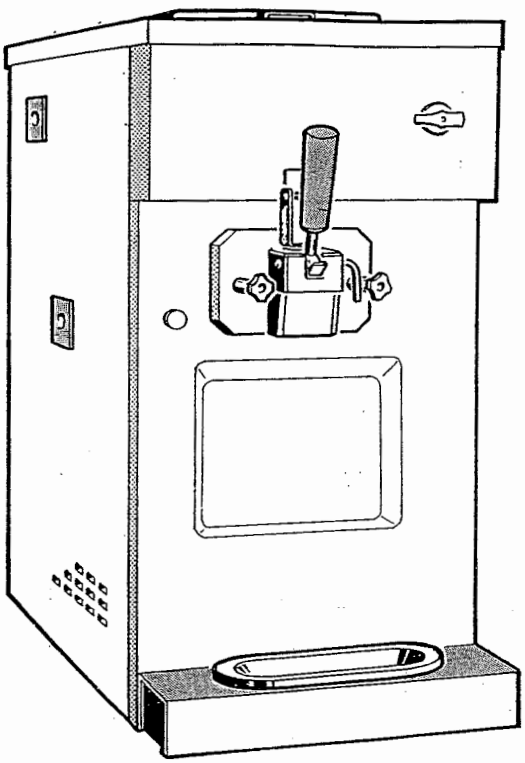
COLDELITE®



Soft Serve Freezer

SINGLE FLAVOR COUNTER MODEL UC-71G

OPERATION and SERVICE MANUAL

COLDELITE CORPORATION OF AMERICA

3760 INDUSTRIAL DR. • WINSTON-SALEM, N.C. 27105 • TEL. (919) 661-9893 • FAX (919) 661-9895

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I N D E X

FOREWORD

Thank you for selecting COLDELITE to meet today's fast growing demands. Your COLDELITE freezer has been manufactured at the most modern freezer manufacturing plant in the U.S.A., our Winston Salem, N.C., facility, utilizing the most advanced equipment and technology available in the industry. We, at Coldelite, take great pride and care in the manufacture of each and every freezer, using only the finest components available, to provide you with years of trouble-free operation.

Over twenty-five years of experience in the manufacturing of dispensing equipment have guided us in the preparation of this Operation and Service Manual. PLEASE READ IT CAREFULLY. Keep it for future reference and most of all, follow the instructions from the very time your machine is delivered.

On the following pages, you will find important information and procedures which describe the proper installation, sanitizing, operation and maintenance of your COLDELITE machine. We feel certain that your full compliance with these instructions will assure you of excellent performance, trouble-free operation and a profitable business for years to come.

NOTICE

Failure to closely follow set-up and maintenance procedures can void your warranty. Coldelite Corporation will not be responsible for any machine not properly maintained.

In the event this unit should malfunction, please contact your Coldelite distributor or an authorized service agency.

WARNING

EXTREME CARE MUST BE TAKEN WHEN REMOVING SIDE, REAR OR CONTROL BOX PANELS.

ALWAYS TURN THE SELECTOR SWITCH TO THE OFF POSITION. ALSO TURN OFF THE DISCONNECT SWITCH ON ELECTRICAL SUPPLY LINE BEFORE EXPOSING ANY ELECTRICAL CONNECTIONS AND/OR MOVING PARTS, SUCH AS BELTS, PULLEYS, FAN BLADES AND BEATER.

PART I INSTALLATION

Before starting this procedure, make sure the carton does not show any evidence of having been dropped, tampered with or abused in such a way as to indicate that its contents may have been damaged in transit.

IMPORTANT - Should the outside of the carton give any indication of possible hidden damage, state this on the Bill of Lading before signing. Contact the carrier immediately and request an inspection of the damage. If this is not done, you are responsible and must pay for any repairs required.

A) UNCRATING - Proceed as follows:

1. The carton is held to the skid by steel strapping. When you cut this strapping, do it with caution, as it may spring out. Remove carton by lifting it straight up. Do not force.

2. Remove single screw at the bottom of each side panel. Remove panels by sliding panel upward slightly, then pull outward at the bottom and allow the panel to slide down.

3. The freezer is held to the skid by a nut and bolt on the left and right side. Remove these bolts and the skid.

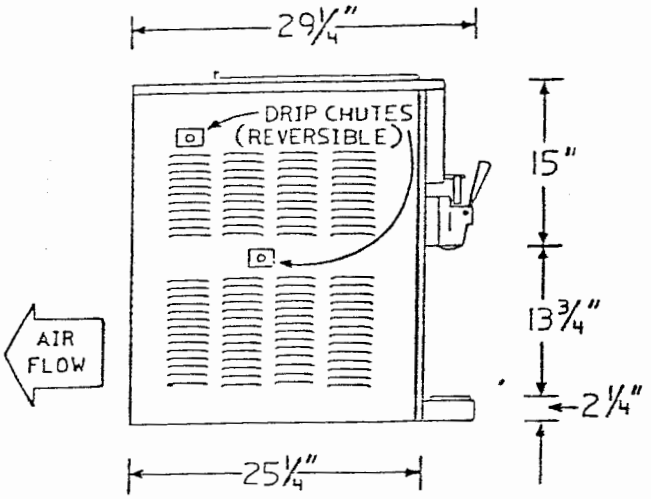
4. The freezer is now ready to be placed on the counter. Note the illustrations on the following page. The counter must be capable of supporting 275 lbs. without vibration. Reinforce it, if necessary. Remember, when choosing a location that this unit is an air cooled unit and the proper air flow must be maintained. Allow at least 6 inches on either side and a minimum of 12 inches between the rear of the machine and any obstruction.

Note: If these clearances are not maintained, the production will be reduced, cycling will increase and possibly the machine will stop completely.

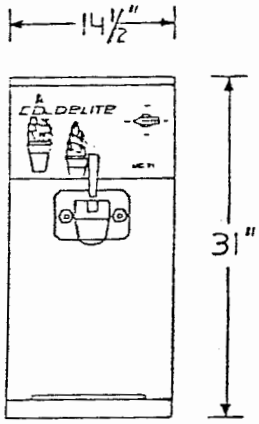
IMPORTANT

Sanitary regulations require that counter model machines be sealed to cabinet top. Apply a coat of proper sealing compound (RTV 732 or equivalent) to machine frame base before securing unit. After installation, excess sealer around perimeter should be removed.

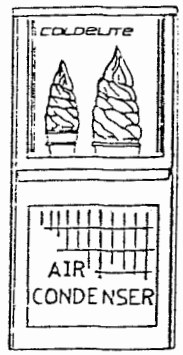
COUNTER MODEL UC-71G



SIDE VIEW UC-71G



FRONT VIEW UC-71G



REAR VIEW UC-71G

(B) ELECTRICAL REQUIREMENTS

Wiring should be made in accordance with the National Electrical Code and/or local electrical codes, rules and regulations.

	Voltage	Running Amperage	Fuse Size
UC-71G	115/1/60	FLA - 19.0 Amperes	30 AMP. MAX.

Power Supply must be adequate to meet requirements at all times. Voltage fluctuations with the machine in operation should not exceed ± 10% of the normal or rated voltage.

Adequate Wiring should be provided with respect to wire size or gauge. Unless otherwise required by the local Electrical Code, the same size wire gauge at the machine junction box should be used for the direct power line. A separate circuit breaker with adequate fuse protection should be employed.

An unfused disconnect switch or a proper size plug and receptacle, close to the freezer, is recommended.

Coldelite freezers are provided with protection for the beater motor. Should the line voltage drop or if there is a short circuit, the overload protector will automatically disconnect the starter and the machine will stop immediately so that no permanent damage can be caused to the motor.

To start the freezer again, push the RESET button (accessed through a hole in the right side panel). The heater must cool down for several minutes before the RESET will operate.

The compressor is also internally protected. If the Klixon protector trips due to an overload to the compressor, the protector will reset automatically.

(C) ELECTRICAL CONNECTIONS

After removing the right side panel, the field wiring box will be found on the bottom plate and is labeled "Connect Power Line Here".

The power line is passed through a hole, located at the bottom right at the rear of the machine in the pedestal, then it is passed through a hole on the bottom deck directly below the field wiring box. The power line may then be connected to the field wiring box. Upon completion, the power line should be clamped to side of control box with the clamp supplied.

In all installations, the machine must be properly grounded. Since all high voltage components (controls are 24 volts) are connected by means of flexible conduit, adequate ground continuity is assured by running and fastening a ground line to the machine junction box ground lug.

After electrical connections are completed, check the rotation of the beater. It should be counter clockwise when facing the front of the machine. If checking from the rear of the machine, note direction of arrow on fly wheel for rotation.

PART II - EXPLANATION OF ELECTRICAL CONTROL

SELECTOR SWITCH - Fig. A - Positions of switch are, as follows:

OFF - Machine is off.

AUTO - This position is used for the production and dispensing of ice cream, yogurt, etc.

ENERGY CONSERVATION - This position is used for prolonged idle periods. Product is held at a safe temperature which is above serving temperature and controlled by a thermostat. The product may not be served when in this position. The beater motor will operate whenever the compressor does.

BEATER - This position will only activate the beater motor, (compressor circuits are de-energized) which will be necessary during the cleaning, sanitizing, and start-up operation.

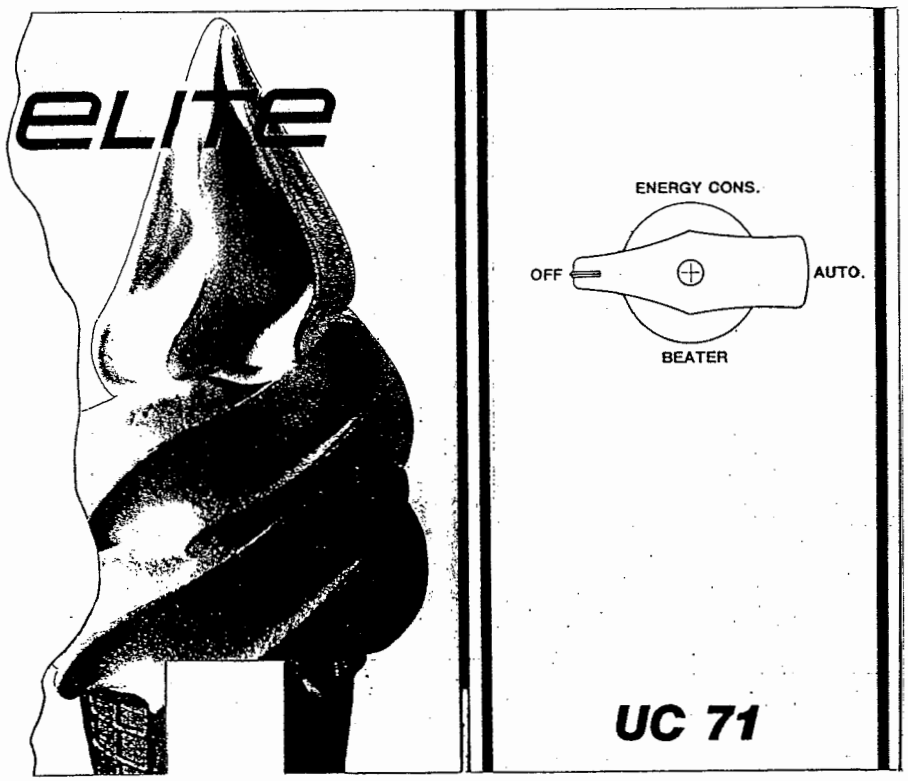


fig. A

B) CONTROL BOX - located under right side panel and consists of the following: (See Figure 9)

1) Compressor Starter

2) Beater Motor Contactor

3) Overload Protector - This device senses the current supplied to the beater motor and will stop the entire machine in the event of an overload. This device also houses the reset button.

4) Transformer - Steps down line voltage to 24 volts to supply controls.

5) Thermostat - Controls temperature of the product in the freezing cylinder when the unit is in the ENERGY CONSERVATION mode.

6) Timer/Time Delay - The timer portion of the control will start the beater motor every 10 minutes when the unit is in the AUTO mode, allowing the torque control to sense the consistency of the product. The Time Delay will delay the start of the compressor 1.5 seconds later than the beater motor in the AUTO position.

C) OTHER CONTROLS -

1) Solenoid Valve - This valve, located on the left side, is normally closed. It will open during the compressor operation.

2) Rear Micro Switch - operates in conjunction with the Hard-O-Matic to keep the product at the proper consistency. (For adjustment, See Part V, Paragraph 2.)

3) High Pressure Cut-Out - Located on right side of the freezer and teed into the discharge line near the compressor; it will cut out the compressor in the event of a high pressure situation, such as a clogged condenser, loss of air circulation, etc. (See Figure 9).

NOTE! CAUTION!

The fan blade is mounted directly to the beater motor shaft. When cleaning the interior of the machine, ALWAYS CUT OFF THE MAIN CIRCUIT BREAKER OR TURN OFF THE DISCONNECT SWITCH BEFORE SERVICING THE INSIDE OF THE MACHINE. THE FAN BLADE WILL BE IN MOTION ANY TIME THE BEATER MOTOR IS ACTIVATED.

PART III - INITIAL CLEANING PROCEDURE

This is a new machine and it must be completely disassembled, washed, and sanitized before starting. Proceed, as follows:

1) Remove mix tank cover and items packed in the tank (spare parts, sanitizer, lubricant, gravity feed tube, etc.),

2) Now remove the remaining parts from the machine. Remove the two hand knobs holding the head in place. Then remove the head assembly itself. Pull the auger out of the cylinder. Make certain that the lip seal on the rear of the shaft is removed. It is possible that it may stick to the back of the cylinder. Take these parts to the sink and wash. Remove the pin holding the handle in the dispensing plunger. Remove the handle and the plunger for washing. It is advisable to use a dish pan to put the parts in so that no part is dropped or lost. This should be a plastic pan.

3) You now have all the parts for the freezer in the sink. Wash all these parts with a detergent and the brushes supplied with the machine. DO NOT USE HOT WATER ON ANY PLASTIC PARTS. Rinse all parts in warm water. Do not dry these parts but allow to air dry or assemble wet.

ASSEMBLY OF FREEZER - Reverse the above procedure. Install the auger first, being sure that the lip seal is on the rear of the auger and has been lubricated on both sides with the sample lubricant supplied. All 'O' rings must be lubricated lightly with Petrogel or equivalent.

When reassembling the freezer, refer to the illustrations, Figures 6, 7, and 8.

CAUTION - It is very important to have the idler installed correctly. If not done properly, damage can be caused to the spigot head assembly. Assembly instructions should be carefully followed.

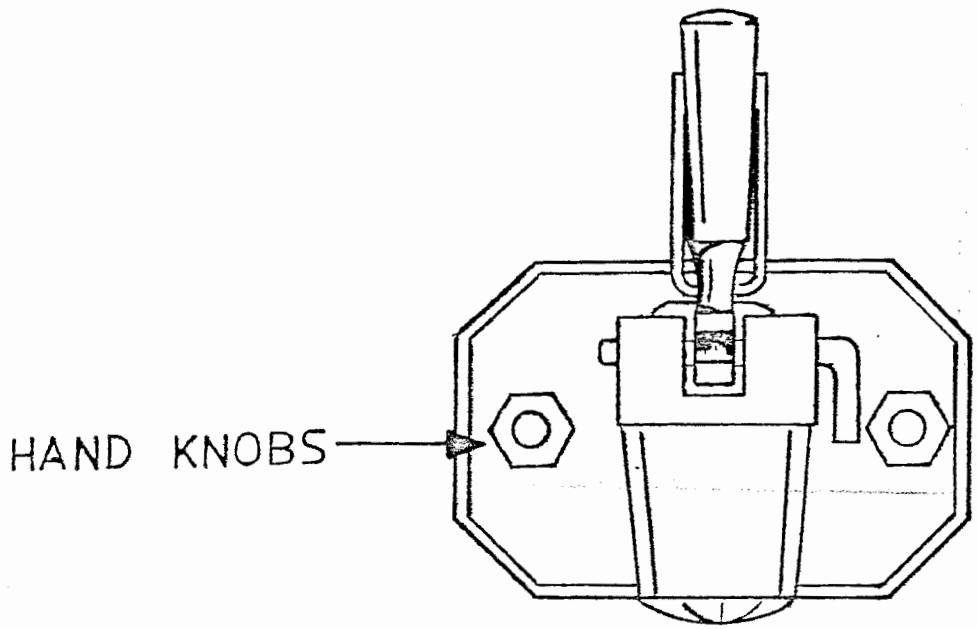
When assembling the idler, first hold it so that the fins are in an upright position. Then insert it so that the thinner portion of the idler shaft fits into the grooved slot at the front of the beater/auger, Item #21, Fig. 8. The grooved slot must be facing up at all times. The front bar of the idler should be in a horizontal position. Push the idler back, inserting its shaft into the hole of the beater/auger shaft. If installed correctly, the idler, when turned, should rotate freely and will be automatically locked in place. If it does not rotate, it is installed incorrectly. Go through the above instructions again.

Finally, when properly installed, the front bar of the idler should be in a vertical position so that the bar will not interfere with the two pins located inside the spigot head, when the head is installed. See Figure 3.

HEAD ASSEMBLY

MODEL 71G

See Fig. 6, 7, & 8 for breakdown of parts.



Place head assembly on studs and turn both hand knobs to tighten evenly. NEVER USE A WRENCH - hand tight only. Should you have a leak around the head assembly after hand tightening, remove the head and lubricate the '0' ring behind the head with petrogel or equivalent.

SANITIZING THE FREEZER

The freezer is now washed and reassembled. The next step is to sanitize the machine which is most important. This procedure will retard the growth of bacteria and insure excellent tests on your product when examined by the Sanitation and/or Department of Agriculture.

First, mix the sanitizer in a clean pail. Hot water first, to dissolve the powder, and then cold water. Instructions are on the sample sanitizer that is included with the machine. Usually two tablespoons to two gallons of water will give you a solution of 200 ppm chlorine, which is sufficient to kill the bacteria. Do not exceed the formula as it does not add to its effectiveness.

With the selector switch in the OFF position, pour one gallon of sanitizer into the mix tank. Lay the gravity feed tube in the mix tank so that it is covered with the sanitizing solution. Now turn the selector switch to BEATER for only a few seconds.

The sanitizer will now run freely into the cylinder. Simply place a bucket or drain attachment under the head and allow the sanitizer to run out. During this operation, the selector switch is in the OFF position.

We recommend that the auger/beater be turned as little as possible during the washing and sanitizing operations. In the last phase, you can turn the selector switch to BEATER for two or three seconds to help remove the last of the sanitizer.

For sanitary reasons, the plastic cover on top of the mix tank should be removed only for the time strictly necessary to make the desired adjustments.

CLEANING AND SANITIZING INSTRUCTIONS

NSF REGULATIONS

1 - Drain machine of all mix and rinse with cool water.

2 - Turn selector switch(s) to OFF position.

3 - Remove and disassemble spigot head, mix pump(s), feed elbow and beater(s).

4 - In a clean pail, mix one ounce of Nu-Foam Liquid Detergent (or equivalent) with three gallons of warm water (70-80°F). Clean and brush all surfaces in contact with product. Flush thoroughly with warm water.

5 - Reassemble all parts and install on machine. See instructions in manual.

6 - In a clean pail, mix two ounces of Stera-Sheen Green Label Sanitizer (or equivalent) with two gallons of warm water. This will make a 200 ppm concentration of chlorine sanitizing solution.

7 - Fill hopper(s) and cylinder(s) with sanitizing solution.

8 - Turn selector switch(s) to BEATER position for approximately 30 seconds. Make sure sanitizer solution is in contact with product contact surfaces for three to five minutes.

9 - Drain machine thoroughly before refilling with product.

PART IV STARTING THE FREEZER

The Model UC-71G is now sanitized and ready for production.

Start the machine, as follows:

1) Insert the gravity feed tube in the mix tank. Pour at least one gallon of liquid mix into the mix tank. The maximum capacity of the hopper is two gallons. Never load mix above the top of the feeding tube. See Page 14.

Turn the selector switch to BEATER and allow the machine to run a few seconds. Place a pail or cup under the dispensing nozzle, open the dispensing plunger and let the mix push out any sanitizer left in the cylinder. When pure mix comes out of the head, close the plunger and allow the machine to continue to run with the switch in the BEATER position for one minute.

2) Now turn the selector switch to AUTO. This activates the torque control to sense that refrigeration is required. Then simply allow the machine to run until it goes off automatically.

3) You are now ready to draw a finished product. Pull the dispensing handle down slowly until the product comes out. The freezer is now in the normal operating position. Be sure to add mix when necessary, and simply dispense the product, as required.

4) Production of the machine is 4 gallons per hour (calculated at 40% overrun) or 2-3 cones per minute (4-5 oz. volume per cone).

ACCESSORIES FOR THE MODEL UC-71G

A drain attachment for the dispensing head, which consists of a watertight connection to the head assembly, and a hose to direct the waste water to a suitable drain, during the cleaning operation.

This drain must be lower than the spigot head (preferably a floor drain) as the water must flow out of the machine.

ROUTINE, PERIODIC CLEANING PROCEDURES

Cleaning and sanitizing schedules are governed by your state or local regulatory agencies and must be followed accordingly. A well planned cleaning schedule will eliminate excessive waste of time and product within your organization.

On a designated day (s) of the week, run the mix in the mix tank as low as feasible.

Proceed to clean the machine, as follows:

1) Turn the Selector Switch to BEATER position and let the machine run for 4 to 5 minutes. This will soften the product in the cylinder and allow the remaining product to be removed more easily.

2) Place a container or bucket under the spigot head. Slowly pull the handle down and remove remaining product from the cylinder.

3) When the product has stopped flowing, turn the Selector Switch to the OFF position. Close the spigot handle. (See Part III - Initial Cleaning Procedure.)

4) Fill the mix tank with lukewarm water and turn the Selector Switch to the BEATER position for 2 to 3 seconds . Turn Selector Switch to the OFF position and drain off water by opening the spigot handle. Repeat this process two to three times until the water drained off is relatively clear. A mild detergent can be used in this rinsing or flushing process.

5) Brush mix tank thoroughly and drain machine. Then flush with a sanitizing solution to remove all mix particles.

6) Remove spigot head assembly, beater and shaft seal. Refer to Part III - Initial Cleaning Procedure.

7) Thoroughly clean all disassembled parts and surfaces with a mild detergent and then sanitizing solution (refer to Sanitizing The Freezer, Page 8a and Assembling the Freezer, Page 7.

PART V TECHNICAL INFORMATION

(A) Refrigeration

Compressor - Hermetic - 1 hp - R 502
Actual Running Amperage - 9.5 - 10.0
Suction Pressure - 22 psig
Discharge Pressure - 245 psig @ 72°F ambient
Cooling System - Air
Use of R 502 only - 1.5 lbs.

1) ADJUSTING PRODUCT TEMPERATURE - Coldelite uses a Hard-O-Matic system (patented) which is referred to as HOM. This mechanical device controls the refrigeration system for the freezing cylinder by 'sensing' the consistency or hardness of the product inside the freezing cylinder. No thermostats are used in this system.

Basically, the HOM control consists of a clutch assembly (Fig. 2). The inclines of a disc, fastened to the fly wheel, are engaged to the inclines of another disc which in turn rotates the auger.

A set of springs, properly calibrated and radially located around the fly wheel, maintains the two discs engaged by exerting a certain pressure.

With the gradual hardening of the product inside the freezing cylinder, a certain resistance or drag will be exerted on the auger by the product itself.

The disc, rotating the auger, will also be affected by this drag and will start sliding on the inclines of the other disc, overcoming the pressure of the springs.

The gradual separation of the two discs, as a result of the sliding of the inclined surfaces of one disc against the other will move the complete drive assembly toward the rear of the machine.

By the time the product has reached the proper consistency or hardness, the drive assembly will have moved backwards just enough to open a normally closed micro switch fastened to the support on the rear frame of the machine.

The opening of this micro switch will de-energize the coil of the compressor contactor, which will immediately stop the beater motor and compressor simultaneously. Thus the refrigeration

system is controlled by the consistency of the product in the freezing cylinder and not by temperature controls.

When you pull the handle on the spigot head to draw a cone or portion, another micro switch is automatically closed, which bypasses the Hard-O-Matic micro switch and starts the beater motor only. This simultaneously pumps new product into the freezing cylinder and starts to change its consistency. The force or drag on the beater is slowly reduced and the springs of the slip clutch return the assembly to its normal position. The compressor starts and thus keeps the product in the freezing cylinder at the proper consistency.

HOW TO ADJUST THE REAR MICRO SWITCH

The firmness of the product depends on the position of the micro switch in relation to the drive assembly.

The compressor must be cut off when the current, absorbed by the beater motor, is equal to the amperage indicated on the label in the electrical box (B/M Cut-Out Amps.) By using an ammeter across the line feeding the beater motor, it is possible to check the amperage drawn by the motor at the time the micro switch opens.

a) If a reading indicates an amperage lower than that of the label amperage, the micro switch opens too soon and should be moved away from the fly wheel.

b) If a reading indicates an amperage higher than that of the label amperage, the micro switch opens too late and should be moved toward the fly wheel.

The micro switch is secured to a rectangular mounting plate, fastened to the frame of the machine, but free to rotate slightly around its retaining bolt. Rotation of the plate toward or away from the fly wheel is achieved by turning a screw located on the plate itself.

Turning the adjustment screw clockwise will move the micro switch away from the fly wheel. The compressor will cut off later.

Turning the adjustment screw counter clockwise will move the micro switch closer to the fly wheel. The compressor will cut off sooner.

Before adjusting the rear micro switch, refer to the decal inside the electrical box for HOM Cut-Out Amperage.

NOTE: At no time should the HOM Cut-Out Amperage exceed the F.L.A. rating of the beater motor.

HARD-O-MATIC SPRINGS

The springs are of the best quality and have a very long life expectancy. However, should it become evident that the adjustment of the HOM cannot be achieved by moving the micro switch within the proper range, replacement of the springs is then necessary. Only springs from the original manufacturer should be used.

If the HOM assembly must be taken apart, the following instructions are important and must be observed:

1) Grease the inclines of both discs generously.
2) Re-assemble the springs with the spacers.
3) After tightening the retaining bolt, make sure the disc is not locked but is free to rotate slightly.

CUT-OUT AMPERAGE

Single Phase - 8.5

W A R N I N G

The maximum travel of the disc and assembly is approximately 1/4 of an inch.

In adjusting the distance of the micro switch from the drive assembly, do not increase this distance more than 1/4 of an inch. If this adjustment is increased more than 1/4 of an inch, the drive assembly would never move back far enough to open the normally closed micro switch. Therefore, the compressor and beater motor would run continuously and cause a freeze-up.

The adjustment of the micro switch position requires only slight movements of the assembly in either direction.

ENERGY CONSERVATION

Unlike the AUTO mode, the ENERGY CONSERVATION mode makes use of a thermostat (see Fig. 9). The sensing element for this thermostat is located on the left side of the hopper in a well, encased by foam. This element senses the temperature of the evaporator (freezing cylinder), and due to loss of temperature, is set approximately 10°F colder than the product temperature, which should be 30°F-35°F.

It is important to note that the beater motor will run on ENERGY CONSERVATION. This is necessary to drive the condenser fan blade.

MIX TANK REFRIGERATION

Refrigeration for the mix tank is provided by the use of a "cold plate" which is common to the freezing cylinder and mix tank walls. This "cold plate" will conduct heat away from the mix tank to the freezing cylinder. This plate has been engineered to maintain temperatures necessary for mix storage. This is a fixed feature and no adjustments can be made.

B) DRIVE SYSTEM

The transmission between the motor and the beater is obtained by a belt system. The tension of the belt is preset at the factory and is automatically self-regulated. It is advisable to check the belt periodically. The tension should be 3/8" when depressed in the middle between the two pulleys.

Beater Motor - - -	3/4 hp
Actual Running Amps. -	8.5
Main Drive Belt - -	490J16

SPIGOT SWITCH - How It Operates (See Fig. 4)

A micro switch, located in the housing directly above the spigot head assembly, actuates the beater motor whenever the dispensing handle is pulled down to draw product. The selector switch must be in the AUTO position.

The actuating lever is preset at the factory.

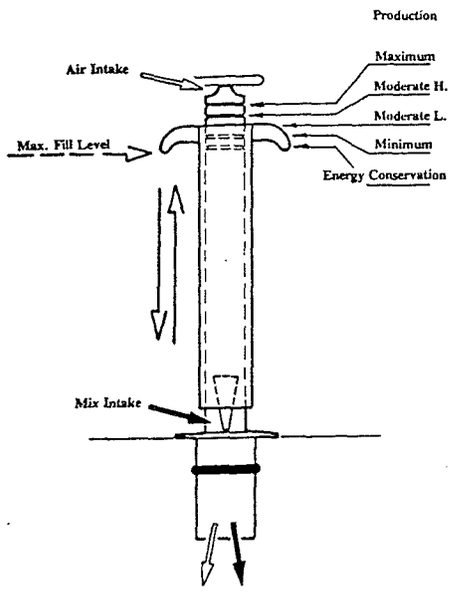
HOW TO ADJUST THE FRONT MICRO SWITCH

Should it become necessary to take the assembly apart for any reason, proper calibration must be maintained. The micro switch must energize and start the beater motor before the product is dispensed from the head. To check, physically bend down and look up through the opening at the bottom of the dispensing head. Slowly pull the dispensing handle down to raise the piston inside the head. The micro switch must be activated (you will hear the switch click) before you can see the opening (orifice) inside the head. If this opening shows before you hear the click, the adjusting screw must be raised. To do so, loosen the lock nut under the adjustment screw and turn the screw counter clockwise. Re-tighten the lock nut after this adjustment.

Gravity Feed Valve - How to Operate and Make Adjustments

The Gravity Feed Valve consists of two tubes, one sliding inside the other, and a plunger/splash guard.

The inner tube blends the flow of air and mix into the freezing cylinder. Air enters through the top of the tube and the mix, through a round hole at the base. See illustration below.



The outer tube is actually a valve. Rotating it from hole to hole on the outer tube varies the size of the hole and the amount of mix that flows into the freezing cylinder. The size of the air inlet, at the top of the tube, does not change so the amount of air that enters the freezing cylinder is constant.

You can vary the overrun (yield) by letting more or less mix enter the freezing cylinder by manually regulating the valve. You must align the mix inlet holes on both the inner and outer tubes or no mix will enter the cylinder. You can see this hole at the top of both tubes. See illustration below.

Gravity Feed Tube Adjustment Settings

The plunger/splash guard keeps the mix from splashing on the mix tank cover and serves as a device to eliminate potential clogging inside the tubes.

You may find it necessary to adjust the position of the outer tube in order to regulate the amount of mix entering the freezing cylinder after start-up. Actually, sales conditions will dictate the proper adjustment.

If more production is required, increase the opening by rotating the outer tube to a larger hole, and conversely when business is slow, rotate to a smaller hole on the outer tube, reducing the opening. Naturally, when the mix runs low in the mix tank, you will open the slot more and eventually take the feed tube out completely to use the last of mix in the mix tank.

Energy Conservation

During long idle periods, it is recommended the outer sleeve of the gravity feed tube be rotated to the position which closes the mix intake hole completely.

IMPORTANT: Remember to rotate the outer tube to the appropriate opening before switching to the AUTO mode.

M A I N T E N A N C E

Your COLDELITE machine has been designed, engineered and manufactured to achieve high performance and long durability.

The life expectancy of a machine, any machine, does not depend only on the quality of its components and design, but also on the beneficial effects of basic maintenance procedures.

It is important to you, therefore, to become familiar with a few of these basic procedures:

1) Remove 'O' rings only with the 'O' ring extractor supplied with the machine.

2) Clean the machine according to the instructions.

3) Lubricate all 'O' rings and seals, as instructed.

4) The wearing or the improper cleaning of the beater and the pump shaft seals, will result in leakage from the rear. Check the drip chute pans frequently and replace seals, when necessary.

5) Replace any 'O' ring that has a nick in it. It will leak and interfere with the proper performance of the machine.

6) When all the spare parts supplied with the machine are used, re-order immediately. Do not wait until the part is required again.

7) NEVER use the AUTO position position for washing, sanitizing, and initially filling the freezing cylinder.

8) IMPORTANT - During the washing and sanitizing period, run the machine only for the time strictly necessary for this operation. Prolonged use of the beater in the cleaning position may cause severe damage to the machine.

9) Always wash metal, plastic or rubber parts in lukewarm water. NEVER, NEVER USE HOT WATER!

10) Check the belt tension periodically. You should be able to depress the belt about 3/8 of an inch between the pulley and the flywheel.

11) I M P O R T A N T

THE MODEL UC-71G IS AN AIR COOLED MACHINE AND THUS ITS EFFICIENCY DEPENDS ON THE AIR COOLED CONDENSER. THE FINS OF THE CONDENSER MUST BE CLEANED EVERY TWO OR THREE MONTHS TO ASSURE EFFICIENCY.

W A R N I N G

EXTREME CARE MUST BE TAKEN WHEN REMOVING SIDE, REAR OR CONTROL BOX PANELS.

ALWAYS TURN THE SELECTOR SWITCH TO THE OFF POSITION. ALSO, TURN OFF DISCONNECT SWITCH ON ELECTRICAL SUPPLY LINE BEFORE EXPOSING ANY ELECTRICAL CONNECTIONS AND/OR MOVING PARTS, SUCH AS BELTS, PULLEYS, FAN BLADES AND BEATER.

TROUBLE SHOOTING GUIDE

PROBLEM	PROBABLE CAUSE	SUGGESTED REMEDY
1) Product too soft	A) Drawing faster than machine can produce.	A) Slow down draw rate
	B) Torque control out of calibration or defective	B) Call serviceman
	C) Machine short of gas	C) Call serviceman
2) Nothing comes out of dispensing head	A) No mix in mix tank	A) Add mix to mix tank
	B) Feeding tube hole not sufficiently opened.	B) Open outer feeding tube jacket.
3) Machine will not freeze	A) Compressor not working	A) Defective starting capacitor
	B) Short of gas	B) Call serviceman
	C) Defective torque control	C) Call serviceman
	D) Defective starter	D) Call serviceman
4) Machine runs continuously	A) Front micro switch stuck on ON position	A) Readjust micro switch
	B) 10 Minute Timer stuck on ON position	B) Call serviceman
	C) No gas	C) Call serviceman
5) Beater motor humming	A) No mix in cylinder	A) Proceed as per 1 and 4 above
6) Beater motor will not shut off	A) Front micro switch activated	A) Proceed as per 4 above

T R O U B L E S H O O T I N G G U I D E

PROBLEM	PROBABLE CAUSE	SUGGESTED REMEDY
7) Machine will not start	A) No power to machine	A) Check plug, disconnect switch or fuses. Push reset button
	B) Faulty selector switch	B) Call serviceman
	C) Off on overload	C) Push reset button after waiting for reset to cool.
8) Short cycle on machine	A) Going off on high pressure	A) Clean condenser B) Defective Klixon on compressor
9) Machine smoking	A) Belt is slipping	A) Turn off machine and tighten belt.
	B) Cylinder starved	B) Reset mix intake tube to add more mix to cylinder. Turn machine OFF. Put selector switch on BEATER for one minute. Return to AUTO position. Resume normal operation.
10) Mix drips from rear of head assembly	A) 'O' ring missing or has a split	A) Install or replace 'O' ring
	B) Head not tight	B) Tighten hand knobs
11) Low overrun	A) Defective 'O' ring. Check all 'O' rings.	A) Replace any 'O' ring with a nick
	B) Too much liquid in cylinders	B) Close liquid hole in feeding tube.

Model UC-71G

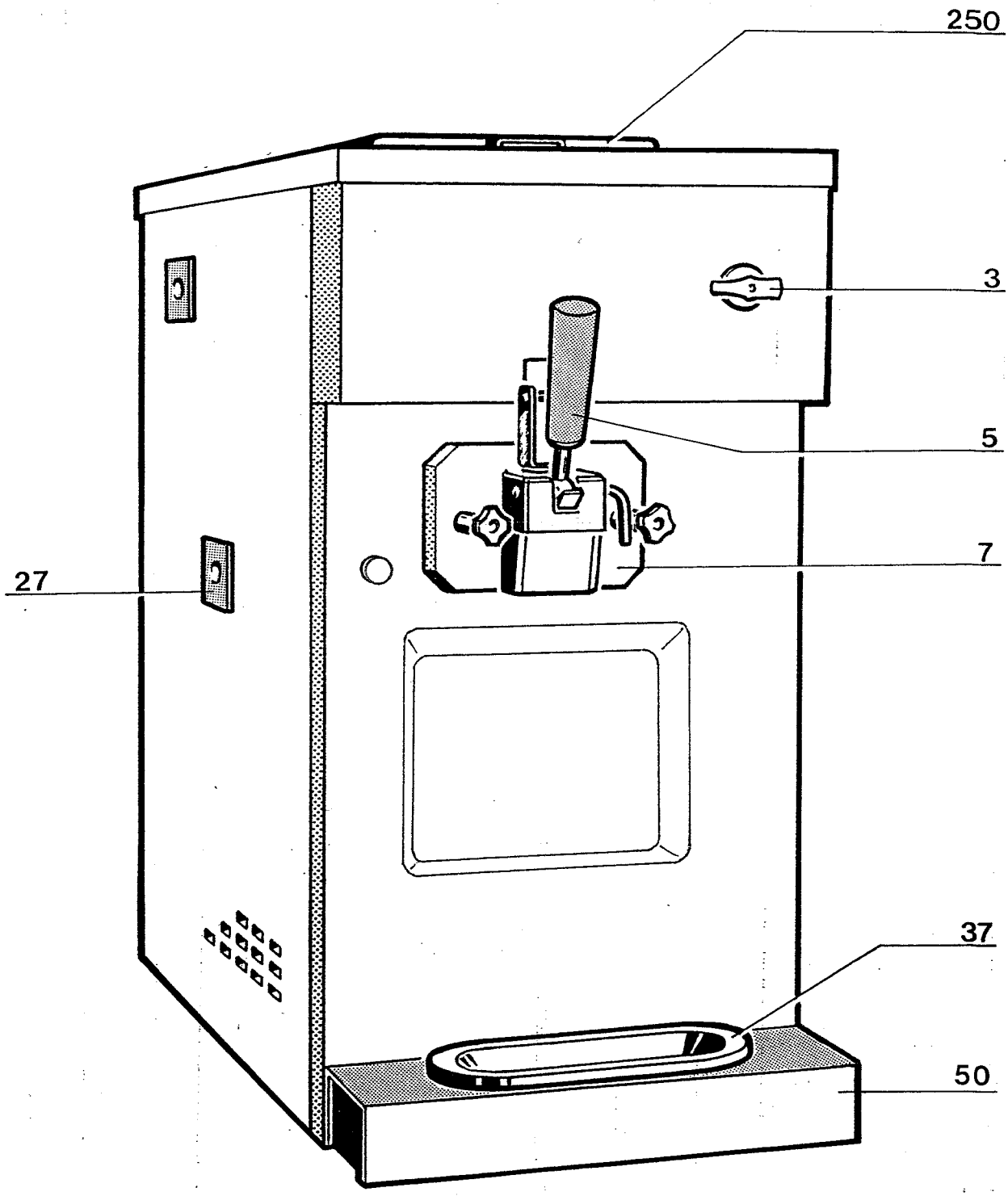


Fig.1

Beater Drive Assembly

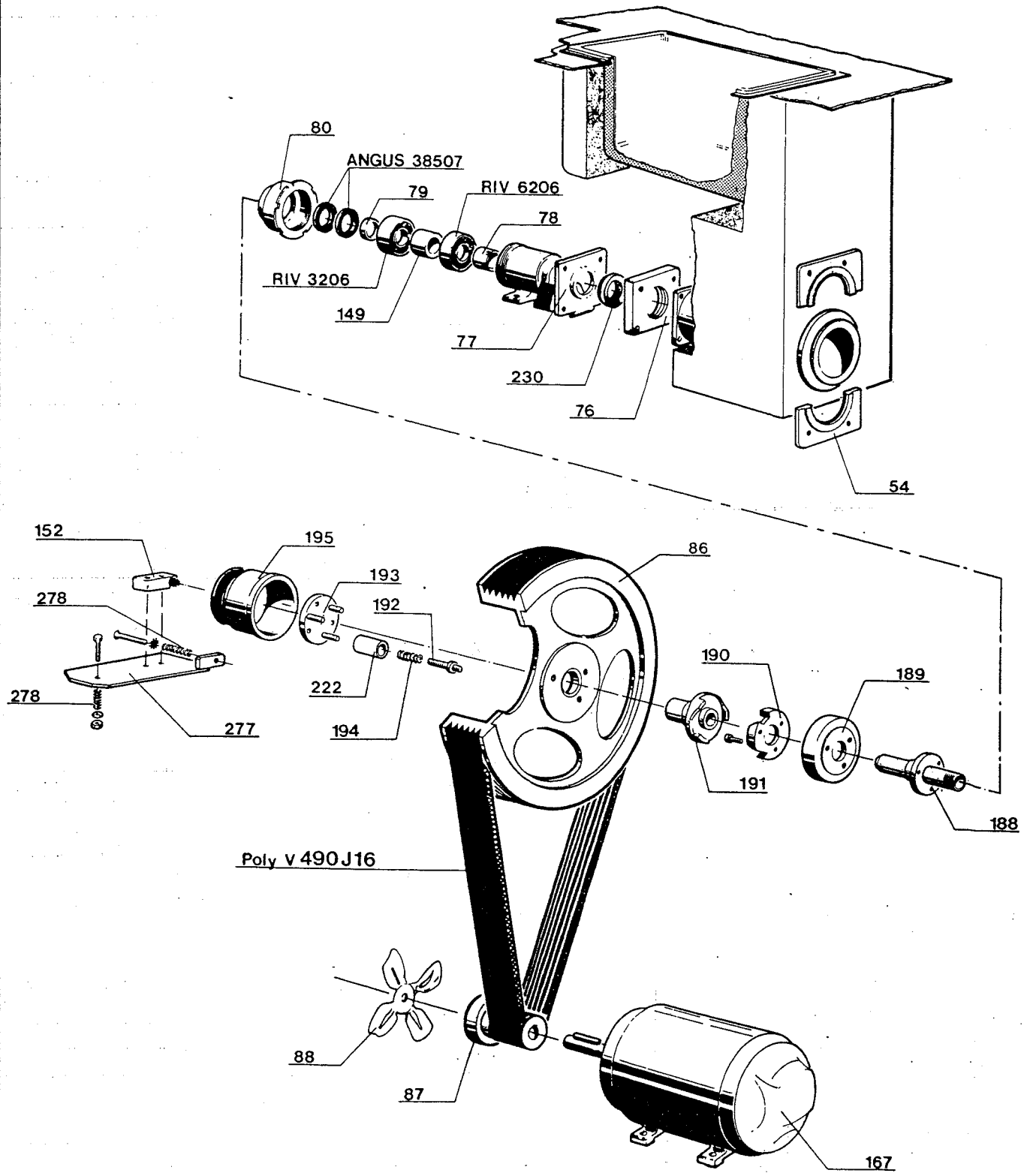
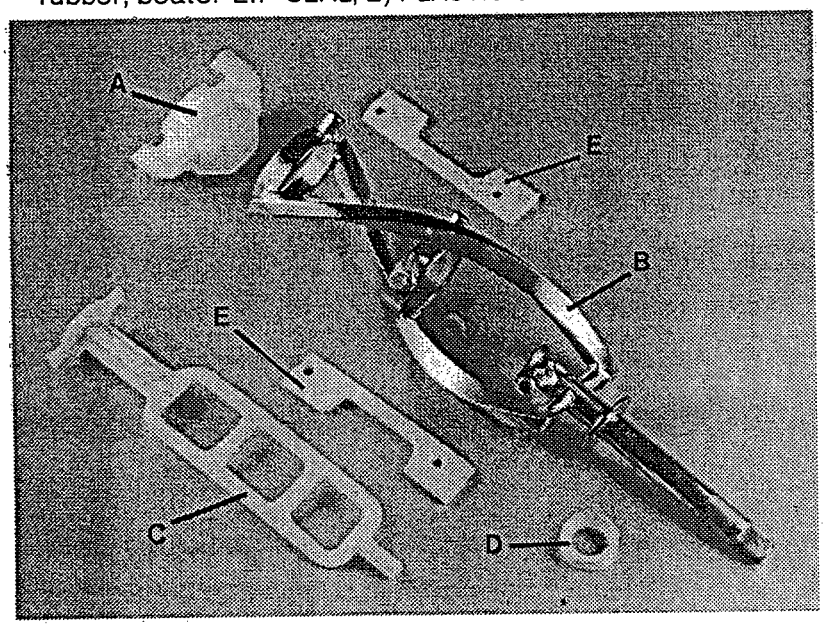


Fig.2

A) Assembling the Beater/Augers

1) First, re-assemble the beater/auger assembly. Begin by gathering the four parts needed to complete each assembly: A) plastic "END PUSHER", B) BEATER/AUGER, C) IDLER, D) rubber, beater LIP SEAL, E) PLASTIC SCRAPERS



2) Aligning the slot on END PUSHER and the one on the holding ring of BEATER/AUGER, slide the end pusher onto the BEATER/AUGER as shown.

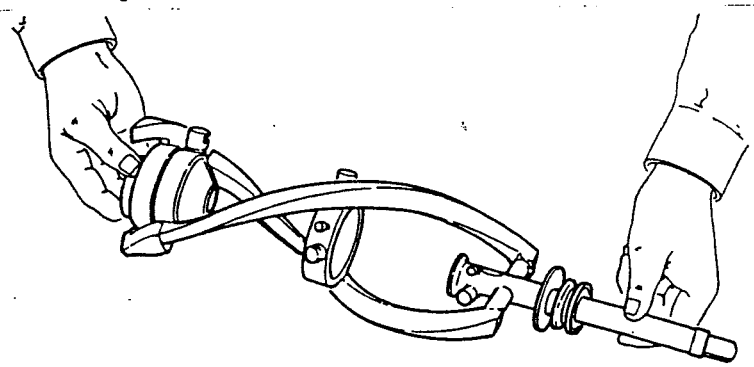
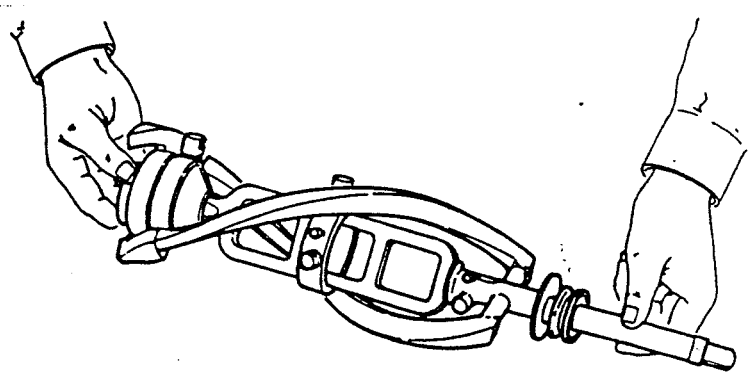


fig. 3

3) Next, install the IDLER, in the slot of END PUSHER. Guide the IDLER shaft down into the slot.



Front Micro Switch Assembly

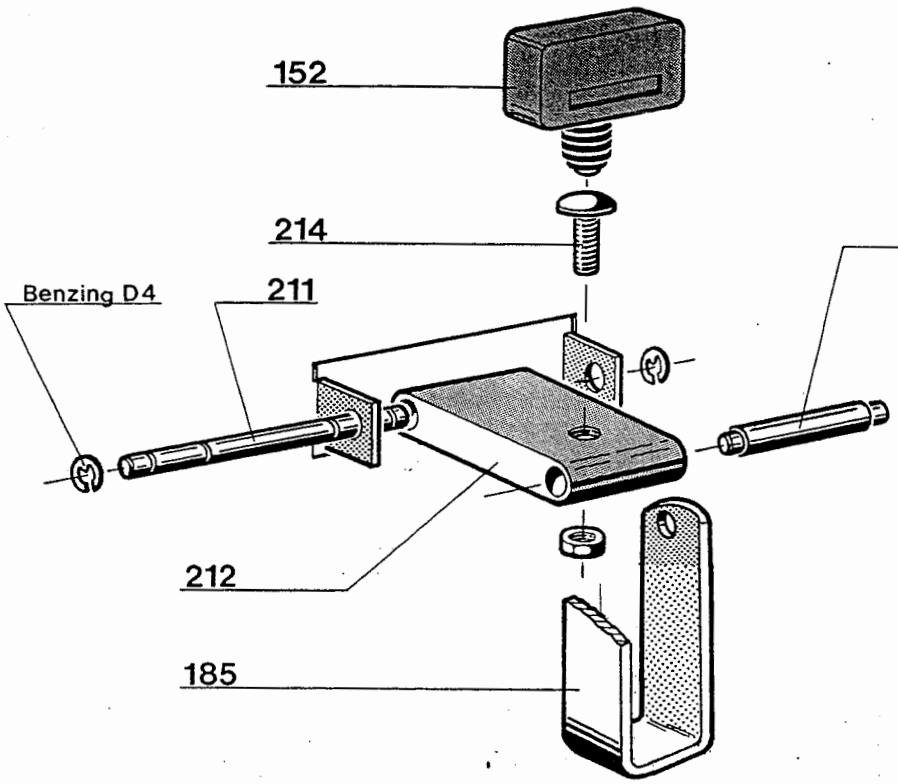


Fig.4

Mix Tank Cover

Fig. 5

Gravity Feed Tube

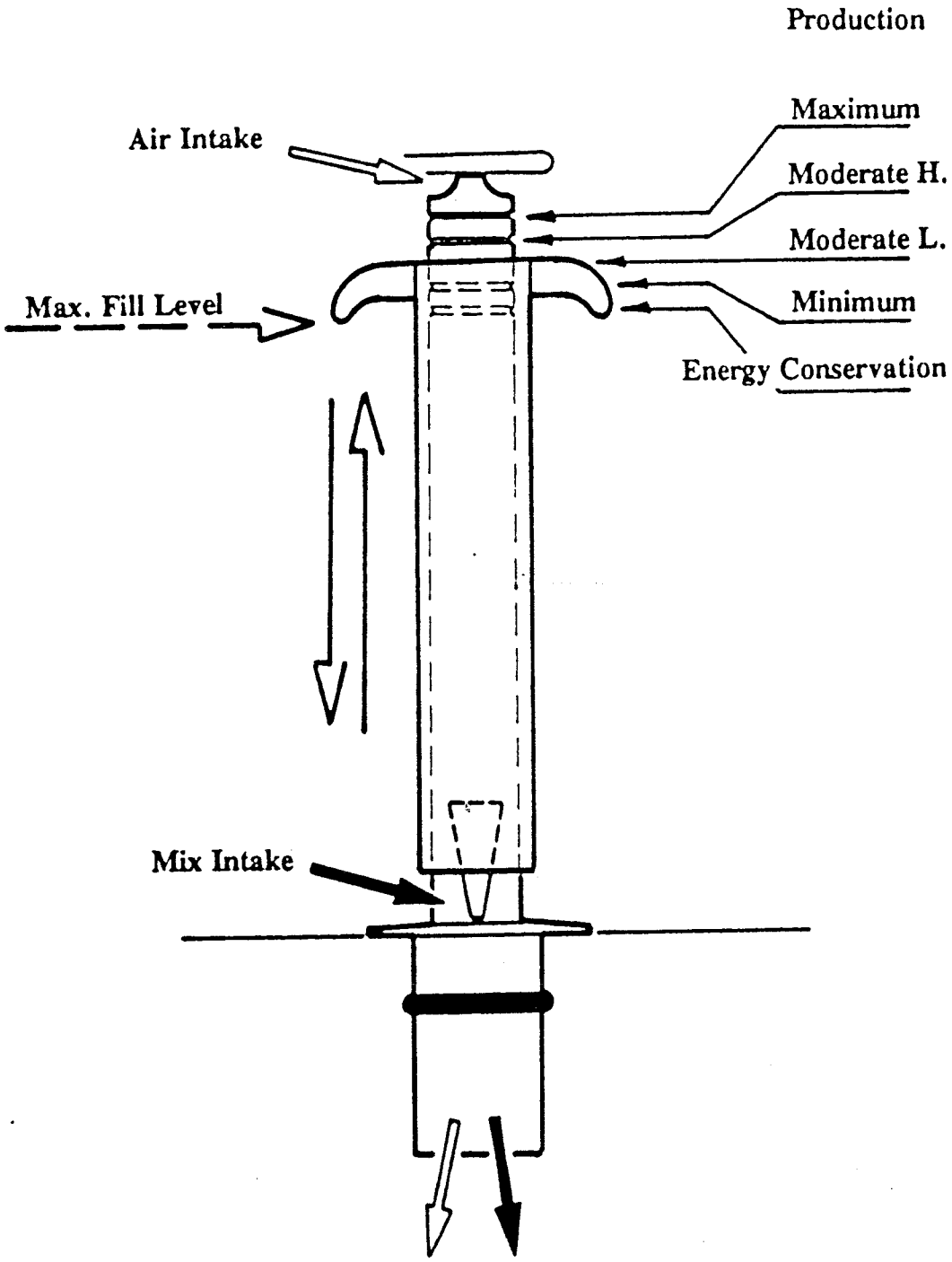


Fig. 6

Spigot Head Assembly

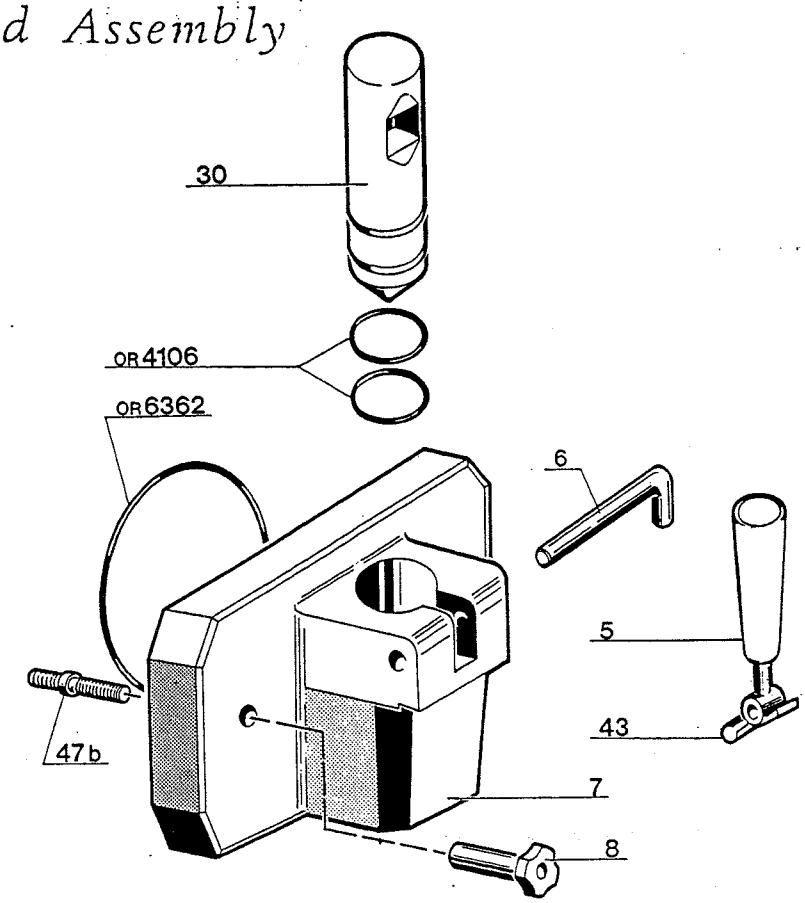


Fig. 7

Beater Assembly

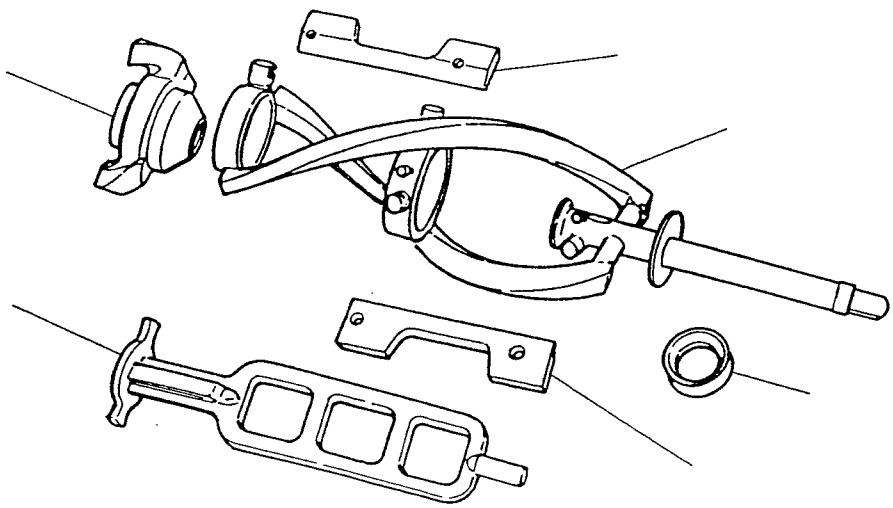


Fig. 8

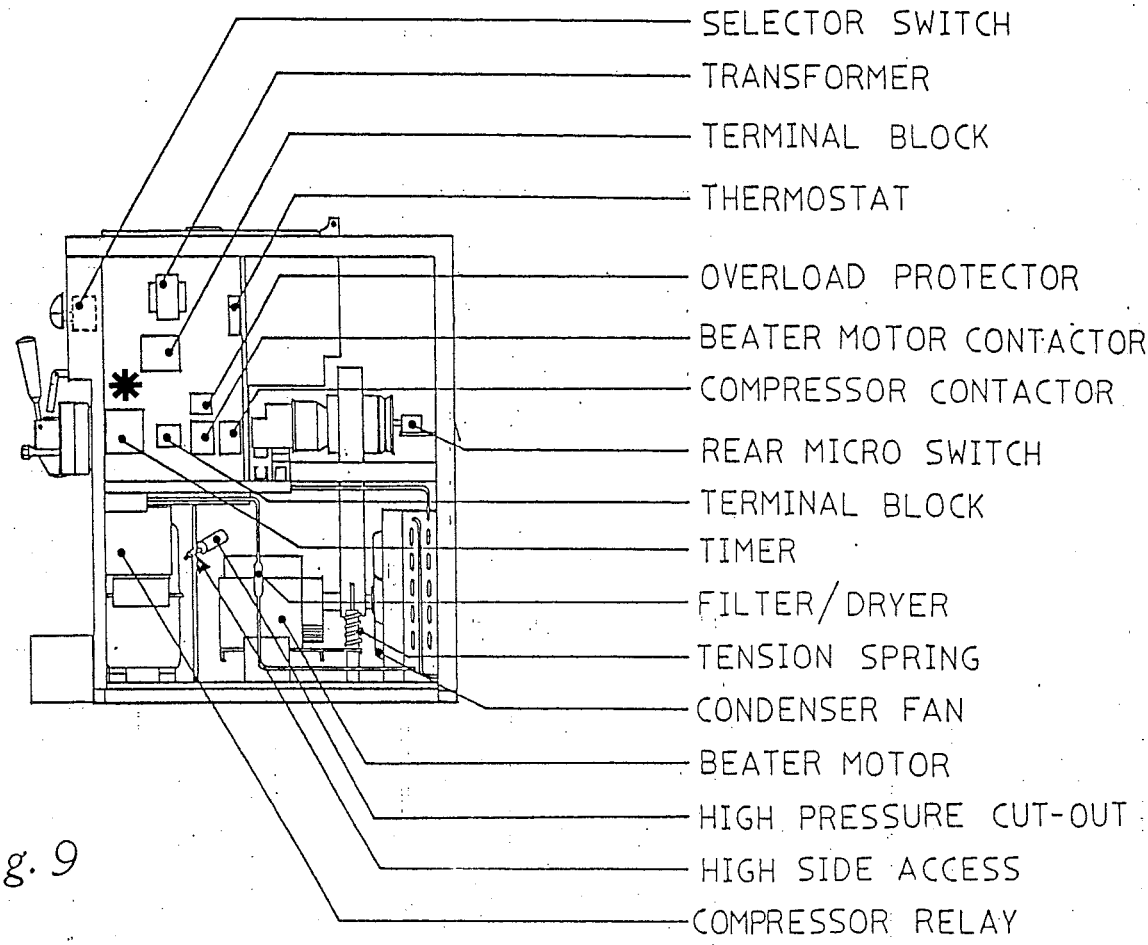
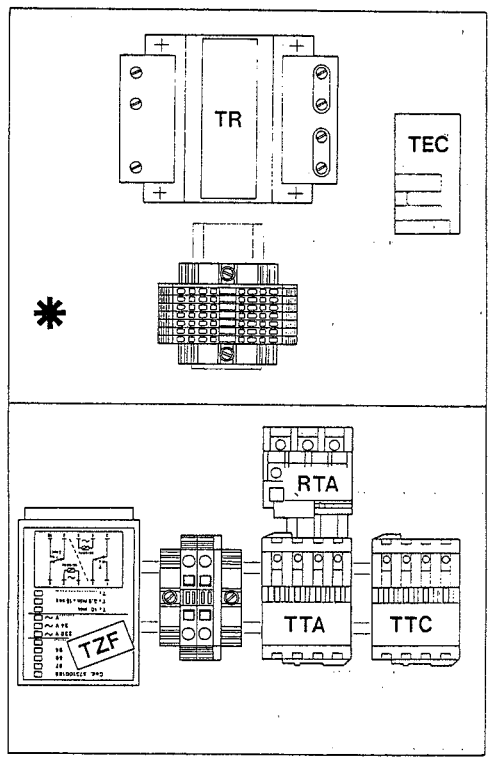
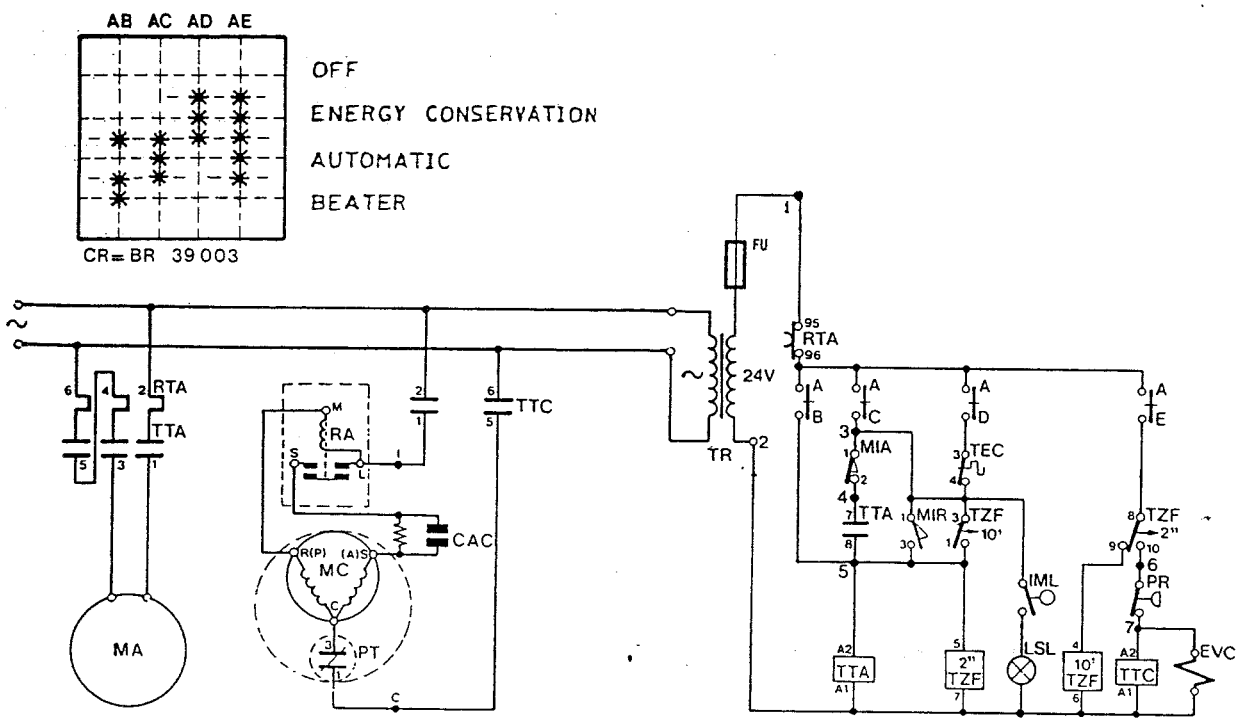


fig. 9

Model UC-71G Right Side View



Wiring Diagram Model UC-71G



FU - Fuse

PR - Pressure Control

CAC - Starting Capacitor for Compressor Motor

PT - Overload Protector

RTA - Overload Protector for Beater Motor

CR - Rotary Switch

EVC - Cylinder Solenoid Valve

MA - Beater Motor

TR - Transformer

IML - Level magnetic switch

MC - Compressor Motor

MIA - Rear Micro Switch

MIR - Spigot Micro Switch

RA - Compressor Motor Starting Relays

TEC - Storage Thermostat

TTA - Beater Motor Contactor

TTC - Compressor Motor Contactor

TZF - Timer

LSL - Level pilot lamp

figure 10