

# INSTALLATION AND OPERATING INSTRUCTIONS for all Hydrocarbon TMR Refrigerator Models



3071628RV05

Rev. 10/13/2022

3779 CHAMPION BLVD, WINSTON-SALEM, NC 27105

Phone: (888) 845-9800 | Fax: (800) 253-5168 | Web: beverage-air.com

SEE BACK COVER FOR WARRANTY REGISTRATION

#### **WELCOME**

Thank you for purchasing a Beverage-Air cabinet. This series has passed our strict quality control inspection and meets the high standards set by Beverage-Air! You have made a quality investment that with proper maintenance will give you many years of reliable service!

Please read the following installation and maintenance instructions before installing or using your unit. If you have any questions, Please call our Technical Service Department at **(800) 684-1199**. 8:00 AM to 5:00 PM EST.

#### **Important Information**

- PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLING OR USING, IF RECOMMENDED PROCEDURES ARE NOT FOLLOWED, WARRANTY CLAIMS MAY BE DENIED.
- Your warranty registration information is located with this manual. Please complete the card and submit it to Beverage-Air within TEN days of installation. Failure to properly register equipment may limit or void the warranty.
- Beverage-Air reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions, or replacements for previously purchased equipment.

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#### **SAFETY**

This appliance has been designed with your safety in mind. It has many features to keep you from being harmed. However, safe operation and maintenance are your responsibilities.



#### Use: When using this unit, please:

- Move it carefully. If on casters be sure the casters do NOT run over the power cord.
- Lock the casters when in use.
- Seek help. This machine is heavy! Be sure to move with enough help to avoid tipping or dropping the cabinet.
- Prevent children from playing in or on the cabinet.
   Persons unable to use this product must be prevented access.
- **Follow all instructions**. There are many safety labels and directions on the unit. Heed them.
- Watch your fingers. There may be pinch points near the door hinges.



#### **Maintenance**

#### Do NOT:

- Clean a frozen evaporator with a sharp object
- Clean a dirty condenser with a sharp object.
- Store gasoline, kerosene or any other flammable material near the cabinet.

#### **Do ALWAYS**

- Use a Beverage-Air recommended technician certified to repair R290 equipment.
- Use ONLY Beverage-Air factory service parts. Use of non OEM parts can be dangerous because of the design changes needed to safely use R290.

#### **Important Information to Add**

Record the model number, serial number and the date of installation here for future reference. The model and serial numbers are on the unit's serial number dataplate, which is located on the left inside wall.

Model Number	
Serial Number	
Date of Installation	
Purchased From	





Observe the **Caution** and **Warning** notices. They are indicators of important safety information. Keep this manual for future reference.

#### IMPORTANT INFORMATION

This unit is intended to be used in a commercial application. That includes bars and restaurants.

If installed in a residence some commercial service companies may not be able to service it on site.

The manufacturer has designed and produced this machine with the finest in materials. The manufacturer assumes no liability for units that have been altered in any way. Alterations or part substitutions will void the warranty.

#### Limitations

The machine is designed for use indoors in a controlled environment. It must be kept dry, not overheated or subjected to excessive cold. May only be connected to a dedicated electrical circuit. Extension cords are not permitted.

	Minimum	Maximum
Voltage	100	130
Room Air Temp	75.2 ° F	100° F

#### Air Flow, All Models regardles of sections, or door count.



#### **Agency Approvals**

These marks appear on the dataplate or serial tag, located in the inside of the left wall. The dataplate also contains the model and serial numbers as well as electrical requirements.







#### **PRODUCT INFORMATION**

Model	Cabinet Dimensions w x d x h (Inches)	Sections	Full Load Amps	Power Cord Plug (NEMA)	Refrigerant Type / Charge (g)
TMR1HC-1S	26 9/32 X 33 9/16 X 80 1/2	1	3	5-15P	R-290 / 65*
TMR2HC-1S	53 31/32 X 33 9/16 X 80 1/2	2	5.3	5-15P	R-290 / 90**

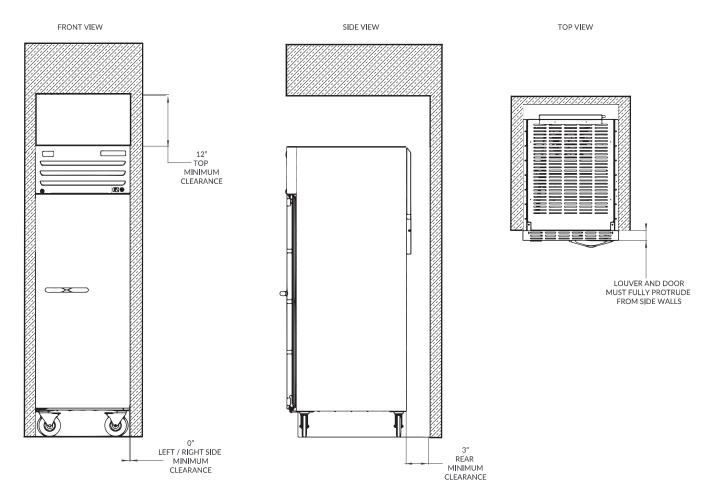
Height includes casters.

- Single door models will maintain product temperature between 35 and 46.2 degrees °F with the factory setting of 36.3°F.
- Two door models will maintain product temperature between 34.5 and 41 degrees °F with the factory setting of 35.4°F.
- All models are 115 volts, 60 Hz AC.
- ALWAYS REFERENCE YOUR EQUIPMENT DATA PLATE AMPS, REFRIGERANT AND REFRIGERANT CHARGE FOR THE MOST UP TO DATE AND ACCURATE VALUES.
- · There are no access valves on the refrigeration system.

<sup>\* 65</sup> grams = 2.3 ounces.

<sup>\*\*90</sup> grams = 3.2 ounces.

#### **CLEARANCE AND PLACEMENT**



#### **Placement**

Consider the following when selecting a location for your Refrigerator:

#### Clearance:

- 12 in. at the top
- 3.0 in. at the rear
- 0.0 in. at the left side
- 0.0 in. at the right side

#### Note: Louver and Door must fully protrude from side walls

**Floor Load:** The floor on which the Refrigerator is located must be even and level, free from vibrations, and strong enough to support the combined weights of the unit and maximum product load.

Ventilation: Grille area at front must be free and clear of any object or wall.

Power Outlet: Dedicated power outlet is located within the length of the unit's power cord.

#### **UNPACKING AND SET UP**

Carefully inspect the shipping carton for damage. This is the only time that shipping damage may be claimed. If damage is suspected, open the carton immediately and, if there is damage, retain the carton and contact the shipper to make a claim. Do NOT contact the manufacturer.

#### Uncrating

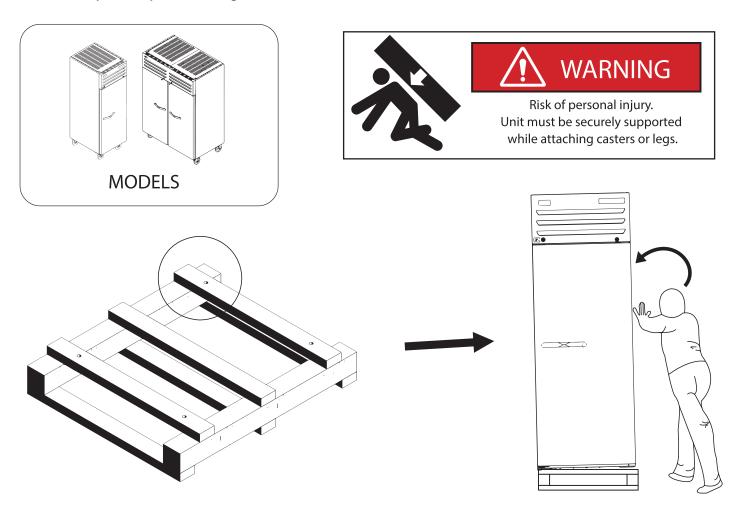
Tools Needed: Phillips screwdriver.



- 1. Cut the stretch wrap from any side, remove the cardboard from the corners, the cardboard top and the cardboard in the front and the back.
- 2 Remove the bond paper. Discard stretch wrap and any cardboard that will not be recycled.
- 3 Move unit as close to final position as possible before removing the skid.

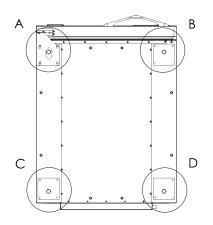
#### **Skid Removal**

Loosen the four hex head screws attached to your model using a 3/4 inch wrench. Once the model is loose, push it to the left and tilt the cabinet to the other direction and block it securely with a 2 X 4 piece of lumber or other suitable material. While in this position, proceed to Page 8 to install casters.



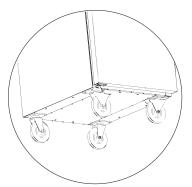
#### **INSTALLING THE CASTERS**

1. Inside your model you will find a kit of four 6" casters (2 with brakes, and 2 free moving). The installation points are located on the bottom corners of the unit.



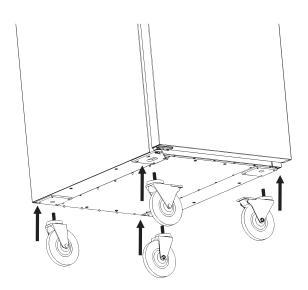


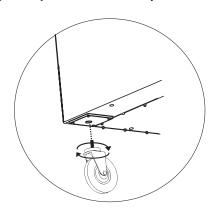
NOTE: CASTERS WITH BRAKES ARE PLACED ON THE FRONT OF THE UNIT, FREE MOVING ON THE REAR.



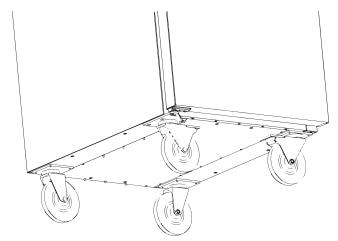
Correctly installed casters

2. Thread the stem casters into the holes on the bottom of the cabinet and tighten by hand as much as possible.





3. Once the caster cannot be turned any more, use a 3/4 inch wrench to tighten the nut in the caster until it's snug. After the first 2 casters are installed, tilt the cabinet to the opposite side and block it securely and repeat steps 2 and 3 for the other 2 casters.



#### IMPORTANT SAFETY INFORMATION

#### SAVE THESE INSTRUCTIONS

#### **▲ WARNING**

The refrigerator may tip forward when too much pressure is applied to an open door or when the refrigerator is installed on an unlevel surface. This may cause injury if the refrigerator tips over or products (food/liquids) fall from the top of the refrigerator.



#### **AWARNING**

#### Refrigerator Anti-tip device



For additional protection against refrigerator tipping inicidents, the supplied anti-tip device shall be installed on the wall. The refrigerator anti-tip device secures the refrigerator to the wall and prevents the refrigerator from tipping forward.

It is important to bear in mind that to avoid the risk of tipping over, it is essential to install the equipment on a completely flat leveled surface.

\*IMAGES FOR ILLUSTRATION PURPOSES ONLY

## Anti-tip bracket installation instructions

Refrigerator Anti-tip device, for both one and two door equipment

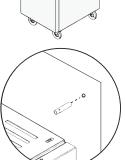
To avoid risk of the appliance tipping, it must be secured by a properly installed anti-tip bracket, for both one and two door equipment.



#### STEP 1. LOCATE ANTI-TIP BRACKET

Place the anti-tip wall bracket up against the rear wall and in line with the desired location of the back side of the refrigerator.

Use the anti-tip wallbracket as a template for marking the holes on the wall. Mark the hole locations with a pencil, nail or awl.



# STEP 2. DRILL AND INSTALL SLEEVE ANCHORS.

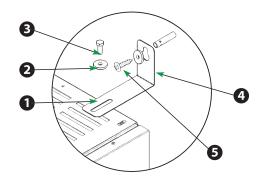
Place the anti-tip wallbracket lined up with the wall holes marks.

Drill the holes for the anchors of the wall at the center of the holes. (Use a 1/4" drill bit).

Install the sleeve anchors into the drilled holes.

#### STEP 3. INSTALL THE ANTI-TIP WALL BRACKET

Install the sleeve anchors into the drilled holes. Place the anti-tip wall bracket as indicated in step 2. Install the 1/4" lag bolts through the anti-tip wall bracketand tighten appropriately.



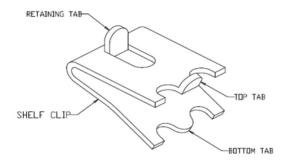
\*IMAGES FOR ILLUSTRATION PURPOSES ONLY

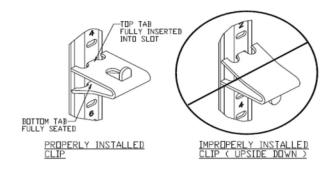
## **User Manual for TMR Refrigerators**

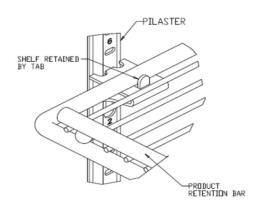
#### **SHELF INSTALLATION**

- Determine the proper location for the shelf clips.
   The reference numbers on the pilaster can serve as a guide to ensure all clips are properly located.
- 2. Insert the top tab of the shelf clip into the desired hole of the pilaster. The retaining tab MUST be facing up as shown.
- 3. Rotate the clip downwards and insert the bottom tab into the matching hole in the pilaster. The clip may need to be squeezed slightly during installation.
- 4. Install all remaining clips.
- Install shelves onto clips with the product retention bar facing up. Be careful not to dislodge clips during installation.

- 6. Place shelves so that the retaining tab on the clip captures the shelf as shown.
- 7. Confirm that the shelf is resting on ALL 4 clips and that the clips are securely attached to the pilasters.
- 8. Improper shelf clip installation could cause the shelf and / or the product on it to fall, resulting in damage to the unit and possible bodily injury.
- Do NOT overload the shelves. The unit is designed to use all shelves that are supplied in an equally spaced manner. Contact Beverage-Air customer service if fewer shelves or a different configuration to ensure shelf overloading will not occur.







#### **ELECTRICAL**

This is a cord-connected unit, and must be connected to its own **dedicated** power supply. Check the dataplate on the machine to confirm the voltage and per the dataplate use the correct fuses or HACR circuit breakers.

Note: Do not connect to GFI / GFCI outlets. Connection to that type of outlet can result in product loss due to unsafe cabinet temperature when GFI device trips from moisture.

#### **Power Cord**

This 115 volt model is equipped with a cord and 5-15P plug.

If the power cord becomes damaged, it must be replaced with the identical cord.

#### **Follow All National and Local Codes**

This Unit Must Be Grounded. Do not use extension cords and do not disable or by-pass ground prong on electrical plug.

#### **Initial Start Up**

Plug the power cord into the proper power supply.

The cabinet will soon begin to blow warm air out of the top area, and cool air will flow from the inside blower.

The cabinet temperature has been set at the factory and should not need adjustment, however if it was changed, the standard setting is 36.3° F for single door equipment and 35.4°F for two door equipment.

#### **Cautions**

Care must be taken whenever moving or servicing the unit. The refrigerant is contained in a sealed system, but if released it may be flammable.

## **User Manual for TMR Refrigerators**

#### **USING THE UNIT**

Operation is simple, just keep it connected to the correct power supply and the refrigerator will maintain the internal temperature it has been set to. Keep the doors and / or drawers closed as much as possible to avoid unnecessary run time.

The controller displays the current internal temperature.

Adjusting the set temperature lower will NOT cause the system to lower the temperature faster. When on, the refrigeration system is always operating at maximum.

The temperature was set at the factory at 36.3 ° F for the one-door model and 35.4 ° F for the two-door model, but you can adjust it to your own selected temperature. 5 seconds after setting, the display will automatically shows the current temperature again.

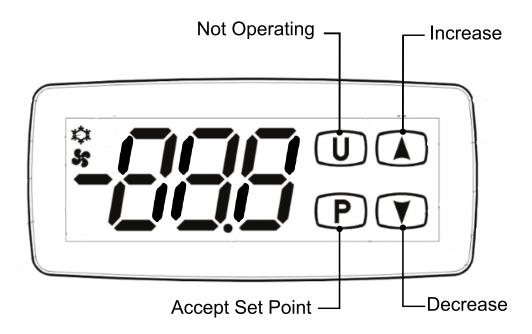
After turning on the equipment, it will defrost automatically every 6 hours. During the defrost cycle, the display will show the legend dEF, at the end of the defrost the message PdF will be displayed until the temperature that the refrigerator had before starting the defrost is reached or 15 minutes have elapsed.

To start a defrost manually, press the button with the up arrow for 5 seconds while the temperature is shown on the display.

The internal fan will normally be on all the time except when the door is opened, when the door is opened the fan will turn off for 1 minute, after that it will turn on again, even if the door is open.

The compressor and its fan will only turn on when the internal temperature exceeds the SetPoint + 3. Every time the compressor is turned off, a minimum compressor shutdown time of 5 minutes will be applied, this is to prevent wear and tear and prolong the life of the equipment.

The equipment will turn on the light when opening the door and turn it off when closing it.



In most cases the only thing displayed will be the cabinet temperature. When something other than normal operation has occurred, a message will be shown.

# **User Manual for TMR Refrigerators**

Message Displayed	Why	What to do
dEF	Unit is defrosting	Nothing. Normal operation.
PdF	Post-defrost in progress	Nothing. Normal operation.
Hi	Cabinet temperature too warm	Confirm doors or drawers are closed.
Lo	Cabinet temperature too cold	Apply a defrost, if the message does not change, call for service.
оР	Door is open	Close door, if message does not change, call for service
E1 -E1 E2 -E2 E3 -E3	Sensor unplugged or has failed	Call for service.
HU	The supply voltage exceeds the maximum	Wait for the voltage to stabilize.
LU	Supply voltage below minimum	Wait for the voltage to stabilize.

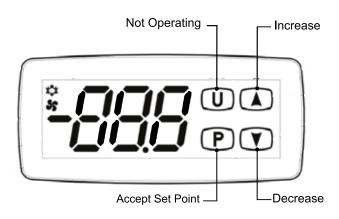
## SEQUENCE OF OPERATIONS REFRIGERATOR

The refrigerator operates based on the air temperature measured by the probe located at the return air.

ON		OFF		
COMPONENT	OPERATION	CONTROLLER ACTION	OPERATION	CONTROLLER ACTION
COMPRESSOR	Compressor turns on when the air temperature at the	The Compressor Contact is energized	Compressor turns off when the air temperature at probe is	The Compressor Contact is deenergized
COMPRESSOR	probe is above the sum of the set point +3	(E34B – Terminal #2)	equal to or less than the set point	(E34B – Terminal #2)
CONDENSER FAN	The Condenser Fan turns on when the Compressor is running	The Condenser Fan is wired directly to the Compressor, not through the controller	The Condenser Fan turns off when the Compressor is not running	The Condenser Fan is wired directly to the Compressor, not through the controller
EVAPORATOR FAN	If your refrigerator door is closed, the evaporator fan will be on continuously.	Evaporator fan Contact is energized (E34B - Terminal # 3)	When opening the refrigerator door, the evaporator fan will turn off for 1 minute, after that the evaporator fan will turn on even if the door remains open.	Evaporator fan + door open Contact is de-energized for 1 minute (E34B - Terminal # 3)
	When the door is opened	The Light Contact is energized	When the door is closed	The Light Contact is de-energized
LIGHT		(E34B – Terminal #4)		(E34B – Terminal #4)

Condition	Compressor	Condenser Fan	Evaporator Fan	Lights
Cabinet Temp > Set point + 3	ON	ON	ON	ON or OFF
Cabinet Temperature <= Set point	OFF	OFF	ON	ON or OFF
Defrost	OFF	OFF	ON	ON or OFF

**Electronic Controller** 

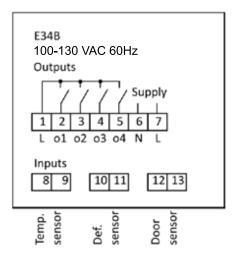


#### **Control Panel Display**

Defrost LED			Alarm LED		
**	On fixed:	Defrost active	$\Lambda$	On fixed:	ALARM Present
₩,	Flashing:	Dripping state	$\angle ! \setminus$	Flashing:	ALARM Silenced
	Off:	Defrost is off		Off:	No Alarm
Fan LED		137	Compressor LED		
	On fixed:	Fan active	***	On fixed:	Compressor active
	Flashing:	Standby Fan (Normal operation.)	**	Flashing:	Standby Compressor(Normal operation.)
	Off:	Fan Off		Off:	Compressor off

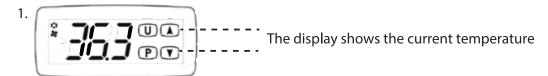
NOTE: When switched on, the instrument panel performs a lamp test for a few seconds. Keyboard Functions

<b>^</b>	▼	U	P
UP	DOWN	DEFROST (ESC)	SET (ENTER)
Quick press and release			
• Increases Set Point	Decreases Set Point	No function	Accept Set Point
Long press and release			
Start/Stop Defrost	No function	No function	No function

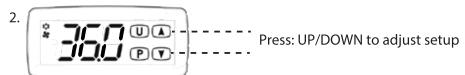


#### Changing the Set point

#### Current temperature



#### Flashing temperature setpoint





Press the P key to accept or wait 5 seconds, the display automatically reverts to showing the current temperature.

**Electronic Controller Alarms** 

Alarm Code	Trigger	Outputs	Comments
"Hi"	Air temperature is above 59°F	Blink "Hi"	High temperature alarm
"Lo"	Air temperature is less than -58°F	Blink " Lo"	Low temperature alarm
"oP"	Door open	Blink "oP"	Door open alarm
"HU"	The line voltage is higher than the upper limit	Blink "HU"	High voltage alarm
"LU"	Line voltage is less than the lower limit	Blink "LU"	Low voltage alarm
"E1 -E1"	"S1" error	Blink "E1" or "-E1"	"S1" sensor failure (short or open)
"E2 -E2"	"S2" error	Blink "E2" or "-E2"	"S2" sensor failure (short or open)
"E3 -E3"	"S3" error	Blink "E3" or "-E3"	"S3" sensor failure (short or open)

#### CLEANING AND MAINTENANCE

CI	eanin	g Sch	hedu	le:
C	caiiiii	g Jui	ICUU	IIC.

**Cabinet Condenser coil** Gaskets **Routine maintenance** 

Daily wipe down **Quarterly cleaning** Daily inspection, check Annually

that hinges are tight to

Weekly interior the cabinet.

#### **Daily Exterior Cleaning**

It is much easier to clean on a regular basis than to have to remove stains once they have built up.

- 1. Wash with a clean sponge and a mild detergent that
- 2. Rinse with clean water.

does not contain chlorine.

3. Dry with a soft cloth.

- 4. Polish with a soft cloth, wiping with the grain.
- 5. Wipe weekly with stainless steel cleaner.

#### **Weekly Interior Cleaning**

- Remove all food, food related items and shelves. Store the food at a safe temperature.
- 2. Disconnect power to the unit (unplug it or switch the breaker off).
- 3. Remove all loose food particles from the inside walls. floor, door liner and ceiling.
- 4. Scrub all interior surfaces and door gaskets with a warm (100°F to 110°F) detergent solution and a soft scrub brush.

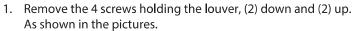
- 5. Rinse with clean water and allow to air dry.
- 6. Return the shelves to the unit and secure them.
- Restore power.
- 8. Return food to the unit when it has reached a safe temperature.

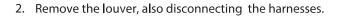
#### **CONDENSER CLEANING**

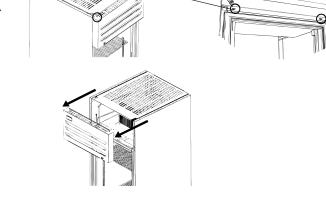
Keeping the condenser coil clean is critical to efficient operation.

#### Before starting:

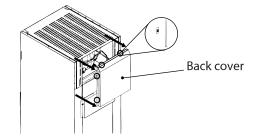
- \* Unplug unit from power supply.
- \* The lock must be turned off to remove the louver.



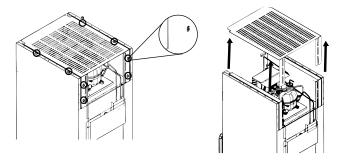




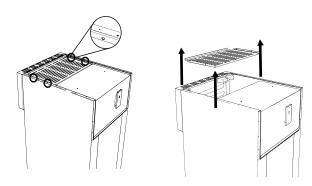
3. Remove the 6 screws from the "Back cover", which is located on the back of the equipment.



4. For TMF1HC-1S or TMF2HC-1S, remove 8 screws which hold the upper grill to be able to access the unit.



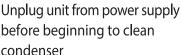
Otherwise, for TMR1HC-1S or TMR2HC-1S only 4 screws are removed.

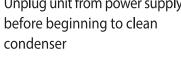


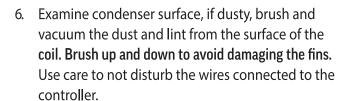
5. Finally, you now have access to the unit to continue with the necessary maintenance.



Rotating fan blade can cause personal injury.



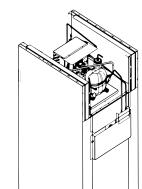




Note: If the coil is greasy, the coil will need to be cleaned with coil cleaner and that should be left to an experienced technician.

7. Return grill to unit.

Note: Air filters are not recommended as they restrict the flow of cooling air.



# **User Manual for TMR Refrigerators**

#### **METHODS FOR CLEANING STAINLESS STEEL**

Cleaning Needed	Cleaning Agent	Method of Application	Affect on Finish
Smears and fingerprints	Areal 20, Lac-O-Nu, Lumin Wash O'Cedar Cream Polish, Stainless Shine.	Rub with cloth as directed on the package.	Satisfactory for use on all finishes. Provides barrier film to minimize prints.
	Allchem Concentrated Cleaner.		
	Samae, Twinkle or Cameo Copper Cleaner	Rub with damp cloth.	
	Grade FFF Italian pumice, whiting, or talc.	Rub with dry cloth.	
Stubborn Spots and Stains, Baked-On Splatter, and Other Light Discolorations	Liquid NuSteel Paste NuSteel or DuBois Temp. Copper's Stainless Steel Cleaner Revere Stainless Cleaner Household cleansers, such as Old Dutch, Lighthouse, Sunbrite, Wyandotte, Bab-O, Gold Dust, Sapolio, Bon Ami, Ajax, or Comet Grade F Italian Pumice, Steel Bright, Lumin Cleaner, Zud, Restore, Sta-Clean, or Highlite. Penny-Brite or Copper-Brite.	Use small amount of cleaner. Rub with dry cloth using a small amount of cleaner. Apply with damp sponge or cloth. Rub with a damp cloth. May contain chlorine bleaches. Rinse thoroughly after use. Rub with a damp cloth. Rub with a dry cloth using a small amount of cleaner.	Use in direction of polish lines on No. 4 (polished) finish. May scratch No. 2 (mill) and Nos. 7 and 8 (polished) finishes.
Heat tint or discoloration	Penny-Brite or Copper-Brite. Past NuSteel, DuBois Temp, or Tarnite. Revere Stainless Steel Cleaner. Allen Polish, Steel Bright, Tenacious Deposits, Rusty Discolorations, Industrial Atmospheric Stains Wyandotte, Bab-O or Zud.	Rub with a dry cloth. Rub with a dry cloth or stainless steel wool. Apply with damp sponge or cloth. Rub with a damp cloth.	
Burnt-On Foods and Grease Fatty Acids, Milkstone (where swabbing or rubbing is not practical)	Easy-Off, De-Grease-It, 4 to 6% hot solution of such agents as trisodium phosphate or sodium tripolyphosphate or 5 to 15% caustic soda solution	Apply generous coating. Allow to stand for 10-15 minutes. Rinse. Repeated application may be necessary.	Excellent removal, satisfactory for use on all finishes.
Tenacious Deposits, Rusty Discolorations, Industrial Atmospheric Stains	Oakite No. 33, Dilac Texo 12, Texo NY, Flash-Klenz, Caddy Cleaner, Turco Scale 4368 or Permag 57.	Swab and soak with clean cloth. Let stand 15 minutes or more according to directions on package, then rinse and dry.	Satisfactory for use on all finishes
Hard Water Spots and Scale	Vinegar. 5% oxalic acid, 5% sulfamic acid, 5 to 10% phosphoric acid, or Dilac, Oakite No. 33, Texo 12, Texo N.Y.	Swab or wipe with cloth. Rinse with water and dry. Swab or soak with cloth. Let stand 10-15 minutes. Always follow with neutralizer rinse, and dry.	Satisfactory for all finishes. Satisfactory for all finishes. Effective on tenacious deposits or where scale has built up.

# **User Manual for TMR Refrigerators**

**Beverage-Air** 

#### **HELP**

Trouble Diagnosis for the User		
Malfunction	Possible Cause	Likely Solution
No cooling - unit is silent	Unit not plugged in. Fuse or circuit breaker tripped. Power cord plug loose in outlet.	Connect to proper voltage circuit Replace fuse or reset breaker. Check outlet for loose connection, replace as needed
Unit cools but seems to be on all the time	Dirty condenser	Clean condenser
Space temperature too high	Dirty condenser Evaporator iced over Unit in high temperature environment	Clean condenser Defrost evaporator Reduce temperature of room
Space temperature too low	Temperature control	Adjust or replace control
Trouble Diagnosis for the Technician		
No cooling - compressor does not hum	Temp control stuck in open position	Replace temp control.
No cooling - compressor hums but does not start	Low voltage to unit. Compressor starting system failure	Check voltage, correct as needed. Check start relay and start capacitor. See next step.
No cooling - compressor starts but shuts off	Compressor start relay failure Compressor start capacitor failure	Replace relay. Replace capacitor.
No cooling - compressor cycles on and off	Overheating weak overload	Clean condenser, check fan motor and blade. Check refrigerant charge. Replace overload.
Unit cools, but is slow to pull cabinet temperature down	Evaporator fan not turning	Check fan(s), on multiple fan units one fan may be turning slowly and will need to be replaced.
Unit cools but turns on and off frequently	No product in cabinet. Temperature control defective Refrigeration issue	Fill cabinet Replace control Have system checked
Makes excessive noise	Tubing rattle Loose parts Bent or broken fan blade Noisy fan motor	Check tubing for routing Check for loose components Replace fan blade Replace fan motor

#### **FOR THE SERVICE TECH - R290**

Refrigeration service should only be attempted by a trained trade professional certified to work on R290 systems.

#### Here are some critical service items.

This list does not qualify anyone to service the unit. It is a reminder and checklist for the service tech. Keep these in mind for R290 service:

- Wire nuts are NOT to be used when changing an electrical part.
- The switches in this product are sealed, only exact replacements may be used.
- The process tubes are to be used for service access.
- Cut out (with tubing cutter) refrigeration components that are to be replaced. Do NOT un-braze.
- Because R290 can be vented into the air during service, the venting MUST be in an area free from flame or spark. It must be near an opend window or door.
- A sign noting service of a system containing propane must be attached to the unit during refrigeration service.
- A combustible gas leak detector must be used to inform anyone in the area when propane is present in the air.

#### Other Information:

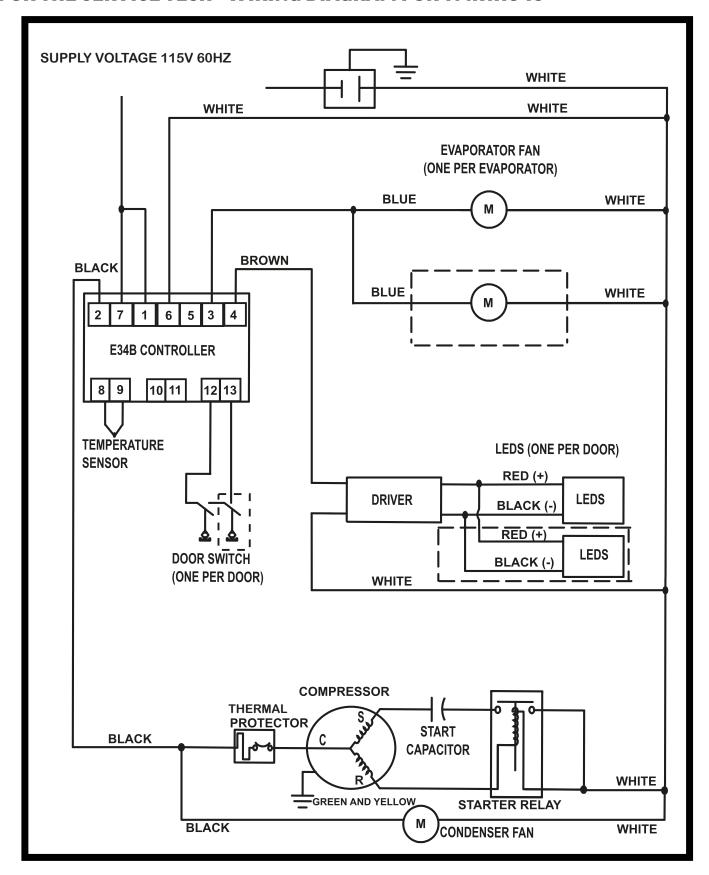
**Evacuation**: It is critical that a refrigeration system be leak free and internally dry. A thorough evacuation with a good vacuum pump with a micron gauge attached is the only way to ensure that the system is dry and ready for a charge of refrigerant.

**Charging:** The system is critically charged and the proper type and amount MUST be weighed in.

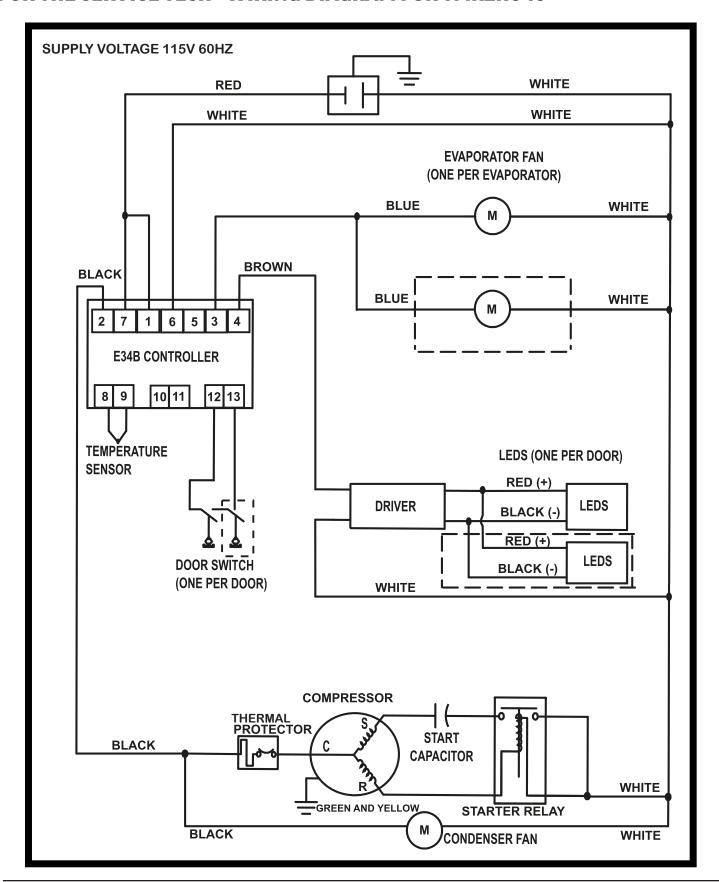
**Overcharge symptoms:** Unit will cool properly but the suction line temperature will be unusually cold. Compressor run time will be longer than normal.

**Undercharge symptoms**: Long run time, poor cooling and a hot compressor dome are the main symptoms of an undercharge.

#### FOR THE SERVICE TECH - WIRING DIAGRAM FOR TMR1HC-1S



#### FOR THE SERVICE TECH - WIRING DIAGRAM FOR TMR2HC-1S



#### LIMITED WARRANTY

# WARRANTY (Warranty valid in USA and Canada) TWO (2) YEAR PARTS AND LABOR WARRANTY:

Beverage-Air Corporation warrants to the original purchaser of Beverage-Air branded equipment, including all parts thereof, that such equipment is free from defects in material and workmanship, under normal use, proper maintenance, and service as indicated by Beverage-Air installation and operation instructions, for a period of TWO (2) years from the date of installation, or twenty-seven (27) months from the date of shipment from the manufacturer, whichever is earlier.

# ADDITIONAL FIVE (5) YEAR COMPRESSOR PART WARRANTY\*:

In addition to the warranty set forth above, Beverage-Air warrants the hermetically/semi-hermetically sealed compressor (part only) for an additional FIVE (5) years beyond the first TWO (2) years warranty period; not to exceed eighty-seven (87) months from the date of shipment from Beverage-Air, provided upon receipt of the compressor, manufacturer examination shows the sealed compressor to be defective. This extended warranty does not cover freight for the replacement compressor or freight for the return of the failed compressor.

\* Units shipped after 09/01/2023. Previous warranty applies to units shipped prior.

#### **EXCEPTIONS:**

- CT96 and CF3 models carry a one (1) year parts and labor warranty, limited to fifteen (15) months from date of shipment from Beverage-Air. These are excluded from additional compressor warranty.
- SR/SF (Slate) models carry a two (2) year parts and labor warranty, limited to twenty-seven (27) months from date of shipment from Beverage-Air.
- TMR/TMF carry a two (2) year parts and labor warranty, limited to twenty-seven (27) months from date of shipment from Beverage-Air.
- Blast Chillers carry a three (3) year parts and labor warranty; additional two (2) years compressor part only.
- Units installed in Residential applications will be not covered under this warranty. Units are intended for Commercial use only.

Also, this extended compressor-part only warranty does NOT apply to any electrical controls, condenser, evaporator, fan motors, overload switch, starting relay, capacitors, temperature control, filter/drier, accumulator, refrigeration tubing, wiring harness, labor charges, or supplies which are covered by the warranty above. Note: 3rd party extended warranties are not covered by this warranty statement.

Normal wear parts, such as light bulbs/lams and gaskets are not covered by this warranty. For the purpose of this warranty, the original purchaser shall be deemed to mean the individual or company for who the product was originally installed.

Units that utilize variable speed compressor technology can experience nuisance tripping on Class A GFCI outlets which have a trip limit of 4 mA to 6 mA. To avoid this issue in a location that requires GFCI circuit protection, Beverage Air & Victory recommends using a HUBBELL Model Number GFRST83W 20A Heavy Duty Hospital Grade Self-Test GFCI Receptacle.

Our obligation under this warranty shall be limited to repairing or replacing, including labor, any part of such product, which proves thus defective. Beverage-Air reserves the right to examine any product claimed to be defective.

The labor warranty shall be for self-contained units only and for standard straight time, which is defined as normal service rate time, for service performed during normal working hours. Any service requested outside of a servicer's normal working hours will be covered under this warranty at the normal rate and any additional overtime rate will be at the responsibility of the equipment purchaser.

Any part or accessory determined to be defective in the product should be returned to the company within thirty (30) days under the terms of this warranty and must be accompanied by a record of the cabinet model, serial number, and identified with a return material authorization number (RMA#) issued by the manufacturer.

Special installation/applications, including remote locations, are limited in coverage by this warranty. Any installation that requires extra work, and/or travel, to gain access to the unit for service is the sole responsibility of the equipment purchaser.

Improper operation resulting from factors, including but not limited to, improper or negligent cleaning and maintenance, low voltage conditions, inadequate wiring, outdoor use (unless otherwise specified) and accidental damage are no manufacturing defects and are strictly the responsibility of the purchaser.

## **User Manual for TMR Refrigerators**

#### **LIMITED WARRANTY (CONTINUED)**

With the exception of Blast Chillers, the product is designed for maintaining temperature and not bringing food to a desired temperature therefore cannot be held responsible for this function under warranty.

Units must be in a conditioned environment or warranty will be void.

Condensing coils must be cleaned at regular intervals. Failure to do so can cause compressor malfunction and will void warranty. Although cleaning requirements vary in accordance with operation of various products, Beverage-Air recommends a minimum monthly cleaning.

NO CLAIMS CAN BE MADE AGAINST THIS WARRANTY FOR SPOILAGE OF FOOD, PRODUCTS, LOSS OF SALES OR CONSEQUENTIAL DAMAGES.

THE FOREGOING WARRANTIES ARE EXPRESSLY GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HERBY DISCLAIMED, ALL OTHER OBLIGATIONS OR LIABILITIES ON OUR PART, AND WE NEITHER ASSUME, NOR AUTHORIZE ANY OTHER PERSON TO ASSUME FOR US, ANY OBLIGATION OR LIABILITY IN CONNECTION WITH THE SALE OF SAID REFRIGERATION UNITS OR ANY PARTS THERE OF.

This warranty shall not be assignable and shall be honored only in so far as the original purchaser. This warranty does not apply outside the limits of the United States of America and Canada, nor does it apply to any part that has been subject to misuse, neglect alteration, accident, or to any damage caused by transportation, flood, fire, acts of terrorism, or acts of God.

#### **LIMITATION OF LIABILITY:**

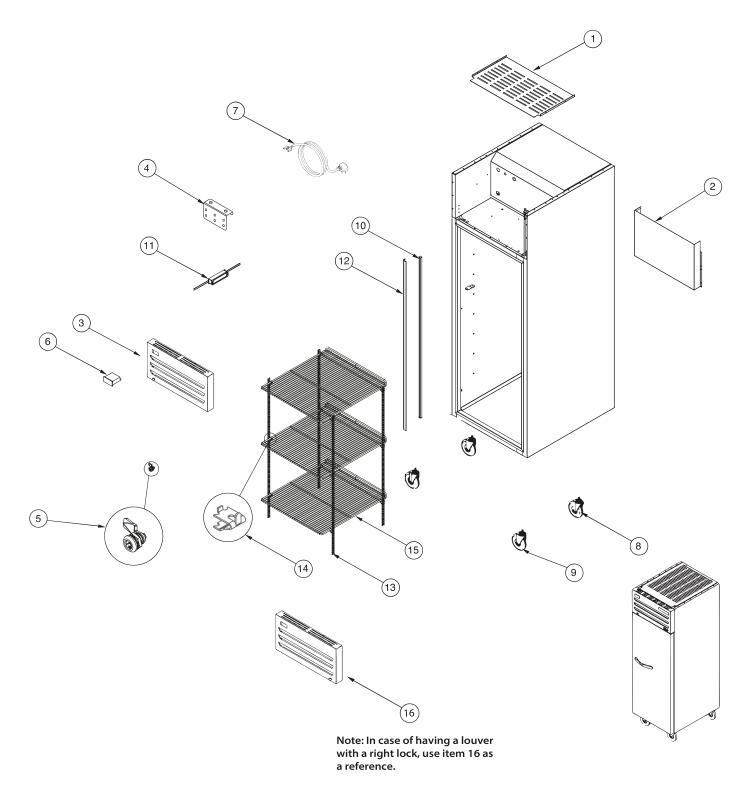
Beverage-Air Corporation or their affiliates shall not be liable for any indirect, incidental, special or consequential damages, or losses of a commercial nature arising out of malfunction equipment or its parts components thereof, as a result of defects in material or workmanship.

THE ORIGINAL OWNER'S SOLE AND EXCLUSIVE REMEDY AND BEVERAGE-AIR'S SOLE AND EXCLUSIVE LIABILITY SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT OF PARTS OR COMPONENTS CONTAINED IN THE EQUIPMENT IDENTIFIED ABOVE WHICH UNDER NORMAL USE AND SERVICE MALFUNCTION ASA RESULT OF DEFECTS IN MATERIAL OR WORKMANSHIP, SUBJECT TO THE APPLICABLE PROVISIONS AND LIMITATIONS STATED ABOVE.

Note: Additional Terms and Conditions of sale may apply. Notice: Specifications are subject to change without notice. Contact Beverage-Air for specific model agency approval. All prices are ex-works Brookville, PA. September 1, 2023

# **REPLACEMENT PARTS FOR TMR1HC-1S**

#### **GENERAL ASSEMBLY**



#### **GENERAL ASSEMBLY CONT'D**

ITEM	SPARE PART CODE	DESCRIPTION
*	3071368	TEMPERATURE SENSOR (1.5M)
1	2079214	CONDENSER GRILLE, 600
2	2077171	BACK DIVERTER AIR
3	2112880	LOUVER 1D (RIGHT HINGE)
4	2106497	LOUVER SUPPORT BRACKET
5	2094602	LOCK CYLINDER
6	2106533	TMR1HC-1S CONTROLLER
*	3069874	CONTROL ADJUSTMENT CLIP E34-BHRRR
7	3022239	POWER CORD
8	3071428	CASTER 6" NON-BRAKE
9	3071429	CASTER 6" WITH BRAKE
10	2113625	SUPPORT KIT FOR LED STRIP
11	2083672	20W LED DRIVER
12	2080513	LAMP SUPPORT
13	3062036	PILASTER
14	2079798	CLIP PILASTER
15	3062152	WIRE SHELF 600
*	3071339	WIRE HARNESS, MAIN (SSC20 E34B)
*	3070836	SENSOR SWITCH (E34B)
16	2106068	LOUVER 1D (LEFT HINGE)

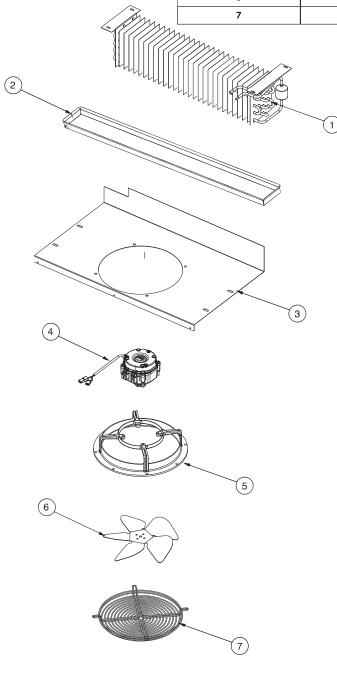
#### **NOTES**

Models with the same refrigeration system and operation condition are included in this manual Drawings are an approximate representation of the reality

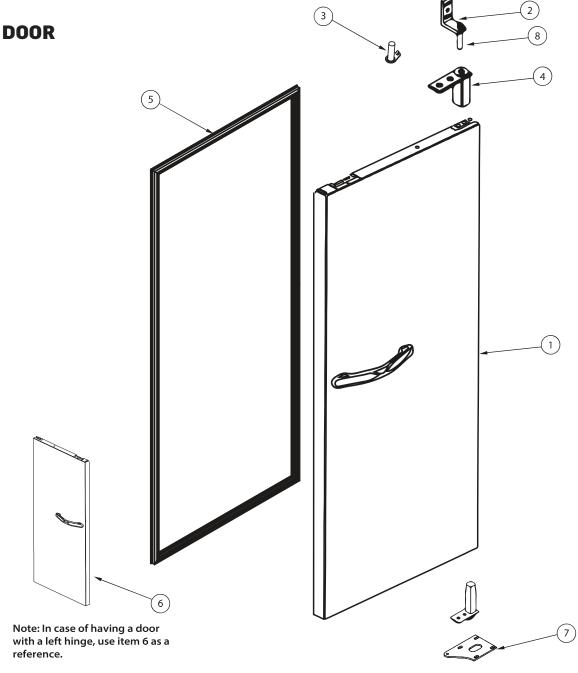
All accessories (shelves, clips, etc) are considerate from product base, extra items are not included

## **EVAPORATOR UNIT**

ITEM	SPARE PART CODE	DESCRIPTION
1	2079060	EVAPORATOR 20T 1/4 AL 6APP LA450 RIGHT
2	2077233	TRAY EVAPORATOR
3	2077115	EVAPORATOR COVER
4	3030464	FAN MOTOR 115V 50/60 HZ 1800 RPM
5	3023907	EVAPORATOR MOTOR MOUNT (ABS).
6	3024837	FAN BLADE 8" 28°
7	3063383	WIRE FAN GUARD 200MM







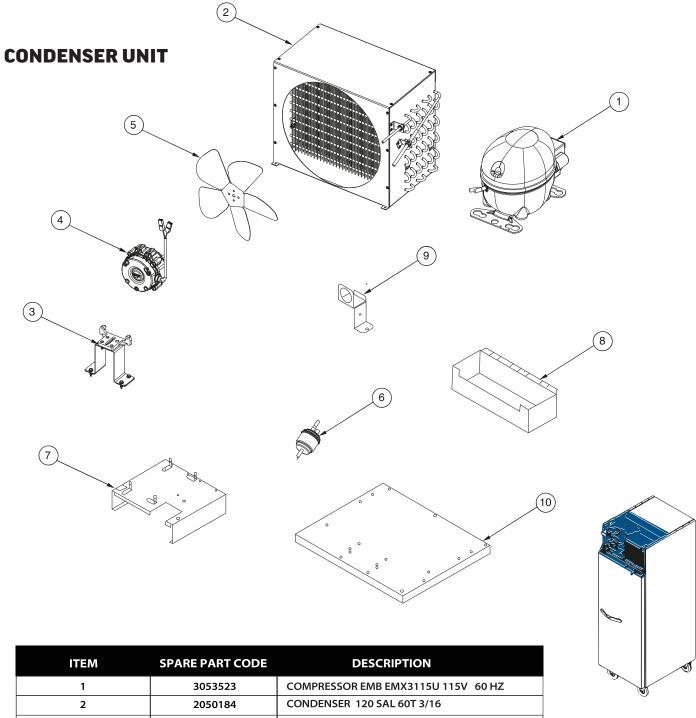
ITEM	SPARE PART CODE	DESCRIPTION
1	2105958	LEFT DOOR (RIGHT HINGE)
2	3061457	TOP HINGE
3	2085902	MAGNETIC SWITCH
4	3038236	SELF-CLOSING HINGE
5	3061454	DOOR GASKET 600/1300 PKD
6	2105950	RIGHT DOOR (LEFT HINGE)
7	2113605	SELF-CLOSING LOWER HINGE

2113626

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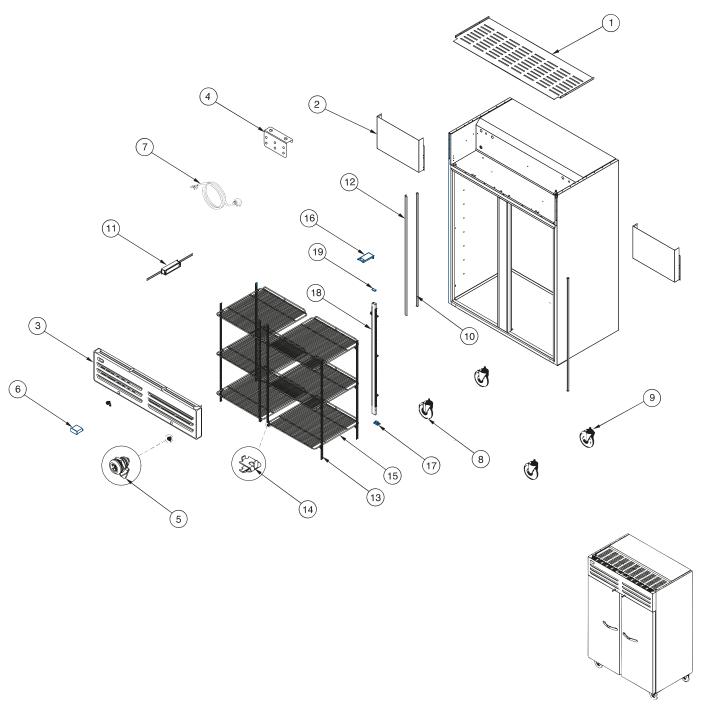
DOOR BOLT KIT



ITEM	SPARE PART CODE	DESCRIPTION
1	3053523	COMPRESSOR EMB EMX3115U 115V 60 HZ
2	2050184	CONDENSER 120 SAL 60T 3/16
3	3043320	CONDENSER MOTOR MOUNT.
4	3030464	FAN MOTOR 115V 50/60 HZ 1800 RPM
5	3024836	FAN BLADE 8 3/4" 25°
6	3043930	FILTER DRIER 0.9 HP DCL
7	2091273	COMPRESSOR BASE
8	2091279	CONDENSATION TRAY, 600
9	2091281	FILTER MOUNTING
10	2091274	BASE CONDENSER UNIT

# **REPLACEMENT PARTS FOR TMR2HC-1S**

#### **GENERAL ASSEMBLY**



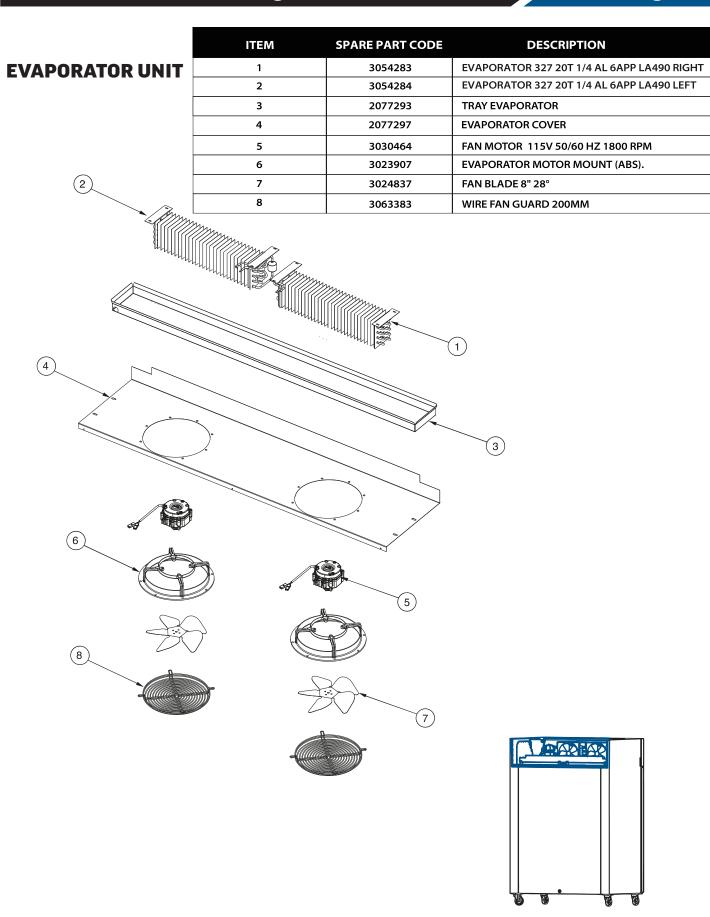
#### **GENERAL ASSEMBLY CONT'D**

ITEM	SPARE PART CODE	DESCRIPTION
*	3071201	TEMPERATURE SENSOR (2 M)
1	2079555	CONDENSER GRILLE, 1300
2	2077171	BACK DIVERTER AIR
3	2106071	LOUVER 2D
4	2106497	LOUVER SUPPORT BRACKET
5	2094602	LOCK CYLINDER
6	2105764	TMR2HC-1S CONTROLLER
*	3069874	CONTROL ADJUSTMENT CLIP E34-BHRRR
7	3022239	POWER CORD
8	3071428	CASTER 6" NON-BRAKE
9	3071429	CASTER 6" WITH BRAKE
10	2065590	LED LIGHT STRIP (1M)
11	2079228	40W LED DRIVER
12	2080513	LAMP SUPPORT
13	3062036	PILASTER
14	2079798	CLIP, PILASTER
15	3062165	WIRE SHELF 1300
16	2094532	POLE MOUNT, PILASTER
17	2094539	POLE MOUNT
18	2094555	CENTER POLE
19	2094540	CAP POLE
*	3071340	WIRE HARNESS, MAIN (SSC45 E34B)
*	3070836	SENSOR SWITCH (E34B)

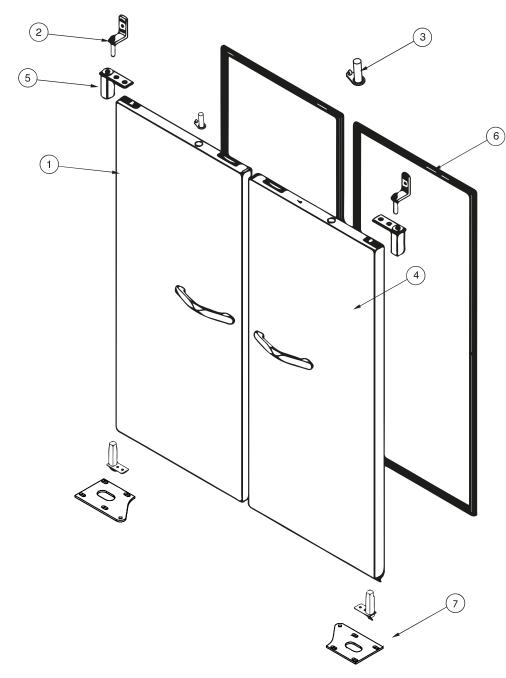
#### **NOTES**

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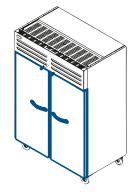
All accessories (shelves, clips, etc) are considerate from product base, extra items are not included

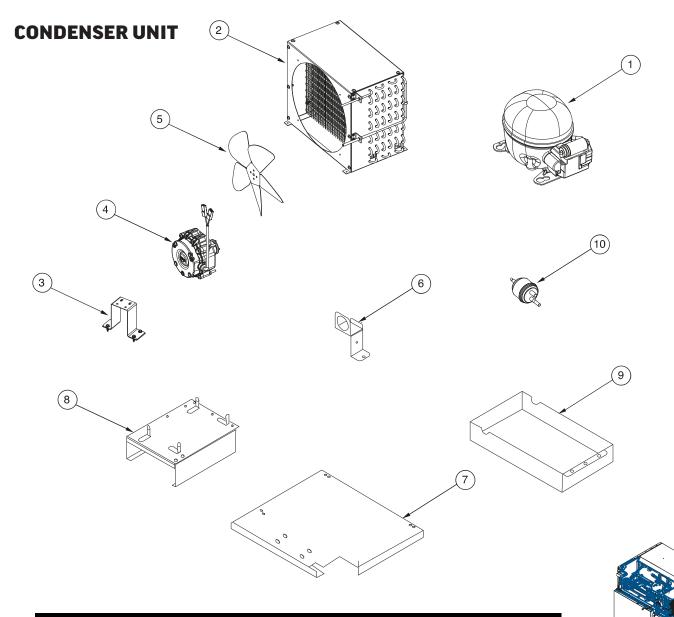


# **DOOR**



ITEM	SPARE PART CODE	DESCRIPTION
1	2105950	RIGHT DOOR (LEFT HINGE)
2	3061457	TOP HINGE
3	2085902	MAGNETIC SWITCH
4	2105958	LEFT DOOR (RIGHT HINGE)
5	3038236	SELF-CLOSING HINGE
6	3061454	DOOR GASKET 600/1300 PKD
7	2113605	SELF-CLOSING LOWER HINGE





ITEM	SPARE PART CODE	DESCRIPTION
1	3056028	COMPRESSOR EMB EMC3134U 115V 60 HZ
2	2048109	CONDENSER 388 SAL 72T 3/16
3	3043320	CONDENSER MOTOR MOUNT.
4	3030464	FAN MOTOR 115V 50/60 HZ 1800 RPM
5	3024836	FAN BLADE 8 3/4" 25°
6	2091281	FILTER MOUNTING
7	2091912	BASE CONDENSER UNIT
8	2091911	COMPRESSOR BASE
9	2091914	CONDENSATION TRAY, 1300
10	3043930	FILTER DRIER 0.9 HP DCL

Warranty Registration			
Register your product online at <b>beverage-air.com/parts-service</b> or fill out and mail the form below.			
Cabinet Model Number:	Date Of Installation:		
Cabinet Serial Number:			
Location Of Product			
Business Name:			
Business Street:			
Business City: State: Po	stal Code:		
Mail to: Beverage-Air, 3779 Champion Blvd, Winston-Salem, NC 27105			

Rev. 10/22

