

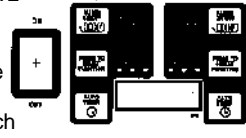
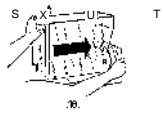

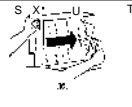
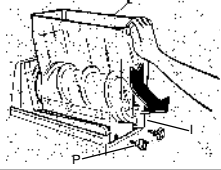
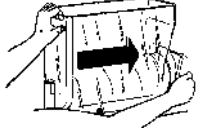
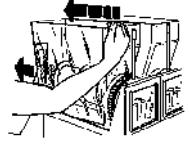
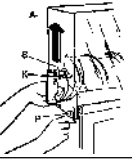
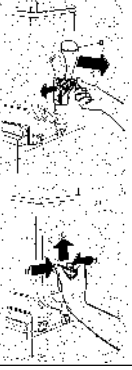
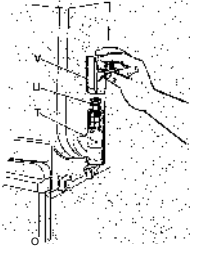

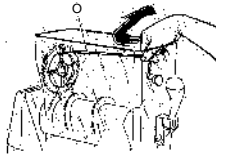
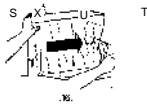
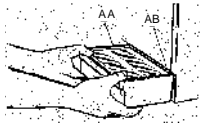
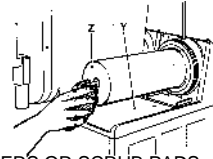


DAILY CARE & CLEANING INSTRUCTIONS: For the machine to function properly, it is important that the cleaning procedures be carried out daily.

TO DISASSEMBLE		TO RE-ASSEMBLE	
<p>1 TURN OFF ALL SWITCHES, EMPTY BOWL & UNPLUG UNIT</p> <ul style="list-style-type: none"> Turn off refrigeration  and  freezing switches and empty the bowls of their remaining product Turn off auger switches and power switch Unplug the unit 		<p>9 PUT ON BOWL SEAL AND SHAFT SEAL</p> <ul style="list-style-type: none"> Moisten bowl seal (T) with water and put back on Check for wear of bell shaped rubber shaft seal (see below) replace if needed Lubricate inside of bell shaped shaft seal (X) with food grade lubricant. Put back seal making sure flared side faces the cylinder 	
<p>2 REMOVE MIXING ROD</p> <p>Pull out the mixing rod (O) by pushing it slightly backwards to remove it from its position</p> 		<p>10 PUT ON GEAR RING/AUGER ASSEMBLY</p> <ul style="list-style-type: none"> Put gear ring/auger assembly (U) back in position Secure parts in place by screwing on the bolt (S) counterclockwise 	
<p>3 REMOVE KNOBS SECURING BOWL - DRAIN EXCESS PRODUCT</p> <ul style="list-style-type: none"> Unscrew and remove the two knobs (P) Then lower the bowl to drain out any remaining product through the dispensing valve (I) 		<p>11 PUT ON BOWL</p> <ul style="list-style-type: none"> Lightly moisten rear inner part of bowl with food grade lubricant Position bowl into place making sure it has a tight hold on the bowl seal Be sure bowl corners fit on outside edge of the top tray piece. The lid cover will not fit properly if the bowl is not correctly positioned. 	
<p>4 REMOVE BOWLS</p> <p>Remove bowl by pulling it outwards, lightly tapping the back of bowl so it comes out of position <u>or</u> by applying slight downward pressure to the top front edge of the bowl.</p> 		<p>12 SECURE BOWL WITH KNOBS</p> <p>Keep bowl lifted until the hole in lower bowl edge is aligned with hole in front panel then tightly screw on the knobs (P) without exerting excessive pressure to avoid cracking the bowl</p> 	
<p>5 REMOVE DISPENSING VALVE</p> <ul style="list-style-type: none"> Remove the pin (G) and slide the handle out from it's seat. Simultaneously apply pressure to the securing tabs, lift the dispensing valve out of its position. Disassemble remaining valve assembly parts 		<p>13 REASSEMBLE DISPENSING VALVE</p> <ul style="list-style-type: none"> Lubricate o-rings with food grade lubricant and place o-rings on valve Place spring over valve stem While pushing up on valve, insert metal bar on handle under hook on valve Slide valve back into position until it completely snaps into place Reassemble the handle (B) with the relevant pin (G) (See #5). 	
<p>6 REMOVE O-RINGS FROM DISPENSING VALVE</p> <ul style="list-style-type: none"> Pinch o-ring between thumb and index finger Squeeze and push o-ring out of the groove Roll o-ring out of the groove with your other thumb 		<p>14 REASSEMBLE MIXING ROD</p> <ul style="list-style-type: none"> Reassemble mixing rod (O) so that its gears are aligned with the lower gear ring Insert front pin into position at front of bowl 	
<p>7 REMOVE MIXING UNIT PARTS & DRIP TRAY</p> <ul style="list-style-type: none"> Unscrew bolt (S) clockwise Pull off auger and gear ring assembly (U) Remove bowl seal (T) and bell shaped shaft seal (X) Remove drip tray by lifting up the front edge, while lowering the rear edge and pulling it towards you 		<p>15 INSTALL DRIP TRAY</p> <ul style="list-style-type: none"> Reinstall drip tray, (AA) making sure that the condensation drainage tube (AB) is reinserted into its correct fixed position allowing it to drain into the tray Plug unit into appropriate power supply 	
<p>8 CLEAN ALL PARTS</p> <ul style="list-style-type: none"> Thoroughly clean all parts removed above as well as the base (Y) and evaporator (Z). Wash with warm water using a mild dish detergent and rinse thoroughly with clean water. Allow to air dry. 		<p>16 SANITIZING UNIT</p> <ul style="list-style-type: none"> Fill bowl with a mix of water and sanitizing solution Turn auger on for 10 minutes to sanitize all parts Turn off auger Drain bowl through dispensing valve Unscrew two knobs and lower bowl to drain out remaining solution Clean tray underneath bowl and lubricate rear bowl seal Reattach bowl Screw knobs back on Disconnect lamp cover from power. With clean cloth wash underside of lamp cover with warm water and mild detergent. Allow to air dry and wipe with cloth that has been dipped in sanitizing mixture 	

CAUTION: DO NOT USE ABRASIVE CLEANERS OR SCRUB PADS. ABRASIVES WILL SCRATCH PLASTIC PARTS AND OTHER FINISHES.

CAUTION: MAKE SURE LAMP COVER HAS BEEN DISCONNECTED FROM POWER.

PROGRAMMING

To access the control panel, open the cover on the right side of the unit

G23-2B ELECTRONIC MODEL GUIDE:

MAIN POWER SWITCH:

1. Turns unit ON.
2. Selects 12/24 time or Fp/CP temperature display when turned ON while simultaneously depressing the auger button.
3. Sets current time when turned ON while simultaneously depressing the "Mode/Press To Select Function" button.

AUGER ON/OFF BUTTON:

1. Turns auger ON and OFF when main power switch is ON.
2. Must be ON to permit defrost time to be reset.
3. Must be ON to activate the "Mode/Press To Select Function" button to select manual "OFF", "FREEZE" or "COOLING" functions.

MODE/PRESS TO SELECT FUNCTION BUTTON:

1. Use to manually select "OFF", "FREEZE" or "COOLING" functions when auger is turned ON.
2. Accesses defrost timer reset mode when depressed for an extended period when auger is turned ON.
3. Locks in hours, minutes and final time settings after they are reset using the "Auto Timer" button.
4. Does not function when light on "Auto Timer" button is illuminated.

"AUTO TIMER" BUTTON:

1. Turns auto defrost mode ON or OFF (light on switch indicates when auto defrost mode is activated).
2. Used to adjust the hours and minutes settings when readjusting current time or auto defrost timer.

ENTER TIME PROGRAMMING ON INITIAL INSTALLATION OR IN THE EVENT OF A TIME CHANGE:

1. Turn OFF power switch.
2. While pressing left "Press to Select Function" button, turn ON power switch while continuing to hold the "Press To Select Function" button until the display illuminates (hour digits will start to blink).
3. First set hour by pressing the "Auto Timer" clock button until the appropriate hour is shown.

Note: When using a 12 hour clock the time is P.M. when the dot at the bottom right corner of the LED is lit; when dot is not lit it is A.M.)

4. To set the minutes press the left "Press To Select Function" button, then press the "Auto Timer" clock button until the appropriate minutes are set.
5. To save your settings press the "Press To Select Function" button one more time.

G23-2B SETTING DEFROST TIMER (Night Setting):

1. Turn the power switch on.
2. Then press "Auger ON/OFF" button on for the side you are setting.
3. Then press and hold the "Press to Select Function" button until you hear a long beep and the LED and clock light begins to blink.
4. Press the "Auto Timer" clock button to set the hour you want it to turn to refrigeration mode and then press "Press to Select Function" to save the setting.
5. Then press the "Auto Timer" clock to set the minutes to complete time setting that you want it to turn to refrigeration mode. Then press the "Press to Select Function" button to save the setting.
6. Proceed to setting the time you want the machine to turn to freezing mode by following steps 4 and 5 above. Then press the "Press to Select Function" button to save the time settings for freeze mode.

Note: Once the settings have been saved, the unit will save the settings, even when the power switch is turned off.

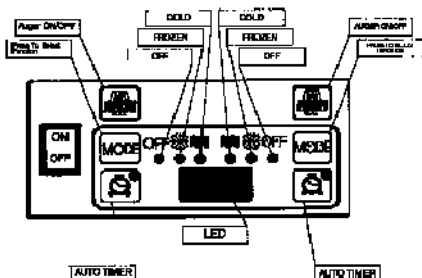
When the light on the "Auto Timer" clock button is "on", the defrost timer is activated. To turn off the defrost timer, press the clock buttons until the lights on the clock buttons turn off.

G23-2B - TO OPERATE IN AUTOMATIC MODE (WITH DEFROST TIMER ACTIVATED)

1. Turn power switch on and wait for LED to light up.
2. To operate in defrost mode the light on the "Auto Timer" clock button should be illuminated.
3. If it is not, press the "Auto Timer" clock button to turn on automatic mode.

G23-2B OPERATE IN MANUAL MODE (WITHOUT DEFROST TIMER ACTIVATED)

1. Turn power switch on and wait for LED to light up.
2. Make sure clock button is off (LED light on clock button should not be lit up).
3. First turn auger on by pressing "Auger ON/OFF" button until it beeps. (Note: The auger



must be on before unit will allow the cooling or freezing mode to activate.)

4. Then select refrigeration or freezing mode by pressing the "Press to Select Function" button until the light under the selection you desire is lit up. Note: In the cooling mode the LED will read the actual temperature of the product (The temperature setting is preset to NSF standards and is not adjustable.) In the freezing mode the LED will read the current time.

ERROR MESSAGES

"FILTER CLEANING" ALARM

A filter cleaning alarm will activate when the unit is running hot due to insufficient internal air circulation. When this occurs a "Filtr" message will appear on the touchpad LED readout and an intermittent audible tone will also sound to alert the operator of this condition.

The "Filtr" message will appear when the alarm activates (a beeping sound every 4-5 seconds). To determine the condition that caused the alarm and correct problem, see list of conditions below:

- Condition: Filter is dirty and needs to be cleaned
Corrective Action: Clean and replace filter following instructions.
- Condition: Unit is positioned too close to a wall or other objects restricting air flow and causing the machine to run at a higher temperature.
Corrective Action: Reposition unit to maximize ventilation space.
- Condition: Filter is not properly installed.
Corrective Action: Properly install filter.
- Condition: Unit has been installed near a heat source, such as a coffee machine, ice maker or cold beverage machine which expels hot air from its vents, causing the machine to run at a high temperature. (Installation near a heat source should be avoided)
Corrective Action: Reposition unit to maximize ventilation.

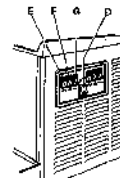
"SYSTEM OVER TEMPERATURE" ALARM

- A system over temperature alarm will activate as a safety when the unit has overheated to protect the compressor.
- The system automatically goes to "OFF" status where the compressor's operations are stopped, while augers will keep working to avoid forming ice blocks.
- When this "Err" message will appear on the touch pad LED readout accompanied by a continuous buzzer sound to alert the operator of this condition.
- When this alarm activates, turn off all switches. Then determine the condition from the list above.

MG23-2B & ID2.2 TRADITIONAL ROCKER SWITCH MODEL GUIDE

Important: The mixing parts/auger switch should be on prior to activating the freezing or refrigeration switches.

- (E) activates the mixing parts/spiral auger
- (F) activates the freezing of the product
- (G) activates the refrigeration of the product
- (D) is the main power switch



FROZEN BEVERAGE - select (E) and (F)

Note: There is a 4 minute delay before the compressor starts.

COLD BEVERAGE - select (E) and (G)

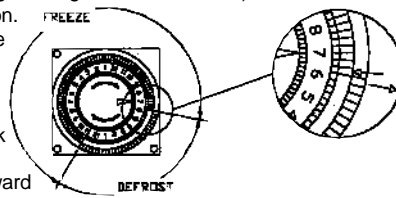
STANDBY (Night Setting) - select (E) and (G)

- * Defrost timers are installed in each unit and can be set to automatically place units in defrost mode and back to frozen mode. All switches must be on for defrost timer to properly function.

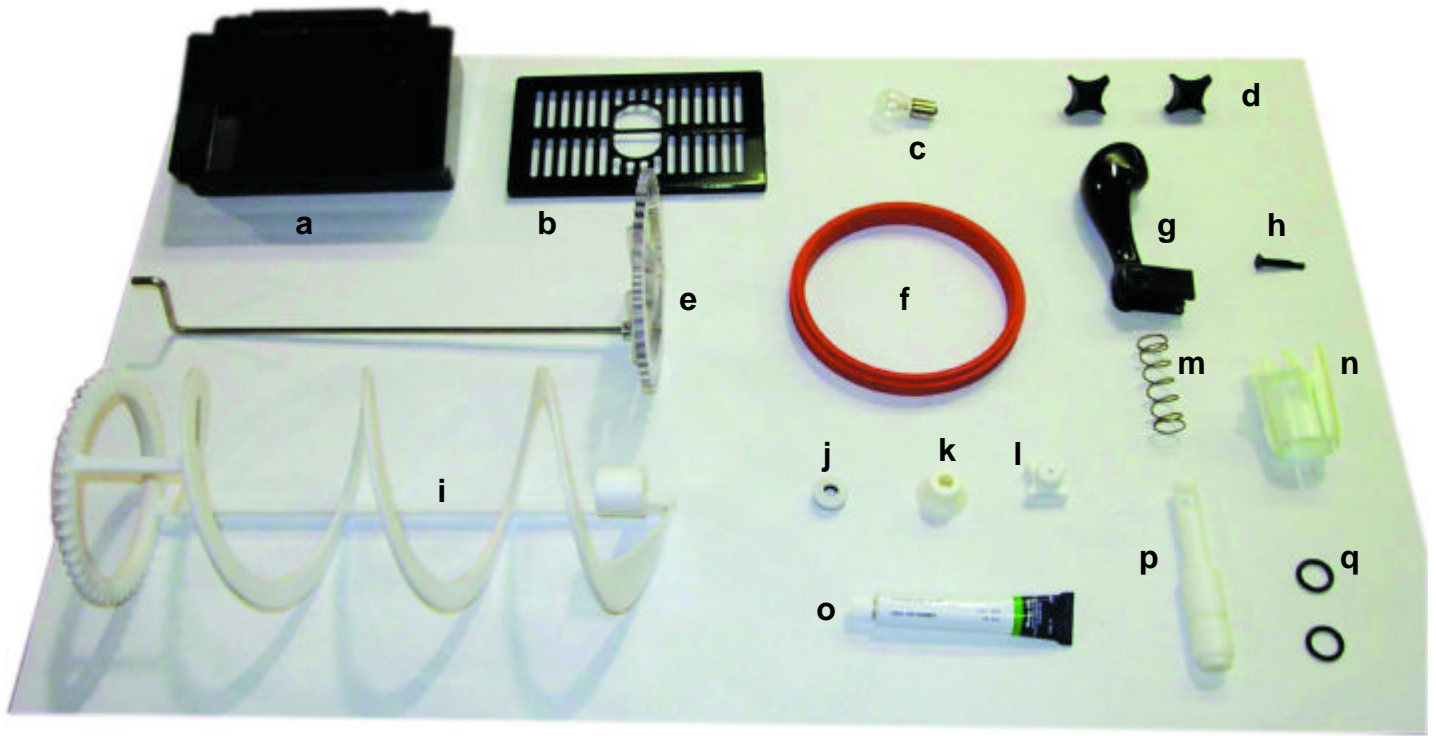
MG23-2B SETTING DEFROST TIMER (& ID2.2 When Equipped)

NOTE: All switches (power, auger, refrigeration and freeze) must be "on" for defrost timer to properly function.

- Setting Current Time - Rotate the program disc, in the direction of the arrows, to align the correct time of day with the time of day mark
- Setting Defrost Mode - Push the switch activator toward the outer edge of the program disc. Freeze time is set by pushing the switch actuators toward the center of the time switch. The light and dark shaded areas of the program disc indicate day and night. Each actuator is equivalent to 15 minutes
- The drawing shows a defrost time from 11:00 to 6:15



THE TIMER IS BATTERY BACKED TO PROTECT SETTINGS DURING POWER FAILURE. THE BATTERY BACK-UP FEATURE WILL FAIL IF POWER IS REMOVED FROM THE UNIT FOR MORE THAN 2 WEEKS



Key Replacement Parts

ITEM DESCRIPTION	PART NUMBER	ITEM DESCRIPTION	PART NUMBER
a) Drip Tray - Black	90409	i) Auger	90444
Drip Tray - White	90026	j) Spindle Bushing	90069
b) Drip Tray Grid - Black	90408	k) Shaft Seal, Rubber Bell Shaped - Black	90066
Drip Tray Grid - White	90025	l) Securing Nut for Auger	90068
c) Incandescent Light Bulb	90142	m) Dispensing Valve Spring	90044
d) Knob to secure Bowl - Black	90426	n) Dispensing Valve Upper Body	90043
Knob to secure Bowl - White	90024	o) Food Grade Lubricant	90112
e) Upper Mixing Bar	90065	p) Dispensing Valve Lower Body - G & GM Series	90403
f) Seal for Bowl	90023	Dispensing Valve Lower Body - ID Series	90045
g) Dispensing Valve Handle - Black	90401	q) Dispensing Valve O-ring	90046
Dispensing Valve Handle - White	90041		
h) Handle Securing Pin - Black	90402		
Handle Securing Pin - White	90042		

IMPORTANT-PREVENTATIVE MAINTENANCE

The following Preventative Maintenance Items should be performed per the recommended schedule in order to maximize the life of your machine and to insure warranty coverage. (For a checklist of all P.M. items, contact GCS or check the website.)

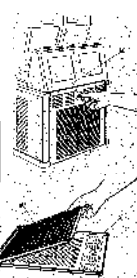
1. Lubricate bell shaped shaft seal and dispense valve o-rings following daily cleaning procedure.
2. Check bell shaped shaft seal for wear and replace when needed (every 1-6 months or more often if necessary). Seal is worn if edges that touch barrel curl back.
3. Clean air filter weekly and condenser monthly or more often if necessary.
4. Check dispense valve o-rings for wear and replace as needed (every 3-6 months during complete PM or more often if necessary).
5. Perform complete PM every 3-6 months.

WARNING Disconnect the unit from its power supply prior to performing any maintenance procedures. Failure to do so could result in electric shock from hazardous parts or serious burns from hot surfaces.

REMOVING AND CLEANING THE FILTER IF EQUIPPED (G & MG MODELS STANDARD; ID MODELS OPTIONAL)
In order to guarantee an efficient refrigerating system, it is essential that the filter be properly cleaned, according to the following procedures:

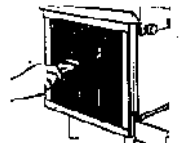
Attention: Failure to maintain a clean filter and condenser will cause damage to the unit not covered by warranty.

- Unscrew the knob (K) on rear panel in order to have the full back panel in your hands - (G, MG) on ID pull filter cover from unit at bottom of cover, pull down to remove.
- Remove the filter (W) held inside the back panel (X) and clean it properly using water or vacuum. Allow to dry.
- Put the clean dry filter back to its position and reinstall the back panel on machine by screwing in the knob (K) or reattaching filter cover.



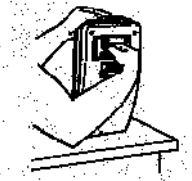
CLEANING CONDENSER

- Remove the back panel
- Using a dry brush or vacuum, remove the dust that has accumulated between the fins of the condenser



CHANGING LIGHT BULB

- To access the lightbulb insert the tip of a coin or small screwdriver in the slot on the cover and rotate to pop the panel open
- Holding the cover, carefully remove the lightbulb.
- Insert the new bulb and replace the light cover



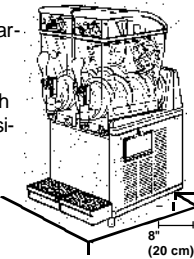
REAR MERCHANDISER LIGHTS

- In order to access the lightbulb from the rear back lit merchandiser, remove the rear merchandiser by sliding it upwards.
- Then remove the lightbulb(s). Insert the new bulb(s).
- Reassemble the rear back-lit merchandiser making sure that its slots are inserted properly in the relevant brackets.

INSTALLATION

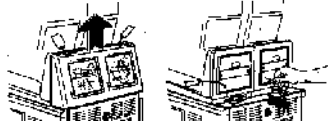
POSITIONING THE MACHINE

The machine must be well ventilated, with an 8" (20 cm) clearance on the sides and back of the machine. Do not install near a heat source such as ovens, coffee machines, cold or frozen beverage dispensers or ice machines (equipment with compressors that expel hot air through its vents). Do not position near dust producing units such as a Powdered Cappuccino or Cocoa dispenser. A room temperature between 59°F (15°C) and 77°F (25°C) is recommended.



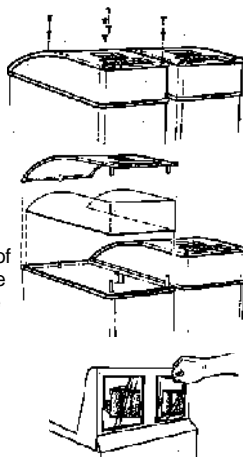
REMOVE SHIPPING PIN

Attention: Shipping pin attached to tag located behind each bowl must be removed before starting machines.



INSTALLING THE TOP LID MERCHANDISER (requires Phillips head screwdriver)

1. Remove hole plugs and screws.
2. Remove or replace graphic by sliding it around the outside edge of the lid's clear plastic base. Position bottom edge of header in grooved area. Reassemble the top cover onto the clear plastic base. The top edge of header should slide into top cover grooved area.



INSTALLING REAR GRAPHIC

1. Pinch or bend graphic and pull it out to remove.

CONNECTION TO MAIN POWER SUPPLY

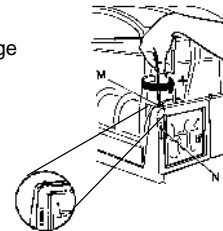
Install in properly grounded, electrical receptacle that is in compliance with current national safety standards. Grindmaster Crathco Systems, Inc. is not responsible for damage and/or injury caused by failure to follow above precautions.

- Only connect to a dedicated outlet.
- Altering the cord or plug will void the warranty.
- Do not compress, bend or bunch power cord or use extension cord.

CONSISTENCY ADJUSTMENTS

CONSISTENCY ADJUSTMENTS

- Unplug the machine
- Product in bowl should be within proper fill range
- Change the thickness of product by turning the screw (M) on the back of bowl clockwise for thinner product or counterclockwise for thicker product
- The indicator gauge (N), located on the back of the bowl, shows the degree of adjustment (+/-) (+) = thicker, (-) = thinner



TOO THICK OF A PRODUCT CAN BE PREVENTED BY SWITCHING THE FREEZING MODE (F) "OFF" OR BY REFILLING THE BOWL WHEN PRODUCT IS BELOW MINIMUM FILL LINE

PRODUCT HINTS

- To maintain product quality place unit in standby (refrigeration) mode at night to allow product to thaw out, and then refreeze the next day. This will promote smoother product and smaller ice crystal growth. (Defrost timer can be programmed to do this for you automatically at preset times.)

HELPFUL HINTS

PREPARING PRODUCT

- Make sure that your product has a 13% minimum sugar content (BRUX). A lower concentrate could damage the mixing parts and gear motors. NEVER USE ONLY WATER.
- Premix all product in a separate container. NEVER pour dry powder, crystals or concentrate into a dry bowl.
- There is no need to remove lid for refilling. Simply slide lid back until "stops" are reached.
- Note and follow minimum and maximum fill lines on bowl. Do not overfill, or run the unit without enough product.



TROUBLESHOOTING GUIDE

Problem	Possible Cause	Solution
The machine over-freezes, making the auger movement slow or stopped	<ul style="list-style-type: none"> • The product brix is too low • The screw setting for the product consistency control system is set too far toward the "+" position • The level of the product in the bowl is too low, exposing the auger 	<ul style="list-style-type: none"> • Check the product brix and correct • Reset the screw toward the "-" position to produce a thinner consistency product
Product is leaking out of the bowl	<ul style="list-style-type: none"> • One of the bowl seals is not in place 	<ul style="list-style-type: none"> • Add more product or turn the refrigeration "Off" • Replace or reposition the seals
The machine does not cool, or cools only partially, but the compressors are running	<ul style="list-style-type: none"> • Freezer is in defrost mode • The space around the machine is inadequate for ventilation • The condenser fins are clogged with airborne particles 	<ul style="list-style-type: none"> • Return to freeze mode • Allow at least 8" between the machine and anything next to it; keep away from heat sources • Remove the side panels and using a brush or compressed air to clean the condenser
The cover does not fit properly on the bowl	<ul style="list-style-type: none"> • The bowl is incorrectly positioned. The lower right and/or left corner edge of bowl is not over the lower triangle edge 	<ul style="list-style-type: none"> • Remove bowl and position properly
Product is leaking from the dispensing valve	<ul style="list-style-type: none"> • The dispensing valve has been incompletely or incorrectly replaced in its position • The free movement of the dispensing valve is impeded • Dispensing valve o-rings are damaged 	<ul style="list-style-type: none"> • Reassemble and replace • Clean and lubricate the valve and valve cylinder with the lubricant provided with the machine • Replace the o-rings
Product is flowing into drain tray through drainage tube	<ul style="list-style-type: none"> • The bell shaped "shaft" seal between the front of the cylinder and the auger hub has not been reinstalled properly 	<ul style="list-style-type: none"> • Find the seal and put it back in place
The auger and/or the upper mixing unit is not turning	<ul style="list-style-type: none"> • Auger not turned on 	<ul style="list-style-type: none"> • Turn auger on

If you still need help, call our service department at (800) 695-4500 (Monday through Friday, 8 am - 6 pm EST) or an authorized service center in your area. Please have the model and serial numbers ready so that accurate information may be given. Prior authorization must be obtained from Grindmaster Crathco Systems' Technical Services Department for all warranty claims.



GRINDMASTER CRATHCO SYSTEMS, INC.
"Global Customer Satisfaction"

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