



BEST BUILT BATCH FREEZERS SINCE 1905

CB-350 BATCH FREEZER

INSTALLATION - OPERATION
CLEANING - MAINTENANCE



STATE LAW REQUIRES THAT THE ELECTRICAL
POWER TO
THIS BATCH FREEZER BE INSTALLED
ONLY
BY A LICENSED ELECTRICIAN

FAILURE TO HAVE A LICENSED ELECTRICIAN
INSTALL THIS BATCH FREEZER WILL
VOID YOUR WARRANTY

<<< CAUTION >>>

CB-350 COUNTERTOP BATCH FREEZER

<<< WARNING >>>

1. SECURE ALL PANELS TO THE BATCH FREEZER BEFORE
TURNING ON THE ELECTRIC.

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Section 1 - SAFETY

First, be sure to read and understand this CB-350 manual, and familiarize yourself and other operators with the batch freezer features, its operation, cleaning, and maintenance. Your batch freezer is equipped with several important safeguards that should never be removed or altered. DO NOT remove the following items:

- Door discharge guard - restricts fingers and utensils from coming in contact with moving blades/dasher and funnels product into smaller containers neatly.
- Inlet spout lid - restricts fingers from coming in contact with moving blades/dasher

The sides, front and rear section of the batch freezer have ventilation openings in them. All but the rear panel are louvered to deflect food and splashing liquids away from the inside. Never spray water directly at/into these openings. Make sure your hands are dry when plugging in or unplugging your batch freezer.

The door and the dasher are heavy parts and are slippery when wet. Use extreme care when handling them. Keep the floor and work area neat and dry to avoid slippage. Do not use the top of the batch freezer as a storage spot.

In addition to the above:

- DO NOT operate your batch freezer unless it is connected to a grounded power supply and was properly installed by a licensed electrician.
- DO NOT put fingers, hands, or any utensils in either the inlet spout or discharge spout.
- DO NOT operate the batch freezer unless it is properly assembled, and all guards are in place.
- DO NOT force any of the (washable) parts together or into/on the batch freezer. All parts should fit together easily.
- DO NOT operate the batch freezer with the freezing cylinder empty.
- DO NOT turn on the **batch freezer's** refrigeration switch with only water in the freezing cylinder.
- DO NOT let your product over-freeze during production.

Section 2 - UNPACKING

Upon delivery, fully inspect the pallet and packaging following the steps that were emailed to you prior to the shipment of your batch freezer.

The shipping carton is stapled to two wooden runners inside*. Using a razor knife, carefully cut through the carton all the way around its perimeter JUST ABOVE the staple line. The carton is approx. ½" thick. Once free, the carton should be lifted straight up and off of your batch freezer. You will find a small box of parts that will be explained in subsequent sections; set them, as well as all paperwork, aside in a safe place.

The batch freezer is bolted to the pallet it was shipped on **from the underside. There are four hex bolts (9/16" head)** that go through the upper planks of the pallet, and into the batch freezer frame. Remove all four bolts, and also unscrew one wooden side runner from the pallet. The batch freezer will now be free from the pallet. Save all components; they can be used at a later date to safely move the batch freezer.

Section 3 - INSTALLATION

Your new batch freezer weighs roughly 300 pounds and has vibration when running; therefore, it must be operated on a surface/stand/counter capable of supporting it. It will take a minimum of two people to safely lift it.

Included with your batch freezer are 4 screw-in feet; these should be installed into the threaded holes on the underside of the batch freezer's frame, where it was previously bolted to the shipping pallet. These allow for minor uneven surfaces.

NOTE: If you also purchased the heavy-duty CB-350 stand, you will not be using these feet; follow the instructions in the kit that came with the stand.

The stainless-steel can stand latches onto the louvers on the front lower panel; it is adjustable for various height containers/trays.

NOTE: The protective plastic film on most outer surfaces of the batch freezer **MUST** be removed before operation to allow proper airflow and heat dissipation.

The batch freezer **MUST** be able to pull in cool, clean room air from THE REAR. It requires a minimum of 18 inches of clear, unobstructed space. Failure to allow adequate spacing and/or not removing the protective plastic film may result in poor performance, overheating, and shutdown.

ELECTRICAL CONNECTION: The model CB-350 batch freezer comes with a 72-inch-long flexible power cord that has an L14-20 locking male plug installed on it. It **MUST ONLY** be connected to the provided matching receptacle on a dedicated and fused 20-amp circuit. Your batch freezer has a wiring tag on its cord, as well as electrical specifications on its serial number tag on the rear of the batch freezer. Your electrician can also call us for technical information if necessary, during business hours.

IMPORTANT NOTE: This batch freezer will not work if it is connected to a GFCI circuit. If the local electrical code requires that the batch freezer be connected to a GFCI circuit, contact Tech Support at Emery Thompson for further instructions. 718-588-7300.

RUNNING THE FREEZE TEST: We recommend that the first thing you do is run a freeze test to make sure that your new batch freezer is operating properly. When we test batch freezers in our facility, we use sugar water because we run a lot of tests, and it would not be practical to use dairy mix. We know that if the batch freezer performs in a certain way with sugar water, it will perform in a similar manner with dairy mix. The only difference is that the amount of time it will take to make a batch of sugar water is longer than a batch of dairy mix.

To perform the freeze test, you can go to the touchscreen on your batch freezer: **GET HELP**, **TROUBLESHOOTING**, **PERFORMING THE FREEZE TEST**, or perform as follows:

CB-350 Batch Freezer:

- 4 quarts water
- 2 pounds sugar

Dissolve sugar into the water, pour into the batch freezer, turn on your dasher, turn on the refrigeration, and freeze for approximately 12-14 minutes.

Section 4 - CLEANING & SANITIZING

Note: Your local or state health inspector will always have jurisdiction over the methods and chemicals that are used for sanitation on your batch freezer. Our instructions are based on industry standards and should be discussed with your inspector.

(See diagrams 1A & 1B) These parts have to be cleaned and sanitized at the end of each day after production or sit for longer than one hour without use. All the parts to be cleaned are dishwasher top rack safe or can be manually cleaned with warm water and dish washing detergent, along with an abrasive hand pad. The inside surface of the freezing cylinder will have to be manually washed with detergent and thoroughly rinsed by hand. Be careful as when the dasher is removed, there is an opening in the back of the cylinder that leads to the inside of the batch freezers. **DO NOT SPRAY WATER OR ANY CHEMICALS INTO THE CYLINDER WITH THE DASHER REMOVED.**

(See diagrams 1A & 1B) Once the parts have been washed, and then dried, there are two areas that require a coating of food-grade grease on them prior to assembly. The two o-rings on the dashershaft and the door outer surface where the gate slides against. Smear a thin film of food grease on the door surface where the round discharge gate slides against it during opening and closing of the handle. The round gate has an o-ring under it, and if the o-ring gets dry, it will tend to leak and roll out of its groove.

Install the front dasher bushing (diagram 1B) in the pocket on the backside center of the door and put the door in place on the four mounting studs. The nose of the dasher shaft should go into the round bushing in the door. Now install and evenly tighten each of the four knurled knobs in a crisscross pattern; top right, bottom left

simultaneously and the top left, bottom right simultaneously. Repeat the process until all four knobs are hand tight. Note: tightening the knobs in this pattern allows for the door to sit flush against the batch freezer for an even, tight seal.

The batch freezer is now ready for sanitizing.

Sanitization is the important step of using a chemical to kill any remaining bacteria just prior to introducing food products to the batch freezer. Emery Thompson uses and recommends the sanitizer "Stera-Sheen Green Label". Mix a 4-quart batch of sanitizer (following the manufacturer's instructions) and pour the mixture into the CB-350. Turn on the dasher and agitate this mixture for as long as your local health department recommends. (NOTE: DO NOT run the refrigeration at this time!) When complete, discharge the sanitizing water, and from this point forward, do not put fingers or dirty utensils on any surface that could introduce bacteria into your batch freezer. The sanitizer (once diluted) is food-safe and does not need to be rinsed from the batch freezer with water if directions are followed.

You are now ready to add your product to the batch freezer!

Section 5 - OPERATION

Your new batch freezer is very easy to operate, with only two controls on it. The batch freezer was shipped fully assembled, and its parts and features should be learned and understood.

On the upper right of the face of the batch freezer, there is a pushbutton switch. This energizes the refrigeration condensing unit. Push in the button for **“on”** and push in the button for **“off”**. **In the “on” position, the button will illuminate blue. Ensure that the button is in the “off” position.**

The normal sequence of operation, assuming the batch freezer is cleaned and sanitized, would be as follows:

- flip the inlet spout guard open.
- pour in the mix/ingredients.
- close the inlet spout guard and lid.
- turn on the DASHER by selecting operating the touchscreen (pg. 11)
- push the REFRIGERATION button to turn it on.
- after 10-12 minutes, check the consistency of your product by slightly opening the gate to allow a small amount of product to come out then quickly close the gate. **This process is what you call a “cut-off check”.** **If the product puddles into your container and has a runny consistency that trails down the discharge chute, then it isn’t ready to extract.** If the product has a clean cut at the gate and piles into your container, then you are ready to extract your product.
- when the desired stiffness is achieved, **MAKE SURE** you immediately turn off the refrigeration, but leave your dasher running.
- open the discharge gate and allow the product to come out as fast as it will flow and fill your container(s).

Section 6 - OPERATING THE TOUCHSCREEN

The CB-350 touchscreen is a powerful device filled with intuitive operating screens and helpful information. This section will explain how to navigate the screens for the safe and proper operation of your batch freezer.

The SCREEN SAVER

After applying power to the batch freezer, the SCREEN SAVER screen displays the rotating ET symbol. To begin operating the batch freezer or to watch a help video, touch the screen. The screen saver will appear after 1 minute of the screen not being touched unless the RUN screen is active.



The I WANT TO: Screen (Also called the HOME screen)

After touching the screen, the I WANT TO:/HOME screen is displayed. You can choose to MAKE ICE CREAM or GET HELP. Press the MAKE ICE CREAM button.



The CHOOSE RECIPE Screens

If you select the MAKE ICE CREAM from the I WANT TO:/HOME screen, the next screen you will see is the CHOOSE RECIPE screen. This screen allows the operator to choose the desired amount of overrun by the product name. (See the Overrun/Product/Speed chart on page 14, section 7.4.) This is the first screen of two CHOOSE RECIPE screens. Press the MORE RECIPIES button to go to the second screen or press the HOME button to go back to the I WANT TO:/HOME screen.



When you are on the second CHOOSE RECIPE screen, you can press the PREVIOUS RECIPIES button to return to the first CHOOSE RECIPE screen or you can press the HOME button to go back to the I WANT TO:/HOME screen. Press the button that corresponds to the product you want to make, on either screen, or choose the MANUAL option for a custom speed, and you will be taken to the START screen for that product.



The OVERRUN/PRODUCT/SPEED Chart

OVERRUN/PRODUCT/SPEED

Desired Overrun (%)	Product Name	Dasher Speed (RPM)
100	Homemade	234
65	Super Premium	165
65	Frozen Yogurt	160
50	Gelato	140
25	Cream Ice	200
25	Sherbet	200
35	Custard	135
20	Dairy Free	160
15 - 17	Italian Ice	234
15 - 17	Sorbet/Sorbetto	234
20	Frozen Lemonade	234

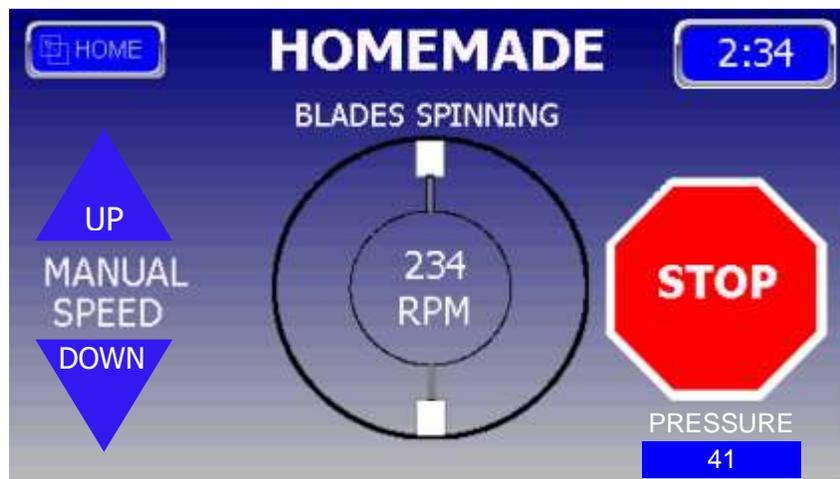
The START Screen

On the START screen you will find the name of the product you have selected at the top, and the speed that the dasher will turn in the middle of the two circles, when the START button is pressed. You will also find the MANUAL SPEED UP and DOWN buttons. These buttons can be used to adjust the dasher speed up and down as desired. The speed will change in 5 RPM increments each time the button is pressed. You will also see the status of the blades where it says BLADES STOPPED. The HOME button will take you back to the I WANT TO:/HOME screen and the BACK button will take you back to the CHOOSE RECIPE screen.



The RUN Screen

When the START button is pressed, the RUN screen is displayed, and the dasher and scraper blades begin to spin. You will see that the START button changes to a STOP button, the blades animation begins spinning, and the BLADES STOPPED message changes to BLADES SPINNING. The MANUAL SPEED UP and DOWN buttons can be pressed to change the speed of the dasher if desired. Once the FREEZE switch is pressed, the BACK button in the upper right-hand corner of the screen changes to a timer and begins to count up. This timer can be used to monitor the time that a batch has been running. The timer stops and resets to 0:00 when the FREEZE switch is turned off. In the bottom right corner is the PRESSURE display. This displays the pressure of the low side of the refrigeration system. This is useful information when troubleshooting refrigeration problems. When the STOP button is pressed, the dasher stops and the screen changes back to the START screen.



The GET HELP Screens

From the I WANT TO:/HOME screen, press the GET HELP button, which will take you to the SELECT YOUR MACHINE screen.



The SELECT YOUR MACHINE Screen

Touch the picture of the batch freezer that matches the batch freezer you want to get help with, and you will be taken to the HELP VIDEOS menu for your batch freezer. If you want to go back to the I WANT TO:/HOME screen, press the HOME button.



The HELP VIDEOS Screen

From the HELP VIDEOS menu, you can select the category of help you need. You can choose SETUP, OPERATION, MAINTENANCE, and TROUBLESHOOTING topics. Also, you can press the HOME button to be taken back to the I WANT TO:/HOME screen or the BACK button to go back to the SELECT YOUR MACHINE screen.



The rest is self-explanatory and very easy to navigate. Simply choose a topic, press the button for the video of your choice, and watch the video.

The ALARM Screens

If the dasher motor speed controller experiences a problem, an alarm screen will be displayed. There are two different alarm screens that may be displayed: COMMON ALARMS and OTHER ALARMS. Some alarms can be cleared by pressing the RESET button, while others may cause the dasher to stop turning, and soon thereafter, the refrigeration system to shut down. Pressing the REMEDY button will provide information for resolving the problem that caused the alarm. If the batch freezer stops due to one of these alarms, it is important to take note of the alarm and call Tech Support at Emery Thompson if the alarm persists. If the alarm cannot be cleared by pressing the RESET button, turn off the power to the batch freezer for 60 seconds and turn it back on.

COMMON ALARMS	
mm/dd HH:mm	ACT Description
mm/dd HH:mm	ACK Description
mm/dd HH:mm	RTN Description
mm/dd HH:mm	RTN Description

HISTORY	
mm/dd HH:mm	ACT Description
mm/dd HH:mm	ACK Description
mm/dd HH:mm	RTN Description
mm/dd HH:mm	RTN Description

REMEDY **RESET**

OTHER ALARMS	
mm/dd HH:mm	ACT Description
mm/dd HH:mm	ACK Description
mm/dd HH:mm	RTN Description
mm/dd HH:mm	RTN Description

HISTORY	
mm/dd HH:mm	ACT Description
mm/dd HH:mm	ACK Description
mm/dd HH:mm	RTN Description
mm/dd HH:mm	RTN Description

REMEDY **RESET**

The WARNING Screen

As the product mixes in the cylinder, the product gets constantly thicker. As the product gets thicker, the power required to drive the dasher motor increases. As the power to drive the dasher motor increases, the IOC monitors its output power to ensure that it does not rise to a level that will damage the dasher motor. If the output power reaches the preset high level, the WARNING screen will be displayed, and an audible alarm will begin to sound. If this happens you should press the ACKNOWLEDGE button, turn off the FREEZE switch and begin to extract the product. Pressing the ACKNOWLEDGE button will cause the screen to display the RUN screen and cause the audible alarm to stop. If the product is not extracted the WARNING screen will come back on 30 seconds after the ACKNOWLEDGE button was pressed. This will continue to happen until the IOC shuts itself off.



The SYSTEM Screen

The touchscreen requires an operating system just like a computer. There is no reason for the user to access the SYSTEM screens, but you should be aware that they exist as it is possible to call up the screens accidentally. The SYSTEM screens will appear if you touch the screen in the upper right-hand corner. If the system screen is accidentally displayed, touch the screen anywhere outside the SYSTEM screen area to close the screen, or wait 1 minute and it will go off on its own.



Section 7 - CARE & MAINTENANCE

One of the best features of an Emery Thompson batch freezer is the small amount of maintenance and the ease of care required to keep it running and looking new. The materials we use for our parts are the best available for their intended purpose and are designed for maximum longevity.

The outer casing of your batch freezer is all heavy-gauge stainless steel and will only require a daily wipe down with a mild detergent and warm water. Using a stainless-steel cleaner/polish will also help keep it looking new.

There are two areas mentioned previously that require food grease to be applied daily: the area of the dasher shaft that goes into the rear bushing in the cylinder, and the door face where the gate slides against it. (See diagrams 1A & 1B) Keeping these two areas clean and lubricated will directly affect the life of the parts involved and must be addressed DAILY.

Your batch freezer should be operated in the cleanest environment possible, but the potential exists for an eventual accumulation of dust/lint/debris on the surface of the condensing fins. This is the area just behind the expanded metal grate on the rear surface of the batch freezer. It can be cleaned using a strong (shop-type) vacuum cleaner with a soft brush attached.

The following parts are wearable and should be inspected at least weekly: (DIAGRAMS 1A and 1B)

- Part # SEAL006 - o-ring, dashershaft
- Part # SPRG001 - springs, scraper blade (X4)
- Part # BRNG001 - bearing, dasher front
- Part # BLAD001 - blade, scraper (X2)
- Part # SEAL007 - o-ring, gate sealing
- Part # FAST024 - washer, teflon, handle pivot
- Part # SEAL008 - o-ring, door sealing
- Part # SPRG004 - spring, gate pressure

	0 to 15 HPW*	15 to 30 HPW*	30 to 45 HPW*	More Than 45 HPW*
Lubricate the Dasher/Center Shaft O-rings (1 & 2)	Every time you run the batch freezer or after 8 hours of continuous operation	Every time you run the batch freezer or after 8 hours of continuous operation	Every time you run the batch freezer or after 8 hours of continuous operation	Every time you run the batch freezer or after 8 hours of continuous operation
Lubricate the Discharge Gate O-ring (1 & 2)	Daily	Daily	Daily	Daily
Lubricate the Door O-ring	Never	Never	Never	Never
Replace the Dasher/Center Shaft O-rings (1 & 2)	Once each year	Every 9 months	Every 6 months	Every 3 months
Replace the Discharge Gate O-ring (1 & 2)	Only if it leaks	Only if it leaks	Only if it leaks	Only if it leaks
Replace the Door O-ring (1)	Only if it leaks	Only if it leaks	Only if it leaks	Only if it leaks
Replace the Door Gasket (2)	Only if it leaks	Only if it leaks	Only if it leaks	Only if it leaks
Replace the Blade Springs (1 & 2)	Every 2 years	Every 18 months	Once each year	Every 6 months
Replace the Door Gate Spring(s) (1 & 2)	Only if it leaks	Only if it leaks	Only if it leaks	Only if it leaks
Sharpen the Scraper Blades (1 & 2)	Every 5 to 7 years	Every 4 to 6 Years	Every 3 to 5 years	Every 2 to 4 years
Replace the Scraper Blades (1 & 2)	After sharpening 1 to 3 times	After sharpening 1 to 3 times	After sharpening 1 to 3 times	After sharpening 1 to 3 times
Inspect/Clean the Drip Tray (2)	Once each Year	Every 9 months	Every 6 months	Every 3 months
Drain the Water (3)	Every year prior to possible freeze	Every year prior to possible freeze	Every year prior to possible freeze	Every year prior to possible freeze
Clean the Cooling Coils (4)	Once each year	Every 9 months	Every 6 months	Every 3 months

(1) CB-200 and CB-350 batch freezer only
(2) 12, 24- and 44-quart batch freezer only

(3) Water cooled batch freezer only
(4) Air cooled batch freezer only

*HPW =
HOURS
PER WEEK

If your batch freezer has been stored in an unheated area and is brought into a warmer area for use, allow it to sit for at least 12 hours in the warmer temperature; condensation can build up on cold surfaces, including inside the speed controller, touchscreen, contactor, and overload relay, which could lead to malfunctions.

Never transport, store or use your batch freezer in any position other than upright on its feet. Oil in the refrigeration compressor could travel into areas of the batch freezers piping where it will remain trapped.

Your batch freezer has been tested and is rated to run in ambient air temperatures as high as 104 degrees Fahrenheit, and as low as 40 degrees Fahrenheit. Operation in temperatures at the high end of the temperature range may slightly increase the freezing time of your product, and at the low end of the temperature range may slightly decrease the freezing time of the product.

Section 8 - Description of Function

The purpose of this section is to explain how the CB-350 is supposed to work so that anyone working on the batch freezer will have a thorough understanding, which should make troubleshooting easier. Please refer to the electrical drawing on the next page for the reference numbers in parentheses.

With main power present at the batch freezer, the 24VDC power supply (1) is providing power to the touchscreen (2), which should be active, and the COM terminal on the refrigeration switch (3), which should be in the off position.

When a product is selected on the touchscreen and the start button is pressed, the speed controller (4) sends power to the dasher motor (5) and the dasher motor runs at the speed pre-programmed for that product. Also, the auxiliary contacts NO and COM on the dasher motor speed controller close completing that portion of the circuit that is in series with the refrigeration switch, the high-pressure switch and the coil of CR-2 (6).

With the dasher motor running and the refrigeration switch on, CR-1 (7) is energized. When the contacts in CR-1 close, the refrigeration switch lights up and input Q1 on the touchscreen becomes true, which starts the timer on the touchscreen. CR-2 is also energized and completes the circuit to the condensing unit compressor (8) and the cooling fan (9).

The high-pressure switch (10) is normally closed and will only open if the pressure goes above 400 psi, which is the set point of the high-pressure switch. If the high-pressure switch opens, the power to CR-2 is interrupted and the compressor and fan stop.

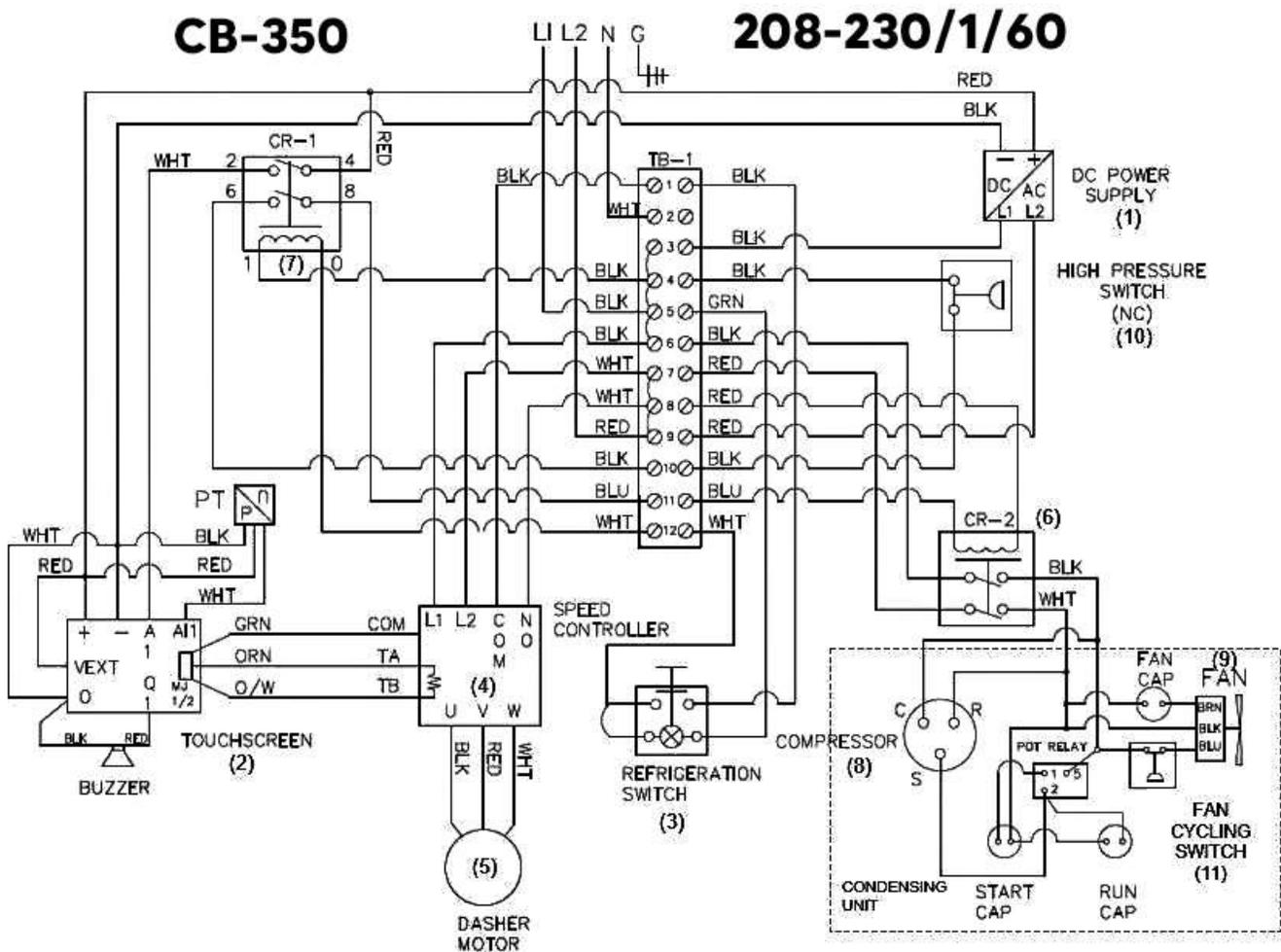
As the condensing unit runs, the refrigeration coils wrapped around the product cylinder begin to get cold. Also, when the refrigeration high side pressure increases to 310 psi, the contacts in the fan cycling switch (11) close and the cooling fan comes on. When the cooling fan comes on it cools the refrigerant, and the pressure decreases below 230 psi and the contacts in the fan cycling switch open causing the fan to go off. Depending upon the ambient temperature, the fan may cycle on and off throughout the batch. On colder days the fan may not run very much, and on hot days it may run all the time.

Ideally the low-pressure side should drop to 28 to 32 psi and the high-pressure side should run at 275 to 325 psi. During the last several minutes of a batch you may see the low-pressure side drop again by about 2 psi.

When the product is ready, the refrigeration switch is turned off and the contacts in CR-1 and CR-2 open. When the contacts in CR-2 open, the compressor and fan stop running. When the contacts in CR-1 open, the timer on the touchscreen stops and the light on the refrigeration switch goes off.

Now it's time to extract the product. Open the gate and the product will flow out into your choice of container. Once the product is extracted and the cylinder is empty, press the stop button on the touchscreen and the speed controller stops sending power to the dasher motor and the motor stops.

Section 9 - Electrical Diagram



Section 10 - TROUBLESHOOTING

TWO VERY IMPORTANT THINGS TO KNOW ABOUT YOUR NEW CB-350 BATCH FREEZER



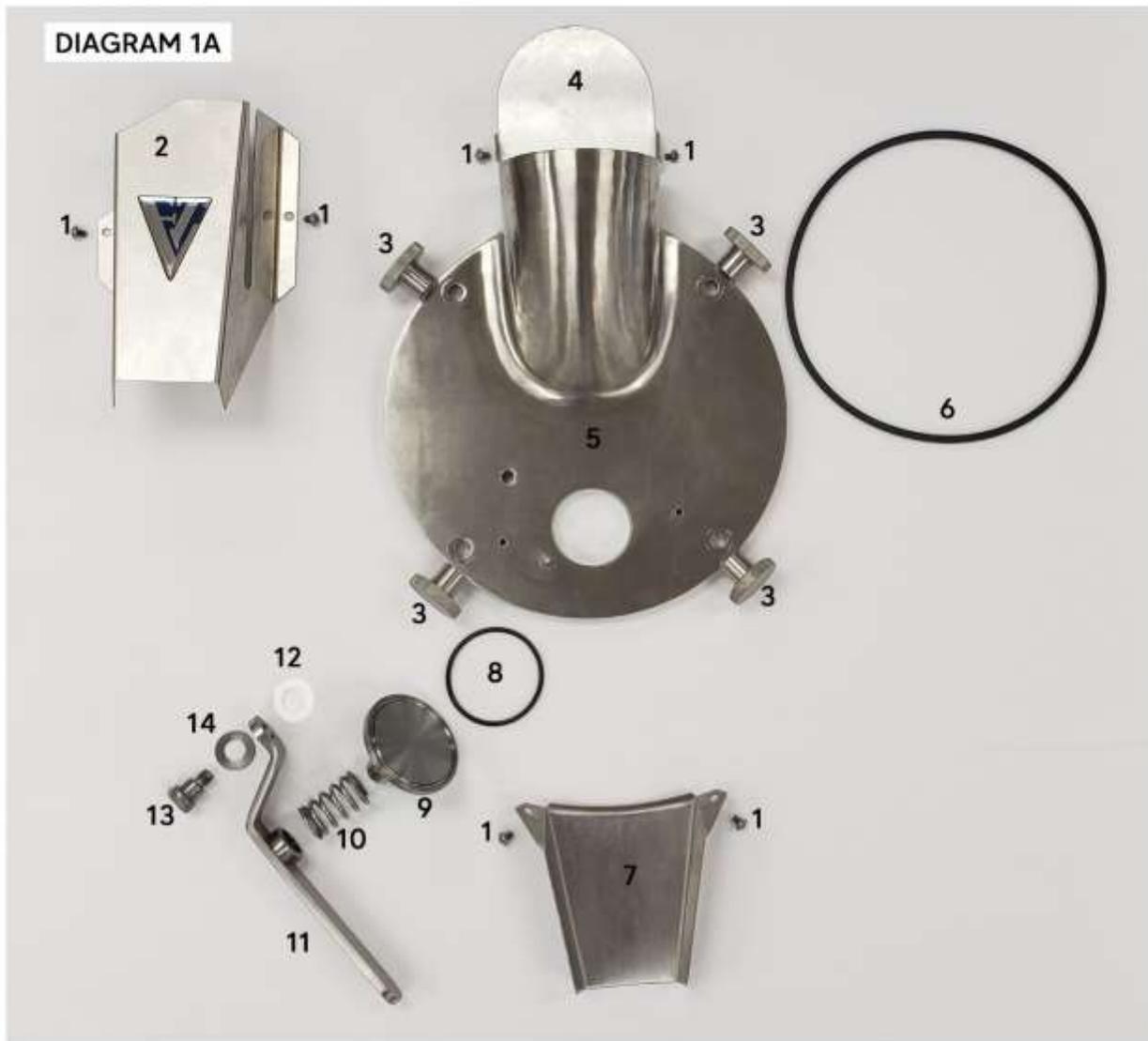
1. Scraper blades: If your scraper blades (the two long white pieces of Delrin plastic inside your cylinder) are not installed properly, your batch freezer will start making noise in a few minutes and either freeze up or take three times as long to make a batch. The curved tip of the blade goes towards the back of the cylinder and the other tip of the blade which is cut off on a 90-degree angle goes to the front of the batch freezers towards the door. If this is wrong the batch freezer will not operate properly. You need to be aware of this each and

every time you assemble the batch freezer. We have added a dimple on the front of each blade so that you can more easily identify whether the blades are installed correctly.

2. Minimum and maximum: You cannot run less than 3-1/2 quarts of liquid into the batch freezer. Any less, would cause the batch freezer to freeze up and the product will stick to the walls of the cylinder and blades. The maximum input into the batch freezer is four quarts. Any more, **and you wouldn't have enough room for expansion** and your product will take three times as long to freeze, or not at all.

Problem	Solution
Dasher not spinning	Contents frozen too stiff - allow to thaw and soften or remove bulk of product . Push “stop” button, and attempt restart.
Dasher spins, but refrigeration will not run. (refrigeration switch illuminated)	Compressor has tripped off. Turn off switch; allow unit to cool for 1 hour minimum; attempt restart.
Unit runs, but takes too long, or longer than usual to freeze product.	Airflow restricted or coils dirty/blocked. Provide adequate airflow and/or clean coil area.
Squeaking noise when dasher runs.	Ensure that dasher shaft has been lubricated properly at o-ring area.
Grinding noise while making product; build-up on cylinder walls.	Blades installed incorrectly; one or more blade springs missing.
Sliding gate is leaking	O-ring on gate is either not in gate groove or worn out; surfaces not lubricated correctly.
Door will not pull back on studs; blades sticking out beyond face.	Rear of dasher is not engaged into drive motor socket. Rotate dasher and push backward.
Batch freezer sways/shakes while running	Feet or mounting surface uneven; adjust feet so that each has equal pressure.
Door is leaking around edge(s)	Door seal O-ring uneven/not fully seated in its groove. Remove and reinstall

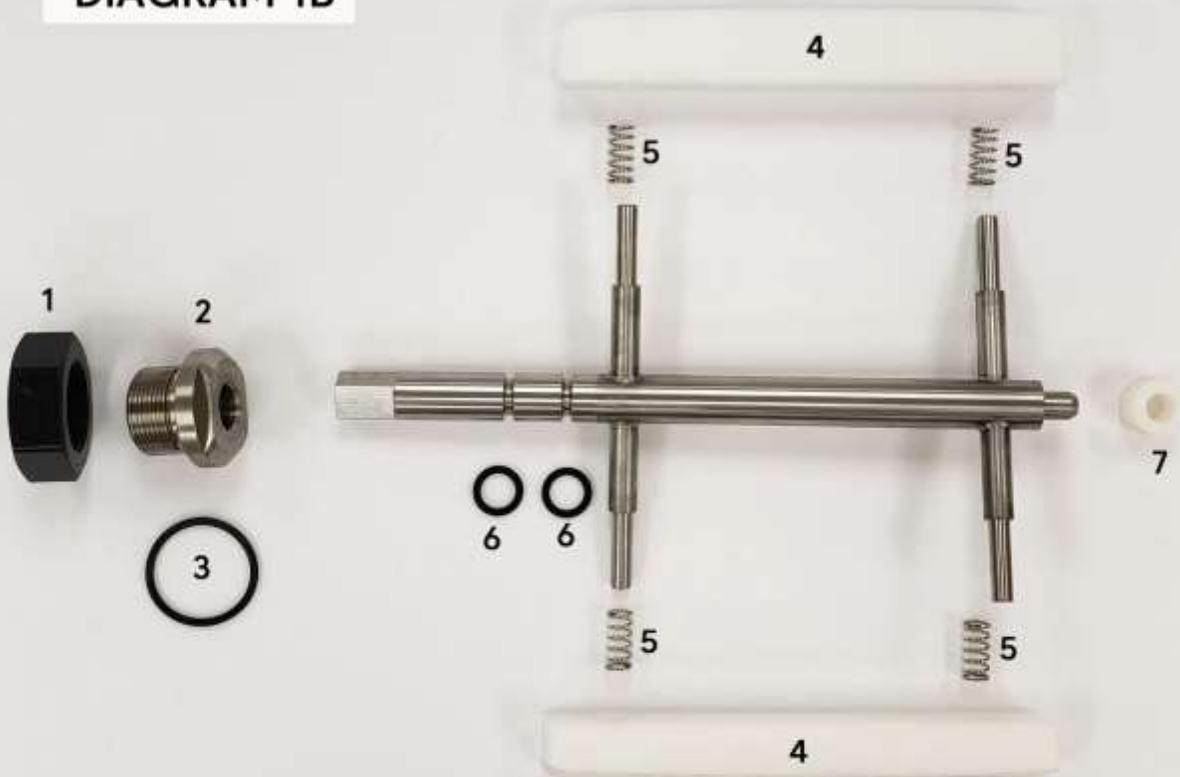
Section 11 - PARTS DIAGRAMS



1	FAST025	SCREW, #10-24X1/4" L, 18-8 SS PHILLIPS (X6)	8	SEAL007	O-RING, GATE
2	STML005	GUARD, DOOR DISCHARGE	9	MECH007	DISCHARGE COVER, SLIDING (GATE)
3	FAST015	KNOB, KNURLED SS, 3/8"-16 BLIND THREAD (X4)	10	SPRG004	SPRING, DISCHARGE COVER PRESSURE
4	STML004	COVER, SPOUT INLET GUARD	11	MECH010	HANDLE, DISCHARGE COVER SLIDING
5	MECH008	DOOR, CAST SS	12	FAST024	WASHER, TEFLON, DOOR HANDLE SWIVEL
6	SEAL008	O-RING, DOOR SEAL	13	FAST011	SHOULDER BOLT, DOOR HANDLE
7	STML012	CHUTE, DISCHARGE	14	FAST071	WASHER, SPRING PRESSURE

CB-350 MIX ASSY 2.0

DIAGRAM 1B



1	FAST009	NUT, 1-1/2" - 12 LEFT-HAND, BLACK DELRIN
2	BUSH009	BUSHING, BACK JACKET
3	SEAL005	O-RING, BACK JACKET
4	BLAD001	BLADE, DELRIN (X2)
5	SPRG001	SPRING, SCRAPER BLADE (X4)
6	SEAL006	O-RING, DASHER SHAFT (X2)
7	BRNG001	BUSHING, DASHERFRONT

Section 12 - RECIPES

The following recipes are very basic, and require few ingredients, but are a good starting point to familiarize yourself with freezing times and consistencies, as well as begin to form a production routine. NEVER put undissolved sugar into your batch freezer for any recipe. Dissolve it first, then pour it into the batch freezer.

Lemon Italian Ice

- 4 quarts water
- 2 pounds of sugar
- Zest grated from 4 large lemons
- 20 ounces of fresh-squeezed lemon juice

Mix the sugar with the water until the sugar is dissolved. Slowly pour this into your CB-350 batch freezer. Add the lemon juice and lemon zest; start the dasher.

Then turn on the refrigeration and freeze for 8-10 minutes, depending on the desired consistency **performing the “cut-off check.”**

Coffee Ice Cream

- 4 quarts ice cream mix
- 1 ounce of vanilla extract
- 5 oz instant coffee (measured by volume)

Mix all ingredients together, then pour into the batch freezer and start dasher. Turn on refrigeration and freeze for 10-12 minutes.

Verry Berry Wine Sorbet

- 2 quarts water
- 2 quarts red, sweet wine
- 2 pounds of sugar
- 16 oz frozen mixed berries, thawed and pureed.

Mix the sugar with the water and wine until the sugar is dissolved. Slowly pour this and the remaining ingredients into the batch freezer; start dasher, then turn on the refrigeration. Freeze for approximately 12-13 minutes.

Creamsicle Boozy Cream Ice (Sherbet)

- 2 quarts dairy mix
- 2 quarts orange juice
- 2 pounds sugar
- 1 cup whip cream vodka

Mix the sugar with the dairy mix and orange juice until the sugar is dissolved. Slowly pour this and the remaining ingredients into the batch freezer; start the dasher, then turn on the refrigeration. Freeze for approximately 12-13 minutes.

For more recipes, you can visit our website at:
www.emerythompson.com

OR

Visit us on our YouTube channel:
[EmeryThompsonMachine](https://www.youtube.com/channel/UC...)

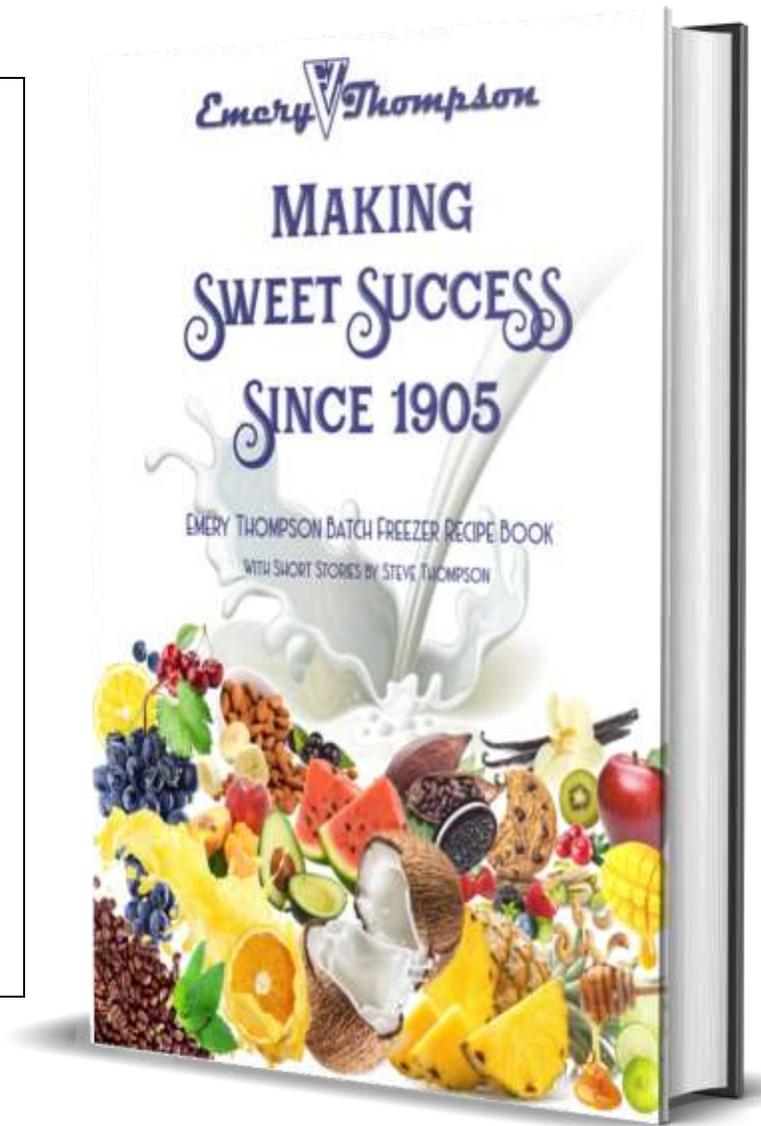
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Section 13: WARRANTY
Emery Thompson Machine & Supply CO.
12 Month Limited Warranty on New Batch Freezers

Notice:

The batch freezer warranty starts when you receive your batch freezer. Except as limited and conditioned hereafter, The Emery Thompson Machine & Supply CO (**hereinafter referred to as the "Company"**) warrants to the original purchaser and user only, the said batch freezer and all parts thereof to be free from defects in material and workmanship for a period of twelve (12) months from the *date of shipment* from **the Company's factory if it is proved to our satisfaction to be inoperative due to defects** in material or factory workmanship. Caution: This warranty is valid only if the required service is provided by an authorized agent of Emery Thompson Machine & Supply CO or person or persons directly authorized by Emery Thompson Machine & Supply CO to perform the necessary repairs. Emery Thompson Machine & Supply CO can be reached at 718-588-7300-factory, or fax at 352-345-8007.

Definitions. **The term "original purchaser" as used herein, shall be deemed to mean that person, firm, or association, or corporation for whom the equipment referred to herein is originally sold to.**

The term "Company and or Factory" shall mean the plant of the company located at 15350 Flight Path Drive, Brooksville, FL 34604 U.S.A.

Labor and Transportation Charges. Emery Thompson Machine & Supply CO assumes no liability under the warranty for any transportation charges or labor expenses incident to its work under this warranty, such transportation expenses and labor costs to be assumed and paid by the Purchaser.

Use and Care of Machine. Purchaser shall only use the batch freezer in accordance **with the operator's manual provided by the Company and no liability under this Warranty** or otherwise shall attach by reason of a defect caused by negligence, abnormal use, misuse or abuse of said batch freezer, or for any accident that may occur to said batch freezer or any part thereof after said batch freezer has left the factory of the Company, nor for any defect that may arise by placing any part in said batch freezer which has not been manufactured or approved by the Company. Misuse of the batch freezer **includes owner's failure to: (1) clean, lubricate and assemble per the Operator's Manual; (2) replace damaged or worn "wear items", including but not limited to o-rings, gaskets, front bearing, rear bearing, scraper blades, drive shaft, water valve. (3) handle parts properly, resulting in breakage; or (4) use unauthorized service agencies.**

Purchaser shall not remove, alter, or deface the serial number on said batch freezer and there shall be no liability of Emery Thompson Machine & Supply CO if any of same shall occur.

Repair or Replacement of Defective Parts. **The Company's obligation under this warranty is limited to the repair of defective parts at the Brooksville, Florida plant or replacement from the Company's own inventory. In the event the Company ships a replacement part prior to the return of the defective part, payment will be required for said part and credit issued or reimbursement made only if the defective part is returned within thirty (30) days from the replacement date.**

WARNING: The use of alternate refrigerants will void your warranty. Use only **the refrigerant specified on this unit's data plate (located on rear panel of the batch freezer).**

Emery Thompson Machine & Supply CO reserves the right to make design changes, or to make additions to, or improvements on its products without imposing any obligation on itself to make such changes on its products previously manufactured.

THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES AND REMEDIES UNDER THE LAW, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. **THE ORIGINAL OWNER'S SOLE REMEDY WITH RESPECT TO ANY EMERY THOMPSON BATCH FREEZER SHALL BE REPAIR OR REPLACEMENT OF DEFECTIVE COMPONENTS UNDER THE TERMS OF THIS WARRANTY.**

WHAT IS NOT COVERED BY THIS WARRANTY Emery Thompson Machine & **Supply CO's** sole obligation under this warranty is limited to either repair or replacement of parts, subject to the additional limitations below. This warranty neither assumes nor authorizes any person to assume obligations other than those expressly covered by this warranty. NO CONSEQUENTIAL DAMAGES. EMERY THOMPSON MACHINE & SUPPLY CO IS NOT RESPONSIBLE FOR ECONOMIC LOSS; PROFIT LOSS; OR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOSSES, OR DAMAGES ARISING FROM FOOD OR PRODUCT SPOILAGE REGARDLESS OF WHETHER OR NOT THEY RESULT FROM REFRIGERATION FAILURE. WARRANTY IS NOT TRANSFERABLE; this warranty is not assignable and applies only in favor of the original purchaser/user to whom delivered. ANY SUCH ASSIGNMENT OR TRANSFER SHALL VOID THE

WARRANTIES HEREIN AND SHALL VOID ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR LABOR COVERAGE FOR COMPONENT FAILURE OR OTHER THE WARRANTY AS PROVIDED IN OUR INSTRUCTION MANUAL WITH THE UNIT AND AT www.emerythompson.com. EMERY THOMPSON MACHINE & SUPPLY CO will not be held responsible for the following external factors: ALTERATION, NEGLIGENCE, ABUSE, MISUSE, ACCIDENT, DAMAGE DURING TRANSIT OR INSTALLATION, FIRE, FLOOD, ACTS OF GOD, OR IMPROPER ELECTRICAL CONNECTIONS. EMERY THOMPSON MACHINE & SUPPLY CO IS NOT RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF FAILED OR DAMAGED COMPONENTS RESULTING FROM ELECTRICAL POWER FAILURE, THE USE OF EXTENSION CORDS, LOW VOLTAGE, OR VOLTAGE DROPS TO THE UNIT. THERE ARE NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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