

商用冷藏柜 / 冷冻柜 COMMERCIAL REFRIGERATOR/FREEZER

使用说明书 INSTRUCTION MANUAL



HRE/HFE-127B-_HD

- ●使用说明书是本产品不可分割的重要组成部分,用户须妥善保管。
- ●请务必仔细阅读本使用说明书中描述的指南和警告事项,因为这些指南和警告事项 为安装人员/用户提供了正确安装、持续安全地使用和保养本产品所需的重要信息。
- ●请妥善保管本使用说明书,以便必要时参考使用。
- 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.

HRE-67B- * HD-_ HRE-77B- * HD-_ HRE-77B- * LD-HRE-127B- * HD-HRE-127B- * LD-HRE-147B- * HD-HRE-147B- * LD-HRE-187B- * HD-HRE-187B- * LD-HRE-70B- * HD-HRE-70B- * LD-HRE-140B- * HD-HRE-140B- * LD-HFE-67B- * HD-HFE-77B- * HD-HFE-77B- * LD-HFE-127B- * HD-HFE-127B- * LD-HFE-147B- * HD-HFE-147B- * LD-HFE-187B- * HD-HFE-187B- * LD-HFE-70B- * HD-HFE-70B- * LD-HFE-140B- * HD-HFE-140B- * LD-HRFE-77B- * HD-HRFE-77B-WR-

* : C, S, T, A _ : GN, ML

生产商: 星崎电机(苏州)有限公司

Manufacturer: HOSHIZAKI (SUZHOU) CO., LTD.

L1R27330B (071018)

中文	I. 一般信息	1
	1. 结构(HRE-147B-CHD/SHD/THD)	
	2. 附件	1
	3. 安装位置	
	4. 安装	2
	5. 层板和导轨	
	[a] 层板和层板托(标准)	
	[b] 导轨(定制)	
	[c] 支撑杆(定制)	4
	6. 电气连接	4
	7. 排水管连接	
	Ⅱ.操作说明	
	1. 启动	
	2. 前板	
	3. 柜内温度设置	
	4. 框架加热器	
	5. 除霜	
	6. 关机	
	Ⅲ. 保养和清洁说明	
	1. 内部、外部、层板	
	2. 空气过滤网	
	IV. 报修前	
	1. 显示故障代码的故障	
	2. 不显示故障代码的故障	
	V. 废弃处理	
	VI. 保修	9
ENGLIGH	I INOTALLATION INOTPUOTIONO	40
ENGLISH	I. INSTALLATION INSTRUCTIONS	
	CONSTRUCTION (HRE-147B-CHD/SHD/THD) ACCESSORIES	
	3. LOCATION	
	4. SET UP	
	5. SHELF AND RAIL	
	[a] SHELF AND SHELF CLIP (standard)[b] RAIL (customized)	
	[c] HANGER (customized)	
	6. ELECTRICAL CONNECTIONS	
	7. DRAIN CONNECTIONS	
	II. OPERATING INSTRUCTIONS	
	1. START UP	
	2. FRONT PANEL	
	CABINET TEMPERATURE SETTING	15
	4. FRAME HEATER	
	5. DEFROST	
	6. SHUT DOWN.	
	III. MAINTENANCE	
	1. INTERIOR, EXTERIOR, SHELF	
	2. AIR FILTER	
	IV. BEFORE CALLING A SERVICE AGENT	
	TROUBLES WITH ERROR CODE INDICATION	
	TROUBLES WITH ENROR CODE INDICATION 2. TROUBLES WITHOUT ERROR CODE INDICATION	
	V. DISPOSAL	
	VI. WARRANTY	

WARNING •



Keep Dry

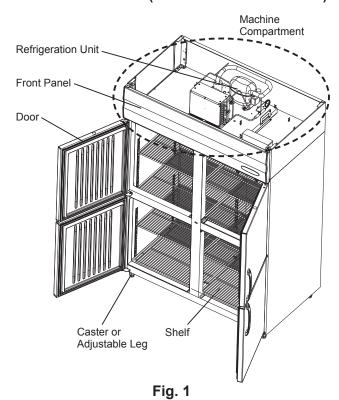
Do not wet this product or use it in potentially wet conditions. This may cause electric leakage, resulting in electric shock or fire.

- IMPORTANT

- This is a commercial refrigerator/freezer, 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.
- 2. 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 instruction concerning use of the appliance by a person responsible for their safety. Young children should be supervised to ensure that they do not play with the appliance.

I. INSTALLATION INSTRUCTIONS

1. CONSTRUCTION (HRE-147B-CHD/SHD/THD)



2. ACCESSORIES

Width a) Shelf:	<u>700mm</u> 4 [4]	<u>1200/1400mm</u> 8 [8]	1800mm 12 [12]			
b) Shelf clip:	16 [16]		48 [48]			
	16 [16] (H	IRFE)				
c) Shelf holder:	4 [0]	8 [0]	12 [0]			
8 [0] (HRFE)						
d) Spanner:	1 [1]	1 [1]	1 [1]			
(caster model only)						
e) Spacer:	4 [4]	4 [4]	6 [6]			
(caster mode	el only)					

- Note: 1. Numbers in parentheses are for models without shelf holders.
 - 2. Customized products may have different numbers and specifications of accessories.

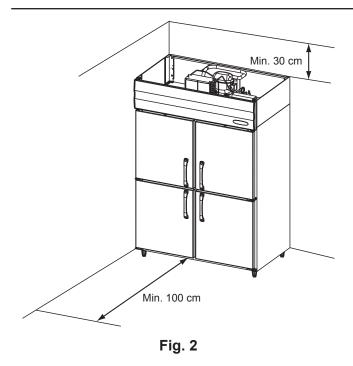
3. LOCATION

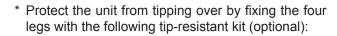
- IMPORTANT ·

This refrigerator/freezer is not intended for outdoor use. Normal operating ambient temperature should be within 5°C to 43°C.

For best operating results:

- * The refrigerator/freezer should not be located next to ovens, grills or other high heat producing equipment.
- * The location should provide a firm foundation for the equipment.
- * Avoid a site where dripping is not allowed. Especially, a side-by-side or back-to-back installation (possibly with other manufacturer's unit) may cause condensation between the two units, resulting in dripping onto the floor.
- * Do not expose the unit to direct sunlight or higher temperatures.
- * Allow at least 100 cm clearance at the front of the unit for smooth door operation. Also allow at least 30 cm clearance from the ceiling to the top of the unit for proper air circulation.





[Tip-resistant kit]

Adjustable leg (4Y2042-01, optional)	4
Shakeproof leg (454440-01, optional)	4
Shakeproof fitting (454441-01, optional)	4
Anchor bolt M10 (not provided)	4

[Installation example]

- 1) Replace the casters/adjustable legs with the optional adjustable legs.
- 2) Replace the adjustable ends of the legs with the shakeproof legs.
- 3) Fix the two rear shakeproof fittings to the floor.
- 4) Mount the refrigerator/freezer on the fixed shakeproof fittings.
- 5) Fix the front shakeproof fittings.
- * Locate and orient the fittings to optimize the function of the anchor bolts.
- * The shakeproof legs will raise the height by about 5 mm.

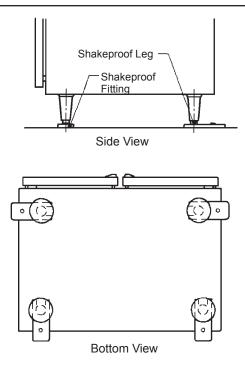


Fig. 3

4. SET UP

· IMPORTANT ·

- 1. Do not tilt the unit more than 45° when mounting the legs or casters.
- 2. Carry the unit by holding its bottom.
- 3. Remove all stuff inside the cabinet before moving the unit.
- 1) Cut the vinyl shipping tape and remove the carton.
- 2) Take out the accessory shelves and shelf clips. Attach the four shelf clips horizontally to the shelf posts. Place the shelf on the shelf clips.
- 3) Before operating the unit, remove all shipping carton, packing, tape(s) and protective plastic film on the exterior. Be careful not to damage the exterior panels.
- 4) Position the unit in a selected site.
- 5) Clean the interior with a soft cloth soaked in cold or warm water containing the proper amount of neutral cleaner and wrung dry.

[Caster models]

6) Level the refrigerator/freezer in both the left-toright and the front-to-rear directions. To adjust the height of the unit, insert the spacers (accessory) into the caster joints. Use the spanner (accessory) to loosen or tighten the casters. After making the unit level, tighten the casters securely. Lock the stoppers of the front casters.

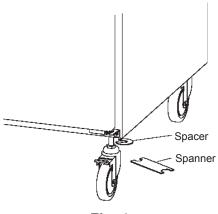


Fig. 4

[Adjustable leg models]

6) 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.

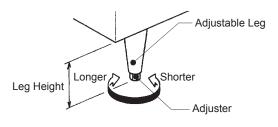


Fig. 5

CAUTION

The height of the adjustable legs must be within 9 - 12 cm (or 15 - 18). If extended too much, the legs may become weak or the adjusters can come off, causing unexpected injuries.

5. SHELF AND RAIL

[a] SHELF AND SHELF CLIP (standard)

- * The shelf is adjustable in 2.5 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.

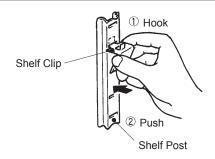


Fig. 6

CAUTION

Attach the shelf clips properly to make the shelf level.

* To lay the shelf at the bottom of the cabinet, attach two shelf holders each to the left and right frames as shown below.

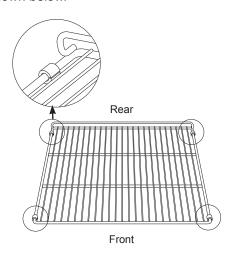


Fig. 7

· IMPORTANT ·

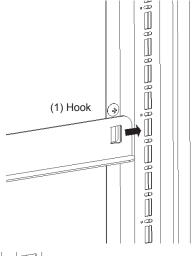
Do not put anything at the bottom of the cabinet to prevent damage or deformation to the cabinet bottom, resulting in corrosion.

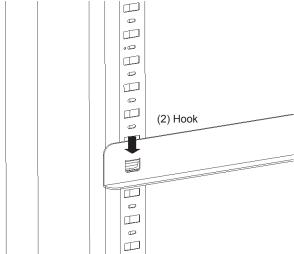
[b] RAIL (customized)

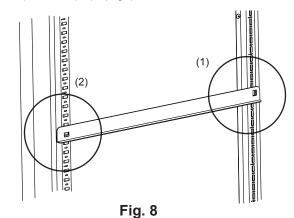
* To attach the rail, (1) push the rail hook backwards to fit into the square hole in the rear shelf post, and (2) push the rail hook down to fit into the square hole in the front shelf post. To detach the rail, reverse the above procedure. See Fig. 8.

- CAUTION

Attach the rail properly to make it level.







[c] HANGER (customized)

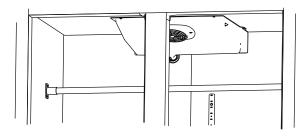


Fig. 9

6. ELECTRICAL CONNECTIONS

- IMPORTANT -

This refrigerator/freezer is provided with no power switch or earth leakage circuit breaker, but with overcurrent protection only. Install an earth leakage circuit breaker with overload protection rated at least 15A on the main power supply.

- * This refrigerator/freezer 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.

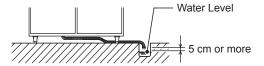
7. DRAIN CONNECTIONS

CAUTION

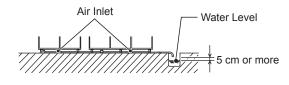
Be sure to connect the drain hoses properly. Otherwise water leaks from the drain hoses may damage the surroundings (property).

- IMPORTANT -

- Drain lines shall be as short and straight as possible. The drain hoses shall have an adequate pitch and fall so that no part is higher than the drain outlets.
- To prevent a backflow, do not connect the drain hoses directly with the sewer system. An air gap of a minimum of 5 cm should be between the ends of the drain hoses and the water level of drainage.

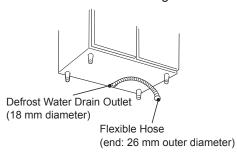


3. When installing more than two units, do not interconnect their drain hoses. If the interconnection is necessary, provide an air inlet per unit.



ENGLISH

- * The drain outlets are at the bottom of the body. Use the accessories to connect the drain hoses.
- * HRFE type is provided with two defrost water drain outlets while HRE and HFE types are provided with only one.
 - Insert the 18 mm diameter end of flexible hose into the defrost water drain outlet, and fix the flexible hose with the accessory drain hose band.
- 2) Attach the other end (26 mm outer diameter) of the flexible hose to the drainage.



* The illuofstration above shows HRE or HFE

Fig. 10

* The drain outlet is not provided for forced drain water evaporation model (customized). Drain water is evaporated inside the rear side of the body.

II. OPERATING INSTRUCTIONS

- IMPORTANT -

- Be careful not to wet the machine compartment. This might cause failure or electric shock hazard.
- 2. To prevent electric shock, do not touch the attachment plug with wet hands.
- 3. Do not store any volatile or flammable substances, such as benzine, ether, adhesives and LPG, in the unit.
- 4. This refrigerator/freezer 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.
- 5. Do not throw anything onto the shelves or load more than 60 kg on each of them. They may fall off and cause injury.
- Do not store bottles or cans near the air outlet. They may freeze up and break, causing a risk of injury.

- 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.
- 8. Do not put anything into the machine compartment or the air inlet/outlet. The fan rotating rapidly inside may cause injury or heat.
- 9. Energise the refrigerator/freezer for 1 hour and check for proper temperature before putting foods in the cabinet.
- 10. Do not block the air inlet/outlet with foods.
- 11. Do not pack the cabinet with foods. Allow some space between them to ensure good air flow.
- 12. 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.
- 13. Make sure all items are snug on each shelf.
- 14. 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.
- 15. 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.
- 16. 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.
- 17. 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.
- 18. 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.

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

2. FRONT PANEL

To open and close the front panel:

Pull each side of the front panel toward you to release it from the grip on each side of the bottom, and swing up the front panel as shown.

To close the front panel, fit both sides of the bottom securely in the grips.

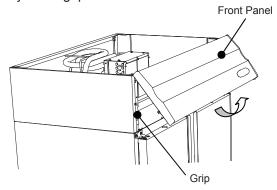


Fig. 11

To remove the front panel:

Release both sides of the bottom from the grips, and lift it off vertically.

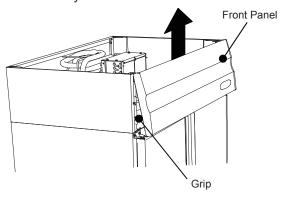


Fig. 12

3. CABINET TEMPERATURE SETTING

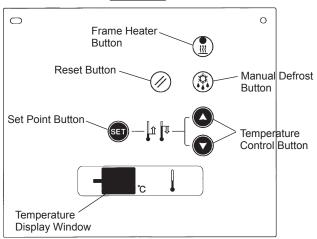
- IMPORTANT -

- 1. Pressing the temperature control button (downward) will not speed up refrigeration, but will only lower the temperature setting.
- 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 3°C for the refrigerator and -18°C for the freezer. If necessary, readjust the temperature as follows:

- 1) Open the front panel.
- 2) Press the set point button to display the current set point temperature.
- 3) Press and hold the set point button, and push the temperature control button until the temperature display window shows the desired temperature. The cabinet temperature is adjustable between -0°C and 16°C (or -6°C and 12°C) for the refrigerator and between -25°C and -7°C for the freezer.
- 4) 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.

HRE, HFE



HRFE

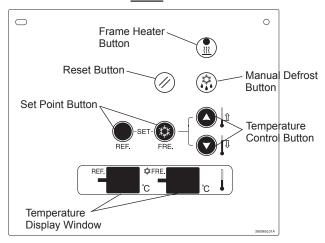


Fig. 13

4. FRAME HEATER

The front frame is provided with a built-in heater to prevent condensation. It is factory-adjusted to "low". If condensation forms on the front frame, the frame heater can be adjusted to "high".

Press the frame heater button on the operation panel for more than 3 seconds. The lamp will illuminate and the frame heater will be adjusted to "high".

To change the setting to "low", press the frame heater button for more than 3 seconds. The lamp will go out and the frame heater will be set to "low".

5. DEFROST

The refrigerator/freezer automatically defrosts the evaporator every 6 hours. For the refrigerator, the temperature display window shows the cabinet temperature and "dF" alternately during defrost cycle. For the freezer, the temperature display window shows "dF" during defrost cycle.

To start a manual defrost cycle, press the manual defrost button for more than 5 seconds. The next defrost cycle will begin in 6 hours.

6. SHUT DOWN

- 1) Before shutting down the unit, move the stored foods into another refrigerator/freezer.
- 2) Unplug the unit or disconnect the main power supply.
- 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. MAINTENANCE

- IMPORTANT

- 1. Before carrying out any cleaning or maintenance operations, unplug the unit.
- 2. Do not touch or wet the machine compartment parts. This could result in failure or breakdown.
- To prevent possible damage, do not clean the plastic parts with water above 40°C or in a dishwasher.

1. INTERIOR, EXTERIOR, SHELF

- * Clean the interior and exterior at least once a week for sanitary use. The unit can be moved by unlocking the casters [caster models].
- * 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.



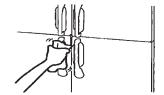
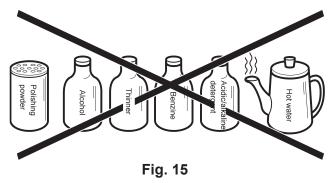


Fig. 14

* 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.



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. AIR FILTER

- IMPORTANT

To prevent deformation, do not wash the air filter with hot water above 40°C.

Plastic mesh air filters remove dirt or dust from the air, and keep the condenser from getting clogged. If the filters get clogged, the refrigerator/freezer's performance will be reduced. Check the filters at least twice a month. When clogged, use warm water and a neutral cleaner to wash the filters. Do not operate the unit with the air filters removed, or the condenser will get clogged, resulting in failure.

 Open the front panel and remove the air filter. To prevent injury, do not touch the condenser fins directly.

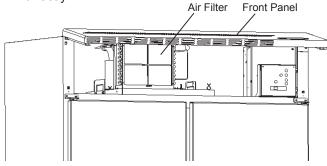


Fig. 16

- 2) Wash the air filter carefully with cold or warm water containing the proper amount of neutral cleaner. Rinse and dry the air filter thoroughly.
- 3) To refit the air filter, attach it to the guide at the top of the condenser and put the tabs into the slots in the refrigeration unit base.

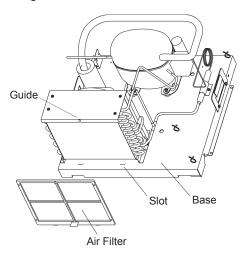


Fig. 17

IV. BEFORE CALLING A SERVICE AGENT

- IMPORTANT -

- If the temperature display window 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.
- 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.

1. TROUBLES WITH ERROR CODE INDICATION

Code	Problem and Possible Cause
E1	Cabinet temperature too high.
	(1) Ambient temperature too high (above
	43°C).
	(2) Warm or hot foods inside.
	(3) Door(s) left open.
E2	Cabinet temperature too low.
	(1) Ambient temperature too low (below
	5°C).
	(2) Frozen foods being defrosted.
E3	Defrost error. Immediately contact an
	authorized Hoshizaki service company.
E4, E7	Air filter clogged.
	(1) Ambient temperature too high (above
	43°C).
	(2) Air filter not clean.
1	Thermistor defective. Immediately contact
E9	an authorized Hoshizaki service company.
1	Controller board defective. Immediately
Ed	contact an authorized Hoshizaki service
	company.
EE	Compressor related error. Immediately
	contact an authorized Hoshizaki service
	company.

^{*} To cancel the error code indication:

If only one code is flashing, open the front panel and press the reset button on the operation panel. (The codes "E7", "E8", "E9", "EA", "Eb" and "Ed" cannot be canceled.)

ENGLISH

If more than one code is flashing, press the reset button to cancel the first code in the highest priority and press it again to cancel the other code(s).

The error codes are indicated in the following order of priority:

EA > Ed > EE > E5 > E8 > E9 > E4 > E7 > E3 > E1 > E2

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

2. TROUBLES WITHOUT ERROR CODE INDICATION

- 1) Unit fails to operate:
 - (1) Unplugged.
 - (2) Power failure.
 - (3) Main power supply disconnected.
- 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 filter not clean.
 - (6) Door(s) left open.
- 3) Condensation around door(s):
 - (1) Ambient humidity too high.
 - (2) Frame heater button set to "low" (lamp off).
 - (3) Door(s) not closed tightly.
- 4) Noise:
 - Normal operating sounds of compressor or condenser fan.
- 5) Frosting inside compartment:
 - (1) Ambient humidity too high.
 - (2) Door(s) opened too often.
 - (3) Too packed with foods beyond load line.

V. DISPOSAL

When disposing of the refrigerator/freezer, contact an authorized Hoshizaki service company or a specialized waste disposal company.

- IMPORTANT -

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

VI. 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 the nearest Hoshizaki Service office.

联系人: 星崎冷热机械(上海)有限公司

上海市静安区天目西路128号嘉里企业中心第一座501室

邮编: 200070

电话: +86 21 5228-8181 传真: +86 21 5228-0113



星崎香港有限公司

香港九龍觀塘巧明街95號世達中心17樓G室

电话: +852 2866-2108 传真: +852 2866-2109

Hoshizaki Singapore Pte Ltd

18 Boon Lay Way #07-142 Tradehub 21, Singapore 609966 Tel: +65 6225-2612 Fax: +65 6225-3219

台湾星崎股份有限公司

106 台北市大安區敦化南路一段337號5樓

Tel: +886 2-2706-8818 Fax: +886 2-2708-7999

Hoshizaki Lancer Pty Ltd

5 Toogood Avenue, Beverley SA 5009 Australia

Tel: +61 8-8268-1388 Fax: +61 8-8268-1978

Contact: Hoshizaki Shanghai Co., Ltd.

Room 501, Tower 1, Kerry Enterprise Centre, 128 Tianmu Road West,

Jing'an District, Shanghai, 200070 China

Tel: +86 21 5228-8181 Fax: +86 21 5228-0113

Hoshizaki Hong Kong Co., Limited

Unit G, 17/F, World Tech Center, No. 95 How Ming Street,

Kwun Tong, Kowloon, Hong Kong

Tel: +852 2866-2108 Fax: +852 2866-2109

Hoshizaki Singapore Pte Ltd

18 Boon Lay Way #07-142 Tradehub 21, Singapore 609966 Tel: +65 6225-2612 Fax: +65 6225-3219

Hoshizaki Taiwan, Inc.

5F, No. 337, Sec. 1, Dunhua S. Rd., Da'an Dist, Taipei City 106, Taiwan (R.O.C.)

Tel: +886 2-2706-8818 Fax: +886 2-2708-7999

Hoshizaki Lancer Pty Ltd

5 Toogood Avenue, Beverley SA 5009 Australia

Tel: +61 8-8268-1388 Fax: +61 8-8268-1978 info@hoshizaki.com.au http://www.hoshizaki.com.au

To register your product for warranty with Hoshizaki, visit http://www.hoshizaki.com.au/warranty-registration

or scan the QR code.



牛产商: 星崎电机(苏州)有限公司

邮编: 215126 江苏省苏州工业园区青丘街15号

电话: +86 512-62807850 传真: +86 512-62807860

HOSHIZAKI (SUZHOU) CO., LTD. Manufacturer:

No. 15 Qingqiu Street, Suzhou Industrial Park, Suzhou 215126 China

Tel: +86 512-62807850 Fax: +86 512-62807860

HOSHIZAKI