OPERATOR'S MANUAL

Model 8657
Combo Freezer

Original Operating Instructions

028757-M

6/97 (Original Publication)
(Updated 6/28/2018)

Complete this page for quick reference when service is required:

Taylor Distributor: _____

Address: _____

Phone: _____

Service: _____

Parts: _____

Date of Installation: _____

Information found on the data label:

Model Number: _____

Serial Number: _____

Electrical Specs: Voltage_____ Cycle_____

Phase_____

Maximum Fuse Size: _____ A

Minimum Wire Ampacity: _____ A

Note: *Continuing research results in steady improvements; therefore, information in this manual is subject to change without notice.*

Note: *Only instructions originating from the factory or its authorized translation representative(s) are considered to be the original set of instructions.*

028757-M

TAYLOR®

Taylor Company
750 N. Blackhawk Blvd.
Rockton, IL 61072

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The following are general installation instructions. For complete installation details, please see the checkout card.

Installer Safety

IMPORTANT! *In all areas of the world, machines should be installed in accordance with existing local codes. Please contact your local authorities if you have any questions.*

Care should be taken to ensure that all basic safety practices are followed during the installation and servicing activities related to the installation and service of Taylor machines.

- *Only authorized Taylor service personnel should perform installation and repairs on the machine.*
- *Authorized service personnel should consult OSHA Standard 29CFRI910.147 or the applicable code of the local area for the industry standards on lockout/tagout procedures before beginning any installation or repairs.*
- *Authorized service personnel must ensure that the proper personal protective equipment (PPE) is available and worn when required during installation and service.*
- *Authorized service personnel must remove all metal jewelry, rings, and watches before working on electrical equipment.*

DANGER! The main power supply(s) to the machine must be disconnected prior to performing any repairs. Failure to follow this instruction may result in personal injury or death from electrical shock or hazardous moving parts, as well as poor performance or damage to the machine.

Note: *All repairs must be performed by an authorized Taylor service technician.*

WARNING! This machine has many sharp edges that can cause severe injuries.

Site Preparation

Review the area the machine is to be installed in before uncrating the machine, making sure that all possible hazards the user or equipment may come into have been addressed.

For Indoor Use Only: This machine is designed to operate indoors, under normal ambient temperatures of 70°F to 75°F (21°C to 24°C). The machine has successfully performed in high ambient temperatures of 104°F (40°C) at reduced capacities.

WARNING! This machine must **NOT** be installed in an area where a water jet or hose can be used. **NEVER** use a water jet or hose to rinse or clean the machine. Failure to follow this instruction may result in electrocution.

CAUTION! This machine must be installed on a level surface to avoid the hazard of tipping. Extreme care should be taken in moving this machine for any reason. Two or more persons are required to safely move this machine. Failure to comply may result in personal injury or machine damage.

Uncrate the machine and inspect it for damage. Report any damage to your Taylor distributor.

This piece of equipment is made in the USA and has USA sizes of hardware. All metric conversions are approximate and vary in size.

Air-Cooled Machines

Do not obstruct air intake and discharge openings.

Air-cooled machines require a minimum of 3 in. (76 mm) of clearance around **all** sides of the freezer and 12 in. (305 mm) on top to allow for adequate air flow across the condensers. Failure to allow adequate clearance can reduce the refrigeration capacity of the freezer and possibly cause permanent damage to the compressor.

Water Connections

Water-Cooled Machines Only: An adequate cold water supply must be provided with a hand shutoff valve. On the underside rear of the base pan, two 1/2 in. IPS (iron pipe size) water connections for inlet and outlet have been provided for easy hookup. The 1/2 in. (12.7 mm) inside diameter water lines should be connected to the machine. Flexible lines are recommended if local codes permit. Depending on local water conditions, it may be advisable to install a water strainer to prevent foreign substances from clogging the automatic water valve. There will be only one water **in** and one water **out** connection. **Do not** install a hand shutoff valve on the water **out** line. Water should always flow in this order: first, through the automatic water valve; second, through the condenser; third, through the outlet fitting to an **open trap drain.**

IMPORTANT! *A backflow prevention device is required on the incoming water connection side. Please see the applicable national, state, and local codes for determining the proper configuration.*

Electrical Connections

IMPORTANT! *In the United States, this machine is intended to be installed in accordance with the National Electrical Code (NEC), ANSI/NFPA 701987. The purpose of the NEC code is the practical safeguarding of persons and property from hazards arising from the use of electricity. This code contains provisions considered necessary for safety.*

In all other areas of the world, the machine should be installed in accordance with the existing local codes. Please contact your local authorities.

Each machine requires one power supply for each data label on the machine. Check the data label(s) on the machine for branch circuit overcurrent protection or fuse, circuit ampacity, and other electrical specifications.

See the wiring diagram provided inside the electrical box for proper power connections.

FOLLOW YOUR LOCAL ELECTRICAL CODES.

WARNING! This machine must be properly grounded! Failure to do so can result in severe personal injury from electrical shock!

IMPORTANT! *This machine is provided with an equipotential grounding lug that is to be properly attached to the rear of the frame by the authorized installer. The installation location is marked by the equipotential bonding symbol (5021 of IEC 60417-1) on the removable panel and the frame.*

NOTICE!

- Stationary machines which are not equipped with a power cord and a plug or another device to disconnect the machine from the power source must have an all-pole disconnecting device with a contact gap of at least 0.125 in. (3 mm) installed in the external installation.
- Machines that are permanently connected to fixed wiring and for which leakage currents may exceed 10 mA, particularly when disconnected or not used for long periods, or during initial installation, shall have protective devices to protect against the leakage of current, such as a GFI, installed by the authorized personnel to the local codes.
- Supply cords used with this machine shall be oil-resistant, sheathed flexible cable not lighter than ordinary polychloroprene or other equivalent synthetic elastomer-sheathed cord (code designation 60245 IEC 57) installed with the proper cord anchorage to relieve conductors from strain, including twisting, at the terminals and protect the insulation of the conductors from abrasion.
- If the supply cord is damaged, it must be replaced by the manufacturer, service agent, or a similarly qualified person in order to avoid a hazard.

Beater Rotation

NOTICE! Beater rotation must be clockwise as viewed looking into the freezing cylinder.

Note: *The following procedures must be performed by an authorized Taylor service technician.*

To correct the rotation on a three-phase machine, interchange any two incoming power supply lines at the freezer main terminal block only.

To correct rotation on a single-phase machine, change the leads inside the beater motor. (Follow the diagram printed on the motor.)

Electrical connections are made directly to the terminal block provided in the splice boxes which are mounted behind the left and right upper side panels.

Refrigerant

CAUTION! In consideration of our environment, Taylor uses only earth-friendly HFC refrigerants. The HFC refrigerant used in this machine is R404A. This refrigerant is generally considered nontoxic and nonflammable, with an ozone-depleting potential (ODP) of zero (0). However, any gas under pressure is potentially hazardous and must be handled with caution.

NEVER fill any refrigerant cylinder completely with liquid. Filling the cylinder to approximately 80% will allow for normal expansion.

WARNING! Refrigerant liquid sprayed onto the skin may cause serious damage to tissue. Keep eyes and skin protected. If refrigerant burns should occur, flush the area immediately with cold water. If burns are severe, apply ice packs and contact a physician immediately.

NOTICE! Taylor reminds technicians to be aware of government laws regarding refrigerant recovery, recycling, and reclaiming systems. If you have any questions regarding these laws, please contact the factory service department.

IMPORTANT! *R404A refrigerant used in conjunction with polyolester oils is extremely moisture absorbent. When opening a refrigeration system, the maximum time the system is open must not exceed 15 minutes. Cap all open tubing to prevent humid air or water from being absorbed by the oil.*

Notes:

Section 2 To the Operator

The freezer you have purchased has been carefully engineered and manufactured to give you dependable operation. The Taylor Model 8657, when properly operated and cared for, will produce a consistent quality product. Like all mechanical products, this machine will require cleaning and maintenance. A minimum amount of care and attention is necessary if the operating procedures outlined in this manual are followed closely.

IMPORTANT! *This manual should be read before operating or performing any maintenance on your machine.*

Your Taylor freezer will **NOT** eventually compensate and correct for any errors during the setup or filling operations. Thus, the initial assembly and priming procedures are of extreme importance. It is strongly recommended that all personnel responsible for the equipment's operation study these procedures together in order to be properly trained and to make sure that no misunderstandings exist.

If you require technical assistance, please contact your local authorized Taylor distributor.

Note: *Warranty is valid only if the parts are authorized Taylor parts purchased from an authorized Taylor distributor and if the required service work is provided by an authorized Taylor service technician. Taylor reserves the right to deny warranty claims on equipment or parts if parts not approved by Taylor or incorrect refrigerant were installed in the machine, system modifications were performed beyond factory recommendations, or it is determined that the failure was caused by neglect or abuse.*

Note: *Constant research results in steady improvements; therefore, information in this manual is subject to change without notice.*

IMPORTANT! *If the crossed-out waste container symbol is affixed to this product, it signifies that this product is compliant with the EU Directive as well as other similar legislation in effect after August 13, 2005. Therefore, it must be collected separately after its use is completed, and cannot be disposed as unsorted municipal waste.*

The user is responsible for delivering the product to the appropriate collection facility, as specified by your local code.

Compressor Warranty Disclaimer

The refrigeration compressor(s) on this machine are warranted for the term indicated on the warranty card accompanying this machine. However, due to the Montreal Protocol and the U.S. Clean Air Act Amendments of 1990, many new refrigerants are being tested and developed, thus seeking their way into the service industry. Some of these new refrigerants are being advertised as drop-in replacements for numerous applications. It should be noted that, in the event of ordinary service to this machine's refrigeration system, **only the refrigerant specified on the affixed data label should be used.** The unauthorized use of alternate refrigerants will void your compressor warranty. It will be the owner's responsibility to make this fact known to any technician he employs.

It should also be noted that Taylor does not warrant the refrigerant used in its equipment. For example, if the refrigerant is lost during the course of ordinary service to this machine, Taylor has no obligation to either supply or provide its replacement either at billable or unbillable terms. Taylor does have the obligation to recommend a suitable replacement if the original refrigerant is banned, obsoleted, or no longer available during the five-year warranty of the compressor.

Taylor will continue to monitor the industry and test new alternates as they are being developed. Should a new alternate prove, through our testing, that it would be accepted as a drop-in replacement, then the above disclaimer would become null and void. To find out the current status of an alternate refrigerant as it relates to your compressor warranty, call the local Taylor distributor or the Taylor factory. Be prepared to provide the model and serial number of the machine in question.

Installer Information

We at the Taylor Company are concerned about the safety of the operator when he or she comes in contact with the freezer and its parts. Taylor has gone to extreme efforts to design and manufacture built-in safety features to protect both you and the service technician. For example, warning labels have been attached to the freezer to further point out safety precautions to the operator.

 **DANGER!** Failure to adhere to the following safety precautions may result in severe personal injury or death. Failure to comply with these warnings may also damage the machine and/or its components. Such damage may require component replacement and service repair expenses.

 **NOTICE! DO NOT** operate the machine without reading the Operator Manual. Failure to follow this instruction may result in machine damage, poor machine performance, health hazards, or personal injury.

 ***IMPORTANT!*** *This machine is provided with an equipotential grounding lug that is to be properly attached to the rear of the frame by the authorized installer. The installation location is marked by the equipotential bonding symbol (5021 of IEC 60417-1) on the removable panel and the frame.*

 **WARNING! DO NOT** use a water jet to clean or rinse the machine. Failure to follow these instructions may result in serious electrical shock.

 **WARNING!** Avoid injury.

- **DO NOT** operate the machine unless it is properly grounded.
- **DO NOT** operate the machine with larger fuses than specified on the data label.
- All repairs must be performed by an authorized Taylor service technician.
- The main power supplies to machine must be disconnected prior to performing repairs.
- **For Cord-Connected Machines:** Only authorized Taylor service technicians or licensed electricians may install a plug or replacement cord on the machine.
- Stationary machines which are not equipped with a power cord and a plug or another device to disconnect the machine from the power source must have an all-pole disconnecting device with a contact gap of at least 0.125 in. (3 mm) installed in the external installation.
- Machines that are permanently connected to fixed wiring and for which leakage currents may exceed 10 mA, particularly when disconnected or not used for long periods, or during initial installation, shall have protective devices to protect against the leakage of current, such as a GFI, installed by the authorized personnel to the local codes.
- Supply cords used with this machine shall be oil-resistant, sheathed flexible cable not lighter than ordinary polychloroprene or other equivalent synthetic elastomer-sheathed cord (code designation 60245 IEC 57) installed with the proper cord anchorage to relieve conductors from strain, including twisting, at the terminals and protect the insulation of the conductors from abrasion.
- If the supply cord is damaged, it must be replaced by the manufacturer, service agent, or a similarly qualified person, in order to avoid a hazard.

WARNING! Avoid injury.

- **DO NOT** allow untrained personnel to operate this machine.
- **DO NOT** put objects or fingers in the door spout.
- **DO NOT** operate the machine unless all service panels and access doors are restrained with screws.
- **DO NOT** remove the machine door or beater assembly unless the control switches are in the OFF position.

WARNING! This machine has many sharp edges that can cause severe injuries.

- **DO NOT** put objects or fingers in the door spout. This may contaminate the product and cause severe personal injury from blade contact.
- **USE EXTREME CAUTION** when removing the beater assembly. The scraper blades are very sharp.

WARNING! Parts of this machine have sharp edges. Two people are required to move the cup/cone dispenser. Protective gloves must be worn, and the mounting holes must **NOT** be used to lift or hold the dispenser. Failure to follow this instruction can result in personal injury to fingers or equipment damage.

CAUTION! This machine must be placed on a level surface. Failure to comply may result in personal injury or machine damage.

NOTICE! Cleaning and sanitizing schedules are governed by your federal, state, or local regulatory agencies and must be followed accordingly. Please see the cleaning section of this manual for the proper procedure to clean this machine.

DO NOT obstruct air intake and discharge openings.

Air-cooled machines require a minimum of 3 in. (76 mm) of clearance around all sides of the freezer and 12 in. (305 mm) on top to allow for adequate air flow across the condensers. Failure to allow adequate clearance can reduce the refrigeration capacity of the freezer and possibly cause permanent damage to the compressor.

For Indoor Use Only: This machine is designed to operate indoors, under normal ambient temperatures of 70°F to 75°F (21°C to 24°C). The freezer has successfully performed in high ambient temperatures of 104°F (40°C) at reduced capacities.

Noise Level: Airborne noise emission does not exceed 78 dB(A) when measured at a distance of 39 in. (1.0 m) from the surface of the machine and at a height of 62 in. (1.6 m) from the floor.

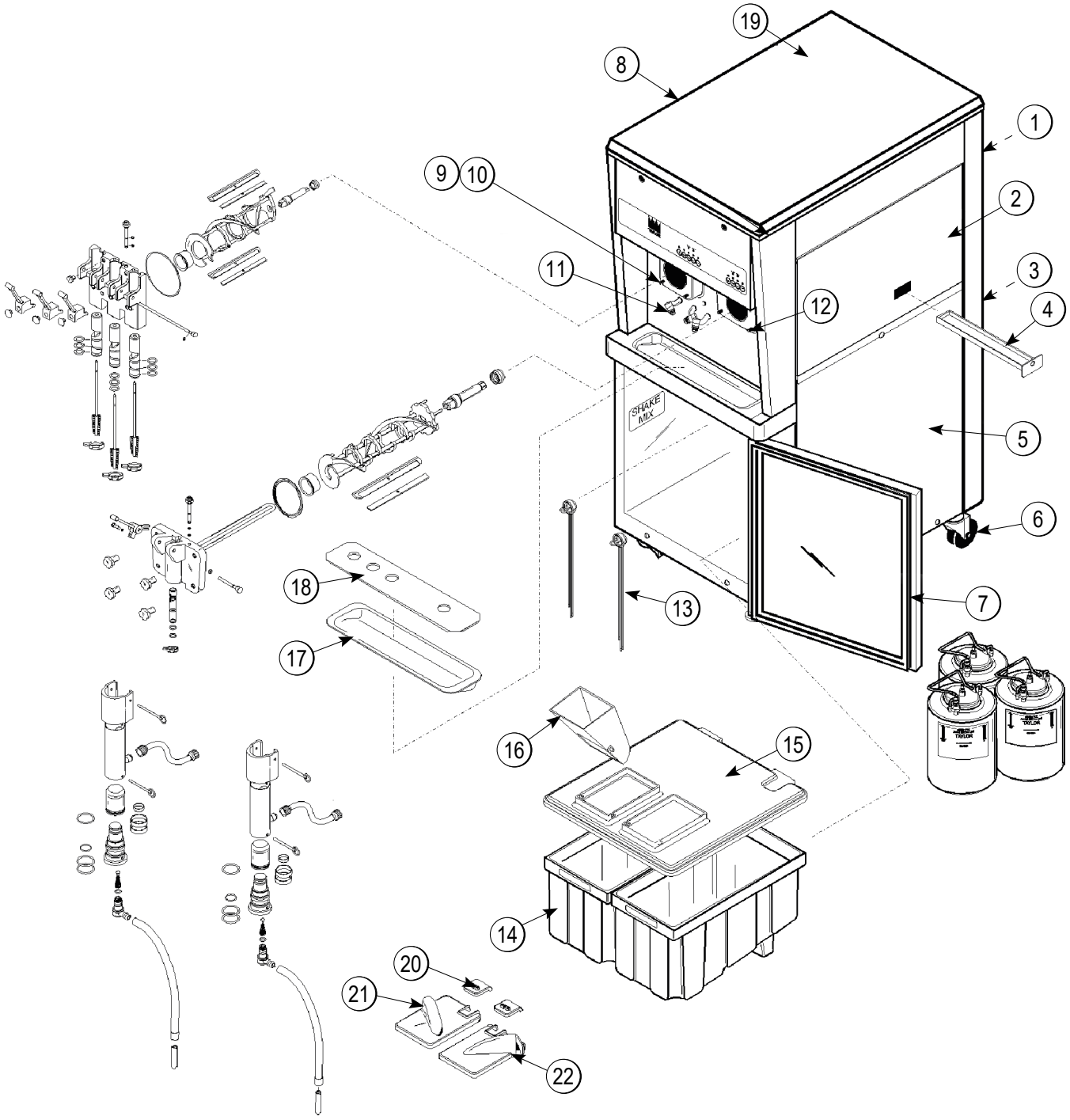

Figure 4-1

Parts Identification

Item	Description	Part No.
1	Panel- Upper Rear	022015
2	Panel- Upper Side Right	028600
3	Panel- Lower Rear	025220
4	Pan- Drip 11- 5/8 Long	027503
5	Panel A.- Lower Side (R and L)	X23956
6	Caster- Swivel	021279
7	Gasket- Mix Cabinet Door	024629
8	Panel- Upper Side Left	028638
9	Stud- Upper Freezer (Shake)	023909
10	Stud- Lower Freezer (Shake)	023910
11	Line A.- Syrup- BRN- 120”	X30059- 120
	Line A.-Syrup-WHT-120”	X30060-120
	Line A.-Syrup-RED-120”	X30072-120

Item	Description	Part No.
12	Stud- Nose Cone (Soft Serve)	022822
13	Probe A.- Mix w/Ball Connector	X35981
14	Tank A.- Mix w/Decals	X38755
15	Cover- Mix Tank	024590
16	Funnel- Mix	036637
17	Tray- Drip 22- 7/8 L x 5- 1/8 W	014533
18	Shield- Splash	026039
19	Hood	048526
20	Boot- Mix Cover	037200
21	Cover- Left Mix Storage	037138
22	Cover- Right Mix Storage	037139

Beater Door Assembly–Shake Side

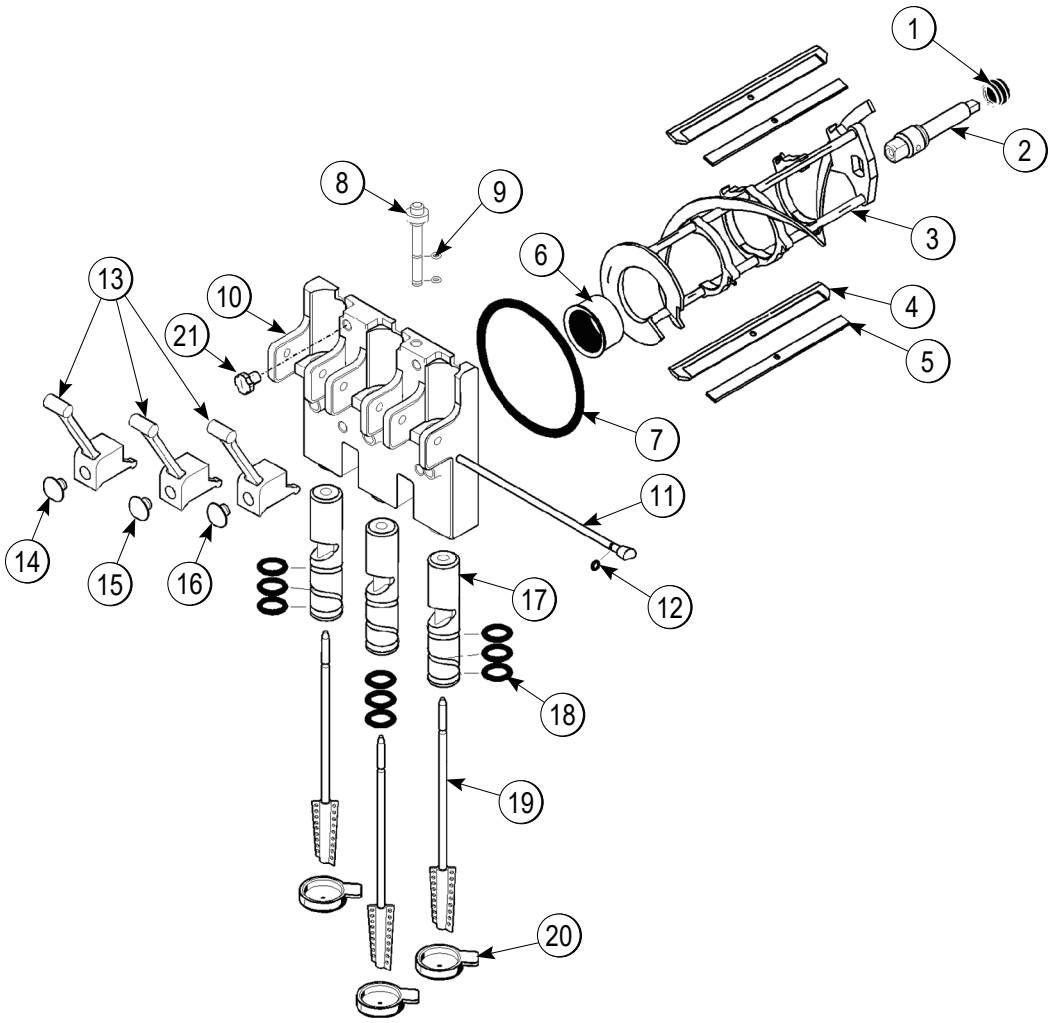

Figure 4-2

Item	Description	Part No.
1	Seal- Drive Shaft	032560
2	Shaft- Beater	032790
3	Beater A.- 7 Qt.- 1 Pin Support	X46233
4	Blade- Scraper- Plastic	046237
5	Clip- Scraper Blade 8.75”	046238
6	Bearing- Front	013116
7	Gasket- Door 5.177 x 5.938	016672
8	Plug- Prime	028805
9	O-ring 3/8 x .070	016137
10	Door A.- 3 Spout Shake	X38815- SER
11	Pin A.- Pivot	X21781

Item	Description	Part No.
12	O-ring 5/16 x .070	016272
13	Handle- Draw Valve	026952
14	Button- Brown	021225- 2
15	Button- Red	021225- 1
16	Button- Plain	021225
17	Valve A.- Draw	X20152
18	O-ring 1- 1/16 x .139	020571
19	Blade A.- Spinner	020112
20	Cap- Restrictor	021183
21	Nut- Stud *General Usage*	021508

Beater Door Assembly–Soft Serve Side

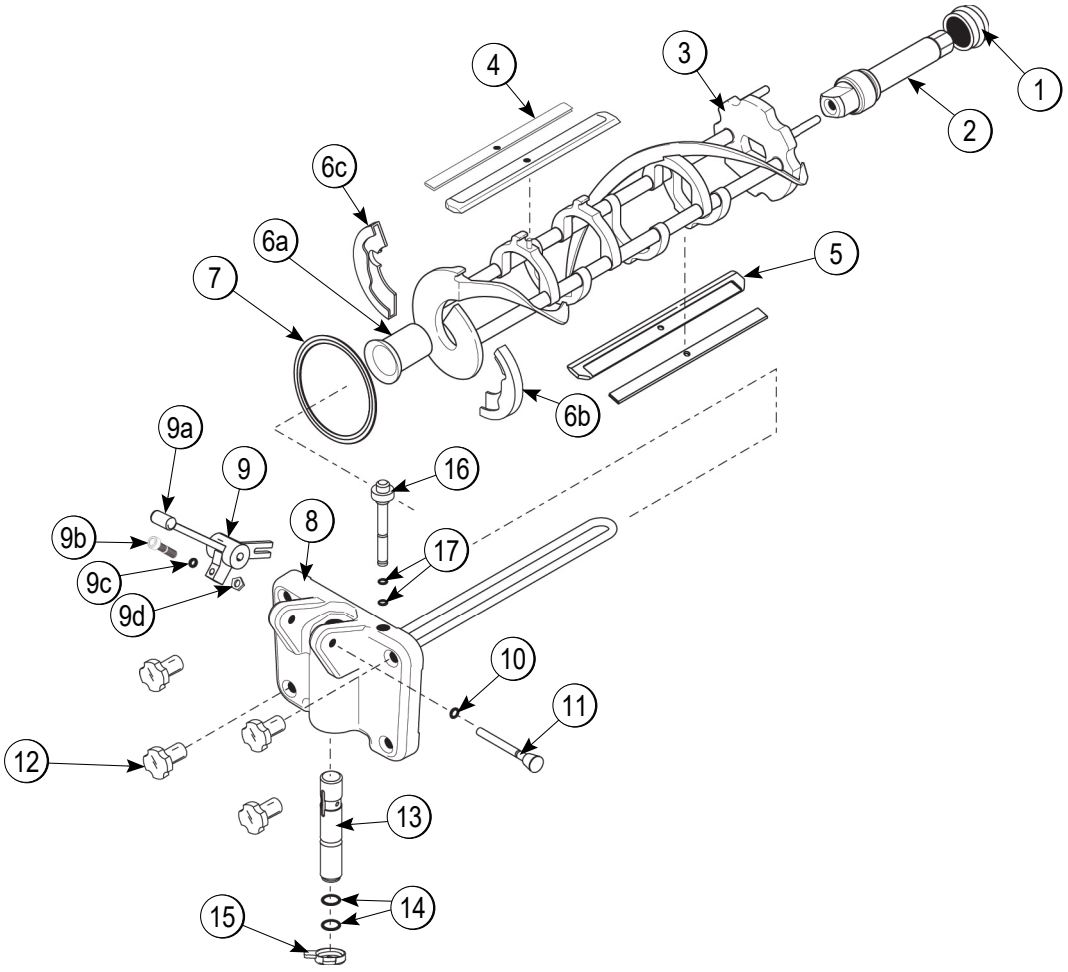

Figure 4-3

Item	Description	Part No.
1	Seal- Drive Shaft	032560
2	Shaft- Beater	032564
3	Beater A.- 3.4 Qt.- 1 Pin	X46231
4	Clip- Scraper Blade 7”	046236
5	Blade- Scraper- Plastic	046235
*6a	Bearing- Front	050348
*6b	Shoe- Front Helix- Front	050347
*6c	Shoe- Front Helix- Rear	050346
7	Gasket- Door HT 4” Double	048926
8	Door A.- 1 Spout Long Baffle	X51531- 10
9	Handle A.- Draw- Adj.	X26996

Item	Description	Part No.
9a	Draw Handle	028804
9b	Screw- Adjustment	026592
9c	O-ring (Adj. Screw)	015872
10	O-ring - 5/16 x .070	016272
11	Pin A.- Pivot	X22820
12	Nut- Stud	021508
13	Valve A.- Draw	X18303
14	O-ring - 7/8 x .103	014402
15	Cap- Design - 1.010”, 6 Point	014218
16	Plug- Prime	028805
17	O-ring - 3/8 x .070	016137

*Order Kit X50350.

Pump Assembly–Shake Side

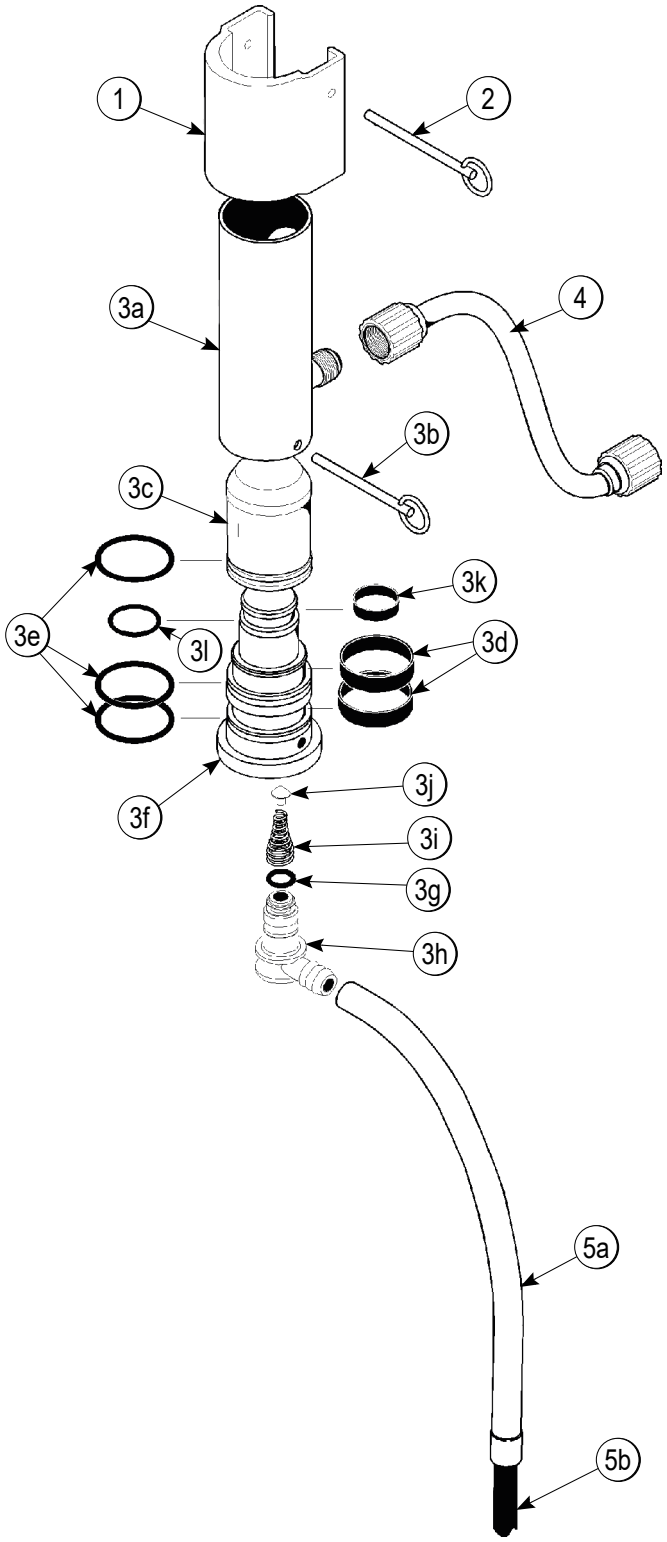

Figure 4-4

Item	Description	Part No.
1	Cap- Pump	021276- 9
2	Pin- Retaining	021276- 8
3	Pump Assembly	X33450
3a	Cylinder A.- Pump	022345- 1
3b	Pin- Retaining	021276- 8
3c	Piston	032733
3d	Ring- Check 2” OD x 1/2	020050
3e	O-ring - 2- 1/8 OD x .139 W	020051
3f	Body- Valve	X33451
3g	O-ring - 13/16 OD x .139 W	021278
3h	Elbow- Inlet 90 Degree	022502- 4
3i	Spring- Tapered 1- 7/8 L	022456
3j	Poppet- Rubber- Black	022473
3k	Ring- Check - 1- 1/4 OD x 3/8	033215
3l	O-ring - 1- 3/8 OD x .103 W	018664
4	Line A.- Flare	038299
5	Tube A.- Suction	X37293
5a	Tube- Vinyl 5/8 ID x 1/8 W	020945- 18
5b	Counterweight- Suction Tube	020452

Pump Assembly–Soft Serve Side

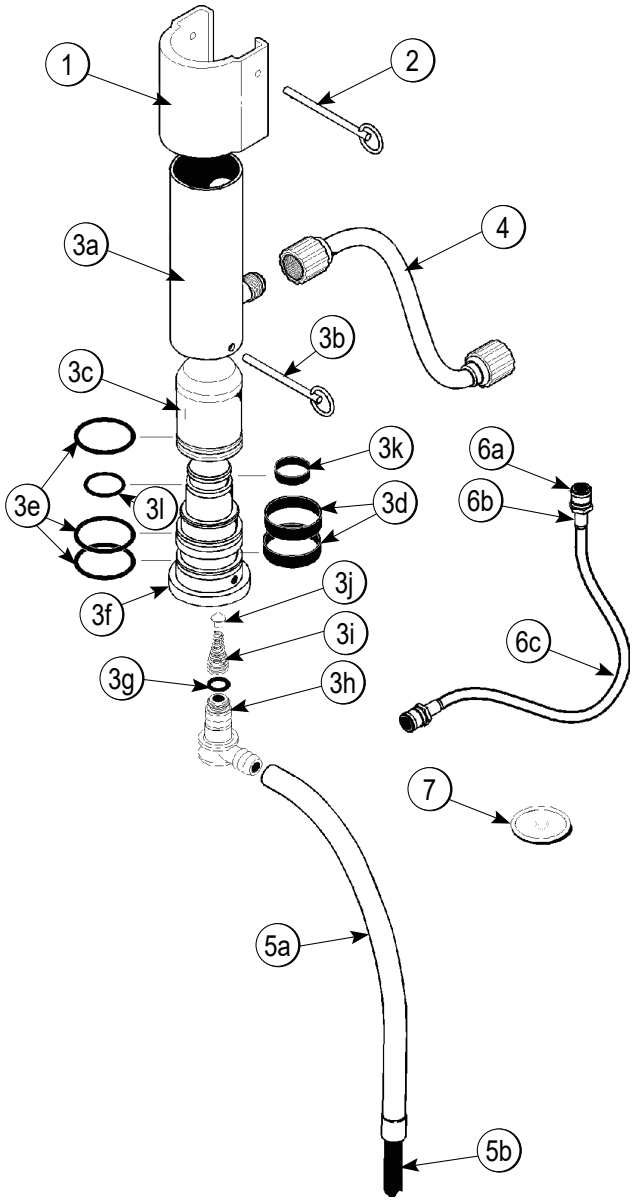

Figure 4-5

Item	Description	Part No.
1	Cap- Pump	021276- 9
2	Pin- Retaining	021276- 8
3	Pump Assembly	X36300
3a	Cylinder A.- Pump	X23420
3b	Pin- Retaining	021276- 8
3c	Piston	032733
3d	Ring- Check 2” OD x 1/2	020050
3e	O-ring - 2- 1/8 OD x .139 W	020051
3f	Body- Valve	X36419
3g	O-ring - 13/16 OD x .139 W	021278
3h	Elbow- Inlet 90 Degree	022502- 4
3i	Spring- Tapered 1- 7/8 L	022456
3j	Poppet- Rubber- Black	022473
3k	Ring- Check - 1- 1/4 OD x 3/8	033215
3l	O-ring - 1- 3/8 OD x .103 W	018664
4	Line A.- Flare	038299
5	Tube A.- Suction	X37293
5a	Tube- Vinyl 5/8 x 1/8	020945- 18
5b	Counterweight- Suction Tube	020452
6	Line A.- Pump Pressure	X27139
6a	Socket- Q.D. - 3/16 Barb	020021
6b	Ferrule- 3/8 OD Brass	030553
6c	Tube- Vinyl - 3/16 x 1/16	020940- 16
7	Diaphragm- Pressure Switch	020249

Syrup Tank

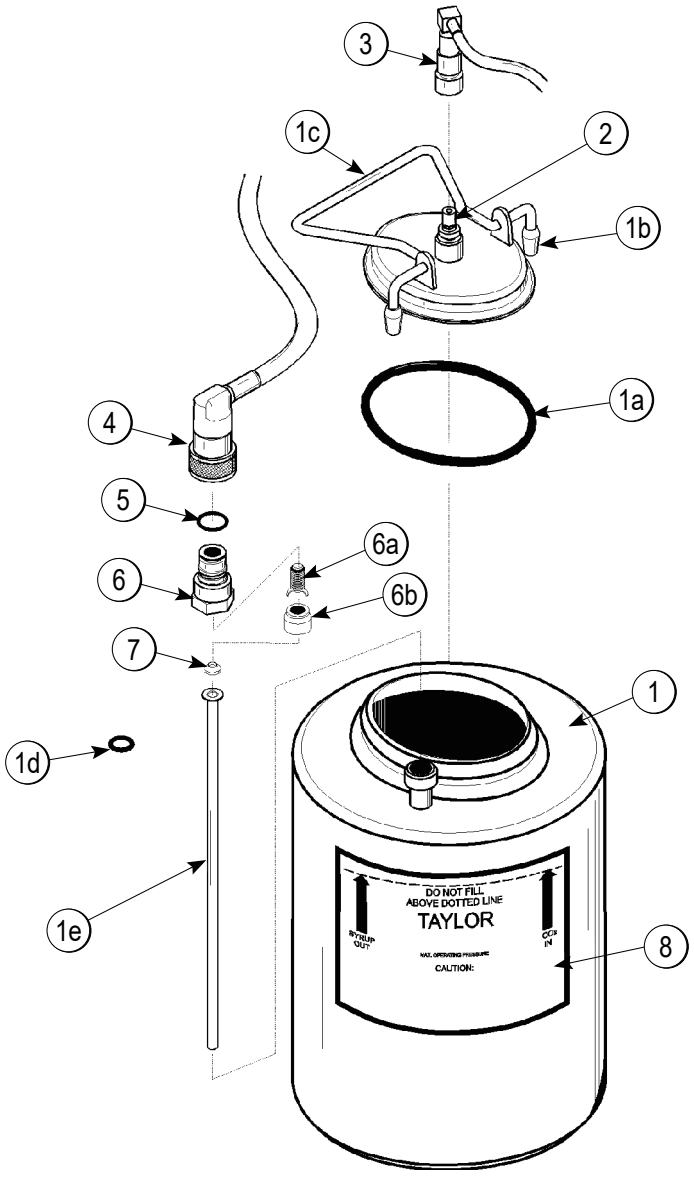

Figure 4-6

Item	Description	Part No.
1	Syrup Tank	035759
1a	O-ring - 3.437 ID	016037
1b	Tip- Nylon	024261
1c	Cover- Tank	035759- 1
1d	O-ring - .291 ID	018550
1e	Dip Tube	020577- 4
2	Plug--Q.D. -- CO2	021077
3	Socket--Q.D. --CO2	021524

Item	Description	Part No.
4	Socket- Q.D. - Liquid	021026
5	O-ring - 5/8 OD	016030
6	Plug- Q.D. - Liquid	021081
6a	Valve and Spring	021081- 2
6b	Insert - Q.D. Plug	021081- 1
7	Washer- 1/4 Flare	018595
8	Decal- Syrup Tank	045533- 1

Accessories

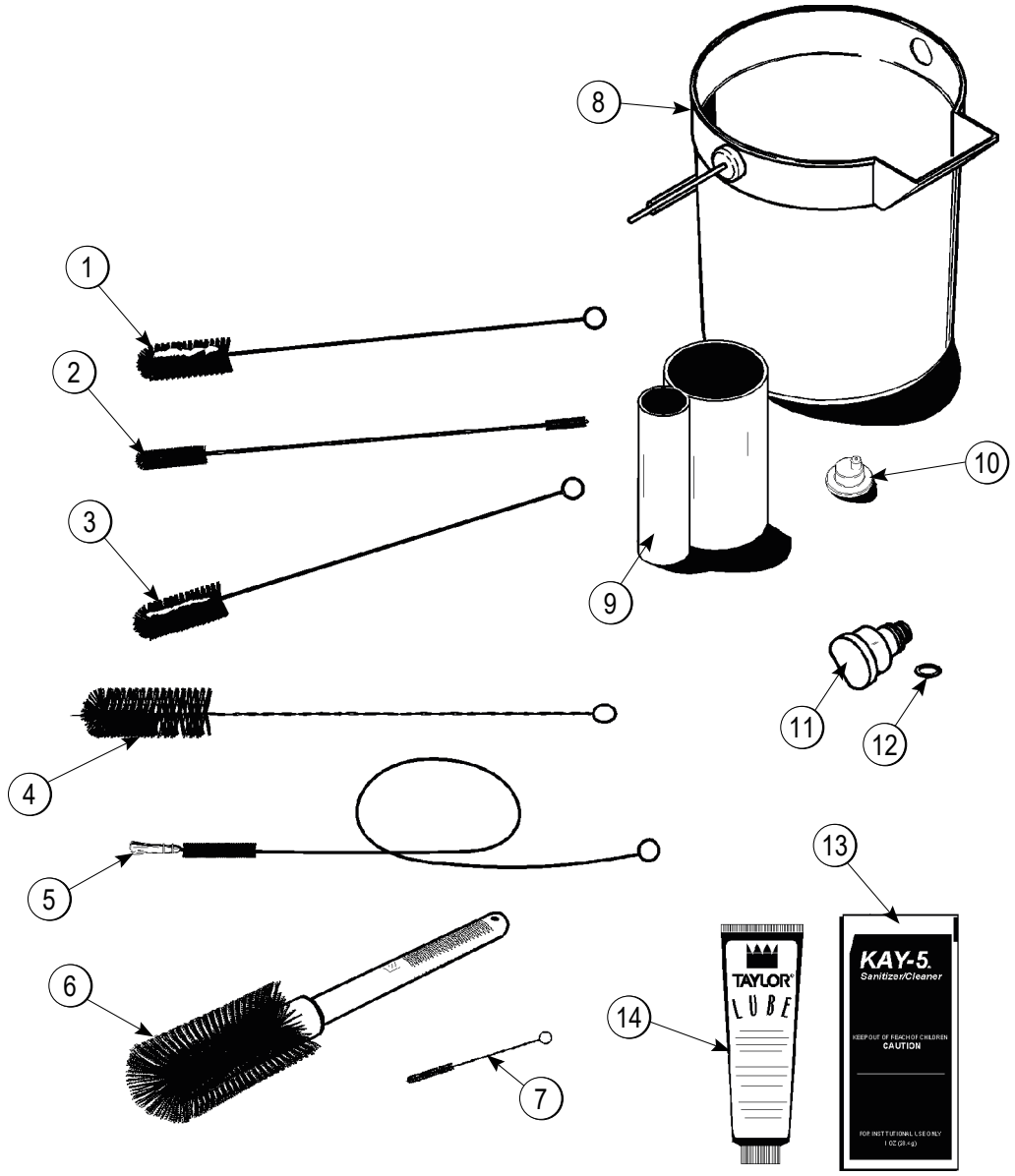

Figure 4-7

Item	Description	Part No.
1	Brush- Rear Bearing - 1” x 2”	013071
2	Brush- Double Ended	013072
3	Brush- Draw Valve 1” x 2” x 17”	013073
4	Brush- Draw Valve 1- 1/2” OD	014753
5	Brush- Feed Tube 9/16 x 44	021101
6	Brush- Mix Pump Body- White	023316
7	Brush- Pressure Switch 1/8” Dia.	027647

Item	Description	Part No.
8	Pail-Mix 10 Qt.	013163
9	Cup-Divided Syrup	017203
10	Sampler-Syrup	024874
11	Plug-Syrup Hole	026278
12	O-ring - 1/2 OD x .070 W	024278
13	Sanitizer-Kay 5® (125 Packets)	041082
14	Lubricant-Taylor (4 oz.)	047518

Notes:

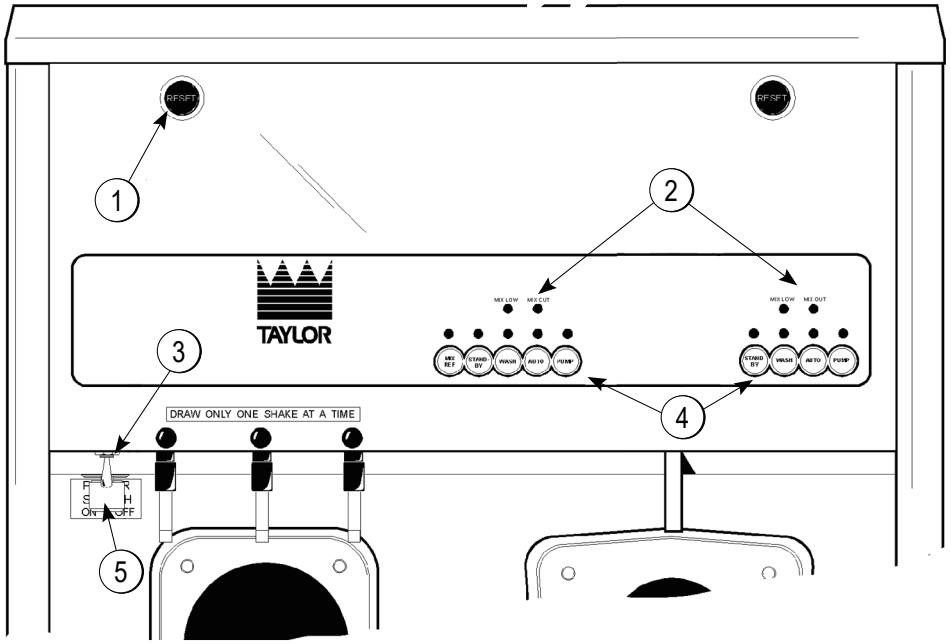

Figure 5-1

Item	Description
1	RESET Button
2	Indicator Lights
3	POWER Switch
4	Control Keys
5	Thermistor Control

POWER Switch

When placed in the ON position, the POWER Switch allows Softech™ control panel operation.

RESET Button

The RESET button is located in the decorative plate above the Softech controls. A reset mechanism protects the beater motor from an overload condition. Should an overload occur, the reset mechanism will trip. To properly reset the freezer, turn the POWER switch to the OFF position. Press the RESET button firmly. Turn the power switch to the ON position. Press the WASH key and observe the freezer's performance.

Open the side access panel to check if the beater motor is turning the drive shaft in a clockwise (from operator end) direction without binding.

If it is turning properly, press the WASH key to cancel the cycle. Press the AUTO key on both sides to resume normal operation. If the reset mechanism trips again, contact your authorized Taylor distributor to resolve the problem of the beater motor going out on reset.

Indicator Lights–MIX LOW/MIX OUT

When the MIX LOW indicator light begins to flash, the mix tank has a low supply of mix and should refilled as soon as possible. When the MIX OUT indicator light begins to flash, the mix tank has been almost completely exhausted and has an insufficient supply of mix to operate the freezer. At this time, the Standby and Auto modes are locked out and the freezer shuts down. To initiate the refrigeration system, add mix to the tank and press the AUTO key. The freezer will automatically begin operation.

MIX REF Key

When the MIX REF key is pressed, the indicator light comes on, indicating that the mix cabinet refrigeration system is operating. Pressing the AUTO key on either side of the freezer, the Mix Ref function is automatically turned on. The Mix Ref function cannot be cancelled unless the Auto or Standby mode is cancelled first.

STANDBY Key

The Separate Hopper Refrigeration (SHR) system and the Cylinder Temperature Retention (CTR) system are standard features. The SHR system incorporates the use of a separate small refrigeration system to maintain the mix in the reservoir to below 40°F (4.4°C) to ensure bacteria control. The CTR works with the SHR to maintain a good quality product during long inactive periods. It becomes necessary to warm the product in the freezing cylinder to approximately 35°F to 40°F (1.7°C to 4.4°C) to prevent overbeating and product breakdown.

To activate the SHR and CTR systems, press the STANDBY key. When the STANDBY key is pressed, the indicator light comes on, indicating the CTR system has been activated. In the Standby mode, the Wash, Pump, and Auto functions are automatically cancelled. The Mix Ref function is automatically locked in to maintain the mix in the cabinet.

To resume normal operation, press the STANDBY key to cancel the cycle, and then press the AUTO key. When the machine cycles off, the product in the freezing cylinder will be at serving viscosity.

WASH Key

When the WASH key is pressed, the indicator light comes on, indicating beater motor operation. The Standby or Auto modes must be cancelled first to activate the Wash mode.

AUTO Key

When the AUTO key is pressed, the indicator light comes on, indicating that the main refrigeration system has been activated. In the Auto mode, the Wash or Standby functions are automatically cancelled. The Mix Ref function is automatically locked in to maintain the mix in the cabinet, and the Pump function is locked in to allow coaxial air/mix pump operation as required.

PUMP Key

When the PUMP key is pressed, the indicator light comes on, indicating that the coaxial air/mix pump will operate as required.

Note: *An indicating light and an audible tone will sound whenever a mode of operation has been pressed. To cancel any function, press the mode again; the indicating light and mode of operation will shut off.*

Thermistor Control–Shake Side

The product temperature is adjusted by means of a thermistor control. Located just above the freezer door on the shake side is the thermistor control knob. Turning the adjusting knob clockwise decreases product temperature. Turning the adjusting knob counterclockwise increases the temperature. Each half turn will vary the temperature approximately 2°F (1.1°C). Allow the refrigeration system to cycle on and off two or three times before the adjusted temperature can be evaluated.

Adjustable Draw Handle–Soft Serve Side

The soft serve side features an adjustable draw handle to provide the best portion control, giving more consistency to your product, and controlling costs. The draw handle should be adjusted to provide a flow rate of 5 oz. to 7-1/2 oz. (142 g to 212 g) of product by weight per 10 seconds. To **increase** the flow rate, turn the screw **counterclockwise**. To **decrease** the flow rate, turn the screw **clockwise**. In addition, for purposes of **sanitizing** and **rinsing**, the flow rate can be increased by removing the pivot pin and placing the restrictive bar on the **top.** When drawing product, **always** have the restrictive bar on the **bottom.**

Liquid Valve Body Removal Tool

This tool was designed to help remove the valve body from the pump cylinder. Remove the suction line, flare line, retaining pin, and mix inlet fitting from the pump cylinder. Turn the coaxial air/mix pump assembly upside-down. Insert the curved end under the edge of the valve body and pull down.

This will enable you to easily pull the valve body out of the pump cylinder. To remove the piston, push down from the top end of the pump cylinder. To prevent breakage, do not allow the piston to fall free.

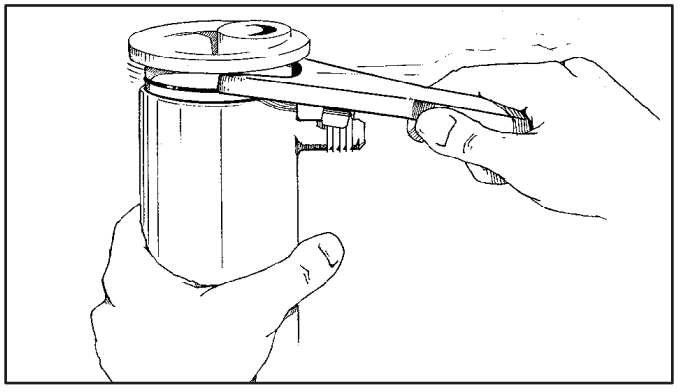

Figure 5-2

Syrup Line Fitting with Clean-Out Feature

During daily operation, hardened syrup could get lodged in the syrup line fitting. To clear the syrup line of restrictions, follow these steps.

1. Prepare a mix pail with cleaning solution.
2. Disconnect the restricted syrup line at the syrup tank and at the freezer door.
3. Place the syrup sampler on the syrup line fitting at the freezer door and press into an empty pail. This will relieve any pressure that might be in the syrup line. Unscrew the cap on the back of the syrup line fitting and pull the cap, spring, and valve out.
4. Rinse the syrup line fitting, cap, spring, and valve in the pail of cleaning solution.
5. Once thoroughly rinsed of any restrictions, place the valve, spring, and cap back inside the syrup line fitting and tighten the cap securely.
6. Reconnect the syrup line fitting at the syrup tank. Calibrate the syrup flow (see page 6-22).

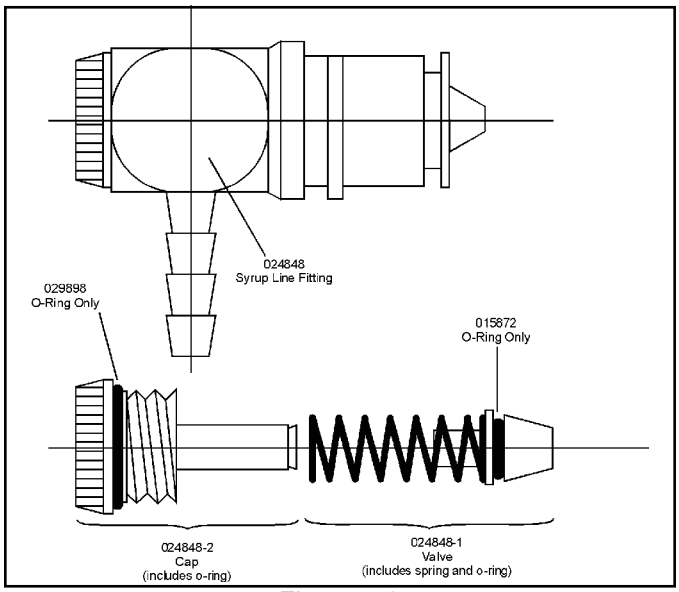

Figure 5-3

Notes:

The Model 8657 is a combination shake and soft serve freezer. It is recommended that these operating procedures be followed closely so that the operating parts for the shake side will not be confused or interchanged with the operating parts for the soft serve side. Parts trays are provided to help keep the various parts separate.

We begin our instructions at the point where we enter the store in the morning and find the parts disassembled and laid out to air dry from the previous night's cleaning.

The following procedures show you how to assemble the parts into the freezer, sanitize them, and prime the freezer with fresh mix in preparation to serve your first portion.

If you are disassembling the machine for the first time or need information to get to this starting point in our instructions, go to "Disassembly" on page 6-26 and start there.

Freezing Cylinder Assembly–Shake Side

Note: *When lubricating parts, use an approved food grade lubricant (example: Taylor Lube).*

1. Install the drive shaft. Lubricate the groove and shaft portion on the beater drive shaft with the square end. Slide the seal onto the shaft and over the groove until it snaps into place. **Do not** lubricate the square end of the drive shaft. Fill the inside portion of the seal with 1/4 in. (6.4 mm) more lubricant and evenly lubricate the end of the seal that fits onto the rear shell bearing.

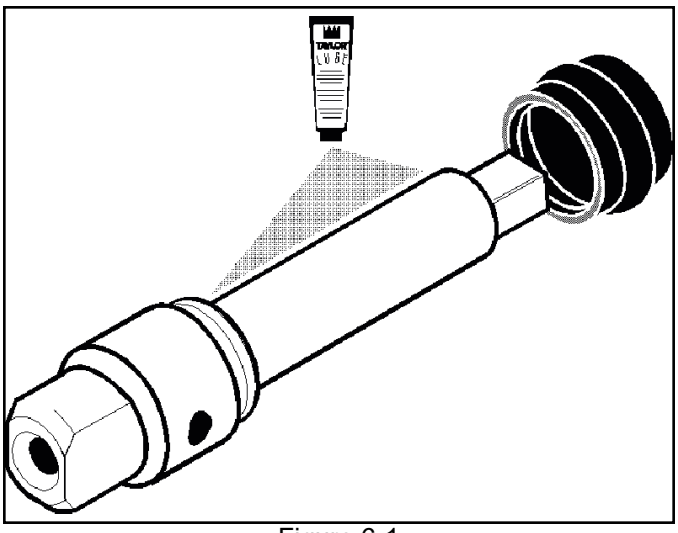

Figure 6-1

2. Install the drive shaft through the rear shell bearing in the freezing cylinder and engage the square end firmly into the gear box coupling. Make sure the drive shaft fits into the drive coupling without binding.

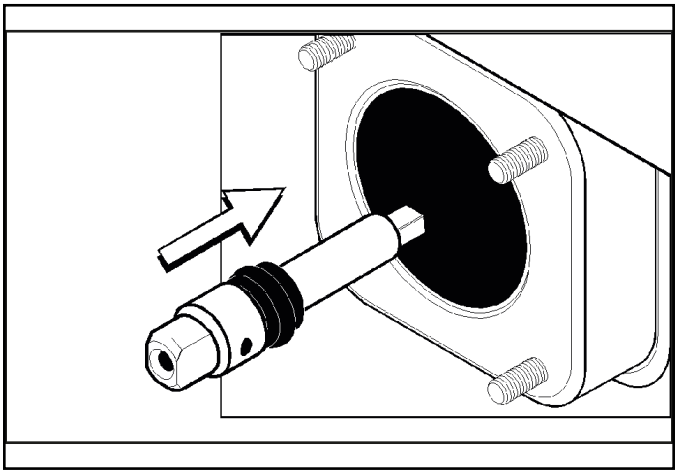

Figure 6-2

3. Install the beater assembly. First check the scraper blades for any nicks or signs of wear. If any nicks are present or if the blade is worn, replace both blades. If the blades are in good condition, place the rear scraper blade over the rear holding pin on the beater.

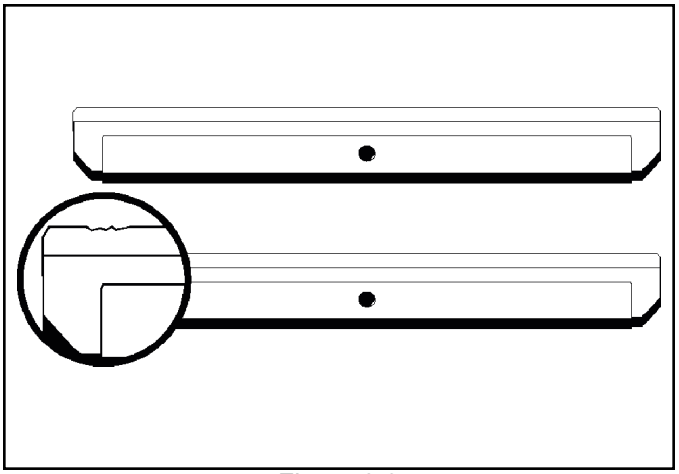

Figure 6-3

Note: *The scraper blade must fit securely over the pin to prevent costly damage.*

4. Holding the rear blade on the beater, slide it into the freezing cylinder halfway. Install the front scraper blade over the front holding pin. Slide the beater assembly the rest of the way into the freezing cylinder.

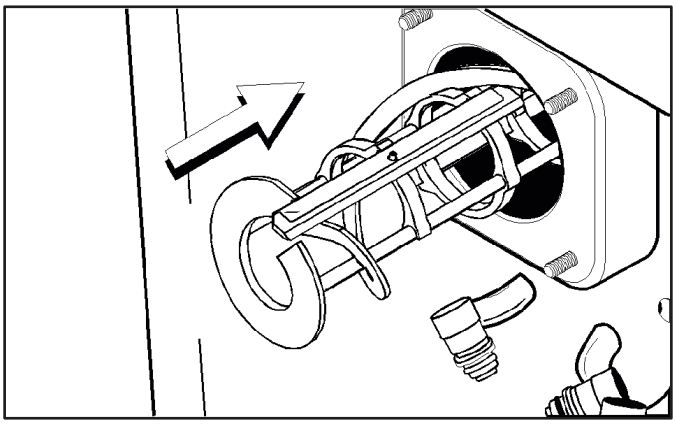

Figure 6-4

Make sure the beater assembly is in position over the drive shaft. Turn the beater slightly to make sure that the beater is properly seated. When in position, the beater will not protrude beyond the front of the freezing cylinder.

5. Place the freezer door gasket into the groove on the back of the freezer door.
6. Slide the front bearing onto the bearing hub so the flanged edge is against the door. **Do not** lubricate the gasket or bearing.

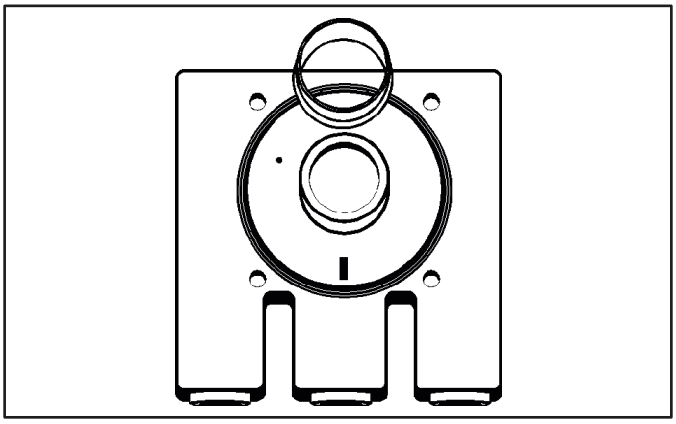

Figure 6-5

7. Slide the two O-rings into the grooves on the prime plug. Apply an even coat of lubricant to the O-rings and shaft.

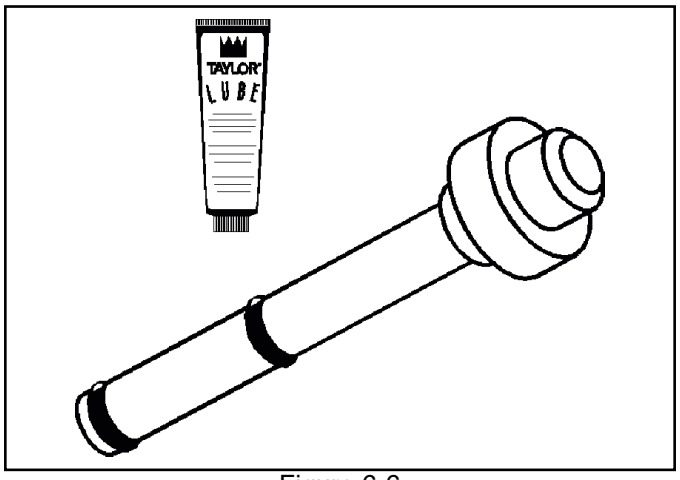

Figure 6-6

8. Insert the prime plug into the hole at the top of the freezer door and push down.

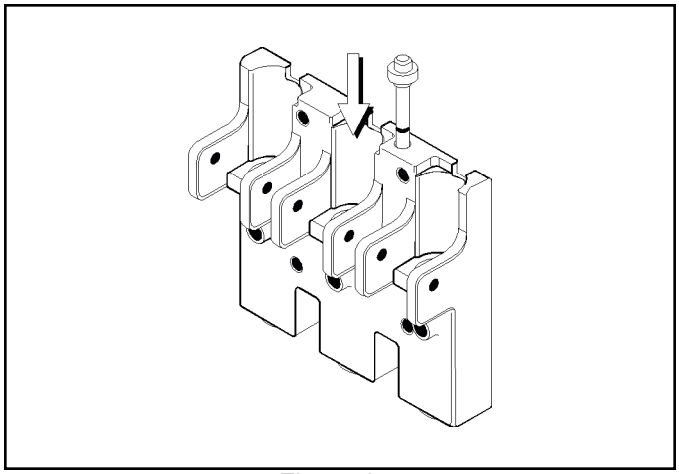

Figure 6-7

9. Position the freezer door on the four studs on the front of the freezing cylinder. Install the handscrews. Tighten equally in a crisscross pattern to ensure that the door is snug.

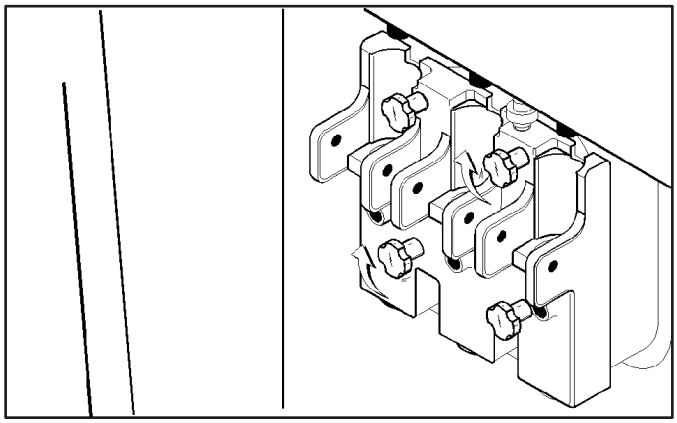

Figure 6-8

10. Install the draw valves. Slide the three O-rings into the grooves on each draw valve, and lubricate.

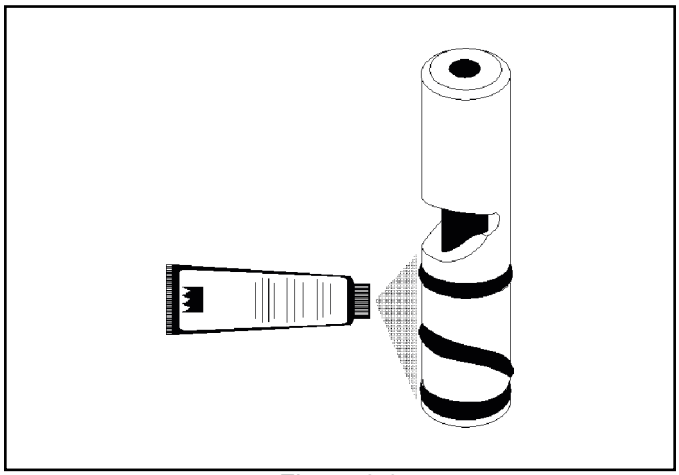

Figure 6-9

11. Lubricate the inside of the freezer door spouts, top and bottom, and insert each draw valve from the **bottom** until the slot in the draw valve comes into view.

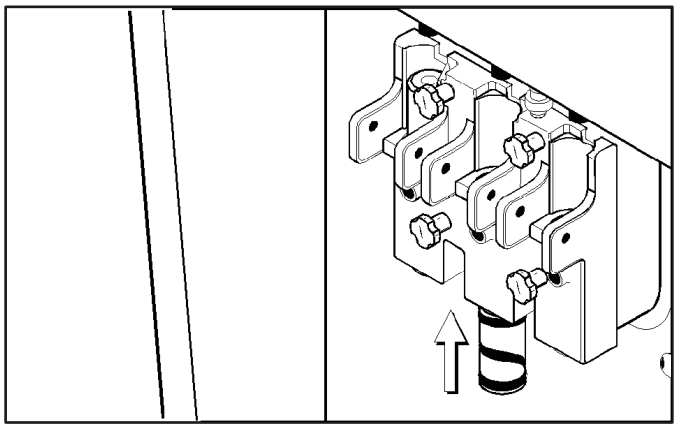

Figure 6-10

12. Install the draw handles. Slide the O-ring into the groove on the pivot pin, and lubricate.

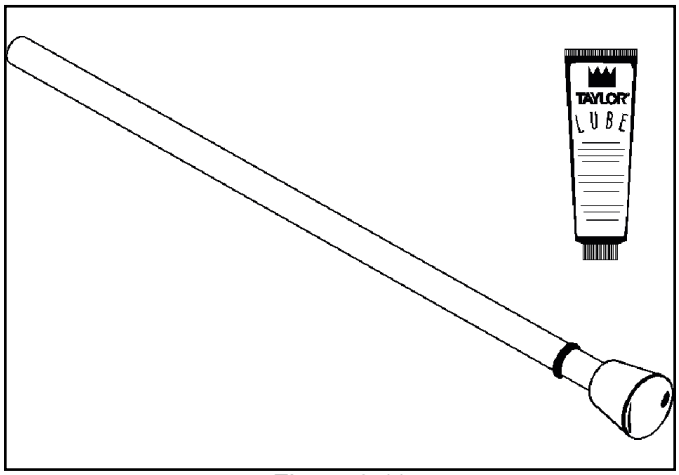

Figure 6-11

13. Slide the fork of the draw handle in the slot of the draw valve, starting from right to left. Slide the pivot pin through each draw handle as you insert them into the draw valves.

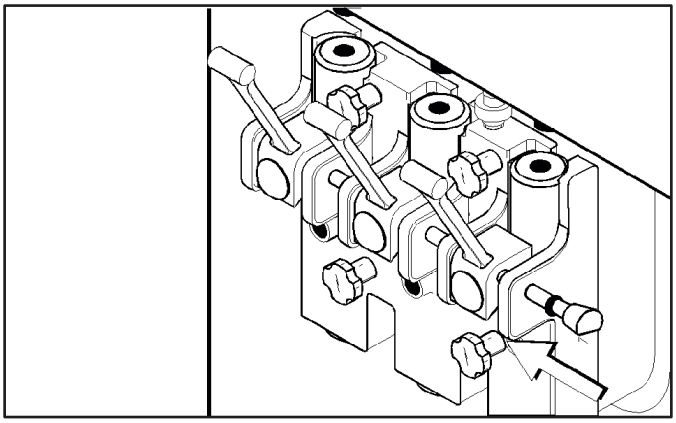

Figure 6-12

Note: *Match the color-coded buttons on the draw handles to the color-coded buttons on the freezer above the door.*

14. Install the spinner blades. Lubricate the shafts of the spinner blades.

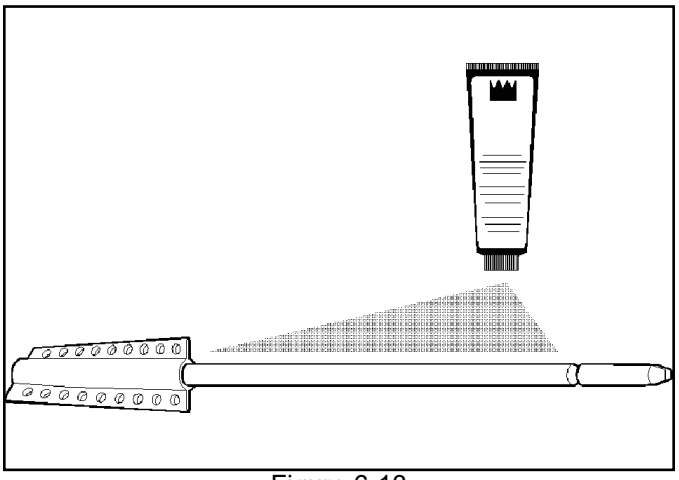

Figure 6-13

15. Insert the spinner blades from the bottom into the center of the draw valves until the shaft appears at the top of the draw valve.
16. Slip the spinner coupling over the slotted end of the spinner shaft. Raise the slip collar on the coupling and turn the shaft from the bottom until the spinner coupling slips down into its locking position.

    Note: *The spinner blade will be correctly installed when the blade is flush with the bottom of the door spout.*

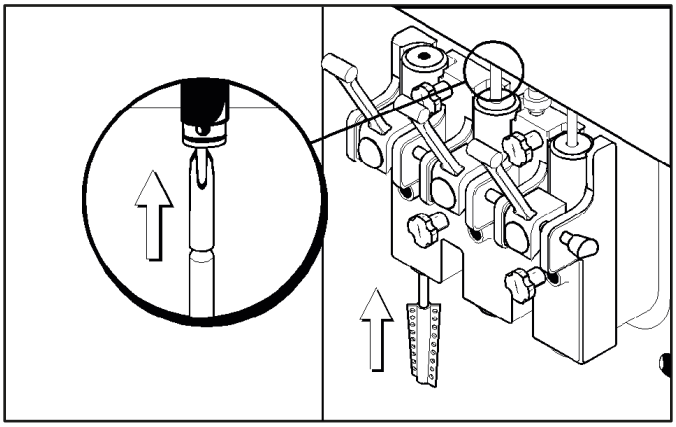

Figure 6-14

17. Snap the restrictor caps over the end of each door spout.

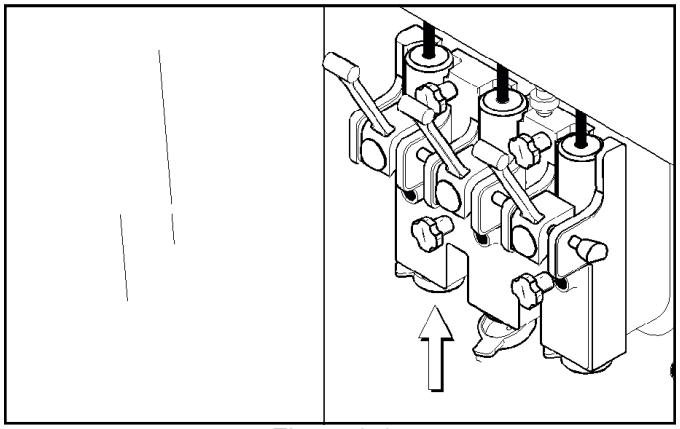

Figure 6-15

18. Slide an O-ring into the groove on each syrup hole plug and lubricate. Install the syrup hole plug in each syrup port in the freezer door.

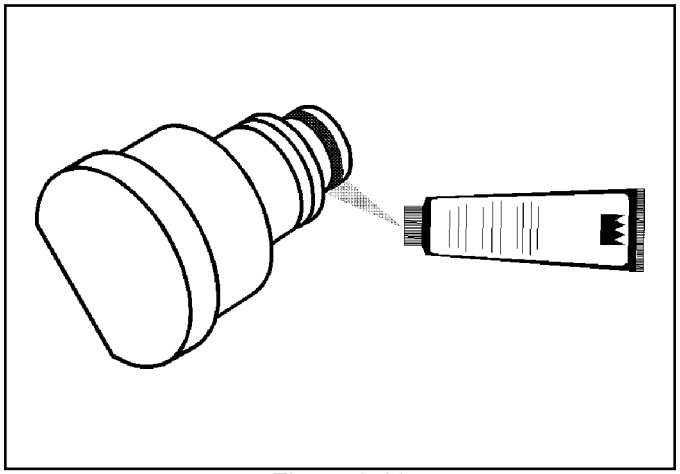

Figure 6-16

Freezing Cylinder Assembly–Soft Serve Side

Note: *When lubricating parts, use an approved food grade lubricant (example: Taylor Lube).*

1. Install the drive shaft. Lubricate the groove and shaft portion of the drive shaft with the **hex** end. Slide the seal over the shaft and groove until it snaps into place. **Do not** lubricate the hex end of the drive shaft. Fill the inside portion of the seal with 1/4 in. (6.4 mm) more lubricant and evenly lubricate the end of the seal that fits onto the rear shell bearing.

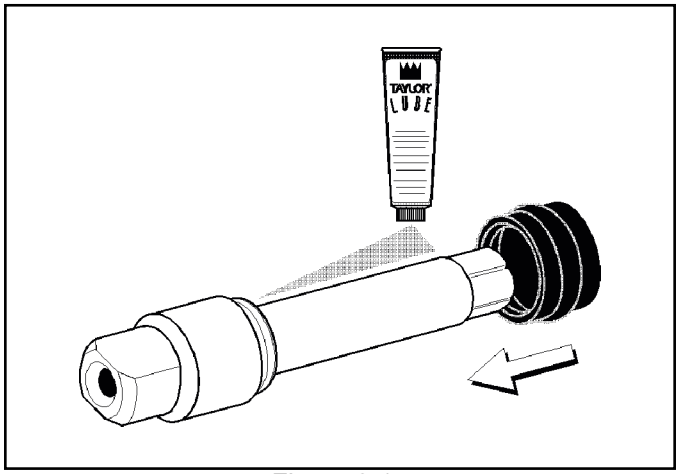

Figure 6-17

Install the drive shaft through the rear shell bearing in the freezing cylinder and engage the hex end firmly into the gear box coupling. Make sure the drive shaft fits into the drive coupling without binding.

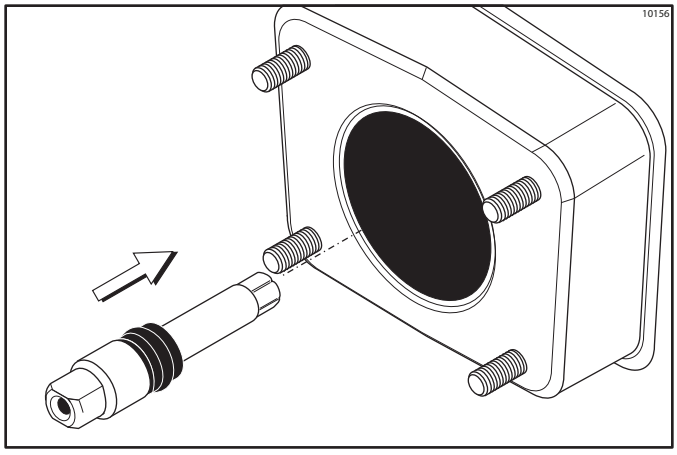

Figure 6-18

2. Install the beater assembly. First check the scraper blades for any nicks or signs of wear. If any nicks are present, or if the blade is worn, replace both blades. If the blades are in good condition, place the rear scraper blade over the rear holding pin on the beater.

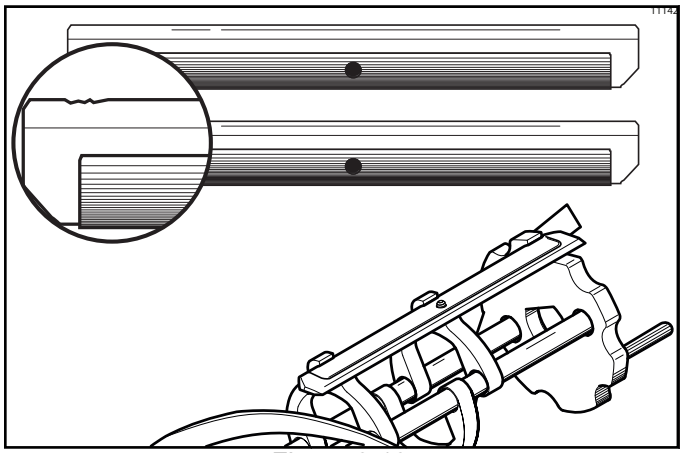

Figure 6-19

Note: *The scraper blade must fit securely over the pin to prevent costly damage.*

3. Holding the rear blade on the beater, slide it into the freezing cylinder halfway. Install the front scraper blade over the front holding pin.

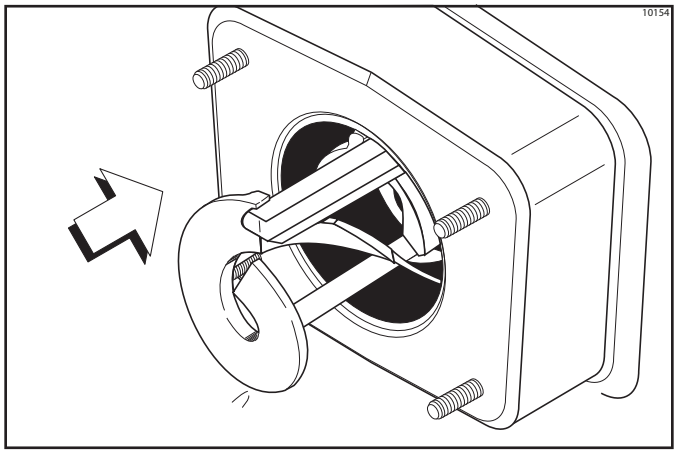

Figure 6-20

4. Install the beater shoes.

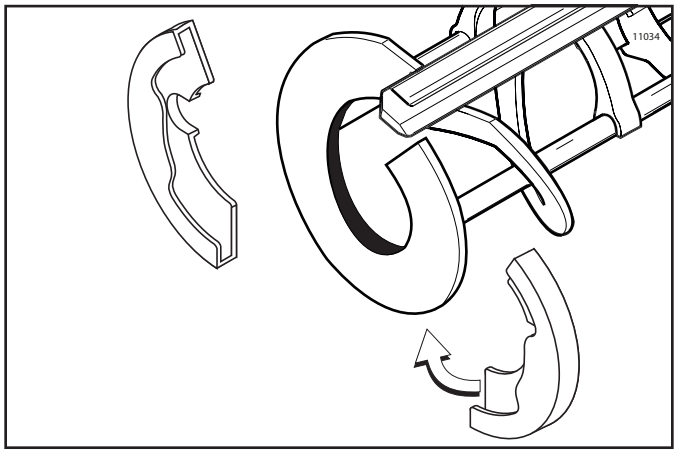

Figure 6-21

5. Slide the beater assembly the rest of the way into the

freezing cylinder.

Make sure the beater assembly is in position over the drive shaft. Turn the beater slightly to be certain that the beater is properly seated. When in position, the beater will not protrude beyond the front of the freezing cylinder.

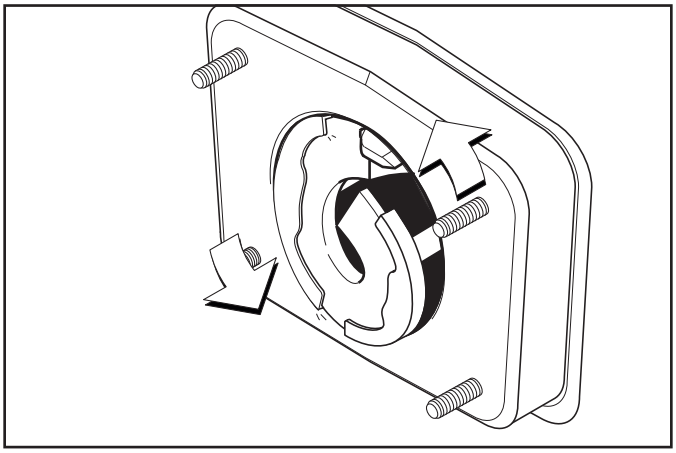

Figure 6-22

6. Assemble the freezer door. Place the large rubber gasket in the groove on the back side of the freezer door.

   Note: *Make sure the round edge of the gasket is against the door.*

7. Slide the white plastic front bearing over the baffle rod, making certain that the flanged end of the bearing is resting against the freezer door. **Do not** lubricate the gasket or front bearing.

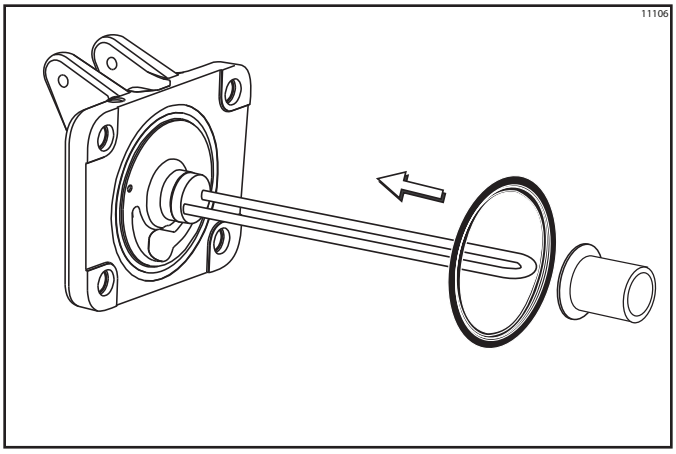

Figure 6-23

8. Slide the two O-rings into the grooves on the prime plug. Apply an even coat of lubricant to the O-rings and shaft.

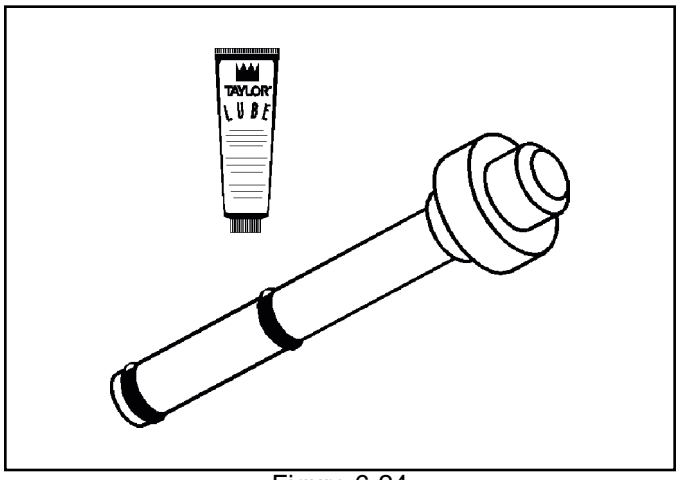

Figure 6-24

9. Insert the prime plug into the hole at the top of the freezer door and push down.

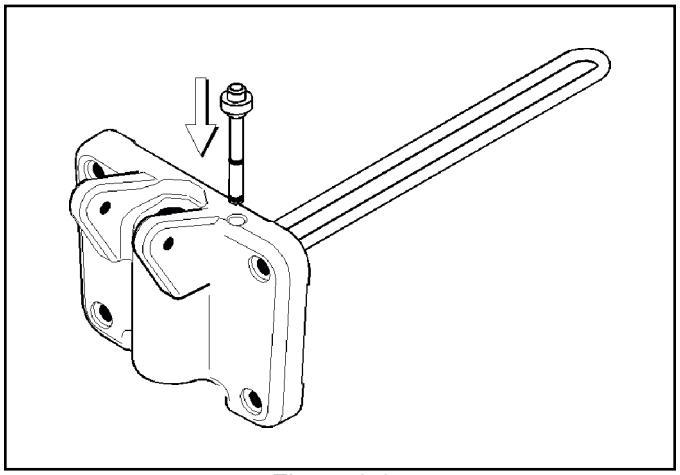

Figure 6-25

10. Install the freezer door. Insert the baffle rod through the beater in the freezing cylinder. With the door seated on the freezer studs, install the handscrews. Tighten equally in a crisscross pattern to ensure the door is snug.

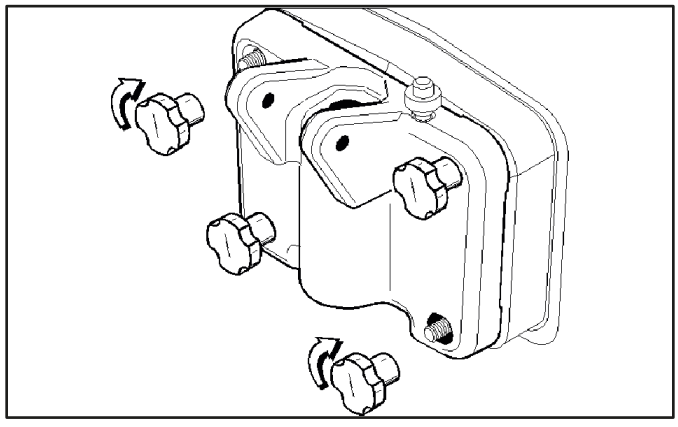

Figure 6-26

11. Install the draw valve. Slide the two O-rings into the grooves on the draw valve and lubricate.

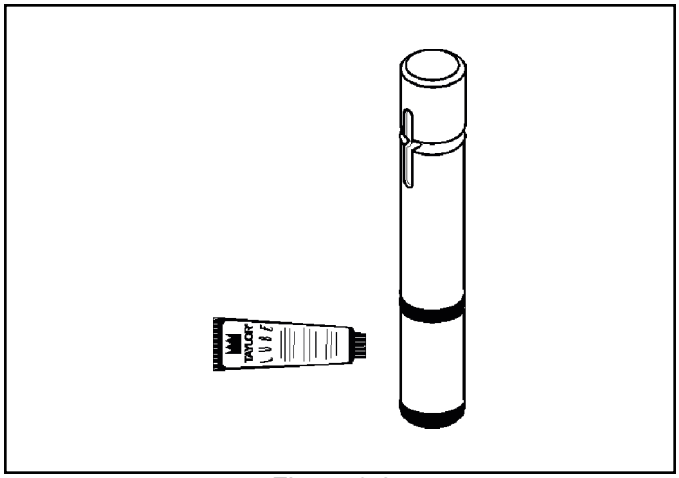

Figure 6-27

12. Lubricate the inside of the freezer door spout, top and bottom, and insert the draw valve from the **bottom** until the slot in the draw valve comes into view.

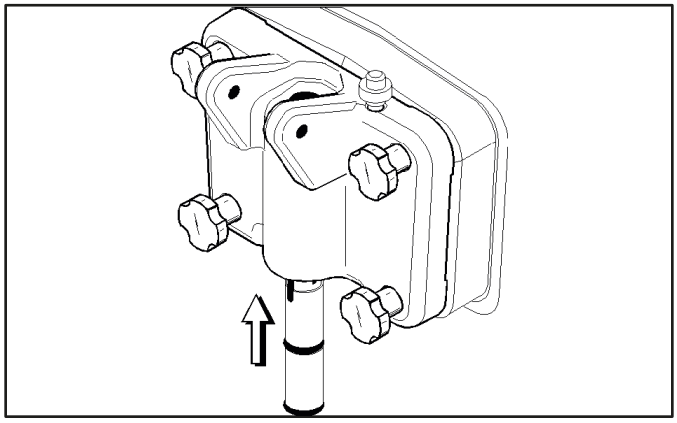

Figure 6-28

13. Install the adjustable draw handle. Slide the O-ring into the groove on the pivot pin and lubricate.

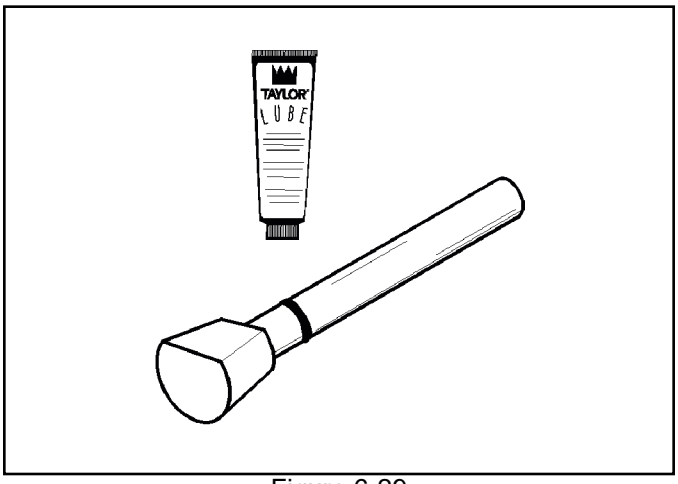

Figure 6-29

14. Slide the fork of the draw handle in the slot of the draw valve. Secure with the pivot pin.

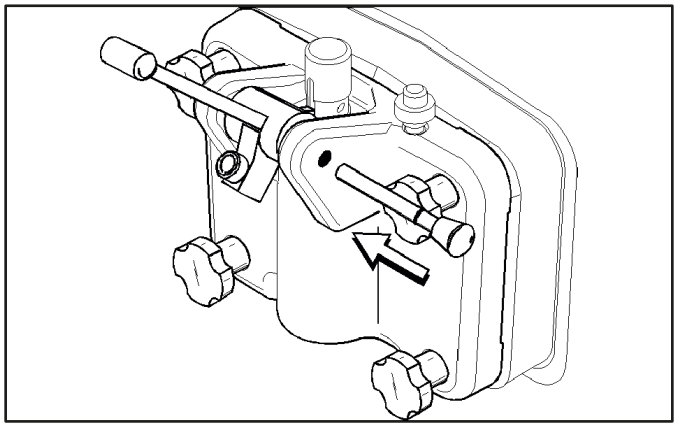

Figure 6-30

Note: *This machine features an adjustable draw handle to provide the best portion control, giving more consistency to your product and controlling costs. The draw handle can be adjusted for different flow rates. See page 5-3 for more information on adjusting this handle.*

15. Snap the design cap over the bottom of the door spout.

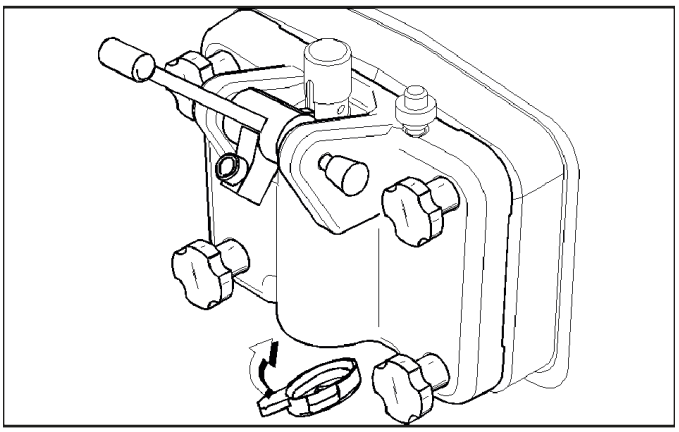

Figure 6-31

16. Install the rear drip trays. Slide the rear drip tray into the hole in the side panel, one for each side.

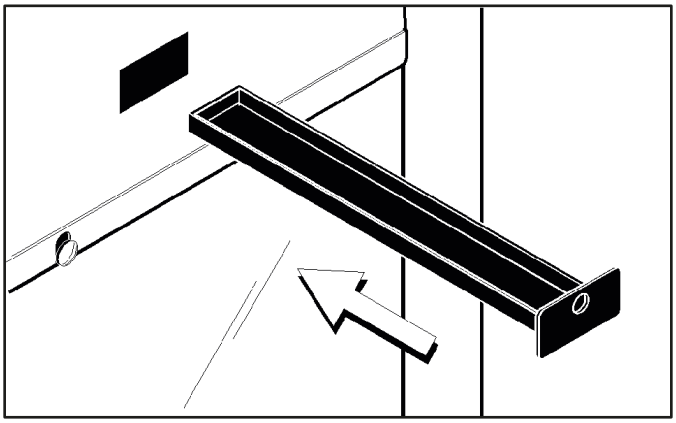

Figure 6-32

17. Install the front drip tray and the splash shield beneath the door spouts.

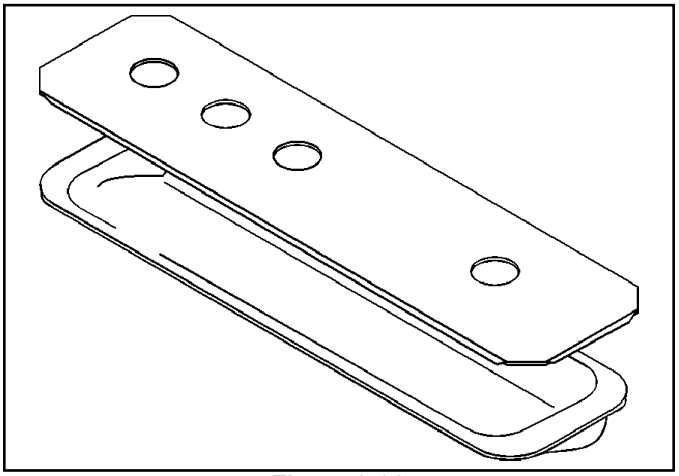

Figure 6-33

Air/Mix Pump Assembly–Shake Side

The air/mix pump meters a specific amount of air and mix and transfers this combination to the freezing cylinder.

1. Assemble the piston. Slide the O-ring into the groove on the piston. Do not lubricate this O-ring.

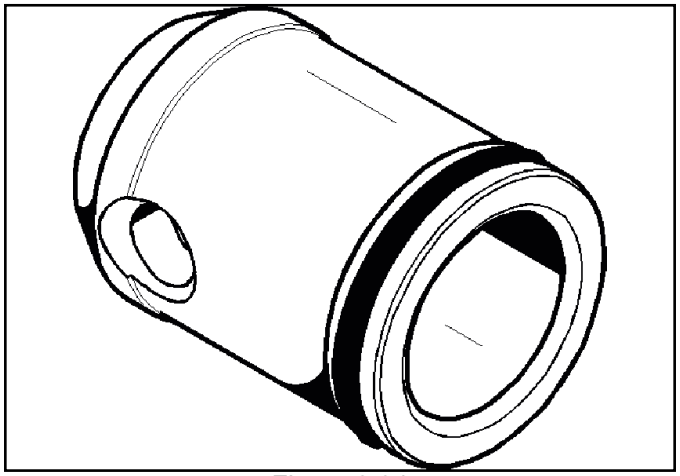

Figure 6-34

Note: *Check bands have two smooth surfaces. A concave shape indicates an incorrect assembly. Turn the check band inside out to correctly expose the flat surface.*

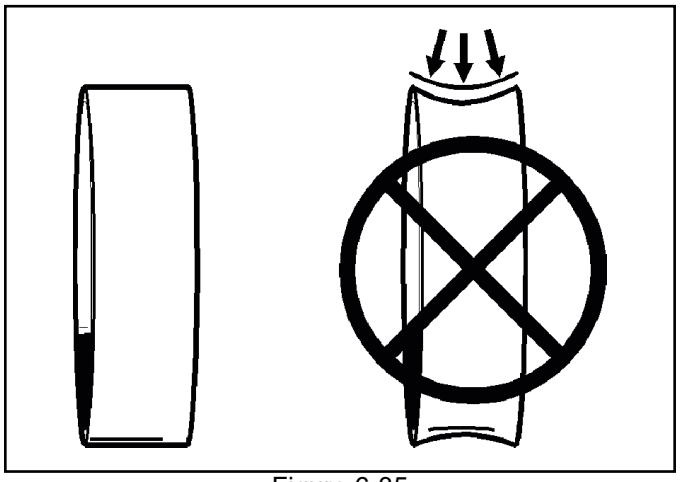

Figure 6-35

2. Assemble the valve body. Slide the three check bands and three O-rings into the grooves on the valve body. **Do not** lubricate the check bands or O-rings.

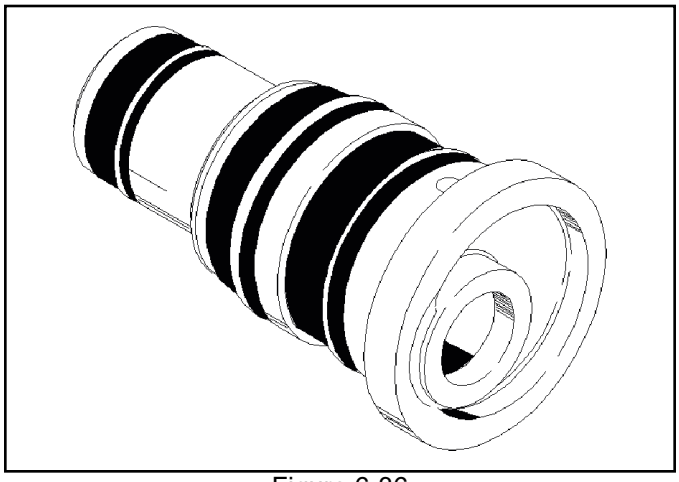

Figure 6-36

3. Put a small amount of lubricant inside the piston and insert the valve body into the piston.

   Apply a small amount of lubricant to the **lower** inside diameter of the pump cylinder to a depth equivalent to your index finger. Once applied, this amount of lubricant should be equal to a paper-thin film.

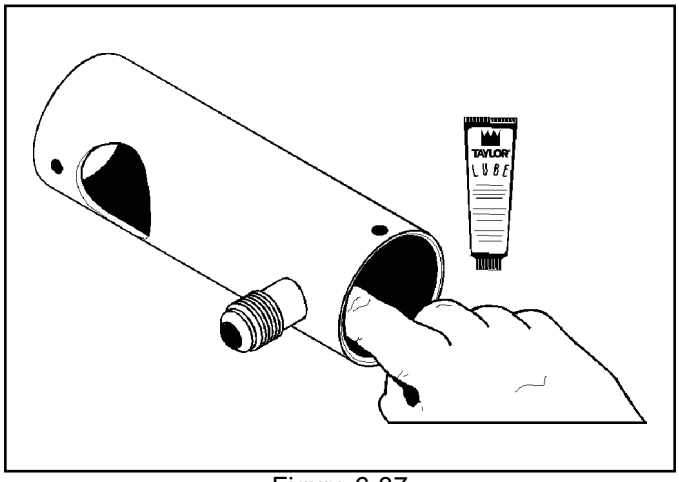

Figure 6-37

4. Insert the assembled piston and valve body into the pump cylinder and push upward. Align the steel button at the base of the valve body with the cut-out groove at the bottom of the pump cylinder.

   Note: *The drive hole in the piston must be visible through the drive hole in the pump cylinder.*

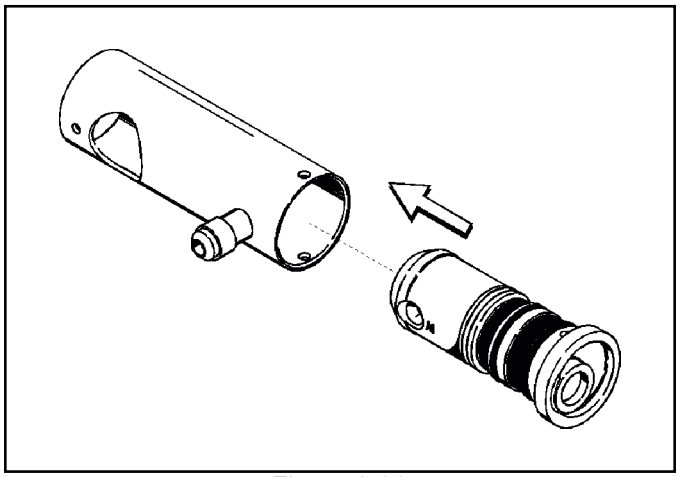

Figure 6-38

5. Assemble the mix inlet fitting. Slide the O-ring into the groove on the mix inlet fitting and thoroughly lubricate.

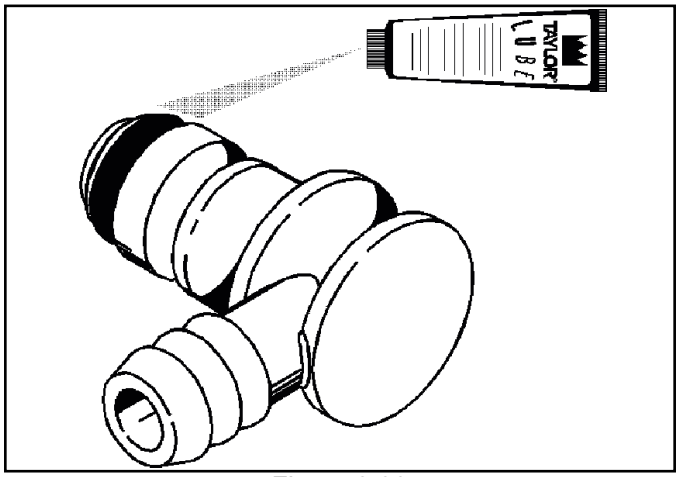

Figure 6-39

6. Attach the poppet and spring to the end of the mix inlet fitting above the O-ring. The spring must be securely fastened and not allowed to float freely.

   Note: *The rubber poppet and spring act as a pressure relief valve to prevent pressure buildup in the freezing cylinder.*

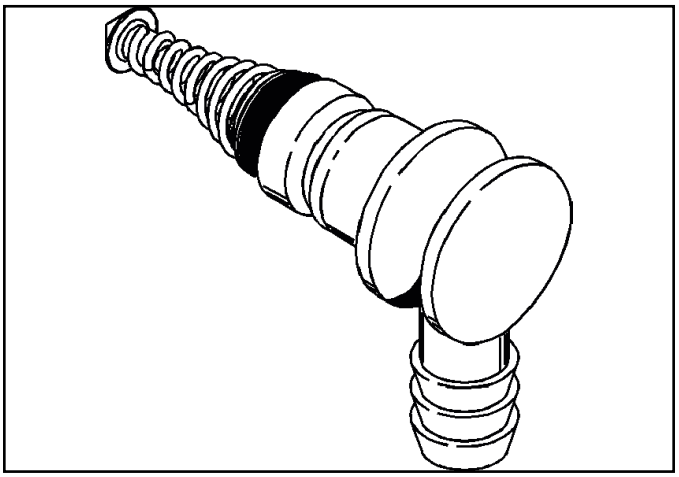

Figure 6-40

7. Insert the mix inlet fitting into the hole in the base of the valve body.

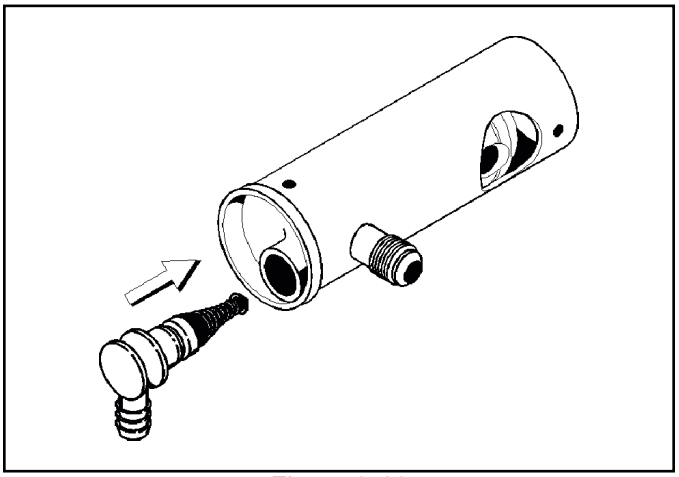

Figure 6-41

8. Secure the pump parts in position by sliding the retaining pin through the cross holes located at the bottom of the pump cylinder.

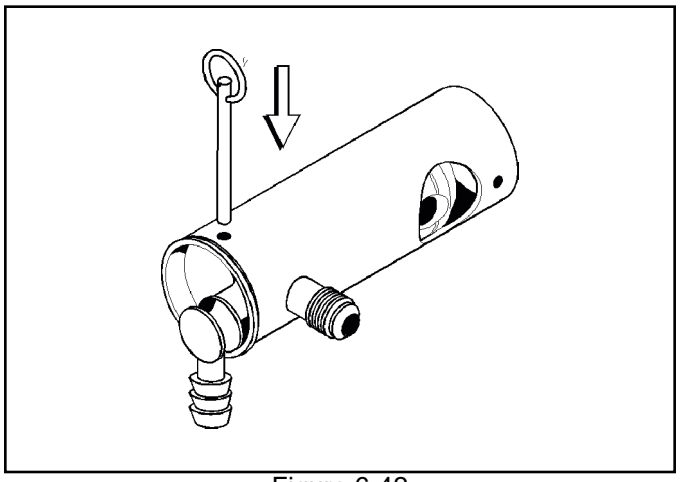

Figure 6-42

9. Assemble the flare line and the suction line. Assemble the weighted end into the suction line. Attach the mix suction line to the barbed end of the mix inlet fitting and allow the weighted end to hang free.

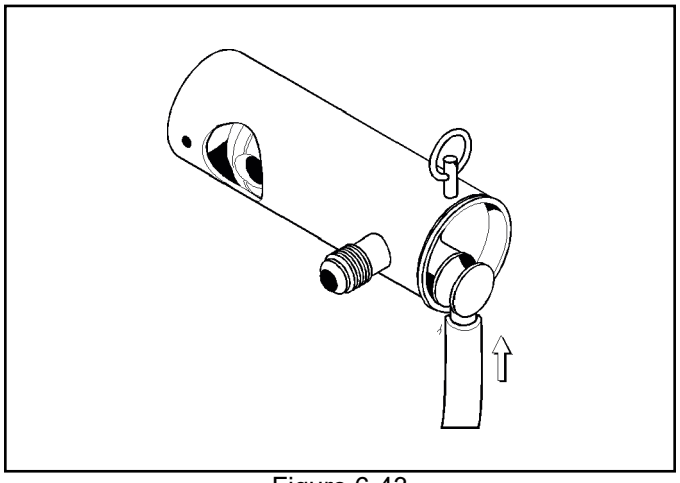

Figure 6-43

Note: *The suction line must fit tightly against the mix inlet fitting.*

10. Push both nuts back from the end of the flare line and lightly lubricate the underside of the plastic flare. This will enable the flare nut to turn freely without twisting the tubing.

    Attach one end of the flare line to the threaded fitting on the lower side of the pump cylinder and allow the other end to hang free.

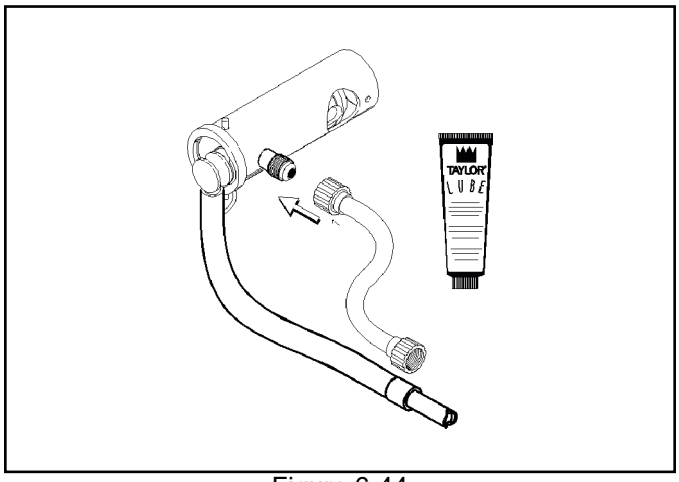

Figure 6-44

11. Secure the air/mix pump. Place the pump collar over the pump cylinder.

    Note: *The cross holes of the pump collar will be on the top.*

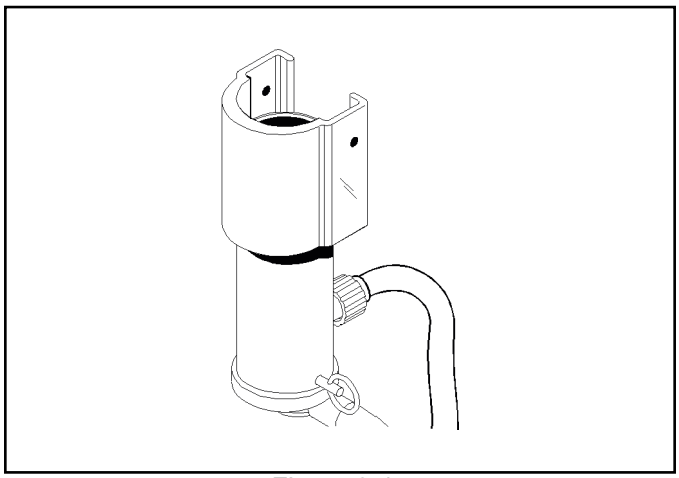

Figure 6-45

12. Align the drive hole in the piston to the ball crank of the motor reducer. At the same time, align the locating pin hole in the pump cylinder to the locating pin on the faceplate.

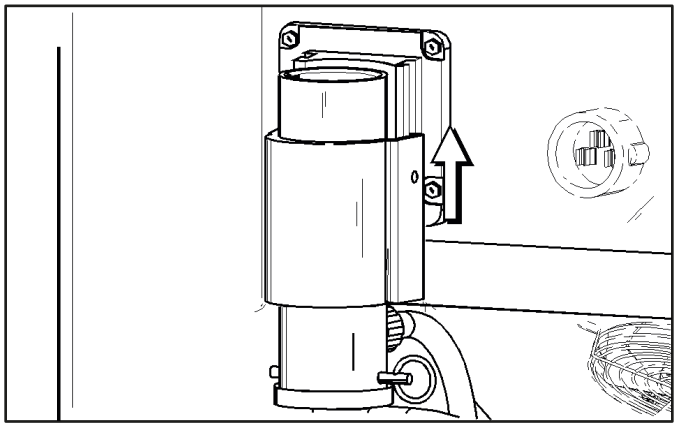

Figure 6-46

13. Slide the pump collar upward into the grooves on the side of the faceplate and secure the air/mix pump in place by slipping the retaining pin through the cross holes of the pump collar.

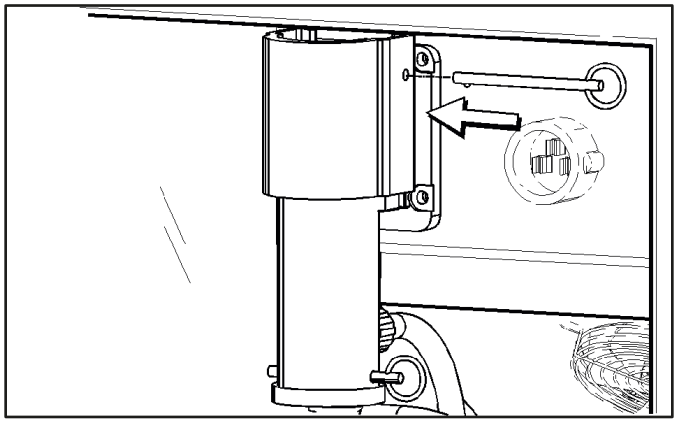

Figure 6-47

Note: *Alignment of the air/mix pump is extremely important. Severe and costly damage may occur if it is not properly aligned.*

Air/Mix Pump Assembly–Soft Serve Side

The air/mix pump meters a specific amount of air and mix and transfers this combination to the freezing cylinder.

1. Assemble the piston. Slide the O-ring into the groove on the piston. **Do not** lubricate this O-ring.

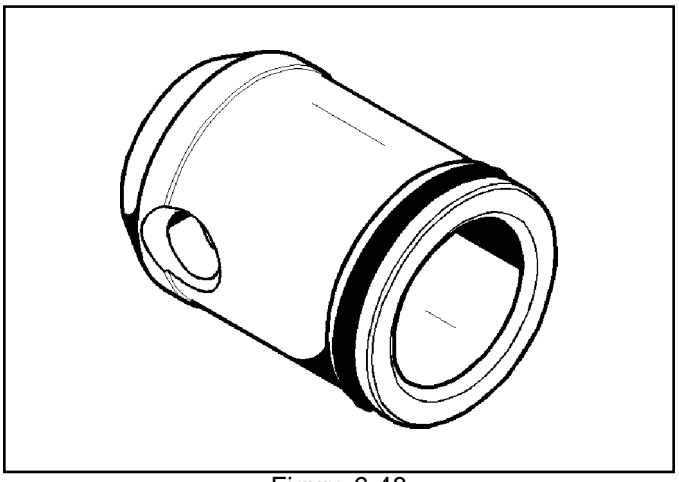

Figure 6-48

Note: *Check bands have two smooth surfaces. A concave shape indicates an incorrect assembly. Turn the check band inside out to correctly expose the flat surface.*

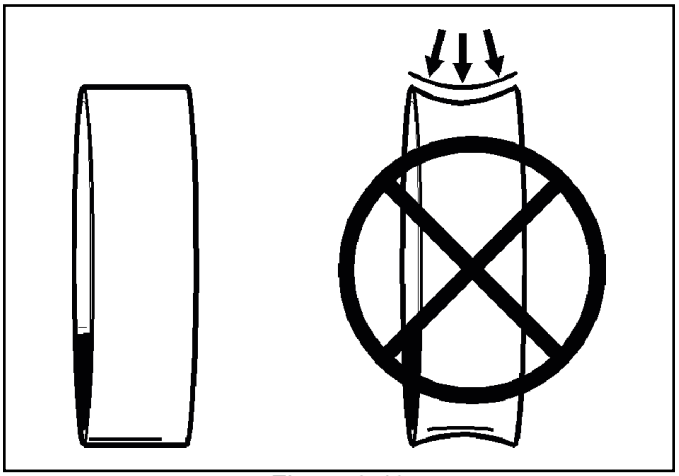

Figure 6-49

2. Assemble the valve body. Slide the three check bands and three O-rings into the grooves on the valve body. **Do not** lubricate the check bands or O-rings.

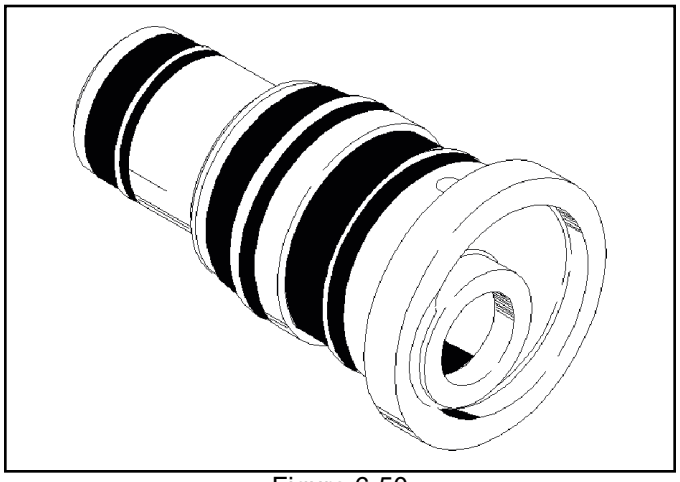

Figure 6-50

3. Put a small amount of lubricant inside the piston and insert the valve body into the piston.

   Apply a small amount of lubricant to the **lower** inside diameter of the pump cylinder to a depth equivalent to your index finger. Once applied, this amount of lubricant should be equal to a paper-thin film.

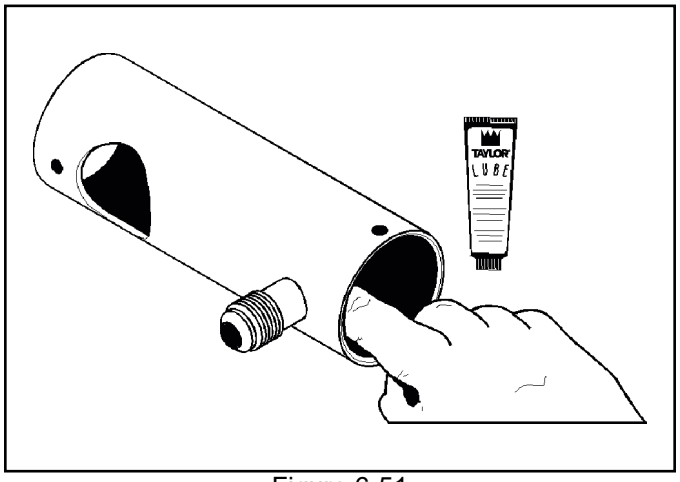

Figure 6-51

4. Insert the assembled piston and valve body into the pump cylinder and push upward. Align the steel button at the base of the valve body with the cut-out groove at the bottom of the pump cylinder.

   Note: *The drive hole in the piston must be visible through the drive hole in the pump cylinder.*

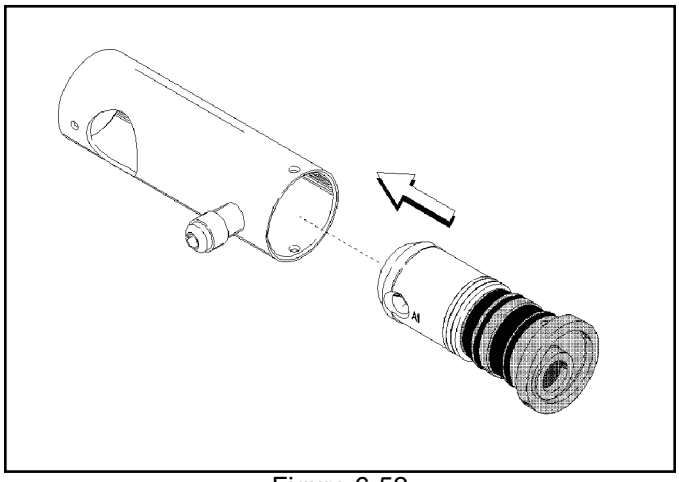

Figure 6-52

5. Assemble the mix inlet fitting. Slide the O-ring into the groove on the mix inlet fitting and thoroughly lubricate.

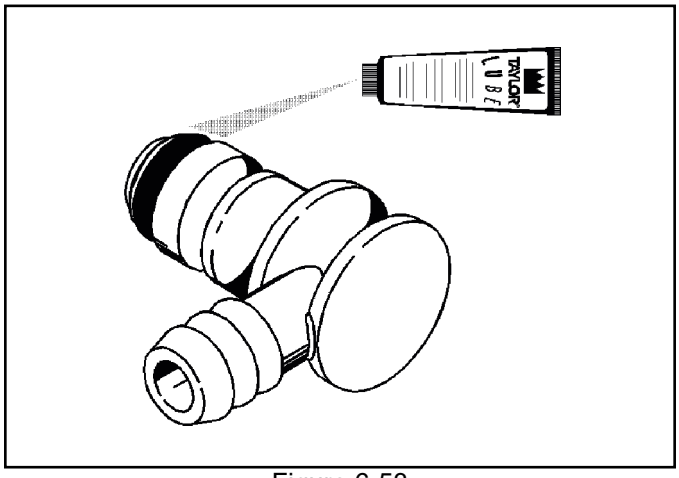

Figure 6-53

6. Attach the poppet and spring to the end of the mix inlet fitting above the O-ring. The spring must be securely fastened and not allowed to float freely.

   Note: *The rubber poppet and spring act as a pressure relief valve to prevent pressure buildup in the freezing cylinder.*

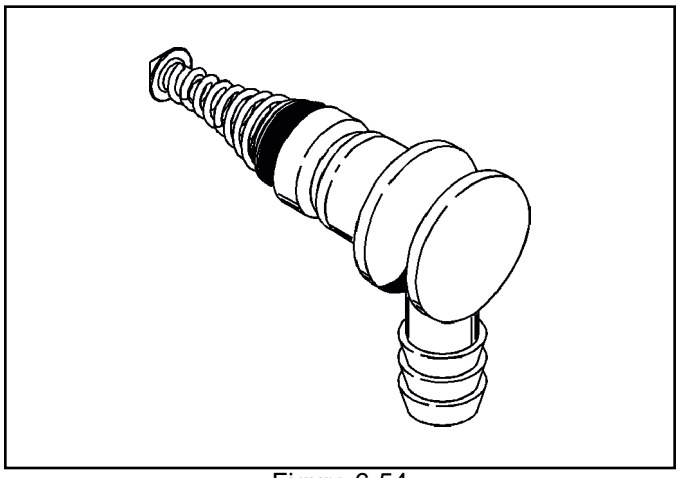

Figure 6-54

7. Insert the mix inlet fitting into the hole in the base of the valve body.

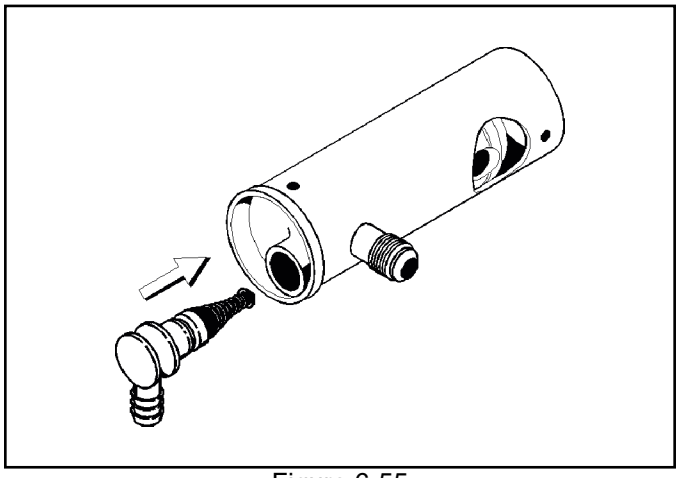

Figure 6-55

8. Secure the pump parts in position by sliding the retaining pin through the cross holes located at the bottom of the pump cylinder.

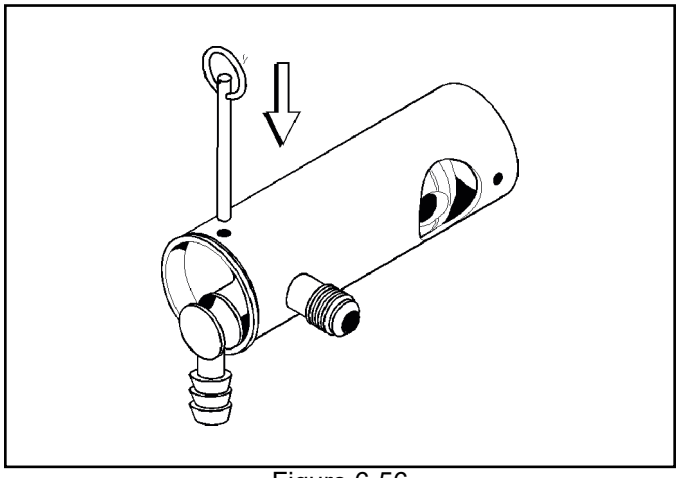

Figure 6-56

9. Assemble the flare line and the suction line. Assemble the weighted end into the suction line. Attach the mix suction line to the barbed end of the mix inlet fitting and allow the weighted end to hang free.

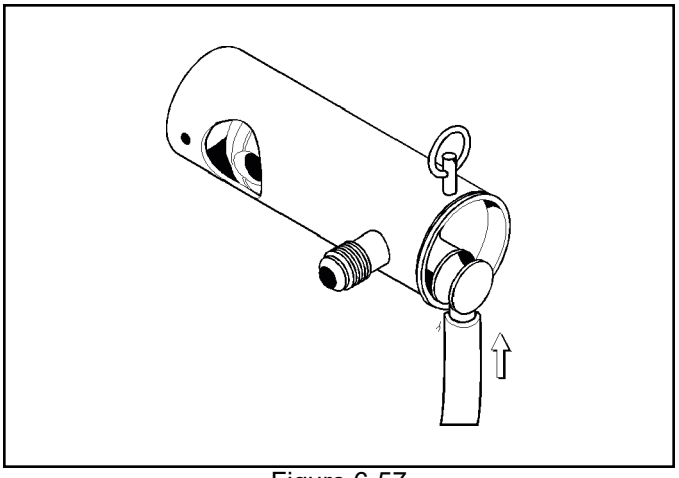

Figure 6-57

Note: *The suction line must fit tightly against the mix inlet fitting.*

10. Push both nuts back from the end of the flare line and lightly lubricate the underside of the plastic flare. This will enable the flare nut to turn freely without twisting the tubing.

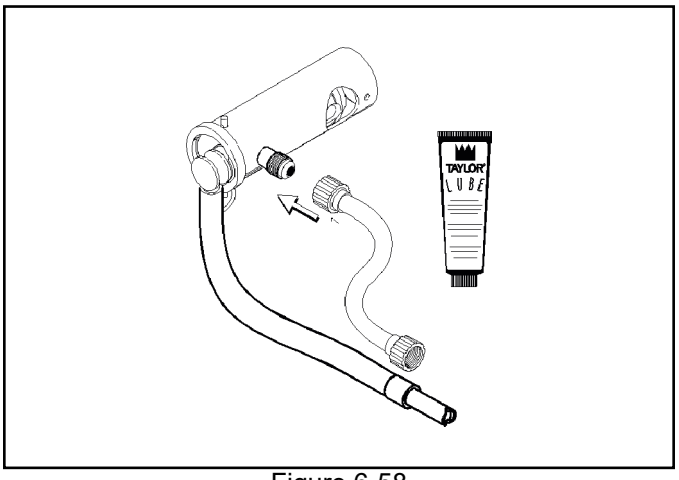

Figure 6-58

11. Attach one end of the flare line to the threaded fitting on the lower side of the pump cylinder and allow the other end to hang free.

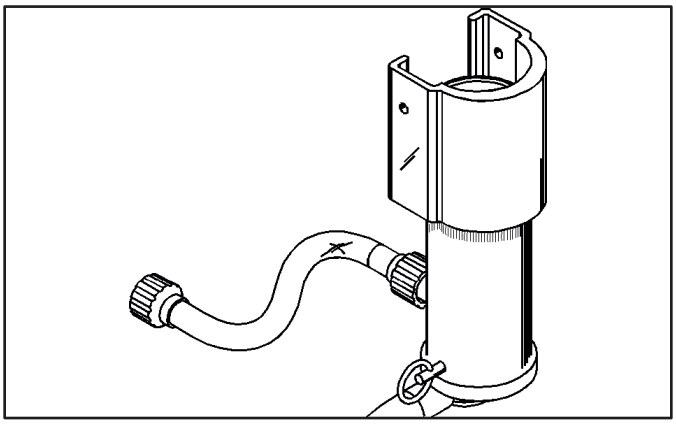

Figure 6-59

12. Secure the air/mix pump. Place the pump collar over the pump cylinder.

    Note: *The cross holes of the pump collar will be on the top.*

13. Align the drive hole in the piston to the ball crank of the motor reducer. At the same time, align the locating pin hole in the pump cylinder to the locating pin on the faceplate.

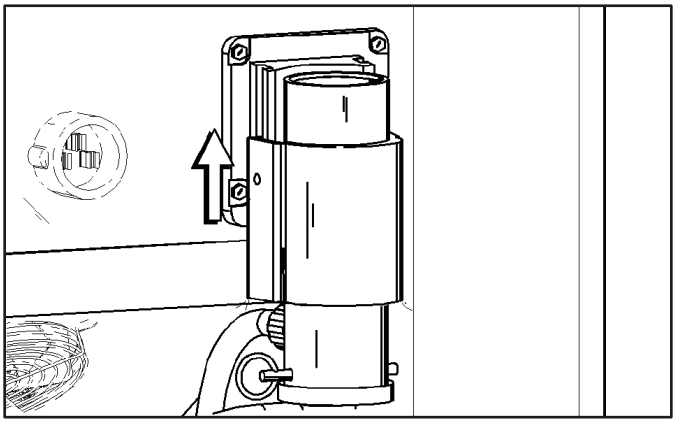

Figure 6-60

14. Slide the pump collar upward into the grooves on the side of the faceplate and secure the air/mix pump in place by slipping the retaining pin through the cross holes of the pump collar.

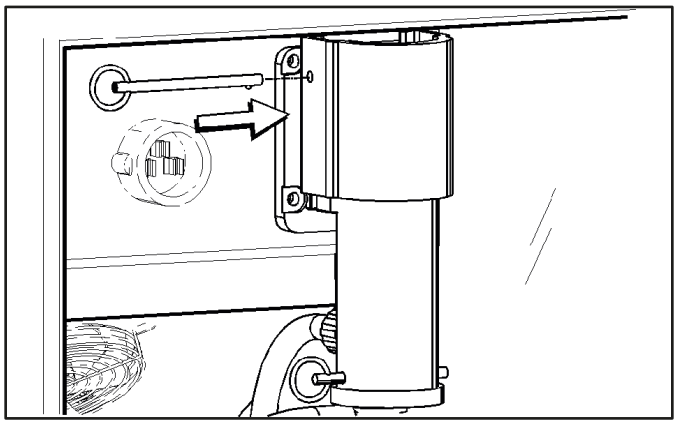

Figure 6-61

Note: *Alignment of the air/mix pump is extremely important. Severe and costly damage may occur if it is not properly aligned.*

15. Lubricate both sides of the pressure switch diaphragm.

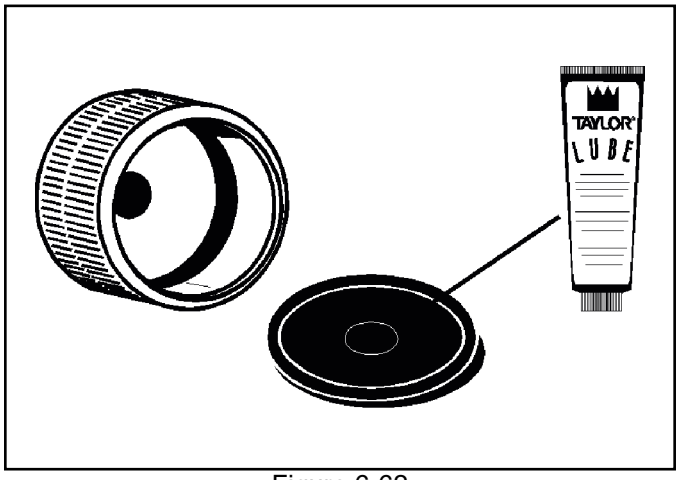

Figure 6-62

16. Place the diaphragm in its groove in the pressure switch cap.

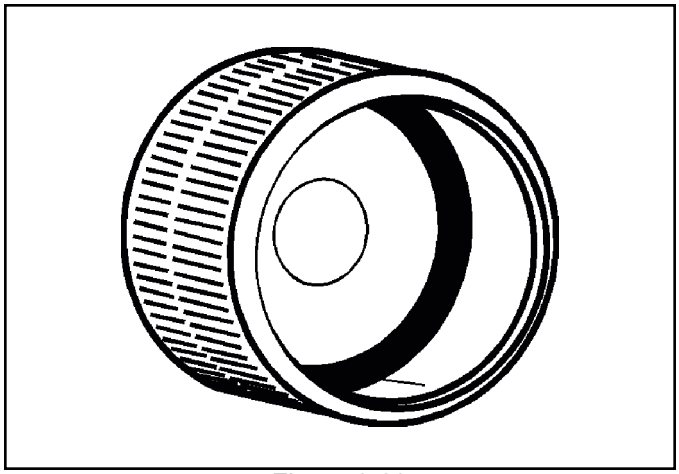

Figure 6-63

17. Screw the cap onto the housing securely.

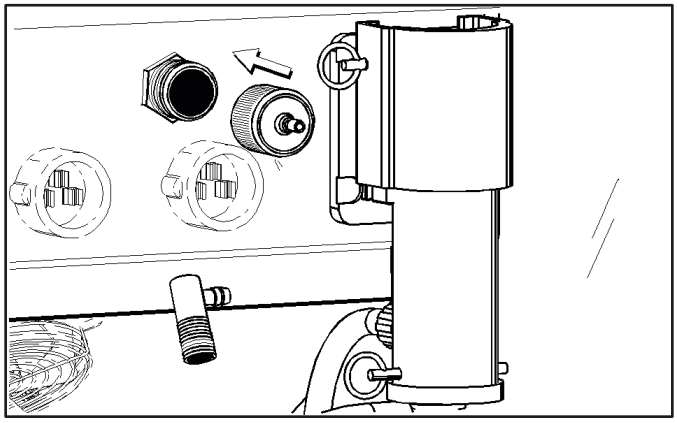

Figure 6-64

Sanitizing–Shake Side

1. Prepare a pail of an approved 100 PPM (parts per million) sanitizing solution (examples: 2-1/2 gal. [9.5 L] of Kay-5® or 2 gal. [7.6 L] of Stera-Sheen®). **Use warm water and follow the manufacturer's specifications.** Place the mix pail of sanitizing solution inside the mix cabinet.
2. Brush clean the mix inlet tube with the long brush and sanitizing solution.

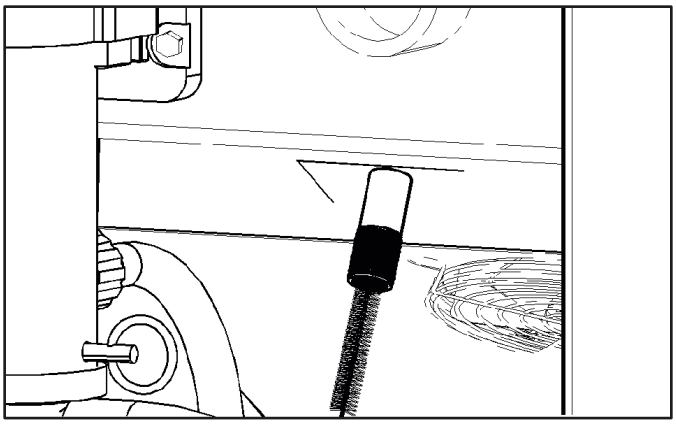

Figure 6-65

3. Connect the free end of the flare line to the threaded fitting on the mix inlet tube.

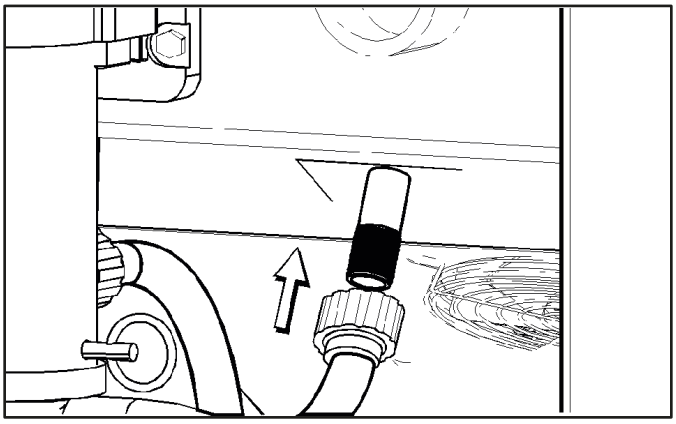

Figure 6-66

4. Insert the free end of the suction line into the pail of sanitizing solution.

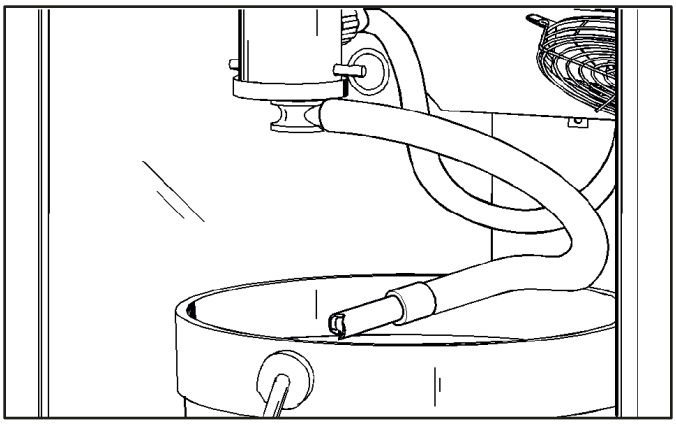

Figure 6-67

5. Place the power switch in the ON position.
6. Place an empty mix pail beneath the door spouts and raise the prime plug.

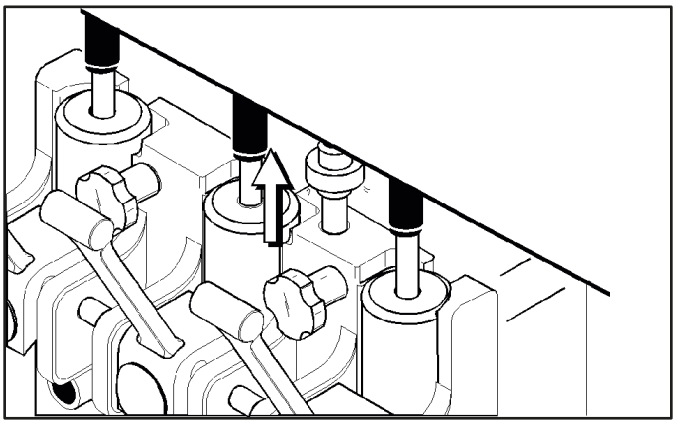

Figure 6-68

Press the WASH and PUMP keys. The indicator lights will come on, showing the pump and beater motor are operating. When a **steady** stream of sanitizing solution flows from the bleed port in the bottom of the freezer door, press the PUMP key, stopping the pump operation. Push down the prime plug. Allow sanitizing solution to agitate in the freezing cylinder for 5 minutes.

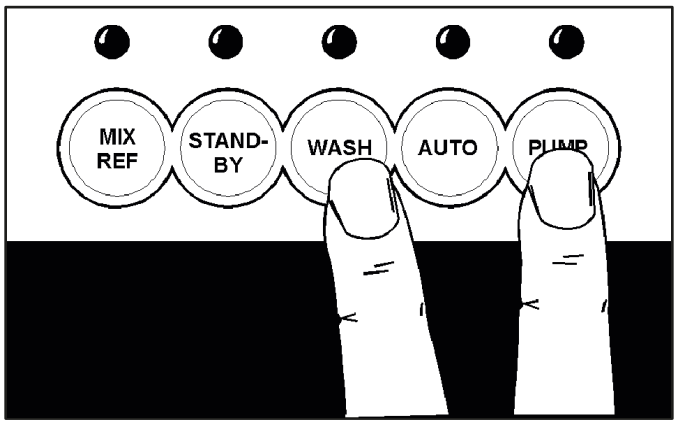

Figure 6-69

7. After 5 minutes, raise the prime plug. Press the PUMP key and pull down all three draw handles. Draw off the remaining sanitizing solution.

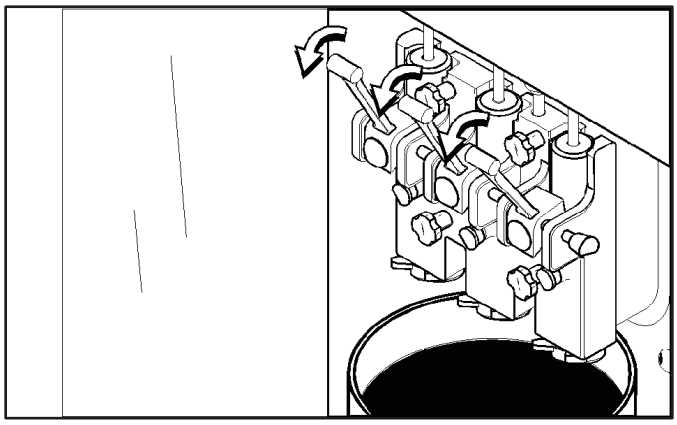

Figure 6-70

8. Once the sanitizer stops flowing from the door spouts, close the draw valves. Press the PUMP and WASH keys to stop the operation.

Sanitizing–Soft Serve Side

1. Prepare a pail of an approved 100 PPM sanitizing solution (examples: 2-1/2 gal. [9.5L] of Kay® or 2 gal. [7.6 L] of Stera-Sheen®). **Use warm water and follow the manufacturer's specifications.** Place the mix pail of sanitizing solution inside the mix cabinet.
2. Brush clean the mix inlet tube with the long brush and sanitizing solution.

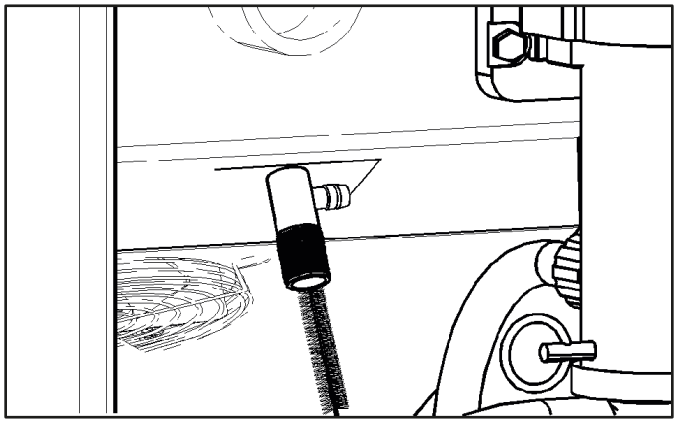

Figure 6-71

3. Connect the free end of the flare line to the threaded fitting on the mix inlet tube.

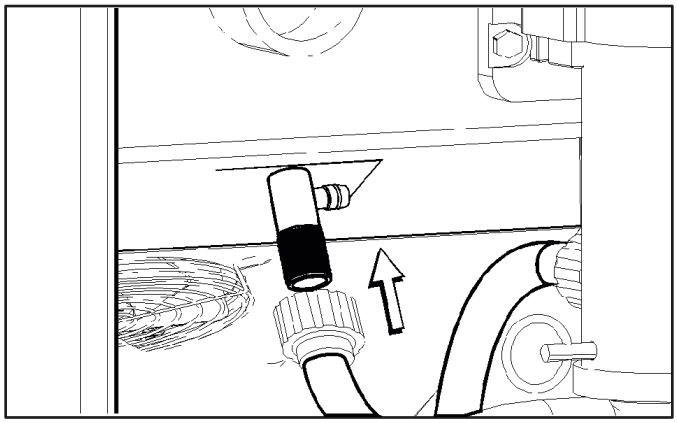

Figure 6-72

6

4. Install the pressure line. Attach the quick disconnect fitting of the pressure line to the other fitting on the mix inlet tube just above the flare line, and allow the other end to hang free.

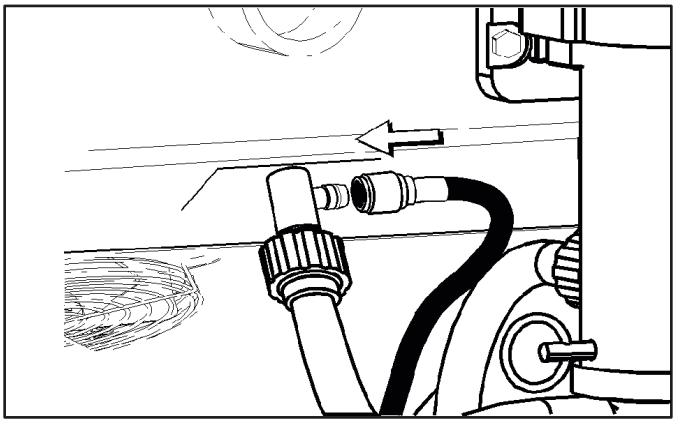

Figure 6-73

5. Insert the free end of the suction line and pressure line into the pail of sanitizing solution.

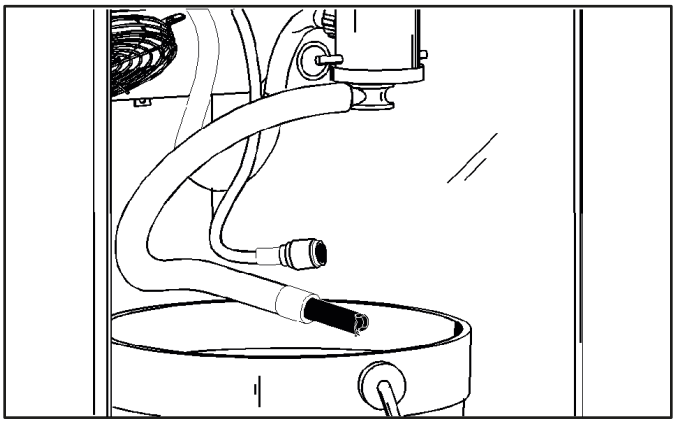

Figure 6-74

6. Press the PUMP key. The indicator light will come on, showing that the air/mix pump is operating. This action will cause the sanitizing solution to be pumped through the air/mix pump and out through the pressure line. After approximately 15 seconds, press the PUMP key. The indicator light will go out, and the pump will stop the operation.

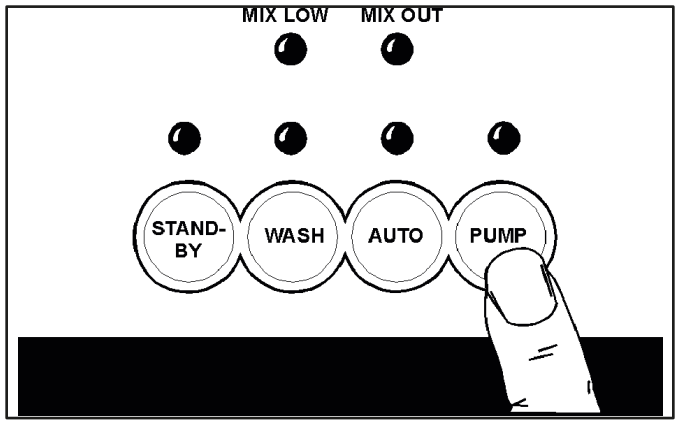

Figure 6-75

7. Drain and connect the free end of the pressure line to the pressure switch.

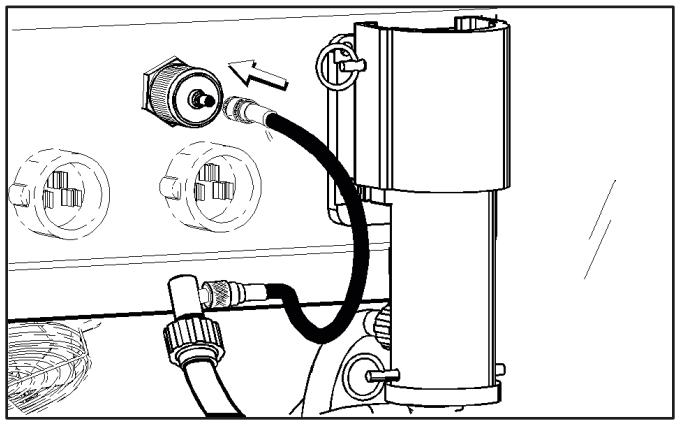

Figure 6-76

8. Place an empty pail beneath the door spout and raise the prime plug.

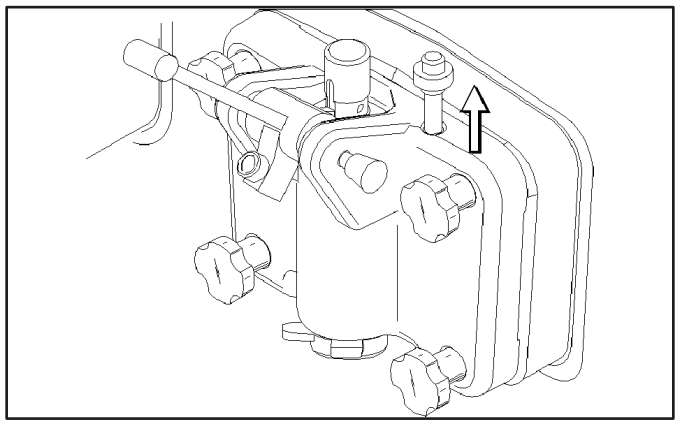

Figure 6-77

9. Press the WASH and PUMP keys. The indicator lights will come on, showing that the pump and beater motor are operating. When a **steady** stream of sanitizing solution is flowing from the bleed port in the bottom of the freezer door, press the PUMP key to stop the pump operation. Push down the prime plug. Allow the sanitizing solution to agitate in the freezing cylinder for 5 minutes.

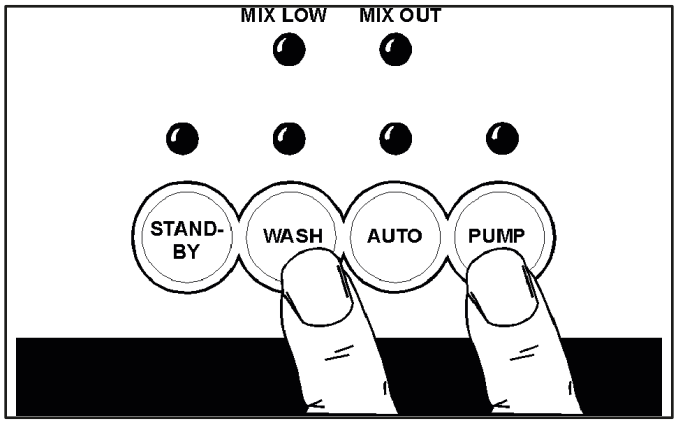

Figure 6-78

10. After 5 minutes, raise the prime plug. Press the PUMP key and pull down the draw handle. Draw off the remaining sanitizing solution.

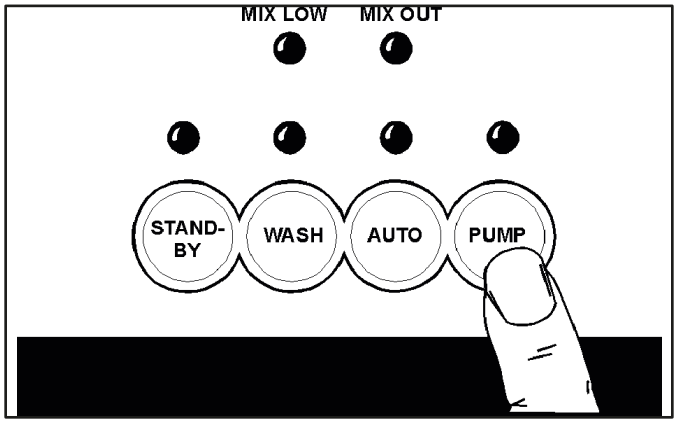

Figure 6-79

11. Once the sanitizer stops flowing from the door spout, close the draw valve. Press the PUMP and WASH keys to stop the operation. Disconnect the pressure line from the pressure switch. Drain the sanitizer and reconnect.

Priming

To prime both sides of the Model 8657, the steps will be the same. Therefore, first prime the shake side, and then go back and duplicate these procedures for the soft serve side.

1. Sanitize the mix tank, mix tank cover, mix probe, and funnel. Place the mix tank and cover in the mix cabinet.
2. Insert the prongs of the mix probe inside the mix tank. Connect the mix probe in the socket receptacle.

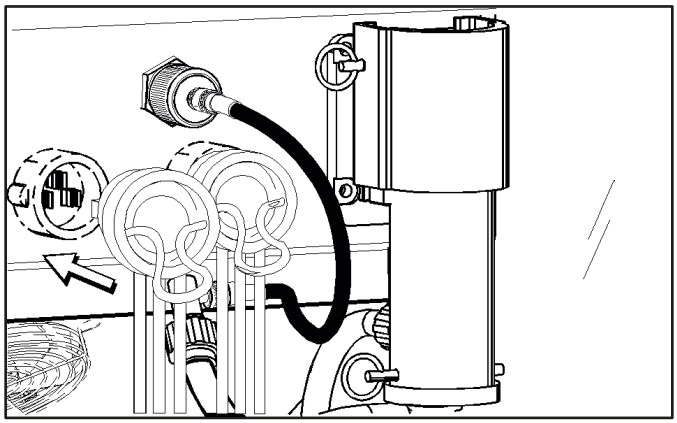

Figure 6-80

3. Place the free end of the suction line down in the mix tank.

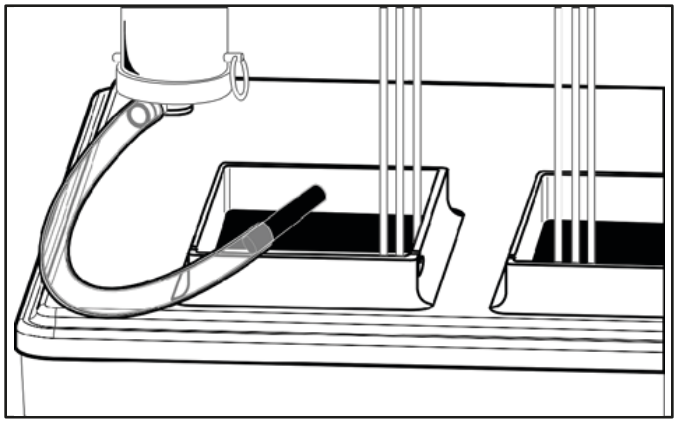

Figure 6-81

4. Install the funnel. Fill the mix tank with **fresh** mix and close the mix cabinet door.

Note: *Use only **fresh** mix when priming the freezer.*

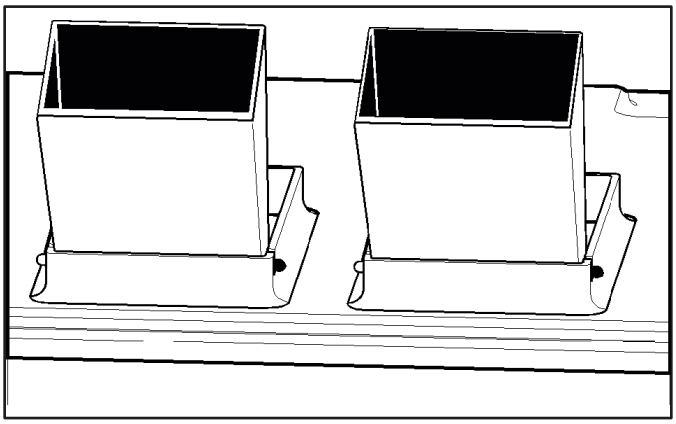

Figure 6-82

5. Place an empty pail beneath the door spout(s) and open the draw valve(s). With the prime plug still in the **up** position, press the PUMP key. This will allow the mix to be pumped through the freezing cylinder and force out any remaining sanitizing solution. When full-strength mix is flowing from the door spout(s), close the draw valve(s).

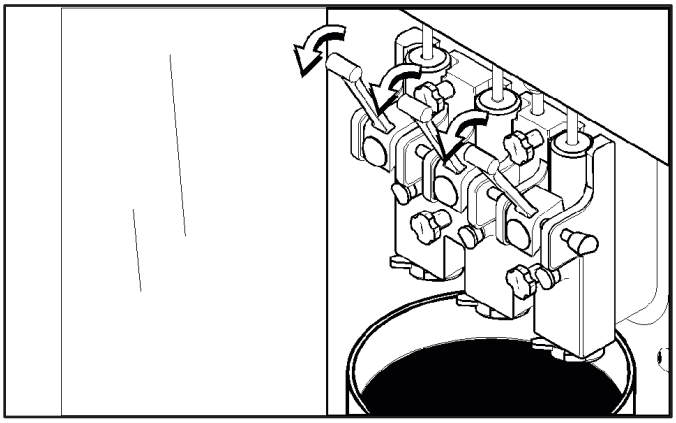

Figure 6-83

6. When a steady stream of mix is flowing from the bleed port in the bottom of the freezer door, press the PUMP key to stop the operation.

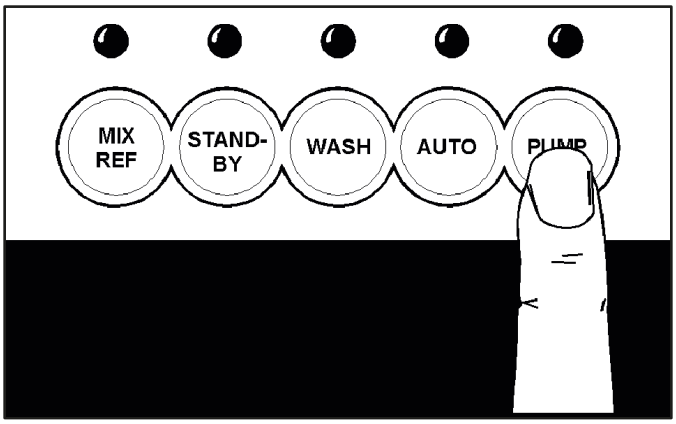

Figure 6-84

7. Once the stream of mix stops flowing from the bleed port, push down the prime plug. Rinse the prime plug hole area with water. Remove the pail and discard the mix and sanitizer.

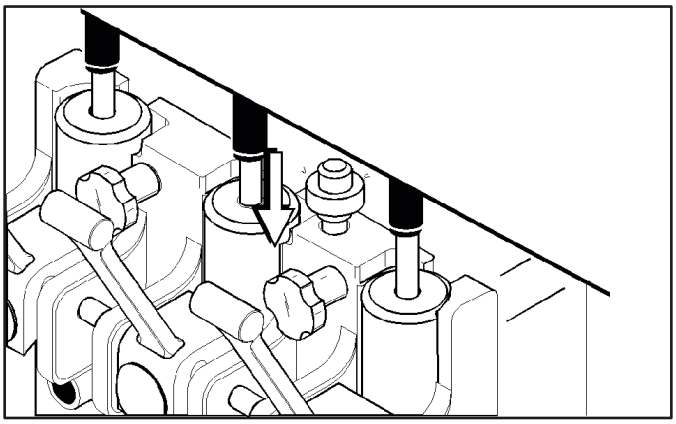

Figure 6-85

8. Press the AUTO key. The MIX REF indicator light will come on, showing that the mix refrigeration system is operating. The AUTO indicator light will also come on, showing that the main refrigeration system is operating. The PUMP indicator light will come on, showing that the air/mix pump will operate whenever mix is needed in the freezing cylinder.

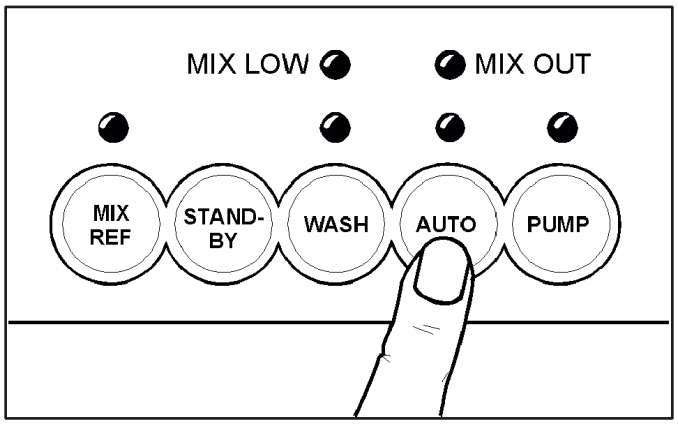

Figure 6-86

When the machine cycles off, the product will be at the correct viscosity.

Note: *Keep the mix cabinet door closed except when filling the mix tank and during the cleaning and sanitizing procedures. Leaving the door open with the mix refrigeration system on may cause the evaporator to ice up and impair the mix cabinet refrigeration.*

Syrup System–Shake Side

The two main objectives in your opening procedures must be to:

- Fill the syrup tanks
- Calibrate the syrup flow.

This must be checked **daily** to ensure high-quality shakes.

Discard syrup weekly and flush the syrup lines at least once a week. This prevents syrup from clogging the lines and breaks the bacteria chain. See page 6-28 to sanitize the syrup system.

The syrup tanks can be put in a separate compartment that can be placed behind the freezer or to the side. The air lines and syrup lines are color-coded. **Make sure to match** the color of the air and syrup lines to the correct flavor syrup tank.

Note: *Vanilla and strawberry syrup lines use restrictors at the syrup tank quick disconnect connections to maintain proper calibration.* ***Use only single-strength syrup that is free of pulp and seeds.***

9. Unscrew the quick disconnect from the elbow portion of the syrup line.Make sure the O-ring rests on the end of the quick disconnect fitting. Place the restrictor on top of the O-ring and screw the quick disconnect back onto the syrup line.

Filling the Syrup Tanks

1. Pull back on the collar of the quick disconnect fittings for the air lines. Allow the air pressure to dissipate from the syrup tanks. Disconnect the syrup lines.

CAUTION! Disengage the air line before the syrup line. Failure to follow this instruction can result in injury.

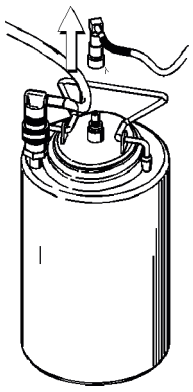

Figure 6-87

2. Remove the syrup tanks from their compartment.
3. Remove the syrup tank lid by lifting up on the locking lever. Fill with syrup to the indicating mark on the label.

Important! *Do not overfill the tanks.*

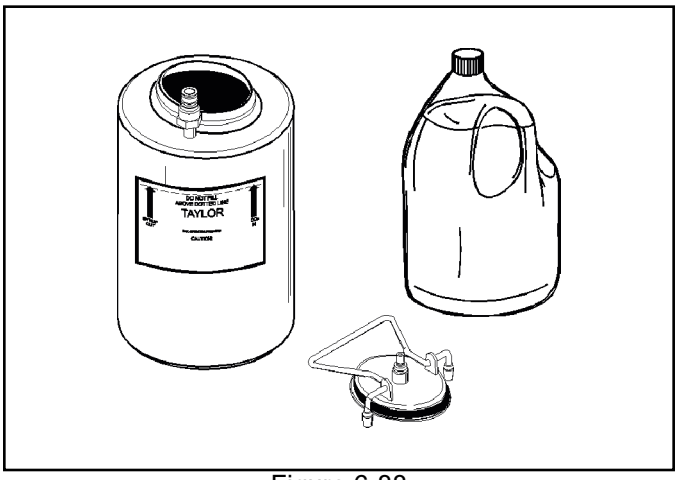

Figure 6-88

4. Replace the tank lid and match the color-coded air and syrup lines to the syrup tank and connect. Repeat this step for all syrup tanks.

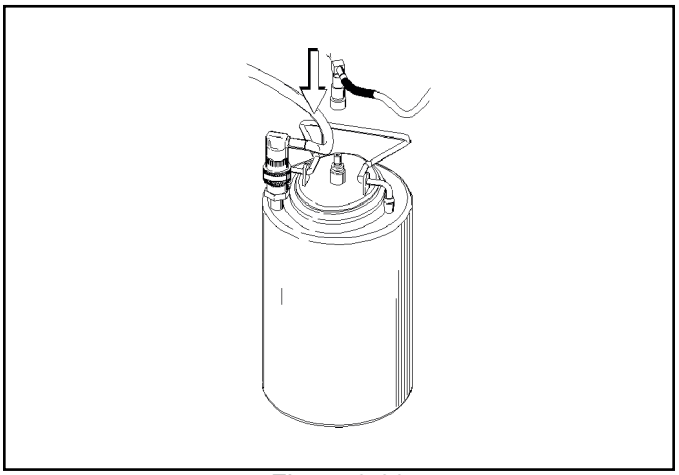

Figure 6-89

Note: *See page 6-28 for sanitizing the syrup tanks.*

Calibrating the Syrup Flow

The correct amount of syrup must be incorporated into the mix to obtain a quality shake. The cause of too-thin shakes is often too much syrup. The cause of too-thick shakes is often too little syrup.

1. To determine the rate of syrup flow, you will need a syrup sampler and a calibrating cup which indicates the ounces of liquid. Generally, the proper rate of syrup flow is 1 oz. (29.6 mL) of syrup in 5 seconds. Once this rate is set, the correct amount of syrup is blended with the shake base regardless of the size of shake served.

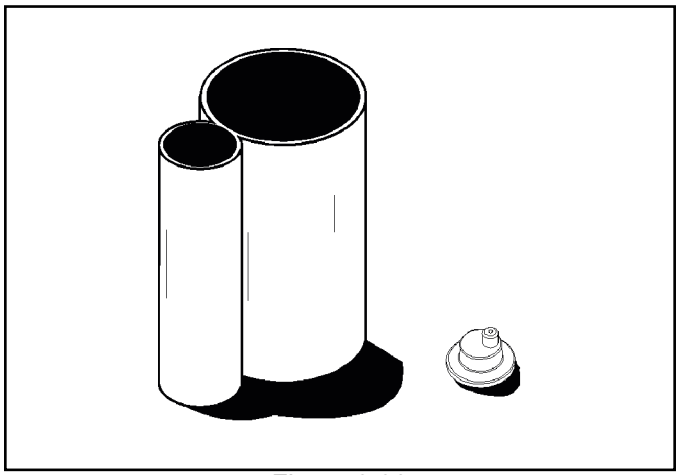

Figure 6-90

2. Install the syrup sampler to the fitting on one of the syrup lines.

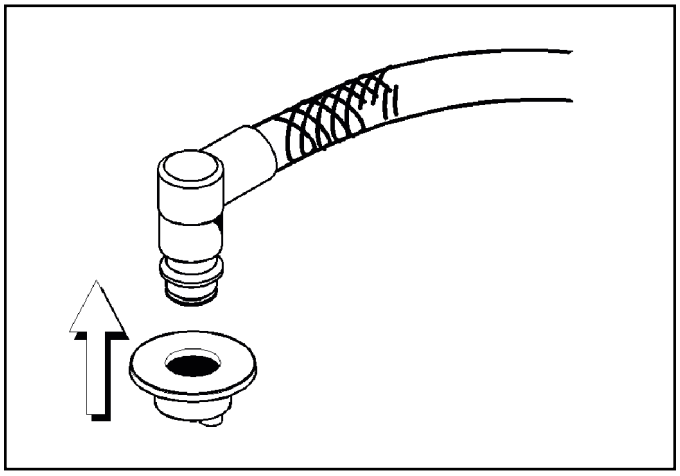

Figure 6-91

3. Hold an empty cup beneath the exit point of the syrup sampler. Press the quick disconnect fitting into the syrup sampler. This bleeds any air pockets from the syrup lines. Continue to press the syrup sampler until a steady stream of syrup is flowing into the cup.

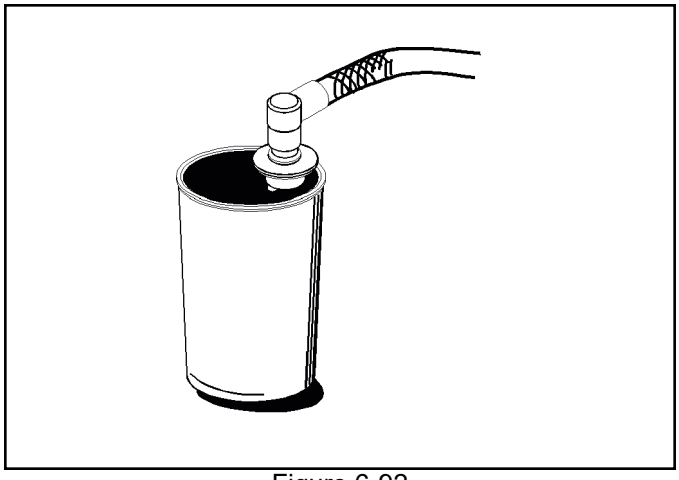

Figure 6-92

4. Hold the calibrating cup under the syrup sampler. Press the syrup sampler and time the rate of syrup flow for **5 seconds;** then release the button. If the amount of syrup received is 1 oz. (29.6 mL), the syrup is properly calibrated.

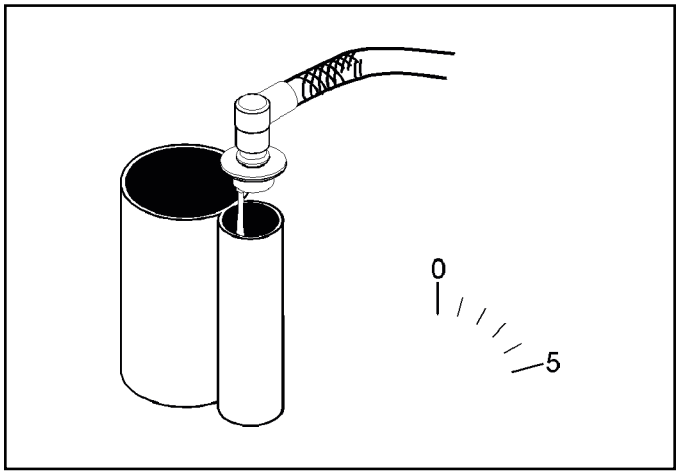

Figure 6-93

Adjusting the Syrup Pressure

If the amount of syrup received is less than 1 oz. (29.6 mL), the syrup pressure must be increased. If the amount received is more than 1 oz. (29.6 mL), the pressure must be decreased.

An air pressure manifold with individual regulators is supplied to control the amount of pressure to each tank and syrup line.

1. If less than 1 oz. (29.6 mL) of syrup is received, the pressure must be increased. Pull up the locking nut and turn the adjusting screw **clockwise.** Push down the locking nut.

   If more than 1 oz. (29.6 mL) of syrup is received, the pressure must be decreased. Pull up the locking nut and turn the adjusting screw **counterclockwise** to zero. Remove the air supply fitting to the syrup tank to allow the pressure in the tank to dissipate.
2. Reconnect the air supply fitting. Adjust the regulator to the new pressure setting and recheck the syrup calibration. Push down the locking nut to lock the regulator into its fixed position.
3. Repeat the calibration procedures for each syrup line.
4. Remove the syrup sampler. Lightly lubricate the O-ring on each syrup line fitting. Remove the syrup hole plugs from each syrup port.

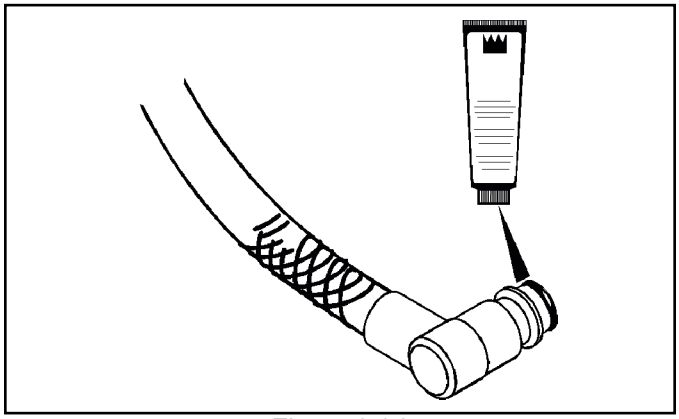

Figure 6-94

5. Match the syrup line to the color-coded draw handles and begin to attach the fittings of the syrup lines to the syrup ports of the freezer door. The flat side of the syrup line fitting should be aligned with the pin in the syrup port at a 90° angle.

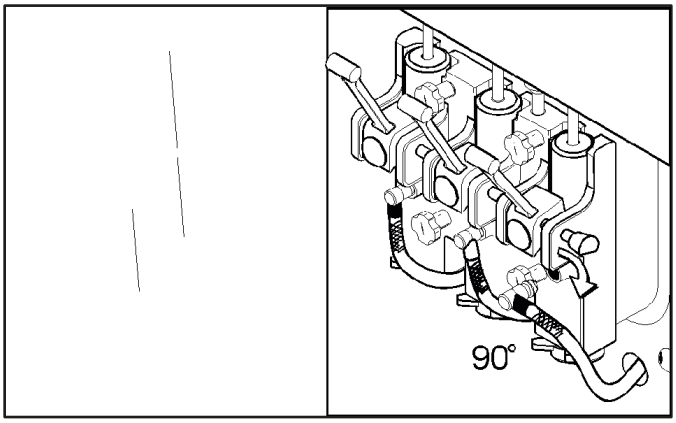

Figure 6-95

6. Rotate the syrup line fitting downward to lock into place.
7. Prime the syrup lines by holding a cup beneath the door spout and draw off 1/2 shake from each nozzle. Discard this product.

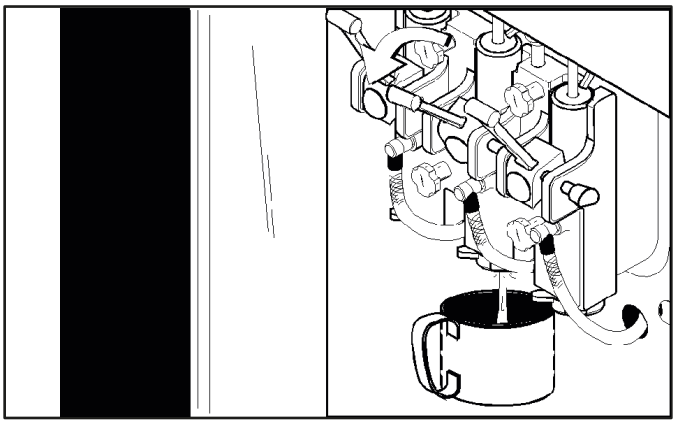

Figure 6-96

Note: *See page 6-28 for sanitizing the syrup lines.*

Closing Procedures

To disassemble your machine, the following items will be needed:

- Two cleaning pails
- Sanitized stainless steel rerun can with lid
- Necessary brushes (provided with freezer)
- Cleaner
- Single-service towels

Draining Product from the Freezing Cylinder

To drain product from the freezing cylinder for both sides, the steps will be the same. Therefore, first drain product from the shake side, then go back and drain the product from the soft serve side.

1. Press the AUTO and MIX REF keys to cancel the freezer operation.

   Note: *Auto mode must be cancelled on the soft serve side before Mix Ref mode can be cancelled.*

2. From the shake door, remove the syrup lines by rotating the syrup line fittings upward 90° and pulling out. Install the syrup hole plugs.
3. Open the mix cabinet door and remove the funnel, the mix probe, and the mix tank. **If local health codes permit the use of rerun,** empty the mix from the mix tank into a sanitized stainless steel rerun can. If local health codes **do not** permit the use of rerun, discard this product.
4. Place an empty, sanitized mix pail in the mix cabinet and insert the suction line.
5. For the shake side, place an empty pail beneath the door spouts. Pull down one draw handle at a time to clear the flavored product left in the door cavities. Lift up the draw handles and discard this product.
6. **If local health codes permit the use of rerun,** place a sanitized, NSF-approved stainless steel rerun container beneath the door spout(s). Pull down the draw handle(s). Press the WASH and PUMP keys. Drain all the mix from the freezing cylinder.
7. When all the product stops flowing from the door spout(s), lift up the draw handle(s) and press the WASH and PUMP keys to stop the operation. Place the sanitized lid on the rerun container and place it in the walk-in cooler. See page 7-1 for instructions regarding the proper use of rerun.

   Note: *If local health codes **do not** permit the use of rerun, the product must be discarded. Follow the instructions in the two previous steps, except drain the product into a mix pail and properly discard the mix.*

ALWAYS FOLLOW LOCAL HEALTH CODES.

Rinsing–Shake Side

1. Fill the empty pail in the mix cabinet with 2 gal. (7.6 L) of **cool,** clean water. Put the suction line into the pail of water.
2. Place an empty mix pail beneath the door spouts, and raise the prime plug.
3. Press the WASH and PUMP keys. This causes the rinse water to be pumped into the freezing cylinder.
4. When a steady stream of rinse water is flowing from the bleed port in the bottom of the freezer door, pull down the draw handles and draw off all the rinse water.
5. Once the rinse water stops flowing from the door spouts, lift up the draw handles and press the WASH and PUMP keys to stop the operation.
6. Repeat this procedure using clean **warm** water, until the water being discharged is **clear.**

Rinsing–Soft Serve Side

1. Fill the empty pail in the mix cabinet with 2 gal. (7.6 L) of **cool** water. Place the free end of the suction line in the pail of water.
2. Disconnect the pressure line from the pressure switch and place it in the pail of water.
3. Press the PUMP key. This causes the rinse water to be pumped through the air/mix pump and out through the pressure line. After approximately 15 seconds, press the PUMP key to stop the operation.
4. Drain and connect the free end of the pressure line to the pressure switch.
5. Place an empty pail beneath the door spout. Raise the prime plug and press the WASH and PUMP keys.
6. When a steady stream of rinse water is flowing from the bleed port in the bottom of the freezer door, open the draw valve and drain all the rinse water.
7. Once the rinse water stops flowing from the door spout, close the draw valve and press the WASH and PUMP keys to stop the operation.
8. Disconnect the pressure line from the pressure switch. Drain the water and reconnect.
9. Repeat this procedure using clean **warm** water, until the water being discharged is **clear.**

Cleaning–Shake Side

1. Prepare a pail of an approved 100 PPM cleaning solution (examples: 2-1/2 gal. [9.5 L] of Kay-5® or 2 gal. [7.6 L] of Stera-Sheen®). **Use warm water and follow the manufacturer's specifications.** Place the mix pail of cleaning solution inside the mix cabinet and insert the suction line into the pail.
2. Place an empty mix pail beneath the door spouts. Make sure the prime plug is still in the **up** position.
3. Press the WASH and PUMP keys.When a steady stream of cleaning solution is exiting the bleed port in the bottom of the freezer door, pull down the draw handles and draw off the cleaning solution. Once the solution stops flowing from the door spouts, close the draw valves. Press the WASH and PUMP keys to stop the operation.

Cleaning–Soft Serve Side

1. Prepare a pail of an approved 100 PPM cleaning solution (examples: 2-1/2 gal. [9.5 L] of Kay-5® or 2 gal. (7.6 L) of Stera-Sheen®). **Use warm water and follow the manufacturer's specifications.** Place the mix pail of cleaning solution inside the mix cabinet and insert the suction line.
2. Disconnect the pressure line from the pressure switch and place it in the pail of cleaning solution.
3. Press the PUMP key. This causes the cleaning solution to be pumped through the air/mix pump and out through the pressure line. After approximately 15 seconds, press the PUMP key to stop the operation.
4. Drain and connect the free end of the pressure line to the pressure switch.
5. Place an empty pail beneath the door spout. With the prime plug still in the **up** position, press the WASH and PUMP keys.
6. When a steady stream of cleaning solution is flowing from the bleed port in the bottom of the freezer door, pull down the draw handle and draw off all the cleaning solution. Once the solution stops flowing from the door spout, close the draw valve and press the WASH and PUMP keys to stop the operation.
7. Place the power switch in the OFF position before disassembling the machine.

Disassembly–Shake Side

1. Make sure the power switch is in the OFF position. Check to make sure no lights are illuminated on the control panel.
2. Remove the restrictor caps from the bottom of each door spout.
3. Remove the spinner blades from the bottom of each door spout by lifting up the slip collar on the coupling and pulling down the blade.
4. Remove the handscrews, freezer door, beater and scraper blades, and drive shaft from the freezing cylinder. Take them to the sink for cleaning.
5. Remove the air/mix pump. Unscrew the flare line from the mix feed tube. Pull the retaining pin out of the pump collar and slide the collar down. Tilt the air/mix pump away from the machine and take the entire assembly to the sink for further disassembly and brush cleaning.

Disassembly–Soft Serve Side

1. Make sure the power switch is in the OFF position. Check to make sure no control panel indicator lights are on.
2. Remove the handscrews, freezer door, beater, shoes, scraper blades, and drive shaft from the freezing cylinder. Take them to the sink for cleaning.
3. Remove the air/mix pump. Unscrew the flare line from the mix inlet tube. Disengage the pressure line from the pressure switch and the mix inlet tube. Pull the retaining pin out of the pump collar and slide the collar down. Tilt the air/mix pump away from the machine and take the entire assembly to the sink for further disassembly and brush cleaning.
4. Remove the pressure switch cap from the mix cabinet and the diaphragm from the cap.
5. Remove the front drip tray and splash shield.
6. Remove the rear drip trays from the side panels.

Note: *If the drip tray(s) are filled with an excessive amount of mix, the drive shaft seal(s) should be replaced or properly lubricated.*

Brush Cleaning

First brush clean all the shake parts, then repeat these steps (where they apply) for brush cleaning all soft serve parts. By doing so, you will not confuse or interchange these parts for assembly the next morning.

1. Prepare a sink with an approved cleaning solution. Use warm water and follow the manufacturer's specifications.

   If an approved cleaner other than Kay-5® or Stera-Sheen® is used, dilute according to label instructions.

   Important! *Follow label directions, since too* ***strong*** *of a solution can cause parts damage, and too* ***mild*** *of a solution will not provide adequate cleaning. Make sure all brushes provided with the freezer are available for brush cleaning.*

2. Remove the seal from the drive shaft.
3. **From the shake door:** Remove the gasket, front bearing, pivot pin, draw handles, draw valves, prime plug and syrup hole plugs. Remove all O-rings.

   From the soft serve door: Remove the gasket, front bearing, pivot pin, draw handle, design cap, draw valve, and prime plug. Remove all O-rings.

   Note: *To remove O-rings, use a single-service towel to grasp the O-ring. Apply pressure in an upward direction until the O-ring pops out of its groove. With the other hand, push the top of the O-ring forward. It will roll out of the groove and can be easily removed. If there is more than one O-ring to be removed, always remove the rear O-ring first. This allows the O-ring to slide over the forward rings without falling into the open grooves.*

4. Remove the flare line, suction line, retaining pin, mix inlet fitting, spring and poppet, valve body, and piston from the pump cylinder. Remove all O-rings and check bands. Remove the weighted end from the suction line.

   Note: *Make sure cleaned and sanitized parts trays are available.*

5. Thoroughly brush clean all disassembled parts in the cleaning solution, making sure all lubricant and mix film is removed. Take particular care to brush clean the draw valve core in the freezer door. Place all the cleaned parts in their proper places on the cleaned and sanitized parts trays to air dry overnight.

   Note: *Never leave the mix probe immersed in water. Rinse the probe in the cleaning solution and allow it to air dry overnight.*

6. Return to the freezer with a small amount of cleaning solution. With the black bristle brush, brush clean the rear shell bearing at the back of the freezing cylinder.

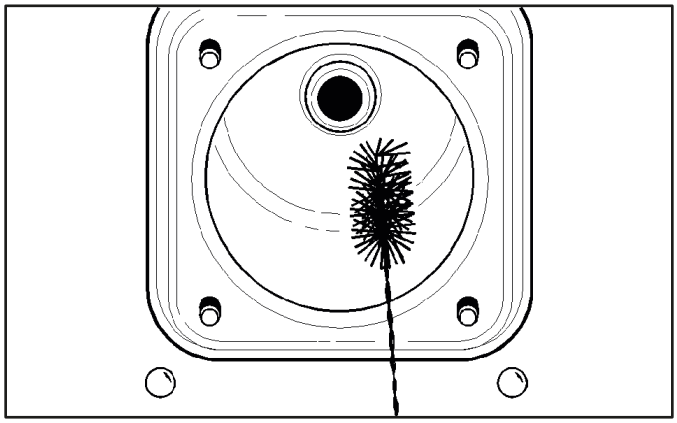

Figure 6-97

7. Using the long, flexible brush and cleaning solution, clean the mix inlet tube located in the mix cabinet. Thoroughly clean this tube all the way up to the freezing cylinder. This area needs special attention because bacteria and milkstone can build up here.

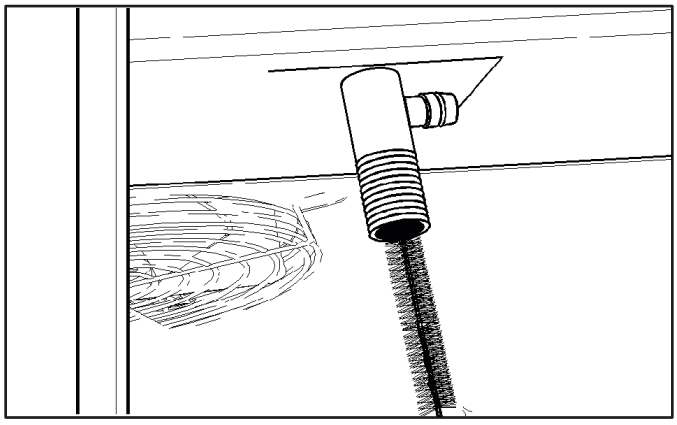

Figure 6-98

8. Wipe clean all exterior surfaces of the freezer and the mix cabinet.

Sanitizing Syrup System–Shake Side

Two main objectives in your closing procedures must be to:

- Discard all syrup at least once a week.
- Flush the syrup lines at least once a week.

This must be done on a regular basis to prevent buildup of old syrup from clogging the lines and to break the bacteria chain which develops in the tanks and lines.

Important! *Calibrating the syrup flow must be done every morning,* ***especially*** *after flushing the syrup lines.*

1. **Sanitizing the syrup tanks:** Pull back on the collar of the quick disconnect fitting of the air line. Allow the air pressure to dissipate from the syrup tank. Disconnect the syrup line.

   Remove the syrup tank from its compartment. Remove the syrup tank lid by lifting up on the locking lever. Discard the remaining syrup.

   Rinse the syrup tank with clean warm water.

   Prepare 1/2 gal. (1.9 L) of an approved 100 PPM sanitizing solution with **warm** water in the syrup tank. Brush clean the inside and outside of the tank.

   Using an adjustable wrench, remove the syrup line fitting from each tank. Remove the dip tube and O-ring from the syrup tank.

   Thoroughly brush clean the dip tube, syrup line fitting, and O-ring using the sanitizing water. Reassemble the dip tube, O-ring, and syrup line fitting.

   Pour off all the sanitizing solution and place the tank in an upside-down position on a clean dry surface to air dry.

   Repeat this procedure for all the syrup tanks.

2. **Sanitizing the syrup lines:** Prepare 1 gal. (3.8 L) of an approved 100 PPM sanitizing solution with warm water in the spare syrup tank. Replace and lock the tank lid into position. Place this tank in the syrup compartment.

   Connect one of the air lines and one of the syrup lines to the syrup tank filled with sanitizing solution.

   Place the power switch in the ON position. This activates the air compressor to supply pressure to the syrup system.

   Attach the syrup sampler to the first syrup line. Press the syrup sampler into an empty mix pail. This causes syrup residue to be forced out into the pail.

   When full-strength sanitizing solution is flowing from the syrup line, release the syrup sampler.

   Clear the syrup line of any remaining sanitizer by turning the syrup tank with the sanitizing solution upside-down and pressing the syrup sampler into the mix pail. Release the syrup sampler and return the syrup tank right-side up.

   Repeat this procedure for all the syrup lines.

   Place the power switch in the OFF position.

During Cleaning and Sanitizing

ALWAYS FOLLOW LOCAL HEALTH CODES.

Cleaning and sanitizing schedules are governed by federal, state, or local regulatory agencies, and must be followed accordingly. The Standby mode must not be used instead of proper cleaning and sanitizing procedures and frequencies set forth by the ruling health authority. The following checkpoints should be stressed during the cleaning and sanitizing operations.

IMPORTANT! *Cleaning and sanitizing must be performed daily.*

Troubleshooting Bacterial Count

- ☐ Thoroughly clean and sanitize the machine regularly, including complete disassembly and brush cleaning.
- ☐ Use all brushes supplied for thorough cleaning. The brushes are specially designed to reach all mix passageways.
- ☐ Use the white bristle brush to clean the mix feed tube which extends from the mix cabinet up to the rear of the freezing cylinder.
- ☐ Use the black bristle brush to thoroughly clean the rear shell bearing located at the rear of the freezing cylinder. Make sure there is a generous amount of cleaning solution on the brush.
- ☐ If local health codes permit the use of rerun, make sure the mix rerun is stored in a sanitized, covered stainless steel container and used the following day. **Do not** prime the machine with rerun. When using rerun, skim off the foam and discard. Mix the rerun with **fresh** mix in a ratio of 50/50 during the day's operation.
- ☐ On a designated day of the week, run the mix as low as feasible and discard after closing. This will break the rerun cycle and reduce the possibility of high bacteria and coliform counts.
- ☐ Properly prepare the cleaning and sanitizing solutions. Read and follow the label directions carefully. Too **strong** of a solution may damage the parts, and too **weak** of a solution will not do an adequate job of cleaning or sanitizing.
- ☐ Empty all syrup from the tanks and discard at least once a week.
- ☐ Thoroughly clean and sanitize the syrup lines at least once a week.
- ☐ The temperature of the mix in the mix cabinet or walk-in cooler should be below 40°F (4.4°C).

Regular Maintenance Checks

- ☐ Rotate the scraper blades to allow both sides of the knife edge to wear evenly. This will contribute to self-sharpening and help maintain fast, efficient freezing.
- ☐ Replace scraper blades that are nicked or damaged. Before installing the beater, be certain that the scraper blades are properly attached over the pins.
- ☐ Check the rear shell bearing for signs of wear (excessive mix leakage in rear drip tray) and be certain it is properly cleaned.
- ☐ Using a screwdriver and cloth towel, keep the rear shell bearings and the female drive sockets clean and free of lubricant and mix deposits.
- ☐ Dispose of O-rings and seals if they are worn, torn, or fit too loosely, and replace with new ones.
- ☐ Follow all lubricating procedures as outlined in "Freezing Cylinder Assembly–Shake Side" on page 6-1, "Freezing Cylinder Assembly–Soft Serve Side on page 6-5, "Air/Mix Pump Assembly–Shake Side" on page 6-8, and "Air/Mix Pump Assembly–Soft Serve Side" on page 6-12.

- ☐ On air-cooled machines, check the condensers for accumulation of dirt and lint. Dirty condensers will reduce the efficiency and capacity of the machine. Condensers should be cleaned **monthly** with a soft brush. **Never** use screwdrivers or other metal probes to clean.

Note: *For machines equipped with an air filter, it will be necessary to vacuum clean the filters on a monthly schedule.*

- ☐ On water-cooled machines, check the water lines for kinks or leaks. Kinks can occur when the machine is moved back and forth for cleaning or maintenance purposes. Deteriorated or cracked water lines should be replaced only by an authorized Taylor service technician.

Air/Mix Pump Checklist

- ☐ Dispose of O-rings and check bands if they are worn, torn, or fit too loosely, and replace with new ones.
- ☐ Follow lubricating procedures carefully. **Never** lubricate check bands.
- ☐ Never interchange the shake parts with the soft serve parts.
- ☐ Handle plastic pump parts with care to avoid nicks and cracks.
- ☐ Make sure the spring and poppet fit securely over the mix inlet fitting.
- ☐ Clean and sanitize the pressure switch diaphragm daily.
- ☐ Make sure the air/mix pump is properly aligned with the faceplate of the motor reducer, or severe and costly damage may occur.

Winter Storage

If the place of business is to be closed during the winter months, it is important to protect the freezer by following certain precautions, particularly if the building is subject to freezing conditions.

Disconnect the freezer from the main power source to prevent possible electrical damage.

On water-cooled freezers, disconnect the water supply. Relieve pressure on the spring in the water valve. Use air pressure on the outlet side to blow out any water remaining in the condenser.

Important! *Failure to follow this procedure may cause severe and costly damage to the refrigeration system.*

Your local Taylor distributor can perform this service for you.

Wrap detachable parts of the freezer such as the beater, blades, drive shaft, and freezer door. Place these parts in a protected, dry place. Rubber trim parts and gaskets can be protected by wrapping them with moisture-proof paper. All parts should be thoroughly cleaned of dried mix or lubrication, which attract mice and other vermin.

Problem	Shake Side Probable Cause	Soft Serve Side Probable Cause	Probable Cause	Remedy	Page Ref.
1. No product is being dispensed.			a. Low on mix. The MIX OUT light is on.	a. Add mix to the mix tank.	- - -
			b. The power switch is in the OFF position.	b. Place the power switch in the ON position.	5-1
			c. The beater assembly is rotating counterclockwise.	c. Call a service technician to correct the rotation to clockwise.	- - -
			d. The beater motor is out on reset.	d. Reset the freezer.	5-1
			e. There is a freeze-up in the mix feed tube.	e. Call a service technician.	- - -
			f. The mix suction line is not fully submerged in mix.	f. Arrange the suction line so it is completely submerged in mix.	6-19
			g. The mix pump ball crank is broken.	g. Call a service technician to replace the ball crank.	- - -
			h. The air/mix pump is incorrectly assembled or improperly lubricated.	h. Check the assembly procedures.	6-8
			i. Missing spring and poppet in air/mix pump.	i. Spring and poppet must fit securely on mix inlet fitting.	6-10
		j. Defective air/ mix pump pressure switch.		j. Call a service technician to replace the pressure switch.	- - -
		k. Pressure switch diaphragm is incorrectly installed or missing.		k. Make sure the diaphragm is lodged in its groove in the housing.	6-15
			l. The pump motor is not activated.	l. Push the reset button on the drive motor.	- - -
			m. The mix probe is not installed properly.	m. Check the mix probe installation.	6-19

8

Problem	Shake Side Probable Cause	Soft Serve Side Probable Cause	Probable Cause	Remedy	Page Ref.
1. No product is being dispensed (cont'd).			n. Missing, defective, or no lubrication on the mix inlet fitting O-ring. (No mix in the suction line.)	n. Replace or evenly lubricate the O-ring on the mix inlet fitting.	6-9
			o. Suction line is not fitting tightly on the barbed fitting of mix inlet fitting.	o. Make sure the suction line fits tightly to the fitting.	6-10
			p. Worn or defective check bands or O-rings.	p. Replace every 3 months. Never lubricate check bands.	- - -
		q. Frozen clumps are restricting the draw port.		q. Remove the pivot pin and draw handle. Raise the draw valve manually. Frozen clumps should fall free from spout.	- - -
2. Product is too stiff.		a. The Softech control is set too cold.		a. Call a service technician to adjust the control.	- - -
	b. The thermistor control is set too cold.			b. Adjust the thermistor control accordingly.	5-2
			c. Insufficient mix in the freezing cylinder.	c. Check the air/mix pump assembly. The mix suction line must be completely submerged in mix.	- - -
			d. Improper priming procedures.	d. Drain the freezing cylinder and re-prime the machine.	6-19
			e. Old, expired mix.	e. Use fresh mix. When using rerun, skim off the foam and mix 50/50 with fresh mix.	- - -
	f. Not enough syrup (1 oz. in 5 seconds).			f. Calibrate syrups. See problem 14.	6-22

8

Problem	Shake Side Probable Cause	Soft Serve Side Probable Cause	Probable Cause	Remedy	Page Ref.
3. Product is too soft.		a. Softech control is set too warm.		a. Call a service technician to adjust the control.	- - -
	b. Thermistor control is set too warm.			b. Adjust the thermistor control accordingly.	5-2
	c. Too much syrup (1 oz. in 5 seconds).			c. Calibrate syrups.	6-22
			d. Bad scraper blades.	d. Replace scraper blades every 4 months.	9-1
			e. Dirty condensers on air-cooled machines.	e. Clean regularly.	7-1
			f. Inadequate water supply on water-cooled machines.	f. Check water supply. Check water lines for leaks or kinks.	7-1
	g. Outdrawing the capacity of the freezing cylinder.			g. Continuous draw rate is approx. one 16 oz. shake by volume every 15-20 seconds.	- - -
		h. Draw rate is too fast.		h. Adjust draw rate to 5 oz. to 7-1/2 oz. (142 g to 212 g) of product by weight every 10 seconds. Make sure the restrictive bar on draw handle is assembled on the bottom.	5-3
			i. Inadequate air space.	i. Minimum of 3 in. (7.6 cm) clearance around all sides. Do not obstruct the air discharge on top.	1-1
			j. The compressor is out on overload.	j. Allow machine to cool automatic reset. If an overload shuts the compressor down again, call a service technician.	- - -
			k. Defective condenser fan.	k. Call a service technician to replace the fan.	- - -
			l. Improper priming procedures.	l. See proper priming procedures.	6-19

8

Problem	Shake Side Probable Cause	Soft Serve Side Probable Cause	Probable Cause	Remedy	Page Ref.
4. The mix cabinet temperature is too warm.			a. Warm mix was placed in cabinet. b. Softech control needs adjustment. c. The mix cabinet door was left open. d. The mix cabinet door gasket is not sealing. e. Dirty condenser on air-cooled machine.	a. The mix should be placed in mix tank below 40°F (4.4°C). b. Call service technician to adjust. c. The door must be kept closed. d. Repair or replace the door gasket. e. Clean regularly.	- - - - - - - - - - - - 7-1
5. The mix cabinet temperature is too cold.			a. The Softech control needs adjustment.	a. Call a service technician to adjust.	- - -
6. Syrup is bleeding into the freezing cylinder.	a. The spinner shaft was improperly installed. b. The center O-ring on the draw valve was improperly lubricated or is worn. c. Draw handle not completely closed.			a. The spinner blade must be flush with the bottom of the door spout. b. Lubricate properly and replace every 3 months. c. Push the draw handle up completely.	6-6 6-3 - - -
7. Product is collecting on top of the draw valve.	a. Inadequate lubrication on the spinner shaft.			a. Lubricate properly.	6-4
8. Product is collecting on top of the freezer door.			a. The top O-ring on the draw valve was either improperly lubricated or worn.	a. Lubricate properly and replace every 3 months.	6-3
9. Excessive mix leakage from bottom of door spout.	c. Inadequate lubrication on spinner shaft.		a. Worn, missing, or incorrect O-ring on the draw valve. b. Improper lubrication on draw valve O-rings.	a. Replace every 3 months. Check O-ring size. b. Lubricate properly. c. Lubricate properly.	9-1 6-3 6-4

8

Problem	Shake Side Probable Cause	Soft Serve Side Probable Cause	Probable Cause	Remedy	Page Ref.
10. Excessive mix leakage into rear drip tray.			a. Worn or missing seal on drive shaft. b. Improper lubrication on drive shaft. c. Worn rear shell bearing. d. The gear box is out of alignment. e. The drive shaft and beater assembly are working forward.	a. Replace every 3 months. b. Lubricate properly. c. Call a service technician to replace rear shell bearing. d. Call a service technician to align the gear box. e. Call a service technician to correct the problem.	9-1 6-4 - - - - - - - - -
11. The drive shaft is stuck in the gear box coupling.			a. Lubrication is on the end of the drive shaft. b. Rounded corners of shaft, gear coupling, or both.	a. Do not lubricate the end of the shaft. Call a service technician for removal. b. Call a service technician to replace the gear coupling, drive shaft, or both.	- - - - - -
12. Freezing cylinder walls are scored.			a. Broken pins on beater assembly. b. The gear box is out of alignment. c. The beater assembly is bent. d. Missing front bearing.	a. Repair or replace the beater assembly. Make sure scraper blades are properly seated on pins. b. Call a service technician to align the gear box. c. The beater assembly must be replaced. Call a service technician to correct the cause of the bent beater. d. Install on back of freezer door.	- - - - - - - - - 6-2
13. The spinner shaft will not rotate to blend syrup and mix.	a. The flexible coupling is broken. b. Pin missing on the quick disconnect of spinner coupling. c. The spinner motor is out on thermal overload.			a. Call a service technician to replace the flexible coupling. b. Call a service technician to replace the spinner coupling. c. Allow the spinner motor to cool. Check lubrication on spinner shaft. Lubricate properly.	- - - - - - 6-2

8

Problem	Shake Side Probable Cause	Soft Serve Side Probable Cause	Probable Cause	Remedy	Page Ref.
14.Large pressure adjustments to calibrate syrups, or unable to get adequate syrup delivery with syrup sampler.	a. Hardened syrup is in the syrup lines. b. The syrup and the air lines are not matched. c. Plugged restrictor in vanilla or strawberry syrup line connection. d. Plugged syrup line fitting at freezer door connection.			a. Clean and sanitize weekly. b. Match the color spiral air and syrup line to the correct syrup tank. c. Clean the restrictor. Remove the air line from the syrup tank. Remove the syrup line (vanilla or strawberry) from the syrup tank. Disassemble the syrup quick disconnect. Pull the restrictor out and clean. d. Clean the syrup line fitting.	6-28 6-22 - - - 5-3
15.The pump will not operate in the PRIME position.		b. Defective air/ mix pump pressure switch. c. The pressure switch diaphragm is incorrectly installed.	a. The pump motor is not activated.	a. Push the reset button on the pump motor. b. Call a service technician to replace the pressure switch. c. Make sure the diaphragm is lodged in its groove in the pressure switch cap.	- - - - - - 6-15

8

Problem	Shake Side Probable Cause	Soft Serve Side Probable Cause	Probable Cause	Remedy	Page Ref.
16.The machine will not run while in AUTO mode.			a. Machine is unplugged. b. The circuit breaker is off or the fuse is blown. c. Low on mix. The MIX OUT indicator is on. d. The mix probe is not installed properly. e. The beater motor is out on reset.	a. Plug machine into wall receptacle. b. Turn the breaker on or replace the fuse. c. Add mix to the mix tank. d. Check the mix probe installation. e. Reset the freezer.	- - - - - - - - - 6-19 5-1
17.The machine is short cycling. (Refrigeration system starts and stops repeatedly in very short intervals.)			a. Inadequate water supply on water-cooled machines. b. Dirty condensers on air-cooled machines. c. Inadequate air space. d. Defective condenser fan.	a. Check water supply. Check water lines for leaks and kinks. b. Clean regularly. c. Minimum of 3 in. (7.6 cm) clearance around all sides. Do not obstruct the air discharge on top. d. Call a service technician to replace the fan.	7-1 7-1 1-2

8

Notes:

Section 9 Parts Replacement Schedule

Table 9-1

Part Description	Every 3 Months	Every 4 Months	Every 6 Months	Annually	Quantities To Be Replaced	
					Shake	Soft Serve
Drive Shaft Seal	X				1	1
Scraper Blade		X			2	2
Freezer Door Gasket	X				1	1
Front Bearing	X				1	1
Front Beater Shoes	X				0	2
Restrictor Cap	X				3	0
Design Cap	X				0	1
Draw Valve O-ring	X				9	2
Prime Plug O-ring	X				2	2
Pivot Pin O-ring	X				1	1
Air/Mix Pump O-ring	X				3	3
Valve Body Check Band	X				3	3
Mix Inlet Fitting O-ring	X				1	1
Pressure Switch Diaphragm	X				0	1
All Brushes			Inspect and replace if necessary.	Minimum	1	1

Note: *See the Parts List on page 10-1 when ordering the above parts.*

Notes:

+ Available Separately

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Accumulator A.- Air *8657*	X25159	1	103	Air Compressor	
Adaptor *McSundae*	023416	1	103	Soft Serve Side	
Adaptor- Pump- Cabinet	024259	1	103	Shake Side	
Beater A.- 3.4 qt.- 1 Pin- Support	X46231	1	103	Soft Serve Side	
+Blade- Scraper- Plastic 8- 1/8L	046235	2	000		
+Clip- Scraper Blade	046236	2	103		
Pin- Scraper	014170	2	000		
Beater A.- 7qt.- 1 Pin- Support	X46233	1	103	Shake Side	
+Blade- Scraper- Plastic 9- 13/16L	046237	2	000		
+Clip- Scraper Blade	046238	2	103		
Pin- Scraper Blade	009839	2	000		
Bearing- Front	013116	1	000	Shake Side	
Bearing- Front	050348	1	000	Soft Serve Side- w/Front Shoe Kit X50350	
Bearing- Rear Shell *Nick.Plate	031324	2	000		
+Guide- Drip Seal	028992	2	000		
+Nut- Brass Bearing	028991	2	000		
+Washer- Bearing Lock	012864	2	000		
Belt- AX34	025729	2	000	Soft Serve Side	
Belt- V- 4L330	027016	2	000	Shake Side	
Blade A.- Spinner	020112	3	103		
Block- Terminal 2P	039422	2	103	1 Phase	
Block- Terminal 3P	039423	2	103	3 Phase	
Block- Terminal 5 Pole	024329	2	103		
Blower Assembly	X47833- 27	1	103	J5013587/Up HP- 62	
Boot- Capacitor Insulating	031314	1	000	J5013587/Up HP- 62	

+ Available Separately

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Capacitor- Run- 10 UF/370V	033047	1	103	J5013587/Up HP- 62	
Housing A.- w/Wheel	X30160	1	103		
Motor- Blower- 208/230V 50/60 HZ	046536- 27	1	103	J5013587/Up HP- 62	
Blower A.	X30153- 27	1	103	J5013587/Prior	
Housing A.- w/Wheel	X30160	1	103		
Motor- Blower	030157- 27	1	103	J5013587/Prior	
Board- Logic- GEN 2	X36641SER1	2	212		
Board- Power- GEN 1 and 2	X32326- SER	1	212	Soft Serve Side	
Board- PWR/RLY- GEN 1 and 2 Shake	X34983- SER	1	212	Shake Side	
Brush- Double Ended- Pump and Feed T	013072	1	000		
Brush- Draw Valve 1”ODX2”X17”L	013073	1	000		
Brush- Draw Valve 1- 1/2”OD X 3”	014753	1	000		
Brush- Feed Tube 9/16ODX44 DA	021101	1	000		
Brush- Mix Pump Body- 3”X7”White	023316	1	000		
Brush- Pressure Switch- 1/8”DIA	027647	1	000		
Brush- Rear BRG 1”DX2”.LGX14	013071	1	000		
Button- Brown	021225- 2	1	000	Shake Door	
Button- Plain	021225	1	000	Shake Door	
Button- Red	021225- 1	1	000	Shake Door	
Cabinet A.- Insulated Mix *8657	X25153	1	103		
Cable- Ribbon- PWR/Relay- 18”	032444	2	103		
Cap- Design- 1.010”ID- 6 Point	014218	1	000	Soft Serve Side	
Cap- Pump	021276- 9	2	103		
+Pin- Retaining	021276- 8	2	103		
Cap- Restrictor	021183	3	000	Shake Side	

+ Available Separately

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Caster- SWV- 3/4- 10 ST. 3” WHL	021279	4	103		
Compressor A.- AIR *8657*	X32342-	1	103		
Compressor- Air	032129-	1	103		
Switch- Pressure	016308	1	103		
Tee- 1/4FPT X 1/4MPT X 1/4FPT	021277	1	000		
Tube- Vinyl 1/4ID X 1/16Wall (36” and 54”)	020941- 36 / - 54	8 ft	000	Bulk Under P/N R30312	
Valve- Check 1/4MP	020959	1	103		
+Valve- Shutoff 1/8 F.P.Brass	024660	1	103		
Compressor AE0415Z- AE80ET	048627-	1	512	J6013968/Up HP- 62 Mix Cabinet	
+Grommet- Compressor Mount- AH	039923	4	000		
+Overload	050108- 27	1	103	60Hz	
+Relay- Start	050106- 27	1	103	60HZ	
+Sleeve- Mounting- Comp.- AH	039924	4	000		
Compressor AE3414A- AE121E	029841-	1	512	J6013968/Prior Mix Cabinet	
+Relay- Start Compressor	035772	1	103		
Compressor AH2490Z- AH556ET	047519-	1	512	Soft Serve J5013587/UP HP- 62	
+Capacitor Relay ASSY.	048130- 27	1	103	(230- 60- 1)	
+Capacitor- Run 35UF/440V	048132	1	103	(230- 60- 1)	
+Capacitor- Start- 135- 155UF/330V	036048	1	103	(230- 60- 1)	
+Relay- Start- Compressor	036047	1	103	(230- 60- 1)	
+Grommet- Compressor Mount- AH	039923	4	000		
+Sleeve- Mounting- Comp.- AH	039924	4	000		
Compressor AH7513Z- AH245ET	047520-	1	512	Shake J5013587/Up HP- 62	
+Capacitor Relay ASSY.	048131- 27	1	103	(230- 60- 1)	
+Capacitor- Run- 35UF- 370V	029439	1	103	(230- 60- 1)	

+ Available Separately

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
+Capacitor- Start- 124- 149UF/33	048134	1	103	(230- 60- 1)	
+Relay- Start- Compressor	048150	1	103	(230- 60- 1)	
+Grommet- Compressor Mount- AE- AK	039919	4	000		
+Sleeve- Mounting- Comp- AE	039920	4	000		
Compressor AH2511K- AH555E	023577-	2	512	J5013587/Prior Shake and Soft Serve	
+Capacitor Relay A.	023725- 27	2	103	J5013587/Prior Shake and SS (230- 60- 1)	
+Capacitor- Run	023739	2	103	(230- 60- 1)	
+Capacitor- Start	037785	2	103	(230- 60- 1)	
+Relay- Start- Compressor	023607-	2	103	(230- 60- 1)	
Condenser- AC- 18LX14H- 3row	048629	2	103	J5013587/Up HP- 62 Main	
Condenser- AC- 12LX14HX5.2-	021671	2	103	J5013587/Prior MAIN	
Condenser- AC- 9X8 - 2 Row	029797	1	103	Mix Cabinet	
Coupling A.- Door Spinner- GENII	X38311	3	103		
Coupling- Drive- Door Spinner	038312	3	103		
Pin- Roll- .094D X .562L	015971	3	000		
Coupling- Drive 1/2 SQ. X 1- 7/8	025997	1	103	Shake Side	
+Screw- 5/16- 18 X 5/16 Allen Set	042511	2	000		
Coupling- Drive 3/4 Hex X 1- 7/8	012721	1	103	Soft Serve Side	
+Screw- 5/16- 18 X 5/16 Allen Set	042511	2	000		
Coupling- Flexible w/Screws	020108	3	103	Shake Side Spinners	
Cover- Mix Tank	024590	1	103		
Cover- Left Mix Storage	037138	1	103		
+Boot- Mix Cover	037200	1	000		
Cover- Right Mix Storage	037139	1	103		
+Boot- Mix Cover	037200	1	000		

+ Available Separately

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Cup- Divided Syrup	017203	1	000		
Decal- Clean Inst.- Cabinet	024735	1	000		
Decal- Dec- 8657 Softech	038336	1	000		
Decal- Draw 1 Shake at a Time	025310	1	000		
Decal- Power Switch	032484	1	000		
Decal- Set 4 Syrup Flavor	021523	1	000		
Decal- Syrup Tank Instruction	045533- 1	3	000		
Decal- Troubleshooting	038374	1	000		
Decal- Warm- Cold	013749	1	000		
Decal- Warning *Panel*	036529	3	000		
Diagram- Wiring *8657*MC*	038294	1	000	J5080000/UP Soft Serve Side J5080000/Prior See Kit A.- Door	
Door A.- 1SPT	X51531- 10	1	103		
+Handle A.- Draw- ADJ.	X26996	1	103		
Handle- Adjustable	028804	1	103		
O-ring- 1/4 OD X .070W 50 DURO	015872	1	000		
Screw- Adjustment	026592	1	000		
+Pin A.- Pivot	X22820	1	103		
+O-ring- 5/16 OD X .070W	016272	1	000		
+Plug- Prime	028805	1	103		
+O-ring- 3/8 OD X .070W	016137	2	000		
+Valve A.- Draw	X18303	1	103		
+O-ring- 7/8 OD X .103W	014402	2	000	Shake Side	
Door A.- 3 Spout Shake	X38815- SER	1	103		
+Handle- Draw Valve	026952	3	103		
+Pin A.- Pivot	X21781	1	103		

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
+O-ring- 5/16 OD X .070W	016272	1	000		
+Plug- Prime	028805	1	103		
+O-ring- 3/8 OD X .070W	016137	2	000		
+Valve A.- Draw	X20152	3	103		
+O-ring- 1- 1/16 OD X.139W	020571	9	000		
Door A.- Ins. Mix- 8657/8756/8757	X24816	1	103	Mix Cabinet	
+Bearing A.- Hinge	X20305	1	000		
+Cap- Door	032934	1	000		
+Gasket- Cab. Mix Door	024629	1	000		
+Hinge- Self Closing Door	020143	1	103		
+Pin A.- Upper Hinge	X20315	1	103		
+Plate- Lower Hinge	020323	1	103		
Dryer- Cap. Tube- HP62 (Dual)	049346	1	000	J6013868/Up HP- 62 Mix Cabinet	
Dryer- Cap. Tube- R12/502	030940	1	000	J6013868/Prior Mix Cabinet	
Dryer- Filter- HP62- 3/8 X 1/4S	047521	2	000	J5013587/Up HP- 62	
Dryer- Filter 3/8FL IN 1/4	026270	2	000	J5013587/PRIOR	
Element- Heater	014174-	2	000	Prior To 03/96 (Overload Relay)	
Evaporator- 12L X 4H X 1- 7/8T	X30939	1	103	Mix Cabinet	
Fan- Evaporator 2900RPM- 18W/60H	028534-	2	103	Mix Cabinet	
Funnel- Mix	036637	2	103		
Fuse- 15 AMP Cartridge	027582	6	000		
Gasket- Door 5.177ID X 5.938OD	016672	1	000	Shake Side	96
Gasket- Door HT 4”- Double	048926	1	000	J5080000/Up Soft Serve Side	96
Gasket- Door- 4” Shell	038514	1	000	J5080000/Prior Soft Serve Side	
Gear A.*Reducer	021286	2	212		

+ Available Separately

+ Available Separately

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Guard- Fan	028534- 1	2	103	Mix Cabinet	
Guide A.- Drip Pan *8657*	X28662	2	103		
Holder- Fuse 300 Volt Panel MT.	027581	6	103		
Hood *8657- 756- 757*	048526	1	103	J5013587/Up	
Hood *into A.*8756- 8657*	023590	1	103	J5013587/Prior	
Kit A.- Door 1 Spout	X51531- 3	1	103	Must Use on Machines before S/N J5080000	
Bearing- Front	023262	1	000	To Replace X23859- Ser. Door Assy.	96
Door A.- 1 Spout	X51531- 10	1	103		
Gasket- Door HT 4”- Double	048926	1	000		
Nut- Stud *General Usage*	021508	4	103		
O-ring- 3/8 OD X .070W	016137	2	000		
O-ring- 7/8 OD X .103W	014402	2	000		
Kit A.- Remote Reg. SYR. *8657	X27719	1	103		
Decal- Syrup Flavor Instruction	020997	1	000		
Grommet--1- 3/4 X 1--1/2	020509	1	000		
Line A.- Syrup- BRN- 120”	X30059- 120	1	103		
Ferrule- .475 ID NP BRASS	021082	2	000		
Nylon- Spiral Wrap- Brown- 5”	022362- 2	1	000	Bulk under P/N R40338	
O-ring- 1/2OD X .070W	024278	1	000		
Plug- Q.D. Syrup 90DEG STNL	024848	1	103		
Socket- Q.D. LIQ.- 90DEG- 1/4Barb	021026	1	103		
Tube- Nylobrade 1/4ID X 7/16OD	020568- 120	1	000	Bulk under P/N R30317	
Line A.- Syrup- Red- 120”	X30072- 120	1	103		
Ferrule- .475 ID NP Brass	021082	2	000		
Nylon- Spiral Wrap- Red- 5”	022362- 1	1	000	Bulk under P/N R40337	

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
O-ring- 1/2OD X .070W	024278	1	000		
O-ring- 3/4 OD X .103W	015835	1	000		
Plug- Q.D. Syrup 90DEG STNL	024848	1	103		
Restrictor- Syrup	025816	1	000		
Socket- Q.D. LIQ.- 90DEG- 1/4Barb	021026	1	103		
Tube- Nylobrade 1/4ID X 7/16OD	020568- 120	1	000	Bulk under P/N R30317	
Line A.- Syrup- WHT- 120IN	X30060- 120	1	103		
Ferrule- .475 ID NP Brass	021082	2	000		
Nylon- Spiral Wrap- White- 5”	022362	1	000	Bulk under P/N R40320	
O-ring- 1/2OD X .070W	024278	1	000		
O-ring- 3/4 OD X .103W	015835	1	000		
Plug- Q.D. Syrup 90DEG STNL	024848	1	103		
Restrictor- Syrup	025816	1	000		
Socket- Q.D. Liq.- 90DEG- 1/4Barb	021026	1	103		
Tube- Nylobrade 1/4ID X 7/16OD	020568- 120	1	000	Bulk under P/N R30317	
Regulator A.- Remote	X23969	1	103		
Line A.- Air	X24382- 96	1	103		
Adaptor- SWV 1/4F 1/4Barb*SS*	016715	2	103		
Ferrule- .475 ID NP Brass	021082	2	000		
Tube- Nylobrade 1/4ID X 7/16OD	020568- 96	1	000	R30317	
Line A.- Air *18”	X23997	1	103		
Adaptor- SWV 1/4F 1/4Barb*SS*	016715	1	103		
Ferrule- .475 ID NP Brass	021082	2	000		
Socket- Q.D. CO2 90DEG 1/4Barb	021524	1	103		
Tube- Nylobrade 1/4ID X 7/16OD	020568- 18	1	000	R30317	

+ Available Separately

+ Available Separately

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Line A.- Air *24”	X24309	1	103		
Adaptor- SWV 1/4F 1/4Barb*SS*	016715	1	103		
Ferrule- .475 ID NP Brass	021082	2	000		
Socket- Q.D. CO2 90DEG 1/4Barb	021524	1	103		
Tube- Nylobrade 1/4ID X 7/16OD	020568- 24	1	000	R30317	
Line A.- Air *30”	X24018	1	103		
Adaptor- SWV 1/4F 1/4Barb*SS*	016715	1	103		
Ferrule- .475 ID NP Brass	021082	2	000		
Socket- Q.D. CO2 90DEG 1/4Barb	021524	1	103		
Tube- Nylobrade 1/4ID X 7/16OD	020568- 30	1	000	R30317	
Manifold A.- Regulator *454- 657	X23994	1	103		
Decal- Flavor Color Set 4	022105	1	000		
Gauge- Pressure 0- 60 LBS 1/8MPT	021029	3	103		
Manifold A. *5454- 5- 8657*	X25293	1	103		
Nipple- 1/8 MPT Close BRASS	020519	4	000		
Regulator- Pressure	020514	4	103		
Restrictor A.- Air *347- 454- 5- 6	X21161	1	103		
Tee- 1/8MPT X 1/8FPT X 1/4MFL	028245	3	000		
Valve- Press.Relief- 45# 1/8MP	021148	1	103		
Nylon- Spiral Wrap- Brown- 5”	022362- 2	1	000	R40338	
Nylon- Spiral Wrap- Red- 5”	022362- 1	1	000	R40337	
Nylon- Spiral Wrap- White- 5”	022362	1	000	R40320	
Washer- 1/4 Flare- Nylon	018595	4	000		
Kit A.- Tune Up- 1 Spout- Non HT	X49463- 15	1	000	J5080000/UP Soft Serve Side	98
Bearing- Front	050348	1	000	Soft Serve Side- w/Front Shoe Kit X50350	

+ Available Separately

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Cap- Design- 1.010”ID- 6 Point	014218	1	000		
Diaphragm- Pressure Switch	020249	1	000		
Gasket- Door HT 4”- Double	048926	1	000		
O-ring- 1- 3/8 OD X .103W	018664	1	000		
O-ring- 13/16 OD X .139W	021278	1	000		
O-ring- 2- 1/8 OD X .139W	020051	3	000		
O-ring- 3/8 OD X .070W	016137	2	000		
O-ring- 5/16 OD X .070W	016272	1	000		
O-ring- 7/8 OD X .103W	014402	2	000		
Ring- Check 1- 1/4 OD X 3/8	033215	1	000		
Ring- Check 2” OD X 1/2	020050	2	000		
Seal- Drive Shaft	032560	1	000		
Tool- Cleaning O-ring Removal	048260	1	000		
Kit A.- Tune Up*8752 Coax	X36566	1	000	J5080000/Prior Soft Serve Side	98
Bearing- Front	023262	1	000		
Cap- Design- 1.010”ID- 6 Point	014218	1	000		
Diaphragm- Pressure Switch	020249	1	000		
Gasket- Door- 4” Shell	038514	1	000		
O-ring- 1- 3/8 OD X .103W	018664	1	000		
O-ring- 13/16 OD X .139W	021278	1	000		
O-ring- 2- 1/8 OD X .139W	020051	3	000		
O-ring- 3/8 OD X .070W	016137	2	000		
O-ring- 5/16 OD X .070W	016272	2	000		
O-ring- 7/8 OD X .103W	014402	2	000		
Ring- Check 1- 1/4 OD X 3/8	033215	1	000		

+ Available Separately

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Ring- Check 2” OD X 1/2	020050	2	000		
Seal- Drive Shaft	032560	1	000		
Tool- Cleaning O-ring Removal	048260	1	000		
Kit A.- Tune Up*5454- 8657*Coax	X36568	1	000	Shake Side	
Bearing- Front	013116	1	000		
Cap- Restrictor	021183	3	000		
Gasket- Door 5.177ID X 5.938OD	016672	1	000		
O-ring- 1- 1/16 OD X.139W	020571	9	000		
O-ring- 1- 3/8 OD X .103W	018664	1	000		
O-ring- 1/2OD X .070W	024278	6	000		
O-ring- 13/16 OD X .139W	021278	1	000		
O-ring- 2- 1/8 OD X .139W	020051	3	000		
O-ring- 3/8 OD X .070W	016137	2	000		
O-ring- 5/16 OD X .070W	016272	1	000		
O-ring- 5/8 OD X .103W	016030	3	000		
Ring- Check 1- 1/4 OD X 3/8	033215	1	000		
Ring- Check 2” OD X 1/2	020050	2	000		
Seal- Drive Shaft	032560	1	000		
Label- 1/4 X 1- 1/2 Long- Brown	022710	1	000		
Label- 1/4 X 1- 1/2 Long- Red	022707	1	000		
Label- 1/4 X 1- 1/2 Long- White	022709	1	000		
Label- Door Caution	032749	1	000		
Label- Mix Pump Reset	022723	2	000		
Label- Moving Parts Warning	024315	3	000		
Label- Shake Mix	025778	1	000		

+ Available Separately

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Label- Soft Serve Mix	025779	1	000		
Line A.- Flare	038299	2	103		
Line A.- Pump Pressure	X27139	1	103		
Ferrule- 3/8 OD Brass	030553	2	000		
Socket- QD. 3/16 Barb	020021	2	103		
Tube- Vinyl 3/16ID X 1/16 Wall	020940- 16	1	000	Bulk under P/N R30314	
Lubricant- Taylor 4 oz.	047518	1	000		
Man- Oper 8657	028757- M	1	000		
Motor A.- Spinner w/Plug	X22635-	3	103		
+Capacitor- Start- 21- 25UF/220V	020246	3	103		
Connector- Plug 3 Pin Female	022522	3	103		
Motor- 1/12 HP 3450 RPM	016005-	3	103		
Pin- Male .084”DIA- Mate- N- Lok	021624	9	103		
+Relay- Spinner Motor- 1/2HP- 230V	016006-	3	103		
Motor- 1.0 HP	013102-	1	212	Shake Side	
Motor- 1.5 HP	021522-	1	212	Soft Serve Side	
Motor- Reducer 108 RPM- SHK	030914-	1	103	Shake Side	
Motor- Reducer 54 RPM- SS	030913-	1	103	Soft Serve Side	
Nut- Stud *General Usage*	021508	8	103	Shake and Soft Serve Side (Handscrews)	
Pail- Mix 10 qt.	013163	2	000		
Pan A.- Drip- Exp.VLV *8657	X25162	2	103		
Pan- Drip 11- 5/8 Long	027503	2	103		
Panel A.- Control *8657*MC*	X38307	1	103	(Control Channel)	
Panel A.- Front *8657*	X25148	1	103		
Panel A.- Lower Side	X23956	2	103		

+ Available Separately

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Panel- Lower Rear	025220	1	103		
Panel- Upper Rear	022015	1	103		
Panel- Upper Side Left	028638	1	103		
Panel- Upper Side Right	028600	1	103		
Plate- DEC- 8657- GEN II	038310	1	103		
Plug- Q.D. CO2 1/8 MP	021077	3	103		
Plug- Q.D. LIQ. 3/4- 18 FP	021081	3	103		
Plug- Syrup Hole	026278	3	000	Shake Door	
Probe A.- Mix- w/Ball Connectors	X35981	2	103		
Probe A.- Thermistor	X31602	2	103	Barrel	
Probe A.- Thermistor *Short*	X36267	1	103	Mix Cabinet	
+Bracket- Therm. Probe *756*	033745	1	103		
Pulley- 2AK22 X .625- .6265	016403	1	103	Soft Serve Side - Beater Motor	
Pulley- 2AK25 X .6255- .6265	021076	1	103	Shake Side - Beater Motor	
Pulley- 2AK64- 5/8 Bore	039695	1	103	Shake Side - Gear	
Pulley- 2AK74- 5/8	027822	1	103	Soft Serve Side - Gear	
Pump A.- Coax- Combo *SS*A*	X36300	1	103	Soft Serve Side	
Body A.- Coax VLV- Combo*SS*A*	X36419	1	103		
Cylinder A.- Pump *McSundae*	X23420	1	103		
Elbow- Inlet 90 DEG.	022502- 4	1	103		
O-ring- 1- 3/8 OD X .103W	018664	1	000		
O-ring- 13/16 OD X .139W	021278	1	000		
O-ring- 2- 1/8 OD X .139W	020051	3	000		
Pin- Retaining	021276- 8	1	103		
Piston- Coax Pump *A* White	032733	1	103		

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Poppet- Rubber- Black	022473	1	000		
Ring- Check 1- 1/4 OD X 3/8	033215	1	000		
Ring- Check 2” OD X 1/2	020050	2	000		
Spring- Tapered 1- 7/8L	022456	1	103		
Pump A.- Coax *Shake*A*	X33450	1	103	Shake Side	
Body A.- Coax Valve *Shake*A*	X33451	1	103		
Cylinder A.- Pump	022345- 1	1	103		
Elbow- Inlet 90 Deg.	022502- 4	1	103		
O-ring- 1- 3/8 OD X .103W	018664	1	000		
O-ring- 13/16 OD X .139W	021278	1	000		
O-ring- 2- 1/8 OD X .139W	020051	3	000		
Pin- Retaining	021276- 8	1	103		
Piston- Coax Pump *A* White	032733	1	103		
Poppet- Rubber- Black	022473	1	000		
Ring- Check 1- 1/4 OD X 3/8	033215	1	000		
Ring- Check 2” OD X 1/2	020050	2	000		
Spring- Tapered 1- 7/8L	022456	1	103		
Relay- 3 Pole- 20A- 208/240 50/60	012725-	4	103	Main Compressor	
Relay- Overload 1 Phase 4.5- 7.5 AMP	049651- 27K	2	103	After 03/96 (230- 60- 1)	106
Relay- Overload 3 Phase 3.0- 5.0 AMP	049651- 33J	2	103	After 03/96 (230- 60- 3)	106
Refer to Full Load Amps of Beater Motor					
Relay- Overload Block	014394-	2	103	Prior to 03/96	
Relay- SPDT- 30 A- 240 V	032607-	1	103	Blower Assembly	
Sampler- Syrup	024874	1	000		
Sanitizer Kay- 5 (125 Packets)	041082	1	000		

+ Available Separately

+ Available Separately

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Shaft- Beater	032564	1	103		
+Seal- Drive Shaft	032560	1	000		
Shaft- Beater	032790	1	103		
+Seal- Drive Shaft	032560	1	000		
Shell A.- Insulated *8657*	X25138	1	512	Soft Serve Side	
+Stud- Nose Cone	022822	4	103		
Shell A.- Insulated*5454- 8657*	X23801	1	512	Shake Side	
+Stud- Upper Freezer	023909	2	103		
+Stud- Lower Freezer *454- 5- 657*	023910	2	103		
Shield- Splash *8657*	026039	1	103		
Shroud A.- Evap- HP62 Cabinet	X49124	1	103	J6013868/Up HP- 62 Mix Cabinet	
Shroud A.- Evaporator	X21983	1	103	J6013868/Prior Mix Cabinet	
Socket A.- Probe*Ball and Sock*60”	X36615	2	103		
Clip- Ball Connector	035813	6	000		
Screw- 5- 40 X 1/4 Socket Cap SS	037843	6	000		
Switch A.- Draw	X49831	3	103	Shake Side	
Bearing- Switch	029244	6	000		
Bracket A.- Draw Switch	X38334	3	103		
E-ring- 5/16	027216	3	000		
Nut- Push On- 1/2DIA. Shaft	039735	6	000		
Rod- Draw *456- 8- 9- 662*	027221	3	103		
Spring- Comp.720.X.055X2.0- SS	035601	3	103		
Switch- Actuator	035609	3	103		
Switch- Lever- SPDT- 15A- 125- 250V	027214	9	103		
Switch A.- Draw *Combo- SS- GEN 2	X38325	1	103	Soft Serve Side	

+ Available Separately

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Bracket A.- Switch *451- 8657*	X25170	1	103		
E-ring 5/16	016422	1	000		
Rod- Switch *451- 657*- 661*	025173	1	103		
Spring- Comp.480X.047X2.00 SS	025452	1	103		
Switch- Roller- SPDT- 20A- 125- 480	025444	1	103		
Switch A.- Pressure*Delrin Cap*	X32660	1	103	Mix Cabinet	
Body- Pressure Switch*Delrin*	032633	1	103		
Cap- Pressure Switch	032635	1	000		
Diaphragm- Pressure Switch	020249	1	000		
Nut- Panel*Pressure Switch*	032637	1	000		
O-ring- 1/2ID X 5/8 OD	017998	1	000		
Piston- Pressure Switch*Delrin	032634	1	103		
Spring- Comp.480X.047X1.00	032651	1	103		
Switch- Plunger- SPDT15A125- 250V	032260	1	103		
Switch- Pressure 440 PSI- Solder	048230	2	103	J5013587/Up	
Switch- Pressure 25PS Open	030886	2	103	J5013587/Prior	
+Boot- Pressure Switch	034682	2	000		
Switch- Toggle- 4PDT*On- None- On	037394	3	103		
Tank A.- Mix w/Decals	X38755	2	103		
Tank- Mix 9- Gallon Tapered BTM	034928	2	103		
Decal- Mix Tank- Wrong Side Out	038750	2	000		
Decal- Mix Tank- Right Side Out	038751	2	000		
Tank--SYR--8 QT w/Inlet FTG-- CVR	035759	3	103		
Cover- Syrup Tank w/Inlet Fitting	035759- 1	3	103	Included w/Tank	
+Decal- Syrup Tank Instruction	045533- 1	3	000		

+ Available Separately

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Gasket	016037	3	000	For Cover	
O-ring	018550	3	000	For Dip Tube	
Tip- Nylon- White	042747	9	000		
Tube- Dip	015441- 7	3	103		
Tee- Access 1/2” w/5344 CO	026688	2	103	J5013587/Prior	
Tool- Liq.Valve Body Extracting	035793	1	000		
Tray- Drip 22--7/8L X 5--1/8W	014533	1	103		
Tray- Parts- Barrel 4”- Long	024332	1	000		
Tray- Parts- Barrel- 3SPT SHK	025227	1	000		
Tray- Parts--Pump--Coax--Double	036632	1	000		
Trim A.- Shelf	X24813	1	103	Below Drip Tray	
Trim A.- Side	X22424	2	103		
Trim- Bottom Mix Cabinet	024826	1	103		
Trim- Corner- Rear	022013	2	103		
Trim- Front Left	024824- SP	1	103		
Trim- Front Right	024825	1	103		
Tube A.- Mix Inlet- Shake	X23825	1	103	Shake Side	
+O-ring- 13/16 OD X .103W	019330	1	000		
+Seal- Inlet Tube	032886	1	000		
Tube A.- Mix Inlet- Soft Serve	X23124	1	103	Soft Serve Side	
+O-ring- 13/16 OD X .103W	019330	1	000		
+Seal- Inlet Tube	032886	1	000		
Tube A.- Suction *18”*	X37293	2	103		
Counterweight- Suction Tube	020452	2	103		
Tube- Vinyl 5/8 ID X 1/8 WALL	020945- 18	2	000	R30326	

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Tube- Vinyl 1/4ID X 1/16Wall	020941- 30	1	000	Bulk under P/N R30312 Mix Cab Shroud	
Tube- Vinyl 1/4ID X 1/16Wall	020941- 10	2	000	Bulk under P/N R30312 AXV Drip Pan	
Valve- Access 1/4 X 3/8 Solder	029406	1	103	Mix Cabinet	
Valve- Access 1/4FL X 1/4Solder	044404	1	103		
Valve- Access 1/4FL X 3/8S	043232	2	103	J5013587/Prior	
Valve- Access 1/4FL X 3/8SDR- 90	044455	2	103		
Valve- Access- 1/4 MFLX1/4 S- 90	047016	2	103	J5013587/Up HP- 62	
Valve- EPR 1/4S	022665	1	103		
Valve- EXP- Auto- 1/4S X1/4 FPT	046365	2	103	J5013587/Up HP- 62	
Valve- EXP- Auto- 1/4MF X 1/	037392	2	103	J5013587/Prior	
+Boot- Expansion Valve	050900	2	000		
Valve- Regulator CPR 5/8S	025780	1	103	J5013587/Prior Syrup Rail Option	
Washer- Plastic Pivot	013808	4	000		
Wire A.- Pressure*Long*	X32663	1	103	Mix Cabinet	
WATER-COOLED					
Bracket- Fan *8657*WC	048524	1	103		
Condenser- WC- COAX	048287	2	103		
Enclosure- Fan *8657- 8756*	030955	1	103		
Fan- 5 Blade 7” Push	016289	1	103		
Hose- Rubber 1/2”ID X 7/8”	R50200	23 ft	000		
Motor- Fan 9 Watt 1450 RPM-	012768-	1	103		
Outlet A.- Tee	X25900	1	103		
Switch- Pressure	048231	2	103		
Valve- Water 3/8 REG/Head	046686	2	103		
50 Hz					

+ Available Separately

+ Available Separately

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Belt- AX35	022848	2	000	Soft Serve Side	
Belt- V- 4L340	003845	2	000	Shake Side	
Capacitor Relay A.	048130- 34	1	103	Soft Serve Side	
Capacitor Relay A.	048131- 34	1	103	Shake Side	
Compressor AE0415Z- AE580JT	048627- 40	1	512	J5070000/Up HP- 62 Mix Cabinet 50Hz	
+Overload	050109- 27	1	103		
+Relay- Start	050107- 27	1	103		
Compressor AE3414A- AE121JL	029841- 34	1	512	J5070000/PRIOR Mix Cabinet 50Hz	
+Relay- Start	035773	1	103		
Pulley- 2AK27 X .625- .6265	011545	1	103	Soft Serve Side - Beater Motor	
Pulley- 2AK30 X .625- .6265	010052	1	103	Shake Side - Beater Motor	
Relay- Overload 3 Phase 1.4- 2.3 AMP	049651- 33G	1	103	After 03/96 (220/380- 50- 3) (240/415- 50- 3)	106
Relay- Overload 3 Phase 2.0- 3.3 AMP	049651- 33H	1	103	After 03/96 (220/240- 50- 3)	106
Relay- Overload 1 Phase 4.5- 7.5 AMP	049551- 27K	2	103	After 03/96 (220/240- 50- 3)	106
Refer to Full Load Amps of Beater Motor					
Relay- Overload Block	014394-	2	103	Prior to 03/96	
ACCESSORIES					
Cabinet A.- Syrup *HORZ*3 Tank*	X24649	1	103		
Decal- Syrup Flavor Instruction	020997	1	000		
Door A.- Syrup Cabinet *HORZ*3	X24656	1	103		
Grommet--1- 3/4 X 1--1/2	020509	1	000		
Handle- STNLS Flush Pull	019043	1	103		
Hinge	018124	2	103		
Leg- 4”- 3/8- 16 Stud- Plastic	024755	4	103		
Cabinet A.- Syrup *VERT*3 Tank*	X27122	1	103		

+ Available Separately

Description	Part Number	Qty.	Warr. Class	Remarks	Parts Update
Decal- Syrup Flavor Instruction	020997	1	000		
Door A.- Syrup Cabinet *VERT*3	X27129	1	103		
Grommet--1- 3/4 X 1--1/2	020509	4	000		
Hinge	018124	3	103		
Latch- Flush	022359	1	103		
Leg- 4”- 3/8- 16 Stud- Plastic	024755	4	103		
Screw- 1/4- 20X1/2 Hex Cap	005192	6	000		

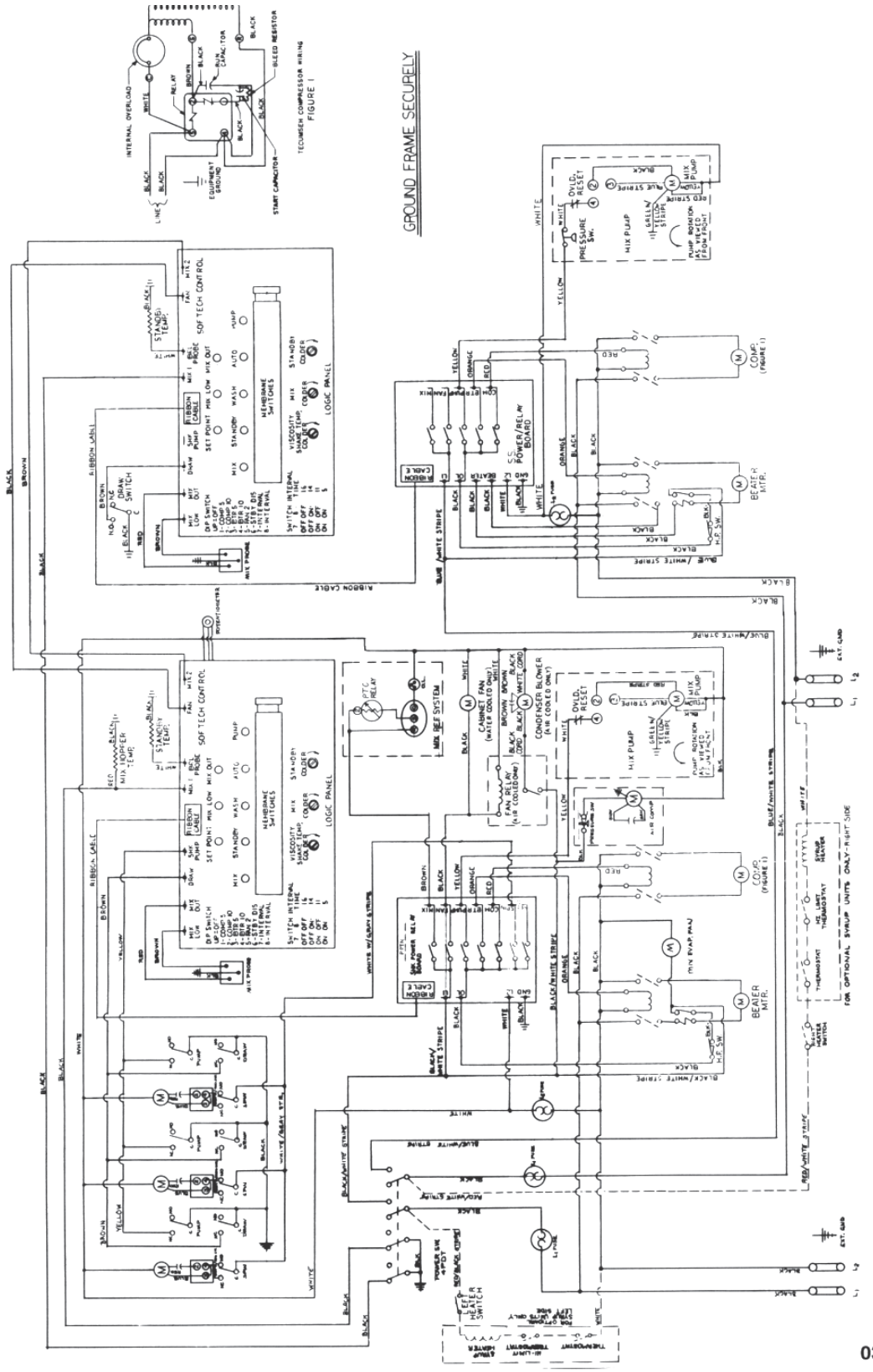

Figure 11-1

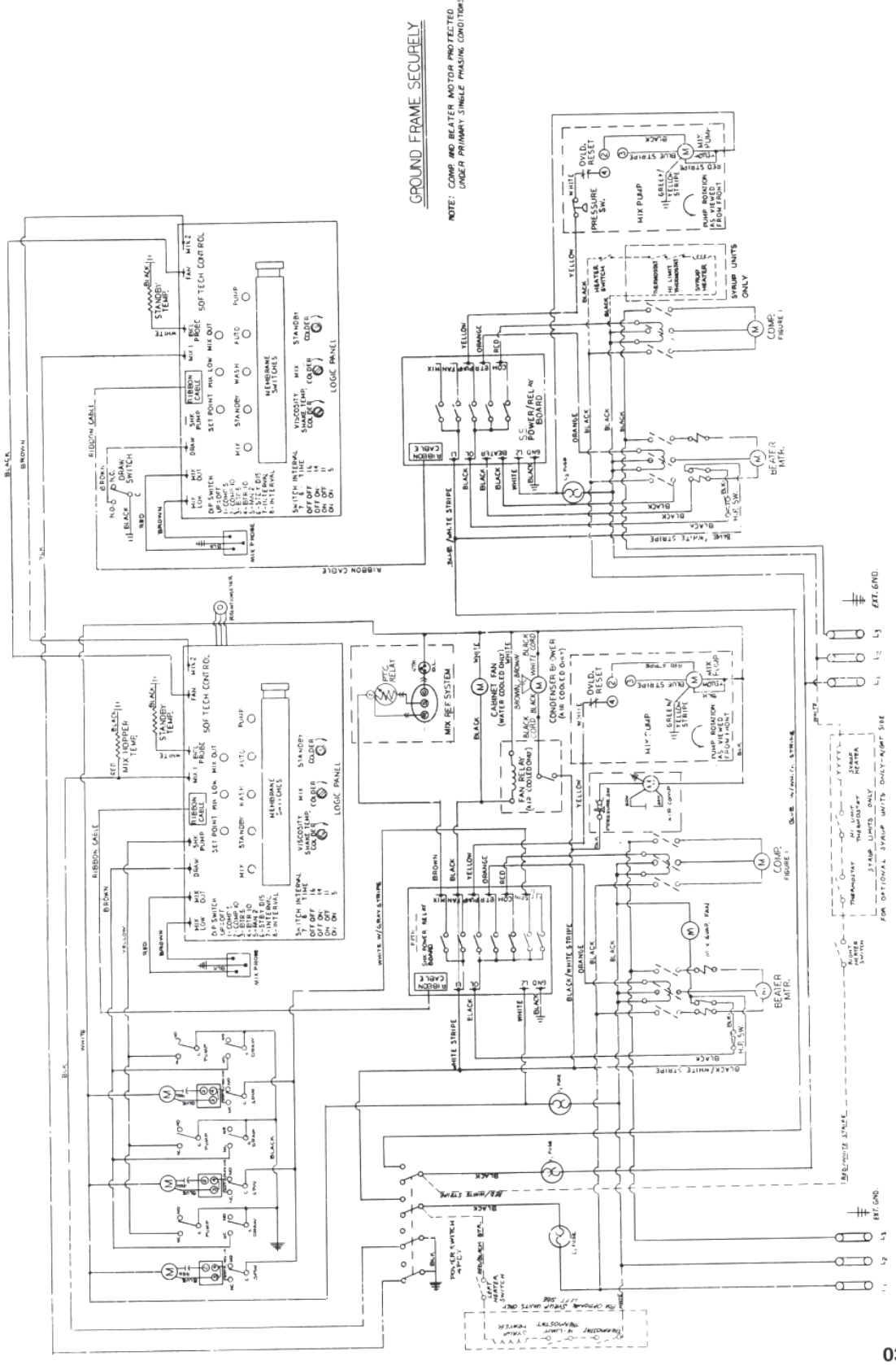
GROUND FRAME SECURELY
NOTE: COMP AND BEATER MOTOR PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS
038294-33

Figure 11-2

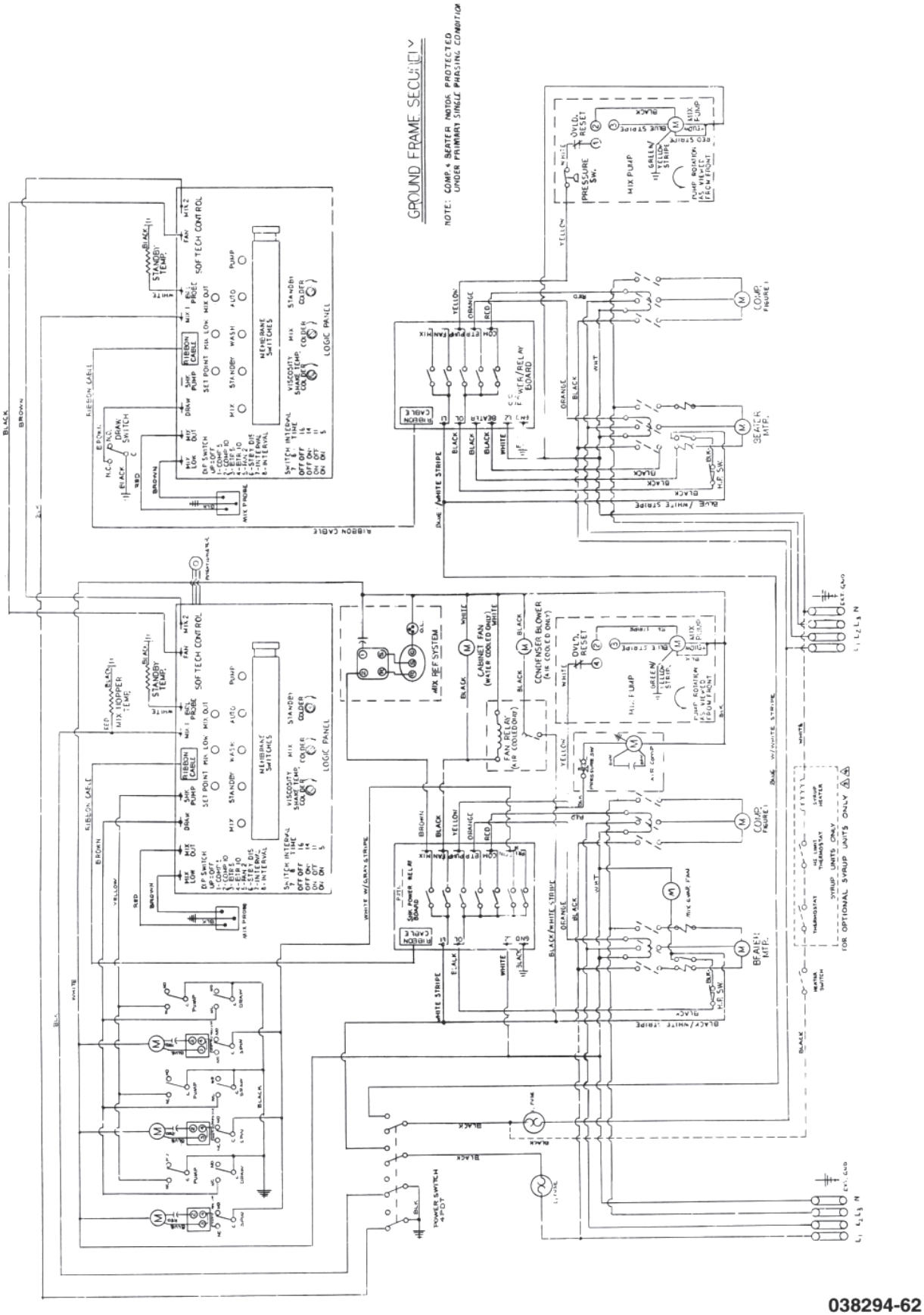
GROUND FRAME SECURELY
NOTE: COMP.& HEATER MOTOR PROTECTED UNDER PRIMARY SINGLE PHASING CONDITION
038294-62

Figure 11-3

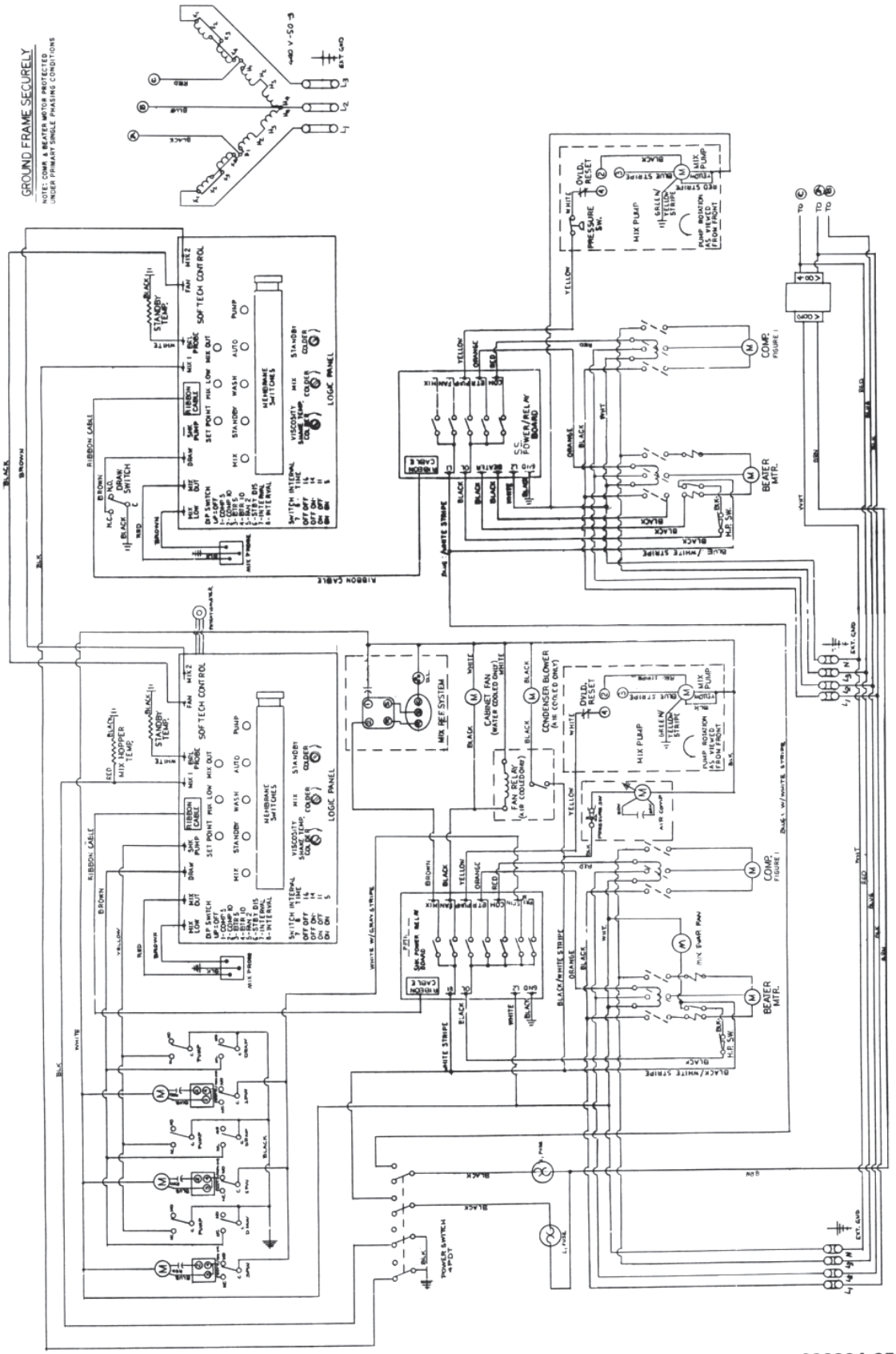
GROUND FRAME SECURELY
NOTE: COMP. & BEATER MOTOR PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS
SOFTECH CONTROL
LOGIC PANEL
MEMBRANE SWITCHES
RIBBON CABLE
MIX HOPPER TEMP.
STANDBY TEMP.
DRAIN SWITCH
MIX PUMP
CABINET FAN (WATER COOLED ONLY)
CONDENSER BLOWER (AIR COOLED ONLY)
FAN RELAY (AIR COOLED ONLY)
MIX REF SYSTEM
PRESSURE SW.
OVLD. RESET
COMP. FIGURE 1
BEATER MTR.
POWER/RELAY BOARD
POWER SWITCH
038294-65

Figure 11-4

Section 12 Limited Warranty on Equipment

TAYLOR COMPANY LIMITED WARRANTY ON FREEZERS

Taylor Company is pleased to provide this limited warranty on new Taylor-branded freezer equipment available from Taylor to the market generally (the “Product”) to the original purchaser only.

LIMITED WARRANTY

Taylor warrants the Product against failure due to defect in materials or workmanship under normal use and service as follows. All warranty periods begin on the date of original Product installation. If a part fails due to defect during the applicable warranty period, Taylor, through an authorized Taylor distributor or service agency, will provide a new or remanufactured part, at Taylor’s option, to replace the failed defective part at no charge for the part. Except as otherwise stated herein, these are Taylor’s exclusive obligations under this limited warranty for a Product failure. This limited warranty is subject to all provisions, conditions, limitations, and exclusions listed below and on the reverse (if any) of this document.

Table 12-1

Product	Part	Limited Warranty Period
Soft Serve	Insulated shell assembly	Five (5) years
Frozen Yogurt Shakes	Refrigeration compressor (except service valve)	Five (5) years
Smoothies	Beater motors	Two (2) years
Frozen Beverage	Beater drive gear	Two (2) years
Batch Desserts	Printed circuit boards and Softech controls beginning with serial number H8024200	Two (2) years
	Parts not otherwise listed in this table or excluded below	One (1) years

LIMITED WARRANTY CONDITIONS

1. If the date of original installation of the Product cannot be verified, then the limited warranty period begins ninety (90) days from the date of Product manufacture (as indicated by the Product serial number). Proof of purchase may be required at time of service.
2. This limited warranty is valid only if the Product is installed and all required service work on the Product is performed by an authorized Taylor distributor or service agency, and only if genuine, new Taylor parts are used.
3. Installation, use, care, and maintenance must be normal and in accordance with all instructions contained in the Taylor Operator’s Manual.
4. Defective parts must be returned to the authorized Taylor distributor or service agency for credit.
5. The use of any refrigerant other than that specified on the Product’s data label will void this limited warranty.

LIMITED WARRANTY EXCEPTIONS

This limited warranty does **not** cover:

1. Labor or other costs incurred for diagnosing, repairing, removing, installing, shipping, servicing, or handling of defective parts, replacement parts, or new Products.
2. Normal maintenance, cleaning, and lubrication as outlined in the Taylor Operator’s Manual, including cleaning of condensers.

3. Replacement of wear items designated as Class “000” parts in the Taylor Operator’s Manual.
4. External hoses, electrical power supplies, and machine grounding.
5. Parts not supplied or designated by Taylor, or damages resulting from their use.
6. Return trips or waiting time required because a service technician is prevented from beginning warranty service work promptly upon arrival.
7. Failure, damage, or repairs due to faulty installation, misapplication, abuse, no or improper servicing, unauthorized alteration, or improper operation or use as indicated in the Taylor Operator’s Manual, including but not limited to the failure to use proper assembly and cleaning techniques, tools, or approved cleaning supplies.
8. Failure, damage, or repairs due to theft, vandalism, wind, rain, flood, high water, water, lightning, earthquake or any other natural disaster, fire, corrosive environments, insect or rodent infestation, or other casualty, accident or condition beyond the reasonable control of Taylor; operation above or below the electrical or water supply specification of the Product; or components repaired or altered in any way so as, in the judgment of the Manufacturer, to adversely affect performance, or normal wear or deterioration.
9. Any Product purchased over the Internet.
10. Failure to start due to voltage conditions, blown fuses, open circuit breakers, or damages due to the inadequacy or interruption of electrical service.
11. Electricity or fuel costs, or increases in electricity or fuel costs from any reason whatsoever.
12. Damages resulting from the use of any refrigerant other than that specified on the Product’s data label will void this limited warranty.
13. Any cost to replace, refill, or dispose of refrigerant, including the cost of refrigerant.
14. **ANY SPECIAL, INDIRECT, OR CONSEQUENTIAL PROPERTY OR COMMERCIAL DAMAGE OF ANY NATURE WHATSOEVER.** Some jurisdictions do not allow the exclusion of incidental or consequential damages, so this limitation may not apply to you.

This limited warranty gives you specific legal rights, and you may also have other rights which vary from jurisdiction to jurisdiction.

LIMITATION OF WARRANTY

THIS LIMITED WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, CONDITIONS, AND/OR REMEDIES UNDER THE LAW, INCLUDING ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE ORIGINAL OWNER’S SOLE REMEDY WITH RESPECT TO ANY PRODUCTS SHALL BE REPAIR OR REPLACEMENT OF DEFECTIVE COMPONENTS UNDER THE TERMS OF THIS LIMITED WARRANTY. ALL RIGHTS TO CONSEQUENTIAL OR INCIDENTAL DAMAGES (INCLUDING CLAIMS FOR LOST SALES, LOST PROFITS, PRODUCT LOSS, PROPERTY DAMAGES OR SERVICE EXPENSES) ARE EXPRESSLY EXCLUDED. THE EXPRESS WARRANTIES MADE IN THIS LIMITED WARRANTY MAY NOT BE ALTERED, ENLARGED, OR CHANGED BY ANY DISTRIBUTOR, DEALER, OR OTHER PERSON, WHATSOEVER.

LEGAL REMEDIES

The owner **must** notify Taylor in writing, by certified or registered letter to the following address, of any defect or complaint with the Product, stating the defect or complaint and a specific request for repair, replacement, or other correction of the Product under warranty, mailed at least thirty (30) days before pursuing any legal rights or remedies.

Taylor Company
750 N. Blackhawk Blvd.
Rockton, IL 61072, U.S.A.

TAYLOR COMPANY LIMITED WARRANTY ON GENUINE TAYLOR PARTS

Taylor Company is pleased to provide this limited warranty on new Taylor genuine replacement components and parts available from Taylor to the market generally (the “Parts”) to the original purchaser only.

LIMITED WARRANTY

Taylor warrants the Parts against failure due to defect in materials or workmanship under normal use and service as follows. All warranty periods begin on the date of original installation of the Part in the Taylor unit. If a Part fails due to defect during the applicable warranty period, Taylor, through an authorized Taylor distributor or service agency, will provide a new or remanufactured Part, at Taylor’s option, to replace the failed defective Part at no charge for the Part. Except as otherwise stated herein, these are Taylor’s exclusive obligations under this limited warranty for a Part failure. This limited warranty is subject to all provisions, conditions, limitations, and exclusions listed below and on the reverse (if any) of this document.

Table 13-1

Part's Warranty Class Code or Part	Limited Warranty Period
Class 103 Parts[1]	Three (3) Months
Class 212 Parts[2]	Twelve (12) Months
Class 512 Parts	Twelve (12) Months
Class 000 Parts	No Warranty

LIMITED WARRANTY CONDITIONS

1. If the date of original installation of the Part cannot be otherwise verified, proof of purchase may be required at time of service.
2. This limited warranty is valid only if the Part is installed and all required service work in connection with the Part is performed by an authorized Taylor distributor or service agency.
3. The limited warranty applies only to Parts remaining in use by their original owner at their original installation location in the unit of original installation.
4. Installation, use, care, and maintenance must be normal and in accordance with all instructions contained in the Taylor Operator’s Manual.
5. Defective Parts must be returned to the authorized Taylor distributor or service agency for credit.
6. This warranty is not intended to shorten the length of any warranty coverage provided pursuant to a separate Taylor Limited Warranty on freezer or grill equipment.
7. The use of any refrigerant other than that specified for the unit in which the Part is installed will void this limited warranty.

[1, 2] Except that Taylor Part #032129SER2 (Compressor-Air-230V SERV) and Taylor Part #075506SER1 (Compressor-Air-115V 60HZ) shall have a limited warranty period of twelve (12) months when used in Taylor freezer equipment and a limited warranty period of two (2) years when used in Taylor grill equipment.

LIMITED WARRANTY EXCEPTIONS

This limited warranty does **not** cover:

1. Labor or other costs incurred for diagnosing, repairing, removing, installing, shipping, servicing, or handling of defective Parts, replacement Parts, or new Parts.
2. Normal maintenance, cleaning, and lubrication as outlined in the Taylor Operator's Manual, including cleaning of condensers or carbon and grease buildup.
3. Required service, whether cleaning or general repairs, to return the cooking surface assemblies, including the upper platen and lower plate, to an operational condition to achieve proper cooking or allow proper assembly of release sheets and clips as a result of grease buildup on the cooking surfaces, including but not limited to the platen and plate, sides of the shroud, or top of the shroud.
4. Replacement of cooking surfaces, including the upper platen and lower plate, due to pitting or corrosion (or in the case of the upper platen, due to loss of plating) as a result of damage due to the impact of spatulas or other small wares used during the cooking process or as a result of the use of cleaners, cleaning materials, or cleaning processes not approved for use by Taylor.
5. Replacement of wear items designated as Class "000" Parts in the Taylor Operator's Manual, as well as any release sheets and clips for the Product's upper platen assembly.
6. External hoses, electrical power supplies, and machine grounding.
7. Parts not supplied or designated by Taylor, or damages resulting from their use.
8. Return trips or waiting time required because a service technician is prevented from beginning warranty service work promptly upon arrival.
9. Failure, damage, or repairs due to faulty installation, misapplication, abuse, no or improper servicing, unauthorized alteration, or improper operation or use as indicated in the Taylor Operator's Manual, including but not limited to the failure to use proper assembly and cleaning techniques, tools, or approved cleaning supplies.
10. Failure, damage, or repairs due to theft, vandalism, wind, rain, flood, high water, water, lightning, earthquake, or any other natural disaster, fire, corrosive environments, insect or rodent infestation, or other casualty, accident or condition beyond the reasonable control of Taylor; operation above or below the gas, electrical, or water supply specification of the unit in which a part is installed; or Parts or the units in which they are installed, repaired, or altered in any way so as, in the judgment of Taylor, to adversely affect performance, or normal wear or deterioration.
11. Any Part purchased over the Internet.
12. Failure to start due to voltage conditions, blown fuses, open circuit breakers, or damages due to the inadequacy or interruption of electrical service.
13. Electricity, gas, or other fuel costs, or increases in electricity or fuel costs from any reason whatsoever.
14. Damages resulting from the use of any refrigerant other than that specified for the unit in which the Part is installed will void this limited warranty.
15. Any cost to replace, refill, or dispose of refrigerant, including the cost of refrigerant.
16. **ANY SPECIAL, INDIRECT, OR CONSEQUENTIAL PROPERTY OR COMMERCIAL DAMAGE OF ANY NATURE WHATSOEVER.** Some jurisdictions do not allow the exclusion of incidental or consequential damages, so this limitation may not apply to you.

This limited warranty gives you specific legal rights, and you may also have other rights which vary from jurisdiction to jurisdiction.

LIMITATION OF WARRANTY

THIS LIMITED WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, CONDITIONS, AND/ OR REMEDIES UNDER THE LAW, INCLUDING ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE ORIGINAL OWNER'S SOLE REMEDY WITH RESPECT TO ANY PRODUCTS SHALL BE REPAIR OR REPLACEMENT OF DEFECTIVE PARTS UNDER THE TERMS OF THIS LIMITED WARRANTY. ALL RIGHTS TO CONSEQUENTIAL OR INCIDENTAL DAMAGES (INCLUDING CLAIMS FOR LOST SALES, LOST PROFITS, PRODUCT LOSS, PROPERTY DAMAGES, OR SERVICE EXPENSES) ARE EXPRESSLY EXCLUDED. THE EXPRESS WARRANTIES MADE IN THIS LIMITED WARRANTY MAY NOT BE ALTERED, ENLARGED, OR CHANGED BY ANY DISTRIBUTOR, DEALER, OR OTHER PERSON, WHATSOEVER.

LEGAL REMEDIES

The owner **must** notify Taylor in writing by certified or registered letter to the following address of any defect or complaint with the Part, stating the defect or complaint and a specific request for repair, replacement, or other correction of the Part under warranty, mailed at least thirty (30) days before pursuing any legal rights or remedies.

Taylor Company
750 N. Blackhawk Blvd.
Rockton, IL 61072, U.S.A.

Notes: