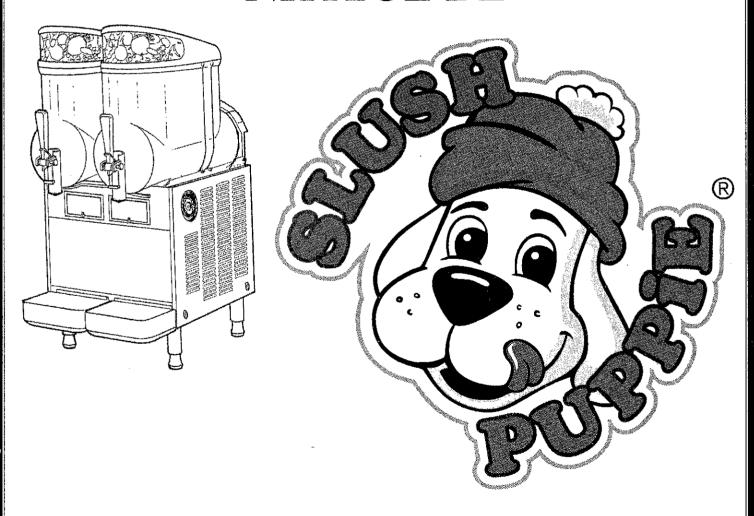
SERVICE MANUAL UGOLINI MODEL:

NHT2UL BL



			·

TABLE OF CONTENTS - UGOLINI MODEL: NHT2UL BL				
SECTION 1	TECHNICAL CHARACTERISTICS			
SECTION 2	INTRODUCTIONS			
SECTION 3	INSTALLATION			
SECTION 4	GENERAL SAFETY TIPS			
SECTION 5	OPERATING PROCEDURES			
SECTION 5.1	DESCRIPTION OF CONTROLS			
SECTION 5.2	OPERATING HELPFUL HINTS			
SECTION 5.3	CLEANING AND SANITIZING PROCEDURES			
SECTION 5.3.1	DISASSEMBLY			
SECTION 5.3.2	CLEANING PROCEDURES			
SECTION 5.3.3	SANITIZING PROCEDURES			
SECTION 5.3.4	ASSEMBLY			
SECTION 5.4	IN-PLACE SANITIZATION			
SECTION 6	ROUTINE MAINTENANCE			
SECTION 6.1	QUALIFIED SERVICE MAINTENANCE			
SECTION 7	DEFROST TIMER - INSTRUCTIONS			
SECTION 8	GENERAL TROUBLESHOOTING GUIDE (4 PAGES)			
SECTION 9	PART VIEWS / PART NUMBER DESIGNATION (5 PAGES)			
SECTION 10	MT2 FACTS AND HIGHLIGHTS			
SECTION 11	QUALIFIED SERVICE TECH INSTALL STEPS (2 PAGES)			
SECTION 12	REBUILD INSTRUCTIONS - DRIVE MOTOR			
SECTION 13	CONTROL BOARD EXPLANATION (MULTIPLE BOARDS)			
SECTION 14	WIRE/COMPONENT DIAGRAMS			

1 TECHNICAL CHARACTERISTICS

SPECIFICATIONS CHART / TECHNICAL CHARACTERISTICS					
	MODEL: MT2UL	MODEL: MT3UL			
OPERATING VOLTAGE	115V/60HZ/1 PHASE	115V/60HZ/1 PHASE			
AMPERAGE RATING/BREAKER	15	15			
DIMENSION - WIDTH	14"	14"			
DIMENSION - DEPTH	19"	19"			
DIMENSION - HEIGHT	28"	28"			
WEIGHT	95 LBS	95 LBS			
QTY OF BOWLS	2,	3			
CAPACITY OF EACH BOWL (MAX)	2.5 GALLONS	2.5 GALLONS			
AIR CLEARANCE (ALL SIDES)	6" MINIMUM	6" MINIMUM			
COMPRESSOR HORSE POWER	1/3 HP	1/3 HP			
THERMOSTAT TEMPERATURE	35 - 40 DEGREES F.	35 - 40 DEGREES F.			
THERMOSTAT SETTING	2-3 O'CLOCK	2-3 O'CLOCK			
DEFROST CYCLE/PROGRAMABLE	24 HR TIMER	24 HR TIMER			
RECOMMENDED DEFROST CYCLE	MIN-6 HOURS	MIN-6 HOURS			



Read electrical ratings written on the data plate of the individual units; the data plate is adhered on the dispensing side panel of the unit, just behind the drip tray (the right side drip tray in multiple bowl models). The serial number of the unit (preceded by the symbol #) is adhered inside the left switch box. Data plate specifications will always supersede the information in this manual.

The electric diagram of the dispenser is located in the inner part of the dispensing side panel.

Specifications are subject to change without notice.

2 INTRODUCTION

Please read all sections of this manual thoroughly to familiarize yourself with all aspects of the unit.

Like all mechanical products, this machine will require cleaning and maintenance. Besides, dispenser working can be compromised by operator's mistakes during disassembly and cleaning. It is strongly recommended that personnel responsible for the equipment's daily operations, disassembly, cleaning, sanitizing and assembly, go through these procedures in order to be properly trained and to make sure that no misunderstandings exist.

3 INSTALLATION

1 - Remove the corrugate container and packing materials

and keep them for possible future use.



When handling the machine never grasp it by the bowls or by the evaporator cylinders. The manufacturer refuses all responsibilities for possible damages which may occur through incorrect handling.

- 2 Inspect the uncrated unit for any possible damage. If damage is found, call the delivering carrier immediately to file a claim.
- 3 Install the unit on a counter top that will support the combined weight of dispenser and product bearing in mind what is stated in the preceding point 1 IMPORTANT warning.
- 4 A minimum of 15 cm (6") of free air space all around the unit should be allowed to guarantee adequate ventilation.
- 5 Ensure that the legs are screwed tightly into the base of the machine.
 - Replace the standard legs originally installed with the 100 mm (4") legs whenever they are provided with the unit.
- 6 Before plugging the unit in, check if the voltage is the same as that indicated on the data plate. Plug the unit into a grounded, protected single phase electrical supply according to the applicable electrical codes and the specifications of your machine. When the unit has no plug, install a proper grounded plug, in compliance with electrical codes in force in your area, suitable to at least 10 Amp 250 Volt (220-230 Volts 50-60 Hz areas) and 20 Amp 250 Volt (100-115 Volts 50-60 Hz areas) applications. Should you prefer to connect the unit directly to the mains, connect the supply cord to a 2-pole wall breaker, whose contact opening is at least 0.125". Do not use extension cords.



Failure to provide proper electrical ground according to applicable electrical codes could result in serious shock hazard.

7 - The unit doesn't come presanitized from the factory. Before serving products, the dispenser must be disassembled, cleaned and sanitized, according to this handbook instructions (chapter 5.3 CLEANING AND SANITIZING PROCEDURES).

4 TO OPERATE SAFELY

- Do not operate the dispenser without reading this operator's manual.
- 2 Do not operate the dispenser unless it is properly grounded.
- 3 Do not use extension cords to connect the dispenser.
- 4 Do not operate the dispenser unless all panels are restrained with screws.
- 5 **Do not** obstruct air intake and discharge openings: 15 cm (6") minimum air space all around the dispenser.
- 6 Do not put objects or fingers in panels louvers and faucet
- 7 Do not remove bowls, augers and panels for cleaning or routine maintenance unless the dispenser is disconnected from its power source.

5 OPERATING PROCEDURES



In case of damages, the power cord must be replaced by qualified personnel only in order to prevent any shock hazard.

- Clean and sanitize the unit according to the instructions in this manual. See chapter 5.3 CLEANING AND SANITIZING PROCEDURES.
- 2 Fill the bowls with product to the maximum level mark. Do not overfill.
 - The exact quantity of product (expressed as liters and gallons) is shown by marks on the bowl.
- 3 In case of products to be diluted with water, pour water into bowl first, then add correct quantity of product. In case of natural particulates, it is advisable to strain them, in order to prevent pulps from obstructing the faucet outlet.
- 4 To obtain the best performance and result, use bases designed to be run in Granita freezers. Such bases have a sugar content of 34 degrees Baumé corresponding to 64 degrees Brix.

For soft drinks the bases are to be diluted with more water, on a 1 plus 5/5.5 basis.

In any case follow the syrup manufacturer's instructions for both Granita and soft drink recipes.

If natural juices (e.g. lemon, orange) as well as sugarless products (e.g. coffee) are used, dissolve 5.3 - 7 oz. of sugar per 0.25 gallons.



However Granita mix may be done, its Brix (sugar percent content) must be at least 13.



Operate the dispenser with food products only.

- 5 Install the covers and check that they are correctly placed over the bowls. The dispenser must always run with the covers installed to prevent a possible contamination of the product.
- 6 Set the control switches as shown in chapter 5.1 DESCRIPTION OF CONTROLS.
- 7 Always leave the dispenser on, as the refrigeration stops automatically when Granita reaches the proper thickness. The mixers will continue to turn.

5. 1 DESCRIPTION OF CONTROLS

The dispenser is equipped with a power switch and a light switch. In addition each bowl is individually operated by a mixer/refrigeration switch. In fact it is possible to dispense both soft drinks and Granita.

When a bowl is in Soft Drink mode the beverage temperature is controlled by the corresponding thermostat.

When a bowl is in Granita mode the mix viscosity is controlled by the corresponding adjustment screw located in the rear wall of each container (for temperature and viscosity setting make reference to chapter 5.2 OPERATION HELPFUL HINTS).

All the switches are located on the faucet side of the dispenser

in switch panels protected by switch covers (see figure 1).

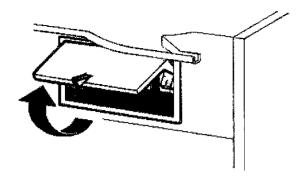


figure 1

With reference to figure 3 dispenser controls functions are as follows:

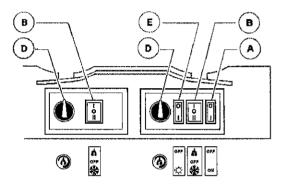


figure 2

Power switch (A)

0 position : power is turned OFF to all functions.

I position : power is turned ON to all functions

and the other switches are enabled.

The fan motor runs.

Light switch (E)

.0 position : all top cover lights are OFF.

I position : all top cover lights are ON, provided

that power switch (A) is set to I.

Mixer/refrigeration switch (B)

I position : mixer and refrigeration ON.

SOFT DRINK mode.

0 position : OFF.

Il position : mixer and refrigeration ON.

GRANITA mode.

Thermostat (D)

Turn clockwise : to decrease temperature
Turn counterclockwise : to increase temperature

To operate the unit:

- 1 Set the power switch to I position.
- 2 Set the mixer/refrigeration switches as follows:
 - to the I position to get soft drink.
- to the II position to get Granita.3 Set the light switch to I position.

5. 2 OPERATION HELPFUL HINTS

- 1 Granita viscosity adjustment: proper Granita viscosity is factory preset. To change the viscosity, if needed, use a standard screwdriver to turn the adjustment screw located in the rear wall of each container as follows (see figure 3):
 - towards right (clockwise) to obtain a thicker product (the indicator F will go down in opening G).
 - towards left (counterclockwise) to obtain a thinner product (the Indicator F will go up in opening G).

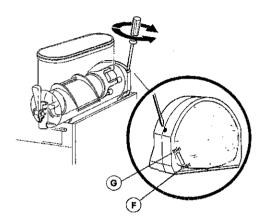


figure 3

- 2 Beverage temperature adjustment: proper beverage temperature is factory preset. To reset, turn the knob located in each switch box as follows:
 - towards right (clockwise) to decrease temperature.
 - towards left (counterclockwise) to increase temperature.

Note: beverage temperature is controlled by the thermostat only when the mixer/refrigeration switch(es) are in I position, Soft Drink mode.

- 3 When the mixer / refrigeration switch(es) are set in I position, Soft Drink mode, it is possible to manually switch off the refrigeration by turning completely towards left (counterclockwise) the thermostat knob until it clicks.
- 4 The length of time for freeze down of Granita is governed by many variables, such as ambient temperature, mix initial temperature, sugar content (Brix level) and viscosity setting.
- 5 To shorten Granita recovery time and increase productivity, it is advisable to pre-chill the product to be used in the dispenser.
- 6 To shorten Granita recovery time and increase productivity, the bowl should be refilled after the product level drops lower than half of the evaporator cylinder and

at the start of each day.

- 7 For good product conservation the dispenser must run overnight, at least in Soft Drink mode.
 - If this is not possible and product is left in the bowls overnight, the mixer/refrigeration switches must be set to the I position at least one hour before the unit is switched off. This eliminates any block of iced product forming overnight, which could result in damage to mixers or to their motor when the unit is switched back on. In any case, before the unit is restarted, make sure that no blocks of ice have been formed; if so, they are to be removed before the unit is switched on. Overnight operation in drink mode also eliminates possible ice accumulation from condensation all around the bowls.
- 8 Mixers must not be turned off when frozen product is in the bowl: if not agitated, the product may freeze to a solid block of ice. If the mixers are turned back on in this situation, damage to the mixers and their motor may result. Therefore, mixers may be restarted only after product is melted.
- 9 The dispenser must be able to emit heat.

In case it seems excessive, check that no heating source is close to the unit and air flow through the slotted panels is not obstructed by wall or boxes. Allow at least 15 cm (6") of free clearance all around the dispenser.

In any case if the product in the bowls is frozen and the safety pressure switch warning light is OFF the unit is running properly.

10 -Restrictor cap: when the unit is used in Soft Drink mode it is advisable to install the restrictor cap on the faucet outlet in order to reduce the drink outflow (see figure 4).

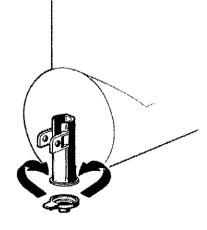


figure 4

5. 3 CLEANING AND SANITIZING PROCEDURES

- 1 Cleaning and sanitizing of the dispenser are recommended to guarantee the conservation of the best product taste and the highest unit efficiency. This section is a procedural guideline only and is subject to the requirements of the local Health Authorities.
- 2 Prior to the disassembly and cleaning, the machine must be emptied of product. To do this proceed as follows:
 - set the power switch to I position
 - set mixer/refrigeration switch(es) to I position (Soft Drink mode)
 - place a pail under each faucet and drain all product from bowls
 - set all control switches to the 0 position.

5. 3. 1 DISASSEMBLY



Before any disassembly and/or cleaning procedure make sure that the dispenser is disconnected from its power source.

- 1 Remove cover from the bowl.
- 2 Remove the bowl by lifting its faucet side up and off the fastening hooks (see figure 5) and slide it out (see figure 6).

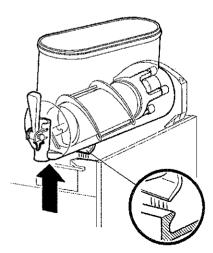


figure 5

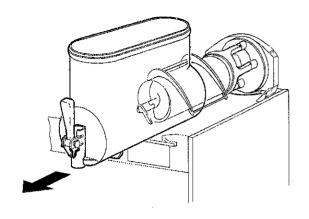


figure 6

3 - Slide the outer spiral out (see figure 7) and then the inside auger. Frequently remove the rear seal by sqeezing it to break the suction grip (see figure 8).

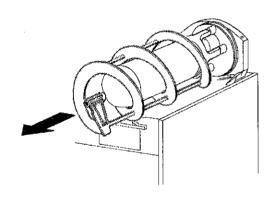


figure 7

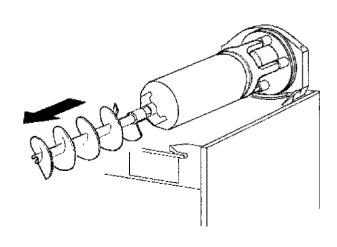


figure 8

4 - Remove the bowl gasket from its seat (see figure 9).

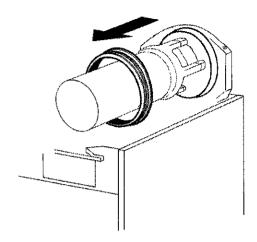


figure 9

5 - Dismantle the faucet assembly (see figure 10).

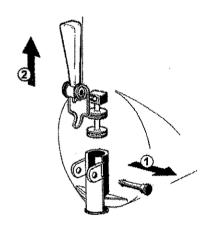


figure 10

6 - Slide the drip tray out and empty it.

3. 2 CLEANING



Before any disassembly and/or cleaning procedure make sure that the dispenser is disconnected from its power source.



Do not attempt to wash any machine components in a dishwasher.

1 - Prepare at least two gallons of a mild cleaning solution of warm (45-60 °C / 120-140 °F) potable water and

dishwashing detergent. Do not use abrasive detergent. Important: if present, follow label directions, as too strong a solution can cause parts damage, while too mild a solution will not provide adequate cleaning.



In order to prevent any damages to the dispenser use only a detergent suitable with plastic parts.

2 - Using a brush, suitable for the purpose, thoroughly clean all disassembled parts in the cleaning solution.



When cleaning the machine, do not allow excessive amounts of water around the electrically operated components of the unit. Electrical shock or damage to the machine may result.

- 3 Do not immerse the lighted top covers in liquid. Wash them apart with the cleaning solution. Carefully clean their undersides.
- 4 In the same manner clean the evaporator cylinder(s) using a soft bristle brush.
- 5 Rinse all cleaned parts with cool clean water.

5. 3. 3 SANITIZING

Sanitizing should be performed immediately prior to starting the machine. Do not allow the unit to sit for extended periods of time after sanitization.

- 1 Wash hands with a suitable antibacterial soap.
- 2 Prepare at least two gallons of a warm (45-60 °C / 120-140 °F) sanitizing solution (100 PPM available chlorine concentration or 1 spoon of sodium hypoclorite diluted with half a gallon of water) according to your local Health Codes and manufacturer's specifications.
- 3 Place the parts in the sanitizing solution for five minutes.
- 4 Do not immerse the lighted top covers in liquid. Carefully wash their undersides with the sanitizing solution.
- 5 Place the sanitized parts on a clean dry surface to air dry.
- 6 Wipe clean all exterior surfaces of the unit. Do not use abrasive cleaner.

5. 3. 4 ASSEMBLY

- 1 Slide the drip tray into place.
- 2 Lubricate faucet piston, inside auger and outer spiral (see points A, B and C of figure 11) only with the grease supplied by the manufacturer or other food grade

approved lubricant.

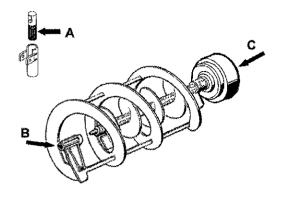


figure 11

- 3 Assemble the faucet by reversing the disassembly steps (see figure 10)
- 4 Fit bowl gasket around its seat.
 Note: the largest brim of gasket must face against the rear wall (see figure 12).

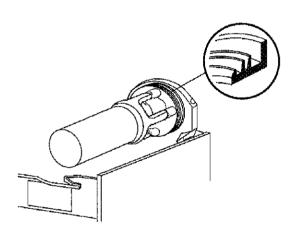


figure 12

5 - Insert the auger into the evaporator. Taking care to insert the rear seal properly. (see figure 13).

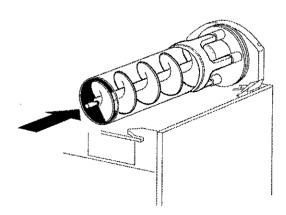
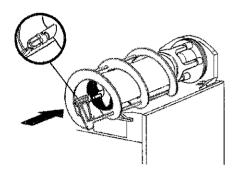


figure 13

6 - Install the outer spiral. Slide it over the evaporator until its

front notch engages with the exposed end of the auger shaft (see figure 14).





7 - Push the bowl towards the rear wall of the unit until it fits snugly around the gasket and its front fastening hooks are properly engaged (see figure 15).

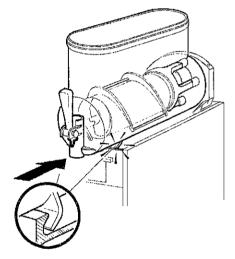


figure 15

8 - Use fresh product to chase any remaining sanitizer from the bottom of the bowl(s). Drain this solution. Do not rinse out the machine.

5. 4 IN-PLACE SANITIZATION

The In-Place Sanitization prior to starting the machine may be performed, if needed, only as further precaution, in addition to the Disassembled Parts Sanitization described before, but never in lieu of it.

- 1 Prepare two gallons of a warm (45-60°C / 120-140 °F) sanitizing solution (100 PPM available chlorine concentration or 1 spoon of sodium hypoclorite diluted with half a gallon of water) according to your local Health Codes and manufacturer's specifications.
- 2 Pour the solution into the bowl(s).
- 3 Using a brush suitable for the purpose, wipe the solution

- on all surfaces protruding above the solution-level and on the underside of the top cover(s).
- 4 Install the top cover(s) and operate the unit. Allow the solution to agitate for about two minutes. Drain the solution out of the bowl(s).
- 5 Use fresh product to chase any remaining sanitizer from the bottom of the bowl(s). Drain this solution. Do not rinse out the machine.

5. 5 REAR SEAL MAINTENANCE



The rear seal, P.N. 00145 (Nr. 11 in the exploded view), must be kept lubricated, in the shaded rear area, with food grade approved lubrificant. To prevent from damages to the machine, it must be replaced every 2000 hours.

To remove the rear seal squeze it to break the suction (see figure 16)



figure 16

6 ROUTINE MAINTENANCE



In order to prevent damages to the machine, the "Rear Seal" must be replaced every 2000 hours.

- 1 Daily: inspect the machine for signs of product leaks past seals and gaskets. If proper assembly does not stop leaks around seals or gaskets, check for improper lubrication, worn or damaged parts. Replace parts as needed.
- 2 Monthly on NHT 2 UL and NHT 3 UL models: remove the dust from the condenser filter. A blocked filter will



Before any disassembly and/or cleaning procedure make sure that the dispenser is disconnected from its power source by unplugging it or switching off the 2-pole wall breaker.

reduce performance and could cause compressor failure.

3 - Replacement of lighted top cover bulb: remove the fixing screw placed in the upper part of the top cover, remove the lower part and replace the bulb (using a 24-28V 21W max bulb). Reassemble the top cover and replace the fixing screw.(vedere figure 17)

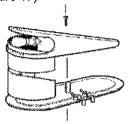


figure 17



Condenser fins are very sharp. Use extreme caution when cleaning.

6. 1 MAINTENANCE (TO BE CARRIED OUT BY QUALIFIED SERVICE PERSONNEL ONLY)

- 1 Annually: remove the panels and clean the inside of the machine including the base, side panels, condenser, etc.
- 2 Never remove the insulating jacket from around the suction tubing of the evaporator (the copper tubing located on the right side of gear motor). In case the insulating jacket is missing replace the entire parts with original spare parts from the supplier.
- 3 In order to prevent any damages to the dispenser, all plastics parts must be lubricated only with grease supplied by the manufacturer or with another lubricating product suitable for polycarbonate.



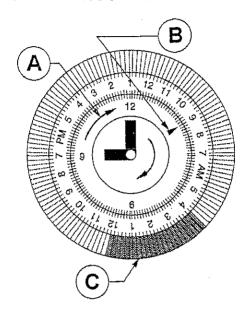
The electric diagram of the dispenser is located in the inner part of the dispensing side panel.

7 DEFROST TIMER (OPTIONAL)

The Defrost Timer, located on the right side of the unit, automatically switches the dispenser from Granita mode to Soft Drink mode and the opposite. This means that during defrost periods frozen Granita will melt to thermostat setting temperature and once defrost period has expired, the product

SLUSH PUPPIE BRANDS

UNIVERSAL DEFROST TIMER INSTRUCTIONS



STEP #1: WARNING – NEVER ROTATE THE TIMER DIAL COUNTERCLOCKWISE. THIS WILL PERMANETLY DAMAGE THE INTERNAL MECHANISM. NOTICE THE DIRECTION ERROW "A".

STEP #2: Align the current time of day with the arrow "B" on the timer face. This is a 24 hour timer showing both A.M. and P.M. hours. Be sure to be on the correct A.M./P.M. hour segments.

STEP #3: Program the defrost cycle by pushing out the tabs (example "C") that correspond to the hours desired to defrost. Each tab represents 15 minutes. A minimum of 6 hours is needed to defrost the Slush Puppie Brand product(s). A total liquid state is needed to properly blend, remove air, and to offer the proper texture of Slush Puppie Branded Frozen Drinks.

NOTES:

- When all of the tabs are pushed in toward the timer center, the defrost function is turned off.

 The Frozen Drink Dispenser will operate as if it were not equipped with a defrost timer/function.
- It is important to always defrost a minimum of 6 hours each day. Meaning a continuous defrost cycle with all pins pushed out (away from the center of the timer) for the designated time period. (PINS IN IS ON DAILY FREEZE CYCLE) (PINS OUT IS OFF DEFROST CYCLE).
- Find the best defrost period that works with each location. Defrost during common slow periods when minimal to no drinks are served.
- Longer defrost times are always recommended. Visual style Frozen Drink Dispensers are equipped with thermostats that keep the liquid product at 38-40 Degree F.

GENERAL TROUBLESHOOTING GUIDE MT2 & NHT MODELS

WHEN THE TROUBLESHOOTING GUIDE
FAILS TO CORRECT YOUR EQUIPMENT
ISSUE, CALL YOUR LOCAL SERVICE
REPRESENTATIVE INDICATED BELOW

PROBLEM	POSSIBLE CAUSES	REMEDY SOLUTIONS		
Top cover not illuminated	1. Light switch turned off	1. Turn switch on		
~ · · · · · · · · · · · · · · · · · · ·	2. Top cover wrongly fitted onto bowl	2. Fit top cover properly		
	3. Failed bulb	3. Replace bulb		
	4. Bowl light wire wrongly fitted or damaged	4. Fit correctly or replace		
	5. Failed light transformer	5. Replace light transformer		
	6. Loose or broken electrical wires from	6. Tighten connections or replace wiring		
	switch to bulb			
Inner & outer blades fail to rotate	1. Damaged/Broken Blades	Replace blades - Correct mix or low fill situation		
	2. Ice blocks inside the bowl	 Remove ice blocks, determine mechanical failure or incorrect mix 		
	3. Inoperative mixer motor	3. Refer to mixer motor not rotating		
	4. Brix (sugar content) too low	4. Adjust brix to correct value		
Mixer motor not rotating	1. Thermal protector motor cut out	1. Check for proper line voltage		
(Minor service required)		 Check for proper viscosity-low brix, low fill 		
		1. Check for adequate condenser air flow,		
		clean filter and/or condenser		
		1. (obstructions or inoperative fan motor)		
	2. Loose or broken electrical wires	2. Tighten connections or replace wiring / connections		
	3. Shorted stator winding	3. Replace stator winding		
	4. Seized rotor (motor failure)	4. Check for bushing alignment		
	4. Dolzod lowi (motor imidro)	(replace failed parts)		
	5. Damaged or worn gears in the box unit	5. Replace inoperative gears & gear		
	and/or components	components		
Unit cooling but not freezing	1. Mixer / Refrigeration switch set to I position	Set mixer/refrigeration switch to II position		
•	2. Clogged and dirty condenser	2. Clean condenser filter and/or condenser		
	3. Improper airflow through condenser	3. Allow for adequate free air on each side		
		of the unit (min 6" on all sides)		
	4. Brix too high (product to sweet)	4. Reduce Brix to correct value		
	5. Low refrigerant charge	5. Detect possible leak		
	J. How toning of the charge	Repair leak & charge to correct value		
	6. Timer – Positioned in night/defrost mode	6. Position the timer pins for proper day/nigh Mode – (Pins in-on) (Pins out-off) Set the time to the correct time		
Unit not cooling at all	1. Inoperative fan motor	Check for free rotation and remove possible obstacles. Replace fan motor if faulty		
		11 19000107		
	2. Automatic reset high pressure cut out	2. Review for proper air flow, blocked		
	2. Automatic reset high pressure cut out -indicated by illuminated lamp indicator	 Review for proper air flow, blocked condenser or dirty removable filter Possible high pressure switch failure 		
	-indicated by illuminated lamp indicator	 Review for proper air flow, blocked condenser or dirty removable filter Possible high pressure switch failure - replace switch 		
	-indicated by illuminated lamp indicator3. Failure of any of compressor electrical components (overload protector, starting	 Review for proper air flow, blocked condenser or dirty removable filter Possible high pressure switch failure 		
	 -indicated by illuminated lamp indicator 3. Failure of any of compressor electrical components (overload protector, starting relay, starting or run capacitors. 	 Review for proper air flow, blocked condenser or dirty removable filter Possible high pressure switch failure replace switch Replace faulty electrical component replace faulty component 		
	-indicated by illuminated lamp indicator3. Failure of any of compressor electrical components (overload protector, starting	 Review for proper air flow, blocked condenser or dirty removable filter Possible high pressure switch failure replace switch Replace faulty electrical component 		
	 -indicated by illuminated lamp indicator 3. Failure of any of compressor electrical components (overload protector, starting relay, starting or run capacitors. 	 Review for proper air flow, blocked condenser or dirty removable filter Possible high pressure switch failure replace switch Replace faulty electrical component replace faulty component 		
	 -indicated by illuminated lamp indicator 3. Failure of any of compressor electrical components (overload protector, starting relay, starting or run capacitors. 4 Failed 24 hour defrost timer 	 Review for proper air flow, blocked condenser or dirty removable filter Possible high pressure switch failure - replace switch Replace faulty electrical component - replace faulty component Replace defective timer 		

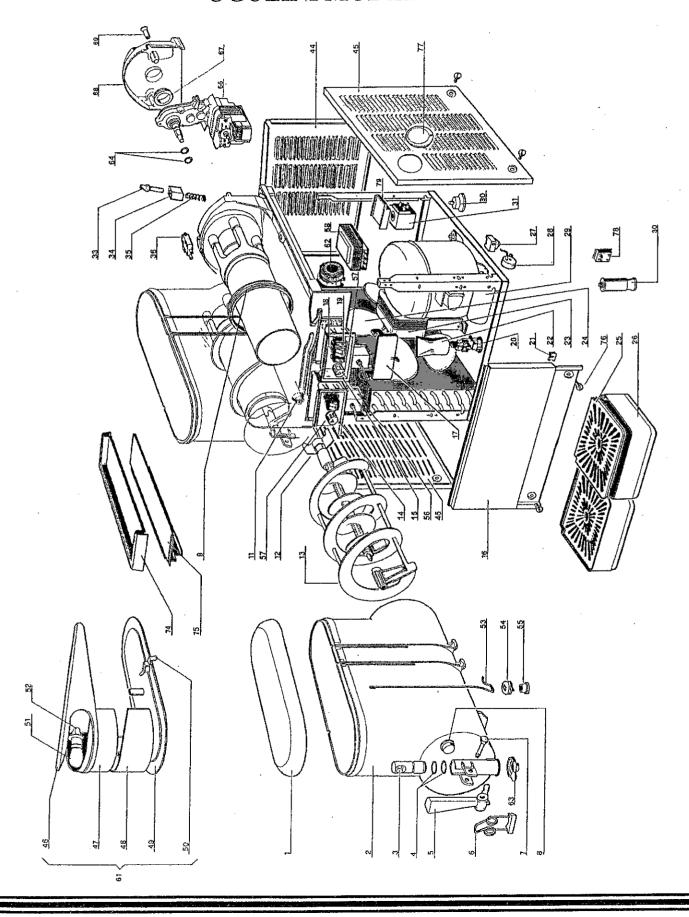
PROBLEM	POSSIBLE CAUSES	REMEDY SOLUTIONS
Unit not cooling at all on	1. Failed consistency microswitch	1. Replace microswitch
one side (other side normal)	2. Low refrigerant charge	2. Repair leak & add the appropriate
,	č v	Refrigeration charge
	3. Control board failure / relay failure	3. Replace control board / replace relay
	4. Solenoid valve not opening (coil)	4. Replace solenoid valve coil
	5. Solenoid valve not opening (mechanical par)	5. Replace solenoid valve body
Unit excessively freezing	Mixer not rotating at full speed	Rebuild or replace gear motor
on one side (other side normal)	2. Failed consistency microswitch	2. Replace microswitch
	3. Control board failure	3. Replace control board
	4. Solenoid valve not closing	4. Replace solenoid valve body
	5. Motor - Failure to pivot	5. Correct obstacles or slack in wire
	C. 2.10.101	harness. Lubricate pivot areas of motor
	6. Consistency adjustment	6. If changed, correct to the appropriate setting
Safety pressure switch	Dirty condenser or condenser filter	1. Remove dust from condenser or
(Illuminated)		condenser filter. Allow adequate
		time for auto reset
	2. Improper air flow through condenser	Check for minimum of 6" of free air
		space all around the unit. Check for
	•	fan free rotation and remove possible
		obstacles. External air may be
		inadequate to allow for proper operation
	3. Inoperative fan motor	Replace fan motor if faulty
	•	Check for fan free rotation and remove
		possible obstacles. Replace fan motor
		if faulty
Ice forming on outside of bowls	1. Improper thermostat settings	1. Position the thermostat control to the
		3 o'clock position – Remove external ice
	Blocked condensation drain tube	2. Remove blockage
	Failure to drain condensation	Adjust the rear legs to allow a slight
		forward tilt to improve drain path
	3. Improper brix/ratio - to much concentrate	3. Remove all product and correct or
		replace
Product quality comprised	1. Spoiled mixed product - Storage	1. Keep all mixed product below 40°F
(Minor service required)		Refrigerate all unused or premixed
(•	brand products
	2. Product "foamy" and light in color	2. Must keep the product level above the
	, , , , , , , , , , , , , , , , , , ,	auger blade. Low fill introduces air into
		the product brands
		2. Each thermostat control must be set at
		its 3 o'clock position to allow for
	3. Product with large ice crystals	nightly defrost
	Product with large ice crystals Spoiled product	nightly defrost 3. Each thermostat control must be set at
	Product with large ice crystals Spoiled product	nightly defrost 3. Each thermostat control must be set at Its 3 o'clock position to allow for
		nightly defrost 3. Each thermostat control must be set at Its 3 o'clock position to allow for nightly defrost and/or product protection
		nightly defrost 3. Each thermostat control must be set at Its 3 o'clock position to allow for

PROBLEM	POSSIBLE CAUSES	REMEDY SOLUTIONS			
Autofill System One bowl will not fill	 Bowl fasten hooks not properly engaged AF probe missing Water supply or safety shut off valve off The autofill switch is in the off position 	 Engage bowl fastening hooks Replace probe Turn all necessary supply valves on Turn the autofill switch to the on "1" position 			
Unit excessively freezing on one side (other side normal)	 Mixer not rotating at full speed Failed consistency microswitch Control board failure Solenoid valve not closing Motor – Failure to pivot Consistency adjustment 	 Rebuild or replace gear motor Replace microswitch Replace control board Replace solenoid valve body Correct obstacles or slack in wire harness. Lubricate pivot areas of motor If changed, correct to the appropriate setting 			
Safety pressure switch (Illuminated)	 Dirty condenser or condenser filter Improper air flow through condenser 	 Remove dust from condenser or condenser filter. Allow adequate time for auto reset Check for minimum of 6" of free air space all around the unit. Check for fan free rotation and remove possible obstacles. External air may be 			
	3. Inoperative fan motor	inadequate to allow for proper operation 3. Replace fan motor if faulty Check for fan free rotation and remove possible obstacles. Replace fan motor if faulty			
Ice forming on outside of bowls	 Improper thermostat settings Blocked condensation drain tube Failure to drain condensation Improper brix/ratio - to much concentrate 	 Position the thermostat control to the 3 o'clock position – Remove external ice Remove blockage Adjust the rear legs to allow a slight forward tilt to improve drain path Remove all product and correct or replace 			
Product quality comprised (Minor service required)	 Spoiled mixed product - Storage Product "foamy" and light in color 	 Keep all mixed product below 40°F Refrigerate all unused or premixed brand products Must keep the product level above the auger blade. Low fill introduces air into the product brands 			
	3. Product with large ice crystals Spoiled product	 Each thermostat control must be set at its 3 o'clock position to allow for nightly defrost Each thermostat control must be set at Its 3 o'clock position to allow for nightly defrost and/or product protection Clean and sanitize regularly to avoid product contaminants 			

MODEL NHT EXPLODED PART NUMBER VIEW

							,	JK 03/14/12 (Page 1 of 1)
DWG	OLD	NEW			DWG	OLD	NEW	
NO.	PART NO.	PART NO.	DESCRIPTION		NO.	PART NO.	PART NO.	DESCRIPTION
2	UG00106	41808783	Bowl, Plastic		43	UG00448	41809578	Control Board
3	UG00420	41809623	Plunger, Spigot, Flow Design		44	UG00511	41808914	Panel, Rear, Black, MT2
3	UG00161	41808822	Plunger, Spigot		45	UG00460	41808900	Panel, Side, w/Filter Guide Bracket
4	UG00101	41808779	O Ring, Plunger, Spigot		45	UG00514	41808917	Panel, Side, w/Timer, MT2, MT3
5	UG00639	41809642	Handle, Red, Plastic		45	UG00010	41808751	Screw, Panel
5	UG00640	41809643	Handle, Black, Plastic		46	UG00147	41808813	Cover, Upper White, Light
6	UG00122	41808794	Spring, Handle		46	UG00515	41808918	Cover, Upper Blk, Light
6	UG00447	41809644	Spring, New Style, Handle		48	UG00188	41808841	Light Assembly, Lens
7	UG00103	41808781	Pin, Red, Handle, Plastic		49	UG00094	41808773	Lens, Lighted Top, Lower
7	UG00498	41808909	Pin, Black, Handle Plastic		50	UG00084	41808761	Contact, Light
8	UG00537L	41809812	Thrust Washer-Plastic Only					
8	UG00536L	41809811	Cap, Rubber-Thrust Washer		51	UG00100	41808778	Lamp, Bayonet, 28V, 6 Watt, #623
9	UG00105	41808782	Gasket, Bowl, Rubber		52	UG00131	41808800	Socket, Bayonet Bulb
11	UG00385	41808898	Seal, Blade, NHTUL		53	UG00148	41808814	Wire, Light, Bowl
12	UG00386	41808899	Blade, Inner, Plastic, NHTUL		54	UG00098	41808776	Contact, Flexible, Gray
13	UG00556	41808787	Blade, Outer, Plastic		54	UG00533	41809654	Contact, Flexible, Blk
14	UG00129		Box, Switch		55	UG00177	41808834	Ring, Fixing
15	UG00130	41808799	Box, Power Switch, Gray		56	UG00132	41808801	Thermostat
16	UG00239	41808859	Panel, Front, MT2, Stainless		58	UG00193	41808844	Transformer, 2 Bowl
17	UG00245	41808862	Cover, Switch Box, Gray		61	UG00099	41808777	Light Cover Assy, White
18	UG00123	41808795	Switch, 3 Position		61	UG00520	41808921	Light Cover Assy, Blk
19	UG00124	41808796	Switch, 2 Position		62	K2012	41809473	Timer, 24 Hour, with Battery
20	UG00265	41808874	Terminal Block, with Cable Clamp	•	64	UG00255	41809730	O-Ring, Motor Shaft, NHT
21	UG00179	41808835	Clip, Panel		66	UG00387	41809569	Motor, Drive, NHT
22	UG00297		Terminal Block, Protection		67	UG00153	41808817	Bushing, Rear
23	UG00108	41808784	Motor, Fan, MT2, MT3		68	UG00091	41808771	Cover, Rear, Gray, Manual Fill
23	41809733CAUG	41809733	Motor, Fan, 16W UG-CAB		69	UG00517	41808919	Screw, Rear Cover, Black
23	D1005UN	41809696	Bracket, Fan, Universal UG-CAB		72	SP0157.0002	41808319	Filter, Condenser
24	UG00133	41808802	Blade, Fan, Metal		72	UG00119	41808791	Condenser, Filter, Internal
25	UG00138	41808806	Cover, Drip Tray, Gray		73	UG00135	41808804	Screw, Thumb, Panel, Gray
25	UG00506		Drip Tray, Insert, Black		73	UG00519	41808920	Screw, Thumb, Panel, Blk
26	UG00139		Drip Tray, Gray		77	UG00157	41808820	Cover, Timer
26	UG00508	41808913	Drip Tray, Black		N/S	SP0157.0002	41808319	Filer, Condenser, External
27	UG00085-10	41808763	Relay, Compressor, MT2		N/S	UG00082	41808756	Compressor, 1/2HP, MT3, R22
28	UG00085-20	41808764	Overload, MT2, Old Style		N/S	UG00082-10	41808757	Relay, Compressor, MT3
29	UG00085-30	41808767		ĺ	N/S	UG00082-20	41808758	Overload, MT3
30	UG00158			*****	N/S			Capacitor, MT3
30	UG00092	41808772	Leg, Plastic, 4 inch		N/S	UG00085	41808762	Compressor, 1/3, MT2, R22
	UG00092-10			_				Solenoid, Body, Cap Tube
31	UG00120	·····	Solenoid, Coil, WB4.5	_				Rear Wall, NHT, Gray
	UG00364						41809630	Rear Wall, NHT, Blk
								Relay, NHT
				_				Rear Wall, NHT, Black
								Bearing, Rear Shaft, Non-Magnetic
					 			
								1
28 29 30 30 30	UG00085-20 UG00085-30 UG00158 UG00092 UG00092-10 UG00120	41808764 41808767 41808821	Overload, MT2, Old Style Capacitor, MT2 Leg, Rubber Leg, Plastic, 4 inch Rubber Cushion Leg Tip Set		N/S N/S N/S	UG00082-10 UG00082-20 UG00082-30	41808757 41808758 41808759 41808762 41808896 41809629	Relay Overl Capa Comp Soler Rear Rear Relay

UGOLINI MODEL NHT2



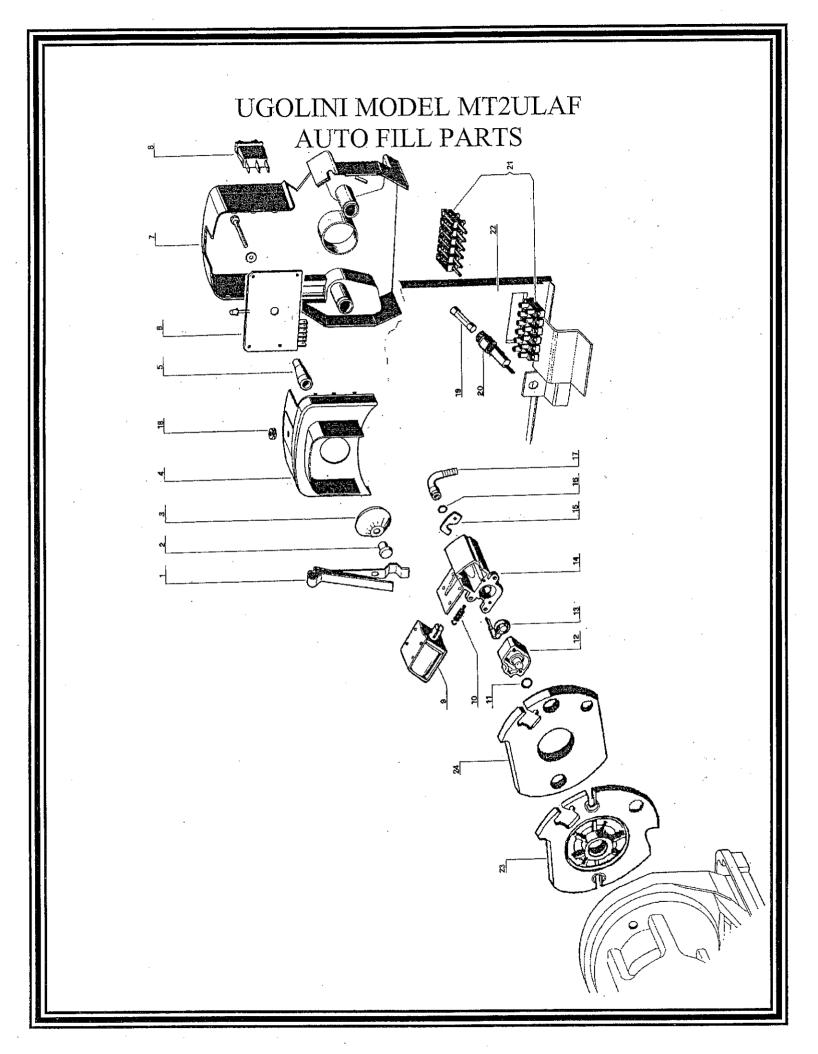
MODEL MTUL & NHTUL AUTOFILL

NHT GEAR MOTOR PARTS VIEW

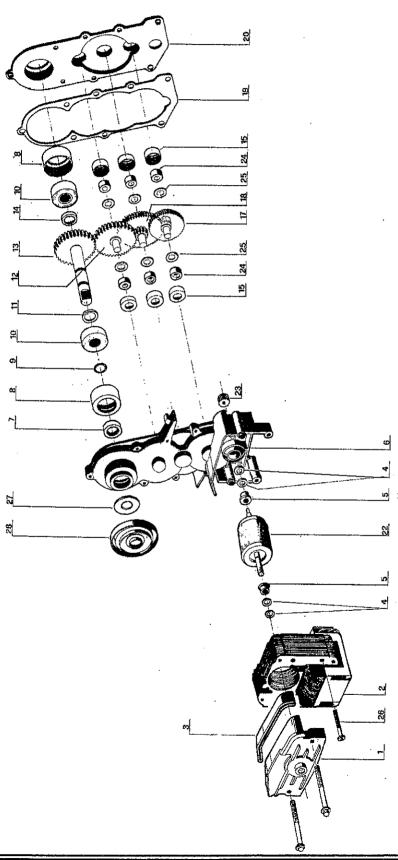
DWG	OLD	NEW	
NO.	PART NO.	PART NO.	DESCRIPTION
1	UG00115	41808789	Clip, Probe, Metal
2	UG00277	41809599	Contact, A.F.
3	UG00490	41808878	Contact, Flexible, Gray
3	UG00533	41809654	Contact, Flexible, Blk
4	UG00279	41808879	Cover, Front, Gray
4	UG00491	41808905	Cover, Front, Black
5	UG00280	41808880	Spacer, Contact
6	UG00473	41808902	Control, Board, Liquid Level
7	UG00281	41808881	Cover, Rear, Gray, Autofill
7	UG00492	41808906	Cover, Rear, Black, Autofill
8	UG00282	41808882	Switch, 3 Position
9	UG00283	41808883	Valve, Solenoid
10	UG00284	41808884	Spring, A.F. Valve
11	UG00144	41808811	O Ring, Faucet, Motor Shaft
12	UG00285	41808885	Faucet, Front part, Gray
13	UG00286	41808886	Valve, Auto Fill, Solenoid
14	UG00287	41808887	Faucet, Rear Part, Gray
14	UG00494	41808907	Faucet, Rear part, Blk
15	UG00288	41808888	Clip, Fitting
16	UG00112	41808922	O Ring, Autofill, Fitting
17	UG00095	41808774	Fitting, 90 Degree, Autofill
18	UG00289		Gasket, LED, Light
19	UG00290	41808889	Fuse, 1.25 amp, MT1, MT2, MT3
20	UG00291	41808890	Fuse, Holder
21	NA	NA	Terminal Block
22	UG00293		Panel, Back, Autofill, MT2
22	UG00294		Panel, Back, Autofill, MT3
23	UG00295	41808891	Flange, Gear Motor
24	UG00231	41808853	Cover, Foam Insulation

DWG	OLD	NEW	
NO.	PART NO.	PART NO.	DESCRIPTION
1	UG00097	41808775	Bracket,w/Bushing, Magnetic Drive
2	UG00156	41808819	Motor, Winding
3	UG00296		Gasket, Stator Protection
4	UG00168	41808828	Washer
5	UG00253	41808866	Spacer, Rotor
6	UG00190	41808842	Gearbox, w/Bushing Assembly
7	UG00256	41808868	Seal, Retainer
8	UG00254	41808867	Cap, Bearing, Rubber
9	UG00255	41809730	O Ring, Faucet, Motor Shaft
10	UG00247	41808863	Bearing, 4th Gear
11	UG00257	41808869	Shim, 4th Gear
12	UG00184	41808839	Gear, 3rd
13	UG00388	41809641	Gear, 4th - NHT
14	UG00258	41808870	Shim, 4th Gear
15	UG00224	41808847	Cap, Bearing, Rubber
17	UG00164	41808825	Gear, 1st
18 .	UG00167	41808827	Gear, 2nd - Brass
19	UG00636	41809621	Gasket, Rubber, UG Motor
20	UG00189		Cover, Gearbox
21	UG00261	41808872	Spring, Microswitch
22	UG00180	41808836	Stator
23	UG00187	41808840	Gear, Pinion
24	UG00169	41808829	Bushing, Gears
25	UG00170	41808830	Washer, Gears
26	UG00262		Screw, Stator
27	UG00151	41809709	Washer, Motor Shaft, NHT
28	ÚG00152	41809710	Sheild, Motor Shaft, NHT

JK - 01/02/13



UGOLINI MODEL: NHT2UL GEAR MOTOR PARTS



NHT2UL & NHT2ULAF – UGOLINI

FACTS AND HIGHLIGHTS

- Direct drive system uses a "suction cup" style seal to protect drive system components.
- Evaporator seals need to be changes every 3 12 months (depending on product used).
- Operation switches stay in the "down" position at all times. Equipped with auto defrost.
- Access doors/switch covers protect the switches from tampering.
- UL and NSF approved.
- Defrost timer is in view and protected by a tamper resistant clear cover.
- Programmable defrost timer (with battery back-up) to cycle a minimum of a 6 hour product defrost each day. Defrost is necessary to offer the highest quality frozen beverage every day.
- Defrost cycle is protected by a thermostat control. Set between 2 and 3 o'clock to hold a safe defrost temperature of 38 40 Degrees F.
- Flooded evaporator system allows ice to be shaved from the evaporator internal and external surface increasing production capacity.
- Multiple augers (blades for quick freezer and recovery)
- Compressor: 1/3 horsepower
- Compressor operation: The "always on" feature allows the compressor to always run except during the defrost period (compressor with cycle on/off by the thermostat control).
- Condenser fan: Runs at all times to cool the electrical components.
- Easy to use consistency adjustment (thicker or thinner product adjust) that is hidden to avoid tampering. Minimal adjustments are best for most products (with compressed spring).
- Lighted lid assemblies offer Slush Puppie Brand P.O.S. options. Using a 24/28V bayonet style lamp for long life and easy replacement. No external connecting wires for easy filling (lid removal).
- External condenser air filter system for visual monthly inspection and cleaning.
- No tools required to disassemble and assemble when cleaning. (clean weekly) (lubricate and clean every 2 weeks).
- Bowl seals use a unique seal that should NEVER be lubricated. Offering a product seal that is reliable and trusted.
- Newest style bowls offer a "flow thru" design. Reducing the issue of frozen product at the dispensing spigot.
- Heavy duty clear bowls with 2 ½ product capacity.
- Automatic Bag-in-box fill systems are available where applicable.
- MT2ULAF model: Before using as a pour over or auto fill system Wire nut the auto fill terminal block wires together >>> terminals 3-4-5- (and 6 on MT3ULAF Models).
- Supplied with counter hugging rubber feel or adjustable 4" legs.
- For best results, tilt the freezer slightly forward for best condensation drainage.
- Maintenance kits available for annual 8-12 month maintenance schedules.

UGOLINI INSTALLATION STEPS

- STEP #1 REMOVE THE FROZEN DRINK DISPENSER AND ASSEMBLED BAG-IN-BOX SYSTEM FROM THEIR BOXES. FINALIZE ASSEMBLY.
- STEP #2 PLACE THE FROZEN DRINK DISPENSER ONTO THE COUNTERTOP, CART, OR STAND. ALLOW 6" CLEARANCE ON ALL 4 SIDES FOR AIR CIRCULATION.
- STEP #3 POSITION THE BAG-IN-BOX ASSEMBLY WITHIN 50 FEET OF THE FROZEN DRINK DISPENSER. THIS IS THE MAXIMUM DISTANCE TO ASSURE PROPER OPERATION.
- STEP #4 PRE-INSTALLATION REQUIREMENTS FOR THE FROZEN DRINK DISPENSER.
- A. REMOVE THE PLASTIC REAR COVERS TO EXCESS THE MOTORS. LUBRICATE WITH SUPER LUBE, THE MOTOR PIVOT BUSHING ON EACH REAR COVER (WHITE INSERT).
- B. REMOVE THE BRACKET WITH PULL AWAY EACH MOTOR ASSEMBLY AND LUBRICATE WITH SUPER LUBE THE DRIVE SHAFT BUSHING AND INNER MOTOR PIVOT LOCATION.
- C. REMOVE THE BRACKET WITH BUSHING (UG00097) FROM EACH MOTOR ASSEMBLY, LUBRICATE (WITH SUPER LUBE) THE BRASS BUSHING, THEN REPLACE. INSTALL MOTOR.
- D. ADD A SMALL AMOUNT OF LUBRICANT (SUPER LUBE) TO EACH MICRO SWITCH BUTTON.
- E. REMOVE EACH CONSISTENCY SPRING AND COMPLETELY COMPRESS WITH A VISE OR COMPARATIVE TOOL.
- F. REPLACE EACH REAR COVER.
- G. ADJUST THE CONSISTENCY SCREW/INDICATOR TO THE #1 POSITION.
- H. DISASSEMBLE EACH LIGHTED TOP CHANGE EACH BULB WITH IMPROVED BULB (UG00100). ADD LIGHTED SIGNAGE.

- I. LUBRICATE (WITH SUPER LUBE) THE SPIGOT O RINGS, PLUNGER, REAR AUGER BUSHINGS, AND FRONT AUGER BOWL BUSHINGS. ADD A MINIMAL AMOUNT OF LUBRICANT TO THE LIGHTED COVER ELECTRICAL CONNECTION.
- J. PLUG INTO A DEDICATED VOLTAGE SUPPLY WITH APPROPRIATE AMP RATING.
- K. SET THE DEFROST TIMER FOR A MINIMUM OF 6 HOUR DEFROST TIME (PINS IN FREEZE POSITION) (PIN OUT DEFROST POSITION).
- L. SET EACH THERMOSTAT KNOB/CONTROL TO THE 2 O'CLOCK POSITION. REMOVE EACH THERMOSTAT KNOB FOR TAMPER FREE ADJUSTMENT.
- M. SHORTNE EACH FILL PROBE BY CUTTING OFF 1".
- N. REMOVE WIRES ON TERMINALS 3,4,5 (& 6 FOR MT3 MODELS) AND JOIN TOGETHER WITH A WIRE NUT (ORANGE).
- O. ADJUST THE LEGS TO ALLOW A SLIGHT FORWARD TILT OF THE MACHINE. THIS IMPROVES CONDENSATION DRAINAGE INTO THE DRIP TRAYS.
- STEP #5 ADD SANITIZER SOLUTION TO EACH BOWL AND ALLOW A MAXIMUM OF 5 MINUTE RUN/CONTACT TIME. DRAIN SANITIZER.
- STEP #6 REVIEW COMPRESSOR OPERATION (AFTER 3 MINUTE DELAY) AND EVAPORATOR FROST CONFIRMATION.
- STEP #7 BAG-IN-BOX INSTALLATION REQUIREMENTS.
- A. EACH PROPORTIONING PUMP WILL REQUIRE DUAL SYRUP AND WATER 3/8" BRAIDED TUBING RUNS CONNECTED TO THE DOUBLE CHECK VALVE, Y FITTING, AND SHUT OFF ASSEMBLY DIRECTLY AT THE AUTO FILL FITTING. A SHORT LENGTH OF 1/4 "BRAIDED TUBING WILL FINISH THE CONNECTION.
- B. CONNECT THE WATER FILTER INLET

FITTING TO A WATER SOURCE. CONNECTION NOT AFFECTED BY OTHER. WATER / WATER PRESSURE NEEDS. REFRIGERATED WATER LINES PREFERRED (MCDONALDS – OJ FILL LINE).

- C. REVIEW ALL HOSE CLAMP CONNECTIONS TO ASSURE ALL ARE SECURE.
- D. POSITION EACH SANITIZER VALVE TO THE DISPENSE POSITION.

- E. TURN THE AUTO FILL SWITCHES TO THE OFF POSITION (CENTER).
- F. TURN ON THE WATER SOURCE AND ADJUST THE WATER PRESSURE REGULATOR TO 40 P.S.I. TIGHTEN THE LOCKING NUT.
- G. CONNECT EACH BAG IN BOX BRAND TO THE SYSTEM BY INSTALLING THE BAG CONNECTORS.
- H. BEGIN FILLING BOWL #1 BY ACTIVATING THE AUTO FILL SWITCH TO

THE ON POSITION. PURGE EXCESS SANITIZER AND WATER FROM THE BOWL SPIGOT. FOLLOW THIS PROCEDURE FOR ALL ADDITONAL BOWLS.

- I. ALLOW EACH BOWL TO FILL UNTIL CONTACT IS MADE TO THE FILL PROBE (AUTOMATIC STOP).
- J. PUMPS BELOW 20 P.S.I. MAY RESULT IN PUMP "STALLING". THIS ALLOWS THE PUMP TO DISPENSE WATER ONLY, CAUSING DAMAGE AND/OR SERVICE.

STEP #8 POSITION ALL SWITCHES TO THE "ON" OR FREEZE POSITIONS.

STEP #9 ALLOW ADEQUATE TIME FOR PRODUCT (S) TO REACH CONSISTENCY.

STEP #10 INSTRUCT THE CUSTOMER ON THE FOLLOWING:

- A. BIB CHANGES & CONNECTORS
- B. ALL SWITCH OPERATIONS
- C. CLEANING PROCEDURES
- D. CLEANING SCHEDULE 1-2 WEEKS
- E. SANITIZING OF MACHINE
- F. AIR FILTER CLEANING PROCEDURES
- G. EMPTY CONDENSATION TRAYS DAILY
- H. EXPLAIN THE HIGH PRESSURE INDICATOR, REASONS, AND HOW TO CORRECT.

- I. LEAVE ORDERING INFORMATION FOR PRODUCT, PARTS, AND SERVICE.
- J. EXPLAIN THE TIMER AND DEFROST OPERATION.
- K. EXPLAIN POTENTIAL PART DAMAGES THAT OCCUR WHEN LOW FILL CONDITIONS (EMPTY BIB) ARISE.
- L. INSTRUCT ON PROPER INSTALLATION OF THE LIGHTED LID ASSEMBLIES.
- M. EXPLAIN ALL EMERGENCY SHUT OFF VALVES AND THEIR LOCATION.

MOTOR / GEARBOX REBUILD INSTRUCTIONS MODELS: UGOLINI MT & NHT

PARTS AND SUPPLIES - RECOMMENEDED INVENTORY FOR 15 REBUILDS

- VIEW # 1 15 UG00097 (41808775) BRACKET, WITH BUSHING
- VIEW # 4
 10 UG00168 (41808828) WASHER
- VIEW # 7 2 UG00256 (41808868) SEAL, RETAINER
- VIEW # 15 30 UG00224 (41808847) CAP, BEARING, RUBBER
- VIEW # 17 5 UG00164 (41808825) GEAR, 1ST
- VIEW # 18 8 UG00167 (41808827) GEAR, 2ND
- VIEW # 19 1 UG00636-10 (41809767) GASKET D MOTOR, UG, 10PCS
- VIEW # 24 50 UG00169 (41808829) BUSHING, GEARS, BRASS
- VIEW # 25 36 UG00170 (41808830) WASHER, GEARS
- N/S 3 K3100 (41809480) GREASE, TUBE, SS2200

INSTRUCTIONS:

- Remove 2 bolts from the BRACKET, WITH BUSHING (41808775). Remove and discard the BRACKET, WITH BUSHING (41808775). Inspect 1 ROTOR SPACER (41808866) & 2 WASHER (41808828). Replace broken, thin, or brittle parts.
- Remove 2 screws from the MOTOR WINDING (41808819). Remove the MOTOR WINDING and clean. Add grease to the lower rotor/bushing (between the motor rotor and lower gearbox half). Note: inspect the lower brass ball bushing and rotor shafts for wear if worn or ball bearing pulls away from the gearbox, rebuild may not be economical scrap for parts or order additional parts to complete the major rebuild.
- Replace the MOTOR WINDING (41808819) install and tighten 2 Philips head screws.
- Replace the (BRACKET, WITH BUSHING), (ROTOR SPACER) AND (WASHERS x 2) –
 Pack grease into the brass ball bushing of the BRACKET WITH BUSHING before installing.
 Install and tighten using 2 bolts.
- Remove the gearbox cover screws. Remove the gearbox cover, locate and discard the GASKET, GEARBOX (41809767).
- Remove gears #1, #2, and #3 from the gearbox. Removing gear #4 is optional. Locate and put aside 6 WASHERS (41808830). Wipe away all grease from each gear and inspect gears for wear. Any remaining grease may contain broken gear parts. Replace any or all worn gears.
- Important: Test the motor operation prior to the following procedures. Bench test by attaching a power cord to the motor, plug into a 120V power source and determine if the motor runs well. When complete, remove the power source and complete the following procedures.
- Remove (6 CAP, BEARING, RUBBER-41808847) and (6 BUSHING, GEARS, BRASS-41808829). Inspect for wear or brittle rubber. Remove all grease. Replace faulty parts. Note:
 We recommend that the brass bearings are replaced with each rebuild.
- Remove all grease from the gearbox lower cavity and gear #4. Remove all grease from the gearbox cover.
- Replace (6 CAP, BEARING, RUBBER 41808847) (6 BUSHING, GEARS, BRASS-41808829).
- Add an adequate amount of grease to the cavity of the gearbox under all 4 gears locations. Add grease to the motor pinion gear (small metal drive gear)
- Replace each gear Important: Add (6 WASHER, GEAR-UG00170) TO EACH SIDE OF EACH GEAR before positioning the gears. With the large output gear in place, position the gears into the gearbox in this order: Gear #3 Gear #1 then Gear #2.
- Add an adequate amount of grease to the top of each gear, filling in all open cavities.
- Place a new GASKET, GEARBOX (41809767) onto the lower gearbox. Install the gearbox cover and secure in place with the cover screws.
- Wipe exterior motor surfaces to remove excess grease, dirt, and/or sugar.
- Bench test with a power cord plugged into a 120V power source. Operate for 15 minutes or until very hot. Note: *The Motor assembly will run very hot without a load*.

SLUSH PUPPIE SERVICE BULLETIN MODELS: MT, NHT, & GIANT 2

SUBJECT: Control Board explanation

We are currently using two different control boards in our Slush Puppie model Ugolini Freezers. The two control board designs are not interchangeable. Below are the facts and details to help you understand the features and differences of each.

41808788 - Board, Control (MT & NHT Ugolini models)

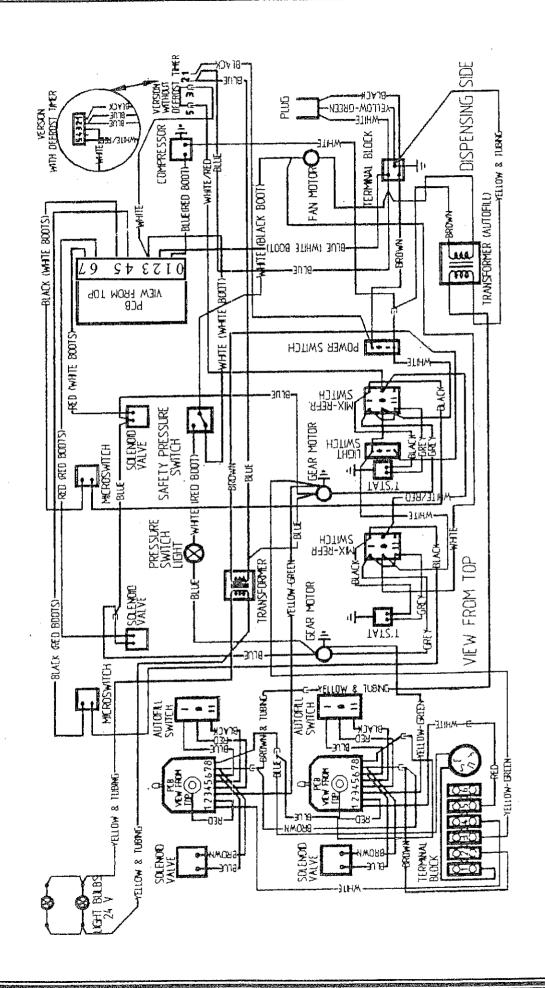
- Used on Freezers manufactured until December 2001
- Dimensions: 3 ½" X 6 ¼"
- Newest version board: Black compressor relay and orange solenoid relays.
- Solenoids are independently opened or delayed 10-15 seconds after each matching micro switch is activated.
- Compressor start is delayed 3 minutes from the moment that at least one solenoid valve is opened.
- Compressor stop has no delay feature. Both solenoids must be closed to stop compressor operation.
- When using the defrost cycle (24 hour timer), The compressor will delay 3 minutes, then start, when the thermostat calls for refrigeration. A temperature of 38-40 degrees is used to protect the product during defrost and to offer a quick-freeze down for daily operation.

41809578 - Control Board, New Style (MT & NHT Ugolini models)

- Used on Freezer manufactured after January 2002
- Dimensions: 2 3/4" X 3 1/2"
- Also called the "always on" Control Board
- Solenoids are independently opened and closed by each matching micro switch. Offering no delay between open or closed cycles.
- Compressor start is delayed 1 minute after power is applied to the freezers and the operating switches are in their "on" position.
- Compressor runs at all times during the daily freeze mode. Giving us the term "always on" Control Board.
- When using the defrost cycle (24 hour timer), The solenoids will close stopping the operation of the compressor. When one or both solenoids open, the compressor again delays 60 seconds and will again run until the next defrost cycle.

	·		

MODEL: UGOLINI MT2ULAF WIRE / COMPONENT DIAGRAM OLD STYLE CONTROL BOARD (41808788)



WIRE / COMPONENT DIAGRAM "ALWAYS ON" CONTROL BOARD (41809578) MODEL: UGOLINI MT2ULAF

