

Model

- R-W720FMX**
R-W691FMSX
R-W660FGS9X
R-W660FRS9X
R-W660FND9X
- R-W720EM**
R-W691EMS
R-W660EGS9
R-W660ERS9
R-W660END9








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Warnings and Caution for Safety

The following warnings and cautions are categorized by the level of possible harm or damage that may occur from ignoring directions. And the symbols shown on the right clearly shows the significance of directions.

	Warning	This pictograph indicates "There is a high possibility of serious injury or death ,if ignored.".
	Caution	This pictograph indicates "There is a high possibility of injury or damage to property ,if ignored.".

The symbols below are examples.	
	This symbol is an alert mark.
	This symbol indicates "prohibited".
	This symbol indicates "necessary".

Warning

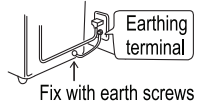
When you install ... To avoid fire, electric shock, and injury .



- Do not install the refrigerator in a place where it may come in contact with water.
- This may impair electricity insulation and cause electric shock or fire.



- Ground this refrigerator to prevent electric shock and noise interference. Always ground this refrigerator when using it in places with high humidity or moisture. (Please consult with retailers.)



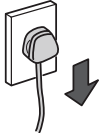
Power Cord and Power Plug ...To avoid fire, electric shock .



- Do not connect the wall outlet whose power capacity is less than the refrigerator's. Also, do not use power sources that are not a rated voltage.
- If a power source is shared with other appliances using double or multipoint adapters, the adapter may heat up beyond the normal level and cause fire.



- Connect the power plug firmly to a power outlet with the cord running down.
- Connection of the power plug with the cord running up could apply stress on the cord and cause electrical short or overheat, which could result in electrical shock or fire.
- Incomplete connection of the power plug could result in electrical shock or fire due to heat.



- Do not use the damaged or loose power plug or power outlet. This may cause fire or electric shock.



- If the power cord or plug is damaged, please consult with a retailer about the repair.



- Do not cut, bend, fold the power cord to avoid fire and electric shock.



- Clean the dust on the power plug frequently with dry cloth.
- Unplug the power plug and wipe it with dry cloth.
- A insulation failure due to moisture , when dust collects on the power plug may cause fire.



- Do not insert or remove the power plug with wet hands.



- Be sure to unplug the power plug before maintaining the refrigerator.
- Be sure to hold the power plug to unplug.



During daily use ...To avoid fire, electric shock .



- Do not splash water on or inside the refrigerator.
- This may impair electricity insulation causing electric shock or fire.



- Do not disassemble, repair, or modify your refrigerator by yourselves.
- Please consult with a retailer if any repair is required.



- Do not use other electrical appliances in the food storage compartment, unless it is the type recommended by the manufacturer.



- Do not use mechanical devices or any other means to accelerate the defrosting process, other than those recommended by the manufacturer.



- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instructions concerning use of the appliance by a person responsible for their safety.



- Ether, liquid propane gas, solvent, etc. which volatile cannot be stored in this refrigerator.
- Do not put flammable substances in the refrigerator. It may cause explosion or fire.



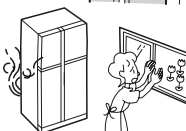
- Do not hang on the doors or step up on the various compartments.
- Injury may be caused by the refrigerator tipping over or hands getting caught in door.



- Do not put water containers or foreign articles on the top of the refrigerator.
- Opening and closing doors etc, may cause the articles on the top of the refrigerator may fall down, resulting in injury.



- Do not damage the refrigerant circuit.
- If you happen to damage the refrigerant tube, stay away from the refrigerator and avoid using fire and electrical appliances.
- And, open the window to ventilate and contact retailers or service center.



- Medicines, chemicals, research and experimental substances should not be stored in the refrigerator.
- Substances that require precise conditions for storage cannot be stored in a domestic refrigerator.



Warnings and Caution for Safety (Continued)

Warning



- Do not use the refrigerator in the atmosphere of flammable gas.
 - Sparks from points of electrical contacts such as door switches may ignite a fire.



- In a event of a flammable gas leak, do not touch the refrigerator and open windows to ventilation.



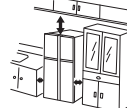
- Do not make an impact on the glass-made doors or shelves.
 - They are made of tempered glass, however, an excess impact may be result in breakage, and is dangerous.



- Children should be supervised to ensure that they do not play with the appliance or get in.
 - Children getting inside may not be able to get out.



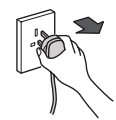
- Keep ventilation openings in the appliance enclosure or mounting structure clear of obstruction.



- If you find something wrong with the refrigerator, immediately unplug and consult with the retailers.



- When replacing the refrigerator interior lamp, unplug the power cord. Use the specified lamp and fix it firmly when replacing.



When discarding the refrigerator.



- Follow the instructions of your region when discarding.
 - This refrigerator uses R-134a for the refrigerant and cyclopentane for the blowing agent of the urethane heat insulation.



- When discarding the refrigerator, remove the door gaskets.
 - To avoid a risk of an infant or child to be entrapped inside.



Caution

During daily use ...To avoid illness and injury .



- Do not put bottles, etc. forcibly in the door pockets.
 - This may cause bottles dropping down or door pockets coming off.



- Do not store food which smells or food whose color is changed abnormal.
 - Such an action may cause diseases.



- Food and containers inside the freezer compartment should not be touched with wet hands.
 - This may cause frost injury. (Especially in case of metal items.)



- Do not hold the top, bottom and side of the doors when closing them.
 - This may result in your fingers caught by the door edge.



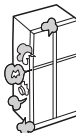
- If someone else is using the refrigerator, do not open or operate the control panel.
 - Fingers may get caught in the spaces between the doors and may cause injury.



- Do not have food items protruding over the front edge of each shelf.
 - Doors may not be closed properly or the door pockets may drop down. Injury may be caused from items like bottles falling and knocking over your feet.



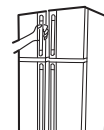
- Do not store glass bottles in the freezer compartment.
 - Bottles may break by the contents freezing and cause injury.



- Do not put your hands into the bottom surface of the refrigerator cabinet.
 - When cleaning , putting your hands near the bottom surface of the refrigerator may result in injury by thin metal sheets.



- Be sure to hold the handle firmly to open and close the door.



- Do not have your feet too close when opening the door of the refrigerator.
 - When opening the door, your feet may be hit, resulting in injury.



When moving or carrying ...To avoid damaging, wetting, soiling the floor, or to avoid injury.



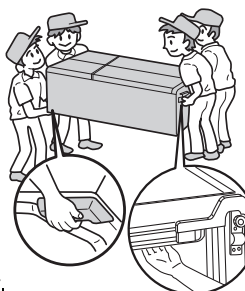
- Do not use door handles when carrying the refrigerator.
 - Never use the carrying handles to hang up with a chain hoist or similar machines.



- On a floor that is easily scratched, do not move the refrigerator with the wheels of refrigerator.
 - The wheels may scratch the floor.
 - For a floor that may be easily scratched, lay a protective mat, etc. .



- Use the carrying handle when carrying the refrigerator.
 - Hold the carrying handles only. If you hold door handles, your hands may slip and may cause injury.
 - More than 4 person should carry the refrigerator for safety reasons.
 - Carry it with the doors facing upward.
- Before carrying the refrigerator:
 1. Take out the food items and ice cubes.
 2. Dispose of the water in the evaporating tray located in the bottom of the refrigerator.
 3. Place the protective mat or cloth on the floor on which you move.
 4. Finally carry the refrigerator with the doors facing upward.
- Secure the doors well with adhesive tapes so they do not open.
- If transporting in a vehicle, do not load the refrigerator on its side. This could damage the compressor.



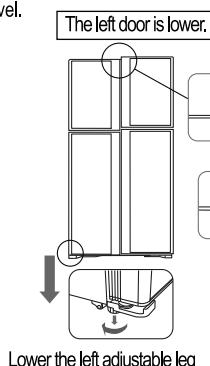
Preparations before Use

Installation

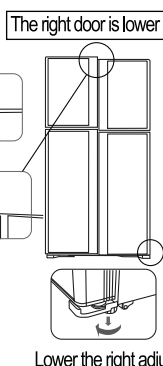
1. Install on a rigid and level floor.
2. Please use this refrigerator between the room temperature of 10 °C to 43 °C.
Sufficient performance may not be obtained, if the room temperature is too low or too high.
3. Do not install where the refrigerator is exposed on a direct sunlight or other heat sources.
4. Install in a atmosphere which is dry or has air ventilation.
5. The refrigerator requires enough air ventilation space around the cabinet to have efficient cooling performance space of at least 30 cm over the top and 10 cm at rear and 5 cm at both sides for proper air circulation.
6. Ground the refrigerator to prevent electric shock and noise interference. Always ground this refrigerator when using it in places with high humidity or moisture. (Please consult with retailers.)
7. Adjusting the adjustable legs to keep the left/right refrigerator door level.

- Without adjusting the legs, door height may not be level, or there may be abnormal vibration or noises depending on floor conditions. Follow the instructions below.

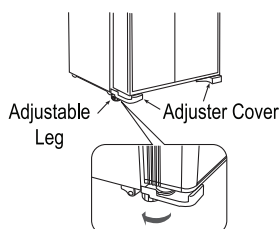
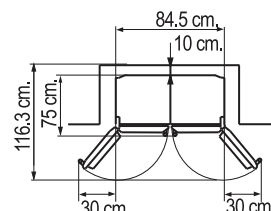
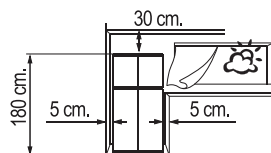
- ① Turn the adjustable legs to lower the adjustable legs until they touch the floor firmly.
- ② Compare the height of left and right doors and lower adjustable leg whose door height is lower than the other until the both door height become level.
 - Turn the adjustable leg for 1 turn makes approx. 1mm door height change.
 - It will take several days until the legs fits the floor and the door height becomes stable.



Lower the left adjustable leg

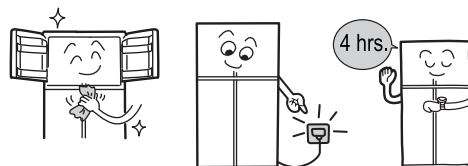


Lower the right adjustable leg



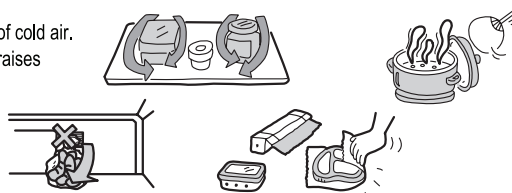
Beginning

1. Cleaning inside the refrigerator. Wipe the surface gently with soft cloth.
2. Connect the refrigerator to an exclusive wall power outlet. The refrigerator can be connected to an outlet soon after it is installed. Surely use with the rated voltage and exclusive power outlet.
3. Allow enough duration for sufficient cooling before storing food. It may take about 4 hours to fully cool down and could even take about 24 hours when the ambient temperature is high.



Food storage

1. Keep enough space between food. Several food placed to close together may obstruct the flow of cold air.
2. Make food cool enough before putting it in the refrigerator. Putting warm food in the refrigerator raises the inside temperature and wastes electricity.
3. Do not block the cold air vent. This will adversely affect the cold air flow and may not keep the temperature inside even. Moreover, it could result in food near the vent freezing.
4. Using food wrap or sealed containers prevent the food from drying on transition of smells.



Identification Parts

Lamp Cover

Freezer Door Pockets

Automatic Ice Maker
(Ice Maker model)

Ice Bank

Water Tank (Ice Maker model)

Refrigerator temperature control dial &
Freezer temperature control dial

Lamp Cover

Water Dispenser Tank

Refrigerator Door Pockets

Vegetable Crisper

Freezer Shelf

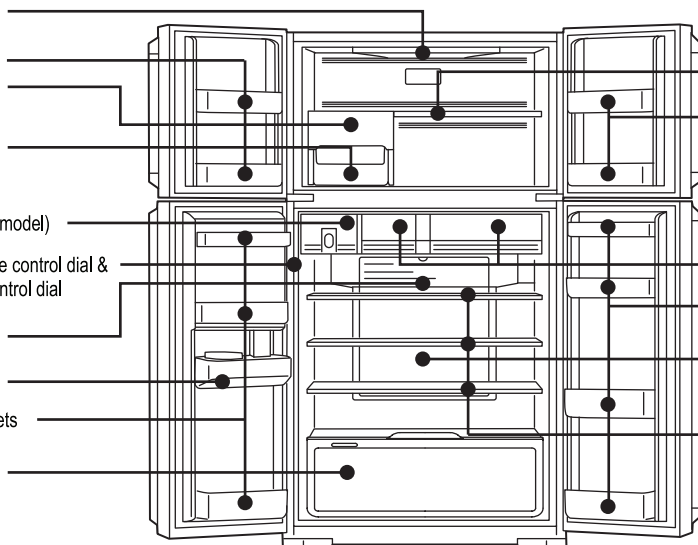
Freezer Door Pockets

Chiller Case

Refrigerator Door Pockets

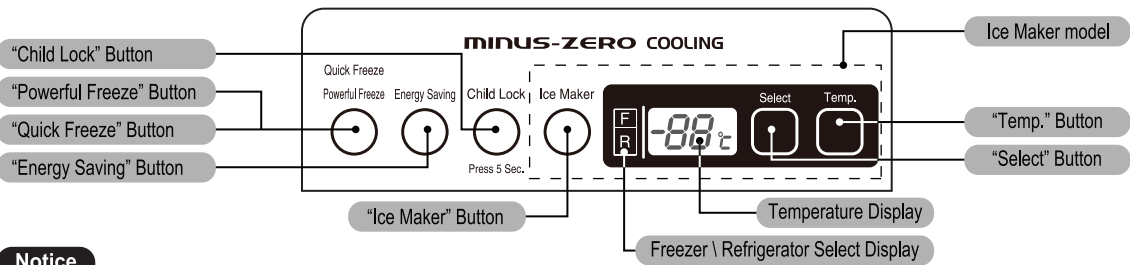
MINUS-ZERO Panel

Refrigerator Shelf



Operation

Names and Function of Display and Button



Notice

- If you unplug the power plug or a power failure occurs and then the refrigerator restarts, the temperature display and each setting will be automatically resumed. However, "Quick Freezing" and "Quick Cooling" operation is cancelled.
- All display will be on 5 seconds after the power plug is inserted.

Temperature Control (Ice Maker model)

- The initial temperature setting of the refrigerator compartment is 3 °C, and one of the freezer compartment is -19 °C.
- The temperatures displayed on the control panel, are targetted temperatures, and may not be actual. The actual temperature is subject to food and ambient conditions.

1. Freezer Compartment Temperature Control



- Press "Select" button to select "F".
"F" lamp lights on.



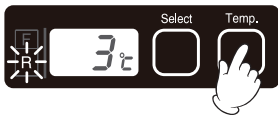
- When you press "Temp." button, the temperature setting will change as below;
The freezer temperature can be adjustable from -15 °C to -23 °C, however, it is recommended to use -18 °C or -19 °C as a regular condition.

-19 °C ⇒ -20 °C ⇒ -21 °C ⇒ -22 °C ⇒ -23 °C ⇒ -15 °C ⇒ -16 °C ⇒ -17 °C ⇒ -18 °C ⇒ -19 °C

2. Refrigerator Compartment Temperature Control



- Press "Select" button to select "R".
"R" lamp lights on.



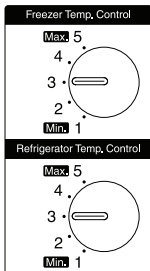
- When you press "Temp." button, the temperature setting will change as below;
The refrigerator temperature can be adjustable from 1 °C to 7 °C, however, it is recommended to use 3 °C as a regular condition.

3 °C ⇒ 2 °C ⇒ 1 °C ⇒ 7 °C ⇒ 6 °C ⇒ 5 °C ⇒ 4 °C ⇒ 3 °C

Temperature control

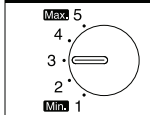
This refrigerator control its temperature automatically. Please set the dial to "3" for normal use. However, supposing it is required, please adjust a temperature control dial as follows.

1. Freezer



- Max. (5)** When making ice quickly or making frozen food quickly. Or, a surrounding temperature is high and the cold of the freezer compartment is weak.
- (3)** For normal use.
- Min. (1)** When storing neighter frozen food nor ice cream.

2. Refrigerator



- Max. (5)** When cooling food more coldly or quickly.
- (3)** For normal use.
- Min. (1)** When the food is too cold.

- If the refrigerator is still not become cool enough, even the "Temperature Control Dial" of freezer compartment has been adjusted to "Max" please turn "Temperature Control Dial" of refrigerator compartment to "Max" also.
- Please return the dial to the position of "3" after the "Max" has been set. Food may be frozen if the "Max" is set for a long time.
- If set the dial to "Min" side for a long time, the temperature of the food in the freezer and refrigerator compartment may rise.

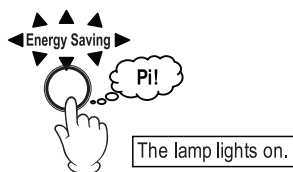
Operation

Other Functions (You can do the following)

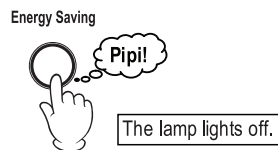
1. Energy Saving

- Recommend to use this function in case of low storage volume, or a long vacation when the doors are not opened for long time.

1. Press "Energy Saving" button. (Starts operation.)



2. When you wish to stop this function, press the button again.



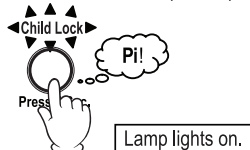
- Notice**
- In case the compartment temperature rises up, the operation will be back to a normal setting temporarily.
 - After a long time operation of "Energy Saving", in some cases, fatty ice cream, etc., may become soft. Please stop "Energy Saving" operation in this case.
 - If you press "Powerful Freeze" button during "Energy Saving" operation, "Energy Saving" operation will be cancelled.

Caution If "Energy Saving" operation is working in high humidity environment, dew may appear. Please stop "Energy Saving" operation in this case.

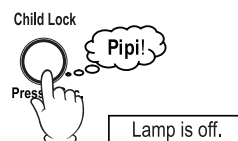
2. Child Lock

- You can prevent mischief of all the buttons on the control panel by children.

1. Press "Child Lock" button for 5 seconds (to lock).



2. To stop this function, press "Child Lock" again.



Notice When "Child Lock" is activated, other buttons will not be accepted even if you press.

3. Quick Freezing / Powerful Freezing

3.1 Quick Freezing

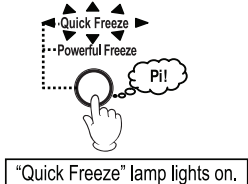
- When you want to freeze food or make ice quickly, use this function.

3.2 Powerful Freezing

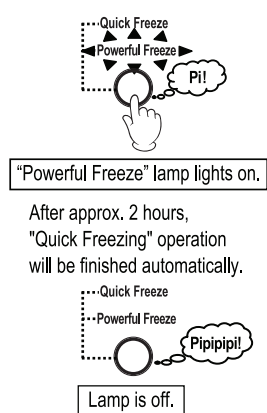
- When you wish to store frozen food at a lower temperature than usual, use this button.

How to Start

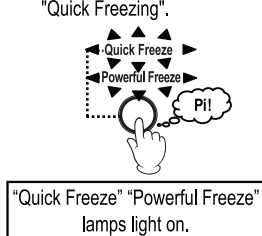
1. Press "Quick Freeze" "Powerful Freeze" button, and start operation of "Quick Freezing".



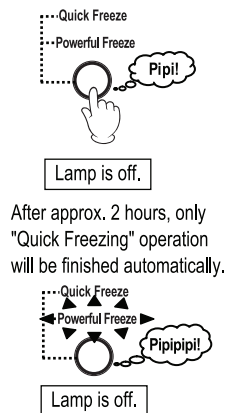
2. Press again "Quick Freeze" "Powerful Freeze" button, and start operation of "Powerful Freezing".



3. Press again "Quick Freeze" "Powerful Freeze" button, and start operation of both "Powerful Freezing" and "Quick Freezing".



4. Press again "Quick Freeze" "Powerful Freeze" button, and stop the operation.



Notice "Quick Freezing"

- During "Quick Freezing", priority cooling of the freezer compartment will be done. Thus, try to avoid unnecessary opening and closing the doors not to have a temperature rise of the refrigerator compartment.
- After "Quick Freezing" is automatically finished, if the button is pressed again, the lamp will turn on, however, the next "Quick Freezing" operation will not start. After 60 minutes, the operation will be started.
- During defrost periods, even if "Quick Freeze" lamp is on, no operation will be made. After finishing the defrost 1 operation, "Quick Freezing" will be automatically started.

Notice "Powerful Freezing"

- During "Powerful Freezing" operation, since the freezer compartment is cooled down to a lower temperature than usual, it consumes more electricity. If you finish using this, cancel "Powerful Freezing" and use a normal temperature of -18°C or -19°C .
- If you press "Energy Saving" button, during "Powerful Freezing" operation, "Powerful Freezing" operation will be cancelled.

Operation

4. Door Alarm and ECO Alarm Functions

If the door is left open for more than 1 minute, the alarm system will inform the user by the sound and digital display.

- Door Alarm: Informs by Pipipi sound.
- Eco Alarm Display: Indicates the door opening state on the control panel.

Duration of Door Opening	Door Alarm Sound	ECO Alarm Display (Ice Maker model)
After 1 minute	Pipipi	Displays F/R OP.
After 2 minute	Pipipipipi	Displays F/R OP.
After 3 minute	Peeps continuously.	Displays F/R OP.



- Freezer door is opened.



- Refrigerator door is opened.



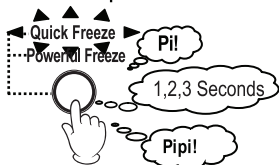
- Both Freezer and Refrigerator door are opened.

Notice

- If the freezer door opens, 『F OP』 is displayed, the refrigerator door opens, 『R OP』 is displayed respectively.
- All alarm functions (Door Alarm and Eco Alarm Display) and each button operation sound can be deactivated.

To Deactivate Alarm and Sound

1. Keep pressing "Quick Freeze" "Powerful Freeze" button for approximately 3 seconds until the sound. Of "Pipit!" is heard.



Lamp lights on.

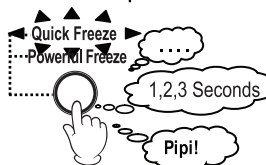
2. Press "Quick Freeze" "Powerful Freeze" again to turn off the light.



Lamp lights off.

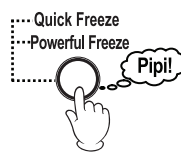
To re-activate Alarm and Sound

1. Keep pressing "Quick Freeze" "Powerful Freeze" button for approximately 3 seconds until the sound. Of "Pipit!" is heard.



Lamp lights on.

2. Press "Quick Freeze" "Powerful Freeze" again to turn off the light.



Lamp lights off.

Notice

- Upon shipment, the alarm and sound are set "ON".
- Unplugging and inserting the power plug or in the event of a power failure the refrigerator will automatically reset the alarm to "ON".
- If you turn the alarm ON/OFF during the "Quick Freezing" or "Powerful Freezing" operation, that operation will be cancelled or moves to the other operation displayed by the lamp . Therefore, in case you do not need the the current operation, please press the button and select your desired operation.

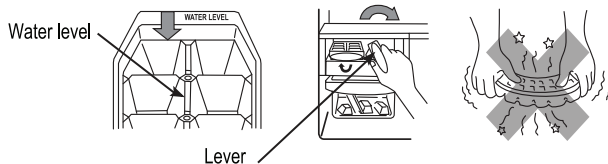
Freezer

1. Ice making

- Fill water until the "WATER LEVEL".
- After ice is made, turn the lever clockwise firmly and drop the ice into the "Ice Bank".

Notice

- Do not remove ice maker with frame and do not twisted it as shown in the picture or else it will be damaged.
- Do not use the "Ice Cube Box" as an ice maker tray or else it will be damaged.



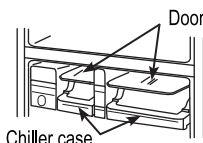
Refrigerator

1. Chilled case

- Meat and fish can be kept fresh before being frozen.

Caution

- If you want to store meat or fish longer, please store them in the freezer compartment.
- Be careful, it might be frozen if that food has a lot of moisture.
- When closing the refrigerator door, push the chilled case for close. If you close the door while the chilled case is still pulled out. The chilled case might be broken.



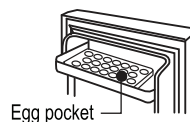
3. Adjusting the shelves.

- Pull up the front and pull out the shelf forward.
- Set the refrigerator shelves by combining with stored food.



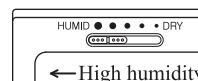
2. Egg pocket

- It can place 17 eggs also turn the rear side to place the small pocket.



4. Crisper

- Move the lever to the left to keep humidity in crisper, move the lever to the right to keep dryness.
- For storing vegetables and fruits, please turn the lever to the left.



5. "MINUS-ZERO" panel

Caution

- Please do not strike the "MINUS-ZERO" panel. The panel maybe deformed.
- Since the temperature of the "MINUS-ZERO" panel may reach 0 °C or less in the momentary time, please do not let the food touch the panel directly. In case of touching the panel, food may be freeze.
- When the door is frequently opened and shut in high humidity environment, or when food is excessively packed in the refrigerator compartment, waterdrop may adhere on the panel surface insuch a case, please reduce the opening and shutting frequently of the door and store food keeping gap each other.

How to Use Water Dispenser

To dispense water, simply press a cup against the "Dispenser Lever".

- Hold the cup up when pressing it against the "Dispenser Lever".

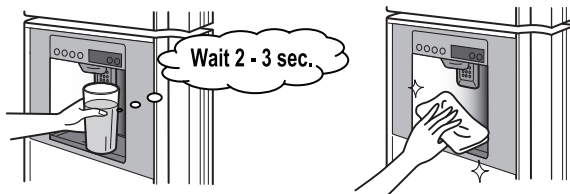


Notice

- Discard the first cup of water that is dispensed just after installation, as the system needs to rinse itself out.
- It may take 24 hours or longer for the water in the Water Tank to cool sufficiently when the ambient temperature is high, such as during summer. Normally, the water (4L in volume) can be chilled in 8 to 9 hours.

Caution

- After pressing for water, withdraw the cup slowly to prevent spilling.
- Dry any water that accumulates in the Water Tray with a dry cloth or remove the Water Tray and dispose of the water. Also, wipe up any water droplets on the surface of the door of the refrigerator with a dry cloth.



How to Use Automatic Ice Maker (Ice Maker model)

- Supply water to the water tank and set it : Ice making will be done automatically.
- Ice will collect in the ice cube box automatically. (when ice supply is low, the sound of ice dropping is clearly audible.).
- When water is supplied to ice tray or when ice tray turns to release ice cube, a motor and electromagnatic valve sound is heard. Also, when water tank is empty (not in use), an operation sound is heard. None of these is problem.

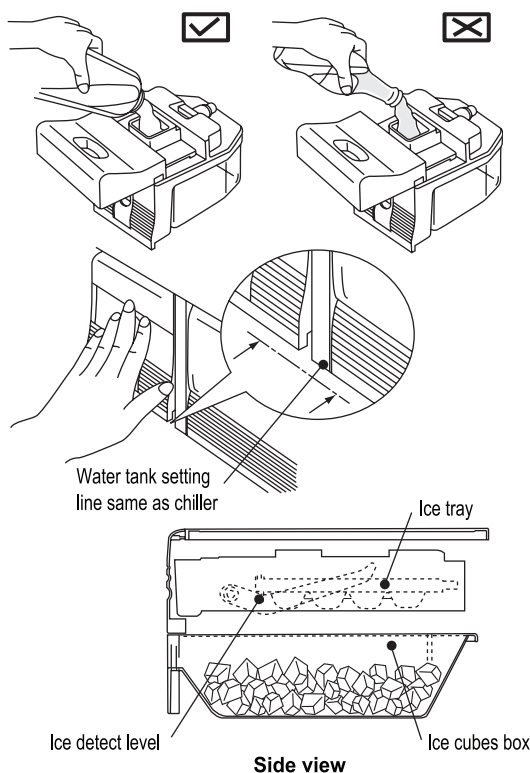
Using the ice maker function

Using the ice maker for the first time :

- Remove first ice (about 30 ice cubes). Odor or dust may adhere to it.
- If freezer compartment is not cool enough, such as on the first time of use, It may take about 24 hours to make ice.
- Supply water to the water tank and set it.
- Open the water supply cap.
- Supply water to the water tank and firmly mount.
- Push the water tank all the way in.
- Do not pour liquid except drinking water into the water tank, it may cause a trouble.
- If water tank was dropped, make sure that water is not leaking from the tank.
- Do not put any other liquid, such as juice, hot water, etc, into the water tank.
- Doing so could cause deformation of tank. (Heat-resistance temperature : 50 °C)

Taking out ice cubes

- Do not open/close freezer door with force ; doing so may cause ice cubes to fall on the inner side so that freezer door cannot be closed completely.
- If ice cubes heat up. They may fall to inner side so that door cannot be closed ; Keep the ice cubes level. (Ice cubes cannot collect evenly in the ice cube box, due to structure of ice maker.)
- Do not put anything, such as frozen food, ice cream other than ice in the ice cube box, If you do so, they may touch the ice detection lever or ice tray, and ice making may stop.
- Do not touch ice detection lever or ice tray with your hands; You may be injured if ice tray turns.



Turning on/off the Automatic Ice Maker Function

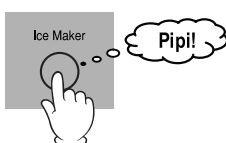
First, check whether the Automatic Ice Maker is in operation.

1. When in operation



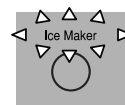
The Lamp will turn on.

2. To stop the operation, press the "Ice Maker" button.



The Lamp will turn off.

3. When restarting operation



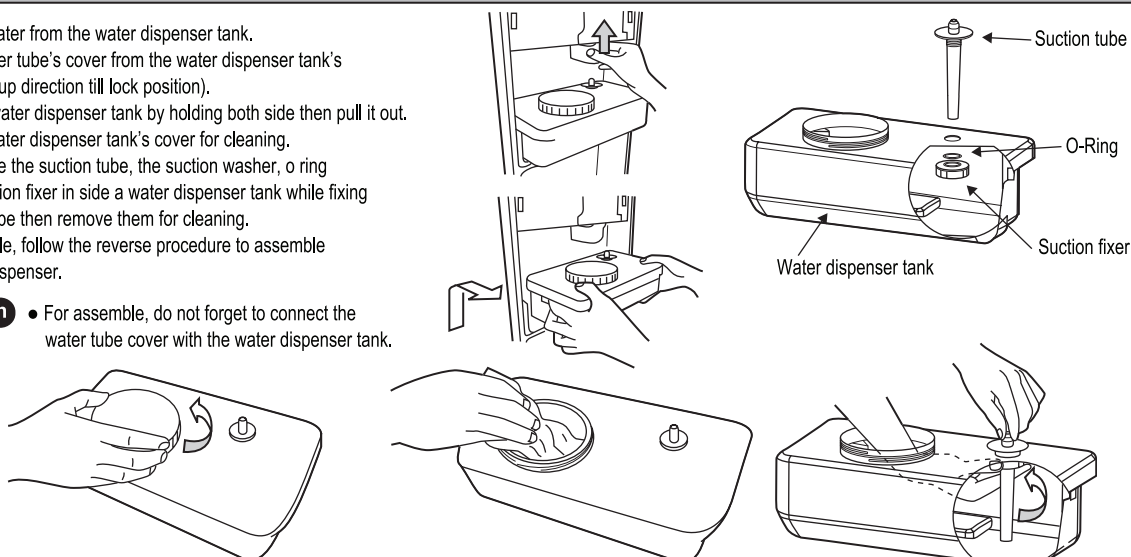
The Lamp will turn on.

Notice • If you do not intend to use the Automatic Ice Maker, manually cancel its operation.

How to Clean Water Dispenser

- Empty all water from the water dispenser tank.
- Pull the water tube's cover from the water dispenser tank's base (slide up direction till lock position).
- Lift up the water dispenser tank by holding both side then pull it out.
- Open the water dispenser tank's cover for cleaning.
- To dismantle the suction tube, the suction washer, o ring by turn suction fixer in side a water dispenser tank while fixing a suction pipe then remove them for cleaning.
- For assemble, follow the reverse procedure to assemble the water dispenser.

Precaution • For assemble, do not forget to connect the water tube cover with the water dispenser tank.

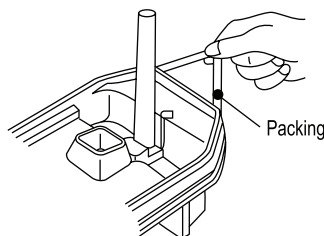


Automatic Ice Maker Daily Maintenance (Ice Maker model)

In order to prevent grime and hard water stains from building up, make sure to rinse the Water Filter once per week.

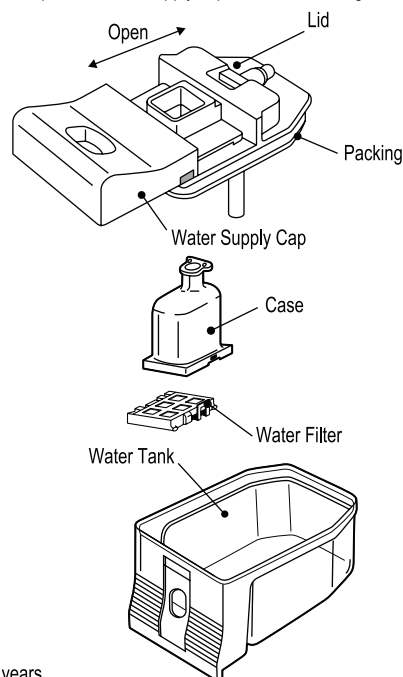
☐ Packing

Remove packing from the notch at the back of the lid and wash it using a soft sponge. Install the packing.



☐ Water tank

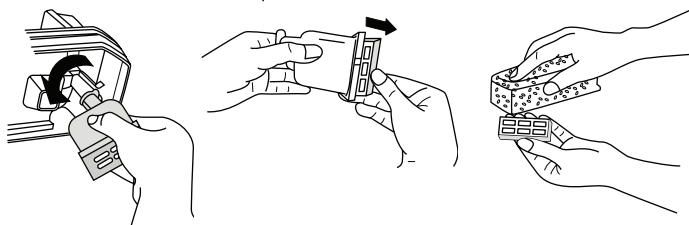
Open the water supply cap, and wash it using a soft sponge.



☐ Water filter and case

Turn it in direction of arrow, and :

1. Release claw of the case.
2. Hold the lower part of the case with fingers and pull the knob of the case cover to remove it.
3. Remove the water.
4. Use a soft sponge to clean the Water Filter.
5. Set the water filter in the lower part of the case and install it.



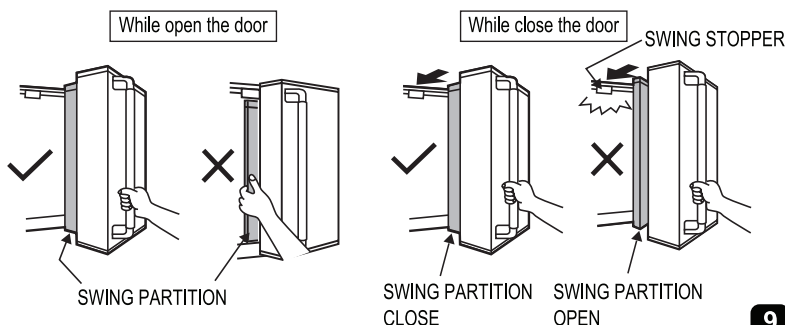
Notice

- Do not use cleanser as this may damage the filter.
- Replace the Water Filter when it wears out. Water Filter need replacing every 3 to 4 years.

Swing Partition Suggestion

☐ Swing Partition suggestion

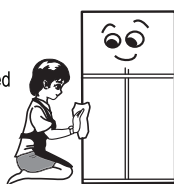
- Do not hold the swing partition while opening or closing the right door. Otherwise, another parts may collapse.
- Whenever the door is opening, the swing partition will be close automatically. While the door is closing, the swing partition will be open. Please follow as usual. Even if, the swing partition may collapse with swing stopper and the door will not close completely.
- For protection dew occur, the swing partition installed heater inside that may feel hot but not defective.
- There are not abnormal when you feeling heavy while opening or closing the right door which is installed the swing partition.



Cleaning

□ Cleaning (Please clean the refrigerator once a month)

1. Unplug the refrigerator.
2. Remove all food.
3. Wipe the refrigerator clean.
 - It is the best if smudges are wiped off immediately. It is also recommended to clean the areas of the refrigerator not clearly in view once a year.
 - Use a soft cloth moistened with lukewarm water to wipe of smudges. For difficult to remove smudges, use a diluted, neutral kitchen.
 - Neatly clean the door gasket because it gets dirty easily.
4. If any droplets remain on the surface of the parts that have been washed, wipe them.
5. Return all parts to their original locations.
6. Inspect and clean the power plug, cord and outlet.
7. Plug the power cord into the outlet.



Notice

- Even if the power plug is plugged in immediately after being unplugged, the compressor will not run for 5 minutes. However, if the inside is not cold, it will start running in approximately 30 seconds.
- If the cooking oil smears on the refrigerator, please wipe it off. (The plastic parts might be cracked).

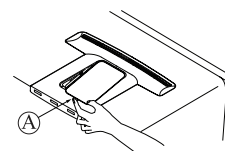
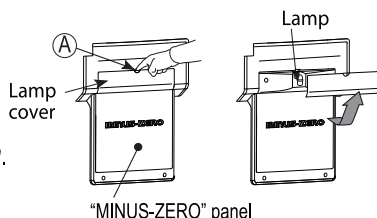
Caution

- The following do not use it. Parts and paint are damaged. Polishing powder, soap powder, oil, boiling water, brush, acid, benzene, thinner, alcohol and alkaline detergent, etc.

□ Replace spare parts.

1. Replace lamp

1. Unplug the refrigerator.
2. Remove shelves.
3. To take out the lamp cover, press the lock at the position of "A".
4. Remove the lamp, tightly screw the new lamp.
5. After replacing the lamp bulb, replace the lamp cover.

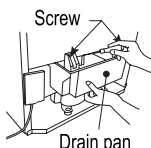


Purchase of the lamp For Purchase of the lamp, please contact the shop or the dealer.

Notice Please do not remove a "MINUS-ZERO" panel. (When necessary, please consult with a service agent.)

2. Drain pan

1. Take 2 screws out.
2. Take the middle hook out.



Caution

- Be careful for the very hot compressor.

Before Requiring Repair (Calling for Service).

Before you call for service, please check the following items.

The refrigerator does not get cold at all.		<ul style="list-style-type: none"> ● Is the refrigerator plugged in properly? ● Check the fuse box for blown fuse or tripped circuit breaker.
The refrigerator does not get cold enough.		<ul style="list-style-type: none"> ● Is the refrigerator placed in the direct sunlight? ● Is the refrigerator placed near heat source? ● Is the temperature control dial set to "MIN"? ● Has anything hot been placed in the refrigerator? ● Is the food stored too much? ● Is the door being opened and closed too frequently? ● Is the door being slightly open?
Food in the refrigerator compartment freezes.		<ul style="list-style-type: none"> ● Is the temperature control dial set to "MAX"? ● Do you place the high moisture food and vegetables at the inner part of the shelf nearby the cold air vent? They will be frozen if being placed nearby the cold air vent.
Dew appears.	Outside	<ul style="list-style-type: none"> ● When the high humidity outside and door gasket will have dew. Please wipe it up by dry cloth.
	Inside	Please wipe it up with dry cloth and please check the details below. <ul style="list-style-type: none"> ● Is the door closed firmly? ● Is the door being opened and closed too frequently or opened for a long time? ● Is it high humidity, is not it?
The inside is smelling.		<ul style="list-style-type: none"> ● Do you store odor food without wrapping it?
Sound is noisy.		<ul style="list-style-type: none"> ● Make sure the refrigerator is installed firmly. ● Is the refrigerator touching the wall?
Frost forms on the wall of the freezer room		<ul style="list-style-type: none"> ● Did you too much make ice cups in the freezer room ? ● Condensation can occur when you leave the door open for along time then it frost forms on the wall. ● Is the air vent blocked ?

This is not out of order.

The surface of the refrigerator is hot.	<ul style="list-style-type: none"> ● The refrigerator contains the dew prevention and heat radiation pipes. ● Especially the back may be heated when starting up or if the door is frequently opened and closed.
If a door is shut, other doors may open.	<ul style="list-style-type: none"> ● The air duct of two compartment is connected. When close one of the door, another door may be opened by the wind pressure. This is a normal phenomenon.
Does it have any abnormal sound?	<ul style="list-style-type: none"> ● The sounds like water flowing and boiling water are sound of the cooling liquid (refrigerant). ● A creaking sound comes from the storage compartment. It is the sound caused by friction of the parts due to temperature change.

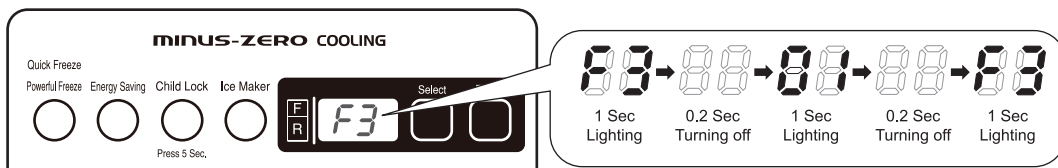
Malfuction Display

- The temperature display reports malfunctions.

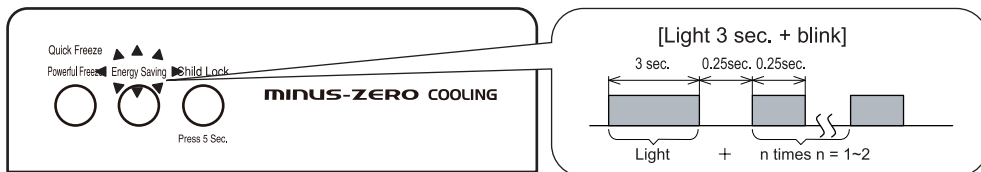


- "F" indicates a malfunction. Please contact your retailer or service center. However, the displays shown below might appear even when there is no malfunction. Before contacting your retailer or service center, please see the following table. There is no problem if the display returns to the temperature display.

Error Trouble Display (Ice Maker model : Show on Display PCB)



Error Trouble Display (Show on "Energy Saving" Lamp on Display PCB)



Error Trouble Display (Ice Maker model)	Error Trouble Display	Possible cause	What to check
F3 01	Light 3 sec. Blink once	<ul style="list-style-type: none"> The freezer compartment door could be touching some food or other object and might not be closed properly. 	<ul style="list-style-type: none"> Remove the obstacles if any, and confirm that the freezer compartment door is closed properly. Then, wait for the inside of the freezer compartment to cool sufficiently.
F3 02	Light 3 sec. Blink twice	<ul style="list-style-type: none"> The refrigerator compartment door could be touching some food or other object and might not be closed properly. 	<ul style="list-style-type: none"> Remove the obstacles if any, and confirm that the refrigerator compartment door is closed properly. Then, wait for the inside of the refrigerator compartment to cool sufficiently.

Service Center

- When you request repair, please check the refrigerator well according to 11 pages. When still abnormal, besure to contact the retailer of a purchase or the following service center after pulling out a power supply plug.

Service Center	TEL No.
<ul style="list-style-type: none"> HITACHI HOME ELECTRONICS ASIA(S) PTE, LTD. (SINGAPORE) HITACHI SALES (MALAYSIA) SDN., BHD. 	<ul style="list-style-type: none"> 62787177 03-79573455

- Telephone numbers are subject to change without notice.

