage to property.

■ Fully understand the meaning of the following symbols before reading the main contents of this manual.


Danger

This symbol indicates that mishandling the product might result in death or serious injury or a fire hazard.


Warning

This symbol indicates that mishandling the product might result in death or serious injury or might cause the risk of fire.


Caution


This symbol indicates that mishandling the product might result in slight injury or property damage.


■ Pictogram symbols and the meanings.

 This pictogram symbol indicates a “prohibited action” that must not be done.

 **Naked Flames Prohibited**  **Do not touch it.**  **Disassembly Prohibited**

 This pictogram symbol indicates an “alert” for items you should be careful of.

 This pictogram symbol indicates a “compulsory action” that you must do.

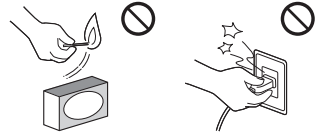
 **Ventilation required**

Danger



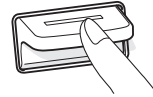
The following actions are prohibited when there is a gas leak:

- Never light a fire.
 - Do not turn electrical appliances switches on or off.
 - Do not remove or insert power plugs.
 - Do not use a telephone in the vicinity.
- Flames or sparks might ignite the gas and cause an explosion.

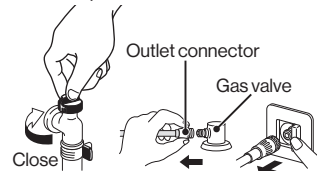


■ **Stop use immediately.**

- ① Press the operation button, turn off the burner.



- ② Close the gas valve. (For gas outlet connections without a knob, remove the outlet connector from the gas outlet)



- ③ Open doors and windows to allow gas to escape to the outside.



- ④ Call our Hotline from outside your house.

Safety Precautions (Installation)

Warning

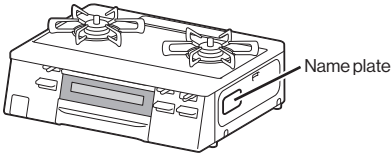


Disassembly Prohibited

- **Remodeling/Disassembly Prohibited.**
Doing so may cause carbon monoxide poisoning or fire, and cause the equipment to malfunction.



- **Do not use a gas type (gas group) other than the type indicated on the nameplate of the appliance.**
 - Using a gas type that does not match with the type indicated on the appliance may cause carbon monoxide poisoning due to incomplete combustion, burns due to abnormal ignition, or a failure of the appliance. Do not use the appliance in such cases.
 - The nameplate is affixed on the right side of the appliance. If you are not sure of the supplied gas type, contact the nearest gas company.
 - When you move to a new address, make sure that the supplied gas type matches the type indicated on the nameplate.

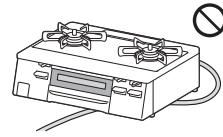


- **Do not use any other than the specified gas pressure.**
 - Appropriate gas pressure range LPG: 2.0-3.3 kPa



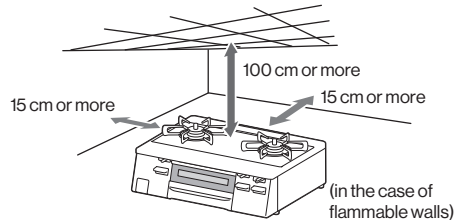
Rubber gas hose /Copper gas tube:

- **Do not use if the rubber gas hose touches hot parts such as the grill vent, or if it is bent or twisted.**
Use the minimum required length of hose.
- **Do not pass the hose below the appliance or place near the grill vent and flame.**
- **Do not pass the hose through places that are heated by other equipment.**
During use, the surrounding areas may become hot, causing the gas rubber hose to be overheated and melt, resulting in gas leakage.



Ensure sufficient distance to flammable objects.

- Follow the conditions required by the fire prevention regulations. Insufficient distance causes fire.
- In the following case, make sure to attach the heat insulating board (optional, not provided)
- In case that there's no sufficient distance to the combustible walls (including those covered with stainless steel sheets or tiles) as indicated in the figure below.

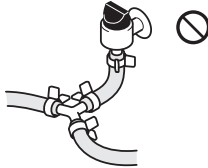


- **Additionally, do not forget to ensure sufficient distance to the flammable objects when you renovate the area around the product.**



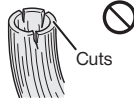
Rubber gas hose:

- **Do not use joined or branched hose.**
Using such hose may cause gas leakage.



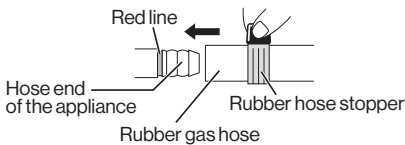
- **Do not use rubber gas hose that is cut or old.**

Using a hose that is cut or old may cause gas leakage. Check the cord periodically and replace when it becomes old.



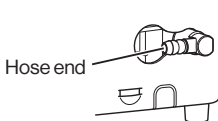
- **Insert the hose up to the red line at the hose end, and secure the hose with the rubber hose stopper.**

Not securing the rubber hose may cause gas leakage.



- **Remove the cap at the hose end and check that there is no dirt or debris.**

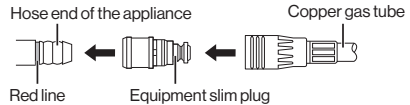
Presence of dirt or debris may cause gas leakage.



Copper gas tube:

- **Connect the copper gas tube according to the instruction manual of the equipment slim plug and copper gas tube.**

Improper connection of the copper gas tube may cause gas leakage.



⚠ Caution



Installation location :

- **Do not install the appliance at places such as under shelves where there is a risk of objects falling.**

An object that has fallen on the appliance may burn causing a fire.

- **Do not install the appliance at a place where there is a strong breeze.**

Installing the appliance at such locations may cause poor ignition, hob turning off in the middle of cooking, damage to internal parts of the appliance and improper activation of the safety features.

- **Do not install below water heaters.**

Installing the appliance below a water heater may activate the incomplete combustion prevention device of the water heater and ignition may not work. It will also shorten the service life of the water heater.

- **Do not install the appliance below plastic products such as lighting fixtures.**

It may cause deformation and discoloration of the lighting fixture shade.

- **Do not install the appliance on vehicles or ships.**

Not following the above instruction may cause the appliance to tilt, and result in a fire or burns.



- **Install the appliance on a sturdy platform that is level and stable.**

Installing the appliance at a place that is not stable or slanted may cause the appliance to tilt, and cause burns or injury.

Safety Precautions (Usage)

Warning



During use:

- **Do not leave the product.**
- **Do not sleep or go out.**

- The foods being cooked may get overheated and cause fire. Be careful especially when deep frying food.
- Failure to turn off the grill may cause the food to catch fire.
- Depending on the kind of food (fish and others), food may catch fire before the grill overheats, prevention the sensor or the grill timer to operate.
- Make sure to turn off the burner when you are going to talk on the telephone or with any visitor.



- **Do not carry the appliance while the flame is turned on.**

If the appliance is carried with the flame ON, it may cause a fire or burns.



Below the gas hob :

- **Do not place flammable materials.**
If the above instruction is not followed, it may cause a fire.
 - Newspapers, plastic sheets, etc.
- **Do not pass any power cord below the hob.**

If the above instruction is not followed, it may cause a fire.



- **When using waste food oil coagulating agent, and you heat food oil, never leave the product.**

Do not put a large amount of waste oil coagulating agent or heat it too much. Otherwise it may catch fire. Follow the instructions of the waste oil coagulating agent you use. Be careful that the temperature of cooking oil does not rise too high and put out the fire as soon as the agent melted.



Cautions about the top plate:

- **Do not exert an impact on it.**
- **Do not stand or sit on top of the product.**

If the top plate is deformed or chipped, it may cause injury or other unexpected accidents.



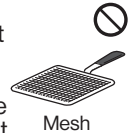
Do not use the following things:

- **Large iron plate or pan which covers the hob.**
- **Accessories such as the aluminum foil soup trap or the energy saving pan support.**



■ Mesh

This may cause fat dripping onto the top plate and catch fire, or cause abnormal overheat of the product.



Do not put the following items near the product:

- **Explosive items**
The inner pressure may increase and cause explosion.
 - Spray can
 - Cylinders for cassette hob
- **Flammable items**
They may cause fire.
 - Spray, gasoline, benzene, and others
- **Combustible items**
They may cause fire.
 - Seasoning rack above the product
 - PET bottle and plastics
 - Dishcloth, towel, or cooking oil and others

Cautions when deep frying food:



■ **Do not deep-fry with the "High temperature cooking" mode.**
The temperature of cooking oil rises and it may catch fire.

■ **Do not deep-fry with frozen food stuck to the center of the bottom of a pan.**

If deep frying with frozen food stuck to the center of the bottom of a pan (the contact position of the temperature sensor), the sensor can not detect the bottom temperature which may cause fire.



Do not let frozen food stuck to the center of the bottom of the pan (the contact position of the temperature sensor).

■ **Do not deep-fry with cooking oil used repeatedly.**

Such oil may easily catch fire. Do not use cooking oil which has been used many times, or whose color changed to dark brown, or which is muddy, or which include sunken fried scums.

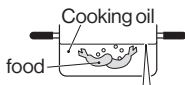
■ **Do not deep-fry too long.**

If deep frying too long time, oil may scatter which may cause fire or burn. Take care especially for the juicy foods such as tofu or explosive foods such as croquette with batter.



■ **When deep frying, pour cooking oil up to the level where all the foods are submerged (more than 200 ml).**

If the amount of cooking oil is not enough or get decreased, it may catch fire. Be careful especially when you deep-fry using a pan with wide bottom such as frying pan. If all the foods are not submerged, the oil may catch fire.



To the level where all the foods are submerged



■ **Never modify or remove the temperature sensor in such a way that prevents the proper working of the sensor.**
They may cause fire.



■ **Do not put a dishcloth or others on the grill vent. Do not block the grill vent with an aluminum foil.**

■ **Do not put anything around the grill vent.**

This may cause carbon monoxide poisoning due to abnormal combustion, fire, or damage of the product.



About the grill:

■ **Do not use auxiliary equipment (such as grill stones, grill sheets, aluminum foil and grill aids) that is not supplied with the appliance or indicated specifically.**

This may cause carbon monoxide poisoning due to abnormal combustion or damage of the product.

■ **Do not put aluminum foil in the grill pan or the grill mesh when you cook fatty foods.**

Fat accumulates on the aluminum foil and gets overheated and may catch fire.

■ **Do not put a fish between the grill door and other part.**

This may cause burning of the fish or the work top. And also, the upper part of the product may get overheated and you may get burned.



■ **Ensure there is no food waste or dishcloth in the grill chamber.**

■ **Remove accumulated fat in the grill pan, the cocotte plate, and also remove food and/or its skin which stuck to the cocotte plate, the grill mesh, after every use.**

Food waste, dishcloth, fat may burn which cause combustion, fire, or getting burned.

Safety Precautions (Usage)

Warning



- **Be careful not to put your body or clothes close to flame while using the hob.**

Your clothes may catch fire, and you may get burned. In addition, flame may grow big automatically due to the temperature sensor's function. And wind may expand flames around the bottom of a pan and your clothes may catch fire.

Cautions during and after use:



- **Ensure the burner is either turned on or off.**
- **Close the gas valve (For gas outlet connection without a knob, remove the outlet connector from the gas outlet).** Failure to turn off the burner causes fire. Especially because people tends to forget to turn off the grill, make sure the fire is extinguished.

When there is any abnormality:



- **Press the operation button to return to the flame extinguishing state, turn off the flame and close the gas valve (For gas outlet connection without a knob, remove the outlet connector from the gas outlet).** In the case of earthquake, fire, or if you noticed abnormal combustion, smell, or noise, stop use immediately.

Caution



Do not touch it.

- **During and immediately after use, do not touch the appliance except for the operation buttons, operation panel, knobs and grill door handle.**

You may get burned.

- The top plate becomes hot even if you use only the grill by the flame of the grill burner and the heat of the exhaust.
- Even when you use only one hob, the top plate of the unused hob may become hot by heat conduction.



- **Take care to ensure infants who are standing or walking near the grill are not burned by the grill door.** If the above instruction is not followed, it may cause unexpected accidents such as burns and injuries.



During use:

- **Do not use it for the purpose of other than cooking.**

Using the product for drying clothing or igniting briquette fuel or other purpose may cause fire or damage of the product.

- **Do not expose the product to the wind.**

Exposing the product to the wind from electric fan or air conditioner prevents the proper safety function and causes damage or malfunction of the product.



- **Do not apply strong force to the control panel or the grill door.**

Pushing it by hand or hanging on it may cause your injury, damage or malfunction of the product.

- **Do not put water or detergent directly on the control panel.**

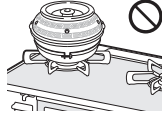
This may cause malfunction.



Cautions about pans to be used:

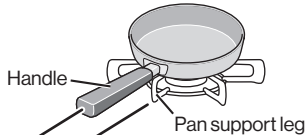
- **Do not use cookware which need to be baked blind, such as pots used with hot stones.**

This may cause damage of the product due to abnormal overheat.



- **Do not use single handle pans, extremely small pans, or pans with dented or rounded or slippery bottom in unstable state.**

These pans may lean or slip, and you may get burned. Use pans in stable state as follows: Make sure to put the pan handle in the same direction as the pan support leg with the handle not protruding beyond the product's front side. Always hold the handle when using a pan with rounded bottom such as a Chinese wok.

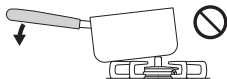


Align the pan handle with a pan support leg.



- **When cooking with a light pan, make sure that the total weight is more than 250g including ingredients.**

Pans that are light in weight or with a heavy single handle may be pushed up by the temperature sensor, and tilt or slip, which may cause burns. The pan may tilt if the weight reduces due to removal of the lid or evaporation of water, so use the pan in a stable condition by holding the handle.



- **Avoid using ceramic pots for long hours and use a medium or lower flame intensity.**

This may cause damage of the product due to abnormal overheat.



- **Do not put your face close to the burner or open the grill door to look into it when you turn the burner on or when using it.**

You may get burned your face by flame and heat.



- **Do not apply strong shock or force, nor damage the temperature sensor.**

Deformation or inclination of the temperature sensor prevents its correct function, and cooking oil may catch fire.



- **Do not put water or detergent on the grill door when in use or right after use.**

- **Do not apply impact or damage to the grill door glass panel.**

The glass panel may be broken and you may get burned or injured.



- **Do not put your hand or face close to the grill vent.**

- **Do not place the handle of the pan toward the grill vent.**

- You may get burned by high temperature exhaust.
- The handle of the pan gets overheated and may burned out.



- **Ensure that infants and children do not touch the appliance.**

This may cause unexpected accidents such as burn or injury.

Safety Precautions (Usage)

Caution



- **When the burner does not turn on, press the operation button to return the flame extinguishing state, ensure the gas around there disappeared, and finally turn the burner on again.**

If you turn the burner on immediately, the gas around there may catch fire and the fire spreads to your clothes or you may get burned.



Ventilation required

- **Always turn on the exhaust fan or open the window while using the appliance.**

Inadequate ventilation may cause carbon monoxide poisoning due to incomplete combustion. Do not use a ventilation fan, but open windows in the following cases.

- When you use a water heater installed indoors (of other than closed type)
- When you use a bath tub water heater installed indoors

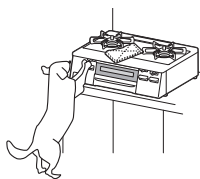
If you turn on the exhaust fan, the combustion exhaust gas from the water heater or bathtub heater may flow back into the room and there is a risk of carbon monoxide poisoning.



- **If you have pets (dogs and cats, etc.) indoors, lock the operation buttons or close the gas valve when the appliance is not in use.**

Pets (dogs, cats, etc.) may try to jump on the appliance or sink, or accidentally press the operation buttons when they jump on the appliance. There is a risk of fire or burns to pets in such cases.

When the appliance is not in use, lock the operation buttons or close the gas valve.



- **Adjust flame depending on the size of the kettle or the pan.**

Too high flame may cause a damage of the handle or burn of your hand when you touch it.



Do not touch it.

Grill:

- **Do not touch the grill door and the glass panel with your hand or arm when you take out cooked food such as fish.**

You may get burned.

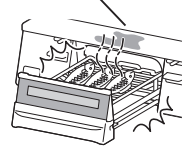
Pull the grill door all the way out horizontally.



- **Do not use the product with the grill door opened.**

Using the grill with the door open, or frequently opening and closing the door may cause scorching of the top plate front and upper part of the grill door. It may also cause the upper part of the appliance to overheat, resulting in deformation, discoloration, and burns.

Top plate front



- **Do not overcook foods.**

Cooked food may catch fire and cause a blaze.

In case that food burns in the grill chamber, or accumulated fat catches fire:

- ① Press the operation button to return to the flame extinguishing state and turn off the grill flame.
- ② Keep the grill door closed until the flame of cooked food goes out and the grill chamber cools down.
- ③ After the fire goes out, ask for inspection.



- **Do not pour water in the grill pan or cocotte plate.**
You don't need to pour water in the grill pan or cocotte plate. You may get burned by heated and spilled hot water.



- **Be careful when you grill fatty foods such as chicken.**
 - Adjust the baking time by checking the doneness of the food being cooked occasionally.
 - Fat may catch fire and flame may come out of the grill vent. This may cause burn or fire.

- **Be careful when you grill different foods (foods grilled easily/hard) together.**
It may lead scorching or fire.

- **Slowly move the grill door horizontally in and out, and carry carefully.**

- If the grill is pulled while the grill door is lifted up, the grill may fall, causing burns or damage.
- If the hot fat collected on the grill pan or cocotte plate spills, it may cause burns.

- **Remove the grill pan, cocotte plate unit and grill mesh after they have cooled.**

These parts become hot during use and immediately after use, and may cause burns.

The grill stand and plate frame are also hot and touching them may cause burns.



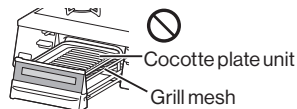
When using the cocotte plate:

- **Do not use by placing on the hob.**
Using on the hob may cause deformation, discoloration and damage of the cocotte plate and malfunction of the appliance. Since the cocotte plate is for exclusive use in the grill, do not use by placing on the hob.



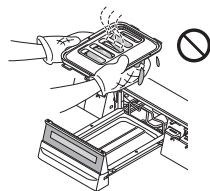
- **Do not use by placing on the grill mesh.**

If the above instruction is not followed, it may damage the appliance or cause a fire. It may also cause improper cooking or damage to the surface coating of the cocotte plate or grill mesh.



- **Do not carry the cocotte plate wearing oven mitts, etc. after cooking.**

Spillage of collected hot fat may cause burns. If you raise the cocotte plate along with the plate frame, and the frame accidentally touches your arms, it may cause burns.



- **When removing the cocotte plate, use a kitchen paper to wipe off the fat that has collected.**

Spillage of collected hot fat on the cocotte plate may cause burns.



Safety Precautions (Usage)

Caution



Inspection, maintenance, and cleaning around the product:

- **Do not immerse the appliance in water or splash water on the appliance.**

Not following the above instruction may cause improper combustion or malfunction of the appliance.



- **Ensure that the product is cooled down.**

The product gets very hot after cooking and you may get burned if you touch it.

- **Close the gas valve (For gas outlet connection without a knob, remove the outlet connector from the gas outlet).**

If ignited by mistake, you may get burned.

- **Lock the operation buttons.**

This prevents inadvertent flame.

- **Make sure to wear gloves.**

You may get injured without gloves.

- **If soup boils over onto the burner cap, make sure to clean it.**

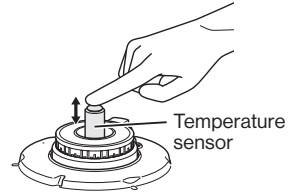
- **When you have washed the burner cap, wipe off moisture enough before installing it.**

Using the burner with the flame openings being wet may cause abnormal combustion.



- **Clean the temperature sensor each time it gets dirty, and ensure it moves up and down smoothly.**

- If it doesn't move smoothly, a pan leans and sheds hot water, and you may get burned.
- If it doesn't move smoothly, make sure to ask for inspection or repair.



Note

When using the product:

- Check normal burning now and then during use.
- Do not forget to turn off the burner, when you set the hob to "Low flame" or you use the grill as it is difficult to see the flame.
- Do not turn off the flame by operating the gas valve.
This may cause burn or unexpected accident.
- Make sure to push the appropriate operation button corresponding to the burner to be used.
- Do not use induction heating type cooking appliances on or near the top plate, such as IH jar rice cooker, table top type IH cooking heater. Magnetic force may cause a failure of the product.

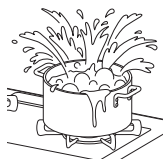


Cleaning under the hob (hob base):

- Check that the appliance is cold and clean by wearing gloves to avoid injury.

About explosive boiling:

- Be careful of explosive boiling when boiling or warming thick foods or soups.



When you use the hob:

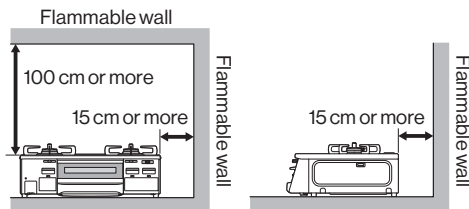
- When you move a pan to an other hob during cooking, put out fire once.
- When you use the hob with High flame for a long time, the pan support may stick to the pan depending on its type such as earthenware pan or porcelain enamel pan or others. Ensure that the pan and the pan support are not stuck each other, when you move the pan after a long time use. When the pan and the pan support are stuck, return them immediately to the original position. And after they have been cooled down, remove the pan support by shaking it. If you move them while they are stuck, the pan support may drop suddenly and damage the product and you may get burned or injured. Be careful of boiling over, and adjust flame as needed.
- Boiling over cause the inside of the product to get dirty. In addition, overboiled soup is stuck to the top plate, the pan support, the burner and may damage the product.
- Do not put a hot pan directly on the label of the top plate. Label may changes color or get damaged by heat.

Installation Instructions

- Always wear gloves when installing or moving the appliance, and carry by holding the bottom edges of the appliance.

1 Check the installation location (fire prevention measures in the surrounding area)

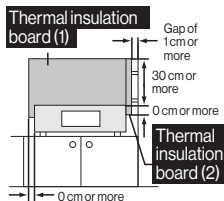
Install the appliance away from flammable walls (including flammable walls affixed with stainless steel or tiles) as shown in the below figures.



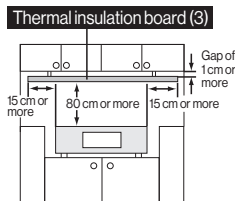
If the above distance cannot be maintained from the flammable walls

Install the appliance after affixing thermal insulation board (sold separately) on the walls.

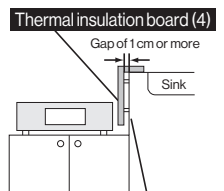
Front and side



Top surface



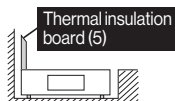
Side of sink and counter top



If the side and top surfaces of the sink and counter top are flammable and higher than the top plate of the appliance

Specialized for sides

* Since the thermal insulation board is affixed to the appliance unit, the edge of the top plate must be 8 mm or more to the side wall.



Minimum size of the thermal insulation board

	Height (mm)	Width (mm)	Depth (mm)
(1)	340	600	-
(2)	340	-	550
(3)	-	900	550
(4)	150	40	500
(5)	403	-	420

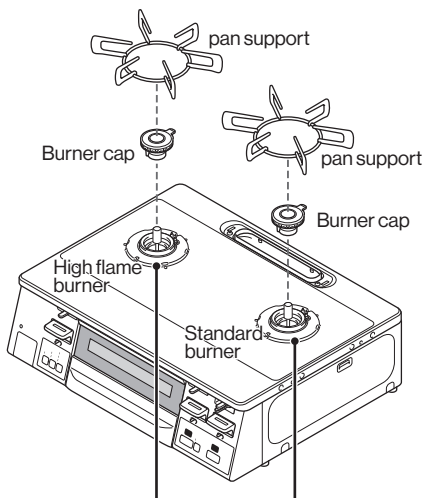
2 Remove the packing material and tapes

- If a transparent protective sheet is stuck on the operation panel, remove it before using the panel.
- Remove the grill and take out all the packing material and tapes from the inside.

3 Installation of parts

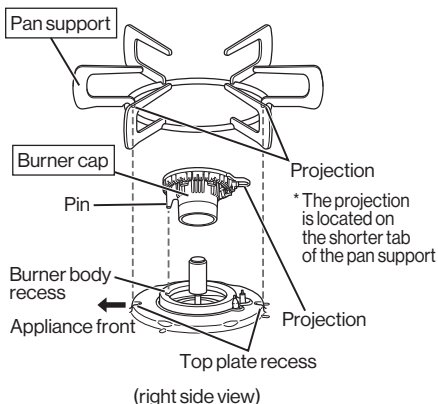
* The figure illustrates an appliance with a high flame burner on the left hob.

Ensure that all parts are installed correctly.



Install the appliance correctly for safe use

Pan support / Burner cap

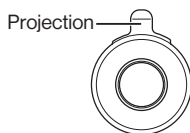


Pan support

Install the pan support correctly by inserting the 2 projections on the inner side into the recesses at the front and rear of the top plate.

Burner cap

Install properly by inserting the pin of the burner cap in the burner body recess at the front with the projection of the cap at the back.

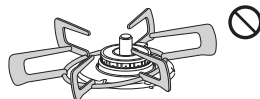


⚠ Caution



Do not use when the pan support is not installed correctly.

If installation of the pan support is not correct, the pan will not be stable and may tilt or fall over.



Example of incorrect installation

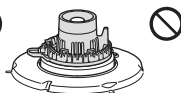


Do not use the appliance with improper attachment of the burner cap.

- If the burner cap is not installed correctly, ignition of the appliance may not be possible.
- Uneven or back flame may cause incomplete combustion, carbon monoxide poisoning, or deformation of the burner cap.
- The flame may enter the appliance and cause damage due to burning.



Burner cap lifted

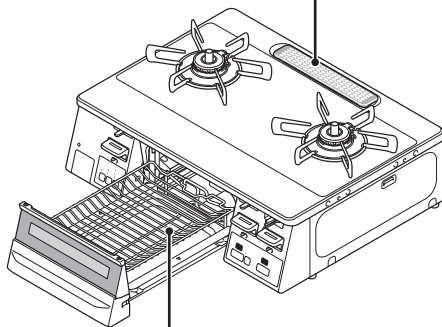
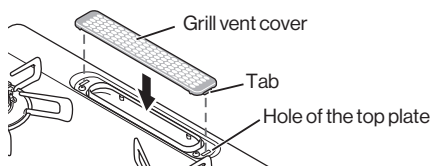


Burner cap reversed

Installation Instructions

Grill vent cover

Match the tabs to the holes on the top plate and attach.

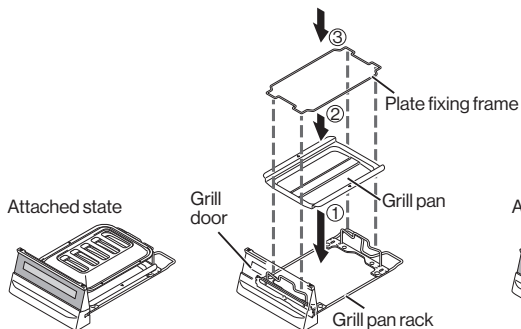
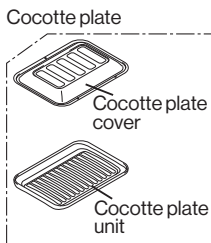


Grill pan, Cocotte plate, Plate fixing frame and Grill mesh

* Do not stack and attach the cocotte plate and the grill mesh.

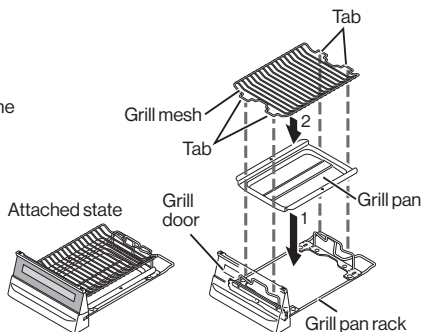
When using the cocotte plate

1. Attach the grill pan to the grill pan rack.
2. Attach the plate fixing frame to the grill pan rack.
3. Attach the cocotte plate to the plate fixing frame.
4. Ensure that the parts are attached securely.



When using the grill mesh

1. Attach the grill pan to the grill pan rack.
2. Attach the grill mesh to the grill pan rack.
3. Ensure that the parts are attached securely.



Note

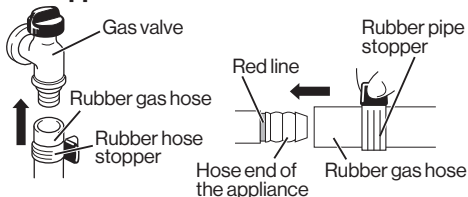
- If the parts are not attached properly, then the grill door will be difficult to close.
- Attach the parts again properly as the grill door may get damaged if you try to close it forcibly.

4 Connect the appliance

Match to the gas valve and connect properly.

When connecting with a rubber gas hose

1 Insert the hose up to the red line at the hose end, and secure with the rubber hose stopper.



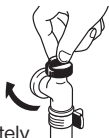
You will need

- Rubber gas hose (new) (Ø9.5 mm) (commercially available)



- 2 rubber hose stoppers (commercially available)

2 Open the gas valve, make sure that there is no smell of gas from the connector, and then close the gas valve.



Close the valve completely

When connecting with a copper gas tube

Attach the equipment slim plug to the appliance and then connect with the copper gas tube.



* Gas outlet shown in the figure is an example.

You will need

- Equipment slim plug (commercially available)
- Copper gas tube (commercially available)



Example of gas valve

Appliance side

Note

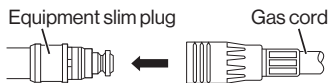
- Confirm that the gas valve can be used for the appliance.
- Cannot be connected if the gas valve side is not an outlet port. If the gas valve has the same hose end connector as the appliance, then commercially available plug for the hose gas valve is required.

1 Connect the equipment slim plug to the hose end of the appliance.



* Connect properly by following the instructions in the instruction manual on the back of the packing paper of the equipment slim plug.

2 Connect the copper gas tube to the appliance. Insert the copper gas tube on the equipment slim plug until a "click" sound is heard.



3 Connect the copper gas tube to the gas valve. Insert the outlet connector on the gas valve until a "click" sound is heard.



* The gas valve opens when the outlet connector is inserted.

Closing the gas valve

Pull the sleeve (white) of the outlet connector towards you.

* The gas valve is closed if the outlet connector is removed.



Warning



Ensure that the rubber gas hose and copper gas tube do not touch the hot parts such as the grill vent, and do not use if the hose or copper gas tube is bent or twisted. Use the minimum required length of pipe.



When connecting, check that there is no dirt or debris on the connector. Presence of dirt or debris may cause gas leakage.

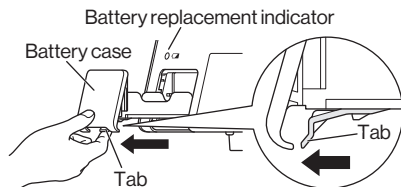
Inserting Batteries

Insert the two size D batteries (1.5 V) provided as accessories for trial use into the battery case.

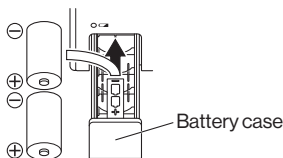
1 Press the tab at the bottom of the battery case and pull the battery case toward you.

* The battery case can be pulled out to the extent that it allows one battery to be inserted at a time.

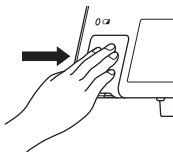
* Remove the old batteries to replace with new batteries.



2 Check the \oplus and \ominus signs at the bottom of the battery case, and insert the batteries correctly, one at a time from the back.



3 Push the battery case firmly all the way in.



Note

- The battery case cannot be removed. Do not forcibly pull or push it.
 - Entry of water or other foreign matter into the battery case may cause poor contact. Wipe the battery case clean.
 - Read the instructions for the batteries to use them properly.
 - When replacing the batteries, check that the unit has cooled, and always replace with two new D-size alkaline batteries (1.5V) at the same time. Using new and old batteries together or differing battery types may shorten the lifespan of the batteries or cause burns or injuries due to heat generation, rupture, leakage of batteries, etc.
 - Do not charge, disassemble, apply heat to the batteries, or place them in a fire.
 - Even in the case of a size D alkaline battery (1.5 V), the replacement time will be less than one year depending on difference in usage conditions, usage duration, battery manufacturer and type. Also, if a size D manganese battery (1.5 V) is used, the battery will need to be replaced within a very short duration. (The service life of a size D manganese battery is approximately 1/3-1/5 that of a size D alkaline battery.)
 - Even in the case of unused batteries, if the recommended usage period has elapsed, self (natural) discharge of batteries takes place, leading to decreased battery capacity. Therefore, the battery replacement indicator may flash or light up after a short duration. In addition, the size D manganese batteries (1.5 V) provided as accessories for trial use may have a short service life depending on when they were shipped from the factory.
 - It may not be possible to use battery spacers that convert size C batteries or AA batteries into size D batteries, or rechargeable size D batteries due to poor contact with the \ominus terminal of the battery case or due to insufficient voltage. Even if they can be used, they will need to be replaced within an extremely short duration.
- * The supplied size D manganese batteries (1.5 V) provided for trial use are for testing the functions and performance of the appliance upon purchase. Replace these batteries with new size D alkaline batteries (1.5 V).

Things You Need to Know

Information on the temperature sensor

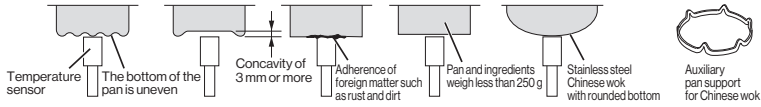
Read the following to ensure the proper functioning of the temperature sensor.

Warning



■ **Do not use when the top surface of the temperature sensor is not in contact with the bottom of the pan.**

- If the temperature sensor cannot detect the temperature of the bottom of the pan correctly, it may result in fire, the flame turning OFF while in use, or burn damage to the appliance.
- Using additional pan support for a Chinese wok may result in poor contact between the temperature sensor and the bottom of the pan.







■ **For cooking with oil, do not use cookware that do not conduct heat well, such as heat-resistant glass cookware or earthenware pots, or pans that are shallow and wide.** The temperature of the oil may rise quickly, and it may catch fire.



Cookware that can be used

○ : Can be used ✕ : Cannot be used (temperature cannot be detected correctly.)

Cookware type		● Cooking with oil (Quantity of oil 200 ml or more) ● Stir-frying	Other cooking	
	Material: Aluminum, copper, iron, or enamel	○	○	
	Material: Stainless steel	Thick cookware: Thickness of 2.5 mm or more	○	○
		Thin cookware: Thickness less than 2.5 mm	✕	○
	Material: Aluminum, copper, or iron	○	○	
	Material: Stainless steel (pans with flat bottoms)	Thick cookware: Thickness of 2.5 mm or more	○	○
		Thin cookware: Thickness less than 2.5 mm	✕	○
Pan used without water Multi-layered cookware		○	○	
Earthenware pot Heat-resistant glass cookware Pressure cookers		✕	○ (flame may turn OFF)	

* When cooking in the “temperature setting mode,” “boiling water mode,” or “rice cooking mode,” use the appropriate cookware for each mode.

Note

When using a Chinese wok

- Always hold the handle when cooking.
- Before using, make sure that the bottom of the wok and the temperature sensor are in contact.
- A wok may not be stable depending on its type, and the temperature sensor may not function properly.

Safety Features

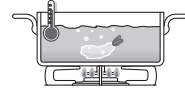
Prevents overheating of cooking oil

Cooking oil overheat prevention device

If the cooking oil overheats, the appliance automatically adjusts the flame level to prevent the oil from catching fire. If this state continues for about 30 minutes, or the temperature continues to rise even with the low flame, the appliance automatically turns off the flame.

High flame burner

Standard burner



Adjusts the flame level

Automatically cuts off the gas as soon as the flame is turned off

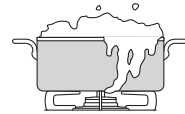
Safety sensor

Automatically stops the gas supply if the flame is extinguished due to boiling over of food or a breeze.

High flame burner

Standard burner

Grill



Stops gas supply

Automatically turns off the flame after a specific duration if you forget

Hob flame turn off function

Automatically turns off the hob burner after 2 hours. The timer of the hob flame turn off function can be changed. * The hob flame turn off function will not work when the hob timer is set.

High flame burner

Standard burner

Turns off the flame

Grill flame turn off function

The timer starts when the grill flame is turned on. The grill flame is automatically turned off when the time set for the timer has passed. Automatically turns off the grill flame after a maximum of 15 minutes.

Grill

Turns off the flame

Automatically turns off the flame before the cookware damaged when the food being cooked burns and sticks to the cookware

Burning flame off function

Automatically turns off the flame if cooked food burns and sticks to the bottom of the cookware, however the extent of burning will vary depending on the cookware material, type of food being cooked and flame level.

* The function may not work when cooking food by placing a kelp or bamboo peel at the bottom of the cookware.

High flame burner

Standard burner



Turns off the flame

Prevents accidental pressing of buttons

Ignition lock

Prevents ignition if buttons are pressed accidentally or by children.

High flame burner

Standard burner

Grill

Prevents flames from curling up the sides of the cookware

Medium flame ignition function

High flame burner

The flame is set to medium to prevent the flame from curling up the sides of the cookware when it is turned on.

Automatically turns off the grill chamber when it overheats

Grill overheat prevention sensor

Grill

Automatically turns off the grill flame when heated when empty or if the temperature of the grill chamber becomes abnormally high.



Alerts with a buzzer if you forget to return the operation buttons

Alert if the operation buttons of the hob and grill are not returned function

High flame burner

Standard burner

Grill

If you do not return the operation buttons when the flame is turned off automatically due to the timer or convenient functions or when turned off by the safety features, you will be alerted by a buzzer that will beep five times every minute.

Since the buzzer consumes batteries, immediately press the operation button and return to the flame extinguishing state.

However, the buzzer will not sound when other burners are in use.

Automatically turns the flame to low when the bottom of the pan heats up to prevent abnormal overheating

Automatic temperature control for high temperatures function

High flame burner

Standard burner

Automatically turns the flame level to high or low to prevent abnormal overheating of the cookware when cooking at a relatively high temperature, such as stir-frying or roasting, or when an empty cookware is heated.

If this state continues for about 30 minutes or the temperature continues to rise even with a low flame, the appliance automatically turns off the flame.

When the flame becomes low for the first time, the buzzer will beep once as an alert.

If this interferes with cooking, use the high-temperature cooking mode (high flame burner).





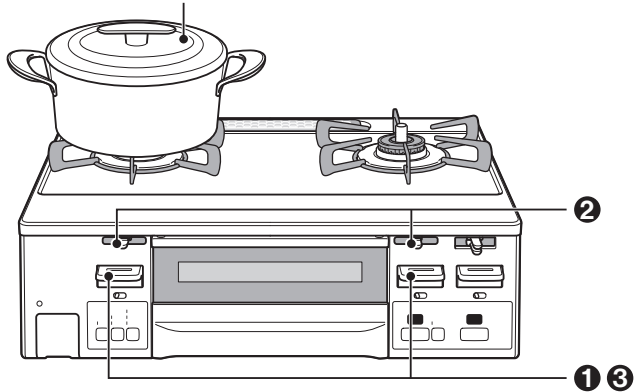
Basic Operations (How to Use the Hob)

Preparations

Rotate the gas valve anti-clockwise and fully open the valve.



Place a pan, etc. at the center of the pan support



* The figure illustrates an appliance with a high flame burner on the left hob.

⚠ Make sure that the ignition lock has been released.
See "Preventing unintentional ignition (ignition lock)" below.



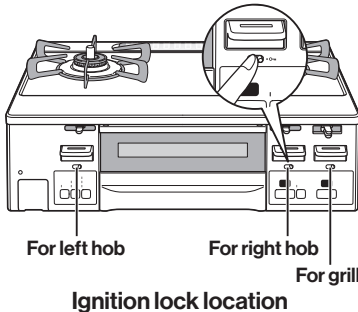
Important

Preventing unintentional ignition (ignition lock)

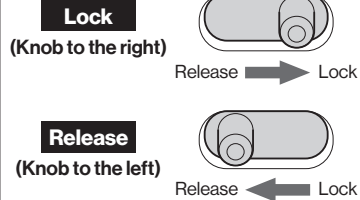
The operation buttons can be locked to prevent accidental operation or operation by children. By turning the ignition lock knob to the left and right, you can release/lock the buttons.

* You cannot lock the button when the flame is turned on.

Always make sure that the operation buttons are in the flame extinguishing state.

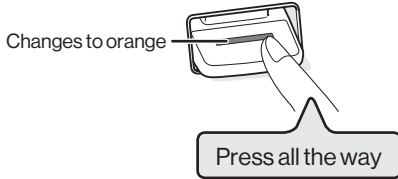


Operation method



1 Turn on the flame

Press the operation button.



Note

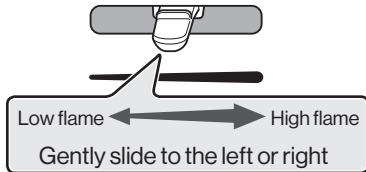
- Always make sure that the flame is turned on even after you release your hand.

Information

- When you turn on the flame, the flame level adjustment knob of the high flame burner will move to the "medium flame" position.

2 Adjust the flame level

Slide the flame level adjustment knob.



Note

- Adjust the flame level depending on the diameter of the cookware such that the flame does not curl up the sides.

Information

- If you operate the flame level adjustment knob quickly, the flame may be turned off, or the flame may become momentarily large.

3 Turn off the flame

Press the operation button.

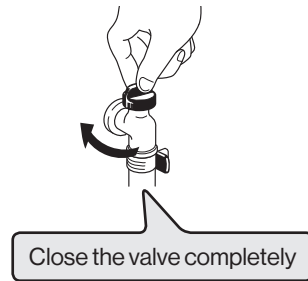


Note

- Always make sure that the flame is turned off.

4 Close the gas valve

After cooking is complete, close the gas valve by rotating clockwise.



Note

- Touching the appliance after cooking may cause burns as it is hot. Always make sure that the appliance has cooled down.



Frying Foods

Since the set temperature is maintained by automatic adjustment of the flame level to high or low, you can fry or grill food.

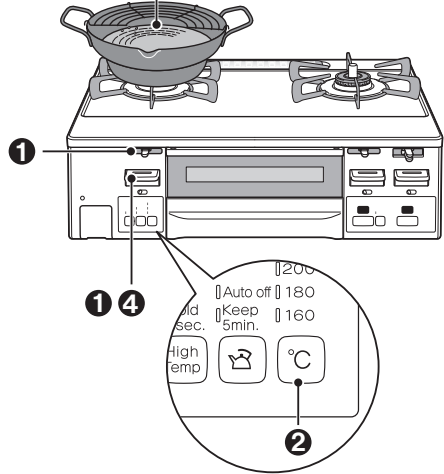
	Suitable cookware	Appropriate amount of oil
Frying	Pans with a flat bottom Chinese wok Frypan Material: Aluminum, copper, iron, or enamel Stainless steel pans (thickness of 2.5 mm or more)	500ml - 1L
Grilling	Frypan Material: Aluminum or copper	-

* When grilling foods with the temperature setting mode, use an aluminum or copper fry pan. Using an iron, enamel, or stainless steel fry pan may cause the flame to turn off during cooking.

When using an aluminum or copper pan for frying, place the food in the pan approximately 1-2 minutes after the buzzer sounds.

This is because the oil temperature is lower than the set temperature even when the buzzer sounds.

Place a cookware, etc. at the center of the pan support



* The figure illustrates an appliance with a high flame burner on the left hob.



Important

Make good use of this appliance for frying and cooking other foods where heat adjustment is difficult.

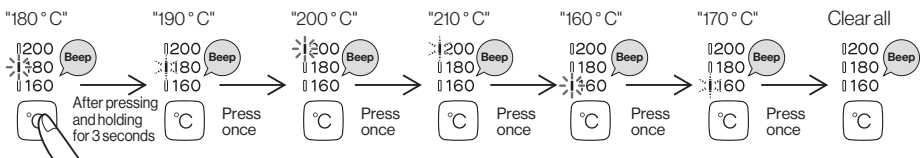
Guidelines for temperature setting <---> Aluminum or copper <- - - - -> Iron, enamel, or stainless steel

Temperature range (160-210°C)

		160	170	180	190	200	210
Frying	Deep-frying chicken, pork cutlets	<--->		>			
	Tempura, frozen croquettes		<--->	<--->	<--->	<--->	<--->
	Hand-made croquettes					<--->	<--->
Grilling	Pancakes	<--->					
	Okonomiyaki		<	>			
	Steak, pork sauté				<--->	<--->	<--->

Press the temperature setting switch to turn on the temperature setting lamp to 180°C, then press and hold the switch for about 3 seconds to set the temperature in increments of 10°C.

Setting temperature

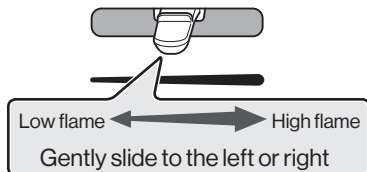


☐ Turns off ✨ Lights up ✨ Flashes

(Temperature Setting Mode) [High Flame Burner]

1 Turn on the high flame burner and adjust the flame level

Slide the flame level adjustment knob.



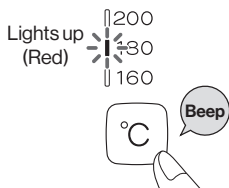
Note

- Adjust the flame level depending on the diameter of the cookware such that the flame does not curl up the sides.

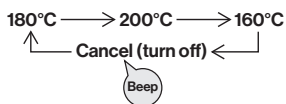
2 Set the temperature

Press the temperature setting switch.

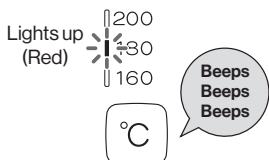
Initially, the temperature will be set at 180°C.



The display switches in the following order each time the button is pressed.



Alerts with the buzzer when the set temperature is reached



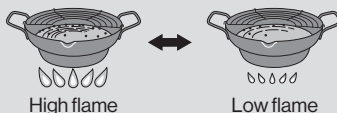
3 Start cooking

Note

- Do not leave the appliance unattended while cooking. The appliance may overheat, which may cause a fire.
- The set temperature will be reset if the flame turns off during cooking. Start again from 1.

Information

- The set temperature can be changed during cooking.
- Automatically turns the flame to high or low during cooking to maintain the set temperature.



- When the flame level is automatically turned from low to high, the buzzer alerts with a beep.

4 Turn off the flame

Press the operation button.



Note

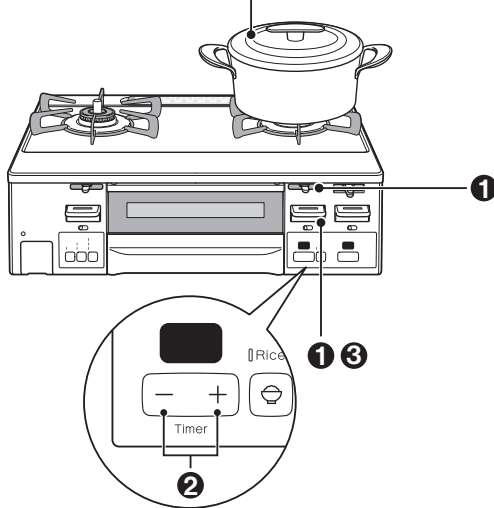
- Always make sure that the flame is turned off.



Using the Hob Timer

Alerts on reaching the set time and automatically turns off the flame.
This function is convenient when you forget the turn off the flame.

Place a pan, etc. at the center of the pan support

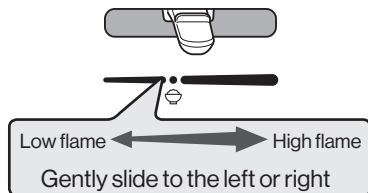


* The figure illustrates an appliance with a high flame burner on the left hob.

(Hob Timer Mode) [Standard Burner]

1 Turn on the standard burner and adjust the flame level

Slide the flame level adjustment knob.



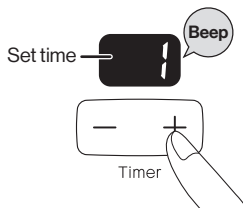
Note

- Adjust the flame level depending on the diameter of the cookware such that the flame does not curl up the sides.

2 Set the time

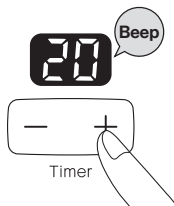
Press the hob timer setting switch [+/-].

Initially, "1" (1 minute) is displayed.



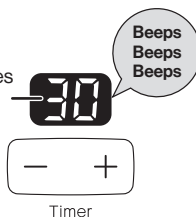
The timer can be set in increments of 1 minute from 1-90 minutes.

If you press and hold the switch, the time can be set in increments of 5 minutes up to 30 minutes and in increments of 10 minutes after 30 minutes.



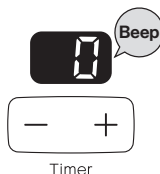
Alerts with the buzzer 30 seconds before the set time

Display changes from minutes to seconds.



Alerts with the buzzer on reaching the set time

Automatically turns off the flame.

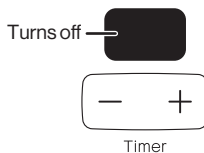


Information

- The set time can be changed during cooking.
- The hob flame turn off function will not work when the hob timer is set.

3 Press the operation button

Press the operation button and return to the flame extinguishing state.



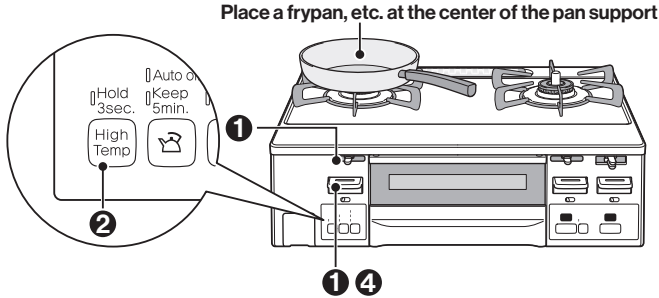
Information

- If the operation button is not returned to the flame extinguishing state, "0" on the hob timer display unit will be turned off after approximately 10 seconds.



Stir-Frying and Roasting

Use this function when you encounter the flame is reduced or suddenly turns off during stir-frying, roasting or broiling.
 “Cooking oil overhear prevention device” and “Burning flame off function” are temporarily deactivated.



Use the high-temperature cooking mode

When flame suddenly becomes low or is turned off

* The figure illustrates an appliance with a high flame burner on the left hob.

Warning



■ **Do not use the high-temperature cooking mode for frying foods.**
 The temperature of the cooking oil will increase, and it may catch fire.

■ **Do not use the grill mesh.**
 The oil that has dropped on the top plate may catch fire or cause the appliance to overheat abnormally.



Caution

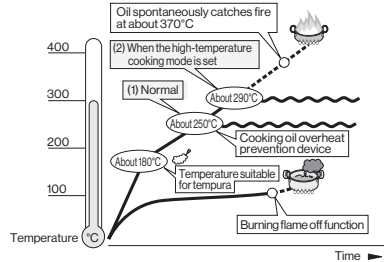


■ **Avoid grilling directly over the temperature sensor.**
 If the temperature sensor becomes dirty due to dripping of cooking juices on the temperature sensor and the sensor cannot detect the temperature of the bottom of the pan correctly, fire, turning off the flame while in the middle of cooking, or burn damage to the appliance may result.
 The amount and location of the dripped cooking juices may cause the failure of the temperature sensor.



Important

Working of the temperature sensor



(1) Normal

The temperature sensor is activated and automatically turns the flame level to high or low or turns off the flame to prevent the abnormal overheating of the pan when cooking at a relatively high temperature, such as when stir-frying or roasting, or when the empty grill is heated.

(2) When the high-temperature cooking mode is set

The high-temperature cooking mode is not a function that completely stops the temperature sensor from functioning but allows cooking at a higher temperature than (1) Normal. Even when using the high-temperature cooking mode, it automatically turns the flame level to high or low or turns off the flame to prevent the abnormal overheating of the pan. After setting to high-temperature cooking mode, the flame is automatically turned off after a maximum of 60 minutes (approximately 30 minutes after the flame level automatically turns to low for the first time).

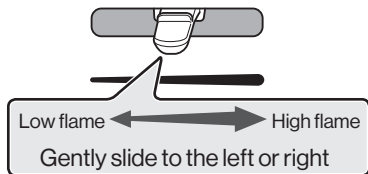
However, it automatically turns off the flame on reaching the set time for the hob flame turn off function.

When the high-temperature cooking mode is set, the burning flame off function and cooking oil overhear prevention device do not function.

(High-Temperature Cooking Mode) [High Flame Burner]

1 Turn on the high flame burner and adjust the flame level

Slide the flame level adjustment knob.



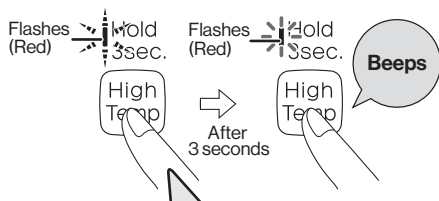
Note

- Adjust the flame level depending on the diameter of the frypan such that the flame does not curl up the sides.

2 Setting for high-temperature cooking

Press and hold the high-temperature cooking switch for at least 3 seconds.

The lamp stops flashing and alerts with the buzzer.



Press and hold until you hear the beep

Information

- To cancel, press the high-temperature cooking switch again.
- When the flame is turned off, the high-temperature cooking mode is cancelled.
- If any other switch is pressed when the high-temperature cooking switch has been pressed, the setting operation of the high-temperature cooking mode will be cancelled.

3 Start cooking

Note

- Be careful when heating a small amount of cooking oil in the frypan, as the temperature of the oil will rise rapidly, and the oil may catch fire.

Information

When the flame level is automatically turned from low to high, the buzzer alerts with a beep.

4 Turn off the flame

Press the operation button.



Note

- Always make sure that the flame is turned off.



Boiling Water

Alerts when the water has boiled and automatically turns off the flame.

Suitable cookware	Appropriate amount of water
Flat-bottomed pans, pan used without water (waterless cooker), multi-layered cookware and kettles Material: Aluminum, copper, iron, enamel, or stainless steel	500 ml-3L Pour the appropriate amount of water (60-70% of maximum capacity) depending on the size of the kettle or cookware. (To prevent boiling over)

When using earthenware pots, heat-resistant glass cookware, or pressure cookers, the temperature will not be detected correctly.

Note

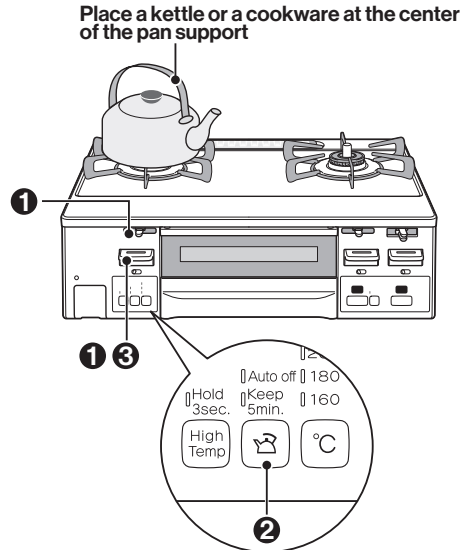
- Depending on the shape and material of the kettle or cookware and the amount of water, the time for the alert may vary, or the water may boil over. Be careful not to burn yourself.
- Observe the following for the proper operation of the temperature sensor.

From ignition until boiling

- Do not open and close the lid
- Do not stir the water
- Do not move the kettle or cookware
- Do not add more water
- Do not add any ingredients
- Do not change the flame level

Information

- If you feel that the alert for boiling is too early or too late, you can change the alert timing to one of 5 levels using the change various settings (customization function) function.
- In the following cases, water may be considered to have boiled before reaching 100°C.
 - When water that has been boiled once (around 70°C or more) is boiled again using the boiling mode
 - When the bottom of the kettle or pan is dirty or rusted

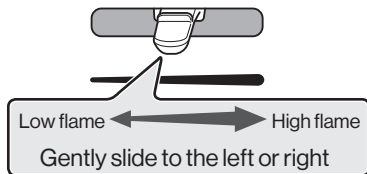


* The figure illustrates an appliance with a high flame burner on the left hob.

(Water Boiling Mode) [High Flame Burner]

1 Turn on the high flame burner and adjust the flame level

Slide the flame level adjustment knob.

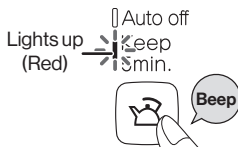


Note

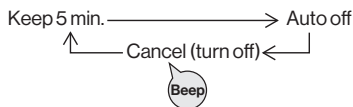
- Adjust the flame level depending on the diameter of the kettle or cookware such that the flame does not curl up the sides.

2 Set the boiling mode

Press the water boiling switch.



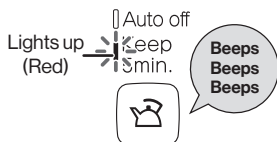
The display switches in the following order each time the button is pressed.



Keep 5 min.

Alerts with the buzzer when the water boils

Automatically switches to low flame.

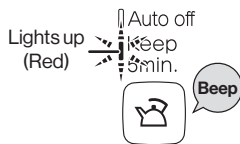


Information

- The flame level cannot be adjusted once the water boils and has switched to the low flame.

Alerts with the buzzer after 5 minutes

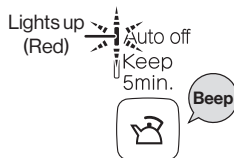
Automatically turns off the flame.



Auto off

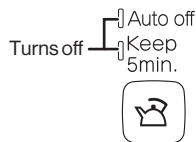
Alerts with the buzzer when the water boils

Automatically turns off the flame.



3 Press the operation button

Press the operation button and return to the flame extinguishing state.



Information

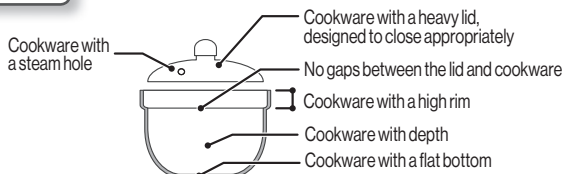
- The lamp of the water boiling switch keeps flashing until the operation button is returned to the flame extinguishing state.







Cooking Rice or Porridge

Cookware suitable for rice cooking mode

Select cookware that are suitable for the rice cooking mode to cook delicious rice.



How to select a rice cooker

Cookware type	Rice	Porridge	Amount of rice to be cooked/points
Aluminum cookware 	* ○	* ○	Rice burns quickly in thin stainless steel pots (thickness of 2.5 mm or less).
Enamel and stainless steel cookware 	* ○	* ○	White rice may be burned. Rice burns quickly in thin stainless steel pots (thickness of 2.5 mm or less).
Commercially available earthenware pots 	✗	* ○	Can be used to cook porridge only.
Glass cookware, pressure cookers, or multi-layered cookware 	✗	✗	Do not use these as the rice will not be adequately cooked.

○ : Can be used ✗ : Cannot be used (temperature cannot be detected accurately.)

* If the lid does not have a steam hole, or with certain materials and shapes, the rice may not be cooked properly due to burning and sticking to the cookware or boiling over.

The amount that can be cooked at one time

Rice	1-5 go
Rice cooked with other ingredients	1-4 go
Full porridge	0.25-1 go
70% porridge	0.25-0.5 go

Tips for cooking delicious rice

1 Measure the amount of rice accurately

Use a 180 ml measuring cup.



The measuring cup filled to the brim is equivalent to 1-go of rice.

180 ml measuring cup

Rice Cooking Mode [Standard Burner]

2 Wash the rice quickly with plenty of water

- **Immediately discard the water used for washing the rice initially.**

This is so that rice does not absorb the water containing rice bran.

- **Repeat the washing and rinsing process several times.**

Wash quickly until the water becomes clear.



Wash the rice quickly

Information

- Inadequately washed rice causes the cooked rice to smell, turn yellow, or burn.

Approximate amount of rice and water

Amount of rice		Volume of water		
		Rice	Porridge	
Volume	No. of go (weight)		Full porridge	70% porridge
45ml	0.25 go (approx. 38 g)	—	360ml	470ml
90ml	0.5 go (approx. 75 g)	—	540ml	630ml
180ml	1 go (approx. 150 g)	300ml	900ml	—
270ml	1.5 go (approx. 225 g)	390ml	—	—
360ml	2 go (approx. 300 g)	480ml	—	—
450ml	2.5 go (approx. 375 g)	580ml	—	—
540ml	3 go (approx. 450 g)	670ml	—	—
720ml	4 go (approx. 600 g)	930ml	—	—
900ml	5 go (approx. 750 g)	1130ml	—	—

Note

- Inadequately washed rice causes the cooked rice to smell, turn yellow, or burn.
- When cooking rice with other ingredients, add about 10% more water (including seasonings and soup stock) than that used only for rice.

Soaking time of rice in water

Type of rice		Soaking time in the water	
		Spring to summer	Autumn to winter
Rice	White rice	30 minutes or more	60 minutes or more
	Pre-washed rice/germinated brown rice		
	Whole grain rice	60 minutes or more	90 minutes or more
	Rice mixed with various grains		
	Old rice		
Barley rice			
Porridge		0-30 minutes	



Important

- After washing, always soak the rice in water for 30 minutes or more before cooking.
- Rice when cooked immediately after rinsing becomes hard after cooking.
- Rice that has been pre-soaked once breaks easily.
- If rice is mixed with broken rice or not washed adequately, the cooked rice may smell, turn yellow, or be poorly cooked.

Tips for cooking pre-washed rice

- **Rinse once or twice**

If rice is cooked while the water is still cloudy, starch settles at the bottom, and the rice will not be adequately cooked.

- **Soak well in water**

- **Increase the amount of water by around 3%**

Or use a special measuring cup for pre-washed rice.

- **Stir well to get rid of the bubbles**

If bubbles form on the surface of the rice, water will not be absorbed, and the rice will not be adequately cooked.



Cooking Rice or Porridge

Alerts when the rice or porridge is cooked and automatically turns off the flame.

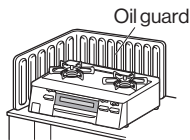
Approximate time for cooking rice

Rice	28-37 minutes (including 10 minutes of steaming)
Porridge	35-50 minutes

Note

Remove the oil guard when cooking rice.

- Installing an oil guard around the appliance changes the flow of the exhaust causing poor combustion, resulting in uneven cooking.
- The rice will not be adequately cooked if a breeze is blowing, or if the flame is exposed to wind from a fan or air conditioner. Place the appliance at a place where the flame is not exposed to the breeze.



When cooking rice seasoned with various ingredients

- Add the seasonings just before cooking to allow the rice to absorb the water.
- Place the ingredients and seasonings such as butter or ketchup on the rice and mix them after cooking. If ingredients settle at the bottom, the rice may not be cooked properly.

When cooking porridge

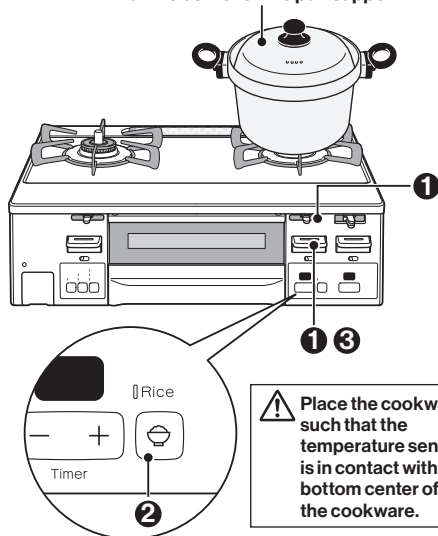
- When preparing porridge (rice gruel) from cooked rice, cook it manually.
- Do not add seasonings such as salt at the beginning, or stir the rice while cooking. The rice may become sticky, or the grains may be crushed, and the rice may not be cooked properly.
- In the event of food boiling over, shift or lift the lid to prevent spilling.
- If the porridge is cooked and an excess amount of water is still present, turn on the flame again and adjust the flame level while keeping an eye on the porridge.

Information

When cooking rice

- Rice cannot be reheated. (The rice may be burned.)
- In the case of a small rice cooker in rice mode, if the color of the rice (burning) is a concern, or if you feel that the rice is not cooked adequately, you can set the degree of cooking to one of 3 levels using the change various settings (customization function).

Cover the cookware with a lid and place it at the center of the pan support

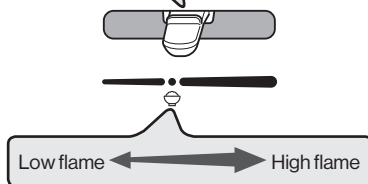


* The figure illustrates an appliance with a high flame burner on the left hob.

1 Turn on the standard burner and adjust the flame level

Slide the flame level adjustment knob.

Set the flame level adjustment knob to the ☺ position



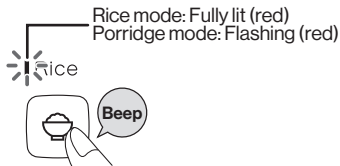
Information

- If the flame level is more than the ☺ position, the cooked rice will be hard, and if the flame level is less than the ☺ position, the cooked rice will be soft.

Rice Cooking Mode [Standard Burner]

2 Setting for rice cooking

Adjust the flame level and press the rice cooking switch immediately.



[Rice] Press the rice cooking switch to enter rice mode. The lamp lights up.

[Porridge] To enter the porridge mode, press and hold the rice cooking switch for at least 3 seconds.

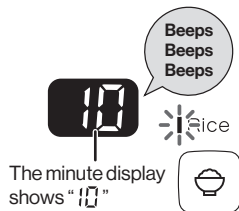
Note

- To cancel, turn off the flame briefly.
- The settings cannot be changed after a specific duration from the start of cooking the rice.

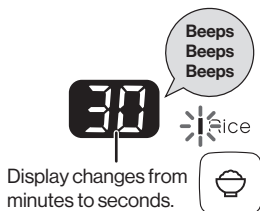
Rice

Alerts with the buzzer when the rice is cooked and steaming starts [10 minutes]

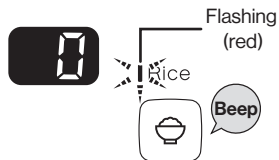
Automatically turns off the flame.



Alerts with the buzzer 30 seconds before the end of steaming



Alerts with the buzzer when steaming is finished



Note

- After steaming... Stir the rice well from the bottom.
- The excess water will evaporate, and the rice will taste better.

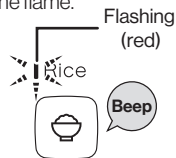
Information

- If the operation button is returned while steaming the rice, the alert buzzer will not sound when steaming is complete.

Porridge

Alerts with the buzzer when the porridge is cooked

Automatically turns off the flame.



3 Press the operation button

Press the operation button and return to the flame extinguishing state.



Information

- The lamp of the rice cooking switch keeps flashing until the operation button is returned to the flame extinguishing state. With the [Rice] option, the hob timer display "10" will turn off after about 10 seconds.

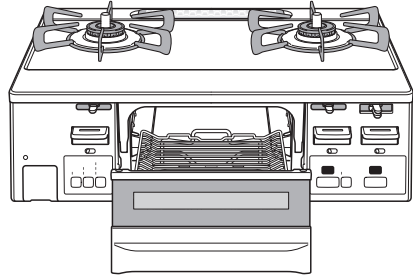
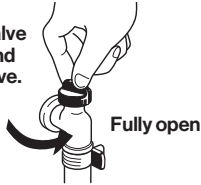


Grill Handling and Preparation

Preparations

- Check that there is no paper or packing material in the grill chamber and remove if present.

Rotate the gas valve anti-clockwise and fully open the valve.

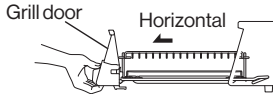


* A grill mesh is shown in the figure.

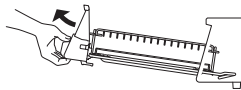
- ⚠ **Make sure that the ignition lock has been released.** See "Preventing unintentional ignition (ignition lock)" on page 25.
- Check the grill chamber.**

Removing the grill

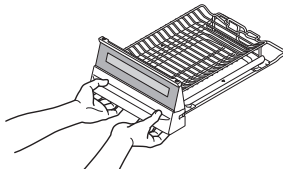
- 1 Pull the grill door out slowly and horizontally.**
The door stops when it is fully pulled.



- 2 Lift the grill door slightly and remove it from the appliance, and then take out the door.**



- 3 Hold the grill door firmly with both hands and carry the grill gently.**



Information

- Lifting the grill door before the grill is completely pulled out will damage the grill pan.

When using the grill for the first time

- 1 Remove the cocotte plate and grill mesh.**
- 2 Heat the empty grill for about 6 minutes.**
The heat burns off the machining oil adhering to the parts. Heat by setting the top and bottom flames to "high". If you are concerned about the odor or smoke, wait 5 minutes for the grill chamber to cool and heat again.

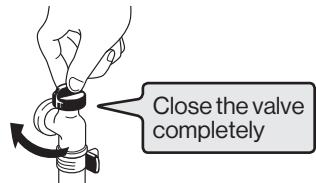
Note

- When heating the empty grill, the grill overheating prevention sensor may be activated and turn OFF the flame automatically. ("E2" and "- 5" are displayed alternately) In this case, press the operation button to return to the flame extinguishing state and wait 5 minutes for the grill chamber to cool and start the grill again.

Information

- Smoke is emitted from the grill vent and other places. This is not abnormal.

- 3 Close the gas valve.**
After use, close the gas valve by rotating clockwise.



For grilling food (fish, etc.) properly

1 Prepare the food.

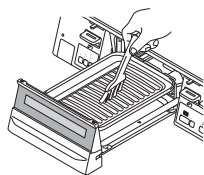
- Frozen fish should be thawed completely.
- Fish that has been refrigerated must be left at room temperature for some time.
- Rinse raw fish in cold water, and thoroughly remove the moisture.

2 Apply oil to the cocotte plate or the grill mesh.

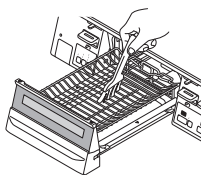
Apply a thin layer of oil.

This extra step will prevent the food from sticking to the mesh.

When using the cocotte plate



When using the grill mesh



3 Heat (preheat) the grill mesh for approximately 1-2 minutes.

Heat by setting the top and bottom flames to "high".

This prevents the food (fish, etc.) from sticking to the grill mesh and makes it easier to remove after grilling.

Note

- Do not preheat when cooking with the cocotte plate.
- Do not heat the cocotte plate when the grill is empty. Preheating or heating the cocotte plate may cause deformation, discoloration, or peeling off of the fluorine coating.

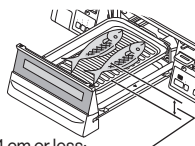
Information

- Heating the empty grill mesh for a long time may peel off the fluorine coating.

4 Place the food (fish, etc.)

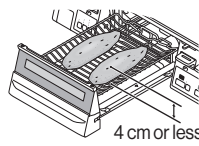
The thickness of the food placed in the grill chamber should be 4 cm or less.

When using the cocotte plate



4 cm or less:
Without the cocotte plate cover

When using the grill mesh



3 cm or less:
With the cocotte plate cover

4 cm or less

5 Ensure that the grill door is fully closed.

Note

- For information on how to place the food (fish, etc.), read the included "Recipes for the Grill" booklet.

Information

- The grill pan, cocotte plate and grill mesh are consumable parts. With use and aging, food may easily stick to the cocotte plate or grill mesh, and the fluorine coating may peel off. Also, cleaning the grill pan may become difficult. When you need to purchase the replacement parts, please contact your local Rinnai shop.



Cooking With the Cocotte Plate

Alerts on reaching the set time and automatically turns off the flame.

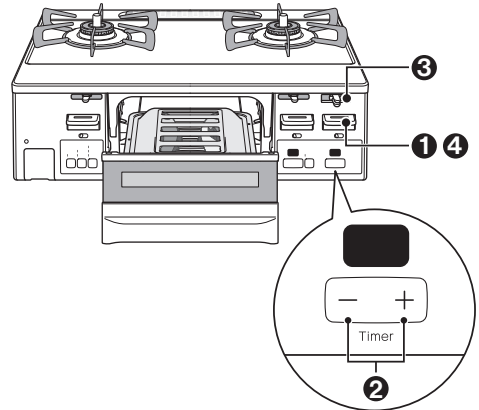
* Use the cocotte plate that is provided.

- Always make sure that the grill mesh is removed.
- Use by placing the plate fixing frame on top of the grill pan rack.

**⚠ Only the cocotte plate that has been provided can be used.
Do not pour water into the grill pan.
Ensure that the grill door is fully closed.**

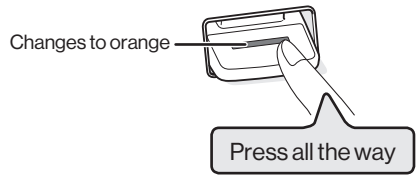
Note

- **Do not leave the appliance unattended while cooking, and ensure that the food is not overcooked.**
Depending on the food cooked, it may catch fire before the grill timer or grill overheat prevention sensor is activated.
Examples: Small fish, dried and smoked foods, fatty fish or chicken, etc.
For preparation and cooking, carefully read the included "Recipes for the Grill" booklet.
- Do not open the grill door while cooking.
- If the grill chamber becomes too hot, the grill overheating prevention sensor may be activated and may automatically turn off the flame. Press the operation button to return to the flame extinguishing state and wait for about 5 minutes for the grill chamber to cool before using the grill.
- When grilling fatty foods, wait for one minute after the flame has been turned off before removing the food, as fat may spatter from the cocotte plate immediately after cooking.
- Before continuing cooking, wipe off any fat collected on the cocotte plate with kitchen paper.
- The cocotte plate will be extremely hot after cooking.
Remove the cocotte plate cover with care wearing oven mitts, etc.
Do not use oven mitts made of synthetic fibers as they may melt.
Use of thick cotton oven mitts, etc. is recommended.
- After use, wipe off any fat accumulated in the cocotte plate with kitchen paper before removing the cocotte plate and be careful not to burn yourself.
- Do not cool the grill pan or cocotte plate too quickly.
Splashing water on the grill pan or cocotte plate immediately after use may cause deformation or discoloration.
Allow the grill pan or cocotte plate to cool before cleaning.



1 Turn on the grill

Press the operation button.



The grill timer starts automatically.



Initially, "9" (9 minutes) is displayed.
When the temperature in the grill chamber is high, "6" (6 minutes) is displayed.

Note

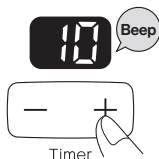
- For information on using the cocotte plate cover, read the included "Recipes for the Grill" booklet.
- Do not preheat the grill.

2 Set the time

Press the grill timer set switch [+/-].

The timer can be set from 1 to 15 minutes (maximum) in increments of 1 minute.

When the temperature in the grill chamber is high, the time can be set from 1 to 10 minutes (maximum).



Note

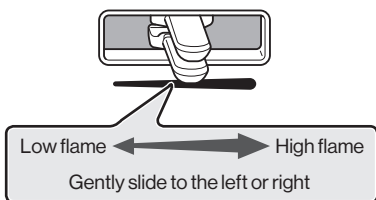
- For information on the approximate cooking time, read the included "Recipes for the Grill" booklet.

Information

- The set time can be changed during cooking.

3 Adjust the flame level

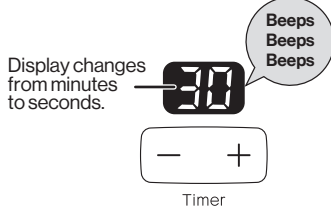
The flame can be adjusted separately for the upper and lower flames.



Note

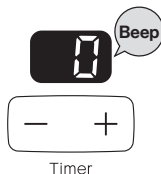
- The browning of the top and bottom may not be the same as the heating methods for the upper and lower flames are different. Adjust the heat of the upper and lower flames while observing the browning color.

Alerts with the buzzer 30 seconds before the set time



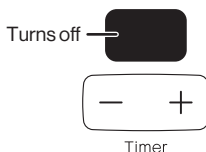
Alerts with the buzzer on reaching the set time

Automatically turns off the flame.



4 Press the operation button

Press the operation button and return to the flame extinguishing state.



Information

- If the operation button is not returned to the flame extinguishing state, "00" on the grill timer display unit will be turned off after approximately 10 seconds.



Cooking with the Grill Mesh

Alerts on reaching the set time and automatically turns off the flame.

* Use the grill mesh that is provided.

- Check that the grill mesh is installed in the grill chamber.
- Always make sure that the plate fixing frame is removed.
- Do not use the cocotte plate.

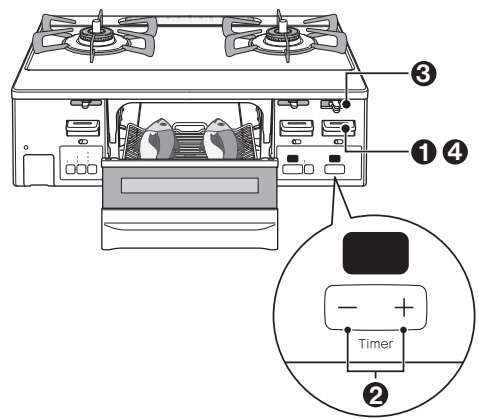
! Only the grill mesh that has been provided should be used.
Do not pour water into the grill pan.
Ensure that the grill door is fully closed.

Note

- **Do not leave the appliance unattended while cooking, and ensure that the food is not overcooked.**
Depending on the food cooked, it may catch fire before the grill timer or grill overheat prevention sensor is activated.
Examples: Small fish, dried and smoked foods, fatty fish or chicken, etc.
For preparation and cooking, carefully read the included "Recipes for the Grill" booklet.
- Fish, such as soy broiled, soy grilled, and seasoned fish, is easy to burn, so roast slowly, keeping the flame level low.
- If the grill chamber becomes too hot, the grill overheating prevention sensor may be activated and may automatically turn off the flame.
Press the operation button to return to the flame extinguishing state and wait for about 5 minutes for the grill chamber to cool before using the grill.
- Remove the food immediately after broiling.
The food may be burned by residual heat.
- Do not cool the grill pan too quickly.
Splashing water on the grill pan immediately after use may cause deformation.
Allow the grill pan to cool before cleaning.

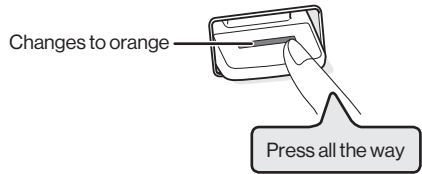
Information

- **Removing the fish.**
Inserting chopsticks parallel to the grill mesh makes it easier to remove food stuck to the grill mesh.



1 Turn on the grill

Press the operation button.



The grill timer starts automatically.



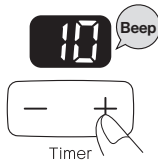
Initially, "9" (9 minutes) is displayed.
When the temperature in the grill chamber is high, "6" (6 minutes) is displayed.

2 Set the time

Press the grill timer set switch [+/-].

The timer can be set from 1 to 15 minutes (maximum) in increments of 1 minute.

When the temperature in the grill chamber is high, the time can be set from 1 to 10 minutes (maximum).



Note

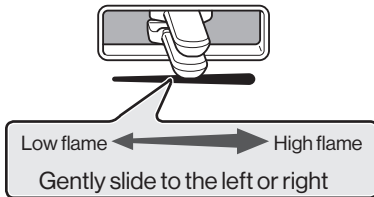
- For information on the approximate cooking time, read the included "Recipes for the Grill" booklet.

Information

- The set time can be changed during cooking.

3 Adjust the flame level

The flame can be adjusted separately for the upper and lower flames.

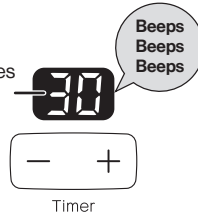


Note

- The browning of the top and bottom may not be the same as the heating methods for the upper and lower flames are different. Adjust the heat of the upper and lower flames while observing the browning color.

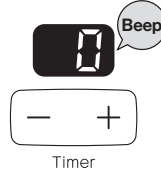
Alerts with the buzzer 30 seconds before the set time

Display changes from minutes to seconds.



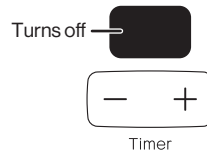
Alerts with the buzzer on reaching the set time

Automatically turns off the flame.



4 Press the operation button

Press the operation button and return to the flame extinguishing state.



Information

- If the operation button is not returned to the flame extinguishing state, "00" on the grill timer display unit will be turned off after approximately 10 seconds.

Various Settings (Customization Function)

You can change the settings of the following functions.

Display unit	Function	Details	Setting item
*1 01	Flame turn off duration	Allows setting the timer of the hob flame turn off function.	30-90 minutes (increments of 10 minutes) --:2 hours (initial setting)
02	Hot water alert time	If you feel that the alert time for boiling water is too early or too late, you can change the alert timing to any following 5 levels.	1 : Fast 2 : Slightly faster 3: Standard (initial setting) 4 : Slightly slower 5 : Slow
03	Rice cooking adjustment	When cooking a small amount of rice in the rice cooking mode, if you are concerned about the rice color (browning) or feel that the rice is undercooked, you can set the cooking level to one of three levels.	1 : Low 2: Standard (initial setting) 3 : High
04	Automatic heat adjustment buzzer	You can set the alert buzzer to Yes/No when the safety features and convenient functions are activated and when the flame level is automatically changed from low to high.	on: Buzzer sound (initial setting) oF: No buzzer sound
*2 05	Operation buzzer	Set buzzer alert to Yes/No (beep, etc.) when operations are performed.	on: Buzzer sound (initial setting) oF: No buzzer sound
07	Reset all	Restores all settings that have been changed (customized) to their initial settings.	Press and hold the grill timer set switch [+] for 3 seconds until "88" is displayed.
08	Latest error history	Allows you to check the latest error.	The detection location and error numbers flash alternately on the grill timer display. -1 : Standard burner -3: High flame burner -5: Grill -- : No error code

*1 Setting of the high flame burner and standard burner are changed at the same time. Individual setting for each burner is not possible.

*2 Beeping of the buzzer cannot be turned off for the high-temperature stir-fry setting.

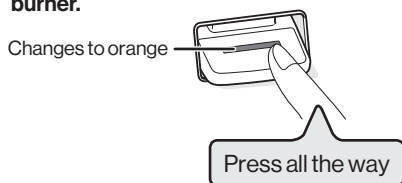
- You can customize the appliance according to your personal preferences for convenience and ease of use.

⚠ Make sure that the ignition lock has been released.

* The figure illustrates an appliance with a high flame burner on the left hob.

Setting method

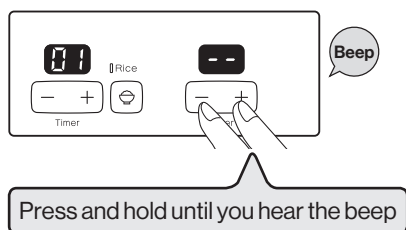
- Turn on the high flame burner**
Press the operation button of the high flame burner.



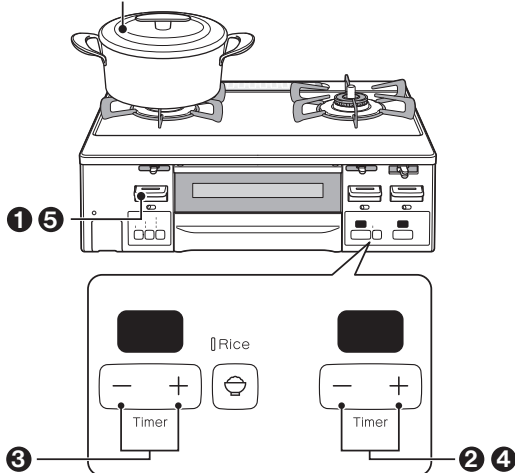
- After the flame is turned on, press the grill timer set switches [+] and [-] simultaneously within 10 seconds.**
Press and hold for at least 3 seconds until the buzzer sounds.

"01" is displayed on the hob timer display of the standard burner, and "--" is displayed on the grill timer display.

The flame of the high flame burner is turned off.



Place a cookware containing water at the center of the pan support.



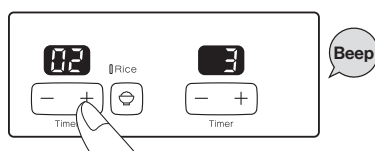
- Select a function to change its setting**
Press the hob timer set switch [+/-] of the standard burner.

When the [+] switch is pressed

Number of the display increases 02, 03, 04...

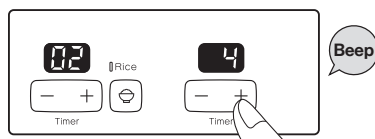
When the [-] switch is pressed

Number of the display decreases 08, 07, 05...



- Change the setting item**
Press the grill timer set switch [+/-].

Refer to the table on the left page for various setting items.



- Complete the changes to the various settings**

Press the operation button of the high flame burner and return to flame extinguishing state.

Tools for Daily Inspection and Care

Perform daily inspection

Are the components installed correctly?

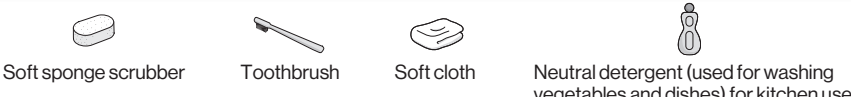
- Check that the burner cap, pan support and grill vent cover are installed correctly before using the appliance.

Is there any clogging, build-up, or dirt?

- Check that the burner cap flame opening, safety sensor (flame detector), and electrodes (spark plugs) are not clogged or dirty due to spills caused by boiling over.
- Has oil accumulated on the grill pan or cocotte plate, or is the grill chamber dirty with oil?
- Is the gas rubber pipe damaged? Replace the gas rubber pipe with a new product.

Tools and detergents for cleaning


Okay to use



Soft sponge scrubber Toothbrush Soft cloth Neutral detergent (used for washing vegetables and dishes) for kitchen use

Not okay to use

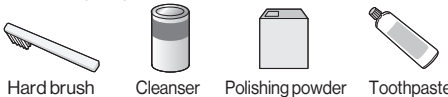
These may cause scratches and peeling of the parts.



Backside of sponge scrubber (hard) Nylon scrubber Scrubber Melamine foam sponge* Cream cleanser
 Metal scrubber


These products should be used only for the top plate, pan support, grill vent cover and cocotte plate cover when the stains cannot be removed. However, scratches may be formed on the surface.

* You can purchase melamine foam sponges from home centers, retailers and other stores.



Hard brush Cleanser Polishing powder Toothpaste

These products may cause peeling, deterioration, discoloration, rusting and cracking of the surfaces.




Acidic detergent Weakly acidic detergent Thinner Baking soda
 Alkaline detergent Weak alkaline detergent Benzene alcohol

Baking soda may be used for top plate, support, grill vent cover and cocotte plate cover.

Using the following may cause malfunction.

- If the detergent enters the appliance, it may adhere to electronic parts and cause failures such as malfunction or corrosion. Always soak into a cloth and use.


These products should not be used directly



Spray detergents

These products may ignite and cause a fire.

These products should never be used



Flammable spray Penetrant lubricant

Note

- Try tools and detergents on a discrete area of the appliance or part before using them.
- When using a dishwasher for washing pan support, grill vent cover and burner cap, read the instruction manuals of the special detergent and dishwasher before use. Parts may be subject to discoloration or loss of luster when washed with hot water, dishwashers and dryers.

Care procedure

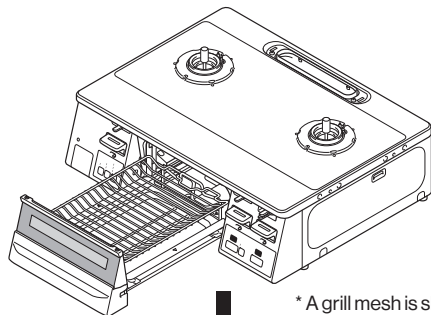
1. Check that the appliance is cool
2. Close the gas valve
3. Lock the operation buttons
4. Wear gloves and start cleaning

Parts that can be removed and cleaned

When cleaning, you can remove the parts shown within the rectangle boxes below and wash them.

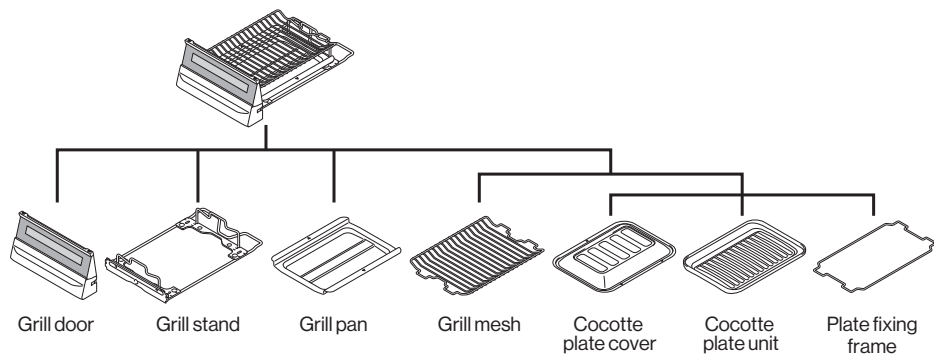
*** Parts other than these cannot be removed.**

Around the hob



* A grill mesh is shown in the figure.

Around the grill

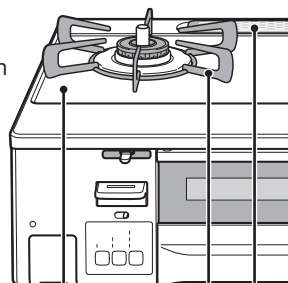


Care Instructions (Hob)

- Clean the hob each time it becomes dirty.
- Wear gloves before cleaning.
- Use diluted neutral detergent for kitchen use, and always wipe with a wet cloth followed by a dry cloth after cleaning to avoid leaving moisture or detergent residue.

Note

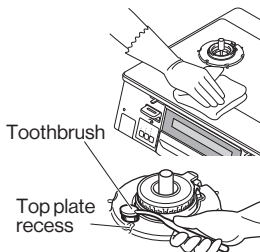
- Do not use hard brushes or scrubbers. Do not use detergents other than neutral detergents. Such detergents may cause peeling, discoloration, stains, scratches and rust.



Top plate

- Clean by removing the pan support and grill vent cover and placing the appliance in a stable position.
- Wipe the dirt off with a cloth soaked in detergent and wipe off any detergent and moisture with a dry cloth.
- Clean the recesses of the top plate with a toothbrush.

* Accumulation of dirt can cause the pan support to become unstable.



When dirt is stuck

1. Soak a piece of kitchen paper in detergent and water and moisten the dirty areas.
2. When the dirt becomes loose, wipe the dirt off with a soft cloth.

When the dirt still cannot be removed

1. Soak a melamine foam sponge in water and scrub off the dirt. Fine scratches are formed on the enameled surface with this method. If the dirt persists, soak a metal scrubber in water and scrub off the dirt. If black spots appear on minor scratches, apply a cream cleanser to a soft sponge scrubber and scrub off the dirt.
2. When the dirt is removed, wipe with a dampened soft cloth and then with a dry cloth.

Pan support and grill vent cover

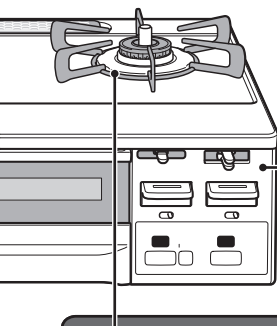
- Wipe the dirt off with a cloth soaked in detergent and wipe off any detergent and moisture with a dry cloth.
- When the parts are extremely dirty, soak and then wash thoroughly with a detergent.

When the dirt still cannot be removed

- Dirt is easier to remove using hot water.
1. Place the pan support and grill vent cover in a large cookware containing water and heat for about 30 minutes.
 2. Allow the parts to cool and wash the dirt that has come loose with water, and then wipe off the water.



Before cleaning, allow the appliance to cool, turn off the gas valve, lock the operation buttons and wear gloves



Appliance surfaces and operation panel

- Wipe the dirt off with a cloth soaked in detergent and wipe off any detergent and moisture with a dry cloth.

* Do not allow the detergent to enter inside the appliance
it may adhere to electronic parts and cause failures such as malfunction or corrosion..



Burner

- Wipe off the dirt with a soft cloth and then with a dry cloth.

Burner cap

- Wipe the dirt off with a cloth soaked in detergent and wipe off any detergent and moisture with a dry cloth.

* After washing with water, thoroughly wipe off the moisture before attaching the parts.

* These parts can also be washed with hot water in the same way as the pan support.



When the dirt still cannot be removed

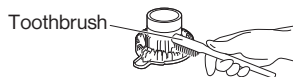
1. Soak a melamine foam sponge in water and scrub off the dirt. However, scratches may be formed on the painted surfaces.
2. When the dirt is removed, wipe with a dampened soft cloth and then with a dry cloth.

If the flame opening is clogged

- Clean the dirt with a toothbrush.

* Clogging and dirt may cause improper combustion or ignition failure.

* When dirt is stuck to the surfaces, use a toothbrush to remove the dirt.



Burner body

- Wipe off the dirt on the surfaces with a soft cloth.

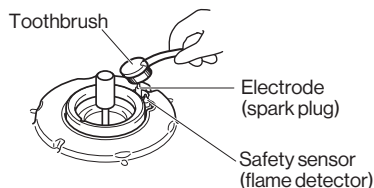


Safety sensor and electrode

- Clean it with a toothbrush, etc.

* Since the electrodes (spark plugs) tips are sharp, be careful not to injure yourself.

* Since any remaining dirt or moisture will cause ignition failure, wipe off the water completely.

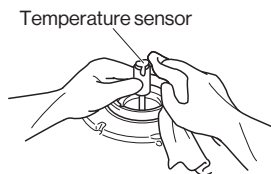


Temperature sensor

- Hold the sensor with one hand and wipe the head and sides with a damp cloth that has been squeezed tightly.

* If you apply excessive force, the temperature sensor may tilt and not contact the bottom of the cookware.

Do not forcibly rotate the temperature sensor. This may cause malfunction.



Care Instructions (Grill)

- Clean the grill after each use.
- Wear gloves before cleaning.
- Use diluted neutral detergent for kitchen use, and always wipe with a wet cloth followed by a dry cloth after cleaning to avoid leaving moisture or detergent residue.
- Keep the grill in a stable position while cleaning.
If you apply strong force when the grill is not stable, parts of the grill may deform.

Note

- Do not use hard brushes or scrubbers. Do not use detergents other than neutral detergents. Such detergents may cause peeling, discoloration, stains, scratches and rust.

Grill door and grill pan rack

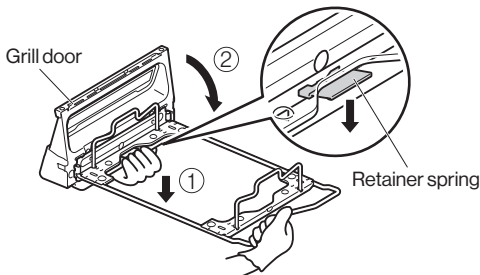
- **Wipe the dirt off with a cloth soaked in detergent and wipe off any detergent and moisture with a dry cloth.**

* Any remaining moisture may cause rusting, etc.

- **When the parts are extremely dirty, soak and then wash thoroughly with a detergent.**

Removing the parts

1. Lower the retainer spring in direction ①.
2. Tilt the grill door in direction ②.

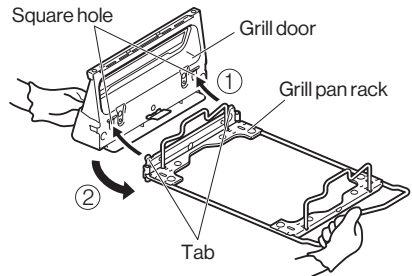


* Do not bend the retainer spring.

If the retainer spring is bent, the grill door will not close properly or come out easily.

Attaching the parts

1. Insert the 2 tabs of the grill stand into the square holes of the grill door. (①)
2. Rotate the grill door in direction ②.
3. Make sure that the retainer spring is securely engaged in the grill pan rack.



Grill pan, cocotte plate cover, cocotte plate unit, plate fixing frame and grill mesh

- **Wipe the dirt off with a cloth soaked in detergent and wipe off any detergent and moisture with a dry cloth.**

- **When dirt is stuck to the surfaces, soak and then wash thoroughly with a detergent.**

* If dirt remains on the cocotte plate unit or grill mesh, fish and other cooked food will easily stick to the parts.

* If the cocotte plate unit is left while it is wet on a stainless steel table or sink, it may damage the table or sink.

* The cocotte plate unit is made of aluminum.

The top surface of the cocotte plate unit and grill mesh are coated with fluorine.

Therefore, rubbing the coated surfaces with hard objects may cause the fluorine coating to peel off, and using acidic or alkaline detergents may cause discoloration or deterioration of the surfaces.

* Do not use dishwashers or dryers to wash the cocotte plate unit and grill mesh.

Such equipment may cause discoloration and deterioration of the surfaces.

Grill chamber (side walls and base)

- **Wipe the dirt off with a cloth soaked in detergent and wipe off any detergent and moisture with a dry cloth.**

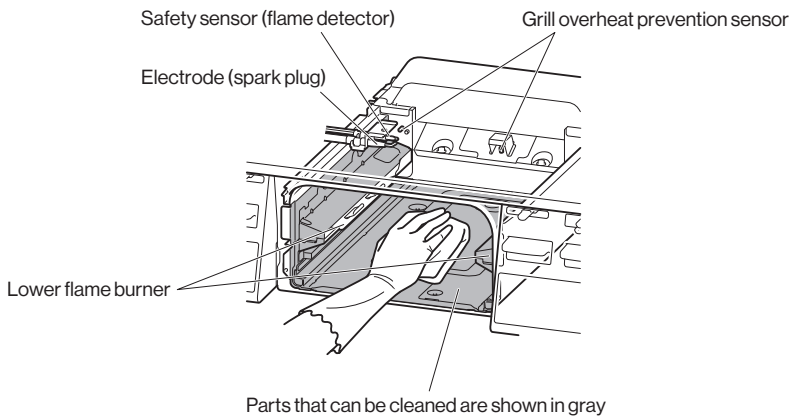
* Parts that can be cleaned are shown in gray.

Do not touch the combustion sections (upper flame burner: Ceiling surface, lower flame burner: Shown in the figure below).

It may cause clogging of the flame opening leading to poor combustion.

Do not touch the safety sensor (flame detector) and electrode (spark plug) attached to the roof of the grill chamber or the grill overheating prevention sensor attached to the rear wall.

If you touch these sensors, they may not function correctly.



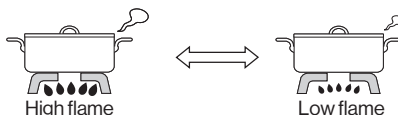
Frequently Asked Questions

List of most frequently asked questions

1 The flame changes to low or turns off by itself

⇒ The temperature sensor is activated, and the flame level is adjusted automatically from high to low, preventing overheating. This is not a malfunction.

The safety feature is activated, and the hob adjusts the flame level automatically



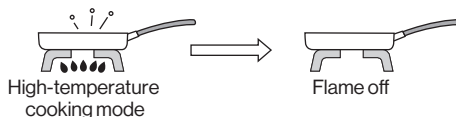
* If this state continues for about 30 minutes, it automatically turns off the flame.

* If you have a problem cooking the food, set to the high-temperature cooking mode to cook at an even higher temperature. (High flame burner)

2 Even though the appliance is set to the high-temperature cooking mode, the flame changes to low or turns off by itself

⇒ The temperature sensor works even in the high-temperature cooking mode, and the flame level is automatically adjusted from high to low flame. When the high-temperature cooking mode is set, the flame is turned off automatically approximately 30 minutes after the flame level automatically turns to low for the first time. This is not a malfunction.

The safety feature is activated even when the high-temperature cooking mode is set



* Turns off the flame automatically even when the temperature becomes too high.

* The flame is turned off automatically a maximum of 60 minutes after the high-temperature cooking mode is set. (High flame burner)

3 The flame is not ignited even if the operation button is pressed and the flame is turned off while the appliance is in use

⇒ The battery is drained. If the battery is drained, the flame may not ignite, and the flame may turn off while the appliance is in use.

Replace the batteries with 2 new size D alkaline batteries (1.5 V).

Even if the appliance stops working when the battery replacement indicator is not displayed, check the flame ignition by replacing the batteries.

Replace the batteries around once a year. (The batteries provided as accessories for trial use (size D manganese battery (1.5 V)) are for checking the operations of the appliance and will need to be replaced within a short period of time.)

* Even when the batteries are not used for a long time, the replacement period will be reduced due to self (natural) discharge.

Check the battery replacement indicator!



Flashes



The hob and grill cannot be used when the battery replacement indicator flashes. Replace the batteries with 2 new size D alkaline batteries (1.5 V).

Lights up



The appliance cannot be used when the battery replacement indicator lights up. Replace the batteries with 2 new size D alkaline batteries (1.5 V).

4 The flame does not ignite even though a clicking sound is heard when the ignition operation is performed.

⇒ The flame may not ignite when the electrode (spark plug), safety sensor (flame detector) and burner cap are wet or dirty. Wipe off the moisture and dirt, and then perform the ignition operation.

Question

Flame does not ignite

The flame level changes or the flame is turned off during cooking

The flame level does not change

Even when set to the high-temperature cooking mode, the flame level may change, or the flame may be turned off

Solution

The flame will not ignite if the gas valve is closed.
Fully open the gas valve.

If the flame opening of the burner cap is clogged with food that has boiled over, the flame may not ignite.
Clean the burner cap.

The flame may not ignite when the electrode (spark plug), safety sensor (flame detector) and burner cap are wet or dirty.
Clean the parts.

If the burner cap is not attached correctly, the flame may not ignite.
Attach the burner cap correctly.

When the appliance is used after a long time or used for the first time in the morning, it may take time to ignite the flame, or the flame may not ignite at all. If the flame does not ignite even after repeated ignition operation, replace the batteries with 2 new size D alkaline batteries (1.5 V).

The flame cannot be ignited if the ignition lock is enabled.
Release the ignition lock.

Check that the batteries have been inserted correctly.

If the battery replacement indicator is flashing or lit up, replace the batteries with 2 new size D alkaline batteries (1.5 V).

The safety features of the appliance are activated to maintain the temperature of the cookware or fry pan at approximately 250°C by automatically changing the flame level. If this state continues for about 30 minutes, the flame is turned off automatically. You can cook at an even higher temperature with the high-temperature cooking mode. (High flame burner)

The burning flame off function is occasionally activated and turns off the flame when an earthenware pot, heat-resistant glass cookware or pressure cooker is used. Ignite the flame again. Also, use the high-temperature cooking mode. (High flame burner)

The flame turn off function activates and automatically turns off the flame after approximately 2 hours have passed, or after the time set with change various settings (customization function).

There are some positions where the flame changes only slightly or appears not to change even after adjusting the flame level.
This is not abnormal.

Even in the high-temperature cooking mode, the flame level is adjusted automatically to high or low to maintain a temperature of 290°C and prevent abnormal overheating.
When the temperature becomes even higher, the flame is automatically turned off.

Frequently Asked Questions

Question	Solution
Flame condition (burning and color) is not correct.	If the flame opening of the burner is clogged with dirt or water droplets, combustion may not take place properly. Clean the burner cap.
	Check if the burner cap is tilted or lifted and attach the burner cap correctly.
	If ventilation is not provided, the flame burns differently and turns red. Always provide ventilation when the appliance is in use. The flame may turn red when it comes in contact with the pan support or burner cap. This is not abnormal.
	Flames may curl up or turn red when a breeze blows in, or if they are exposed to the breeze from a fan or air conditioner. Make sure the flame is not exposed to wind when in use.
	When using a humidifier, the flame may turn red due to the calcium content in the moisture. This is not abnormal.
	If the hob is used while the grill is in use, the flame may turn red due to the salt (sodium) present in the smoke from grilled foods. This is not abnormal.
	When the flame level is changed, the flame may momentarily turn yellow or enlarge in size. This is not abnormal.
	When the flame level is set between the medium and low flames, the tip of the flame may turn yellow. This is not abnormal.
	Even after the flame is turned off, a small flame may continue to burn in the flame opening of the hob burner. This is due to the small amount of gas remaining in the burner. This is not abnormal.
The bottom of the cookware was severely burned, and the flame went out	The flames may flicker when multiple burners are used at the same time. This is not abnormal.
	The extent of burning depends on the material of the cookware and food being cooked before the burning flame off function is activated. Burning occurs quickly with enamel-coated cookware or when cooking food with less moisture content, such as curry, stew, caramel, miso, etc. Cook with a low flame while stirring the food occasionally.
	Are the temperature sensor and bottom of the cookware dirty? Or, is the temperature sensor not in contact with the bottom of the cookware? In such cases, the temperature of the cookware cannot be detected correctly.
The grill mesh cannot be used	When kelp or bamboo peel is placed at the bottom of the cookware, the burning may be severe. Stir the food occasionally and adjust the flame as you cook.
	Use the grill for grilled eggplant and mochi. Pierce large-sized eggplant and bell pepper, which cannot be placed in the grill, with a fork or metal skewer and grill on the hob using the high-temperature cooking mode. (High flame burner)

Hob

	Question	Solution
Temperature setting mode	Cannot prepare fried foods properly	<p>The oil temperature may be higher or lower than the set temperature depending on the shape and material of the cookware and the quantity of oil. Use by adjusting the set temperature.</p> <p>Are the temperature sensor and bottom of the cookware dirty? Or, is the temperature sensor not in contact with the bottom of the cookware? In such cases, the temperature of the cookware cannot be detected correctly.</p>
Water boiling mode	Water does not boil, or the alert is delayed even though the water has boiled	<p>Water may not boil, or alert may be delayed even though the water is boiling depending on the shape and material of the kettle or cookware and quantity of water.</p> <p>Are the temperature sensor and bottom of the cookware dirty? Or, is the temperature sensor not in contact with the bottom of the cookware? In such cases, the temperature of the cookware cannot be detected correctly.</p> <p>If you shift the cookware or stir the water while heating, the water may not boil, or the alert may be delayed even though the water is boiling.</p> <p>The water temperature that has already been boiled once may not be detected correctly in the water boiling mode.</p> <p>Adjust the "Hot water alert time" setting.</p>
	Boils over	<p>Have you added too much water? Use an appropriate amount of water depending on the kettle or cookware size. The guideline is 60-70% of the maximum capacity of the kettle or cookware.</p>
Rice cooking mode	Rice and porridge are not cooked properly	<p>The rice will not be adequately cooked if a breeze is blowing in, or if the flame is exposed to wind from a fan or air conditioner. Make sure the flame is not exposed to the breeze when in use.</p> <p>If you open the lid while the rice is being cooked, the rice will not be adequately cooked.</p> <p>Use cookware suitable for the rice cooking mode.</p> <p>Are the temperature sensor and bottom of the cookware dirty? Or, is the temperature sensor not in contact with the bottom of the cookware? In such cases, the temperature of the cookware cannot be detected correctly.</p> <p>Adjust the "Rice cooking adjustment" setting.</p> <p>If the cooked rice is hard or soft, steam the rice for an additional time of about 5 minutes.</p> <p>Be sure to soak the rice in water for 30 minutes or more before cooking. If you cook the rice immediately after washing, it may cause boiling over, or the rice may not be adequately cooked.</p> <p>When cooking porridge, do not stir during cooking. Stirring will cause the rice to burn, become sticky, and lose some of its flavor.</p> <p>If you want to add seasoning to porridge, add after cooking is complete. If the seasoning is added before cooking, a film may form on the surface, and the rice may not be adequately cooked.</p> <p>Rice cooked with other ingredients is more likely to burn than white rice.</p> <p>Is an oil guard installed around the hob? Remove the oil guard.</p>

Frequently Asked Questions

	Question	Solution
Rice cooking mode	Pre-washed rice is not cooked properly	<p>Be sure to soak the rice in water for 30 minutes or more before cooking. If you cook the rice immediately after washing, it may cause boiling over, or the rice may not be adequately cooked.</p> <p>Stir well, wash once or twice, and rinse off. If starch settles at the bottom and bubbles form on the surface of the rice, water will not be absorbed and the rice will not be adequately cooked.</p> <p>Use a special measuring cup for pre-washed rice. If you are not using a measuring cup, increase the water quantity by about 3%.</p>
	Porridge boils over	<p>Porridge may boil over depending on the shape of the cookware. Shift or lift the lid to prevent the porridge from boiling over.</p>
	The flame is turned off by mistake during cooking	<p>Cook again in the rice cooking mode. Rice at the bottom of the cookware may be burned if the flame is turned on again when the water content is low. (Porridge cannot be cooked automatically. Cook with low flame while keeping an eye on the porridge.)</p>
Grill	Flame does not ignite	<p>The flame cannot ignite if the gas valve is closed. Fully open the gas valve.</p> <p>If the grill chamber becomes too hot, the grill overheating prevention sensor may be activated, and the flame cannot be turned on. Press the operation button to return to the flame extinguishing state and wait for about 5 minutes for the grill chamber to cool before using the grill.</p> <p>When the appliance is used after a long time or it is used for the first time in the morning, it may take time to ignite the flame, or the flame may not ignite at all. If the flame does not ignite even after repeated ignition operation, replace the batteries with 2 new size D alkaline batteries (1.5 V).</p> <p>The flame cannot be ignited if the ignition lock is enabled. Release the ignition lock.</p> <p>Check that the batteries have been inserted correctly.</p> <p>If the battery replacement indicator is flashing or lit up, replace the batteries with 2 new size D alkaline batteries (1.5 V).</p>
	The flame level does not change	<p>There are some positions where the flame changes only slightly or appears not to change even after adjusting the flame level. This is not abnormal.</p>
	Food cannot be cooked properly	<p>If frozen food (such as fish) is not completely thawed, the food may not be sufficiently browned or cooked to the middle. The grill overheating prevention sensor may also be activated.</p> <p>Arrange the food (such as fish) appropriately according to the number of pieces and size of each piece. For information on how to place the food (fish, etc.), read the included "Recipes for the Grill" booklet.</p> <p>Wash and wipe off the moisture before grilling fish preserved in miso or sake lees.</p> <p>Close the grill door securely. If the door is not closed, the food may not be sufficiently browned or cooked to the middle.</p>

	Question	Solution
Grill	Bread cannot be toasted properly	The surface of bread in contact with the cocotte plate will have brown stripes only in parts where the cocotte plate touches the bread.
	The grill turns off while in use	If the grill chamber becomes too hot, the grill overheating prevention sensor may be activated, and the flame may be turned off automatically. Press the operation button to return to the flame extinguishing state and wait for about 5 minutes for the grill chamber to cool before using the grill.
	Smoke or odor emanates from the grill vent or hob	<p>When using the grill for the first time, smoke or odor may emanate from the grill vent or hob. This is due to a small quantity of machining oil left on the metal parts around the grill burner, which burns off when the empty grill is heated, and this is not a safety issue.</p> <p>A large amount of smoke is generated if the grill pan, cocotte plate or grill mesh is dirty or when grilling fatty fish, in which case the smoke and odor may be emitted from places other than the grill vent. This is not abnormal. Clean the parts each time they become dirty.</p> <p>Close the grill door securely. If the door is not closed, smoke and odor may be emitted from the gaps.</p> <p>When cooking with the cocotte plate, a high volume of smoke may be emitted from the fat collected in the oil puddle. If you are concerned about the smoke, cooking with the grill mesh is recommended.</p>
Sound	A “pop” sound is heard after the hob is turned on	This sound is generated when the gas burns. This is not abnormal.
	A squeaking sound is heard during and after use	The squeaking sound is of metal expanding and contracting due to heating and cooling. A loud creaking sound may be heard depending on how you use the appliance, which is not abnormal.
	A hissing sound is heard when the hob is in use	This is the sound of gas passing through the burner. This is not abnormal.
	The buzzer beeps when the hob is in use	The buzzer sounds when the flame level automatically turns to low for the first time or turns from low to high. This is not abnormal.

Frequently Asked Questions

	Question	Solution
Sound	A buzzing sound is heard when the grill is turned on	This is the sound generated when the gas is ignited in the burner. This sound may be generated if you turn on the grill when it is warm. This is not abnormal.
	A popping sound is heard when the grill is in use	This is the sound generated from the burners when the grill chamber is cooling down, and this is not abnormal. The sound will disappear when the grill becomes warm.
	Buzzer beeps for about 8 seconds	A part has malfunctioned.
	A beep sounds every minute	Alert if the operation buttons of the hob and grill are not returned function. If you forget to turn off the operation button, the buzzer will sound every minute. Immediately turn off the operation button.
Others	When the flame on one burner is ignited, a clicking sound is heard from other burners	The structure of the appliance is such that there will be clicking at other burners. This is not abnormal.
	The clicking sound continues even after releasing the operation button.	Clicking continues for a maximum of 10 seconds even after the operation button has been released. This is not abnormal.
	Discoloration of pan support, burner cap and grill vent cover	The tips of the pan support that are exposed to the flame become white and rough. This is not abnormal. The pan support, etc., are consumable parts. They are sold as replacement parts.
		Discoloration and peeling of paint may occur for the pan support and burner cap even with normal use. This does not cause any problems with their performance.
		Do not use acidic and alkaline detergents. Wash with a diluted solution of neutral detergents for kitchen use. When washed with hot water, dishwashers and dryers, etc., these parts may be subject to discoloration or loss of luster. This does not cause any problems for the performance.
Top plate becomes hot	The top plate may become hot due to heat from the grill. Even if you are only using one hob, the top plate on the side of the hob not in use may also become hot due to the conduction of heat. Be careful not to touch the top plate while the hob and grill are in use or immediately after use.	

Question

Top plate has expanded

Solution

This expansion is due to the thermal expansion of the top plate. This is not abnormal. The plate will return to its original state on cooling.

Battery replacement indicator flashes

The time to replace the batteries is approaching. It will no longer be possible to use the appliance, replace the batteries with 2 new size D alkaline batteries (1.5 V).

Parts are damaged

Consumable parts that the customer can replace should be replaced as soon as they are damaged.

Buzzer Functions and Displayed




- Regarding the display (numbers): Indications of the standard burner are shown on the hob timer display unit of the standard burner. Indications of the high flame burner and grill are shown on the grill timer display unit.
 - 1: Standard burner - 3: High flame burner - 5: Grill ↔: Flash alternately
- To turn off the mode lamp and display unit, press the operation button and return to the flame turned extinguishing state.

Display		Buzzer sound	Details
0		Beeps once (approximately 2 seconds)	Hob timer mode is finished
		Beeps once (approximately 2 seconds)	Grill timer is finished
00 ↔	- 1, - 3	Beeps 3 times	Activation of the hob flame turn off function
	- 3	Beeps 3 times	High temperature cooking mode is finished
01 (--)		Beeps 3 times	Motor position error
02 ↔	- 1, - 3	Beeps 5 times	Activation of the cooking oil overheat prevention device Activation of the burning flame off function
	- 5	Beeps 3 times	Activation of the grill overheat prevention sensor
11 ↔	- 1, - 3, - 5	Beeps 3 times	Flame is not ignited during ignition
12 ↔	- 1, - 3, - 5	Beeps 3 times	Activation of the safety sensor
14 ↔	- 1, - 3	Beeps 5 times	Activation of the temperature sensor overheat protection function

Messages

Cause	Solution and Precautions for Reuse
The flame was turned off automatically after the set time had elapsed.	<ul style="list-style-type: none"> ● Press the operation button and return to the flame turned extinguishing state.
The flame was turned off automatically after the set time had elapsed.	<ul style="list-style-type: none"> ● Press the operation button and return to the flame turned extinguishing state.
The flame was turned off automatically approximately 2 hours from the start of use or upon reaching the set time.	<ul style="list-style-type: none"> ● Press the operation button and return to the flame turned extinguishing state. ● Ignite the flame again to continue using the appliance.
The flame was turned off automatically after 30 minutes had elapsed since entering the automatic heat adjustment mode.	<ul style="list-style-type: none"> ● Press the operation button and return to the flame turned extinguishing state. ● Wait for the appliance to cool before igniting the flame again.
The flame was turned off automatically after 60 minutes had elapsed since setting to the high-temperature cooking mode, or after approximately 30 minutes had elapsed after the flame level automatically turned to low for the first time.	<ul style="list-style-type: none"> ● Press the operation button and return to the flame turned extinguishing state.
Initialization of motor has not been completed	<ul style="list-style-type: none"> ● Automatically starts the motor initialization operation. ● The display will change to " - - " when the motor initialization operation is complete. Wait for the display to change to " - - " and then press the operation button and return to the flame turned extinguishing state.
Overheating of the cooking oil, burning, overheating due to forgetting to turn off the flame, heating the empty grill, etc.	<ul style="list-style-type: none"> ● Check "The flame level changes or the flame is turned off during cooking" and "The bottom of the cookware was severely burned, and the flame went out" in Frequently Asked Questions. ● Be careful of getting burned and turn the flame on again. ● When the flame is turned off by the activation of the cooking oil overheat prevention device (when the temperature sensor remains at a high temperature), the flame may go off even when ignited again. Press the operation button to return to the flame extinguishing state and ignite the flame again after the appliance cools.
Heating the empty grill, forgot to turn off the flame, continuous use of the appliance, small quantity of food, etc.	<ul style="list-style-type: none"> ● When the flame is turned off by the activation of the grill overheat prevention sensor (when the temperature sensor remains at a high temperature), the flame may go off even when ignited again. ● Return to the flame extinguishing state by pressing the operation button and wait for about 5 minutes for the grill chamber to cool before igniting the flame again.
The flame has blown off, food has been spilled, the flame did not ignite, etc.	<ul style="list-style-type: none"> ● Check "Flame does not ignite" and "The flame level changes or the flame is turned off during cooking" in Frequently Asked Questions. ● Press the operation button to return to the flame extinguishing state, wait for gas in the surrounding area to dissipate and ignite the flame again.
An abnormality has been detected, such as the activation of the overheat protection function.	<ul style="list-style-type: none"> ● Press the operation button and return to the flame turned extinguishing state. ● Wait for the appliance to cool before igniting the flame again.

Buzzer Functions and Displayed

Display		Buzzer sound	Details
24 ↔	-3	Beeps once (approximately 8 seconds)	Failure of the high-temperature cooking switch
31 ↔	-1, -3	Beeps once (approximately 8 seconds)	Failure of the temperature sensor
32, 33 ↔	-5	Beeps once (approximately 8 seconds)	Failure of the grill overheat prevention sensor
53, 71, 72 ↔	-1, -3, -5	Beeps once (approximately 8 seconds)	Failure of electronic components
70 ↔	-5 -- (High flame burner, standard burner)		
* Battery replacement indicator <lights up> *		Beeps 3 times	Battery replacement alert
 (The lamp of the water boiling mode (Auto off or Keep 5 min.) flashes.)		Beeps once (approximately 2 seconds)	Water boiling mode (Auto off) is finished
			Water boiling mode (Keep 5 min.) is finished
 (Lamp of the rice cooking mode flashes)		Beeps once (approximately 2 seconds)	Rice cooking mode (rice and porridge) is finished
Orange 	When the flame is turned off automatically, and the display of the operation button is orange	Beeps 5 times (every minute)	Activation of the alert if the operation buttons of the hob and grill are not returned function

* Changing various settings (customization function) will display the error number "05" only when displaying the latest error history listed

Messages

Cause	Solution and Precautions for Reuse
A part has malfunctioned.	<ul style="list-style-type: none">● If the same error occurs when using the appliance again, close the gas valve, stop using the appliance or please contact your local Rinnai shop.
Battery is completely drained.	<ul style="list-style-type: none">● Replace the batteries with 2 new size D alkaline batteries (1.5 V).
After the water had boiled, the flame automatically turned off.	<ul style="list-style-type: none">● Press the operation button and return to the flame turned extinguishing state.
After the water has boiled, the flame automatically turned off after approximately 5 minutes.	
After the rice is cooked in rice cooking mode, the flame automatically turned off.	<ul style="list-style-type: none">● Press the operation button and return to the flame turned extinguishing state.
The operation button remains in the pressed condition.	<ul style="list-style-type: none">● Press the operation button and return to the flame turned extinguishing state.

Specifications/Dimensions

Specifications

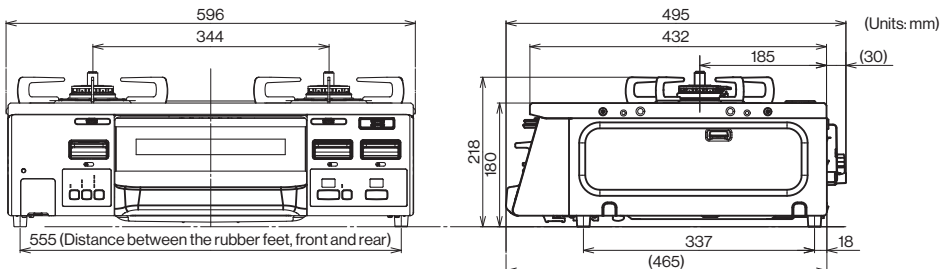
Type	Gas Cooktop with Grill
Model	RTC-6912SG-EWS-RM
Weight	13.5 kg (including accessories)
External dimensions	Height 218 mm x Width 596 mm x Depth 495 mm
Power supply	DC 3.0 V (size D alkaline battery (1.5 V) x 2)
Safety features	<ul style="list-style-type: none"> ● Cooking oil overheat prevention device ● Safety sensor ● Hob flame turn off function ● Grill flame turn off function ● Burning flame off function ● Ignition lock ● Medium flame ignition function ● Grill overheat prevention sensor ● Alert function if the buttons of the hob and grill are not returned ● Automatic temperature control for high temperatures function
Ignition system	Continuous spark ignition type
Accessories	Size D manganese battery (1.5 V) x 2 (for trial use), Instruction manual, "Recipes for the Grill" booklet, cocotte plate, plate fixing frame

Gas type (Gas group)	Gas consumption				Gas connection
	Individual gas consumption			Gas consumption when all the flames are turned on	
	High flame burner	Standard burner	Grill		
For LP gas	4.40kW	3.25kW	2.50kW	9.30kW	Inner diameter 9.5 mm gas rubber pipe

(Specifications are subject to change because of improvements without prior notice. Note the above before using the appliance.)

Dimensions

The figure shows an appliance with a high flame burner on the left hob.



When Disposing of the Appliance

When Disposing of the Appliance

Note

- To replace the appliance, request a specialized dealer to dispose of the old appliance. If you want to dispose of the old appliance by yourself, remove the batteries and before disposing of it appropriately.



(For factory use)

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