

## ***Installation and Owner's Manual***

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Read these instructions. Failure to follow maintenance guidelines may result in a cancellation of warranty.

### ***Chest Freezer Merchandiser***

**BCF44-HC  
BCF56-HC  
BCF68-HC  
BCF80-HC**



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## 1. Warnings & Safety Precautions



Refrigeration units that contain Hydrocarbon (R-290)  
See Below;

- **Danger** - Risk of fire or explosion. Flammable refrigerant used. Do not use mechanical devices to defrost refrigerator. Do not puncture refrigerant tubing.
- **Danger** - Risk of fire or explosion. Flammable refrigerant used. To be repaired only by trained service personnel. Do not puncture refrigerant tubing.
- **Caution** - Risk of fire or explosion. Flammable refrigerant used. Consult repair manual/owner's guide before attempting to service this product. All safety precautions must be followed.
- **Caution** - Risk of fire or explosion. Dispose of properly in accordance with federal or local regulations. Flammable refrigerant used.
- **Caution** - Risk of fire or explosion due to puncture of refrigerant tubing; follow handling instructions carefully. Flammable refrigerant used.
- **Caution** - Keep clear of obstruction all ventilation openings in the appliance enclosure or in the structure for building-in.

### ► Safety Precautions

Basic safety precautions must be followed when using electrical appliances as the followings ;

## Notice to Customer

To avoid any risk of personal injury, material damage or incorrect use of this appliance, be sure to observe the following warnings and safety precautions. (After reading these owner's instructions, keep them in a safe place for future reference.)

Any loss or spoilage of products, such as food, loss of sales, or consequential damages is not covered by warranty.

Use appliances only for its intended purpose as described in this manual.

"Failure to comply with these requirements might result in personal injury and (or) property damage and will void warranty."

Serial number : " The serial number is located on the rating label which is on the right exterior wall of the unit. Retain the unit's serial number for service purposes.

- Strongly recommend that any servicing **MUST** be performed by a qualified technician.
- Before this appliance is used, it must be properly installed and located in accordance with the Installation Instructions.
- Do not allow children to climb, stand or hang on the shelves in the refrigerator or doors. They could damage the refrigerator and seriously injure themselves.
- Do not touch the cold surfaces in the refrigerator compartment when hands are wet. Skin may stick to these extremely cold surfaces.
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Do not store pharmaceutical products, scientific materials or other temperature sensitive products in this appliance.
- Do not spray inflammable gas near the refrigerator.
- Keep fingers out of the "pinch point" areas; clearances between the doors and between the doors and cabinet

- Unplug the appliance before cleaning and making repairs.
- Use caution, the unit does remain powered when system controls are used to turn off unit.
- Unplug unit before replacing the interior light
- Do not plug several appliances into the same wall outlet.
- After unplugging the appliance, wait at least five minutes before re-plugging it into a wall outlet.
- Any deterioration in the insulation may cause fire.
- Do not allow children to touch or play with the control panel
- Do not stand or lean on the base panel, pull-out parts, doors and any other parts of the unit.
- Do not place this equipment directly under direct heat or sunlight.
- This appliance must be grounded.  
You must ground the appliance to prevent any power leakages or electric shocks caused by current leakage from the appliance. Never use gas pipes, telephone lines or other potential lightning rods as grounding.
- Unplug the appliance before cleaning and making repairs.

## Cautions

### Proper disposal of Freezer and Refrigerator.

Child entrapment and suffocation are not problems of the past. Junked or abandoned refrigerators are still dangerous. even if they will sit for "just a few days." If you are getting rid of your old refrigerator, follow the instructions below to help prevent accidents.

#### Before throwing away your old Refrigerator or Freezer:

- Take off all the doors.
- Leave the shelves in place so that children may not easily climb inside.

### Use of extension cords is NEVER allowed

Blue Air will not warranty any refrigerator that has been connected to an extension cord.

### Do not install this appliance at an improper location

The installation location should not be exposed to direct sunlight and not placed near any heat source, e.g. stove, oven, radiator, or etc.

### Replacement of parts

- Component parts must be replaced with like components.
- Servicing shall be done by authorized service personnel, to minimize the risk of possible ignition due to incorrect parts or improper service.
- Lamps must be replaced by identical lamps only.
- If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.

### Refrigerant Disposal

Your old refrigerator may have a cooling system that uses "Ozone Depleting " chemicals. If you are throwing away your old refrigerator, make sure the refrigerant is removed for proper disposal by a qualified service technician. If you intentionally release any refrigerants you can be subject to fines and imprisonment under provisions of environmental regulations.

## 2. Installation

Before you start to install your Blue Air unit, carefully inspect it for freight damage. If damage is discovered, immediately file a claim with the delivery freight carrier. Blue Air is not responsible for damage incurred during shipment.

To ensure that your unit works properly from the first day, it must be installed properly. We highly recommend a trained refrigeration mechanic and electrician install your Blue Air equipment. The cost of a professional installation is money well spent.

### 1) Uncrating

The following procedure is recommended for uncrating the unit. Move your unit as close to the final location as possible before uncrating.

### 2) Leveling:

Proper leveling of your Blue Air unit is critical to operating success. Effective condensate removal and door operation will be affected by leveling. The unit should be leveled front to back and side to side.

### 3) Installation of water condensation pan

Insert the water condensation pan through the rail that is located at the center of cabinet bottom as shown Fig1.



Fig1

### 3) Ventilation:

Set unit in its final location. Be sure there is adequate ventilation in your room. you may need to install an exhaust fan under the extreme heat conditions, (100°F+, 38°C+),

**Warning:** Warranty is void if ventilation is insufficient.

### 4) Space clearance:

- Ensure air circulation around unit
- Side to side: at least 7 inches (20 cm)
- Back to the wall: at least 7 inches (20 cm)

### 5) To connect electricity:

The power cord of this appliance is equipped with a grounding plug which mates with a standard grounding wall outlet to minimize the possibility of electric shock hazard from the appliance.

Do not, under any circumstances, cut or remove the ground prong from the power cord.

For personal safety, this appliance must be properly grounded.

Have the wall outlet and circuit checked by a qualified electrician to make sure the outlet is properly grounded. If the outlet is a 2-prong outlet, it is your personal responsibility and obligation to have it replaced with the properly grounded wall outlet before using the unit.

A 3-prong outlet ensure the best performance and also prevents overloading building wiring circuits which could cause a fire hazard from overheated wires.

Never unplug your refrigerator by pulling on the power cord. Always grip plug firmly and pull straight out from the outlet.

Repair or replace immediately all power cords that have become frayed or otherwise damaged. Do not use a cord that shows cracks or abrasion damage along its length or at either end.

### Plugs used to depend on the unit

- (1) NEMA Plug, NEMA-5-15R, 115V/60/1



- (2) Make sure the power cord is connected to the proper voltage. (Rated  $\pm 10\%$ )

- (3) Compressor warranties are void if compressor burns out due to usage of improper voltage.

- (4) A protected circuit of the correct voltage and amperage must be used.

- (5) Turn 'off the power switch before disconnecting the power cord whenever performing maintenance service or cleaning the refrigerated cabinet.

- (6) If the power cord of Refrigerator (Freezer) is damaged, it should be replaced by the manufacturer or service agent or a similarly qualified person in order to avoid a hazard.

- (7) If unit is disconnected, wait 5 minutes before re-starting.

If you have any questions about set up or installation of your refrigerator, call our technical service.

## 6) Electrical requirements

There are several factors that will affect the proper operation of your refrigerator. Among these factors, the electrical installation is the most important and should always be checked before connecting your refrigerator as follows:

- 1) Make sure the electrical installation complies with national, state, and local codes
- 2) Make sure the circuit is properly ground.
- 3) Check circuit for proper voltage at receptacle
- 4) Make sure that the wire gauge and breaker sizes are correct and comply with the minimum allowance for voltage drops (rated  $\pm 10\%$ )

## 3. Operation Guide

- Using hermetic compressor of high quality and efficient with a wide work range. The whole refrigeration system is optimized to operate with high cooling speed and low energy consumption.
- Goods stored can be displayed clearly through the door made from luxurious hollow glass.
- At the top front of the cabinet, there is a light box for convenience.

### 1) General Specifications

Product	Chest Freezer (Merchandise)			
Model Name	BCF44-HC	BCF56-HC	BCF68-HC	BCF80-HC
Capacity (cu.ft)	TBD	17.66	TBD	24.72
W(inch)	TBD	56 1/8	TBD	79 3/4
D(inch)	29 5/8			
Net weight (lbs)	TBD	170	TBD	256
Rated Voltage	AC115V			
Rated Hz	60 Hz			
Rated Amps	TBD	2.8A	TBD	4.5A
# of Basket	3	4	5	6
Defrost	Manual			
Refrigerant	R290			
Temperature Range	0~-10°F			

(TBD: to be determined for the models coming soon)

## 2) How to set the temperature

### (1) Set Temperature:

Push the SET key for more than 2 seconds to change the Set point value; The value of the set point will be displayed and the "°C" or "°F" LED starts blinking. To change the Set value, push the up or down arrows within 10s. To memorize the new set point value push the SET key again or wait 10s.

### (2) Temperature controller:

After turning on for the delay time (2 minute), the compressor starts when cold room temperature  $\geq$  set temperature + hysteresis and will be off when cold room temperature  $\leq$  set temperature.

To protect the compressor, it can re-start unless the time when the compressor stops every time is longer than the delay time. (2 minute)

**CAUTION** - Setting the temperature control to the coldest setting may cause the eventually result in a warmer cabinet temperature by overloaded compressor.

**Transportation:** Do not be hard collided or fiercely vibrated when in transportation; Do not tilt the product more than 45 ° When it is on working, do not re-move frequently.

**Storage:** Warning! - Do not store bottled food, beverage or cans into the cabinet, otherwise the glass bottles or cans may break or explode. In order to avoid bad smell or taste, keep space between each food and do not store the foods too long time.

## 4. Maintenance, Clean

For keeping the best efficiency, it is very important to clean the condenser coil in period. Blue Air recommend to clean the condenser coil by a month.

Dirty condensers result in compressor failure, product loss, and lost sales, which are not covered by warranty.

If you keep the Condenser clean you will minimize your service expense and lower your electrical costs. The Condenser requires scheduled cleaning every month or as needed. Air is pulled through the Condenser continuously, along with dust, lint, grease, etc.

A dirty Condenser can result in NON-WARRANTEED part & Compressor Failures, Product Loss, and Lost Sales.

Proper cleaning involves removing dust from the Condenser. By using a soft brush, or vacuuming the Condenser with a shop vac, or using CO2, nitrogen, or pressurized air.

If you cannot remove the dirt adequately, please call your refrigeration service company.

### Tools Required.

- Screwdriver and Vacuum cleaner
- N2 or CO2 Tank
- Stiff bristle Brush

### CAUTIONS

- Please clean the cabinet with soft clothes timely. Before cleaning, **MUST** pull out the power plug. When the cabinet will not be used for a long time, disconnect the power cord then clean it. Please examine the wiring circuit before reusing it.
- Restart:  
Please wait 5 minutes to restart the refrigerator after the plug pulled down or short sudden-cut, or it will reduce the sever life of the compressor. To save energy, the refrigerator door should not be frequently opened or left open for a long time.

### 1) Cleaning the condenser coil

For efficient operation, it is important that the condenser surface be kept free of dust, dirt, and lint. Blue Air recommends cleaning the condenser coil and fins at least once per month. clean with a commercial condenser coil cleaner, available from any kitchen equipment retailer. Brush the condenser fins from top to bottom, not side to side. After cleaning, straighten any bent condenser fins with a stiff bristle brush.

### 2) Cleaning the fan blades and motor

If necessary, clean the fan blades and motor with a soft cloth. If it is necessary to wash the fan blades, cover the fan motor to prevent moisture damage.

### 3) Cleaning the interior of unit

When cleaning the cabinet interior, use warm water and mild soap. Do not use steel wool, caustic soap, abrasive cleaners, or bleach that may damage the inner surface.

### 4) Manual defrosting:

- (1) Unplug the unit from the power.
- (2) Remove all food and put in an alternative freezer.
- (3) Disassemble the doors. Use a soft cloth to wipe the disassembled door with warm water and mild soap and let it dry.
- (4) Place a proper size pan under the drain as shown Fig 2. If you open the drain tube cap without placing a pan, the floor will become wet.
- (5) Wait until the ice on the side wall of the cabinet is completely melted.

**Caution** - Do not use sharp awl or metal tools to remove ice.

- (6) If the ice is completely melted, throw defrosted water away, after then wipe the interior of the cabinet with a soft cloth, warm water and mild soap, and make dry.
- (7) Reassemble the doors again.
- (8) Check that there is no damage to the electric circuit and the power cord and reconnect the power plug to the power source.
- (9) Wait until the temperature goes down to the set temperature. after then store the food back.

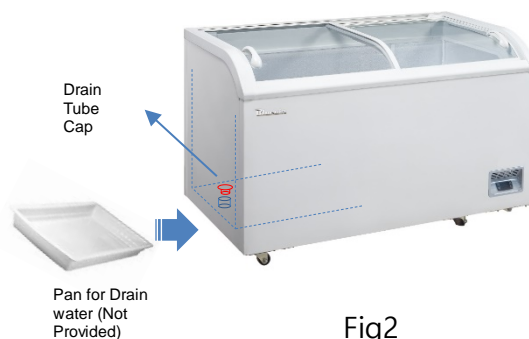


Fig2

## 5. Troubleshooting

### TROUBLESHOOTING GUIDE

When you found that the refrigerator appears abnormally, please examine it according to the following form.

Problem	Possible Cause	Action
Compressor will not start	Power connection failure	Check Power Cord and plug it in
	Power switch is in off position	Ensure switch is in the "on" position
The unit does not refrigerate well	Temperature set point is too high	Correct temperature set point
	The door is opened too frequently	Minimize door opening
	Loading of too much warm or moist product	Load product in intervals
	Not enough ventilation	Move the unit to a well ventilated location with at least 7 Inches of clearance on all sides
	Condenser is clogged	Clean it
Condensation On cabinet exterior	High moisture air can produce dews during the rainy season	Wipe with cloth

### ATTENTION!

The following phenomenon is normal, not trouble:

- A water-flowing sound can be heard when the unit is operating. This is the sound of refrigerant flow.
- Heat from the compressor or condenser.
- If the ambient humidity is high, condensation will easily occur on the glass door, please wipe with a towel in a timely manner.

Blue Air has a Nationwide Service Network to provide timely services to our customer's needs. Please call or fax us at the following numbers.

#### Blue Air Refrigeration Nationwide Service Network

Toll Free, 1-866-677-8500

TEL, (310) 808-0102

Fax, (310) 808-0242/0262

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