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Franke New Equipment Limited Warranty

Franke Foodservice Systems ("Franke") warrants new equipment manufactured in Franke's own facilities and installed in the United States and Canada to be free of defects due to poor materials or workmanship for the period of time listed below (following the date of original installation):

Franke-Manufactured Equipment

- Stainless Steel Surfaces – Life of the equipment
- Compressor -- 5 Year Extended Warranty, as detailed below
- All Other Components – 1 Years Parts and Labor

5-Year Extended Compressor Warranty

- One Year from Date of Installation – Parts & Labor
- 2nd through 5th Year from Date of Installation – Parts only

  In accordance with the compressor manufacturer's policy, the serial number plate affixed to the compressor must be returned with the service invoice before reimbursement will be made.

Exclusions. Certain Franke parts that are expendable by nature and that need to be replaced frequently may not be covered. Franke is not liable under these warranties for repairs or damages due to improper operation, attempted repairs or installation by unauthorized persons, alterations, water quality, abuse, fire, flood or acts of God. Additionally, this warranty may be voided in the case of:

- Failure to follow Franke instructions for use, care or maintenance
- Removal, alteration or defacing of the Franke-affixed serial number

This warranty is conditional upon Franke receiving notice of any defect subject to this warranty within thirty (30) days of its original discovery by the Buyer.

Other Equipment (Not Manufactured by Franke)

Equipment not manufactured by Franke (commonly known as "buyouts" or purchased goods) and manufactured by other entities is covered by the warranties, if any, of such third-party manufacturers. Where such third party manufacturers provide warranties on any or all portions of said "buyouts," Franke agrees to transfer all such warranties to the Buyer.

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Franke Service Commitment

Service Commitment

Franke Foodservice Systems' Technical Support Department and its third-party Service Network are committed to meeting the unique service needs of restaurant operators. We strive to provide the following response times to service requests for Franke-manufactured equipment:

1. Provide contact with the customer…
   - Within 30 minutes of request for service during normal business hours
   - Within 90 minutes after normal business hours (including weekends)
2. Perform service visit
   - The same day for emergency service*
   - Within 24 hours for standard service
3. Target a 90% "first call" fix rate
4. Provide 90-day warranty on service performed

**For the purposes of this warranty, "emergency" is defined as an equipment operating condition that poses an immediate risk to the safety of restaurant workers or customers.*

This response time breakdown applies throughout the week and weekend. Due to varying customer locations, and varying service agent locations and schedules, response rates may occasionally be extended. In these situations, Franke Technical Support will work directly with the customer to find mutually suitable options. Franke reserves the right to use service agents outside of the stated Service Network.

Service Network - United States and Canada

Franke fully supports and is a member of the National Service Cooperative ("NSC"), the leading independent provider of factory-authorized service in North America. Franke provides 24-hour, 7-day response to customer service requests through its own Call Center and that of the NSC.

NSC NATIONAL SERVICE COOPERATIVE

Whenever possible, Franke selects service agents who belong to the Commercial Food Equipment Service Association. This trade association currently has more than 450 members representing the U.S., Canada, Mexico and Puerto Rico.

When Franke cannot select a CFESA member, it nonetheless adheres to the CFESA standard for qualified service agents in North America. Among them are:

- 24 Hour emergency service
- Factory authorized warranty service
- Factory trained and certified technicians
- OEM parts availability
- System for communication with field technicians

Performance of service agents, including their parts stocking abilities, call response time, service rates and customer satisfaction are monitored by the Franke Field Service Department via online, written and phone surveys. Franke Technical Support updates this Service Network list annually.

Contact Information: Franke Technical Services

1-800-5FRANKE (1-800-537-2653) and select option 5) TechSupport@Franke.com

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The Problem	Possible Cause	What To Check & Do
Switch ON but Power Not "ON"	Power not available to unit?	Breaker OK? Yes = Continue; No = Call electrician
		Receptacle OK? Yes = Continue; No = Call electrician
	Power cord OK?	Yes = Continue; No = Replace power cord set. Per ***Section 2.12***.
Main Power "ON" But Compressor Does Not Run	Compressor thermal overload tripped?	Unplug refrigerated case power cord for 1 hour, then retry. If problem reoccurs: 1. Ensure air filter is maintained per PM Service Instructions 2. Ensure condenser coil is clear of debris and cleaned, per PM Service Instructions
	Power disconnected to temperature controller	Check input voltage to temperature controller. Replace wiring harness if damaged.
	Temperature controller disconnected from condensing unit	Check output voltage at temperature controller. Replace wiring harness to Condenser, if damaged
	Sensor cable is damaged or disconnected from controller to refrigeration compartment	Connect or replace sensor cable per ***Section 2.10***
	Temperature controller is defective	Replace defective component per ***Section 2.9*** *or* ***2.9A***
Compressor Is Running But Case Does Not Cool To 34 to 40° F	Set point too high	Adjust thermostat setting, per ***Section 3.1***
	Door is being latched or blocked open for extended periods.	Discuss case loading and use procedures with unit manager and crew.
	Door frame damaged or thermo-pane seal has failed	Inspect glass doors and door tracks for damage. If needed, replace per ***Section 2.2***
	Evaporator fan not functioning	Check wiring and inspect fan for blockage. Replace evaporator fan motor if necessary, per ***Section 4.3***
	Evaporator coil blocked with ice	Check Troubleshooting Problem: Evaporator Is Blocked With Ice. ***Page 2***
	Refrigerant charge is not correct	Inspect service valves, lines, joints and components for signs of leaks, kinks or restrictions.
		Service condensing unit per ***Section 4.6***
	Condensing unit does not start	Inspect and test condenser electrical components for defects (start-capacitor, run-capacitor, start-relay, condenser fan, compressor…)
Evaporator Is Blocked With Ice.	Thermostat set point is too low.	Adjust thermostat setting, per ***Section 3.1***.

Continued…

The Problem	Possible Cause	What To Check & Do
Evaporator Is Blocked With Ice… *continued*.	Door is being latched or blocked open for extended periods.	Defrost coil. Discuss case loading and use procedures with unit manager and crew.
	Door frame is damages or glass thermo-pane seal has failed.	Inspect glass doors and door tracks for damage. If required, replace per ***Section 2.2***.
	Evaporator fan is not functioning.	Check wiring and fan for blockage. Replace evaporator fan motor, if necessary per ***Section 4.3***.
	Automatic defrost function of electronic control is not working.	Check defrost operation buy pressing and holding bottom button on digital display. If display does not go to '**dEF**' check defrost sensor for damage or improper placement.
	Defrost sensor is not properly placed in coil.	Check defrost sensor location at rear-center of coil. In necessary, move sensor to area of greatest frost buildup.
	Refrigeration charge is not correct.	Inspect service valves, lines, joints and components for signs of leaks, kinks or restrictions. If damage or leaks are found, repair or replace components per ***Sections: 4.7, 4.8*** *or* ***4.9***.
Compressor is cooling and display is reading in normal range but ON-times are short and actual case air temperature is NOT that cold.	Sensors not mounted correctly.	Make sure that air and coil sensors are connected and mounted correctly, per ***Sections 2.10*** *and* ***2.10A***.
	Sensors not plugged into controller properly.	
	Sensors are reversed.	Make sure that sensors are not reversed with air sensor in coil and coil sensor in air sensor location.
	Sensors or controller is/are failing.	Check sensors and controller. Replace as needed per ***Sections: 2.9A, 2.10*** *and/or* ***2.10A***.

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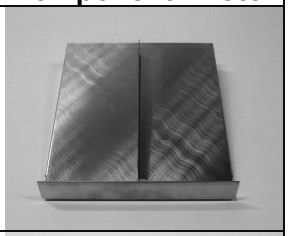
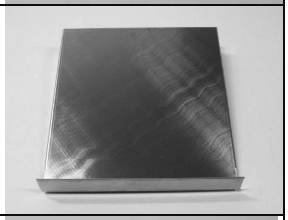
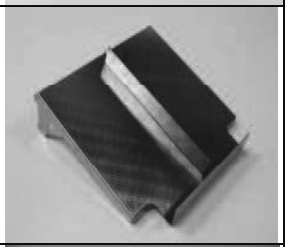
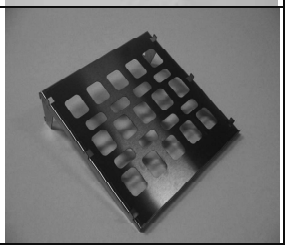
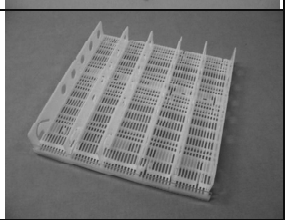
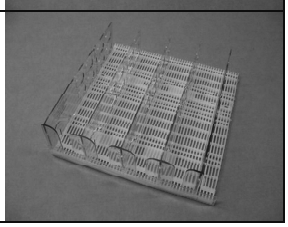
Old Style Stainless Steel & Plastic Shelf System Components

Part No. & Description	Product/Display Application	Component Photo
P/N: 18001770 -- Stainless steel bottom shelf with center divider and sloped design with front stop, to allow displayed product to roll or slide forward.	Horizontal [lay-down] stocking of plastic or glass beverage bottles or cans; Flat stocking of plastic or foam salad containers or other pre-packaged product.	
P/N: 17006047 -- Stainless steel bottom shelf with sloped design with front stop to allow displayed product to roll or slide forward.	Flat stocking of plastic or foam salad containers or other pre-packaged product; or to support White Plastic Shelf Grate Part Number 19001001.	
P/N: 18001771 -- Stainless steel hanging shelf with center divider, bottle access cutout and sloped design with front stop allow displayed product to roll forward.	Horizontal [lay-down] stocking of plastic or glass beverage bottles; Flat stocking of plastic or foam salad container or other pre-packaged product.	
P/N: 17006146 -- Stainless steel hanging shelf with perforated bottom and vertical tabs to secure plastic dividers. [Shelf is perforated to provide good air flow.]	Designed to support and work with Part Number 190001001 White Plastic Shelf with tall Clear Plastic Dividers.	
P/N: 19001001 -- White plastic shelf grate with adjustable vertical plastic dividers forming five separate display rows.	For standing display of milk cartons, juice boxes and other small containers. It is typically set on the Solid Stainless Steel Bottom Shelf.	
P/N: 19001000 -- White plastic shelf grate with taller, clear plastic adjustable dividers forming four separate display rows.	For standing display of water or other beverage bottles. It is set on the perforated Stainless Steel Hanging Shelf.	

New Style Wire Form Shelf System Components

Franke Bottled Beverage Refrigerators (BBR-36 & BBR-45 Models) now ship from the factory with wire display shelf components assembled but shipped in a separate cardboard carton, ready for installation.

Wire Shelving Kit Components & Part Numbers:

BBR-36" – New Unit Wire Shelf Kit No. 19001889		
BBR-36" – Retrofit Wire Shelf Kit No. 18002674 *[* Includes]*		
Part No.	**Description**	**Quantity**
19001595	Full 36" Wide Upper Shelf	1
19001594	Sectional Bottom Shelf	2
19001380	Upper Shelf Adjustable Dividers	8
19001000	Bottom Shelf Adjustable Dividers	6
*17007299	Upper Shelf Mounting Brackets	3
*3586580	Shelf Mounting Bracket Screws	12
19001381	Assembly/Setup Instructions	1

BBR-45" – New Unit Wire Shelf Kit No. 19001888		
BBR-45" – Retrofit Wire Shelf Kit No. 18002378 *[* Includes]*		
Part No.	**Description**	**Quantity**
19001378	Full 45" Wide Upper Shelf	1
19001377	Sectional Bottom Shelf	3
19001380	Upper Shelf Adjustable Dividers	12
19001000	Bottom Shelf Adjustable Dividers	7
*17007299	Upper Shelf Mounting Brackets	4
*3586580	Shelf Mounting Bracket Screws	16
19001381	Assembly/Setup Instructions	1

Retrofit of Wire Shelf System

For field replacement of an existing Stainless Steel & Plastic Shelf System, obtain Wire Shelving Kit No. 18002674 for 36" wide BBR or Kit No. 18002378 for 45" wide models. Retrofit Kits include detailed installation instructions: Doc. No. 19001381.

Basic Repair Parts List

[Also See Section 2.1 – For Truck Stock List]

BBR - 36	BBR - 45	Description	Qty.
19001266	19000992	Sliding Glass Door Frame	1 ea.
19001267	19000993	Inner/Left Door	1 ea.
19001268	19000994	Outer/Right Door	1 ea.
3126151	3126151	Power ON Switch	1 ea.
19000962	19000962	In-case Thermometer	1 ea.
19001164	19001164	Case Light Fixture, with Bulb 1)	1 ea.
--	19000023	Danfoss Mechanical Thermostat 2)	1 ea.
19001104	19001104	Digital Temperature Control 2)	1 ea.
19001172	19001172	Digital Temperature Sensor	1 ea.
19000470	19000470	Digital Defrost Sensor	1 ea.
19000436	19000436	Remote Temperature Display	1 ea.
19001171	19001171	Remote Display Cable	1 ea.
19000958	19000958	Condensate Collection Heater	1 ea.
18001787	18001787	Condensate Collection Assembly	1 ea.
3589854	3589854	Condenser Fan Motor	1 ea.
19001293	19000454	Evaporator Fan Motor	1 ea.
19000998	19000998	Evaporator Coil	1 ea.
600024	600024	Start Capacitor	1 ea.
19001083	19001083	Start Relay	1 ea.
19001079	19001079	Compressor, Danfoss TF4	1 ea.
19000959	19000959	Condensing Unit, ¼-HP	1 ea.
19001189	19000497	Thermostatic Expansion Valve	1 ea.
19000282	19000282	8’ cord set with plug	1 ea.
19001328	19001328	Sliding Door Roller Assembly	4 ea.
19001329	19001329	Door Hold-Open Latch	2 ea.
19002321	19001330	Door-Close Spring Assembly	2 ea.
19002322	19001331	Bumper Gasket for Outer/RH Door	1 ea.
19002323	19001332	Bumper Gasket for Inner/LH Door	1 ea.
19002324	19001333	Sealer Gasket for Outer/RH Door	1 ea.

NOTES:

1) Bulb for light fixture is a T5 14W, FH 14W/840 HE, and available locally.

2) Models built prior to May 2007 have an electro-mechanical thermostat. Newer models have digital temperature controls.

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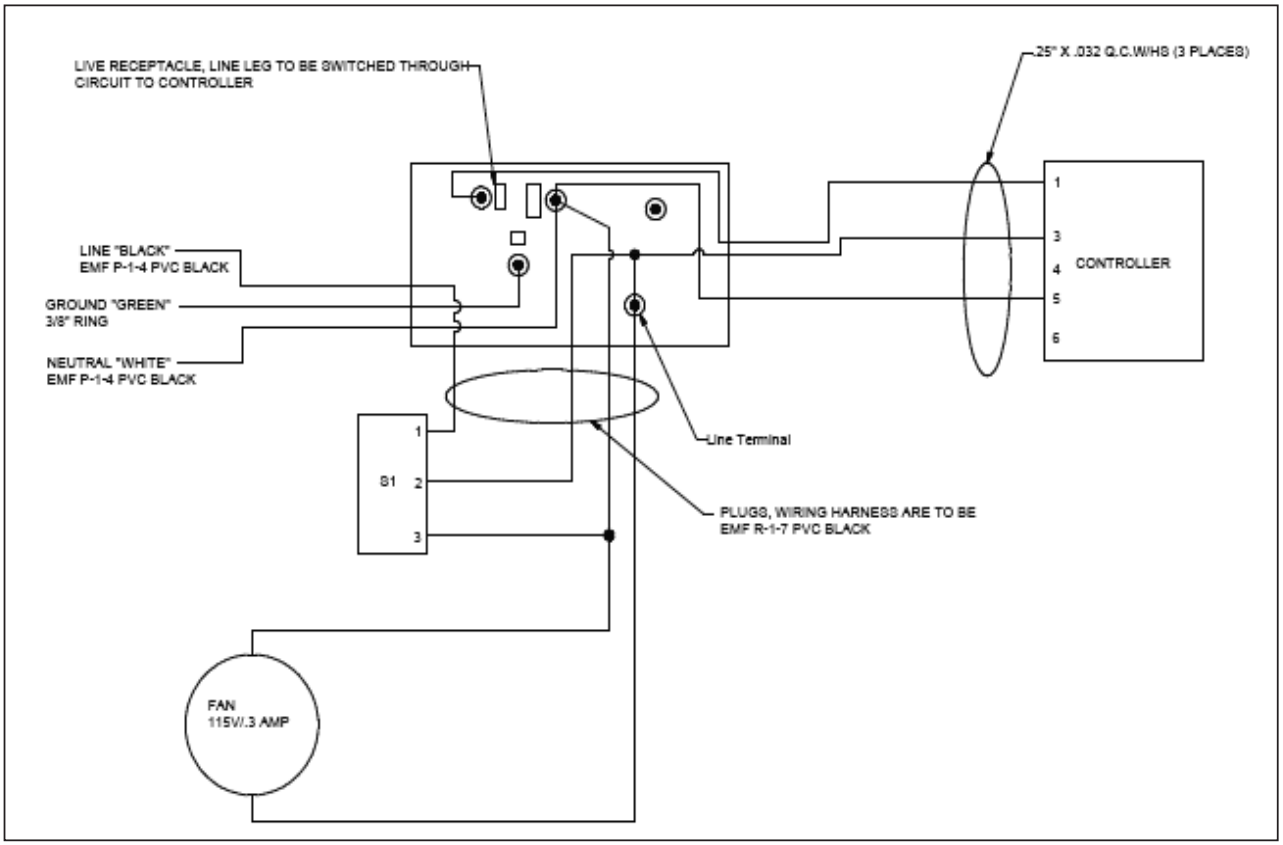
BBR Wiring Harness



2.1 An Introduction To BBR Service Manual

The Basics:

1) Technicians should be authorized to work on Franke Equipment and be **EPA Certified** and qualified to diagnose and repair refrigeration equipment.
2) The Franke Bottled Beverage Dispenser [BBR] is a wall mounted display refrigerator designed to provide easy crew access to beverages and chilled prepared foods.
3) This unit operates on 120-volt power and is provided with a grounded plug and 8' power cord.

WARNING:
Unplug unit from its120-volt power source whenever servicing electrical components or removing side service access panels. Failure to unplug unit may result in electric shock, burns or death.

4) The BBR refrigeration system is charged with 16 ounces (.45 kg) of **ozone-safe R404A refrigerant**. See unit Data Plate and use site glass provided, when filling.
5) Only use R404A refrigerant when recharging this unit.
6) Always verify proper unit cleaning before replacing or repairing components. [See Section 4.1]

Suggested [On-Truck] Repair Parts:
We suggest the following to ensure a first-trip fix of the BBR:

BBR-36	BBR-45	Description	Qty.
19001266 &	19000992	Sliding Glass Door Frames	1 ea.
19001267 &	19000993	Inner/Left Doors	1 ea.
19001268 &	19000994	Outer/Right Doors	1 ea.
3126151		Power ON Switch	1 ea.
19000962		In-case Thermometer	1 ea.
19001164		Case Light Fixture, with Bulb[1)]	2 ea.
--	19000023	Danfoss Mechanical Thermostat[2)]	1 ea.
19001104		Digital Temperature Control	1 ea.
19001172		Digital Temperature Sensor	1 ea.
19000470		Digital Defrost Sensor	1 ea.
19000436		Remote Temperature Display	1 ea.
19001171		Remote Display Cable	1 ea.
19000958		Condensate Collection Heater	1 ea.
18001787		Condensate Collection Assembly	1 ea.
3589854		Condenser Fan Motor	1 ea.
19001293 &	19000454	Evaporator Fan Motors	1 ea.
19000998		Evaporator Coil	1 ea.
600024		Start Capacitor	1 ea.
19001083		Start Relay	1 ea.
19001079		Compressor, Danfoss TF4	1 ea.
19000959		Condensing Unit, ¼-HP	1 ea.

[Photo 1]

The BBR Unit Serial Number is located adjacent to the Model Number & Data sticker, which is on the left side, when facing unit.

🛠Tools Required:
[For Mechanical Systems Repair]

- 3/8" screw driver
- ¼" screw driver
- 1/16" "mini" screw driver
- 1/8" Allen/hex wrench
- 3/16" Allen/hex wrench
- 5/32" Allen/hex wrench
- 5 mm Allen/hex wrench
- 13 mm Allen/hex wrench
- 7/16" box/socket wrench
- Razor knife
- Needle nose pliers
- Small wire cutters
- Rubber mallet
- Plastic Wire Ties

[Also See Section 4.1A]

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Additional Suggested [On-Truck] Repair Parts:
We suggest the following to ensure a first-trip fix of the BBR:

BBR-36	BBR-45	Description	Qty.
19001189 &	19000497	Thermostatic Expansion Valves	1 ea.
19000282		8' cord set with plug	1 ea.
19001328		Sliding Door Roller Assembly	4 ea.
19001329		Door Hold-Open Latch	2 ea.
19002321 &	19001330	Door-Close Spring Assemblies	2 ea.
19002322 &	19001331	Bumper Gasket for Outer/RH Door	1 ea.
19002323 &	19001332	Bumper Gasket for Inner/LH Doors	1 ea.
19002324 &	19001333	Sealer Gasket for Outer/RH Doors	1 ea.

NOTES:

1. Bulb for light fixture is a T5 14W, FH 14W/840 HE, and available locally.
2. Models built prior to May 2007 have an electro-mechanical thermostat. Newer models have digital temperature controls.

2.2 Glass Sliding Door Replacement

For Doors On:	BBR-36 Models	BBR-45 Models
Outer/Right:	P/N 19001268	P/N 1900994
Inner/Left:	P/N 19001267	P/N 1900993

When Should A Door Be Replaced?
The BBR Sliding Glass Doors are fabricated with sealed double thermal pane, tempered safety glass panels, for strength and to provide better insulating value. The Outer/Right or Inner/Left door should be replaced if:

- either inner or outer pane is cracked or broken;
- fog or condensate appears between the glass [The gas thermo-pane seal has broken.];
- If the plastic doorframe is broken, chipped or interferes with closing or sealing the door, **See Section 2.5**.

CAUTION
If door grass is broken, use gloves and caution when handling door. Ensure case is emptied and inspected for any broken glass. Inspect door tracks for any glass and use caution when disposing of all broken glass.

1) Remove door to be replaced by opening it enough to grasp both sides; lift door up into upper channel, pull bottom of door forward; pull door down and free of spring closing stud.
2) Remove new door from protective packaging.
3) Grasp new door with both hands; nose [left/right] top leading edge against spring closing stud and slid stud against spring pressure left or right until door top frame slides into top track.
4) Angle door bottom into bottom track and allow door to slide closed.

5) **Test** the new Glass Door by:
6) Slide OPEN that door, release it and allow it to close. Did closing spring roll it back and fully close door?
7) Check door seal against cabinet frame. Is the door square with the case frame? If doors do not seal against frame, **See Section 3.2 for instructions on adjusting door alignment.**

8) If door is functioning properly, return BBR to service.

[Photo 1]

To remove door lift up into upper track until bottom clears lower track then angle out, bottom-first.

[Photo 2]

The Door-Close Springs have a plastic stud that engages the leading top edge of each door.

[Photo 3]

Engage spring stud with top leading edge of door and push against spring tension until top of door slides into upper track.

🛠Tools Required:
- NONE Required

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2.3 Door Bottom Roller Replacement [Part No. 190001328]

When Should Door Rollers Be Replaced?
Each BBR Sliding Glass Door rolls on two metal rollers set into the bottom doorframe. **NOTE**: Before replacing, inspect bottom door track for broken glass or any debris that may interfere with door movement. If doors are difficult to roll back or if plastic doorframe is being gouged or abraded by door bottom, inspect and replace one or both Door Bottom Rollers.

1) Remove door to be inspected by opening it enough to grasp both sides; lift door up into upper channel, pull bottom of door forward; pull door down and free of spring closing stud.
2) Turn the door bottom UP and inspect both metal rollers. They should roll freely with little resistance.
3) If one or both roller is corroded or will not roll freely, replace with P/N 190001328.
4) Use a ¼" nut driver to remove the two lock nuts securing the damaged door roller assembly.
5) Remove the wheel assembly. **NOTE:** There may be one or more small metal spacers on the screw studs. Leave them in place.
6) Place new door bottom roller assembly in bottom frame slot (on screw studs) and secure using the two ¼" lock nuts just removed. [Repeat steps 4 & 5 if replacing <u>both</u> rollers.]
7) Turn door right-side-up and nose [left/right] top leading edge against spring closing stud and slide stud against spring pressure [left or right] until door top frame slides into top track.
8) Angle door bottom into bottom track and allow door to slide closed.

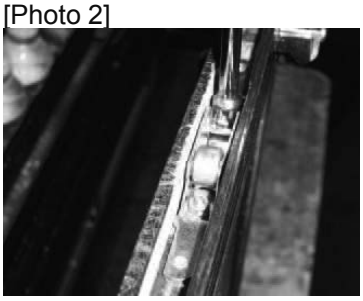
9) **Test** the replacement roller(s) by:
10) Slide OPEN door, release it and allow it to close. Did the door roll back freely and fully close?
11) Check door seal against cabinet frame. If doors do not seal against frame, **see Section 3.2 for instructions on adjusting door alignment.**

12) If door is functioning properly, return BBR to service.

[Photo 1]

To remove door lift up into upper track until bottom clears lower track then angle out, bottom-first.

[Photo 2]



Use a ¼" nut driver to remove and replace two lock nuts that secure each door bottom roller.

[Photo 3]

To replace door engage spring stud with top leading edge of door and push against spring tension until top of door slides into upper track.

🛠Tools Required:
- ¼" nut driver

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2.4 Glass Door Hold-Open Latch Replacement [Part No. 19001329]

A simple Door Hold-Open Latch is used to prop open either spring-loaded auto-close door, when loading or unloading product. You lift it up when door is near full OPEN position and insert tip in top channel slot or depression to hold door.

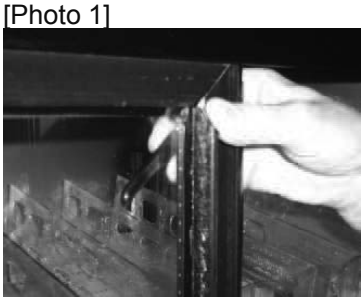
To replace this latch:

1) Remove door with broken or missing stop by opening it enough to grasp both sides; lift door up into top channel, pull bottom of door forward; pull door down and free of spring closing stud.
2) Place door on flat, clean work surface. Be careful not to mare or scratch glass.
3) Using medium Phillips screwdriver, remove screw and broken end of latch.
4) Take new stop [P/N: 19001329] and screw into hole in inside door frame
5) Grasp new door with both hands; nose [left/right] top leading edge against spring closing stud and slid stud against spring pressure left or right until door top frame slides into top channel.
6) Angle door bottom into bottom track and allow door to slide closed.

7) **Test** the replacement of the Door Hold-Open Latch by:
8) Slide open the door, flip up plastic latch to engage slot or depression in upper door channel. Release door. Does it stay open?
9) Slide door a little further open, against spring tension. Latch should disengage and swing down, out of the way.

10) If latch is functioning properly, notify manager of fix.

[Photo 1]



A plastic latch is attached to the top/inside of each door leading edge. It swivels up to engage a depression or slot in upper door channel.

[Photo 2]

The Door-Close Springs have a plastic stud that engages the leading top edge of each door.

[Photo 3]

Engage spring stud with top leading edge of door and push against spring tension until top of door slides into upper track.

🛠Tools Required:
- Medium Philips Screwdriver

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2.5 Door Frame Replacement [Part No. 19001266 – BBR-36 Models] [Part No. 19000992 – BBR-45 Models]

When Should The Door Frame Be Replaced?
The BBR Sliding Glass Doors should open easily and automatically close when released. Both doors should seal squarely against the left or right door jam. The Door Frame should be replaced if:

- If the plastic door frame is broken, chipped or interferes with closing or sealing the door.
- If either door doesn't close square with side jam, try adjusting the door **per Service Manual Section 3.2.**

1) Turn OFF power at switch and unplug power cord from 120-volt outlet.
2) Remove all refrigerated product from case. **IMPORTANT**: Any perishable foods including milk should be placed in another refrigerator.
3) Remove both glass doors. Lift up and pull out door bottom, then pull down and out of upper track, releasing auto-close spring stud.
4) Remove all hanging shelf components to provide more room to work.
5) Use a medium Phillips screwdriver to remove the six door frame mounting screws: three in top track & three in bottom track.
6) Cut the silicon sealant bead applied around the plastic door frame where it meets cabinet.
7) Remove old black plastic door frame from unit front.
8) Obtain and orient new Door Frame [P/N 19001266 (BBR-36) or P/N 19000992 (BBR-45)] with the larger flange OUT and the spring door closers on top/UP.
9) Insert new plastic door frame in cabinet opening. **NOTE**: Door frame will flex to help with press fit. Make sure outer frame flange is flush and square with cabinet front.
10) Use power drill with 1/8" [3 mm] metal bit to drill six new holes through plastic frame track and stainless steel below. Locate one hole 3" [76 mm] from each side and on-center, in both top and bottom track.
11) Use self-tapping screws in all six holes to secure plastic door frame to cabinet.
12) Apply a smooth continuous bead of black silicone sealant to the full perimeter of both the inner and outer doorframe flange: top, sides and bottom. **IMPORTANT:** Take your time and ensure a neat continuous seal, to avoid condensate water leaks.

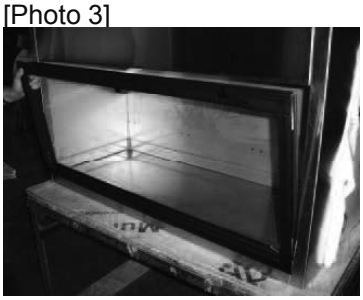
[Photo 1]

To remove doors lift up until bottom clears lower track then angle out, bottom-first.

[Photo 2]

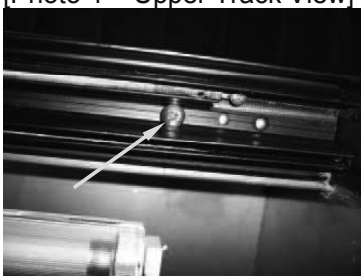
Remove the three screws in the bottom track and three in upper door track that secure frame.

[Photo 3]



Insert new frame into cabinet opening until flush and square.

[Photo 4 – Upper Track View]



Drill 1/8" holes through frame and stainless steel, then secure frame with self-tapping screws.

2.5 Door Frame Replacement - *Continued*

Test the replacement Door Frame:

13) Install both glass doors. Grasp door with both hands; nose [left/right] top leading edge against spring closing stud and slide stud against spring pressure [left or right] until door top frame slides into top track. Angle door bottom into bottom track and allow door to slide closed.
14) Slide OPEN door, release it and allow it to close. Did closing spring roll it back and fully close door?
15) Check door seal against cabinet frame. If doors do not seal against frame, **See Section 3.2 for instructions on adjusting door alignment.**

16) If both doors are functioning properly, return BBR to service.

🛠Tools Required:

- Medium Phillips Screwdriver
- Sharp bin knife or tile cutter
- Power Drill & 1/8" [6 mm] drill bit
- Black silicone sealant

[Photo 5– Upper Track View]

Locate new holes 2-3" out from left and right side of upper and lower track and one on-center.

[Photo 6]

Use silicon sealant on both inside and outside of door frame. Apply in a smooth continuous bead.

2.6 Display Light Fixture Replacement

[Fixture with Bulb – Part No. 19001164]
[Bulb – FH 14W/840 HE, T5 14W Cool White Florescent – *Available locally.*]

NOTE: The BBR Refrigerated Case is provided with a simple, top/front mounted florescent light fixture with a protective plastic bulb shield. This fixture was chosen because it is readily available through retail homecenters and hardware outlets, as well as Franke Authorized Service Providers.

To Replace Light Fixture:

1) Turn OFF power at switch and unplug power cord from 120-volt outlet.
2) Remove both glass doors. Lift up and pull out door bottom, then pull down and out of upper track, releasing auto-close spring stud.
3) Locate white plug on far-left side of florescent fixture. Grab plug firmly and pull straight down to unplug.
4) There are two metal clips that secure the fixture to the interior compartment top. Grasp fixture with two hands and gently tilt and disengage fixture from the clips.
5) Obtain new florescent fixture assembly [P/N 190001164], which includes the bulb and protective plastic shield. Remove from protective packaging, orient with plug pins on left side and snap into the two metal retaining clips. **NOTE:** Make sure fixture is centered in case.
6) Push plug back on left side socket pins on the fixture.
7) Cap connection opposite cord using cap from old fixture.

To Replace Florescent Light ONLY:

8) Follow Steps 1-4 above and place fixture on flat surface, with bulb facing up.
9) Slide the plastic bulb shield off the fixture. [It seats in shallow channels on each side of fixture.]
10) Gently grasp florescent bulb and rotate 90-degrees to disengage bulb end-pins.
11) Properly dispose of bad bulb and replace with new florescent bulb. Orient bulb end-pins, insert into fixture socket channels and rotate bulb 90-degrees to lock in.
12) Replace clear plastic bulb shield.
13) Snap fixture back into the two metal retaining clips.
14) Push plug back on left side socket pins on the fixture.

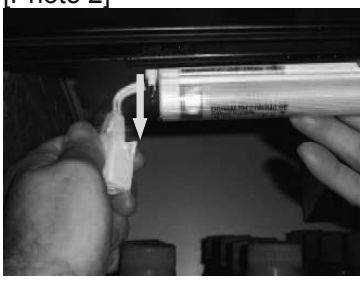
Test the replacement fixture and/or light:

14) Plug in power cord to 120-volt outlet and turn on Power Switch. Light should come on.
15) Replace both glass sliding doors.

[Photo 1]

To remove doors lift up until bottom clears lower track then angle out, bottom-first.

[Photo 2]



To remove fixture plug pull straight down.

[Photo 3]

Fixture is held in place with two metal clips.

[Photo 4]

Remove plastic shield to remove florescent bulb. Rotate bulb 90-degrees to remove from clips.

🛠 No Tools Required

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2.7 In-Case Thermometer Replacement [Part No. 19000962]

A simple analog thermometer is mounted just inside the right side glass door, so it can be read without opening the door.

If broken or damaged, this thermometer can be replaced by:

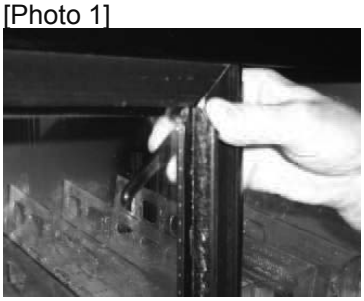
1) Roll back the right side door and use the plastic door-OPEN latch to keep it open. [Swing it up to engage slot in top track.]
2) Using a medium Phillips screwdriver, remove screw and the broken thermometer.
3) Take new thermometer [P/N: 19000962] and screw into mounting hole in right side of case, just inside doorframe. Position thermometer so it is vertical and parallel to the doorframe.
4) Roll right door further open to release latch and allow door to close.

5) **Test** replacement of thermometer by:
6) Look at thermometer to see if temperature starts to drop after the BBR door is closed.

7) If thermometer is functioning properly, notify manager of fix.

NOTE: This thermometer DOES NOT contain mercury. NO special precautions are required for disposal or handling, beyond caution in handling broken glass.

[Photo 1]

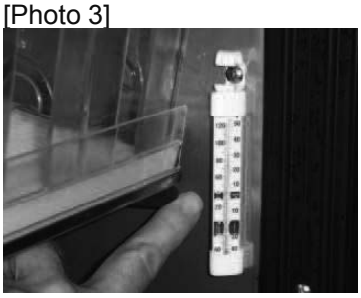


Use door-OPEN latch to secure door in full open position.

[Photo 2]

The thermometer is attached to the right front case wall, just inside the right side sliding door.

[Photo 3]



When functioning normally, with the door closed, the case temperature should be between 34 - 40° F.

🛠Tools Required:
- Medium Philips Screwdriver

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2.7A Front LED Temperature Display Replacement [Part No. 19000436]

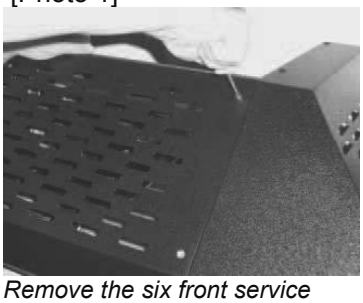
NOTE: BBR Models Manufactured after May 2007 include a front mounted LED Temperature Display.

1) Turn off power at switch and unplug power cord from 120-volt outlet.
2) Using a medium Phillips screwdriver, remove the six screws that secure the top/front service access panel. **NOTE:** Use ladder or a stable work platform to safely reach the service access panel.
3) Remove panel to gain access to rear of LED temperature display just below service panel opening.
4) From inside the case [back of digital display] carefully remove the two plastic double-pronged retainers that hold the temperature display to the cabinet front.
5) From the front, pull temperature display out to expose rear cable connector.
6) Take a small flat blade screwdriver and depress retaining tab on display that secures three-wire plastic connector to the wiring harness.
7) Obtain new Temperature Display [P/N 19000436] and reattach plastic connector to control. Make sure connector tab locks it in place.
8) Insert temperature display through cabinet cutout until bezel is flush with panel.
9) Replace the two plastic retainers to secure display to cabinet front. Insert prongs first until they provide spring tension against back of panel.
10) Replace service access panel and secure with the six Phillips screws removed earlier.

Test the new LED Temperature Display by:
11) Plug in unit power cord to 120-volt power supply.
12) Turn ON main power switch next to display.
13) The LED temperature display should show the current BBR compartment temperature, which should be in the range of 34 to 40° F, if the doors have been closed.

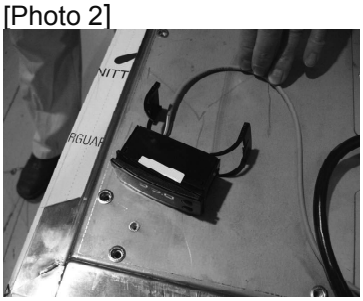
🛠Tools Required:
- Phillips Screwdriver
- 1/4" [6-7 mm] flat blade screwdriver

[Photo 1]



Remove the six front service access panel screws and set panel aside.

[Photo 2]



Remove black two-pronged plastic retainers from left & right side of temperature display.

[Photo 3]

Disconnect the display harness by levering tab on display to release plastic harness terminal.

[Photo 4]

LED Temperature Display in place.

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2.8 Power ON/OFF Switch Replacement [Part No. 3126151]

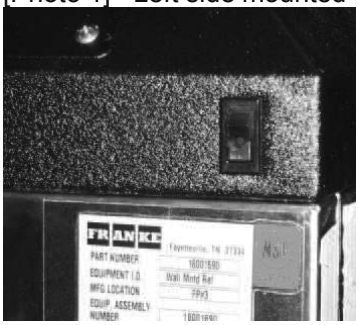
NOTE: Early model BBR Cases have the Power-ON Switch mounted on the left side, just below the service access panel. On newer models, the Power-ON Switch is front-mounted, next to the LED Temperature Display. The switch and basic replacement instructions are the same for all models.

1) Disconnect power at outlet. [Pull 120-Volt plug.]
2) Position a stepladder or stable work platform to access the top-left or front service access panel.
3) Using the Phillips screwdriver, remove the six screws that secure the vented, matt black left or front access panel.
4) Remove access panel and set aside.
5) Note and label the lead connections on switch before removing wire connectors. [Connections must be correct for LED indicator to light, when power is ON.]
6) Remove the terminal connections from the back of the Power ON/OFF Switch.
7) From the back carefully depress the plastic locking tabs on the top and bottom of the switch and push the switch out through the left side or front panel.
8) Take the new Power ON/OFF Switch [P/N: 3126151] and push it through the left or front panel opening until the top/bottom tabs lock it in place. Switch bezel should be flush with side/front panel.
9) Reconnect the three switch wires per your I.D. labels. [**NOTE:** If polarity of black wires is reversed, LED indicator will not function.]
10) Return the vented left or front access panel to the angled mounting position and install the six mounting screws.
11) Plug in unit power cord to 120-volt power supply.

Test the new Power ON/OFF Switch by:

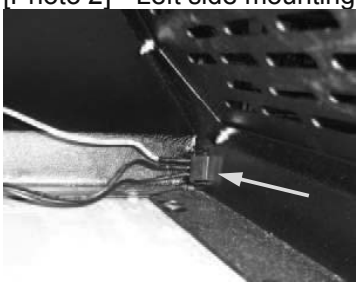
12) Switch ON the Power Switch. The integrated [red] pilot light should come on and you should hear the compressor start, after a short delay.

[Photo 1] - Left side mounted



Power-ON switch is located on front-left side of BBR case hood on older models.

[Photo 2] - Left side mounting



Remove black & white terminal leads then depress top & bottom plastic clips to remover power-ON switch from just below the left side access panel.

[Photo 3] – Front mounted

The Power ON switch is front mounted left of LED temperature display on newer models.

Tools Required:

- Medium Phillips screwdriver

2.9 Mechanical Thermostat Replacement [Part No: 19000023 – BBR-45 Models ONLY]

1) Turn OFF Main Power Switch before proceeding.
2) Disconnect power at outlet. [Pull 120-Volt plug.]
3) Position a stepladder or stable work platform to access the top left side and front [compressor] access panels.
4) Using the Phillips screwdriver, remove the six screws that secure the vented, front and left side access panels.
5) From the front, remove two black wire leads from the controller/thermostat.
6) From the left side, use the small Phillips screwdriver to remove the two screws holding thermostat to the interior panel or bulkhead.
7) Remove and save the insulating putty that plugs sensor hole into refrigerator cabinet.
8) Remove the old sensor from mounting clip in the evaporator fan compartment top.
9) Take new thermostat [P/N: 19000023] and mount to bulkhead using two screws removed earlier. Verify the new thermostat is set between 3-4.
10) Reconnect the two black wire leads to thermostat. Polarity is not critical.
11) Gently uncoil thermostat sensor and insert down through access hole and press into the retaining clip in the evaporator fan compartment top.
12) Take putty removed earlier and completely fill access hole and pinch around senor lead.

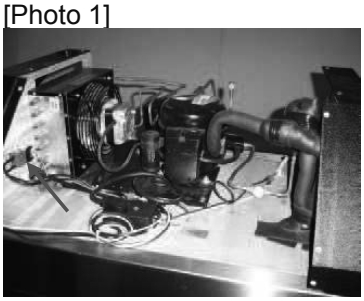
Test Operation of new thermostat by:

13) Plug unit into the 120-volt power source.
14) Turn ON Main Power Switch.
15) Allow compressor to draw unit down to its normal operating temperature range, which should be between 34 and 40° F. [Cool down time of 45-60 minutes is normal, depending on ambient temperature.]

16) Position and secure the front and left side vented access panels using screws removed earlier.

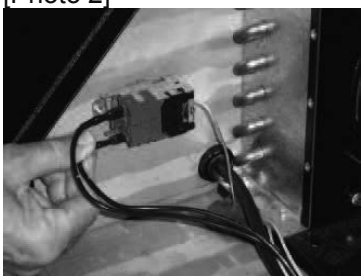
🛠Tools Required:
- Medium Phillips Screwdriver

[Photo 1]



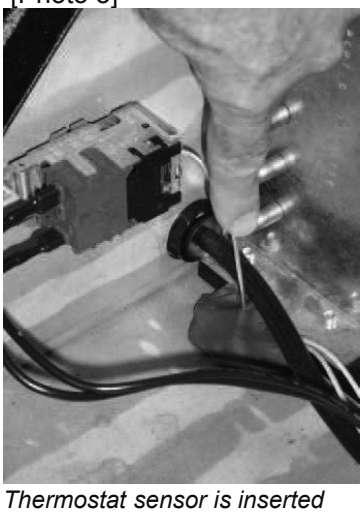
Remove front & left side service access panels to replace controller/thermostat. [Photo taken with top panel removed.]

[Photo 2]



Remove two black wire leads from controller/thermostat & two screws that secure it to bulkhead.

[Photo 3]



Thermostat sensor is inserted through hole into evaporator fan compartment & sealed with putty.

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2.9A Digital Temperature Control Replacement [Part No: 19001104]

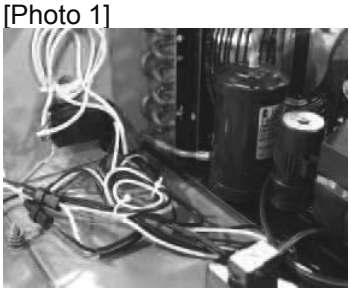
1) Turn OFF Main Power Switch.
2) Disconnect power at outlet. [Pull 120-Volt plug.]
3) Position a stepladder or stable work platform to access the top left side and front [compressor] access panels.
4) Using the Phillips screwdriver, remove the six screws that secure the vented front service access panel. The left side access panel will hinge open and lift off.
5) From the front, note the wire and cable connector positions on the control. If necessary, tape-label the wires and cables.
6) Remove the three wire connectors and three sensor/display cable connectors from the digital temperature controller.
7) From the left side or top, use pliers to remove the retaining nut on the control spindle, while holding the control to the interior panel or bulkhead.
8) Take new temperature controller [P/N: 19001104] and mount it to the bulkhead using the spindle nut removed earlier. Verify the new thermostat is set between 3-4, the approximate mid-point.
9) Reconnect the three wire leads to the thermostat, per your labeling. [You can verify these connections by comparing them to the wiring diagram.]
10) Reconnect the three sensor/display cables.

Test Operation of new temperature control by:

11) Plug unit into the 120-volt power source.
12) Turn ON Main Power Switch.
13) Allow compressor to draw unit down to its normal operating temperature range, which should be between 34 and 40° F. [Cool down time of 45-60 minutes is normal, depending on ambient temperature.]
14) LED temperature display should show current case temperature.

15) In unit is operating properly, position and secure the left side vented access panel and use the six mounting screws removed earlier to secure the front service access panel.

[Photo 1]

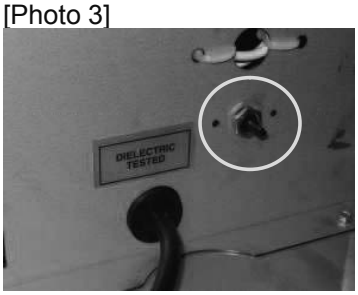


Remove front & left side service access panels to replace controller/thermostat.

[Photo 2]

Mark then remove three wire leads and three cable connectors from bulkhead-mounted controller.

[Photo 3]



Remove retaining nut that mounts control to bulkhead.

Tools Required:

- Medium Phillips Screwdriver
- Pliers

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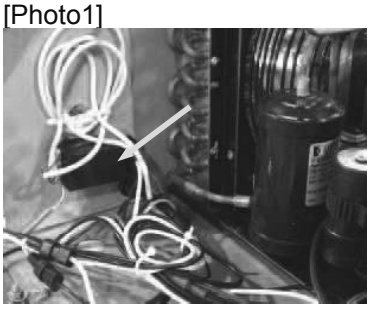
2.10 Digital Temperature Sensor Replacement [Part No. 19001172]

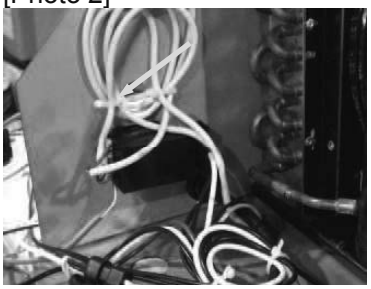
1) Disconnect power at outlet. [Pull 120-Volt plug.]
2) Position a stepladder or stable work platform as needed, to access the top-front service access panel.
3) Using a medium Phillips screwdriver, remove the six screws that secure the vented front access panel.
4) Locate Digital Controller mounted on condenser coil (left) bulkhead. It has three cable connections leading to: **the temperature sensor**; the evaporator coil defrost sensor; and the front digital temperature display.
5) Open left side sliding glass door and lock open using the Door-OPEN latch. Remove product and shelving, as needed.
6) Unplug display light from left side of fixture. [Pull down]
7) Using a medium Phillips screwdriver, remove the four screws that secure evaporator fan cover to top/ceiling of refrigerated case.
8) Disconnect plastic condensate drain line.
9) Left of the fan cutout locate the sensor access panel. Use the Phillips screwdriver to remove the two screws.
10) The white plastic sensor is secured to the case top by a small plastic strap. Use a Phillips screwdriver to remove the screw that secures the plastic strap that may hold several coils of sensor cable.
11) Push excess cable and finally the sensor through the grommet/stress relief leading to the compressor compartment.
12) Trace that sensor cable back to digital controller and cut the plastic tie that secures excess cable above control.
13) Detach sensor cable terminal from side of controller.
14) Remove any packaging and uncoil new sensor/cable [P/N 19001172] and attach terminal end to controller.
15) Gently push sensor end of cable down through grommet into display case.
16) From inside the case, pull new sensor through grommet until you have 12-14” of sensor cable in hand.
17) Form one or two loops at sensor end and secure those loops to compartment top using the plastic strap and screw removed earlier.
18) In compressor compartment, use plastic ties to secure excess cable away from fans and hot refrigeration lines.
19) Replace sensor compartment access panel using two screws removed earlier.
20) Push display light plug through cutout in evaporator cover

[Photo1]



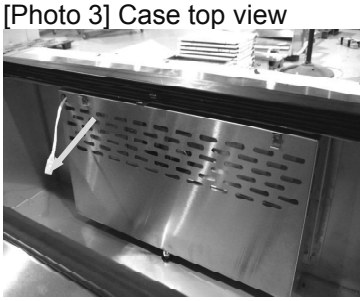
The Digital Temperature Controller is mounted to the condenser coil bulkhead.

[Photo 2]



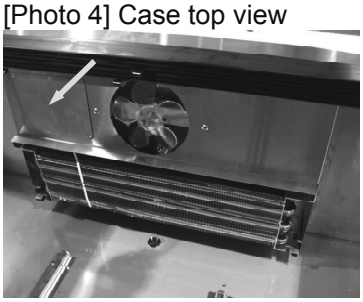
Identify temperature sensor cable. Cut plastic tie securing excess cable and remove that terminal from controller.

[Photo 3] Case top view



Unplug compartment light from fixture and remove four screws to remove evaporator fan cover.

[Photo 4] Case top view



Sensor access is through panel left of evaporator fan cutout.

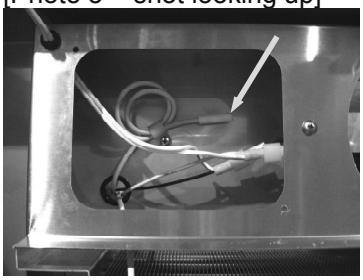
2.10 Digital Temp. Sensor Replacement Cont.

21) Reconnect plastic condensate drain tube to fitting. **IMPORTANT:** Make sure drain line fits tightly so it will not leak. If necessary, use a clamp and/or sealant.
22) Secure evaporator fan cover to case top using the four screws removed earlier.
21) Plug in display light cord at left side of fixture.

Test the new Temperature Sensor:
23) Plug in unit power cord to 120-volt power supply.
24) Switch ON main power switch. [Switch pilot will light.]
25) The temperature display should show the refrigerated case compartment temperature and track the pull-down to a normal operating temperature range of 34 to 40° F.

26) If temperature sensor functions properly, replace service access panel, reinstall display case shelving, close left side door and return BBR Display Case to service.

[Photo 5 – shot looking up]



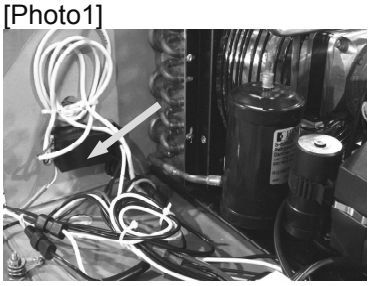
Sensor is mounted inside cabinet in ceiling cutout just left of the evaporator fan.

Tools Required:
- Phillips Screwdriver
- 1/4" [6-7 mm] flat blade screwdriver
- Wire cutters
- Plastic wire ties

2.10A Evaporator Coil Defrost Sensor Replacement [Part No. 19001172]

1) Disconnect power at outlet. [Pull 120-Volt plug.]
2) Position a stepladder or stable work platform as needed, to access the top-front service access panel.
3) Using a medium Phillips screwdriver, remove the six screws that secure the vented front access panel.
4) Locate Digital Controller mounted on condenser coil bulkhead. It has three cable connections leading to: the temperature sensor; **the evaporator coil defrost sensor**; and the front digital temperature display.
5) Open left side sliding glass door and lock open using the Door-OPEN latch. Remove product and shelving, as needed.
6) Unplug display light from left side of fixture. [Pull down]
7) Using a medium Phillips screwdriver, remove the four screws that secure evaporator fan cover to top/ceiling of the refrigerated case.
8) Disconnect plastic condensate drain line.
9) Left of the fan cutout, locate the sensor access panel. Use a Phillips screwdriver to remove the two screws.
10) Inside the display case compartment locate the defrost sensor, which is pushed into the center of the evaporator coil on the **back side** or rear of that coil.
11) Gently pull sensor out between coil fins. Straighten adjacent fins with a pliers as needed, to free sensor.
12) Trace defrost sensor cable as it runs under and around the evaporator coil to the grommet in case bottom, leading to the compressor compartment.
13) From compressor compartment, pull cable and sensor through the grommet/strain relief.
14) Trace that defrost sensor cable back to the digital controller and cut the plastic tie that secures any excess cable coiled above control.
15) Detach defrost sensor cable connection from side of controller.
16) Remove any packaging and uncoil the new defrost sensor/cable [P/N 19001172] and attach terminal end to controller.
17) Gently push sensor end of cable down through grommet into display case.
18) From inside the case, pull new sensor/cable through grommet until you have about 24" of cable in hand.
19) Run cable around back of evaporator coil and insert sensor in pocket created in coil fins. Crimp fins to secure.
20) In compressor compartment, use plastic ties to secure excess cable away from fan and hot refrigeration lines

[Photo1]

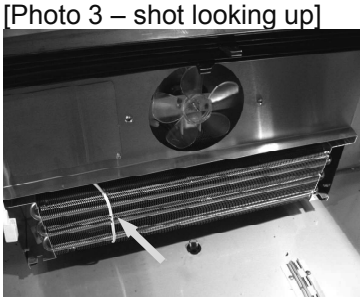


The Digital Defrost Sensor connects to the Temperature Controller mounted to the condenser coil bulkhead.

[Photo 2 – shot looking up]

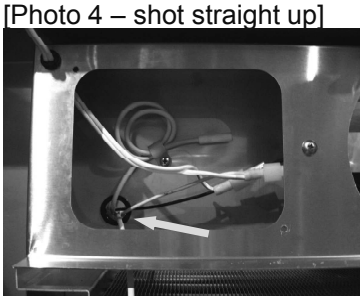
Unplug display light cord and remove four screws that secure evaporator fan cover.

[Photo 3 – shot looking up]



Defrost sensor cable runs down through compartment grommet then around evaporator coil to the back (rear) side.

[Photo 4 – shot straight up]



Remove sensor access panel screws to access grommet.

2.10A Evaporator Coil Defrost Sensor Replacement…Continued

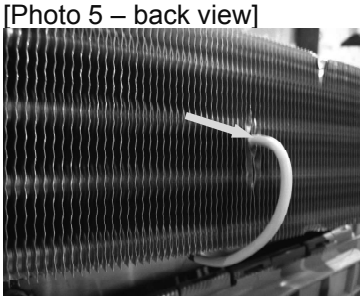
21) Replace sensor/grommet compartment access panel using two screws removed earlier.
22) Push display light plug through cutout in evaporator cover.
23) Reconnect plastic condensate drain tube to fitting. **IMPORTANT:** Make sure drain line fits lightly so it will not leak. If necessary, use a clamp and/or sealant.
24) Secure evaporator fan cover to case top using the four screws removed earlier.
25) Plug in display light cord at left side of fixture.

Test the new Defrost Sensor:

26) Plug in unit power cord to 120-volt power supply.
27) Switch ON main power switch. [Switch pilot will light.]
28) Allow the case to cool down to normal operating temperature range of 34 to 40º F.
29) Press and hold the lower button on the digital temperature display for more than five-seconds. The display should change from current case temp to: '**dEF**' to indicate unit is in defrost mode. **NOTE**: Defrost will not initiate if coil sensor is not below 38º F. The evaporator fan will continue to run and blow air through the coil to defrost coil. [There is no defrost heater.]
30) Unit will remain in defrost mode until coil sensor reaches 38º F, at which time the compressor will start.
31) The '**dEF**' will remain on display for a few minutes during the re-cool period. Case air temperature is likely to reach 40 to 42º F during the defrost cycle, which will typically last 5 to15 minutes. **NOTE**: The maximum defrost cycle is 30 minutes. If a longer defrost period is require by heavy ice buildup on the coil, repeat the defrost cycle.

32) If defrost sensor functions properly, replace service access panel, reinstall display case shelving, close left side door and return BBR Display Case to service.

[Photo 5 – back view]



Sensor is inserted between evaporator coil fins. Carefully bend over adjacent fins to secure in place.

🛠Tools Required:

- Phillips Screwdriver
- Wire cutters
- Needle nose pliers
- Plastic wire ties

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2.11 Condensate Collection Heater Replacement [Part No: 19000958]

NOTE: The Condensate Collection Heater is located under the small aluminum collection pan that is bottom-mounted behind the BBR. It can be replaced from the bottom of the BBR Cabinet but sufficient work room must be cleared below the cabinet by carefully moving or removing drink dispensers, POS terminals and cup dispensers.

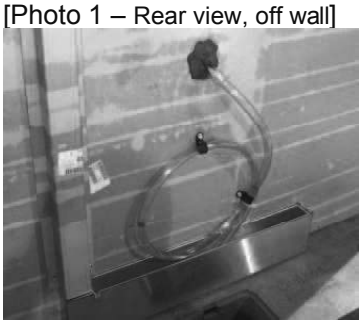
1) Turn OFF Main Power Switch before proceeding.
2) Disconnect power at outlet. [Pull 120-Volt plug.]
3) Move or remove enough beverage dispensers, POS terminals and cup dispensers to provide access to bottom collection pan.
4) Use ¼" flat blade screwdriver to remove screw in **center** of narrow tank at back of cabinet bottom.
5) Loosen, but don't remove right and left screws and shift tank right or left to allow keyholes to clear screw heads.
6) Pull tank down to extent of insulated power supply cable.
7) Disconnect the two heater terminal leads from power supply cable connections.
8) The heater is attached to the bottom of the aluminum tank with peal-and-stick adhesive. Pull off old heater.
9) Remove new tank heater [P/N 19000958] from any protective packaging.
10) Attach heater terminal leads to power supply cable connections.
11) Peel protective strip off adhesive-side of flexible heater and stick heater to the bottom of the aluminum tank. Smooth and press to ensure good adhesion.
12) Position tank with bottom flange facing out and slide it behind the case back. Align the two keyholes over right and left screws, push up and slide right of left to secure.
13) Tighten these two screws and insert and tighten center screw removed earlier, to lock tank in place.

Test Operation of new condensate collection tank heater by:

14) Plug unit into the 120-volt power source.
15) Turn ON Main Power Switch.
16) Wait 2-3 minutes then feel bottom of condensate collection tank. Bottom should feel warm to the touch.

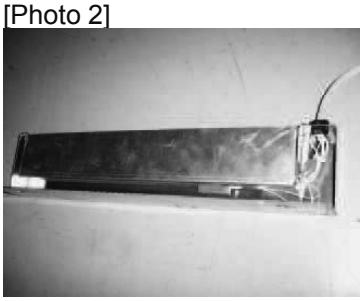
17) If heater is operating as described, return all tabletop beverage dispensers, POS displays and cup dispenser to their original beverage center location.

[Photo 1 – Rear view, off wall]



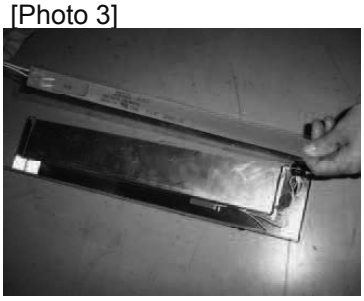
The condensate collection heater is located under and behind center of case bottom.

[Photo 2]



The tank heater is attached to the aluminum tank bottom and protected by a false bottom.

[Photo 3]



The small flexible heater is attached to the tank bottom by a peal-and-stick adhesive strip.

Tools Required:

- ¼" flat blade screwdriver

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2.12 Power Cord Set Replacement [Part No. 19000282]

1) Unplug power cord from 120-volt electric outlet.
2) Position a stepladder or stable work platform to access the top-front and top-left service access panels.
3) Using a Phillips screwdriver, remove the six screws that secure the vented front access panel. The left side access panel will hinge open and lift off.
4) From the front unplug the power cord black and white wires at connections just outside main junction box.
5) **IMPORTANT**: Note how [green] grounding connection is made so it is reconnected properly when new cord set is installed. Remove ground wires from welded stud. The power cord should be the **bottom** connection with a separate nut.
6) From the left side access panel, pull power cord out and through the protective grommet in the compressor bulkhead, then out through the top [or side] feed hole.
7) Obtain new 8-foot power cord [P/N: 19000282]. Remove any ties securing cord.
8) Push [non-plug] end of power cord through the top [or side] feed hole then push the cord end gently through the grommet in the compressor compartment bulkhead.
9) From the compressor side pull power cord through to reach the internal connectors.
10) Replace any binding ties, grommets and strain relief bushing to prevent damage to the new power cord.
11) Connect white and black wire leads. Reconnect the green power cord ground wire with nut first, before reconnecting other ground leads with the second nut.

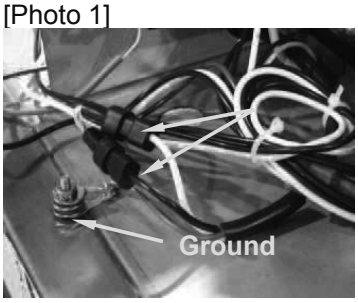
DANGER

Make sure ground lead is firmly attached and separate from other grounding leads. Failure to properly ground unit could result in electric shock, burns and even death!

12) Secure front access panel using screws removed earlier. Replace side access panel.
13) Plug in power cord to designated 120-volt power outlet.

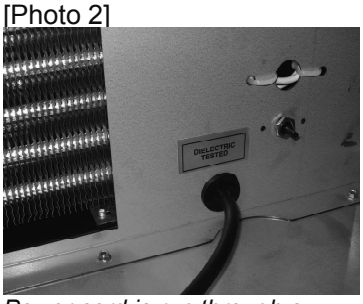
14) **Test** the replacement cord set by:
15) Turn ON main power switch. If power switch pilot light comes on and compressor starts, repair is complete.

[Photo 1]



Unplug compressor power cord black and white wires at connections outside junction box. Disconnect green gounds.

[Photo 2]



Power cord is run through a protective grommet in the condenser coil bulkhead.

[Photo 3 - Rear view]

Push new cord back through top or side feedhole..

Tools Required:
- Medium Philips screwdriver
- ¼" Flat blade screwdriver

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3.1 Thermostat Adjustment/Adjust Temp. [Older BBR-45 Models ONLY]

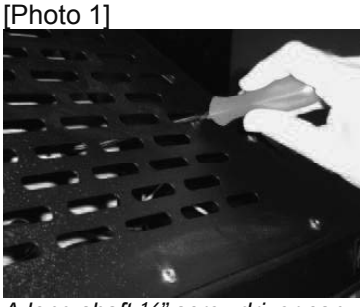
PROBLEM: Refrigerated Case will not maintain temperature within target range of 34-40° F, when doors are closed.

[**NOTE**: with the thermometer mounted near the right-hand door, cold air will dump and drop compartment temperature when door is opened frequently. This is normal and not a service issue.]

To manually adjust refrigerator thermostat setting:

1) Obtain ladder or stable work platform to allow safe and easy access to top-mounted refrigeration access panels.
2) Insert long shaft, flat blade screwdriver through first vent opening in middle row [from front] of left side vented access panel. [**TIP**: Use small flashlight to help locate thermostat and its adjustment screw, which is mounted on the refrigeration compartment bulkhead.]
3) **NOTE**: The factory thermostat setting is calibrated to provide a refrigeration compartment temperature range of 34 to 40° F at average ambient room temperatures.
4) If the steady state operating temperature is over 40° F (too warm), adjust thermostat down (turn clockwise toward "colder") in ¼ turn increments, as required. [Most adjustments will be to lower operating temperatures because of high ambient room temperatures, high humidity or direct sunlight on case doors.]
5) Allow the case temperature to stabilize after each incremental adjustment. Repeat as needed until target operating temperature range is reached.
6) If steady state operating temperature is below freezing (too cold), adjust thermostat up (turn counterclockwise toward "warmer") in ¼ turn increments, as required. [Allow the case temperature to stabilize after each increment adjustment.]
7) Assuming Main Power is ON, allow the compressor to operate until it cycles off. Check case compartment temperature. If in the 34 to 40° F range, no further adjustments are necessary.
8) **Tip**: If trying to raise case steady state temperature, open one refrigerator door to dump cold air, close door and allow case to regain steady state temperature.

[Photo 1]



A long shaft ¼" screwdriver can be used to adjust the thermostat setting, without removing left side access panel.

[Photo 2]

Use long screwdriver to adjust thermostat by rotating shaft in ¼-turn (clockwise) increments.

🛠Tools Required:

- Long shaft [8-12"] Medium Screwdriver
- Small flashlight

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3.1A Adjusting Set Refrigeration Temperature Range [All Newer Models]

The BBR internal thermostat maintains the recommended refrigerated beverage storage temperature range of 33° to 39° F (1° to -4° C). This thermostat is calibrated, set and tested at the factory prior to shipment from Franke.

To Change Temperature Set Point:

1) The BBR refrigerated case should be plugged in, main power ON and running properly before proceeding.
2) Using the two buttons just right of the LED temperature display, push and hold either button for two seconds to display the mid-point target temperature, which is factory set at 38° F (-3° C).
3) Push the top button to raise target temperature, the lower button to lower it. If you lower the target temperature to 34° F (1° C), the operating range will become 33° to 35° F (0° to -2° C) or one degree plus or minus (±1°/±<1°C) the set point.
4) The current compartment temperature will automatically reappear. [If the target temperature was reduced, the compressor should come on to lower the compartment temperature.]

To Test:

5) If lowering set point temperature, the compressor should come on and begin to lower freezer temperature. If raising set point, you will have to open one of the sliding front doors to dump cold air and speed case warm-up. Check LED temperature display to see if new target range is achieved.

[Photo 1]

BBR case ships from factory preset for 33° to 39° F (1° to -4° C) operating temperature.

[Photo 2]

Press and hold either button for two seconds. Push top button to raise target temperature, lower button to lower temperature.

🛠Tools Required:
- None required

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3.2 Door Alignment/Roller Adjustment

PROBLEM: Sliding door does not seal against doorframe or is out of square. Each BBR Sliding Glass Door rolls on two metal rollers set into the bottom doorframe. The height of these rollers can be adjusted to square the door.

NOTE: Before adjusting, inspect bottom door track for broken glass or any debris that may interfere with door alignment. If doors are difficult to roll back or if plastic doorframe is being gouged or abraded by door bottom, inspect and replace one or both Door Bottom Rollers per Section 2.3. If doorframe is damaged, replace per Section 2.5. Make sure it is installed square and flat on case bottom, before adjusting rollers.

1) Remove door that requires adjusting by opening it enough to grasp both sides; lift door up into upper channel, pull bottom of door forward and down and the top free of the spring closing stud.
2) Turn the door bottom UP and inspect both metal rollers. They should roll freely with little resistance.
3) Each roller assembly is secured to the doorframe with two small ¼" lock nuts.
4) Use a ¼" nut driver to remove the two screws securing the door roller assembly. You should find one small spacer under the wheel assembly on each screw stud.
5) Additional small flat or lock washers can be added to raise either one or both wheel assemblies, which will change the bottom clearance and/or square of the door as it meets the side frame. **NOTE:** This may require some trial and error.
6) Use ¼" nut driver to secure both roller assemblies.
7) When satisfied with the pitch and seal of the door in question, grasp it with both hands; nose [left/right] top leading edge against spring closing stud and slide stud against spring pressure [left or right] until door top frame slides into top track. Angle door bottom into bottom track and allow door to slide closed.

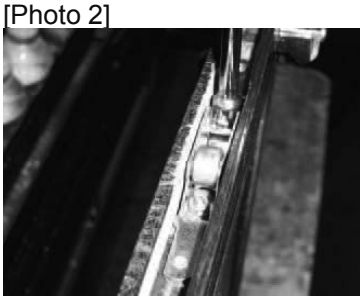
8) **Test** door seal adjustment by:
9) Slide OPEN door, release it and allow it to close. Did the door roll back freely and fully close against side jam?

10) If door is functioning properly, return BBR to service.

[Photo 1]

To remove door lift up into upper track until bottom clears lower track then angle out, bottom-first.

[Photo 2]



Use a ¼" nut driver to remove and replace two lock nuts that secure each door bottom roller. Small spacers can be added to screw stud to raise or lower each roller assembly.

[Photo 3]

To replace door engage spring stud with top leading edge of door and push against spring tension until top of door slides into upper track.

🛠Tools/Supplies Required:
- ¼" nut driver
- Small washers

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4.1 Basic [Operator] Refrigeration Maintenance

[Before attempting service failure diagnosis or component repairs, verify basic operator maintenance has been done.]

PROBLEM: Refrigerated case is running but will not reach 34 to 40° F operating temperature range.

1) Check with crew and unit manager to see if door has been left open for extended periods. Wait to see if temperature drops to target range.
2) Check to see if case is in direct sunlight. If yes, recommend unit manager contact 3M for Night Vision 35 Glare Control Film. [Their number is 800 229-1566.]
3) Check area room temperature and/or humidity to see if it exceeds recommended maximums of:
   - Room Temperature of 85° F
   - Relative Humidity of 55% or less

   If room conditions exceed these maximums, discuss possible HVAC changes with unit manager and adjust thermostat setting of BBR, per Section 3.1.
4) Inspect the condenser coil to ensure it is clean and free of dust and debris. If it is dirty, clean it with a soft bristle brush or portable vacuum.

CAUTION

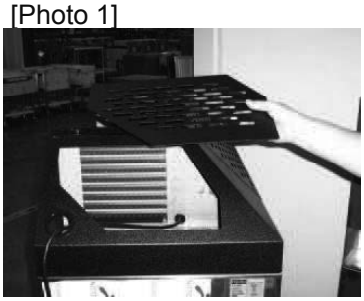
Avoid contact with fins on the condenser coil and any refrigeration lines. The fins are very sharp and can cause cuts. Certain refrigerant lines can be very hot and could cause burns to exposed skin. The use of gloves is recommended.

5) Test unit for operation within the 34° to 40° F normal operating temperature range.
6) If these steps correct problem, notify unit manager of problems noted with crew cleaning. If problem persists, see Troubleshooting Guide 1.3 and Sections 4.2 - 4.10.

PROBLEM: The BBR case will not run when turned ON.

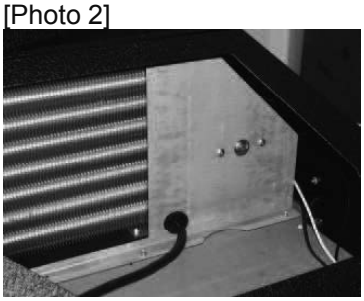
1) Verify unit is plugged in to 120-volt power supply.
2) Check circuit breaker for that outlet/area or use a test meter to verify power at outlet.
3) If these simple steps return unit to service, notify unit manager of fix.
4) If unit is plugged in, turned on and power is present at the outlet but Refrigeration System will not power-up, see Troubleshooting Guide 1.3 and Sections 4.2 - 4.10.

[Photo 1]



To inspect condenser coil, open and remove left side louvered service access panel at top of unit top.

[Photo 2]



Inspect the condenser coil. If dirty, vacuum or clean with soft bristle brush.

Tools/Supplies Required:
- Cleaning brush or small portable vacuum

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4.2 Condenser Fan Motor Replacement [Part Number: 3589854]

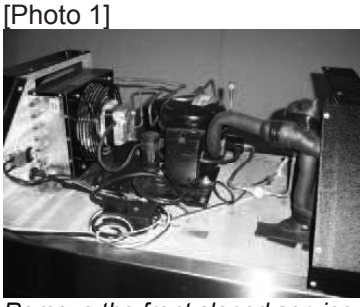
1) Unplug power cord from electric outlet.
2) Position a stepladder or stable work platform as needed, to access the top-front service access panel.
3) Using a medium Phillips screwdriver, remove the six screws that secure the vented front access panel.
4) Using a large flat blade screwdriver, remove metal spring clip to open the black plastic cover of the relay box mounted to the compressor.
5) Disconnect the three Condenser Fan Motor wires from the relay terminal block using needle nose pliers. [Wire colors are: Blue/Brown/Green.]
6) Using a 3/8" [10 mm] wrench or socket, remove the four lock nuts securing motor/fan assembly to condenser mounting frame.
7) Using a 1/8" [3 mm] Allen wrench, loosen setscrew securing fan blade to motor shaft.
8) Using the 3/8" [10 mm] wrench or socket, remove the four lock nuts securing motor to fan guard.
9) Attach the new Condenser Fan Motor [P/N: 3589854] to fan guard using the four nuts just removed.
10) Position fan on motor shaft and tighten setscrew.
11) Position fan assembly over four mounting screws and secure using the four lock nuts removed earlier.
12) Reattach the three Fan Motor wires at relay terminal block. [Wire colors are: Blue/Brown/Green.]
13) Close plastic cover on relay box and secure with metal spring clip.

Test Operation of new Condenser Fan Motor by:

14) Plug in unit to a 120-volt power source.
15) Turn ON Main Power Switch.
16) Allow compressor to draw unit down to its normal operating temperature range, which should be between 34 and 40° F. Unit should maintain that temperature if case doors remain closed.

17) Secure sloped compressor access panel using six screws removed earlier.

[Photo 1]

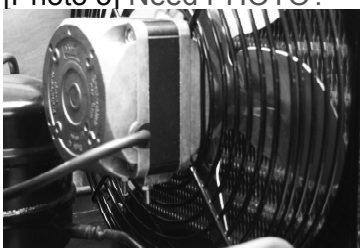


Remove the front sloped service access panel to access the refrigeration package.

[Photo 2]

Disconnect Condenser Fan Motor wires inside the plastic relay box.

[Photo 3] Need PHOTO?



Remove the four fan housing mounting nuts, remove fan blade and separate motor from fan cover by removing four nuts.

Tools Required:

- Medium Phillips screwdriver
- 3/8" [10 mm] wrench or socket/driver
- 1/8" [3 mm] Allen/hex wrench
- Needle nose pliers

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4.3 Evaporator Fan Motor Replacement [Part Number: 19000454]

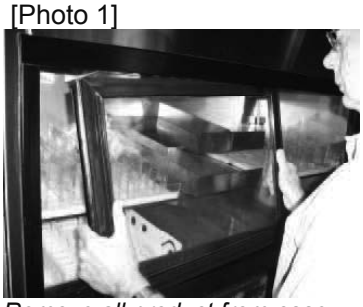
1) Unplug power cord from 120-volt outlet.
2) Remove all refrigerated product from case. **IMPORTANT**: Any perishable foods including milk should be placed in another refrigerator.
3) Remove two glass doors to provide easier compartment access. Lift up and pull out door bottom, then pull down and out of upper track, releasing auto-close spring stud.
4) Remove all hanging shelf components to provide room.
5) Use a medium Phillips screwdriver to remove the four screws that secure the perforated evaporator motor cover above the compartment interior.
6) Gently remove the plastic fan blade from the motor shaft. It is a snug press fit. Be careful not to snap a fan blade.
7) Using a small Phillips screwdriver, remove the two screws securing motor to the motor mounting plate.
8) Angle motor and bracket through mounting hole.
9) Using the small Phillips screwdriver, remove two screws holding motor to its bridge bracket.
10) Separate motor wires from harness at motor terminals. Use pliers if needed.
11) Obtain P/N 19000454 replacement evaporator motor assembly and attach wiring harness connectors to motor.
12) Use the Phillips screwdriver to attach new motor to the bridge bracket and angle assemble back through hole.
13) Attach bridge bracket to motor mounting plate.
14) Gently press fit fan blade on motor shaft. **NOTE**: Make sure fan is attached as shown in Photo 3, to assure correct air flow.
15) Return perforated evaporator motor cover/housing into position and secure four Phillips screws removed earlier.
16) Replace glass sliding doors. [Insert lead edge of door top against plastic auto-close spring stud in top track and slide back. Insert full top of door in upper track, angle door bottom over bottom track and lower into place.]

Test Operation of new Evaporator Fan Motor by:

17) Plug power cord in to 120-volt power source.
18) Allow compressor to draw unit down to its normal operating temperature range, which should be between 34 and 40° F. Unit should maintain that operating temperature if both case doors remain closed.

19) If refrigerator is operating properly, return hanging shelves to their previous mounting position and notify unit manager or crew it is OK to reload case.

[Photo 1]

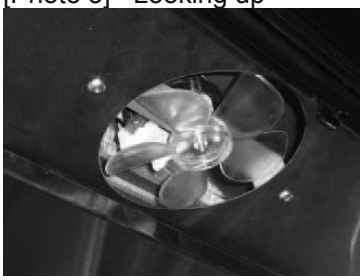


Remove all product from case shelves, remove both sliding doors and take out all hanging shelf components.

[Photo 2] - Looking up

Remove the four side mounting screws that secure the evaporator fan motor cover.

[Photo 3] - Looking up



Remove press-fit fan blade from motor shaft and the two motor mounting screws, then angle motor/bracket assembly through mounting hole.

Tools Required:

- Medium & small Phillips screwdrivers
- Needle nose pliers

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4.4 Evaporator Coil Replacement [Part Number: 19000998]

1) Unplug power cord from 120-volt outlet.
2) Remove all refrigerated product from case. **IMPORTANT**: Any perishable foods including milk should be placed in another refrigerator.
3) Remove two glass doors to provide easier compartment access. Lift up and pull out door bottom, then pull down and out of upper track, releasing auto-close spring stud.
4) Remove all hanging shelf components to provide room.
5) Using a medium Phillips screwdriver, remove the six screws that secure the vented front access panel.
6) **Note:** Recover any residual refrigerant and ensure line pressure is equalized to zero, before opening the refrigeration system.

IMPORTANT: Any residual refrigerant charge should be recovered in strict accordance with the Federal Clean Air Act.

7) Unwrap rubber insulation from vertical refrigeration lines that penetrate compressor compartment and go to the evaporator coil. [See Photo 3]
8) Cut those refrigerant lines 2-3" above compartment floor.
9) Using that same screwdriver, remove the six screws that secure evaporator/motor mounting pan to the case roof. Support center of pan as you remove the last screws.
10) Separate motor wires from harness at motor terminals. Use pliers if needed.
11) Disconnect evaporator pan condensate drain line from rear fitting and remove the assembly from case interior.
12) Using the medium Phillips screwdriver, remove the four screws that secure the evaporator coil to pan/support assembly. Remove the old/bad coil.
13) Obtain P/N 19000998 replacement evaporator coil and position in pan/mounting assembly.
14) Secure to sides of pan assembly with the four Phillips screws removed earlier.
15) **Two-Person Job** - Lift evaporator/motor mounting pan into case compartment and attach evaporator drain line to rear fitting.
16) Reattach fan motor to harness leads.
17) Carefully push new evaporator coil refrigerant stubs through hole in compressor compartment bulkhead.
18) Cut lines as needed to align fittings.
19) Clean and prepare the refrigeration line fittings, then braise all the line connections.

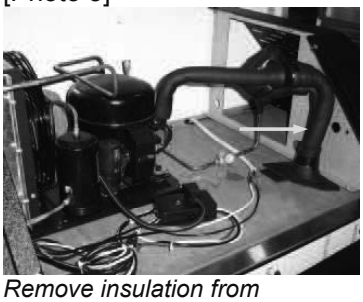
[Photo 1]

Remove all product from case, both sliding doors and shelves.

[Photo 2 - Looking up in case]

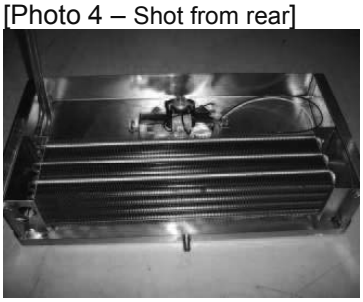
Remove four screws that secure evaporator fan cover.

[Photo 3]



Remove insulation from refrigeration lines that run to evaporator coil. Cut lines here.

[Photo 4 – Shot from rear]



Evaporator coil and fan/motor assembly removed from case.

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4.4 Evaporator Coil Replacement - *Continued* [Part Number: 19000950]

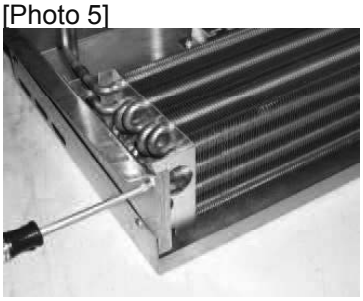
20) **Note**: When resealing the system, use a continuous Nitrogen charge to assure no contaminants enter the system, especially when brazing.
21) Before recharging system, pull vacuum equivalent to 30 inches [760 mm] of Mercury, for minimum of 30 minutes.
22) Recharge the system with R404A refrigerant, per nameplate label specifications.
23) Return perforated evaporator motor cover/housing into position and secure four Phillips screws removed earlier.
24) Replace glass sliding doors. [Insert lead edge of door top against plastic auto-close spring stud in top track and slide back. Insert full top of door in upper track, angle door bottom over bottom track and lower into place.]

Test Operation of new Evaporator Coil by:
25) Plug power cord into 120-volt power source.
26) Turn ON Main Power Switch.
27) Allow compressor to draw unit down to its normal operating temperature range, which should be between 34 and 40° F. Unit should maintain that operating temperature if both case doors remain closed.

28) If refrigerator is operating properly, return hanging shelves to their previous mounting position and notify unit manager or crew it is OK to reload case.

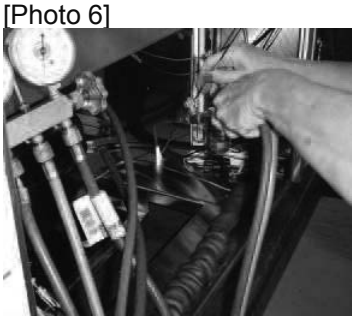
🛠Tools Required:
- Medium Phillips screwdriver
- Refrigerant Recovery Tank/Fittings
- Nitrogen Charge Tank
- R404A Refrigerant
- Tubing Cutter
- Brazing Torch, etc.

[Photo 5]



Evaporator coil is secured to pan support housing with four screws, two on each side.

[Photo 6]



When resealing the system, use a continuous Nitrogen charge to keep contaminants out.

4.5 Compressor Capacitor Replacement [P/N: 600024] and/or Start Relay Replacement [P/N: 19001083]

1) Unplug power cord from electric outlet.
2) Position a stepladder or stable work platform as needed, to access the top-front [compressor] access panel.
3) Using a medium Phillips screwdriver, remove the six screws that secure the vented front access panel.
4) **To replace Capacitor:** use a large flat blade screwdriver to depress retainer clip on the plastic cover over the relay box mounted to the side of the compressor.
5) Using needle nose pliers, carefully **remove the capacitor leads from the terminal block, without touching each other, any metal parts or tools.**

WARNING
High voltage warning. Use caution. There is a danger of electrical shock, which can cause injury or even death!

6) Unsnap the plastic retainer clip holding the capacitor, and then remove the capacitor.
7) Install the new capacitor [P/N: 600024] and snap closed retainer clip around capacitor.
8) Connect capacitor leads to the terminal block.

Test operation of Compressor by:

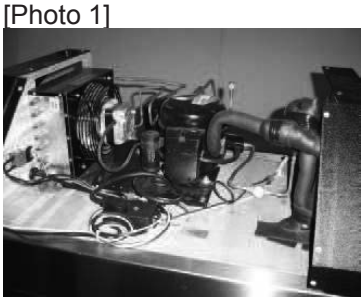
9) Plug in unit to a 120-volt power source.
10) Turn ON unit at Main Power-ON Switch.
11) If compressor starts and runs, close cover of relay box and secure service access panel. If not, disconnect power cord and complete steps 12-18.

12) **To replace Start Relay:** Using needle nose pliers, disconnect the 7 wires from the relay terminals.
13) Using a small screwdriver remove 2 screws mounting the relay to the compressor and remove the relay.
14) Install the new relay [P/N: 19001083] and secure with those two screws.
15) Reconnect the 7 wires to the relay terminals, as follows: T1 = Black from capacitor; T2 = Red from compressor; T4 = Black from capacitor, White from power cord and White from compressor; T5 = Black from power cord and Black from compressor.
16) Close and secure black plastic relay box cover.

Test operation of Compressor by:

17) Plug in unit to a 120-volt power source.
18) Turn ON unit at Main Power-ON Switch.
19) If compressor starts and runs, secure access panel.

[Photo 1]



Remove six screws securing vented front access panel to compressor compartment.

[Photo 2]

Replace the compressor capacitor first. If replacing the capacitor doesn't start the compressor, replace start relay.

[Photo 3]

To access relay, use screwdriver to remove metal clip on plastic relay cover.

Tools Required:

- Medium Phillips screwdriver
- 3/8" flat blade screwdriver
- 1/8" [3 mm] flat blade screwdriver
- Needle nose pliers

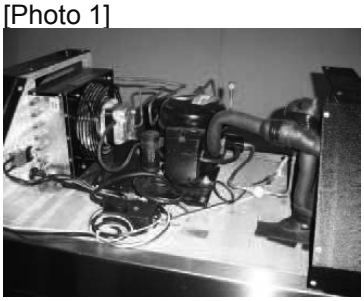
4.6 Check System [Refrigerant] Pressure and Electronic Leak Detection

1) Unplug power cord from electric outlet.
2) Position a stepladder or stable work platform as needed, to reach the top-front [compressor] access panel.
3) Using a medium Phillips screwdriver, remove the six screws that secure the vented front access panel.
4) Using a standard manifold refrigeration gauge, confirm the following pressures for a unit with a **16 oz. [453 gm] R404A charge:**
   - Discharge Valve: 230 +/- 10 psig [16 ± 1 Bar] @ 80˚F/27°C ambient
   - Suction Valve: 55 +/- 2 psig [4 ± .1 Bar] @ 80˚F/27°C ambient
5) If Discharge Valve pressure is HIGH and Suction Valve pressure is LOW, check for a kinked or restricted line.
6) If a kinked or restricted line is found, **see Section 4.9** for Expansion Valve replacement.
7) If Discharge Valve Pressure is LOW and Suction Pressure is LOW, verify leak and location with an Electronic Leak Detector. [If existing system pressures are high enough, a thorough scan with a standard leak detector may be sufficient to locate the exact location.]
8) If system pressure is too low or leak[s] is intermittent and difficult to detect, pressurize the system with Nitrogen to an equalized MAXIMUM of 150 PSIG [10.5 Bar].
9) Use electronic leak detector or application of a soap solution to locate any and all leaks.
10) **IMPORTANT**: Make sure the condensing unit is off when checking for leaks. Air movement from the fan would inhibit the ability of the leak detector to sense refrigerant.

NOTE: Do not use an electronic leak detector to locate leaks inside the case evaporator housing. The foam insulation used inside the case walls contains HFCs, which could generate false readings. Call Franke Service if you suspect a leak in this area.

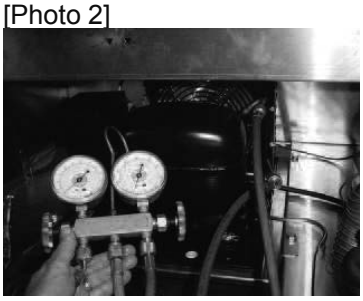
11) If a leak is found, **see Section 4.7** for Leak Repair Procedures.

[Photo 1]



Remove six screws securing vented front access panel to compressor compartment.

[Photo 2]



Check Discharge and Suction Valve pressures using a manifold refrigeration gauge.

[Photo 3]

If system pressure is too low or the leaks difficult to pinpoint, pressurize system with 150 PSIG [10.5 Bar] of Nitrogen and use an electronic leak detector or soap solution.

🛠Tools Required:

- Medium Phillips Screwdriver
- Manifold Refrigeration Pressure Gauge
- Electronic Refrigeration Leak Detector or
- Liquid leak-detection soap

4.7 Repair System [Refrigerant] Leak

1) Unplug power cord from electric outlet.
2) Position a stepladder or stable work platform as needed, to access the top-front [compressor] access panel.
3) Using a medium Phillips screwdriver, remove the six screws that secure the vented front access panel.
4) Repair or replace refrigerant lines as needed.
5) **Note**: Recover any residual refrigerant and ensure line pressure is equalized to zero, before opening the refrigeration system.

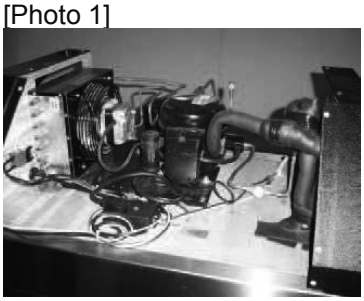
> **IMPORTANT**: Any residual refrigerant charge should be recovered in strict accordance with the Federal Clean Air Act.

6) **Note**: For larger leaks that may have contaminated the system, replace the expansion valve [**See Section 4.9**] and always replace the filter/dryer [**See Section 4.8**].
7) When resealing the system, use a continuous Nitrogen charge to assure no contaminants enter the system, especially when brazing.
6) Before recharging the system, pull a vacuum equivalent to 30 inches [760 mm] of Mercury, for a minimum of 30 minutes.
7) Recharge the system with R404A refrigerant, per nameplate label specification.

Test operation of Refrigeration System by:
8) Plug in unit at 120-volt power outlet.
9) Turn ON Main Power Switch.
10) If compressor starts and brings the case compartment down to the normal operating temperature range of 34 to 40° F, proceed to Step 13.
11) Replace sloped compressor service access panel.

12) Inform unit manager or crew that unit is back in service.

[Photo 1]

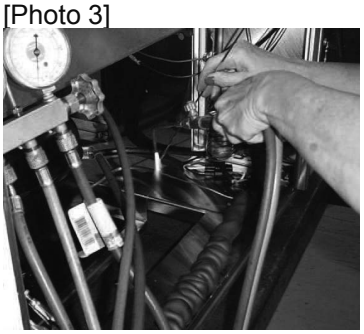


Remove six screws securing vented front access panel to compressor compartment.

[Photo 2]

Recover any residual refrigerant and ensure line pressure is zero before opening system.

[Photo 3]



When resealing the system or repairing leaks, use continuous Nitrogen charge to keep contaminants out.

🛠Tools/Supplies Required:
- Medium Phillips screwdriver
- Refrigerant Recovery Tank & fittings
- Nitrogen Charge Tank
- R404A Refrigerant
- Brazing Torch, etc.

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4.8 Filter/Dryer Assembly Replacement [Use filter/dryer rated at least 440 SWP that is suitable for use with R-404A and POE oil]

1) Unplug power cord from electric outlet.
2) Position a stepladder or stable work platform as needed, to access the top-front [compressor] access panel.
3) Using a medium Phillips screwdriver, remove the six screws that secure the vented front access panel.
4) **NOTE:** Recover any residual refrigerant and ensure line pressure is equalized to zero, before opening the refrigeration system.

> **IMPORTANT**: Any residual refrigerant charge should be recovered in strict accordance with the Federal Clean Air Act.

5) Cut the lines to allow removal of Filter/Dryer.
6) Install new Filter/Dryer Assembly. Prepare and braze lines as required.
7) When resealing the system, use a continuous Nitrogen charge to assure no contaminants enter the system, especially when brazing.
8) Before recharging the system, pull a vacuum equivalent to 30 inches [760 mm] of Mercury, for a minimum of 30 minutes.
9) Recharge the system with 16 ounces of R404A refrigerant. Gradually add refrigerant until small bubbles stop rushing past sight glass.

Test operation of Refrigeration System by:

10) Plug in unit to 120-volt power source.
11) Turn ON Main Power Switch.
12) If compressor starts and brings the case compartment down to the normal operating temperature range of 34 to 40° F, proceed to Step 13.
13) Replace top & front compressor access panels and inform unit manager or crew that case is back in service.

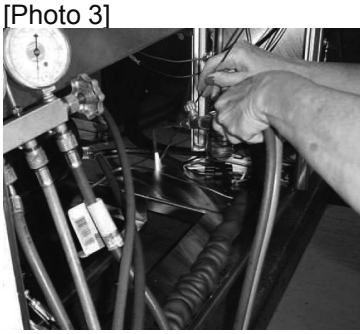
[Photo1]

Filter/Dryer is mounted vertically, just left of compressor start capacitor.

[Photo 2]

Recover any residual refrigerant and ensure line pressure is zero before opening system.

[Photo 3]



When resealing the system, use a continuous Nitrogen charge to keep contaminants out.

Tools/Supplies Required:

- Medium Phillips screwdriver
- Refrigerant Recovery Tank/Fittings
- Nitrogen Charge Tank
- R404A Refrigerant
- Tubing Cutter
- Brazing Torch, etc.

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4.9 Expansion Valve Replacement
[P/N 19000497 for BBR-45 or 19001189 for BBR-36]

NOTE: Expansion Valve failures are often due to debris or moisture in the system. Always replace the filter/dryer when replacing an Expansion Valve, to remove the source of contamination and to prevent a second failure.

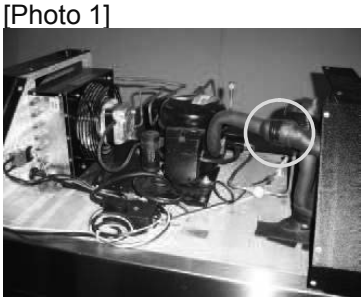
1) Unplug power cord from electric outlet.
2) Position a stepladder or stable work platform as needed, to access the top-front [compressor] access panel.
3) Using a medium Phillips screwdriver, remove the six screws that secure the vented front access panel.
4) **NOTE:** Recover any residual refrigerant and ensure line pressure is equalized to zero, before opening the refrigeration system.
5) Carefully unwrap foam insulation from around Expansion Valve and the area near copper fittings.
6) Sweat off copper fittings on either side of Expansion Valve.

IMPORTANT: Any residual refrigerant charge should be recovered in strict accordance with the Federal Clean Air Act.

7) Install the new Expansion Valve. Prepare and braze lines to Expansion Valve, as required.
8) Also install a new filter/dryer. See Section 4.8.
9) When resealing the system, use a continuous Nitrogen charge to assure no contaminants enter the system, especially when brazing.
10) Before recharging the system, pull a vacuum equivalent to 30 inches [760 mm] of Mercury, for a minimum of 30 minutes.
11) Recharge the system with 16 ounces of R404A refrigerant. Gradually add refrigerant until small bubbles stop rushing past sight glass.

Test operation of Refrigeration System by:
12) Plug unit into 120-volt power source.
13) Turn ON main power switch.
14) If compressor starts and brings the Case compartment down to the normal operating temperature range of 34 to 40° F, proceed to Step 14.
15) Rewrap foam insulation around lines and Expansion Valve and secure with electrical tape.
16) Close front service access panel and notify unit manager or crew that case is back in service.

[Photo 1]

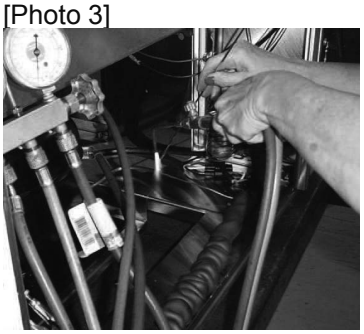


Carefully remove insulation wrap. Sweat off fittings on both sides of Expansion Valve.

[Photo 2]

Recover any residual refrigerant and ensure line pressure is zero before opening system.

[Photo 3]



When resealing the system, use a continuous Nitrogen charge to keep contaminants out.

Tools/Supplies Required:
- Medium Phillips screwdriver
- Refrigerant Recovery Tank/fittings
- Nitrogen Charge Tank
- R404A Refrigerant
- Tubing Cutter
- Brazing Torch, etc.
- Electrical tape

4.10 Condensing Unit Replacement [Part Number: 19000959]

1) Unplug power cord from electric outlet.
2) Position a stepladder or stable work platform as needed, to access the top-front [compressor] access panel.
3) Using a medium Phillips screwdriver, remove the six screws that secure the vented front access panel.
4) Using a 7/16" [11 mm] box wrench or socket, remove the four Condenser Assembly mounting bolts.
5) Unplug the compressor power cord at the Interior Electric Supply junction box.
6) **Note:** Recover any residual refrigerant and ensure line pressure is equalized to zero, before opening the refrigeration system.

IMPORTANT: Any residual refrigerant charge should be recovered in strict accordance with the Federal Clean Air Act.

7) Cut the refrigerant lines.
8) Lift old Condenser Package out of refrigeration compartment. Place new Condenser Package [P/N: 19000959] in position and secure with 7/16" bolts.

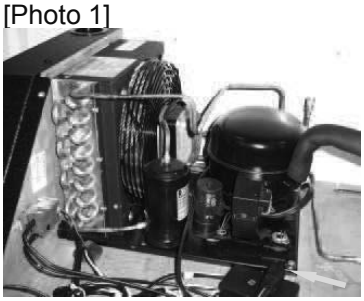
CAUTION
The Condenser Package weights 50-pounds. Obtain help if needed to remove it from the refrigeration compartment.

9) Clean and prepare the refrigeration line fittings, then braise all the line connections.
10) **NOTE**: When resealing the system, use a continuous Nitrogen charge to assure no contaminants enter the system, especially when brazing.
11) Before recharging system, pull vacuum equivalent to 30 inches [760 mm] of Mercury, for minimum of 30 minutes.
12) Recharge the system with R404A refrigerant, per nameplate label specifications.
13) Plug in condenser power cord at power junction box.

Test operation of Refrigeration System by:
14) Plug in unit to 120-volt power source.
15) Turn ON Main Power Switch.
16) If compressor starts and brings the Freezer compartment down to the normal operating temperature range of 34 to 40° F, repair is complete.

17) Close front/top service access panel and notify unit manager or crew that case is back in service.

[Photo 1]

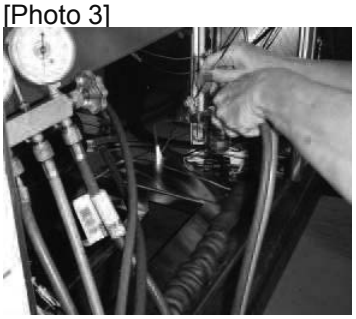


Remove the four Condenser Assembly mounting bolts.

[Photo 2]

Recover any residual refrigerant and ensure line pressure is zero before opening system.

[Photo 3]



When resealing the system, use a continuous Nitrogen charge to keep contaminants out.

Tools/Supplies Required:
- Medium Phillips screwdriver
- 7/16" [11 mm] socket/wrench
- Refrigerant Recovery Tank/Fittings
- Nitrogen Charge Tank
- R404A Refrigerant
- Tubing Cutter
- Brazing Torch, etc.

Rev. 2 5/07

5.1 Drain Line Elbow Kit Installation [Kit No. 18002091]

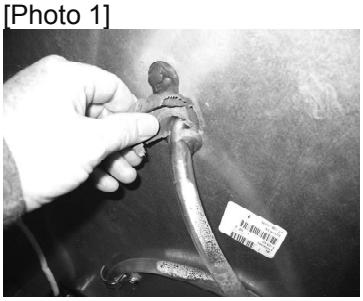
PROBLEM: A clear plastic flexible drain line is routed through the unit back panel, coiled and routed to the condensate collection box. This plastic drain line can kink as it exits the unit back panel.

THE FIX: Install a 90-degree plastic elbow [P/N 3588975] to the existing clear plastic drain line, as it exits the rear panel, for easier routing to bottom condensate collection box.

CAUTION! The BBR beverage refrigerator weighs approx. 210 lbs. Do not attempt to remove this unit from the wall or wall mount it without assistance.

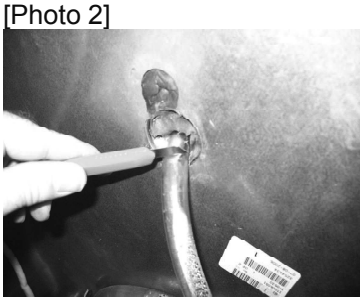
1) Empty all product from the refrigerated case.
2) Unplug 120-Volt power cord from the wall outlet or electric chase outlet.
3) With a minimum of two people, hold case from either side; lift it up one to two inches to clear the wall-mounting strip.
4) Set the refrigerated case on the floor and position to access the rear of the unit.
5) Locate the clear plastic tubing where it penetrates the rear case wall; and using a large screwdriver or small scraper, remove and **save the excess sealing putty** used to seal and insulate the rear case penetration.
6) Using a sharp knife or tubing cutter, cut the plastic tubing ½" [13 mm] out from the rear case wall.
7) Take the plastic 90-degree elbow and press fit it into the tubing that penetrates the rear case wall.
8) Press fit the other end of elbow fitting into the remaining tubing that goes down into the drain box. [See Photo 3]
9) Turn the elbow fitting so it points down towards the drain box and ensure excess tubing and hose end is inserted in the drain box.
10) Take putty removed earlier and pack it around the plastic tubing [and elbow] that penetrates the rear case wall.
11) With a minimum of two people, lift case up against wall to a height just above where upper case flange engages the wall-mounted strip and lower it until it locks in place. Make sure power cord isn't trapped behind the case.
12) Plug in power cord to 120-Volt outlet and turn ON main power switch.
13) Reload product and return unit to operation.

[Photo 1]



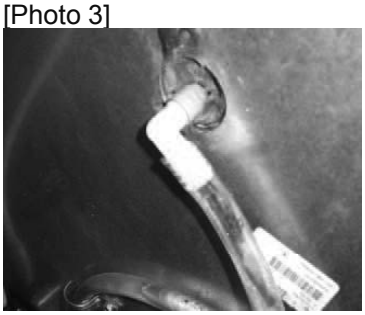
Remove putty from around plastic tubing where it exits case.

[Photo 2]



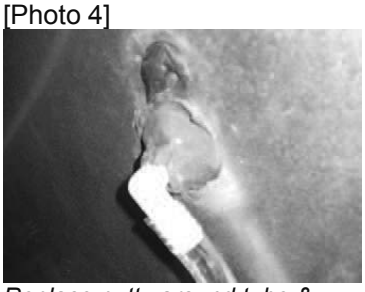
Cut plastic tubing ½" out from case rear panel.

[Photo 3]



Insert plastic elbow in tubing that penetrates case wall & tubing routed down to the drain box.

[Photo 4]



Replace putty around tube & fitting, sealing hole in rear panel.

P/N 19001140
Issued: February 12, 2007

5.2 Evaporator Drain Pan Retrofit Installation [Kit No. 18002648 Required]

PROBLEM: On some early model BBR refrigerators, the evaporator drain has insufficient downward pitch, which may cause the collection pan to overflow and leak water into the display compartment.

THE FIX: Install Drain Pan Retrofit Kit [P/N 18002648] and enlarging the rear drain cabinet penetration to increase the downward pitch of the internal evaporator drain pan line.

RETROFIT KIT CONTENTS:

- Aluminum Drain Pan w/flex drain line pre-attached
- Chase Cover for Rear Drain Line
- ½" Barbed Elbow
- 17" of vinyl drain tube
- #8 TEK screws (2 ea.)
- Small packet of Perma-gum calking
- Installation Instructions

CAUTION! The BBR beverage refrigerator weighs approx. 210 lbs. Do not attempt to remove this unit from the wall or wall mount it without assistance or the use of a mechanical lift.

1) Empty all beverages from the refrigerated case. **NOTE:** Move these beverages to alternate refrigerated storage.
2) Turn off front mounted Power switch.
3) Unplug 120-Volt power cord from the wall outlet or electric chase outlet. Push power cord back into top or side hole, so cord won't be damaged.
4) Remove all interior shelf components to reduce the weight of the case. Note location of shelf components so they can be returned to that display configuration.
5) Remove the two roll-back doors to reduce case weight and provide easy access to evaporator drain pan. [Center each door and lift up and angle bottom forward, to release door from spring closure catch in top door track.]
6) With a minimum of two people, hold case from either side; lift straight up one or two inches to clear the wall-mounting strip/clip.
7) Carefully set the refrigerated case on the floor or on a sturdy work surface, to provide easy access to both unit back and interior of case.

[Photo 1]

Remove beverage contents and shelf components to lighten case.

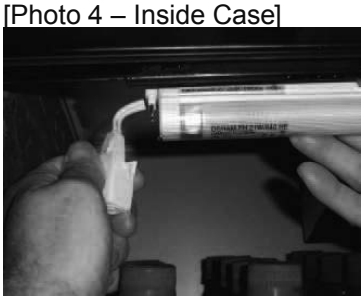
[Photo 2]

Remove doors to lighten case & provide easy access to interior.

[Photo 3 – From rear of case]

Remove putty from around plastic tubing where it exits case.

[Photo 4 – Inside Case]



If case has light, unplug from fixture and remove from clips.

8) Locate the plastic drain/elbow where it penetrates the rear case wall. Using a large screwdriver or small scraper, remove and **save the excess putty** used to seal and insulate the rear case penetration.
9) Remove the plastic elbow [it's a press fit] and the clear drain tubing from the rear case wall. [Remove any plastic retainers, if present.]
10) Look inside the case interior and identify the type of evaporator coil drain pan used on this BBR.

IDENTIFY DRAIN PAN TYPE:

- **Type 1- Integral Drain Pan** – The drain pan is integrated into the evaporator assembly. Pan can not be removed or replaced.
- **Type 2 - Stainless Steel One-Piece Cover/Pan** – Drain pan and vented fan cover are a single piece of stainless steel.
- **Type 3 - Aluminum One-Piece Cover/Drain -** Drain pan and vented fan cover are a single piece of textured aluminum.

[**NOTE**: If unit has an Integrated Drain Pan, go to Step 17.]

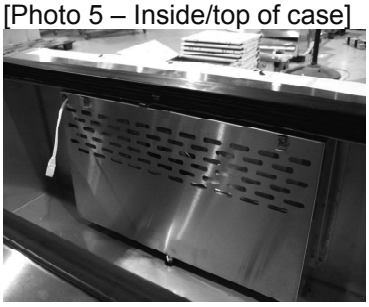
REMOVE COMBINATION COVER/DRAIN PAN:

11) [If unit has a florescent light] Disconnect light by pulling straight down on the white plug on left side of fixture.
12) Unsnap the fixture from the two metal clips by gently tilting it and pulling straight down. Set fixture aside.
13) Remove the four 10-24 screws that secure the combination cover/drain pan to the case interior sides.
14) Allow the pan to tilt down, supported by the rear drain.
15) [If the unit has the light fixture] Remove the plastic hole grommet [split as needed] and push light plug through the hole in the cover/pan. [It will be a tight fit.]
16) Remove old cover/pan from case and set aside.

ENLARGING DRAIN EXIT – CABINET PENETRATION:

17) Remove the plastic bushing from the drain hole and any remaining perma-gum sealant around the hole.
18) Using a rotary grinder or drill with a metal cutting hole bit, enlarge the rear cabinet penetration by about ½" below the existing hole. [**IMPORTANT:** for BBR models with an integrated drain pan (Type 1), be careful not to damage the inside plastic drain stub with your drill or grinder.]
19) After elongating the hole downward, deburr both inner and outer panel penetrations. [Deburr the outer panel from rear of unit.]

[Photo 5 – Inside/top of case]



Identify Drain Pan type. Type 2 – Stainless One-Piece Pan shown.

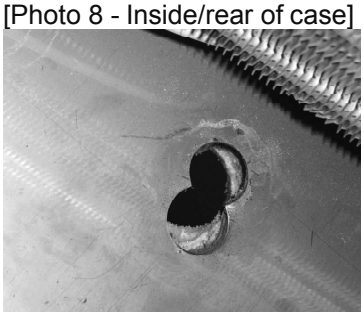
[Photo 6 - Inside/top of case]

Remove four screws that secure Type 2 & 3 Pan to sides of case.

[Photo 7 – Inside/rear of case]

Use hole saw to enlarge bottom of rear wall penetration.

[Photo 8 - Inside/rear of case]



After enlarging rear wall penetration, both inside and outside panel, file and de-burr.

REPLACING COVER/DRAIN PAN [IF NEEDED]:

20) Depending on the original Drain Pan Type:
    - **Type 1 - Integral Drain Pan** [Proceed to Step 27]
    - **Type 2 – Stainless Steel Cover/Pan** [Replace with new Aluminum Cover/Pan – See Step 21]:
    - **Type 3 – Aluminum Cover/Pan** [Replace the existing Cover/Pan removed earlier – See Step 21]:
21) Position cover/drain pan with its short drain tube located at the bottom of the enlarged rear case penetration.
22) Pack some of the perma-gum around tubing to hold in place at the bottom of the enlarged hole. [**NOTE:** Make sure drain tubing SLOPES DOWN toward rear of case.]
23) [It unit has light fixture] Push plug through hole in right front of new/existing cover/drain pan and replace split plastic grommet to protect cord.
24) Hold cover/pan in position and secure with the four 10-24 screws removed earlier.
25) [If unit has light fixture] Snap fixture back into the two retaining clips, with the plug socket on the left side.
26) Plug light cord into the left side socket on fixture.

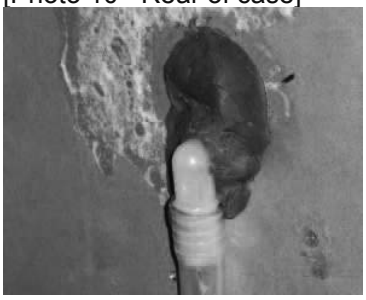
REAR DRAIN TUBE & CHASE INSTALLATION:

27) From the rear of the case take the plastic barbed elbow and press fit it into the tubing that penetrates the rear case wall, with the fitting pointed down to collection pan.
28) Press the other end of elbow into the 17" straight piece of tubing provided.
29) Take putty removed earlier and pack it around the plastic tubing [and elbow] that penetrates the rear case wall. [**NOTE:** Make sure elbow is held town tight against the bottom of cabinet penetration, to maintain down slope.]
30) With tubing directed straight down into collection pan, position drain line chase over tubing and mark position of two mounting holes. **NOTE:** Make sure top of tubing chase extends over the elbow and holds it down against bottom of enlarged cabinet penetration.]
31) Drill two small pilot holes at the locations marked and mount the drain line chase to rear cabinet using the two self-tapping screws provided.
32) Pack any remaining perm-seal around the cabinet opening, inside and out.
33) With a minimum of two people, lift case up against wall to a height just above where upper case flange engages the wall-mounted strip and lower it until it locks in place.
34) Reinstall shelf components and cabinet doors.
35) Remove power cord from inside upper case, plug in to 120-Volt outlet and turn ON main power switch.
36) Reload product and return unit to operation.

[Photo 9 - Inside/rear of case]

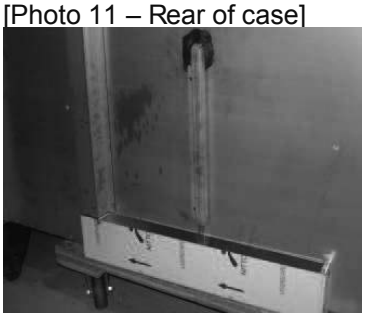
Install new drain pan. Insert drain tube thru hole - downward angle

[Photo 10 - Rear of case]



Install elbow, push to bottom of hole and secure with sealant.

[Photo 11 – Rear of case]



Install rear drain tubing chase to hold elbow at bottom of hole & ensure a drain downward slope.

Tools Required

- Power Drill or Grinder
- ¾-1" hole saw or grinder
- Files or de-burring tools
- 1/16" drill bit
- Medium Phillips screwdriver
- Medium flat blade screwdriver

P/N 19001546
Issued: November 1, 2007

2.5A Door & Frame Replacement [BBR-36 ONLY - Kit No. 18003331]

When Should The Door & Frame Be Replaced?
The Door & Frame Kit should be installed on BBR-36 Models **at the direction of Franke Technical Support**.

Kit No. 18003331 includes:

- Door frame with door closure springs & catches
- Left & right doors with roller bearings
- 12 ea. self-tapping screws
- Tube of black silicon sealant

1) Turn OFF power at switch and unplug power cord from 120-volt outlet.
2) Remove all refrigerated product from case. **IMPORTANT**: Any perishable foods including milk should be placed in another refrigerator.
3) Remove both glass doors. Lift up and pull out door bottom, then pull down and out of upper track, releasing auto-close spring stud.
4) Remove all hanging shelf components to provide more room to work.
5) Use a medium Phillips screwdriver to remove the six door frame mounting screws: three in top track & three in bottom track.
6) Cut the silicon sealant bead applied around the plastic door frame where it meets cabinet.
7) Remove old black plastic door frame from unit front.
8) Use a scraper to remove all old silicon sealant.
9) Remove all kit components from protective packaging.
10) Orient the new Door Frame with the larger flange facing OUT and the spring door closers on top/UP.
11) Insert new plastic door frame in cabinet opening. **NOTE**: Door frame will flex to help with press fit. Make sure the outer frame flange is flush and square with cabinet front.
12) Use power drill with 1/8" [3 mm] metal bit to drill six new holes through plastic frame track and stainless steel below. Locate one hole 3" [76 mm] from each side and one on-center, in both top and bottom track.
13) Use the self-tapping screws provided to secure plastic door frame to cabinet.
14) Apply a smooth continuous bead of black silicone sealant to the full perimeter of both the inside and outer door frame flange: top, sides and bottom. **IMPORTANT:** Take your time and ensure a neat continuous seal, to avoid condensate water leaks.

Test the replacement Door & Frame: ***See Next Page…***

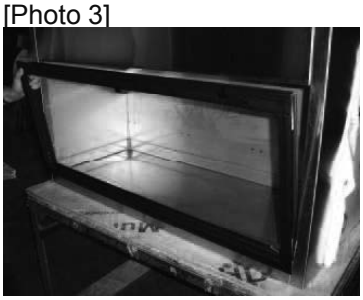
[Photo 1]

To remove doors lift up until bottom clears lower track then angle out, bottom-first.

[Photo 2]

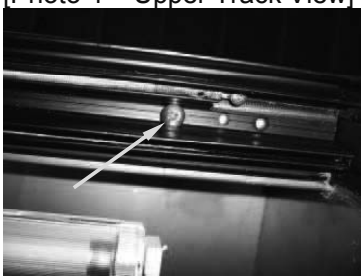
Remove the three screws in the bottom track and three in upper door track that secure frame.

[Photo 3]



Insert new frame into cabinet opening until flush and square.

[Photo 4 – Upper Track View]



Drill 1/8" [3 mm] holes through frame and stainless steel.

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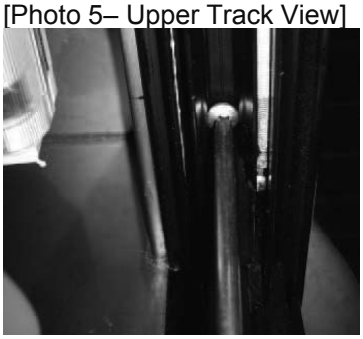
2.5 Door & Frame Kit Installation - Continued

15) Install both glass doors. Grasp door with both hands; nose [left/right] top leading edge against spring closing stud and slide stud against spring pressure [left or right] until door top frame slides into top track. Angle door bottom into bottom track and allow door to slide closed.
16) Slide OPEN door, release it and allow it to close. Did closing spring roll it back and fully close door?
17) Check door seal against cabinet frame. If doors do not seal against frame, **See BBR Service Manual Section 3.2 for instructions on adjusting door alignment.**

18) If both doors are functioning properly, return BBR to service.

🛠Tools Required:
- Medium Phillips Screwdriver
- Sharp bin knife or tile cutter
- Power Drill & 1/8" [3 mm] drill bit
- Black silicone sealant

[Photo 5– Upper Track View]



Secure new track to cabinet using the self-tapping screws provided.

[Photo 6]

Use the silicon sealant provided to seal both inside and outside of door frame. Apply in a smooth continuous bead.