

OPERATING MANUAL

BATCH FREEZER INSTALLATION OPERATING, MAINTENANCE AND CLEANING MANUAL



CB-100 Countertop

Emery V Thompson

World's Best Built Batch Freezers – **100% Made in the U.S.A.**
by the People Who Invented Them!



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Section 1: UNPACKAGING

When your shipment arrives, please inspect it very carefully. Look particularly for damage to the box covering it. If it looks crushed, cut or punctured, have the freight driver wait until you can cut the box off, and inspect the machine itself. Also, look for damage to the wooden skid itself. Broken wood can signify rough treatment. Any damage should be photographed.

The machine and skid weigh about 100 pounds total. Two people, one on each side, should easily be able to carry it, and it will fit through a standard 36" exterior door.

If you haven't already, remove the box from the skid by cutting through it as close as possible to the skid, then lift it off. Look for a small box inside which contains 4 black plastic feet, and an Allen wrench to change out blades in the future. You will also find a recipe booklet written just for the CB100.

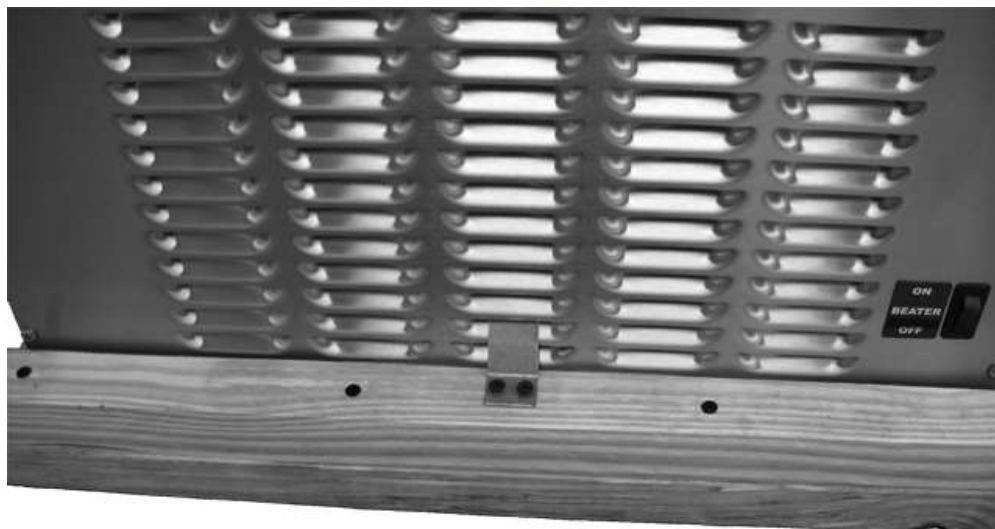
The machine is held in place by two runners along its sides, which have a clip at their middles that hooks into the middle bottom louver on each side of the machine. The clips are screwed down to the runner, and these screws must be removed to free the machine from the skid. (See Figures 1-1, 1-2, 1-3)

Once the machine is free, place it up onto the intended work surface. To install the feet, refer to Figures 1-4 & 1-5. The feet simply plug into the 4 holes that are molded into the machine's base.

Remove the wire ties holding the power cord in place, and unravel it. The machine is now ready for use.



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Hold-Down Clips
1 Per Side

Figure 1-1



Hold-Down Clip

Figure 1-2

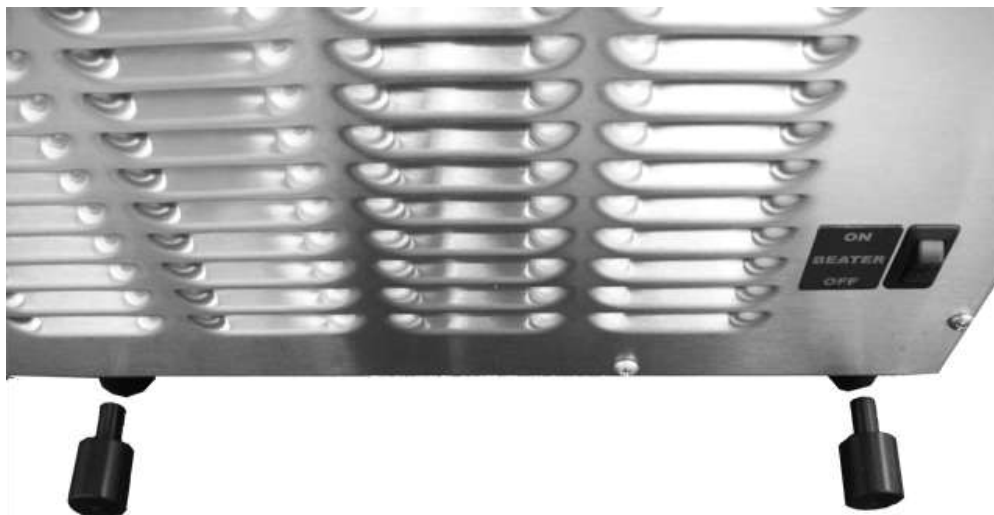


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Hold-Down Clip

Figure 1-3

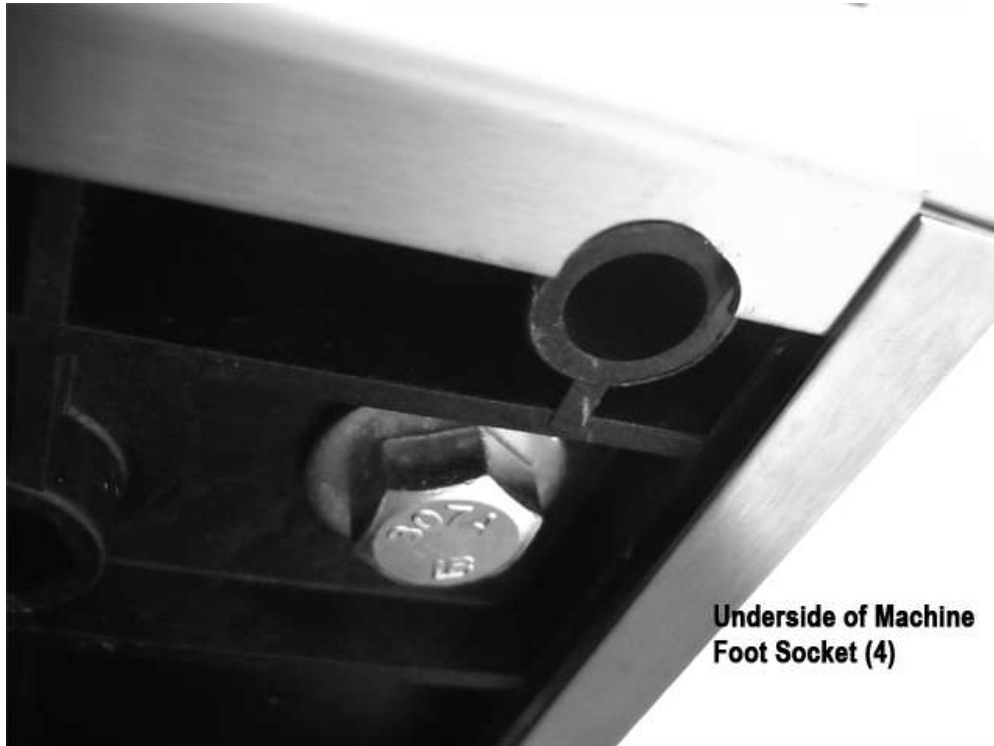


Support Feet Locations
(Opposite side same spacing)

Figure 1-4



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**Underside of Machine
Foot Socket (4)**

Figure 1-5



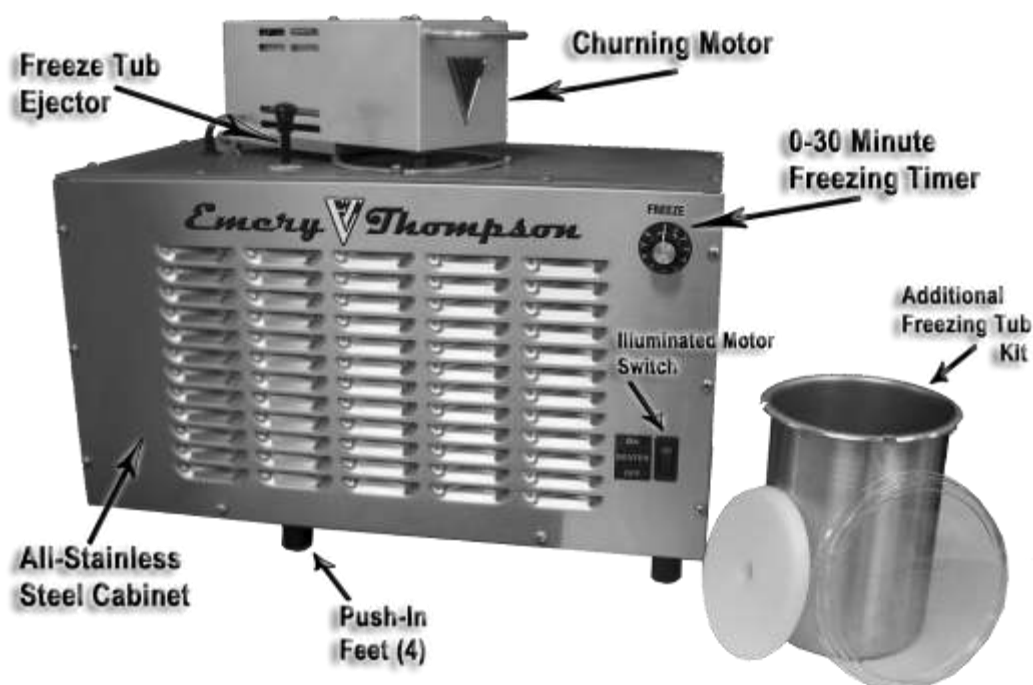
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Section 2: OVERVIEW

Your new model CB100 Countertop Batch Freezer is a self-contained air-cooled unit that is designed to sit on any countertop and be easily moved for cleaning. It runs on standard residential/commercial 115V service, and comes equipped with a plug for such. The machine pulls in room air from the left end, and distributes it out on the other 3 sides. One unique feature of the machine is that it freezes product in what will be your serving or hardening container. Each additional container purchased comes with a bearing disc and a clear lid.

This machine will produce premium ice cream, Italian ices, sorbets, and gelato in 20 minutes or less per tub. Various inclusions can be added prior to churning, and/or after production in the same container it was just made in.

To make it even easier to use, the CB100 has an ejection mechanism that pushes your freezing tub up and out of the freezing chamber, and the machine has very few parts to be cleaned and sanitized.





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Section 3: OPERATION

The normal sequence of operating the CB100 is as follows:

1. Insert a clean, sanitized (See Section 4) freezing tub into the freezing cylinder, making sure the rim of the tub engages all 4 of the round drive lugs and that the rim sits flush with the top surface (See Figure 3-1).
2. Insert the bearing disc, with radiused edge down, into the freezing tub. The disc should sit flat and rounded edge of disc must match rounded profile of tub bottom. (see Figure 3-1R).
3. Insert the dasher shaft with blade into the tub with the hexagonal drive end facing upward. Be sure the round end of the shaft goes into the round hole in the bearing disc, and push it all the way down until the bottom edge of the blade touches the surface of the disc. (See Figure 3-2).
4. Pour the mix you intend to freeze into the tub. NOTE: do not add more than your flavorings and ONE quart of mix to the freeze tub. You do not want overflow out of the top of the freeze tub.
5. Lay the splash plate on top of the dasher. It will fit just inside of the freeze tub. (See Figure 3-3).
6. Tilt the churning motor down gently until the driveshaft touches the top of the dasher. Let the weight of the churning motor rest atop the dasher. (See figures 3-4 and 3-5). When you are ready to begin the cycle, simply turn on the motor switch, and it will engage with the dasher and drop down



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approximately another 1/4" and stop on its rubber bumper.

7. Once the dasher is spinning, turn the freezing timer to 20 minutes. The refrigeration will start, and continue until the timer either times-out, or you manually twist it to the "0" position. (See figure 3-6).
8. When the desired consistency is reached, turn the refrigeration timer to the zero (0) position and the compressor will stop. Now turn the rocker switch off, and the churning motor stops. Raise the motor into its upright position. Push down firmly on the ejection knob, making the freezing tub rise up enough to grasp the rim and remove it from the machine. Remove the splash disc and dasher from the freeze tub and put a cover on the tub, then transfer to your hardening cabinet.



Figure 3-1



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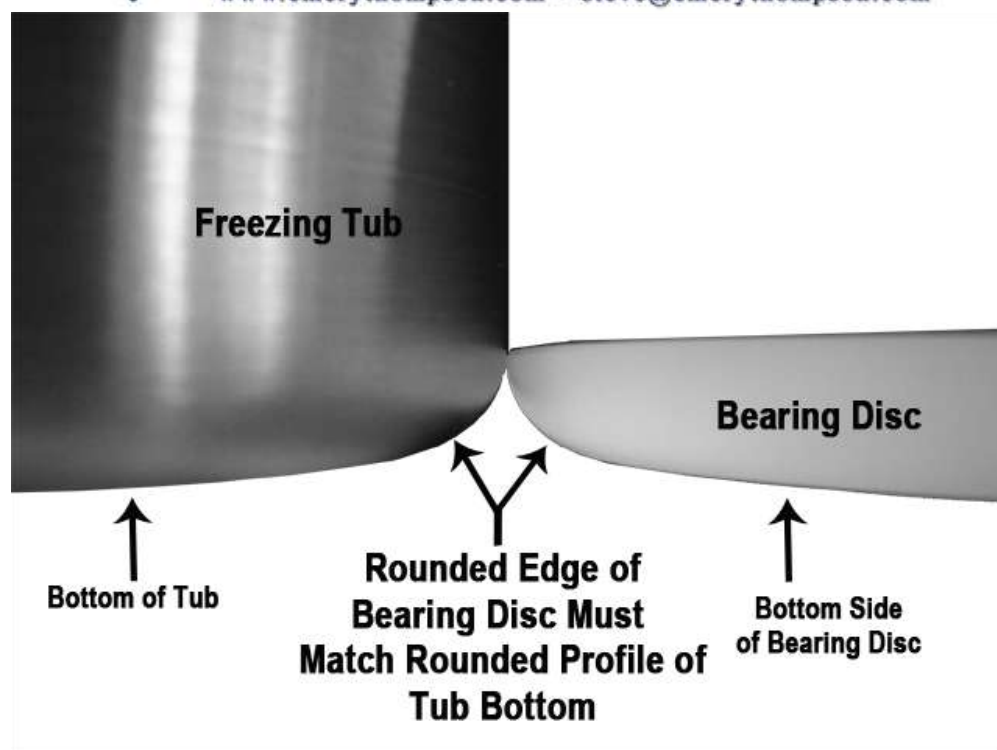


Figure 3-1R

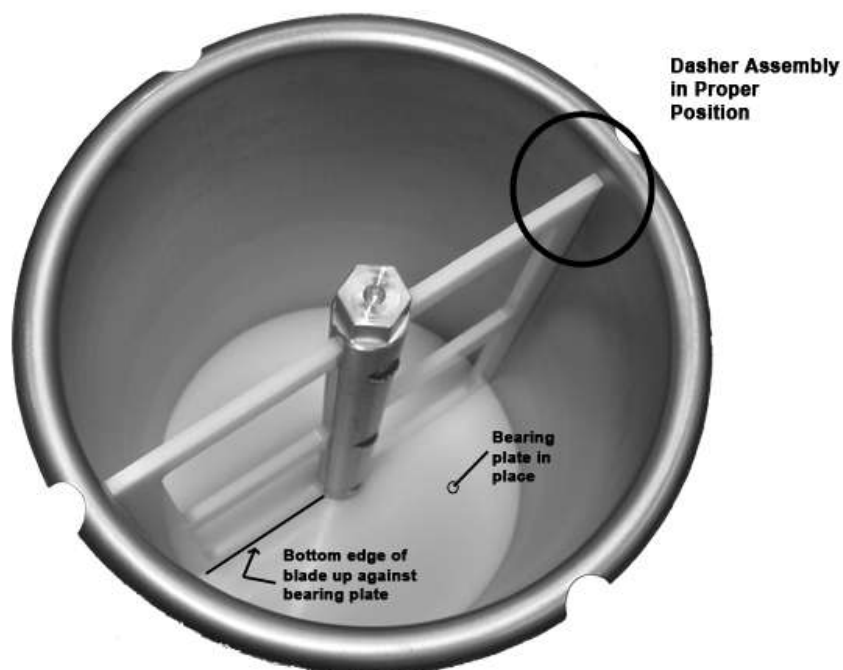


Figure 3-2



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Figure 3-3



Figure 3-4



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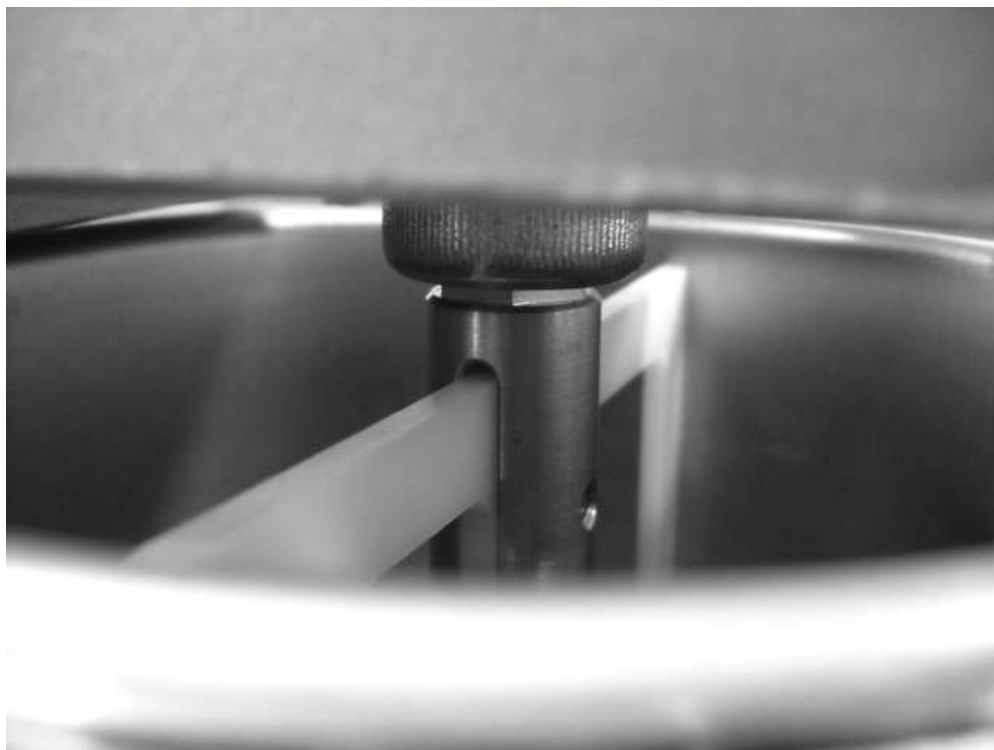


Figure 3-5



Figure 3-6



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Section 4: CLEANING AND SANITIZING

It is very important to have a stringent, repeatable procedure for cleaning and sanitizing any type of food equipment. Fortunately, the model CB100 Batch Freezer has very few parts to clean and sanitize. You will need to have a commercial sanitizer on hand at all times. Emery Thompson recommends Purdy Products "SteraSheen Green Label" sanitizer and cleaner, which was included with your machine. It is a powder that is dissolved in water.

On the model CB100, there are only 4 food-contact parts that must be thoroughly cleaned and sanitized: the freezing tub, the bearing disc, the splash plate and the dasher/blade assembly. After the last batch of the day or shift is made, these parts should be either hand-cleaned with detergent and warm water, or run through a dishwasher. The sanitizing is done just prior to use, so the parts should be washed, dried, and stored in a clean place until ready to use the machine.

When assembling the 4 parts mentioned above for use, have a gallon bucket of sanitizing solution ready, as well as a roll of paper towels, and a clean work surface. Put the bearing disc into the freezing tub, then the dasher/blade assembly into the tub. Submerge the entire assembly into the bucket of sanitizer for at least one minute. Then, pull the tub out, and pour the sanitizer out of it. Consult with your local health Inspector for any additional sanitizing methods he/she may require.

IMPORTANT: the next step is crucial! Just before you put the tub into the machine **YOU MUST DRY THE OUTSIDE** of the tub! Failure to do this important step will cause the freezing tub to lock



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into the freezing cylinder! Once the outside of the tub is completely dry, it can be inserted into the freezing cylinder, and

locked onto the 4 drive pins. At this point, you are ready to add mix/ingredients, and begin.

Keep in mind: the cleaner you work, the easier cleanup will be. Rather than a sponge or rag, use disposable paper towels. Damp or wet sponges and rags harbor bacteria! Wipe up spills and throw away wrappers, paper towels, or anything that may accumulate.

After production is complete, any spilled product on the outer casing or top of the machine should be wiped up thoroughly, and then wiped down with some of the sanitizer that was made earlier. Look into the freezing cylinder. If there is anything in it, including water/condensate, it too should be wiped out thoroughly.

You simply cannot be too thorough when it comes to food and cleanliness!



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Section 5: CARE and MAINTENANCE

Your model CB100 requires very little in the way of care and maintenance. There are some functions of the machine that bear paying attention to.

1) Airflow - your machine uses airflow from its surroundings to extract heat from each batch of product you make. So it goes to reason that good airflow is imperative to the efficient operation of the unit. After about 100 batches (depending on the environment the machine is used in) take a good look at the left side of the machine, where air is drawn in. Look past the square perforations in the stainless steel cabinet, and check the surface of the condensing coil assembly. It should be clean and free of dust, lint, etc. that may in time accumulate on its surface. A strong vacuum cleaner with a soft brush can be used to loosen and pull out any accumulations.

2) Blade condition - the scraping blade is made of food-grade high density polyethylene. Eventually, the surface that touches the freezing tub will wear down. When you notice a change in the amount of product being left on the inside surfaces of the freezing tub, it will be time to change the blade. You should be able to see the gray/silver of the tub after each swipe around of the blade. There will always be a film of product on the surface of the tub, but if you can no longer see through it to notice the color of the stainless steel beneath it, then change the blade. A hex key is included with the machine that fits the 3 screws that secure the new blade into the dasher shaft. Simply remove the screws, and push the old blade out sideways. When sliding the new blade in place, note that there is a top and bottom. The bottom of the blade has a very slight taper near where it rides along the bearing disc (see photo 5-1) Be sure to insert it the correct way into the dasher shaft. Line up the holes in the blade with the holes in the dasher



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shaft, and replace and tighten the 3 securing screws. Start the screws threading into each hole before tightening any of them all the way. Do not over tighten.

3) Bearing discs - the small centering hole in the bearing disc may show signs of wear (oblonging) after many hundreds of batches. To check this, insert the round end of the dasher shaft into the bearing disc's hole. There should be some clearance, but equal all around the hole. If questionable, replace the disc.

4) Power cord - be sure to keep the power cord routed in a safe path to your outlet. If for some reason the cord becomes damaged or frayed, or the plug does, have an electrician replace the entire cord. You can purchase this part from Emery Thompson.

5) General cleanliness - aside from the normal day-to-day cleanup of the machine, and to keep the machine looking it's best, a stainless steel cleaner/polish can be used on all stainless surfaces to bring back its luster. Do not use abrasive cleaners, or cleaners with high bleach content.



Photo 5-1



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Section 6: PARTS DIAGRAMS

MECH077 (x4)



MECH084

Parts Box
4 Feet
1 Blade Wrench

Figure 6-1



STML095

Figure 6-2



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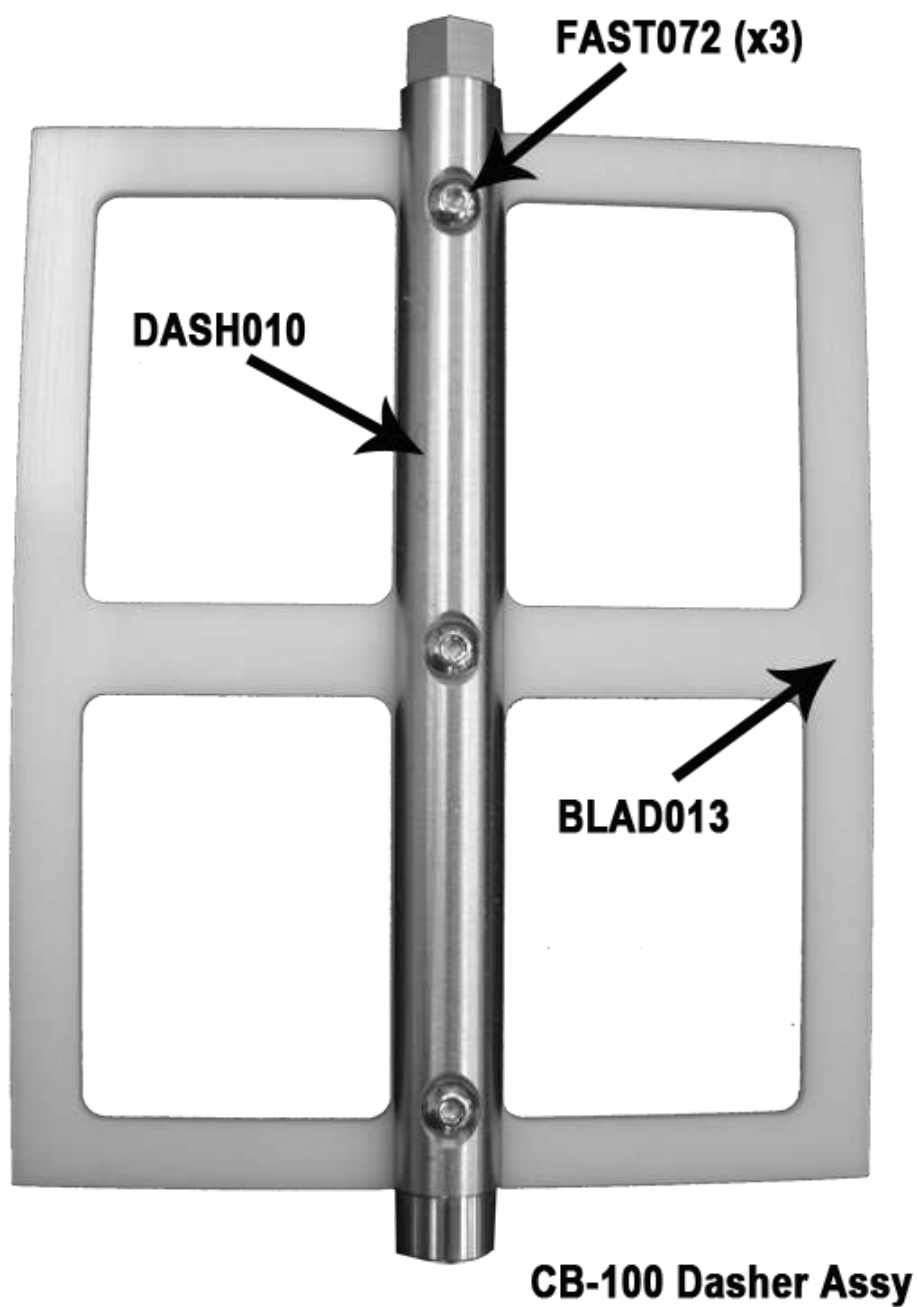


Figure 6-3



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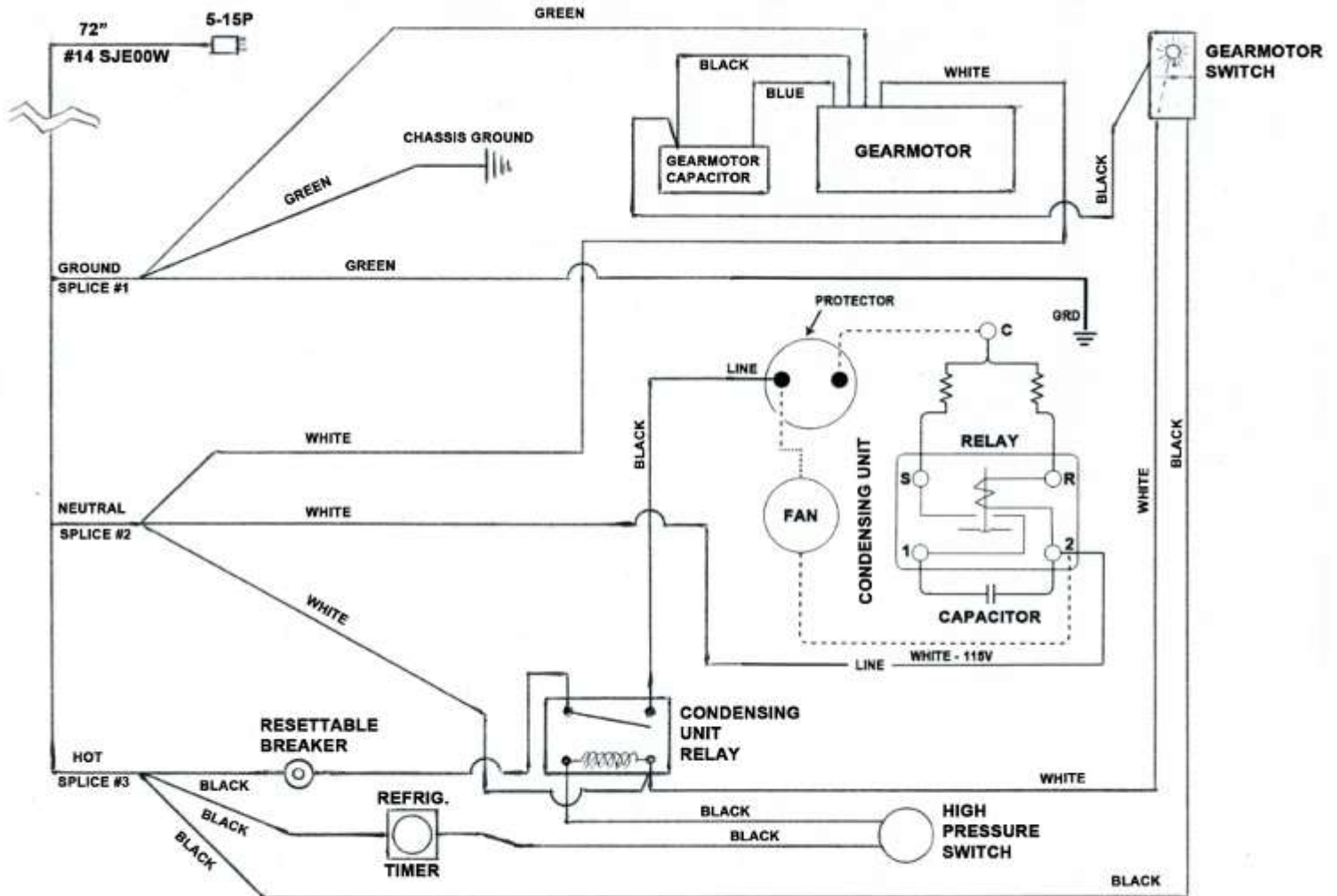


Additional Freezing Tub Kit

Figure 6-4



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Model CB100 Electrical Schematic

Figure 6-5



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Section 7: WARRANTY

12 Month Limited Warranty on New Freezers

Except as limited and conditioned hereafter, The Emery Thompson Machine and Supply Company, Inc. (hereinafter referred to as the “Company”) warrants to the original purchaser and user only, the said machine 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 required service is provided by an authorized agent of the Company or person or persons directly authorized by the Company to perform the necessary repairs. Emery Thompson Machine and Supply can be reached at (ph)718-588-7300, (fax)352-796-0720, or (email) STEVE@EMERYTHOMPSON.COM

Definitions: The term “original purchaser” used herein shall be deemed to be that person, firm, association, or corporation for whom the equipment referred to herein is originally sold to.

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

Labor and Transportation Charges: the Company 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 for by the purchaser.

Use and Care of the Machine: Purchaser shall only use the machine 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 machine, or for any accident that may occur to said machine, or any part thereof after said machine has left the Factory, nor for any defects that may arise by placing any part in said machine which has not been manufactured or approved by the Company. Misuse of the machine includes owners failure to (1) clean, lubricate and assemble per the Operators Manual; (2) replace damaged or worn “wear items” which include but not limited to O-rings, gaskets, front bearings, rear bearings, scraper blades, drive shaft or 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 machine, and there will be no liability of Emery Thompson Machine and Supply Company if any of same shall occur.



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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 Factory, 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 found on the rear panel.

Emery Thompson Machine and Supply Company, Inc. 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 freezer shall be repair or replacement of defective components under the terms of this warranty. All rights to consequential or incidental damages (including claims for lost sales, lost profits, property damages, or service expenses) are expressly excluded. No distributor, dealer, or other person is authorized to make any commitment or assume any liability on behalf of Emery Thompson Machine and Supply Company, Inc. beyond this warranty.

This warranty is NOT TRANSFERABLE.