UNDERCOUNTER REFRIGERATOR / FREEZER

RTW - Series
FTW - Series

INSTRUCTION MANUAL
(ORIGINAL INSTRUCTIONS)

1000657

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WARNING

Keep Dry

Do not wet the product or use it in potentially wet conditions. This may cause electrical leakage, resulting in electric shock or fire.

- The refrigerated unit contains R134a/ R404A and polyester lubricant. These components have a high moisture absorbing characteristics. Exposure to ambient condition should be avoided. Only approved polyester lubricants to be used. Failure to do so will void all parts and compressor warranty.
- Keep the cabinet surrounding open in order to get proper ventilation.
- Do not damage the refrigeration circuit.
- In case of damage to wiring/power cord, do not replace/repair yourself. Call your service person.
- Do not use electrical appliances inside storage compartment.
- Do not move the unit while in use.

IMPORTANT

1. This booklet is an integral and Essential part of the product and should be kept and preserved by the user. Please read carefully the guidelines and warnings contained herein as they are intended to provide the installer/ user with essential information for the proper installation and the continued safe use and maintenance of the product. Please preserve this booklet for any further consultation that may be necessary.

2. This is a commercial , and should be destined only to be used for the purpose for which it has been expressly designed. Any other use should be considered improper and therefore dangerous. The manufacturer will not be held liable or responsible for any damage caused by improper, incorrect and unreasonable use.

3. This appliance can be used by children aged from 8 Years and above and persons with reduced physical, Sensory or mental capabilities or lack of experience And knowledge if they have been given supervision or Instruction concerning use of the appliance in a safe Way and understand the hazards involved. Children Shall not play with the appliance. Cleaning and user Maintenance shall not be made by children without Supervision. Children should be supervised to ensure that they do not play with the appliance.

I. INSTALLATION INSTRUCTIONS

1. CONSTRUCTION

1.1 (RTW-180/186/177 /FTW-180/186/177)

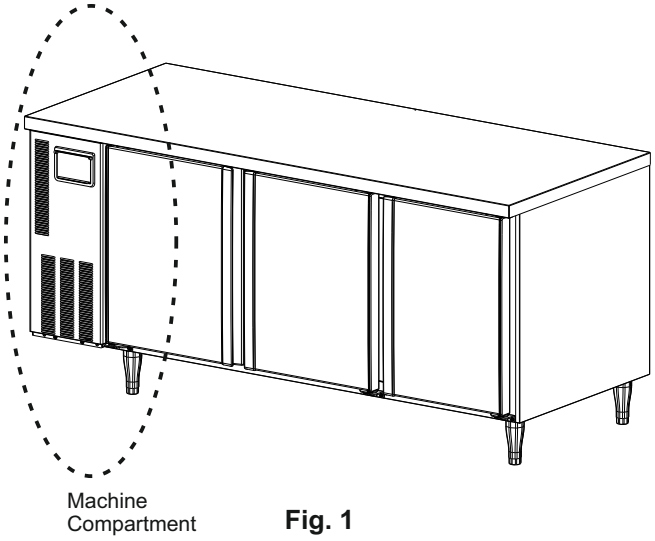


Fig. 1

1.2 (RTW-120/126/127 /FTW-120/126/127) (RTW-150/126 /FTW-150/156)

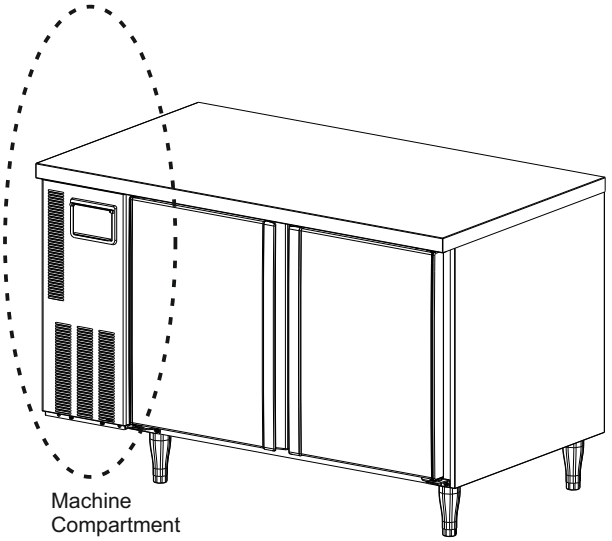


Fig. 2

PRODUCT OUTSIDE DIMENSIONS IN MM (WITH LEGS):	
RTW-120/ FTW-120	1200 (W) x 750 (D) x 850 (H)
RTW-150/ FTW-150	1500 (W) x 750 (D) x 850 (H)
RTW-180/ FTW-180	1800 (W) x 750 (D) x 850 (H)
RTW-126/ FTW-126	1200 (W) x 600 (D) x 850 (H)
RTW-156/ FTW-156	1500 (W) x 600 (D) x 850 (H)
RTW-127/ FTW-127	1200 (W) x 700 (D) x 850 (H)
RTW-177/ FTW-177	1660 (W) x 700 (D) x 850 (H)

1.3 (RTW-180MS4)

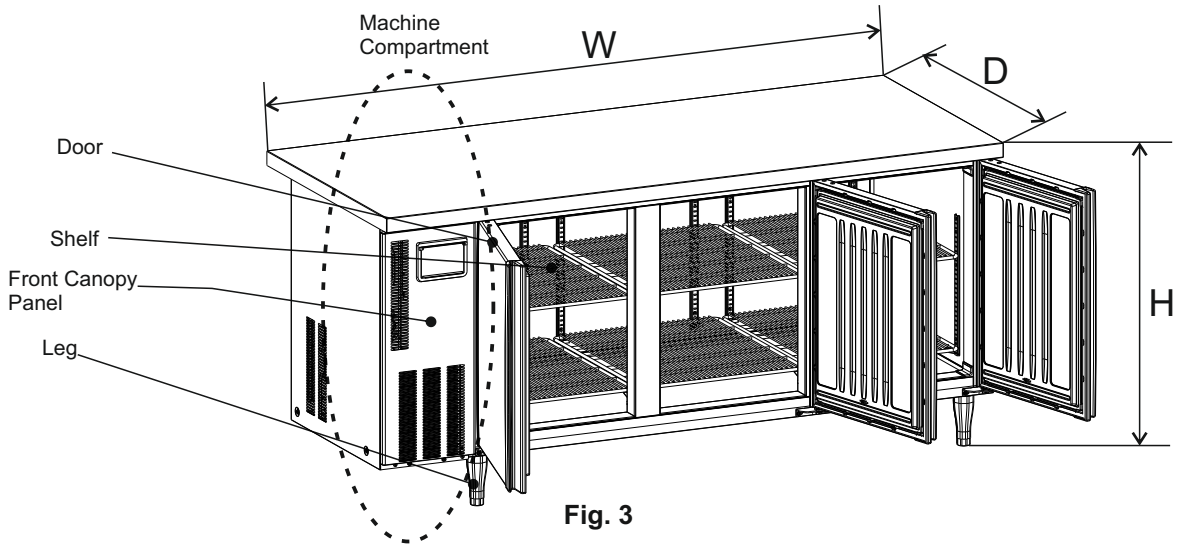


Fig. 3

2. ACCESSORIES

Width	1200/1500mm	1700/1800mm
a) Shelf:	4	6
b) Shelf Clip:	16	24
c) Shelf Holder:	8	12

Note: Customized products may have different numbers of accessories.

3. LOCATION

IMPORTANT

This appliance is suitable for use only in climatic class 5 i.e. At 40°C and 40% RH

For best operating results:

* The should not be located next to ovens, grills or other high heat producing equipment.
* The location should provide a firm foundation for the equipment.

* Allow at least 50 cm clearance between the front panel air inlet/outlet and the wall or other equipment for proper air circulation. The front of the unit should have enough space for smooth adjustment of the cabinet temperature. If the ambient temperature can exceed 38°C, allow at least 10 cm clearance from the wall at the side of the machine compartment to prevent overloading and damaging the refrigeration circuit.

* Do not expose the unit to direct sunlight or higher temperatures.

* Allow at least 50 cm clearance at the front of the unit for smooth door operation.

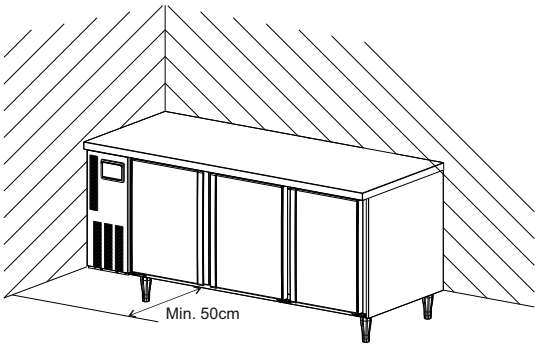


Fig.4

4. SET UP

IMPORTANT

1. Do not tilt the unit more than 45 when mounting the legs.
2. Carry the unit by holding bottom.

1) Cut the vinyl shipping tape and remove the carton.

2) Take out the accessory shelves, shelf clips and legs. Attach the four shelf clips horizontally to the shelf posts. Place the shelf on the shelf clips.

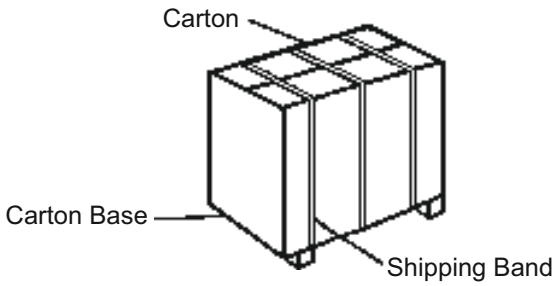


Fig.5

3) Tilt the unit backward to mount the front legs (work in pairs)
4) Mount the rear legs in the same way.

5) Before operating the unit, remove all shipping carton, packing, tape(s) and protective plastic film on the exterior, interior and top panel. Be careful not to damage the exterior panels.

6) Position the unit in a selected site.

7) Clean the interior with a soft cloth soaked in cold or warm water containing the proper amount of neutral cleaner and wrung dry.
8) Level the refrigerator/freezer in both the left-toright and the front-to-rear directions. To adjust the height of the unit, turn the adjusters of the adjustable legs.

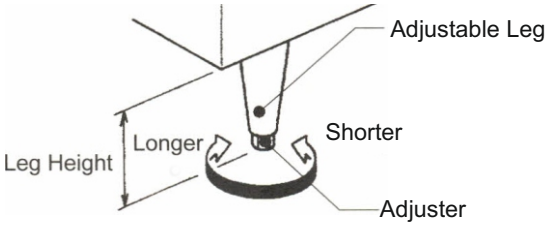


Fig. 6

CAUTION

The height of the adjustable legs must be within 15 - 17 cm. If extended too much, the legs may become weak or the adjusters can come off, causing unexpected injuries.

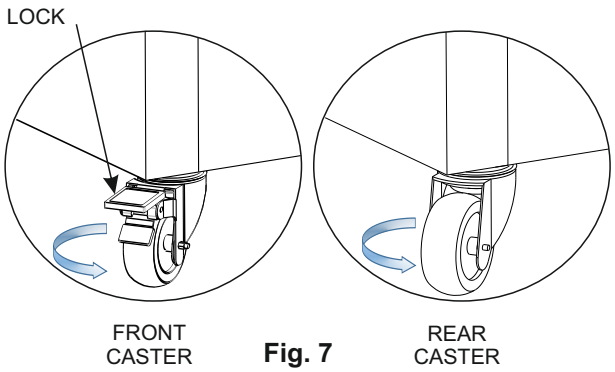


Fig. 7

✶ Caster Wheels are optional

8) Follow the same procedure mentioned for legs to fix caster wheels. Front casters are with lock & rear casters are without lock. Height cannot be adjusted with caster wheels.

CAUTION

Do not move the unit in fully loaded condition. It my cause human fatigue.

Front caster must be locked while unit is in use. And can be unlocked while moving.

9) Remove the protective plastic film from the doors and front canopy panel.

5. SHELF AND SHELF CLIP

✶ The shelf is adjustable in 1.27 cm increments. Adjust the shelf clips according to the height of stored items.

✶ To attach the shelf clip, insert the upper tab into an adjust hole in the shelf post to hook the shelf clip, and push the lower tab into another adjust hole until it locks in place. To detach the shelf clip, reverse the above procedure.

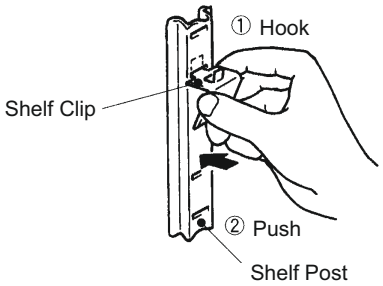


Fig. 8

CAUTION

Attach the shelf clips properly to make the shelf level.

6. ELECTRICAL CONNECTIONS

IMPORTANT

This appliance is provided with no power switch or earth leakage circuit breaker, but with over-current protection only. Install an earth leakage circuit breaker with overload protection rated at least 15A on the main power supply.

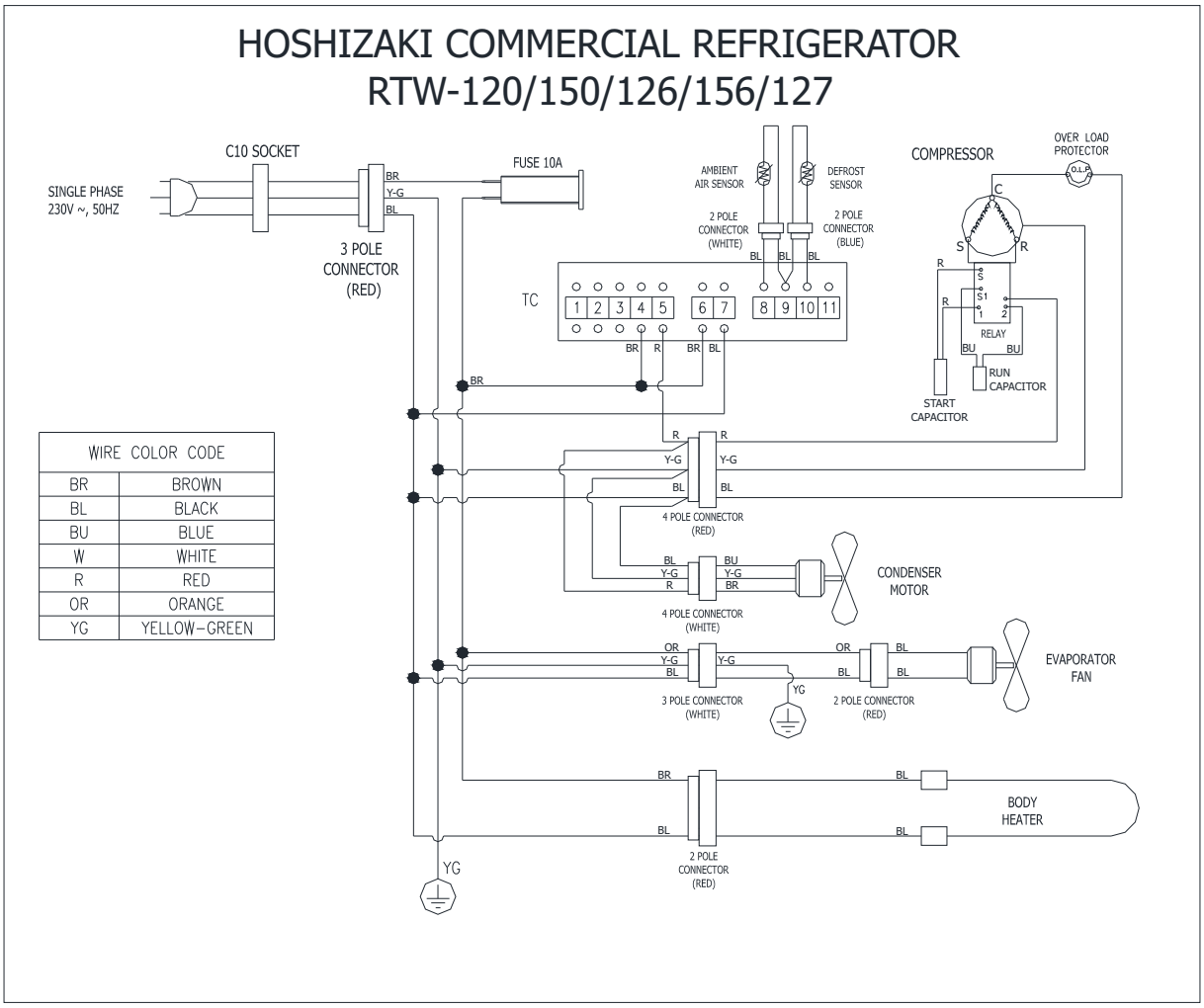
This is equipped with 10A supply cord

✶ This Appliance must be plugged into the separated power receptacle which is readily accessible and has enough capacity. The maximum allowable voltage variation should not exceed ± 10 percent of the nameplate rating. See the nameplate.

✶ If the supply cord and the plug should need to be replaced, it should only be done by a qualified service engineer to avoid any danger.

✶ Ensure proper earthing provided. ⏚

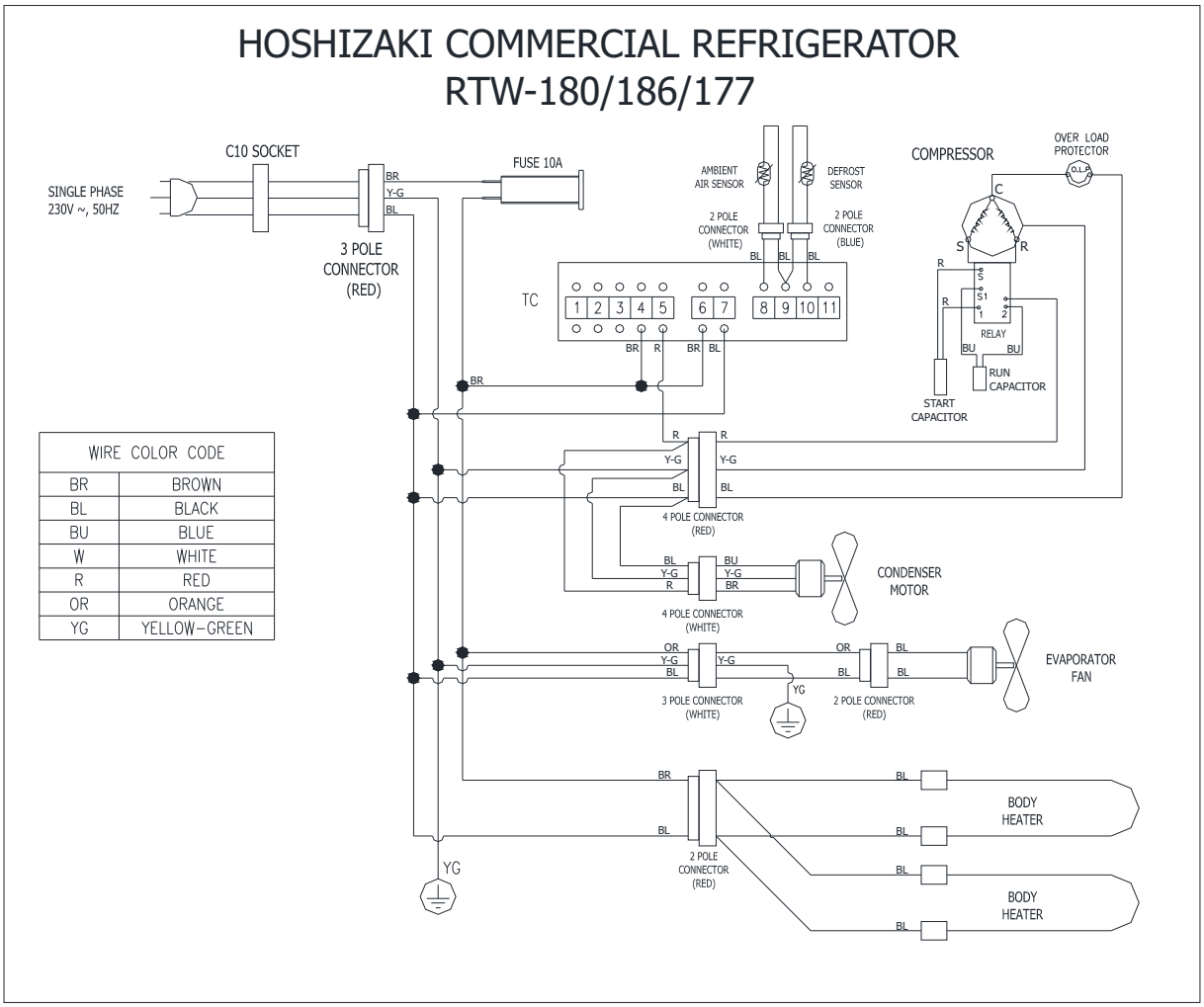
ELECTRICAL WIRING DIAGRAM



ENGLISH

ELECTRICAL WIRING DIAGRAM

HOSHIZAKI COMMERCIAL REFRIGERATOR
RTW-180/186/177



WIRE COLOR CODE	
BR	BROWN
BL	BLACK
BU	BLUE
W	WHITE
R	RED
OR	ORANGE
YG	YELLOW-GREEN

ELECTRICAL WIRING DIAGRAM

ENGLISH

II. OPERATING INSTRUCTIONS

IMPORTANT

1. Use the appliance only at the specified voltage. (As specified in the name plate).

2. Use standard socket. Do not use multi-socket.

3. Be careful not to wet the machine compartment. This might cause failure or electric shock hazard.

4. To prevent electric shock, do not touch the attachment plug with wet hands.

5. Do not store any explosive substances such as Aerosol with a flammable propellant, in this appliance.

6. This is designed only for temporary storage of foods. Use for any other purposes (e.g. storage of chemicals or medical supplies such as vaccine and serum) could cause deterioration of stored items.

7. Do not throw anything onto the shelves or load more than 60 kg on each of them. They may fall off and cause injury.

8. Do not store bottles or cans near the air outlet. They may freeze up and break, causing a risk of injury.

9. Do not use combustible spray or place volatile and flammable substances near the unit. They could catch fire from a spark of a switch or the like.

10. Do not put anything into the machine compartment or the air inlet/outlet. The fan rotating rapidly inside may cause injury or heat.

11. Energies the refrigerator/freezer for 1 hour and check for proper temperature before putting foods in the cabinet.

12. Do not block the air inlet/outlet with foods.

13. Do not pack the cabinet with foods. Allow some space between them to ensure a good air flow.

14. Do not put in warm or hot foods. Let them cool first, or they will raise the cabinet temperature and could deteriorate other foods in the cabinet or overload the refrigerator/Freezer.

15. Make sure all items are snug on each shelf.

16. Moist or fresh foods and those with a strong smell like seafood should be wrapped up in a plastic film or packed in a container. Otherwise the foods may dry up or give their smells to other foods.

17. Foods containing acetic acid or yeast should be wrapped up in a plastic film. Otherwise they may accelerate corrosion of the evaporator and copper tubes, resulting in failure.

18. Foods intended for direct human consumption should be stored on the shelf in a proper container and protected from direct contact with the cabinet walls.

19. Do not use the freezer to freeze foods. It is designed only to store frozen foods. High quality ice cream may melt during defrost cycle and should not be stored in the freezer.

20. The doors may become difficult to open just after closed because of the negative pressure created inside the cabinet. Wait for about 30 seconds.

1. START UP

1) Plug in the unit.

2) The compressor and condenser fan motor will start in 3 minutes.

2. FRONT PANEL & WINDOW PANEL

To open and close the window panel:

Pull with the grip provided on transparent window cover and swing up as shown.

Controller is accessible from this window.

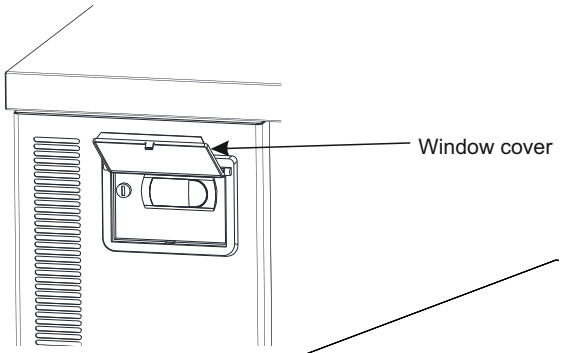


Fig. 9

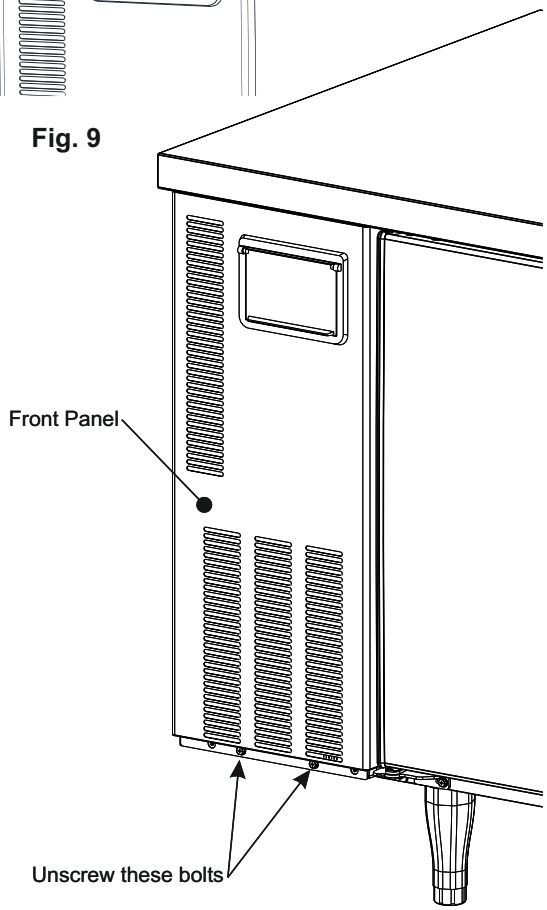


Fig. 10

To remove the front panel:

Unscrew the bolts shown above and pull the front panel down.

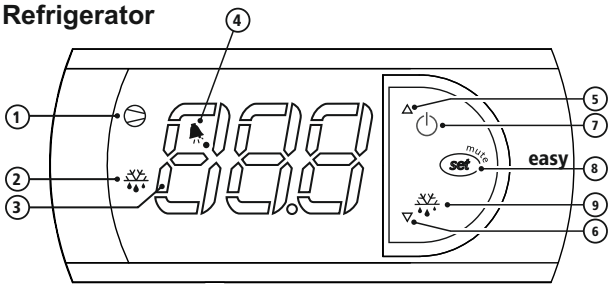
3. CABINET TEMPERATURE SETTING

IMPORTANT

1.The temperature range given below is only the adjustable range. The actual cabinet temperature depends on the ambient temperature and other conditions.

The cabinet temperature is factory-adjusted to 2°C for the refrigerator and -20°C for the freezer & Combi. If necessary, readjust the temperature as follows.

Refrigerator



1. Compressor Indicator
2. Defrost indicator
3. Screen
4. Alarm indicator
5. Up Key
6. Down Key
7. Power On/Off Key
8. Set Key
9. Defrost Key

Fig. 11

1) Open the front window cover

2) Temperature setting:
Press the set key for 1 second the screen displays the "SEt" and set temperature will flash. Press the up or down key to set the temperature. Then press set key to accept new cabinet temperature setting.

If no operation for 60 seconds. Then temperature will not save and system exit from the temperature setting mode.

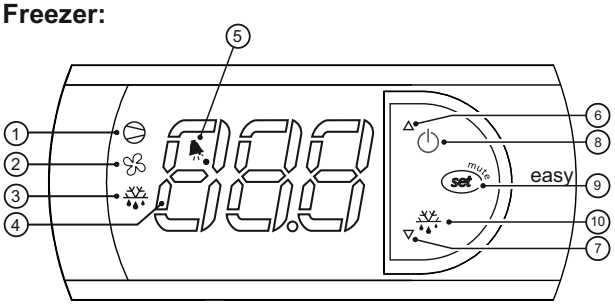
Code	Function	Set Range	Default	Unit
F01	Temperature setting	-2 to +12	2	°C

ENGLISH

IMPORTANT

1.The displayed cabinet temperature is adjusted to be almost equal to the temperature at the center of the cabinet without foods. But it can be different from the actual temperature depending on arrangement of stored foods, frequency of door opening or measuring points.

Freezer:



1. Compressor Indicator
2. Fan Indicator
3. Defrost indicator
4. Screen
5. Alarm indicator
6. Up Key
7. Down Key
8. Power On/Off Key
9. Set Key
10. Defrost Key

Fig. 12

1) Open the front window cover

2) Temperature setting:
Press the set key for 1 second the screen displays the "SEt" and set temperature will flash.
Press the up or down key to set the temperature.
Then press set key to accept new cabinet temperature setting.
If no operation for 60 seconds. Then temperature will not save and system exit from the temperature setting mode.

Code	Function	Set Range	Default	Unit
F01	Temperature setting	-7 to -23	-20	°C

RTW / FTW (Common)

The compressor stops when the cabinet temperature reaches down to the set temperature, and starts when the cabinet temperature rises to the set temperature + 1.5°C. Accordingly, the average cabinet temperature will be around the set temperature + 2°C.

Set temperature (compressor off temperature)
Off-cycle defrost (HRW series): -2 to + 12°C
Heater defrost (HFW series): -7 to -23°C

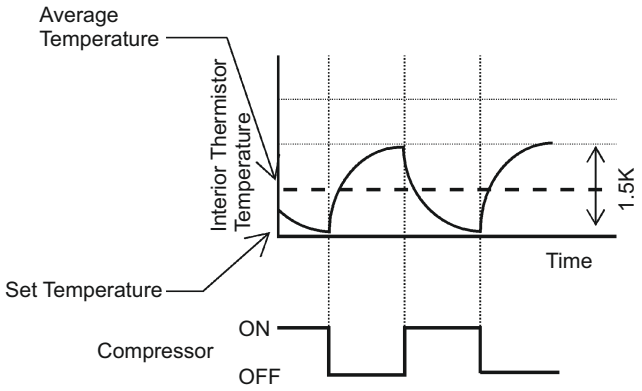


Fig. 13

4. DEFROST

Automatic defrost cycle

The automatically defrosts the evaporator 4 hours (refrigerator) or 3 hours (freezer) after the refrigeration starts. The defrost indicator will turn on and display the message “dF” alternating with the temperature measured by the control probe.

Manual defrost cycle

To start the manual defrost cycle, press the defrost/ down key for 3 seconds. The defrost indicator will turn on and display the message “dF” alternating with the temperature measured by the control probe.

5. INDICATOR LIGHTS

Refrigerator

Indicator	Symbol	Status	Function
Compressor		On	Compressor running
		Off	Compressor off
		Flash	Compressor start delay
Defrost		On	Defrosting
		Off	Defrost stopped

Freezer

Indicator	Symbol	Status	Function
Compressor		On	Compressor running
		Off	Compressor off
		Flash	Compressor start delay
Evaporator fan		On	Evaporator fan running
		OFF	Evaporator fan off
		Flash	Evaporator fan start delay
Defrost		On	Defrosting
		Off	Defrost stopped

6. SHUT DOWN

1) Before shutting down the unit, move the stored foods into another .

2)Unplug the unit or press up/power key from controller for 3 seconds .

3)When preparing the unit for long storage, clean the cabinet interior and door gaskets, dry them thoroughly and store the unit in a dry place.

III. SERVICING OF APPLIENCE

IMPORTANT

1.Disconnect the Appliance from power source during servicing & when replacing parts.
2. For good performance of cabinet, clean the condenser once in a week.
3. Clean the dust from condenser by means of soft wire brush, blower or vacuum cleaner.

Note: Do not use water for cleaning condenser.

4. Do not touch or wet the machine compartment parts. This could result in failure or breakdown.
5.To prevent possible damage, do not clean the plastic parts with water above 40°C

1. INTERIOR, EXTERIOR, SHELF

✶ Disconnect the appliance from power source before cleaning.

✶ Clean the interior and exterior at least once a week for sanitation.

✶ Clean off the interior and exterior with a soft cloth soaked in cold or warm water containing the proper amount of neutral cleaner and wrung dry. Do not use a water jet to clean the machine compartment.

✶ Chemical agents other than neutral cleaner might cause damage to the interior and exterior surfaces.

✶ Any remaining detergent will damage metal or plastic surfaces. Use a soft cloth dampened with warm water to wipe it off.

✶ Do not use the following items. They could damage painted or plastic surfaces:

Polishing powder, alcohol, thinner, benzine, acidic or alkaline detergent, hot water, petroleum, soap powder, metal scourer or brush, etc. Especially detergent to clean grease on ventilator or microwave.

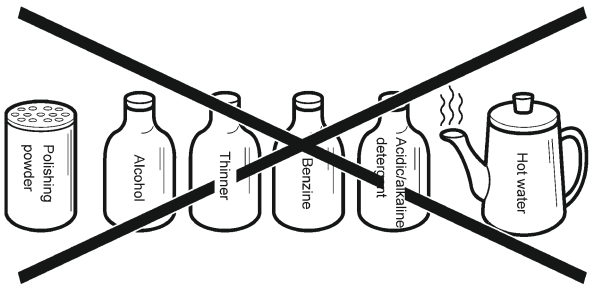


Fig. 19

Note: Some solutions other than the above may also damage painted or plastic surfaces. Immediately stop using such solutions if they cause any problems.

✶ The door gasket and its contact surface get soiled easily. Clean every surface of these parts thoroughly. Remnants of food will accelerate aging.

✶ Use a cloth to wipe off any water staying inside the cabinet.

2. BEFORE CALLING A SERVICE AGENT

IMPORTANT

1. If the screen on the operation panel indicates an error code or something seems wrong with the unit, check for possible causes according to the following instructions. If the problem still exists, immediately contact an authorized Hoshizaki service company.

2. When contacting a service company, let them know the model name, serial number, date of installation (see warranty card) and state of the trouble.

3. Do not attempt to repair the unit yourself.

[a] TROUBLES WITH ERROR INDICATION

Refrigerator/ Freezer

Code	Possible Cause	Operation and Remedy
E1	Cabinet sensor error	Compressor shuts down. Press any key to stop beep. When troubleshooting is over, system recalculates compressor delay time. Immediately contact an authorized Hoshizaki service company.
E2	Defrost sensor Error	Defrost termination temperature is invalid. Press any key to stop beep. Immediately contact an authorized Hoshizaki service company.

* The code "dEF" is not an error code but indicates the unit is in defrost cycle.

[b] TROUBLES WITHOUT ERROR CODE INDICATION

1) Unit fails to operate:
 (1) Unplugged.
 (2) Power failure.
 (3) Main power supply disconnected.
 (4) Switch off from controller.

2) Poor cooling performance:
 (1) Ambient temperature too high (above 43°C).
 (2) Door(s) opened too often.
 (3) Cabinet temperature setting too high.
 (4) Too packed with foods.
 (5) Air circulation path blocked.
 (5) Door(s) left open.

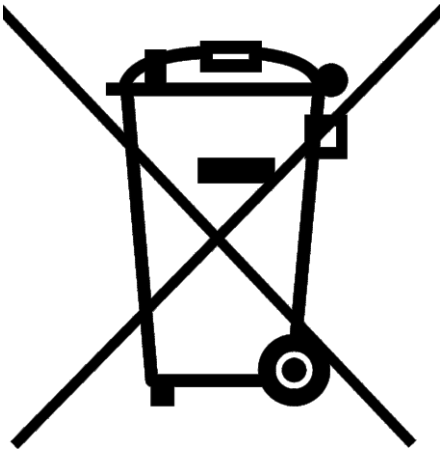
3) Condensation around door(s):
 (1) Ambient humidity too high.
 (2) Door(s) not closed properly.

4) Noise:
 (1) Normal operating sounds of compressor or condenser fan.

5) Frosting inside compartment:
 (1) Ambient humidity too high.
 (2) Door(s) opened too often.
 (3) Door(s) not closed properly.
 (4) Too packed with foods beyond load line.

3. DISPOSAL

This marking indicated that this product should not be Disposed with other household wastes throughout the European union. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the Sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.



IMPORTANT

The insulation foaming agent used for the unit body contains flammable gas cyclopentane. With this in mind, dispose of the properly.

4. WARRANTY

Hoshizaki warrants to the original owner/user that all Hoshizaki branded products shall be free of defects in material and/or workmanship for the duration of the "warranty period". The warranty shall be effective for one year from the date of installation.

Hoshizaki's liability under the terms of the warranty are limited and shall exclude routine servicing, cleaning, essential maintenance and/or repairs occasioned by misuse and installations not in accordance with Hoshizaki guidelines.

Warranty repairs should be completed by an approved Hoshizaki dealer or service agency using genuine Hoshizaki components.

To obtain full details of your warranty and approved service agency, please contact your dealer/supplier, or contact on toll free number 1800 120 8376.

HEAD OFFICE:
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