

Hoshizaki America, Inc.

Commercial Refrigerators & Freezers Undercounter & Worktop Series

Models

Refrigerators

HUR40A(-D) HWR40A(-D)

HUR68A(-D) HWR68A(-D)

HUR96A(-D) HWR96A(-D)

Freezers

HUF40A(-D) HWF40A(-D)

HUF68A(-D) HWF68A(-D)



“A Superior Degree
of Reliability”

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INSTRUCTION MANUAL



Issued: 6-24-2003
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IMPORTANT

Only qualified service technicians should attempt to install, service or maintain this unit. No installation, service or maintenance should be undertaken until the technician has thoroughly read this Instruction Manual. Likewise, the owner/manager should not proceed to operate the unit until the installer has instructed them on its proper operation.

HOSHIZAKI provides this manual primarily to assist qualified service technicians in the installation, maintenance and basic service of the unit.

Should the reader have any questions or concerns which have not been satisfactorily addressed, please call or write to the HOSHIZAKI Technical Support Department for assistance.

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NOTE: To expedite assistance, all correspondence/communication **MUST** include the following information:

- Model Number
- Serial Number
- Complete and detailed explanation of the problem

ENERGY STAR®

Products earning the ENERGY STAR prevent greenhouse gas emissions by meeting strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy. Several models of Hoshizaki undercounter and worktop models have earned the ENERGY STAR. To easily determine if your unit has earned the ENERGY STAR, see the nameplate attached to the right wall on the inside of the cabinet.



- Please review this manual. It should be read carefully before the unit is installed and operated. Only qualified service technicians should install, service and maintain the unit. This manual should be made available to the technician prior to installation, maintenance or service.
- Keep this manual with the unit for later reference.

CONTENTS

I. Installation Instructions	5
A. Unpacking and Checks Before Installation	5
B. Opening and Removing the Front Panel	6
C. Moving the Unit in a Narrow Elevator or Hallway	6
D. Location	7
E. Setup	7
F. Electrical Connection	8
G. Drain Connection	9
H. Final Checklist	9
II. Operating Instructions	10
A. Operation - For Safety and Best Results	10
B. Startup	11
C. Food Storage	12
D. Shutdown	12
E. Electronic Control Operation	13
1. Temperature Display	13
2. Adjusting the Setpoint Temperature	14
3. Alarm Codes	14
4. Defrost	14
5. Start-up Delay	15
6. Compressor Short Cycle Timer	15
7. Safety Devices	15
a) Pressure Switch	15
b) Compressor Protector	15
c) Defrost Protection	15
8. Energy Saving Mode	15
F. Troubleshooting	16
1. Unit Fails to Operate	16
2. Alarm Code Appears in Display	17
3. Poor Cooling Performance	18
4. Condensation	18
5. Noise	18
III. Cleaning and Maintenance Instructions	19
A. Cleaning	19
1. Exterior	19
2. Interior	19
3. Door/Drawer Gaskets	19
4. Shelves	20
5. Air Filter	20
6. Condenser	20
7. Drawers	20

B. Maintenance	20
1. Air Filter	20
2. Power Supply Connection	21
3. Other	21

I. Installation Instructions

A. Unpacking and Checks Before Installation

CAUTION

Unit is heavy. Use care when lifting or positioning. Work in pairs when needed to prevent injury to persons lifting and to prevent damage to the unit. Hold the bottom of the unit. Do not hold doors/drawers; they could become deformed or come off. Do not tilt the unit by more than 45°.

- 1) All tape and packaging should be removed from the machine prior to installation. The equipment should be inspected for any damage which may have occurred during shipment. Concealed damage claims must be filed with the carrier.
 - a) Visually check that the refrigerant lines do not rub or touch other lines or surfaces and that the fan blades turn freely.
 - b) Check that the compressor is snug on all mounting pads.
- 2) Remove all accessory containers before discarding the packing materials. Dispose of all packing materials in a proper and environmentally responsible manner.
- 3) Check for missing or damaged accessories.
- 4) To remove the unit from the pallet:
 - a) Move as close to the final location as possible.
 - b) Remove the bolts that secure the cabinet to the pallet.
 - c) Block the cabinet securely, at a height of 8 inches (203 mm) off the floor.
 - d) Attach the casters or adjustable legs to the bottom of the cabinet as necessary.
- 5) Remove the protective plastic film from the exterior and interior. If the unit has been exposed to the sun or to heat, remove the film after the unit cools.

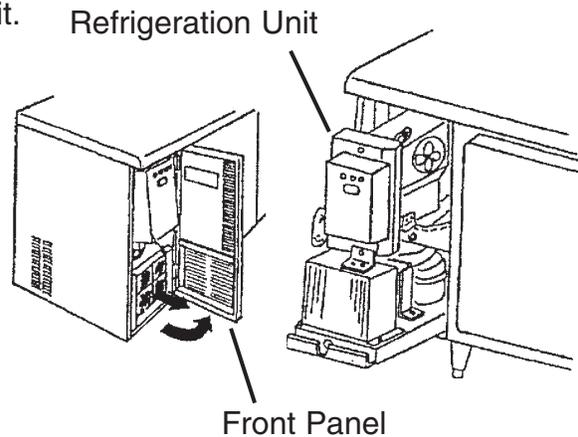
B. Opening and Removing the Front Panel

- 1) Grip outer edge of the front panel near the bottom and top and pull open approximately 1/2 inch (13 mm) until it is disengaged.
- 2) Swing the panel open completely and lift up approximately 1/2 inch (13 mm) to remove completely.

C. Moving the Unit in a Narrow Elevator or Hallway

Hoshizaki undercounter and worktop models have a cartridge type (removable) refrigeration unit. When the space in an elevator or hallway is limited, the unit can be carried as follows:

- 1) Turn off the power supply, and unplug the unit.
- 2) Remove the front panel, then remove the wire guard located below the display panel.
- 3) Unhook the wiring connectors at the control box, then remove the two hex-head M6 attachment nuts and the M5 bolt.
- 4) Very carefully slide out the refrigeration unit. Support the evaporator as it clears the evaporator case. Be careful not to damage the refrigeration circuit tubing.
- 5) After taking out the refrigeration unit, secure the doors/drawers with tape.

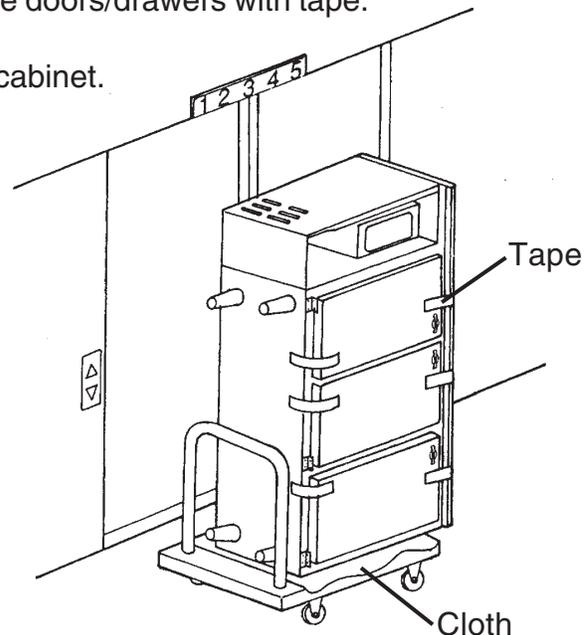


Note: Remove all accessories from inside the cabinet.

- 6) Place the unit upright on a cart, and roll it into the elevator.
- 7) Carry the unit to the installation site. Refit the removed parts in the reverse order of which they were removed.

Note:

- Before placing the unit upright on a cart, lay a cloth on the cart to protect the unit from damage.
- When standing or carrying the unit, be sure to work in pairs.



WARNING

The installation must be carried out by qualified personnel in accordance with this Instruction Manual. Improper installation may cause water leak, electric shock or fire. After the installation, make a trial run to check for proper operation and instruct the user on how to use and maintain the unit according to the Instruction Manual.

D. Location

CAUTION

This unit is not intended for outdoor installation. The air temperature should be within a 45°F (7°C) to 100°F (38°C) range. Extended periods of operation at temperatures exceeding these limitations may cause unsatisfactory results.

For best operating results:

- The machine should be on a flat, level and solid (firm) foundation.
- The unit should not be located in a corrosive environment.
- The air temperature range at the location should be between 45°F (7°C) and 100°F (38°C).
- The unit should not be near ovens, grills, other high heat producing equipment or in direct sunlight.
- The unit may be safely installed and operated flush with walls, but for maximum performance, install a minimum of 4 inches (102 mm) from all walls.
- Allow at least 20 inches (50 cm) at the front for proper air circulation.

E. Setup

- 1) Position the unit in the selected location. For units with casters, no adjustment is necessary. Units with legs can be levelled in both the front-to-back and side-to-side directions. The feet are provided with hex flats in order to facilitate adjustment. Viewed from the bottom, turn clockwise to lower each leg and counterclockwise to raise each leg.
- 2) Install the shelves using the shelf support clips provided in the accessory pack. Shelves are adjustable in one inch increments. Adjust to the height of stored items.

IMPORTANT

1. Casters must be installed flush to unit. If floor irregularity requires adjustment of caster height, add caster shims as necessary (provided with unit) and retighten casters completely.
2. Attach the shelf clips properly to make shelves level.
3. Slant shelves when placing into cabinet in order to clear door frame opening.

F. Electrical Connection

Cord-connected units should only be plugged into a 115 volt, 60 Hz circuit with a national and local electrical code approved, grounded wall receptacle. **A separate circuit with its own circuit breaker (HACR type) or fuse (LP-CC type) should be provided.** Refer to the nameplate, located inside the cabinet, for the proper electrical specifications.

Hardwired units should only be wired into the proper conduit, **with its own circuit breaker (HACR type) or fuse (LP-CC type).** Refer to the nameplate for the proper electrical specifications.

WARNING

1. Make sure the power switch is off before making electrical connections to prevent possible electric shock.
2. The connections must be made to a separate power supply or receptacle in accordance with the national and local electrical code requirements and this Instruction Manual. Branching off the power cord, using an extension cord, or sharing a single power supply with other appliances may result in electric shock, heat generation or fire.
3. This unit should be disassembled or repaired only by qualified service personnel to prevent the risk of electric shock or fire.
4. Do not make any alterations to the unit. Alterations could result in water leak, electric shock or fire.
5. Do not damage the power cord. It should not be altered, jerked, bundled, weighed down, pinched, or tangled. Such actions could result in electric shock or fire.
6. To prevent electric shock, do not touch the attachment plug, power switch, or other electrical parts with damp hands.
7. Failure to use a proper breaker or fuse can result in a tripped breaker, blown fuses or damage to existing wiring.

CAUTION

1. To unplug the unit, be sure to pull the attachment plug and do not jerk the power cord. It could be damaged and cause fire or electric shock.
2. The maximum allowable voltage variation should not exceed $\pm 10\%$ of the rated voltage. Operation outside of this range may result in failure or reduction of refrigeration performance.

G. Drain Connection

This unit is provided with an energy efficient automatic condensate water disposal system and normally requires no drain connection.

H. Final Checklist

- 1) Is the unit level?
- 2) Is the unit located in a site where the ambient temperature will be within the 45°F to 100°F (7°C to 38°C) range—year round?
- 3) Have all shipping cartons, tapes and packing materials been removed from the unit?
- 4) Has the power supply been checked or tested against the nameplate rating?
- 5) Has the unit been checked for shipping damage?
- 6) Has the Owner's Warranty Registration been filled out and forwarded to the factory?

II. Operating Instructions

A. Operation - For Safety and Best Results

IMPORTANT

1. Do not leave the doors/drawers open.
2. Open and close the doors/drawers with care. Doors/drawers opened too quickly or forcefully may cause injury or damage to the unit or surrounding equipment. Doors/drawers may be hard to open just after they have been closed. Try again after 15 seconds.
3. To prevent deformation or cracks, do not spray insecticide onto the plastic parts or let them come into contact with oil.
4. This unit is designed only for temporary storage of food. Employ sanitary methods. Use for any other purposes (for example, storage of chemicals or medical supplies such as vaccine and serum) could cause deterioration of stored items.
5. To avoid damage to the gasket, use only the door/drawer handle (do not grab the top of the door/drawer directly) when opening and closing.

WARNING

For All Units

1. If the unit does not work properly, turn OFF the power switch and unplug the unit or disconnect the main power source, then contact an authorized Hoshizaki service company. To prevent possible electric shock or fire, do not keep the unit in operation.
2. Do not hang on or push down on the doors/drawers. The doors/drawers might be damaged, fall off, or the unit could tip over, causing injury.
3. To prevent electric shock, do not touch the attachment plug, power switch or other electrical parts with damp hands.
4. Do not store any volatile or flammable substances, such as benzene, ether, alcohol, adhesives, or LPG in the unit. They are potential sources of explosion or fire.
5. Do not throw anything onto the shelves or load any single shelf with more than 120 lb (54.5 kg) of product. They might fall off and cause injury.
6. Do not store food or food containers near the air outlet. They might freeze up and crack or break causing a risk of injury or contamination of other food.
7. Do not use combustible spray or place volatile and flammable substances near the unit. They might catch fire.
8. Do not put anything into the machine compartment or the condenser air inlet/outlet. The fan rotating rapidly inside might cause injury or heat.

WARNING

Additional Warning For Units with Drawers

1. Do not hang on or push down on the drawers, and do not load any single drawer with more than 150 lb (68 kg) of product.
2. Depending on the weight of product in the drawers, secure the unit as necessary to prevent it from overturning.
3. Do not open more than one drawer at a time and *never* stand on the drawers.

B. Startup

WARNING

Do not splash water directly onto the unit. It may cause short circuit, electric shock, corrosion or failure.

CAUTION

Do not put anything into the air inlet/outlet. The fan rotating rapidly inside may cause injury.

After installation, wipe the interior with a soft cloth containing cold or warm water.

This unit is equipped with an electronic control which has been preset at the factory to maintain a specified cabinet storage temperature. After the power cord is plugged securely into the closest outlet off the floor, open the front panel for access to the power switch—located on the control box front—and turn the switch on.

IMPORTANT

There is a 2 minute normal delay before the refrigeration system starts.

Allow the unit to pull down and start cycling on the controller prior to loading it with food products. For more information on electronic control operation, see section E.

C. Food Storage

- Do not block the air inlet and outlet with food, or cooling performance may be reduced.
- If the cabinet temperature is set to maintain a subfreezing temperature, do not store vegetables or any foods that should not be frozen, or these foods may deteriorate.
- Do not tightly pack the cabinet with food. Allow some space between items/containers to ensure good air flow. Also allow space between food product and interior surfaces.
- Do not put warm or hot foods in the unit. Let them cool first, or they will raise the cabinet temperature and could deteriorate other foods in the cabinet or overload the refrigerator.
- All foods should be wrapped in plastic film or packed in a container. Otherwise foods may dry up, pass their smells onto other foods, cause frost to develop, result in poor unit performance, or increase the likelihood of cross-contamination. Certain dressings and food ingredients, if not stored in containers, may accelerate corrosion of the evaporator, resulting in failure.

D. Shutdown

WARNING

1. When preparing the unit for long storage, prevent the doors/drawers from closing tightly to reduce the risk of children getting trapped.
2. To prevent electric shock, do not touch the attachment plug, power switch or other electrical parts with damp hands.
3. To unplug the unit, be sure to pull the attachment plug and do not jerk the power cord. It could be damaged and cause fire or electric shock.
4. When shutting down the unit for more than one week, turn OFF the power switch and unplug the unit.
5. Do not plug in/unplug the unit to start/stop operation. This could cause electric shock or short circuit.

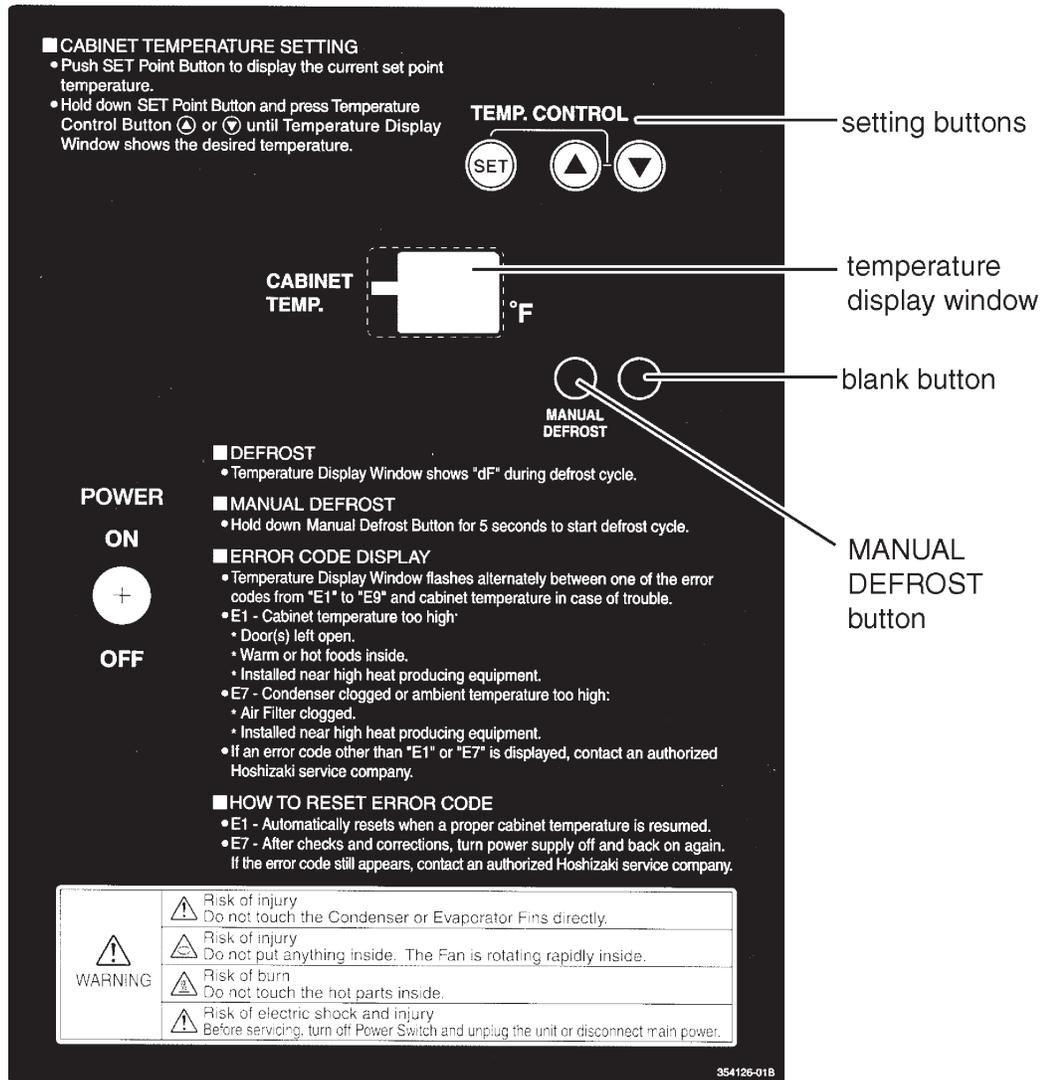
- 1) Before shutting down the unit, move the stored food into another refrigerator/freezer.
- 2) Open the front panel and turn the power switch to OFF. The unit will shut down.
- 3) Unplug the unit or disconnect the main power source.
- 4) Close the front panel.

IMPORTANT

When preparing the unit for long storage, clean the cabinet liner, shelves and door/drawer gaskets.

E. Electronic Control Operation

The display panel is located on the face of the refrigeration circuit, behind the front panel. Upon opening the front panel, the display panel can be accessed. From the display panel, various controls and functions can be adjusted. Follow the instructions and warnings below and on the display panel for safe and efficient operation of the unit.



1. Temperature Display

The factory setting is °F. To change the display to °C, follow the steps below.

- 1) Press and hold both the (SET) button and the ● unmarked, blank button for 5 seconds. "F5" appears in the display window. (If "F0" is displayed, press the MANUAL DEFROST button repeatedly until "F5" appears.)
- 2) Press the ● unmarked, blank button to display the current setting (default: "F"). Press the (▲) up or (▼) down button to switch to °C. Press the ● unmarked, blank button again to save the setting.

- 3) Press and hold both the **SET** button and the unmarked, blank button for 5 seconds. The cabinet temperature will be displayed using the newly saved temperature scale.
- 4) Affix the “°C” label supplied with the unit to the display panel, covering “°F” but not the display window.

Note: The cabinet temperature is updated every 30 seconds.

2. Adjusting the Setpoint Temperature

The setpoint temperature is the temperature at which the compressor turns on. To set the setpoint temperature, follow the steps below.

- 1) Press the **SET** button to display the current setpoint temperature.
- 2) To change the setpoint, press and hold the **SET** button while pressing the **▲** up or **▼** down button to raise or lower the setpoint.

	Allowable Setpoint Range		Default	
	Fahrenheit	Celsius	Fahrenheit	Celsius
Freezer (Door Unit)	-13 to +19°F	-25 to -7°C	0°F	-18°C
Freezer (Drawer Unit)	-13 to +19°F	-25 to -7°C	2°F	-17°C
Refrigerator (auxiliary code Q5 and before)	+21 to +53°F	-6 to +12°C	39°F	4°C
Refrigerator (auxiliary code Q6 and later)			37°F	3°C

- 3) After 10 seconds, the new setpoint will be saved automatically.

Note: For freezers with doors, the temperature differential for the compressor to turn off is 6.3°F (3.5°C) below the setpoint. For freezers with drawers, the temperature differential for the compressor to turn off is 3.6°F (2.0°C) below the setpoint. For refrigerators, it is 4.5°F (2.5°C) below the setpoint for auxiliary code Q5 and before and 3.6°F (2.0°C) below the setpoint for auxiliary code Q6 and later.

3. Alarm Codes

See the troubleshooting section for an explanation of the alarm codes.

4. Defrost

This unit is preset at the factory to defrost every 6 hours for general conditions, the first defrost occurring 6 hours after power to the unit is turned on. Note that the defrost is a heated defrost, and therefore will have a tendency to raise the cabinet temperature. Cabinet temperature is not displayed during defrost; “dF” is displayed in its place. Defrost may be initiated manually by holding down the MANUAL DEFROST button for 5 seconds.

5. Start-up Delay

The start circuit of the compressor is timed such that at power-up and during any compressor off-time, there will be at least a 2 minute delay before the compressor will start.

6. Compressor Short Cycle Timer

There is a 2 minute minimum off-time and on-time for the compressor.

Note:

- Any time the compressor is started, it will keep running for a minimum of 2 minutes.
- Any time the compressor is turned off, it will stay off for a minimum of 2 minutes.
- Time may vary with pressure switch activation.

7. Safety Devices

a) *Pressure Switch*

When pressure on the high-side of the unit is detected to be above a preset limit (determined by Hoshizaki specifications), a pressure switch will activate causing power to be interrupted to the compressor relay. This power interruption will shut down the compressor for a minimum of 5 minutes. After 5 minutes, if pressure is no longer above the preset limit, the pressure switch will reset automatically. When the pressure switch resets, power will be resupplied to the compressor.

b) *Compressor Protector*

When a combined temperature/amperage value is above the limit specified by the compressor manufacturer, a protector will operate independently, turning off the compressor. The compressor will restart when this protector has reset.

Note:

- The compressor protector resets automatically.
- If the condenser fan is operating and the compressor is off, it is most likely that the protector has operated.

c) *Defrost Protection*

Primary defrost termination is controlled by the defrost thermistor. However, two additional safeties are also present.

1. Time Termination - 1 hour maximum
2. Temperature Termination - Measured by a separate device that is in-line with the heaters and independent of the control board.

8. Energy Saving Mode

On some units, the evaporator fan and/or other components may operate intermittently as a means to reduce energy consumption. This setting is made at the factory and such operation is automatic.

F. Troubleshooting

WARNING

1. If the unit does not work properly, turn OFF the power switch and unplug the unit or disconnect the main power source, and immediately contact an authorized Hoshizaki service company. To prevent possible electric shock or fire, do not keep the unit in operation.
2. This unit should be disassembled or repaired only by qualified service personnel to prevent the risk of injury, electric shock or fire.
3. Do not make any alterations to the unit. This could cause water leak, electric shock or fire.
4. To prevent electric shock, do not touch the attachment plug, power switch, or other electrical parts with damp hands.

IMPORTANT

1. In case of insufficient refrigeration performance, move the stored food product into another unit to prevent its deterioration.
2. When contacting a service company, let them know the model name, serial number, date of installation (see warranty card) and the nature of the trouble (error code, etc.).

1. Unit Fails to Operate

- Power failure. Wait until power supply is resumed.
- Unplugged. Plug in.

2. Alarm Code Appears in Display

If an error occurs, the alarm code and cabinet temperature are displayed in 1-second intervals. When an error occurs, check the error code and follow the instructions below. If more than one abnormal condition exists, alarm codes will be displayed in order of priority.

Alarm Signals		
Alarm Code	Problem	Notes
E1	High Temperature Alarm Cabinet temperature has exceeded set temperature by 18°F (10°C) for more than x minutes. The default value of x is "2" (120 minutes).	When temperature returns to setpoint range, alarm code "E1" will clear. If temperature is not back in range, and obvious corrections do not bring temperature back in range, call a qualified service technician.
E2	Low Temperature Alarm Cabinet temperature has remained below setpoint by 9°F (5°C) for more than y minutes. The default value of y is "1" (60 minutes).	When temperature returns to setpoint range, alarm code "E2" will clear. If temperature is not back in range, and obvious corrections do not bring temperature back in range, call a qualified service technician.
E3	Defrost Alarm Defrost has taken longer than 1 hour. Control board has terminated defrost.	Call a qualified service technician. Note that E3 may alternate with "dF" instead of the temperature.
E4	High Pressure Alarm Compressor discharge pressure is outside normal operating range. Pressure switch has been triggered 5 or more times in 1 hour. Condenser filter may need cleaning.	Clean filter if necessary. Allow time for pressure switch to react, then turn power off and back on again to reset. If switch trips 5 times in 1 hour, and the above steps do not clear the alarm code, call a qualified service technician.
E7	Clogged Filter Alarm Condenser temperature is outside of normal operating range. Condenser filter needs cleaning.	Clean filter. Allow time for sensor to react, then turn power off and back on again to reset. If this alarm occurs frequently, it is recommended that a qualified service technician be called.
E8	Defrost Temperature Sensor Malfunction Alarm Defrost temperature sensor has failed.	Call a qualified service technician. After replacing sensor, alarm will reset.
E9	Clogged Filter Sensor Malfunction Alarm Clogged filter sensor has failed.	Call a qualified service technician. After replacing sensor, alarm will reset.
EA	EEPROM Write Error Alarm Control board is defective.	Call a qualified service technician.
ED	EEPROM Verification or Read Error Alarm Control board is defective.	Call a qualified service technician.

3. Poor Cooling Performance

- Door(s)/drawers opened too often.
- Door(s)/drawer left open. Close.
- Too packed with food or air inlet/outlet blocked. Allow some space between items/containers to ensure good air flow.
- Warm or hot foods inside. Take them out until they cool down more.
- Ambient temperature too high. Avoid installation near high heat producing equipment or exposure to direct sunlight.
- Cabinet temperature setting too high. Readjust it to a lower temperature.
- Unit in defrost process. The cabinet temperature may rise temporarily during defrost cycle, but this will not affect the food inside.

4. Condensation

- Door(s)/drawer left open. Close.
- Ambient humidity too high. Condensation may occur on a humid or rainy day. Wipe off occasionally.

5. Noise

- Operating sounds from compressor, condenser fan motor, or evaporator fan motor. This is not a sign of failure.
- Installed on an unsteady floor. Contact an authorized Hoshizaki service company.
- Not leveled in the left-to-right or front-to-rear directions. Contact an authorized Hoshizaki service company.

III. Cleaning and Maintenance Instructions

A. Cleaning

WARNING

1. Do not splash water directly onto the unit. This might cause short circuit, electric shock, corrosion or failure.
2. When cleaning or inspecting the unit, turn OFF the Power Switch and unplug the unit or disconnect the main power source to prevent electric shock, by unexpected entrance of water into the unit, or injury by any moving parts.
3. To prevent frostbite, do not touch foods or containers (especially metallic) in the freezer compartment with damp hands.
4. Before using a sanitizer such as inert soap and sodium hypochlorite, thoroughly read the manufacturer's instructions on the proper usage and amount.

IMPORTANT

1. To prevent damage to the painted or plastic surfaces, do not use the following: thinner, benzine, alcohol, petroleum, soap powder, polishing powder, alkaline cleaner, acid, scouring pad and especially those strong cleaners for use on a ventilating fan or a cooking range. Also, to prevent corrosion, do not use a chlorine bleach such as sodium hypochlorite on the stainless steel surfaces.
2. Use clean cloth and hands for cleaning.
3. Before cleaning the cabinet interior, move the stored foods into another clean refrigerator/freezer.

1. Exterior

The exterior is exposed to grease, moisture and dust. Even stainless steel needs periodic cleaning to prevent possible corrosion. Wipe the exterior occasionally with a clean, soft cloth. Use a damp cloth containing a neutral cleaner to wipe off oil or dirt build up. Clean the worktop as often as necessary to maintain a clean, sanitary work surface.

2. Interior

Spills should be wiped up promptly to avoid unpleasant odors. The cabinet interior should be cleaned periodically with a mild soap or detergent.

3. Door/Drawer Gaskets

Remnants of food on the gaskets or cabinet will accelerate aging. Door/drawer gaskets should be cleaned regularly with mild soap and water to remove dirt and grease.

4. Shelves

Remove and clean regularly.

5. Air Filter

As the air filter becomes clogged with dirt or dust, the unit's performance will be reduced. Do not operate the unit with the air filter removed. This will accelerate clogging of the condenser and result in failure. Check the filter at least twice each month. If it is dirty, use warm water and a neutral cleaner to wash the filter. To avoid damaging the air filter do not use water hotter than 104°F (40°C). The filter is located behind the front panel. This filter can be removed by opening the front panel and lifting the filter away from the condenser. Reinstall the filter after cleaning.

6. Condenser

Check the condenser (located behind the air filter) once a year and use a brush or vacuum cleaner to clean the unit as required.

7. Drawers

On units with drawers, the drawers can be removed for cleaning either individually or as an entire assembly.

- To remove an individual drawer, first remove all food product from the drawer. Pull the drawer out to its fully extended position and lift up on the handle to disengage the drawer. Before removing the drawer, carefully support the rear and front of the drawer and then slowly remove it from the cabinet.
- To remove the drawer frame assembly, first remove the drawers and then remove the fasteners in the thermal break and in the rear of the cabinet. Carefully slide the frame out of the cabinet, making sure not to damage the thermal break. Reinstall in the reverse order, making sure not to overtighten the screws in the thermal break.
- To remove the drawer slide (center slide containing rollers) for cleaning, rotate the top of the slide away from the frame while the slide is completely inside the cabinet. Drawer slides do not require lubrication, but slides should be kept clean and free of food.
Note: Drawer slides are dishwasher safe.

B. Maintenance

1. Air Filter

The air filter promotes clean condenser surfaces and efficient unit operation by removing dirt and grease from circulating air. The filter should be checked monthly and cleaned when necessary—as described in “A. Cleaning - 5. Air Filter”.

2. Power Supply Connection

WARNING

1. Check periodically that the power cord plug blades and their vicinity are free of dust and that the plug is securely plugged into the receptacle. Dusty blades or a loose connection may cause electric shock or fire.
2. Do not damage the power cord. It should not be altered, jerked, bundled, weighed down, pinched, or tangled. Such actions could result in electric shock or fire.
3. The unit must have a separate power supply or receptacle of proper capacity. Branching off the power cord, using an extension cord, or sharing a single power supply with other appliances may result in electric shock, heat generation or fire.

If the plug or power cord is damaged, immediately contact an authorized Hoshizaki service company and ask for repairs.

3. Other

All other maintenance or service on this unit should be performed in accordance with the Hoshizaki Service Manual by a qualified service technician.

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