Blueair
FOOD SERVICE EQUIPMENT LLC

# *Installation and Owner's Manual*

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

***Reach Ins***
***Stainless Steel***



BSR**-HC
BSF**-HC
BSR**T-HC
BSF**T-HC
**/23,49,72/
**/23T,49T,72T/

***Food Prep Tables***
***Undercounters***



BLUR **-HC
BLUF ** -HC
BLPT** -HC
BLMT** -HC
**/28,36,48,60,72/
and optional
Drawer models
Work top models

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# 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 left interior wall of the unit. Retain the unit's serial number for service purposes.

# 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. and Blue Air 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 are necessarily small; be careful closing doors when children are in the area.

- 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.

**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.

## 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 of the doors.
• Leave the shelves in place so that children may not easily climb inside.

**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.

**Tools Required.**

- Wrench(included with casters), Figure 2
- Adjustable Wrench
- Screwdriver
- Leveler



Figure 2

**Uncrating**

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

1) **Remove the wooden pallet :**

Unscrew the bolts shown in Figure 1 (Reach-in 4-M13 Bolts and Undercounter 2-M6 Bolts)

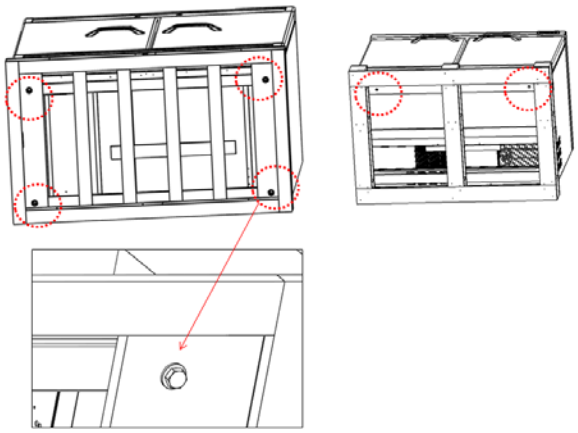


Figure 1

**2) Check all Part accessories listed are included with the appliance :**

| Models | Caster Box | | Shelf Clip | | Shelf | |
|---|---|---|---|---|---|---|
| | Quantity of casters | | Quantity of clips | | Quantity of Shelves | |
| BSR/BSF23,23T,23G-HC | R834E-130 | 4 | R8429-060 | 1set(16ea) | R836A-070 | 1set(4ea) |
| BSR/BSF49,49T,49G-HC | R834E-130 | 4 | R8429-080 | 1set(32ea) | R836A-050 | 1set(8ea) |
| BSR/BSF72,72T-HC | R834E-140 | 6 | R835A-020 | 1set(48ea) | R836A-060 | 1set(12ea) |
| BLUR/BLUF28-HC | R834F-200 | 4 | R835A-110 | 1set(10ea) | R834G-080 | 1set(2ea) |
| BLPT/BLMT28-HC | R834F-200 | 4 | R835A-110 | 1set(10ea) | R834G-080 | 1set(2ea) |
| BLUR/BLUF36-HC | R834F-200 | 4 | R835A-130 | 1set(18ea) | R834G-090 | 1set(4ea) |
| BLPT/BLMT36-HC | R834F-200 | 4 | R835A-130 | 1set(18ea) | R834G-090 | 1set(4ea) |
| BLUR/BLUF48-HC | R834F-200 | 4 | R835A-130 | 1set(18ea) | R834G-100 | 1set(4ea) |
| BLPT/BLMT48-HC | R834F-200 | 4 | R835A-130 | 1set(18ea) | R834G-100 | 1set(4ea) |
| BLUR/BLUF60-HC | R834F-200 | 4 | R835A-130 | 1set(18ea) | R834G-110 | 1set(4ea) |
| BLPT/BLMT60-HC | R834F-200 | 4 | R835A-130 | 1set(18ea) | R834G-110 | 1set(4ea) |
| BLUR72-HC | R834F-200 | 4 | R835A-150 | 1set(26ea) | R834G-120 | 1set(6ea) |
| BLPT/BLMT72-HC | R834F-200 | 4 | R835A-150 | 1set(26ea) | R834G-120 | 1set(6ea) |
| BLUR/BLPT/BLMT/28-D2-HC | R834F-200 | 4 | n/a | | n/a | |
| BLUR/BLPT/BLMT/48-D4-HC | R834F-200 | 4 | n/a | | n/a | |
| BLUR/BLPT/BLMT/60-D4-HC | R834F-200 | 4 | n/a | | n/a | |
| BLUR/BLPT/BLMT/72-D6-HC | R834F-200 | 4 | n/a | | n/a | |

** Four screws (M6) are provided per each caster(R834F-200) of table unit.
** Keys for door locks are in manual packet. (Reach-ins only)

**3) Assembling casters:**

(1). Reach-ins (Figure3): Install casters in the bottom rails assembly on the bottom of the unit. It is important in order to achieve maximum strength and stability of the unit that you ensure that each caster is securely tightened with a 3/4" (19mm) open-ended wrench. Casters with brakes Must be installed in front. and the casters must be in contact firmly with the bottom rails of the unit.

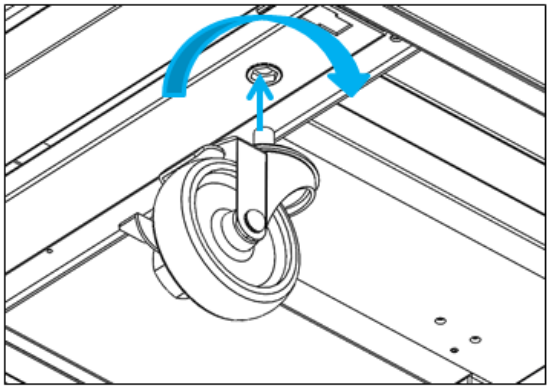


Figure 3

(2) Undercounter and Tables (Figure4): Install casters in the bottom rails assembly on the bottom of the unit with 4 M6 bolts for each caster. This is required in order to achieve maximum strength and stability of the unit. Casters with brakes Must be installed in front and the casters must be in contact firmly with the bottom rails of the unit.

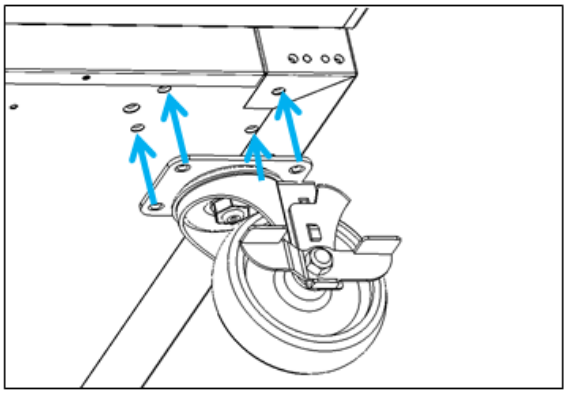


Figure 4

**4) Leveling:**

Proper leveling of your Blue Air unit is critical to operating success. Effective condensate removal and door operation will be effected by leveling.

1) Reach Ins; The unit should be leveled front to back and side to side with a level. For unit with casters Models: Four shims have been provided in the caster package for leveling unit with casters units positioned on uneven floors. Shims must be positioned between rail end and bearing race.

- If the cabinet is not level, use a 3/4" (19mm) open-end wrench to turn the anchoring bolt under the bearing race counter-clockwise until the cabinet is level.
- Install the desired number of shims, making sure the slot of the shim is in contact with the threaded stem of the caster.
- If more than one shim is used, turn the slot at a 45° angle at least so they are not in line.
- Turn the anchoring bolt clockwise with a 3/4" (19mm) open-end wrench to tighten and secure the caster
- Ensure that the drain hose or hoses are positioned in the condensate water pan.
- Untangle plug and cord from unit (do not plug unit into power supply while leveling).
- The unit should be placed close enough to the electrical supply so that the extension cords are never used.

**Warning**: Warning Compressor warranties are void if the unit is more than 6-1/2 ft. (2m) from plugin connection.

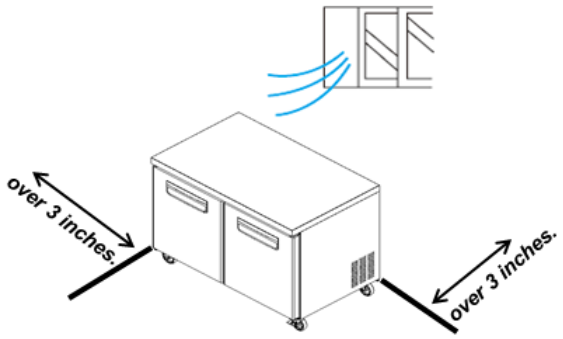
**Caution**
To avoid damage to lower rail assembly, raise unit slowly and carefully to upright position.

2) Table Units: The unit should be leveled front to back and side to side as shown

**5) 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+),

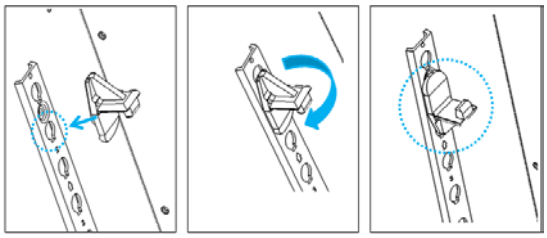
**Warning**: Warranty is void if ventilation is insufficient.

**6) Space clearance:**
Ensure air circulation around unit




**7) Assemble shelf clips :**

- Install all the shelf clips before installing the shelves.
  1) Put the tap back side of clip into the hole of the pilaster.
  2) Rotate the clip with 180 degree.



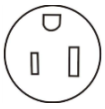
- install the clips as shown above then install shelves.

**7) 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 ensures 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 depending on unit
1) NEMA Plugs
NEMA-5-15R, 115V/60/1



2) Make sure the power cord is connected to the proper voltage. (Rated ±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"

### 8) 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: "

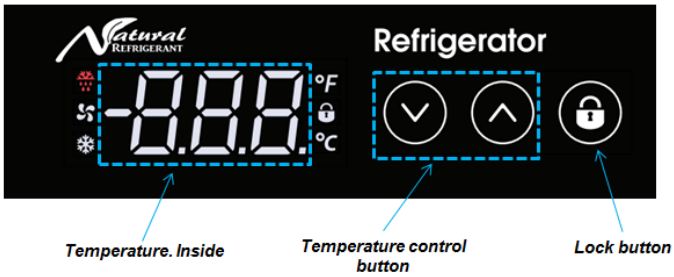
1) Make sure the electrical installation complies with national, state, and local codes.
2) Make sure the circuit is properly grounded.
3) Check circuit for proper voltage at receptacle.
4) Make sure that the wire gauge and breaker sizes are correct and comply with the minimum allowance for voltage drops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

## 3. Operation Guide

### 1) Temperature control range of appliances:

| MODEL | Temperature |
|---|---|
| BSR23/23T/23G-HC | Hold 33 F ~ 38 F (0.5℃ ~ 3.3℃) |
| BSR49/49T/49G-HC | Hold 33 F ~ 38 F (0.5℃ ~ 3.3℃) |
| BSR72/72T-HC | Hold 33 F ~ 38 F (0.5℃ ~ 3.3℃) |
| BSF23/23T-HC | Hold -10 F (-23.3℃) |
| BSF49/49T-HC | Hold -10 F (-23.3℃) |
| BSF72/72T-HC | Hold -10 F (-23.3℃) |
| BLUR28,36,48,60,72-HC | Hold 33 F ~ 38 F (0.5℃ ~ 3.3℃) |
| BLPT28,36,48,60,72-HC | Hold 33 F ~ 38 F (0.5℃ ~ 3.3℃) |
| BLMT28,36,48,60,72-HC | Hold 33 F ~ 38 F (0.5℃ ~ 3.3℃) |
| BLUF28,36,48,60-HC | Hold -10 F (-23.3℃) |

### 2) Operations




- Connect the power to the unit, the display panel will light up, and the compressor will begin to run.
- The compressor is automatically cycled by the electronic controller.
- The interior light is activated by the door switch when the door is open. (applies only to reach-in models)
- Evaporator fan motors will run after all doors are completely closed. (applies only to reach-in models)

### 3) How to set the temperature

- Touch the lock button for 3 seconds to adjust the temperature.
- Adjust the temperature to the value you desire by touching the or buttons.
- When you have finished adjusting the settings, leave it for 3 seconds. Then the changes will be applied.

☞ **Default set temperature**

- Refrigerator(Cooler) : 35°F(2°C)
- Freezer : 0°F(-18°C)

| | |
|---|---|
| | Icon and "DF" will show up while defrost cycle. |
| | Icon will show up when evaporator fan(s) are in operation |
| | Icon will show up when compressor is in operation |
| °F °C | Icon will show up either Celsius or Fahrenheit depending on operation setting. |
| | Buttons to adjust setting temperature. |
| | Icon is used to unlock the buttons. |

# 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.

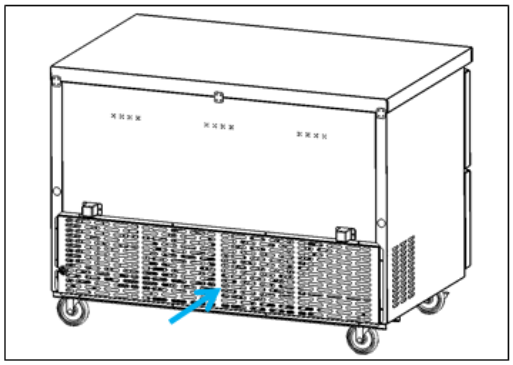
- Screwdriver and Vacuum cleaner
- N2 or CO2 Tank
- Stiff bristle Brush

**Cleaning the condenser coil**

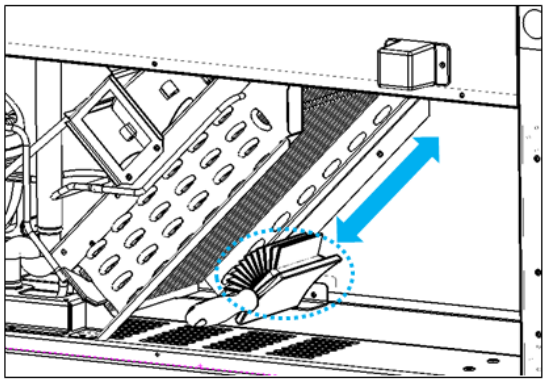
**1) Table units:**

• Disconnect power to unit

• Take off rear cover at the bottom rear by removing screws (only rear table unit). Do not bend or pinch tubes and wires.



• Clean off accumulated dirt from condensing coil and fan blades with a stiff bristle brush.

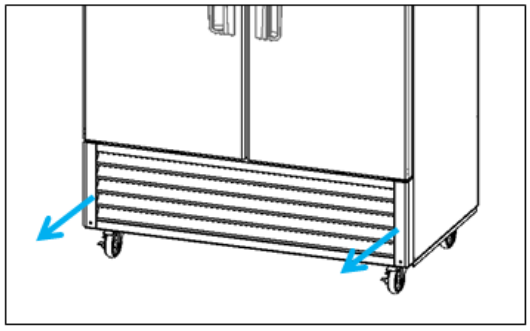


- Vacuum dirt from the condenser coil after brushing.
- Reinstall the rear cover in the reverse order of disassembly. Make tighten all screws.
- Plug the unit to power and check if compressor and fan is working.

**2) Reach ins (Bottom mounted compressor unit):**

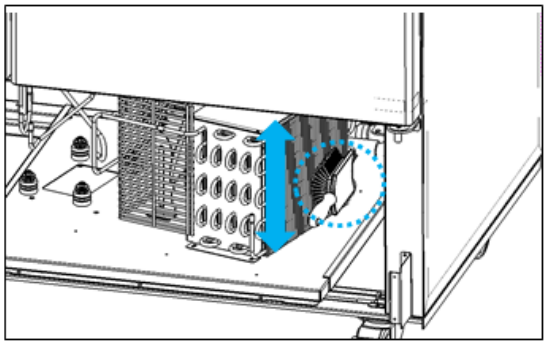
• Disconnect power to unit

• Take off grille at the bottom front by removing screws. (only bottom mounted compressor units).



- Unscrew the base of the compressor and pull it out carefully until you have enough space to clean condenser coil. Do not make bend or pinch tubes and wires.

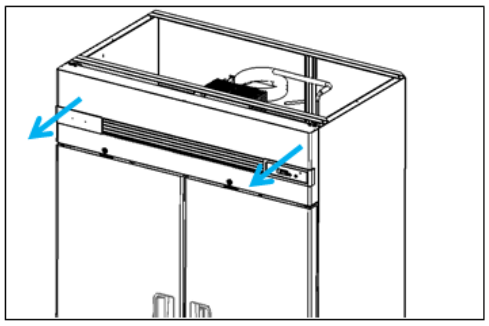
• Clean off accumulated dirt from condensing coil and fan blades with a stiff bristle brush.



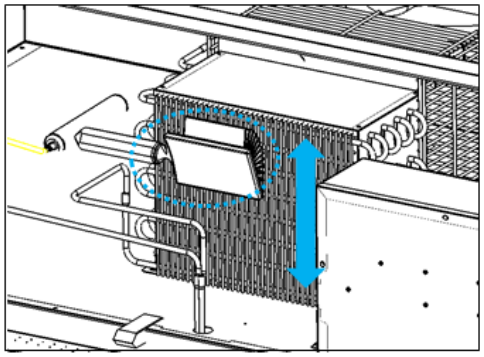
- Reinstall the base and grille in the reverse order of disassembly. Make Tighten all screws.
- Plug the unit to power and check if compressor and fan is working.

**3) Reach ins (top mounted compressor unit):**

• Take off top grille at the bottom by removing screws (only reach-in top mounted compressor model)



• Clean off accumulated dirt from condensing coil and fan blades with a soft brush.



• Reinstall cover onto unit. Make tighten all screws.
• Plug the unit to power and check if compressor and fan is working.

**4) Cleaning the cabinet.**

⚠ To reduce the risk of electric shock, unplug before cleaning or service"

A. Cleaning the interior and exterior
   • The interior and exterior of the unit can be cleaned using warm water with soap.
   • Do not use an abrasive cleaner because it will scratch the surface.
B. Cleaning the gasket
   • The door gasket should be cleaned frequently to maintain proper sealing.
   • Use warm water and a mild soap.
C. Cleaning the evaporator
   • If you need to clean the evaporator, please contact the qualified service technicians.
D. Check after cleaning
   • Check the unit again for safety.
   • Check if the unit is operating properly.

**Tips that help prevent rusting on stainless steel**

Use soft cloths or plastic scouring pads the will not harm the stainless steel's passive layer.

• Use the correct cleaning tools.
When cleaning your stainless steel products that make sure to use non-abrasive.

• Cleaning along stainless steel finish line.s
Always scrub parallel to visible lines on stainless steels. Use a plastic scouring pad or soft cloth when you cannot see the grain.

• Use the cleaners that are either Alkaline, Alkaline chlorinated or Non Chloride based.
Avoid cleaners containing quaternary salts as they can attack stainless steel, causing pitting and rusting.

• Water Treatment.
It is recommended to use soft water when possible to reduce deposits. Installation of certain filters can remove corrosive and distasteful minerals.
Talk to a water treatment specialist if you are not sure of the proper water treatment.

• Clean your equipment frequently

## 5. Troubleshooting

| 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 3 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 |

*** A water-flowing sound can be heard when the unit is operating. This is the sound of refrigerant flowing.*

*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*