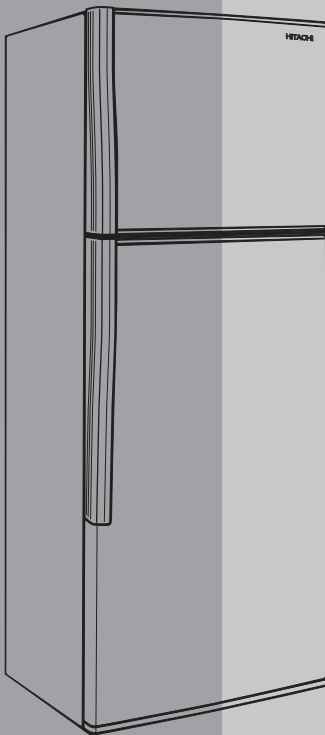


Instruction manual

HITACHI Refrigerator

Model

R-T310EMS, R-T350EMS,
R-T310END1K, R-T350END1K



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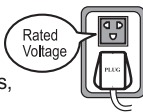
Thank you very much for buying HITACHI product. Before using the refrigerator, please read the instruction manual carefully for the correct usage.

SAFETY SUGGESTION

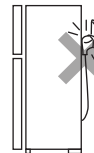
Suggestions below are very important for safety use of the refrigerator, please be sure to keep the following items.

WARNING

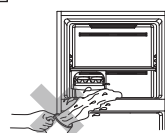
- Do not connect the wall outlet whose power capacity is less than the refrigerator's.
Also, do not use power sources that are not a rated voltage.
If a power source is shared with other appliances using double or multipoint adapters, the adapter may heat up beyond the normal level and cause fire.
- Do not use the damaged or loose power plug or power outlet. This may cause fire or electric shock.
- 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.
- 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 splash water on or inside the refrigerator. This may impair electricity insulation causing electric shock or fire. This may also cause the gas leakage because of pipe rust.
- 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.
- When discarding the refrigerator, remove the door gaskets. To avoid a risk of an infant or child to be entrapped inside.
- Do not disassemble, repair, or modify your refrigerator by yourselves. Please consult with a retailer if any repair is required.
- Ground this refrigerator to prevent electric shock and noise interference.
Always ground this refrigerator when using it in places with high humidity or moisture.
- 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. This may cause the gas leakage.
- Do not use other electrical appliances inside the food storage compartments, unless it is the type recommended by the manufacturer.
- Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.
- Do not use mechanical devices or any other means to accelerate the defrosting process, other than those recommended by the manufacturer.



Do not damage the cord by placing any heavy object on it.



Do not damage the plug by push the refrigerator against the plug.



CAUTION

- Do not store glass bottles in the freezer compartment. Bottles may break by the contents freezing and 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 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.
- Do not touch the compressor or the electric parts behind the refrigerator. It might cause injuries and burns by heat.
- When carrying the refrigerator, please hold and carry the upper back side and a lower adjustor.
- When disposing the refrigerator should be followed the disposal law of your country.

IDENTIFICATION PARTS

Freezer shelf (Adjustable)

Twisted ice maker

Ice cube box

Convertible compartment

Refrigerator temperature control dial
Freezer temperature control dial

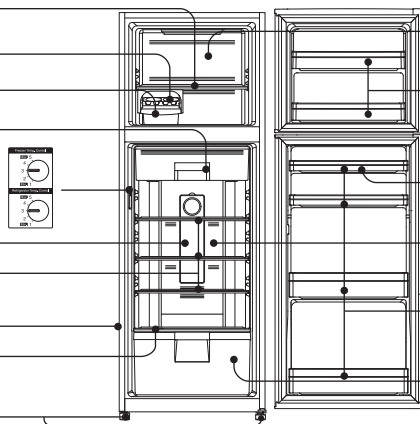
Lamp cover (Lamp)

Refrigerator shelf (Adjustable)
(Tempered glass or steel wire)

Drain pan (Rear side)

Shutter
(Humidity controllable)

Adjustor



Freezer compartment

(For storage ice-creams, frozen foods and ice making.)
(-20°C ~ -18°C)

Freezer door pocket (-18°C ~ -16°C)

(For storage of small packages of frozen foods.)

Egg tray (14 eggs.)

Refrigerator compartment
(For storage of fresh foods.) (2°C ~ 5°C)

Refrigerator door pocket (4°C ~ 8°C)
(For storage of bottles, canned foods, etc.)

Vegetable crisper (4°C ~ 7°C)
(For storage of fresh vegetables and fruit.)

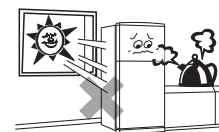
NOTICE

- Above temperatures are the approximate values in conditions of outside temperatures 32°C, door being closed and without food storage.

INSTALLATION

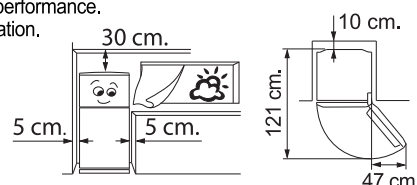
Installation

- Install on a rigid and level floor.
- 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.
- Do not install where the refrigerator is exposed on a direct sunlight or other heat sources.
- Install in an atmosphere which is dry or has air ventilation.
- 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.
- Make the refrigerator stand horizontally by adjusting the leveling legs (adjustor).



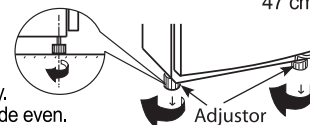
Beginning

- Cleaning inside the refrigerator. Wipe the surface gently with wet soft cloth.
- 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.
- Allow enough duration for sufficient. 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

- Keep enough space between food. Several food placed too close together may obstruct the flow of cold air.
- Store cool down food. Putting warm food in the refrigerator raises the inside temperature and wastes electricity.
- Do not block the cold air vent. This will adversely affect the cool air flow and may not keep the temperature inside even.
- Using food wrap or sealed containers prevents the food from drying or transition of smells.

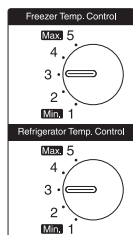


OPERATION

Temperature control

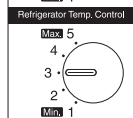
This refrigerator control its temperature automatically. Please set the dial to "MID" for normal use. However, supposing it is required, please adjust a temperature control dial as follows.

1. Freezer



- MIN** (1) When storing neighter frozen food nor ice cream.
(3) For normal use.
- 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.

2. Refrigerator



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

- Please return the "Temperature Control Dial" of refrigerator to the position of "3" after the "5" has been set. Food may be frozen if the "5" is set for a long time.

Caution about a refrigerator compartment food freeze.

- When you place the high moisture food and vegetables at the inner part of shelf nearby the cold air vent, they will be frozen. If it is possible, please do not place the high moisture food and vegetables at the inner part of the shelf nearby the cold air vent.
- When food and vegetables become frozen, you can prevent them from being frozen by wrapping or putting them in the case. If they are still frozen, please adjust the temperature by turning the temperature control dial of refrigerator to "1".

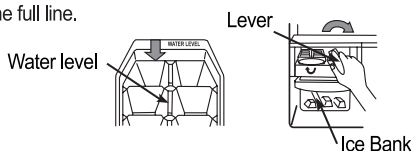
Freezer

1. Ice making

- Pull out the "Twist Ice Maker", and pour water in up to the full line.
- After ice is made, turn the lever clockwise firmly and drop the ice into the "Ice Bank".

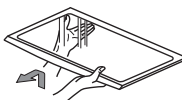
NOTICE

- 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 Bank" as an ice maker tray or else it will be damaged.



2. Adjusting the shelf.

- Lift the front of the shelf upward slightly, then pull the shelf out towards you.
- Adjust the shelf to the desired height.



Refrigerator

1. Convertible Compartment

The temperature zone of the compartment is selected between chiller and vegetable, depending on the set position.

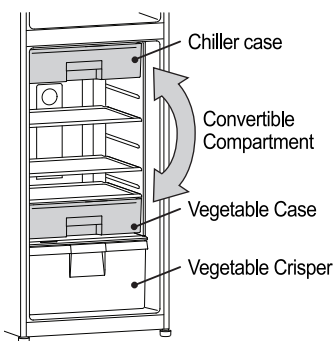
- 1) Chiller (Upper position) (-2°C ~ 1°C)
 - To keep meat and fish fresh before freezing.
- 2) Vegetable (Lower position) (3°C ~ 6°C)
 - For more vegetable storage.

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.

HOW TO REMOVE CONVERTIBLE COMPARTMENT

- Lift the front of the shelf upward slightly, then pull the shelf out towards you.



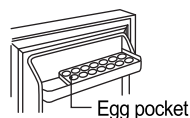
2. Vegetable Crisper

- 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.



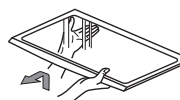
3. Egg pocket

- It can hold 14 eggs. When turned over, it can be used as a case for small items.



4. Adjusting the shelves.

- Lift the front of the shelf upward slightly, then pull the shelf out towards you.
- Adjust the shelf to the desired height.



CAUTION

- Do not store at each case more than below table.

Maximum Load

Convertible Compartment	6.0 kg
Vegetable Crisper	10.0 kg

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.

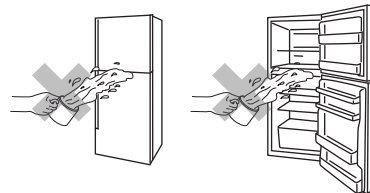


NOTICE

- Even if the power plug is plugged in immediately after being unplugged, the compressor will not run for 10 minutes. However, if the inside is not cold, it will start running in approximately 30 seconds.

CAUTION

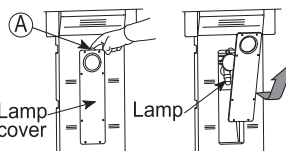
- The following do not use it. Parts and paint are damaged.
1. Do not splash water to Door and Refrigerator.
 - It may cause electric shock and fire.
 - It may cause gas leakage because of pipe rust.
 - It may cause to rust door surface.



2. Do not use following. Polishing powder, soap powder, oil, boiling water, brush, acid, benzene, thinner, alcohol and alkaline detergent, etc.
 - It may cause to damage door surface.
 - It may cause to crack plastic parts.
3. If the cooking oil smears on the refrigerator, please wipe if off. The plastic parts might be cracked.

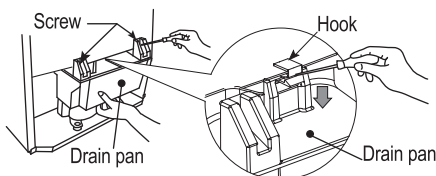
□ Replace spare parts.

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, attach the lamp cover.



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

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 "1" ? • Has anything hot been placed in the refrigerator ? • Is the food store 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 "5" ? • 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	<ul style="list-style-type: none"> • Please wipe it up with dry cloth and please check the details below. • 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 ?

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 and side 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 sound 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.