

Model C903

Slush Freezer

Operating Instructions

057072-M



12/17/03

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

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057072-M



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

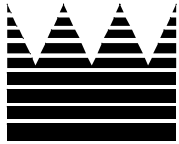


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Note: Continuing research results in steady improvements; therefore, information in this manual is subject to change without notice.

Section 1

To the Installer

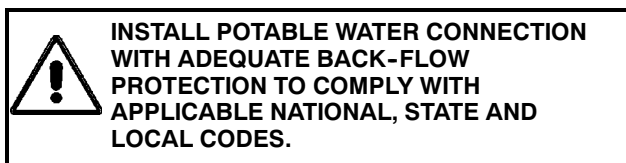
Air Cooled Units

Air cooled units require a minimum air clearance of 3" (76 mm) in the back and 12" (305 mm) on the top. This is required 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 compressors.

Water Connections

An adequate cold water supply must be provided with a hand shut-off valve. On the back of the unit, a 1/4" (6.35 mm) male flare water connection has been provided for easy hook-up. A flexible line is recommended, if local codes permit. A minimum of 25 psi water pressure is required to avoid having the unit cut out the low water pressure switch. A booster pump must be provided if this pressure is not available. It is always a good practice to have a filter system to improve the quality of the water and to avoid clogging the operating components.

Note: Water lines beyond 200 ft. (61 m) require 1/2" (13 mm) water lines.

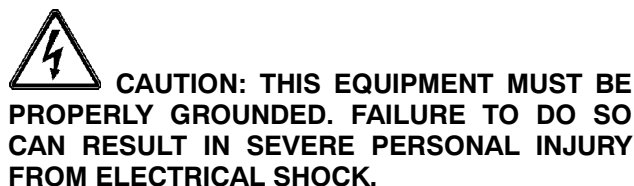


Electrical Connections

This unit must be plugged into a properly grounded receptacle. A dedicated circuit is recommended, sized for 15A usage. The voltage specifications are 115V-60-1. Follow specifications listed on your data label.



In the United States, this equipment is intended to be installed in accordance with the National Electrical Code (NEC), ANSI/NFPA 70-1987. In all other areas of the world, equipment should be installed in accordance with the existing local codes. Please contact your local authorities. 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. Compliance therewith and proper maintenance will result in an installation essentially free from hazard!



Section 2

To the Operator

The freezer you have purchased has been carefully engineered and manufactured to give you dependable operation. The Taylor Model C903, when properly operated and cared for, will produce a consistent quality product. Like all mechanical products, they 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.

This Operator's Manual should be read before operating or performing any maintenance on your equipment.

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

In the event you should require technical assistance, please contact your local authorized Taylor Distributor.

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

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.

The Taylor Company 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/Serial Number of the unit in question.

Section 3

Safety

We at 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. As an example, warning labels have been attached to the freezer to further point out safety precautions to the operator.



IMPORTANT - Failure to adhere to the following safety precautions may result in severe personal injury. Failure to comply with these warnings may damage the machine and its components. Component damage will result in part replacement expense and service repair expense.

To Operate Safely:



DO NOT operate the freezer without reading this operator's manual. Failure to follow this instruction may result in equipment damage, poor freezer performance, health hazards, or personal injury.



DO NOT operate the freezer unless it is properly grounded. Failure to follow this instruction may result in electrocution.



DO NOT attempt any repairs unless the main power supply to the freezer has been disconnected. Failure to follow this instruction may result in electrocution. Contact your local authorized Taylor Distributor for service.



DO NOT operate the freezer with larger fuses than specified on the freezer data label. Failure to follow this instruction may result in electrocution or damage to the machine. Consult your electrician.



DO NOT allow untrained personnel to operate this machine. Failure to follow this instruction may result in severe personal injury to fingers or hands from hazardous moving parts.



DO NOT operate the freezer unless all service panels and access doors are restrained with screws. Failure to follow this instruction may result in severe personal injury from hazardous moving parts.



DO NOT put objects or fingers in the bowl spout. Failure to follow this instruction may result in contaminated product or personal injury from blade contact.



USE EXTREME CAUTION when installing the magnetic drive beater assembly. The scraper blades are very sharp and may cause injury.

IMPORTANT: DO NOT obstruct the air intake and discharge openings. A minimum air clearance of 3" (76 mm) in the back and 12" (305 mm) on the top is required. Failure to follow this instruction may cause poor freezer performance and damage to the machine.

NOISE LEVEL: Airborne noise emission does not exceed 78 dB(A) when measured at a distance of 1.0 meter from the surface of the machine and at a height of 1.6 meters from the floor.

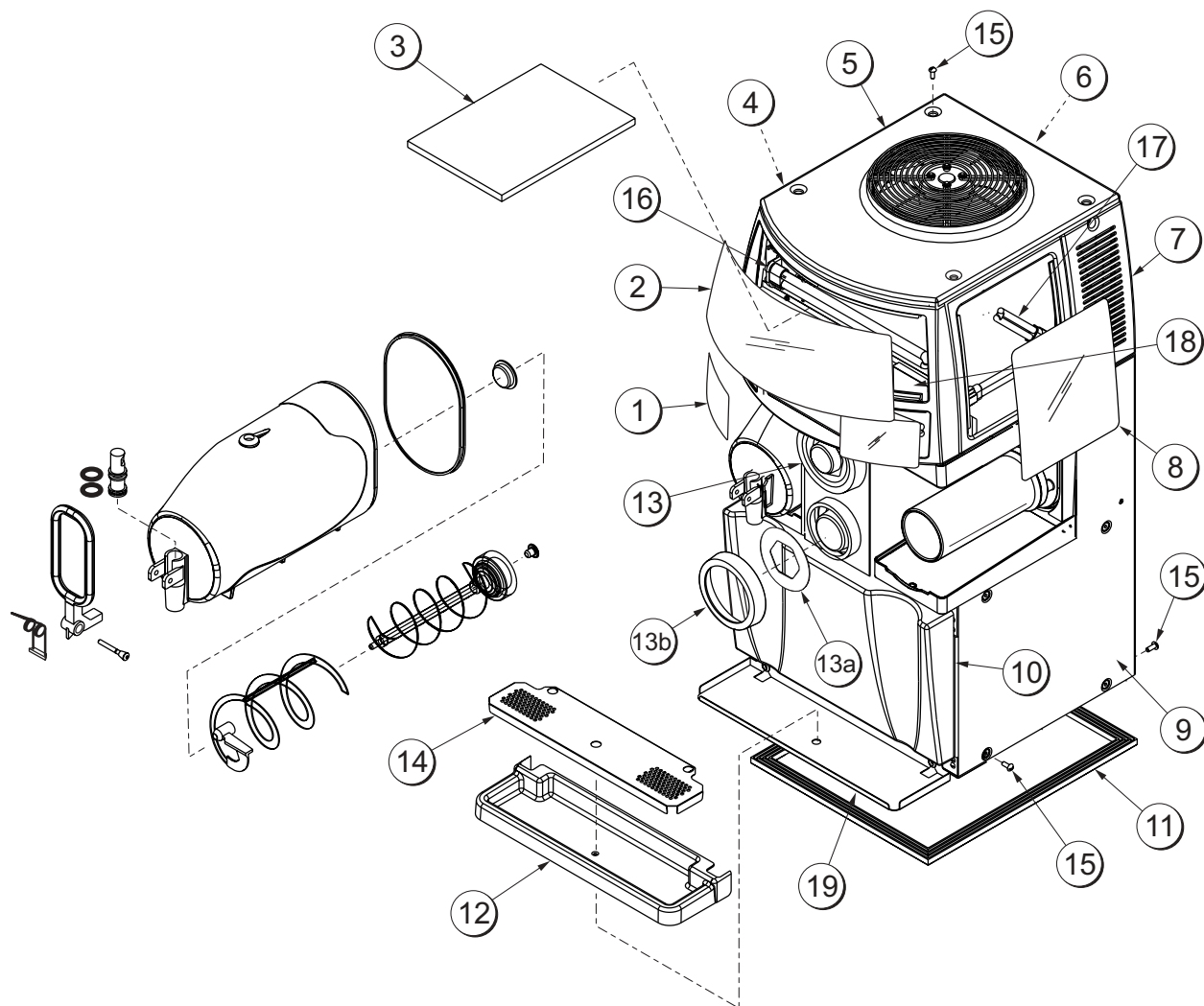
The following statement applies to RFID units only:

FCC ID: RPPTAYLORRFIDSYS

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

Section 4

Operator Parts Identification

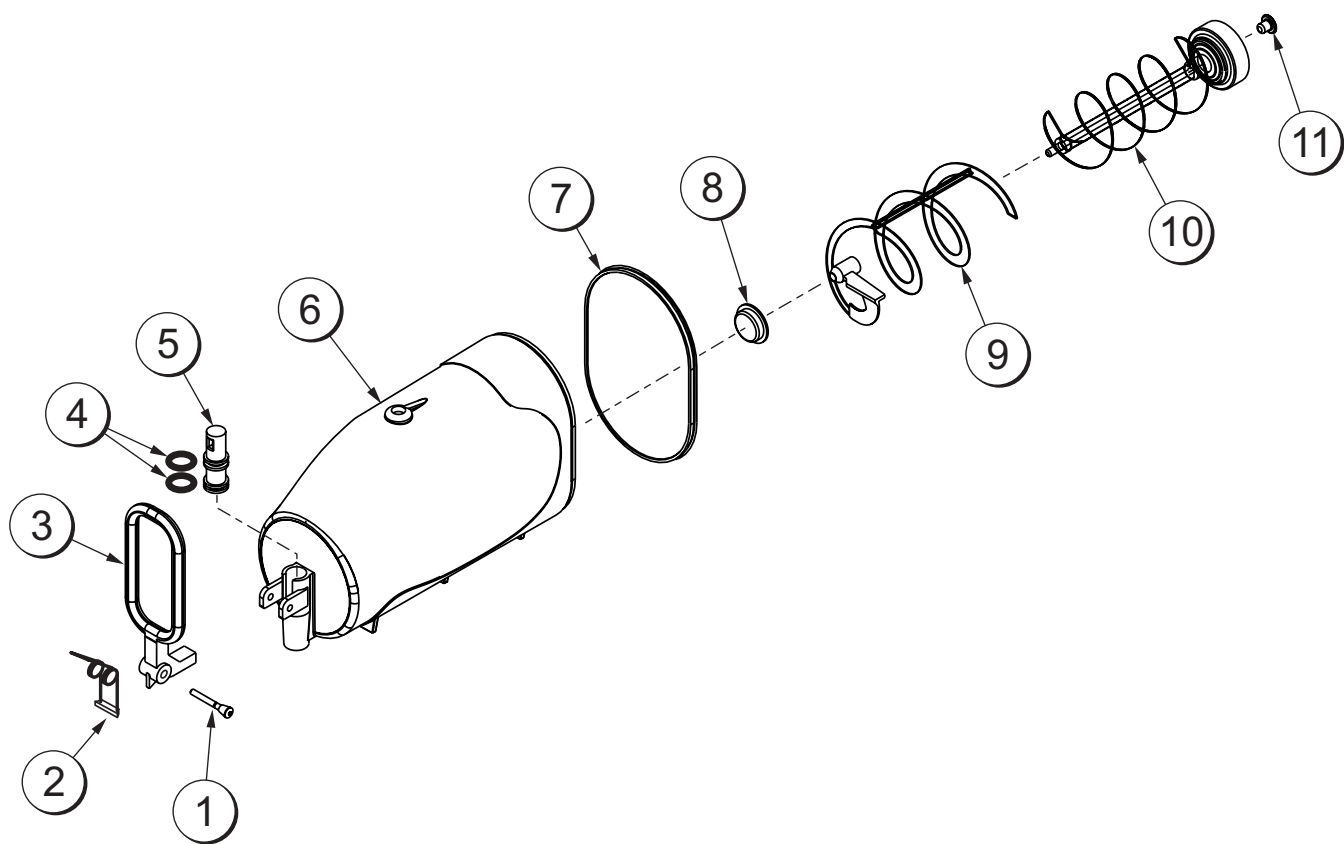


ITEM	DESCRIPTION	PART NO.
*1	LENS-FLAVOR CARD (L & R)	057161
*2	LENS-DISPLAY-FRONT	057330
3	FILTER-AIR-17.00LX12.00HX.70	052779-8
4	PANEL-SIDE-LOWER LEFT	057052
5	HOOD	057050
6	PANEL-REAR	057054
7	PANEL-SIDE-UPPER	057049
*8	LENS-DISPLAY-LIGHTED-SIDE (L & R)	057160
9	PANEL-SIDE-LOWER RIGHT	057053
10	DOOR A.-CABINET	X57081
11	GASKET-BASE PAN	057154

ITEM	DESCRIPTION	PART NO.
12	TRAY-DRIP	057051
13	DISPENSER-CUP-ADJUSTABLE	057144
13a	KIT-GASKET-4 DISP CUP	057144-4
13b	RING-TRIM-DISPENSER CUP	057144-3
14	SHIELD-SPLASH	057044
15	SCREW-10-24 X 1/2 TRUSS HD	049189
16	BULB-FLUORESCENT U SHAPE	057157-12
17	BULB-FLUORES. COMPACT	055298
18	FILTER-AIR	057135
19	SHELF-DRIP TRAY	057307

*CONTACT PRODUCT SUPPLIER OR LOCAL TAYLOR DISTRIBUTOR FOR MERCHANDISING GRAPHICS.

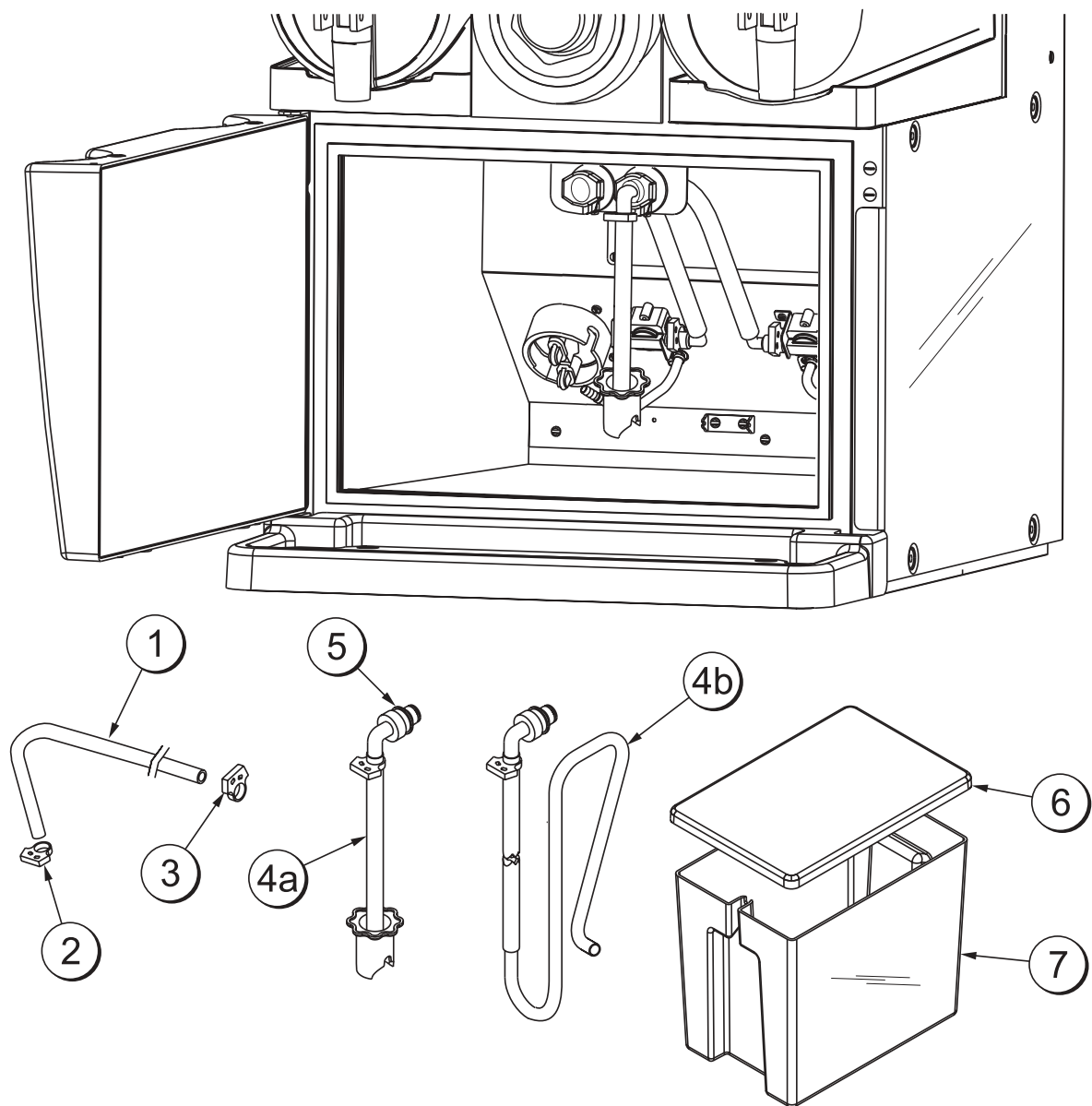
Beater Bowl Assembly



ITEM	DESCRIPTION	PART NO.
1	PIN-PIVOT	046461-1
2	SPRING-DRAW	046460
3	HANDLE-DRAW *BLACK	046459-1
4	O-RING *DRAW VALVE	046458
5	VALVE-DRAW	046457
6	BOWL-MIX 10 QT	057036

ITEM	DESCRIPTION	PART NO.
7	GASKET-BOWL	057042
8	BEARING-FRONT	046462
9	BLADE-SCRAPER-OUTER	056754
10	BEATER-MAGNETIC	052204
11	BEARING-REAR WALL-OUTER	052202

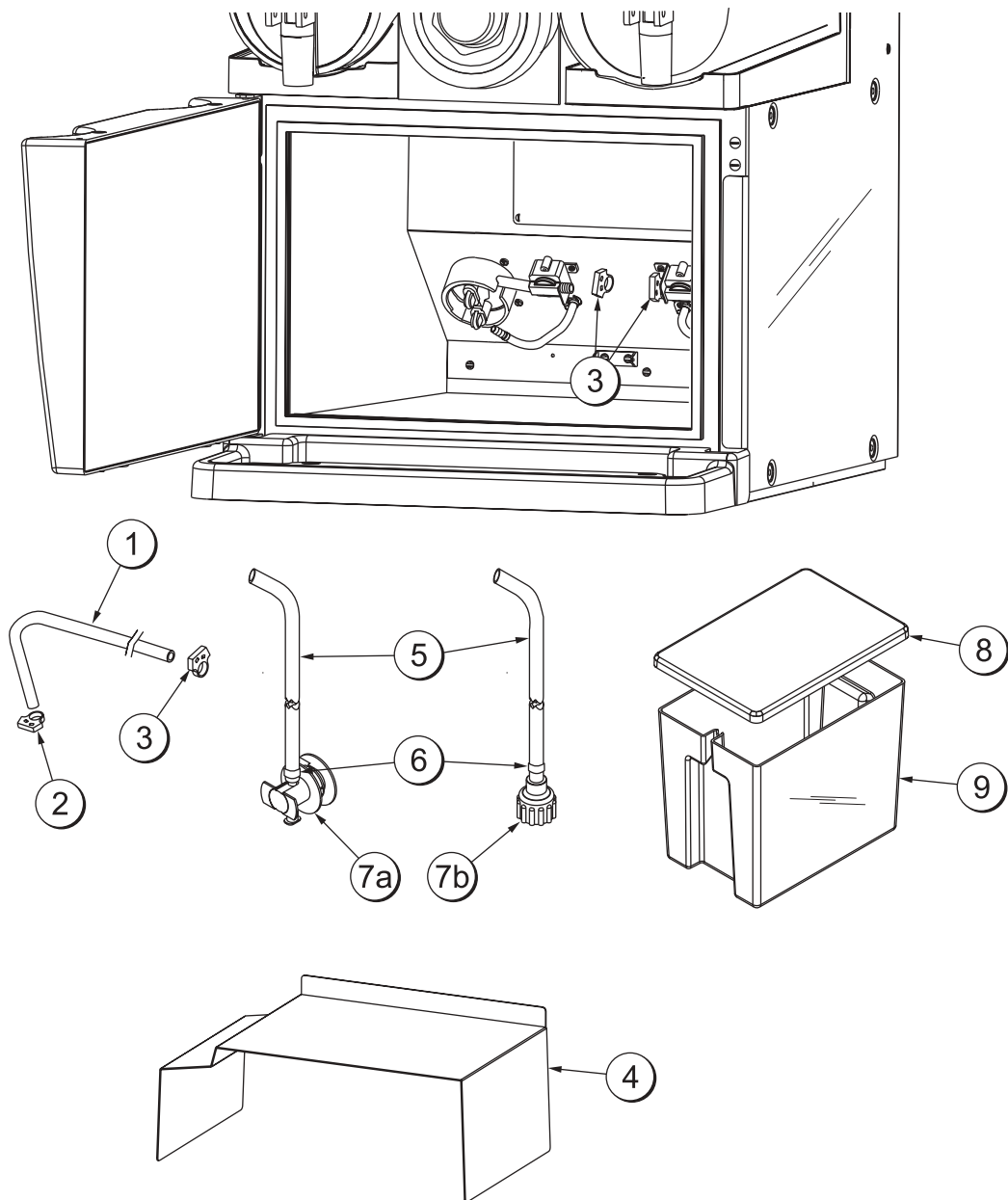
Mix Cabinet Assembly - Standard



ITEM	DESCRIPTION	PART NO.
1	TUBE-PERISTALTIC PUMP	057125
2	CLAMP-HOSE-SNAP IT 11/32	053630
3	CLAMP-HOSE-SNAP IT 17/32	052021
4a	TUBE A.-PRODUCT-KAN PAK (B.I.B.)	X58141

ITEM	DESCRIPTION	PART NO.
4b	TUBE A.-PRODUCT-TANK (MIX TANK)	X58433
5	O-RING - 3/8	021265
6	COVER-MIX TANK	057924
7	TANK-MIX	057923

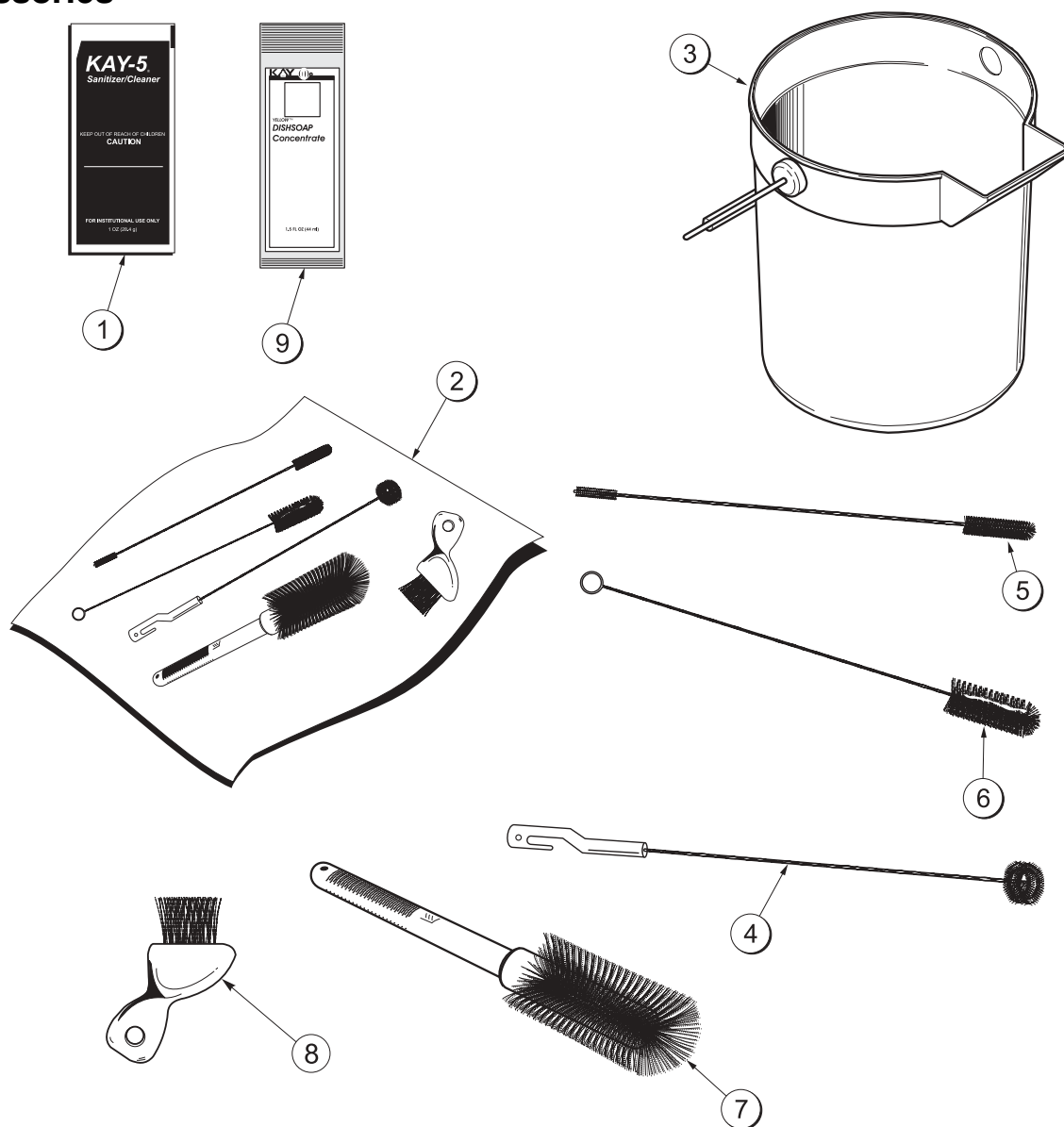
Mix Cabinet Assembly - Optional



ITEM	DESCRIPTION	PART NO.
1	TUBE-PERISTALTIC PUMP	057125
2	CLAMP-HOSE-SNAP IT 11/32	053630
3	CLAMP-HOSE-SNAP IT 17/32	052021
4	SHELF-CABINET	059188
5	TUBE-VINYL 3/8 ID X 9/16 OD	020943-28

ITEM	DESCRIPTION	PART NO.
6	CLAMP-HOSE 9/16 STEPLESS	053959
7a	FITTING-BAG *BIB PEPSI	042945
7b	FITTING-BAG *BIB COKE	048176
8	COVER-MIX TANK	057924
9	TANK-MIX	057923

Accessories



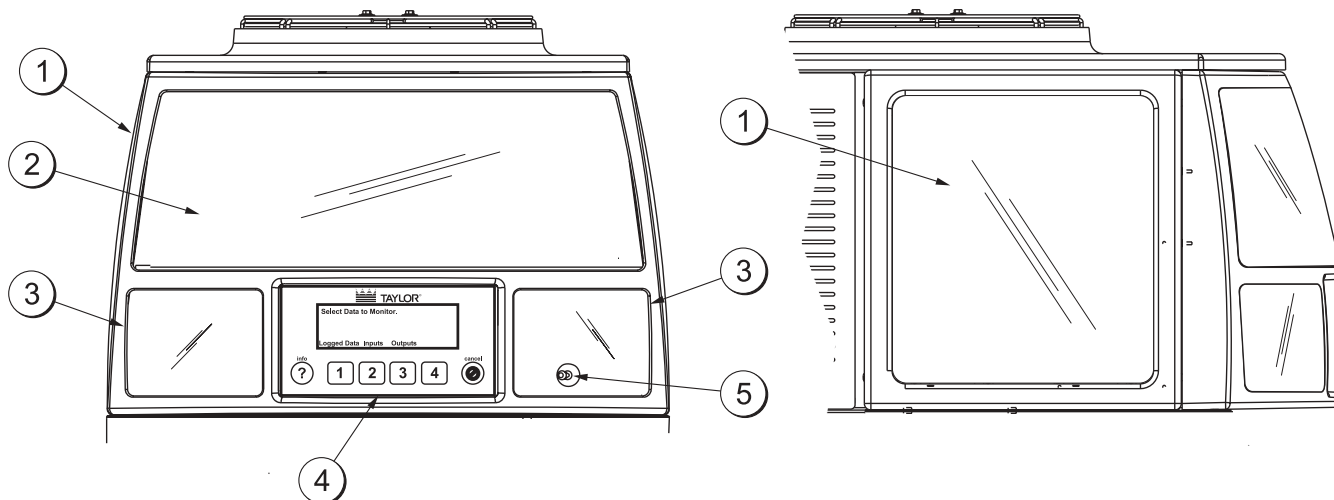
ITEM	DESCRIPTION	PART NO.
1	SANITIZER KAY-5 25 PACKETS	041081
2	BRUSH A.-PACKAGE (CONSISTS OF BRUSH ITEMS 4-8)	X58793
3	PAIL-MIX 10 QT.	013163
4	BRUSH-BEATER & SHAFT	500313
5	BRUSH-DOUBLE ENDED	013072

ITEM	DESCRIPTION	PART NO.
6	BRUSH-DRAW VALVE 1"ODX2"	013073
7	BRUSH-MIX PUMP BODY-3"X7"	023316
8	BRUSH-END-DOOR-SPOUT	039719
9	DETERGENT-YELLOW DISH SOAP	059070
*10	TUNE-UP KIT	X49463-69

*NOT SHOWN

Section 5

Important: To the Operator



ITEM	DESCRIPTION
1	LENS-SIDE
2	LENS-FRONT
3	CARD-FLAVOR
4	CONTROL PANEL
5	POWER SWITCH

Power Switch

Remove the right side flavor card to place the power switch in the ON position. (See item 5 above.)

When the power switch is placed in the ON position, the large upper display and the side displays will illuminate. The flavor card displays will illuminate when the product is ready to serve. The flavor card lights will flash if an alarm occurs (syrup out, low water pressure, etc.).

Viscosity Adjustment

Each bowl has a viscosity adjustment screw. The left bowl adjustment screw is located on the left side toward the back of the panel. The right bowl adjustment screw is located on the right side toward the back of the panel.

Turn the adjustment screw clockwise to obtain a thicker product, and counterclockwise to obtain a thinner product. Make the adjustments in 1/2 turn increments to achieve proper viscosity.

Operating Screen Descriptions

Marketing Screen

The following screen will be visible any time the display is not in one of the Operator Interface modes.



Figure 1

Operator Menu

Functions

Pressing the keys will not do anything from this screen unless the correct passcode is entered. The default passcode for the Operator Menu is: 2133.

Once an appropriate password has been entered the screen will display the bowl select screen.

Bowl Select Screen

The following screen shows the Bowl Select Menu. It is the starting point for controlling daily operation of the machine.

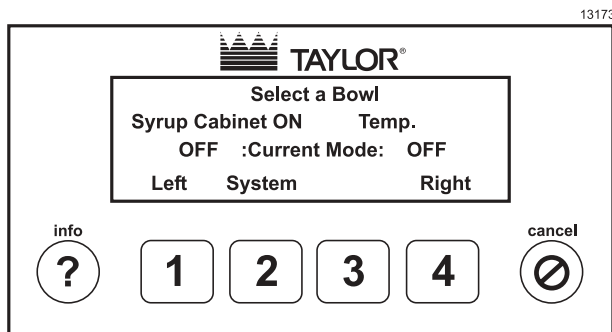


Figure 2

Functions

When entering a mode, if neither bowl is in place, the screen will indicate "No Bowls in Place" and neither Bowl Select Key (1 or 4) will be active.

Current Bowl Status (Off, Auto-Fill, No-Fill, Chill, Rinsing, Sanitizing, Rinsed, or Sanitized) will be displayed to the side of the current mode. Press Key 1 to select the Left Bowl or Key 4 to select the Right Bowl.

Pressing a Bowl Select Key (1 or 4) will open the Bowl Mode Select Screen.

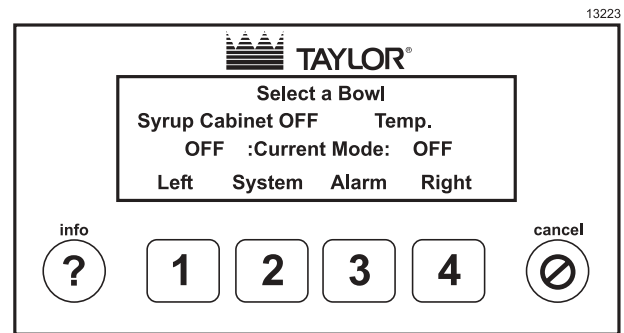


Figure 3

If one or more Alarms are active, then an "Alarms" heading will appear above Key 3. Pressing Key 3 will open the Alarms Screen.

Help Text

Press Key 1 to select the Left Bowl or Key 4 to select the Right Bowl. The dedicated CANCEL key can always be used to return to the previous menu without affecting any options entered.

Bowl Mode Select Screen

This screen is accessed from the BOWL SELECT Screen.

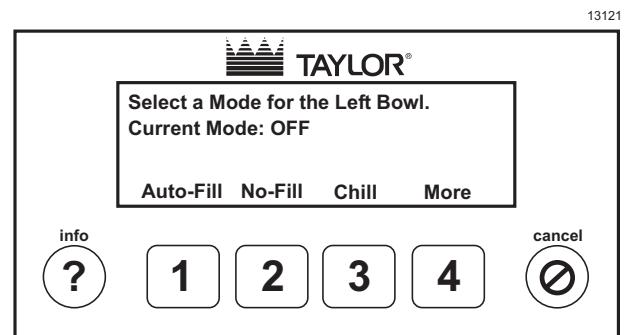


Figure 4

Functions

The top text line will indicate which bowl is currently selected.

Key 1 will allow the user to put the selected bowl into Auto-Fill. Key 2 will allow the user to put the selected bowl into No-Fill.

Key 3 will allow the user to enter a Chill Mode (Refrigerated Drink Mode). The key will only be visible if:

- The Mix Low input is reading product.
- The bowl magnetic beater is running.
- The bowl is NOT in a Wash Mode.

Key 4 is the MORE key and will allow the user to enter the Rinse, Sanitize and Bowl Lock modes.

Help Text:

(description of the chosen visual indicator) will indicate the current Operating Mode of the Bowl. Placing the Bowl in Auto-Fill (Key 1) will cause the bowl to fill with product from either a Bag-In-Box or the provided hopper.

The product level will continue to rise until it reaches the Full Level Sensor. When the level of product drops below the full level sensor, the pumps will start to refill automatically. If the bowl is put into the No-Fill mode (Key 2), the refrigeration mode still freezes but no additional product will be added to the bowl.

Bowl Wash Select Screen

This screen is accessed by pressing the MORE Key (4) from either the Left or Right Bowl Mode Select Screen.

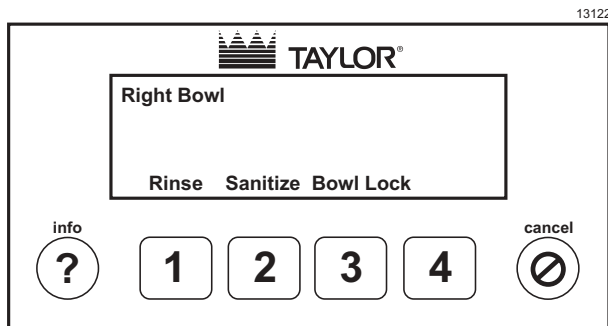


Figure 5

Functions

The operator is able to choose the Rinse Mode (Key 1) or the Sanitize Mode (Key 2).

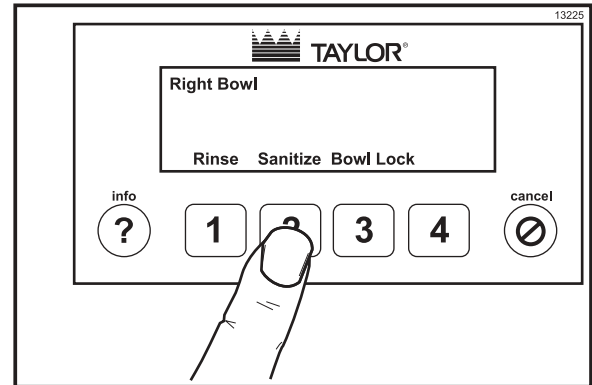


Figure 6

The Rinse Mode fills the bowl with water to just above the over fill sensor. The Water Solenoid for the bowl will open to aid in rinsing. The Sanitize Mode completely fills the bowl and sanitizes the overfill tube.

Key 3 is used to engage or disengage the Bowl Lock.

Bowl Wash Action Screen

This screen, in either its Rinse or Sanitize form, is triggered by the selection of Rinse or Sanitize Mode from the Bowl Wash Select Screen.

Functions

In Rinse Mode, the mix tank should be filled with **water**.

In Sanitize Mode, the mix tank should be filled with **sanitizing solution**.

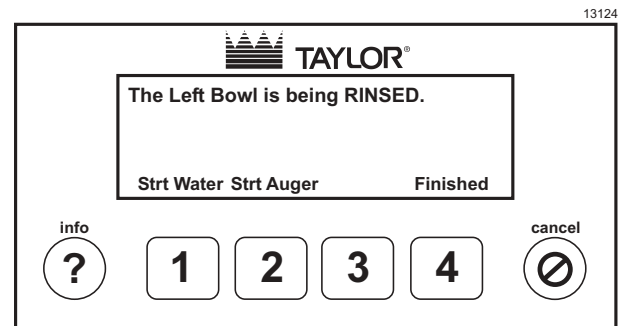


Figure 7

Functions

When rinsing or sanitizing, allow the bowl to fill and shut off the water or sanitizer automatically. If needed, the operator may start or stop the filling of the bowl by pressing Key 1.

The Auger Key (2) option is used to start/stop the auger.

The Finished Key (4) will stop both water and the auger.

During a Sanitize Cycle, the bowl will fill until the Overfill Sensor is triggered. Press the Cancel Key to return to the previous screen.

Help Text:

Use Key 1 to pause or to resume filling the bowl as needed. After the Rinse cycle is completed, pressing the Finished Key (4) will cause the Rinse Cycle to end and the mode to change from “Rinsing” to “Rinsed.” This option is also available during the Sanitize Cycle. Pressing Key 2 toggles between “Stp Auger” and “Strt Auger”. This allows the magnetic beater to be stopped or started as long as the bowl is left in place. The magnetic beater will not run once the bowl has been removed for cleaning.

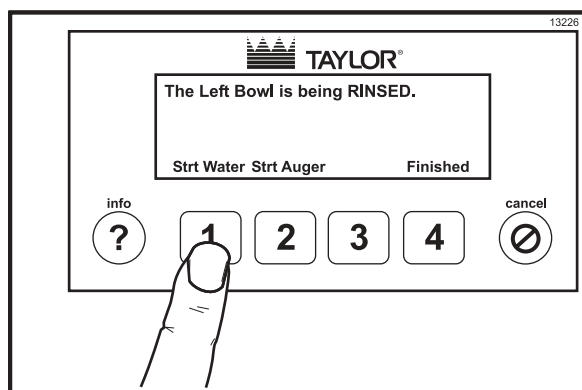


Figure 8

Alarm Menus

To access an Alarm Menu, press the Alarm Key (3).

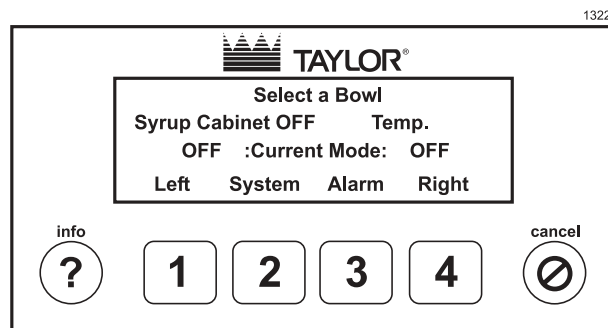


Figure 9

Syrup Out Alarm

When the Syrup Out Alarm sounds, the appropriate side of the unit will go into the NO FILL mode until the syrup source is replenished. If the product is not replenished before the mix level reaches the MIX LOW probe, that bowl will switch to the Standby mode.

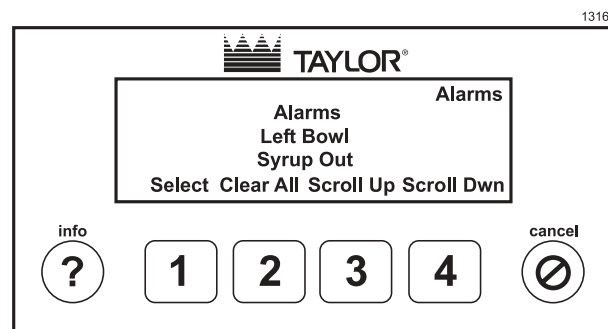


Figure 10

Press Key 1.

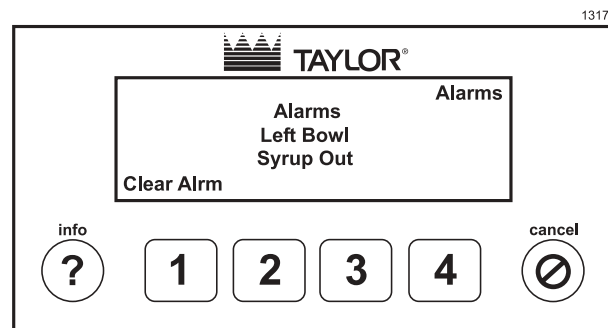


Figure 11

Press Key 1.

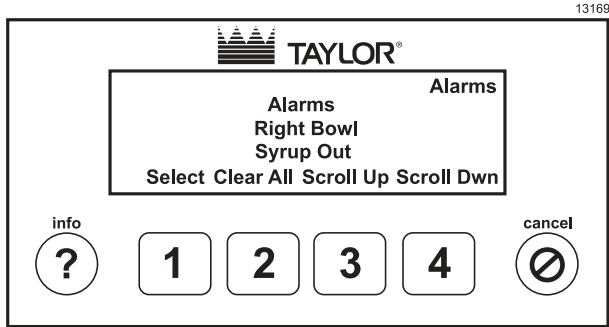


Figure 12

Press Key 1.

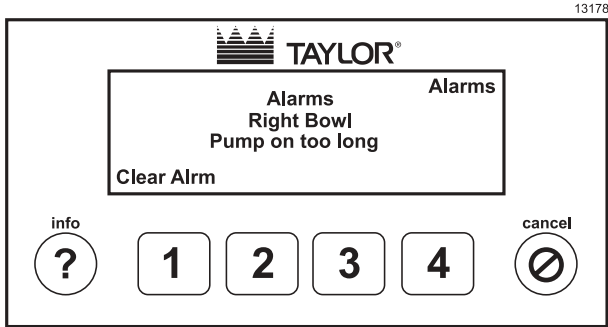


Figure 15

Press Key 1.

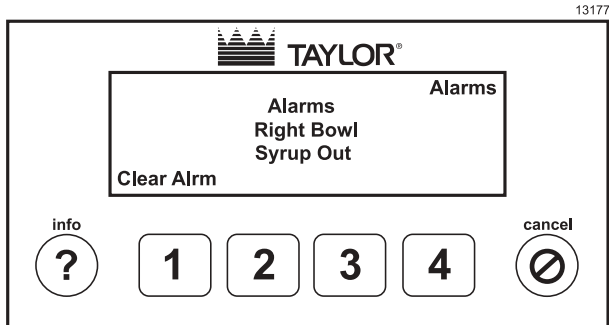


Figure 13

Press Key 1.

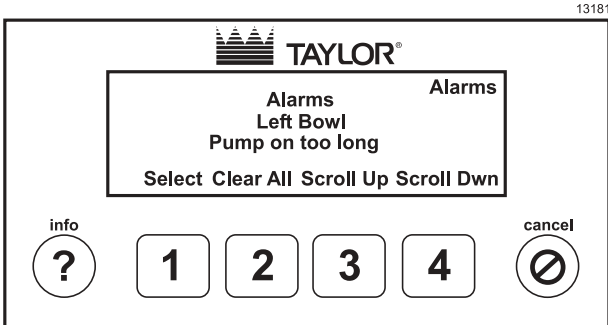


Figure 16

Press Key 1.

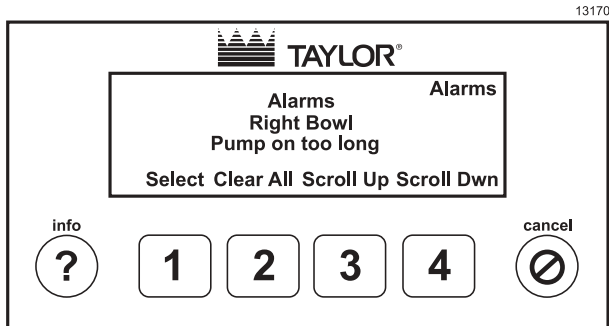


Figure 14

Press Key 1.

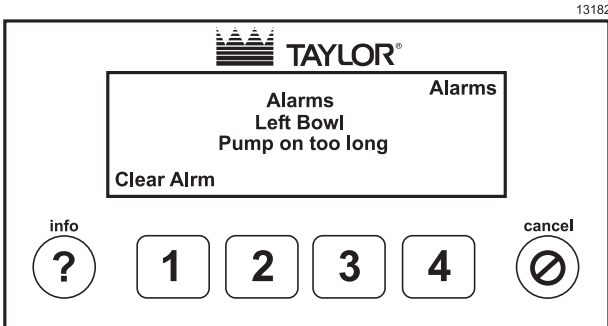


Figure 17

Press Key 1.

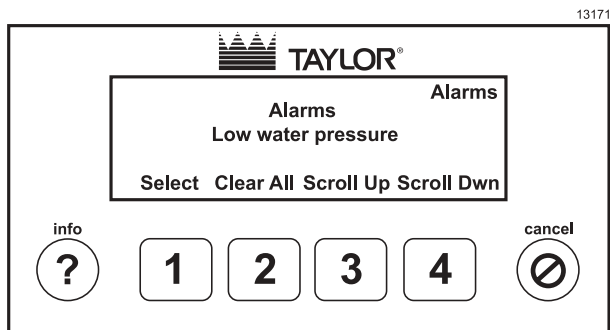


Figure 18

Press Key 1.

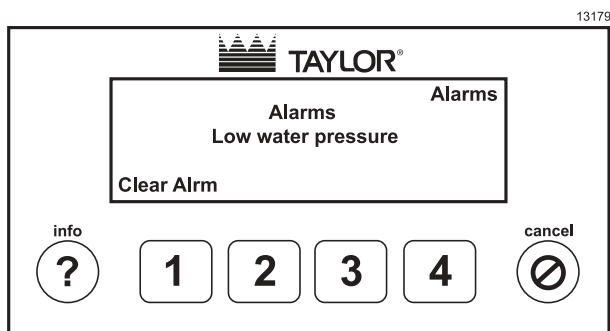


Figure 19

Press Key 1.

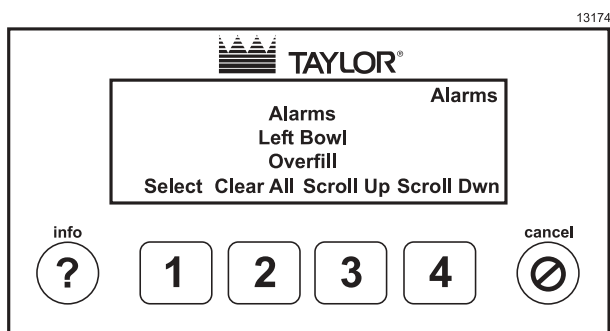


Figure 20

Press Key 1.

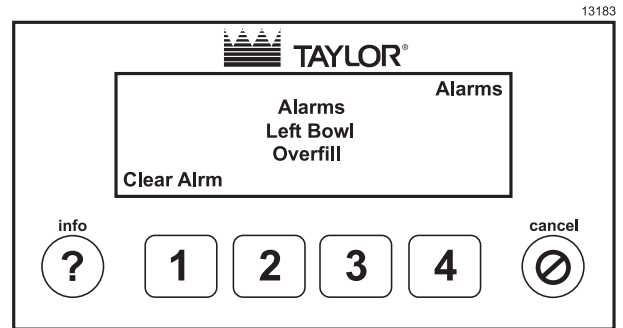


Figure 21

Press Key 1.

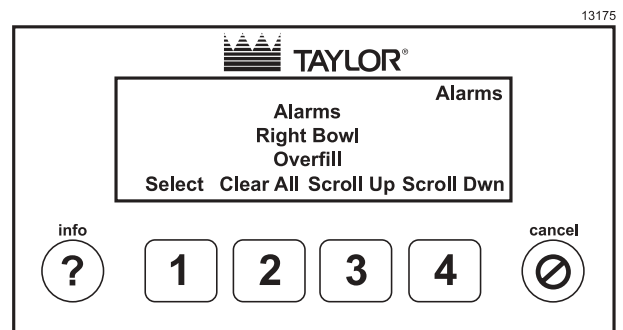


Figure 22

Press Key 1.

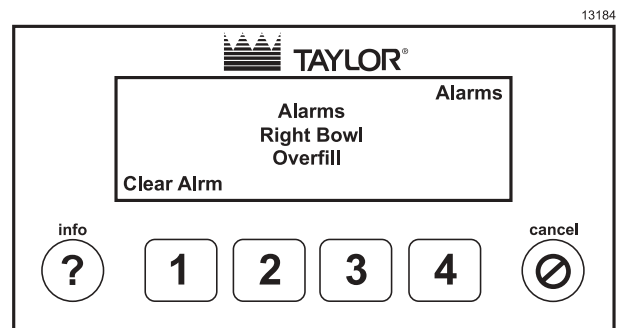


Figure 23

Press Key 1.

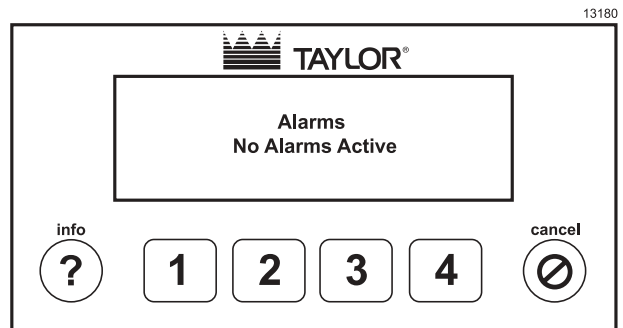


Figure 24

Press the "cancel" key to exit the menu.

Manager Menu

To enter the System Menus, enter access code “3312”.

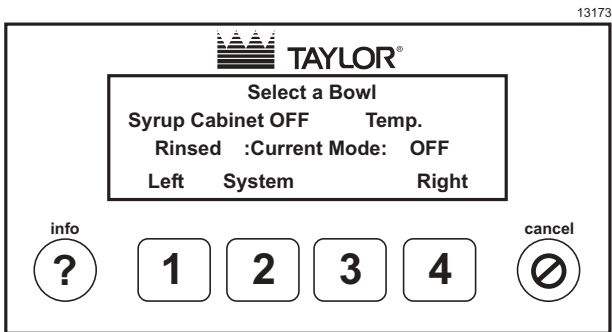


Figure 25

Press Key 2 for the System Menu screen.

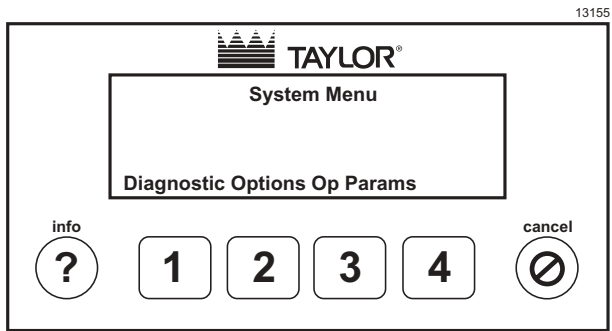


Figure 26

Press Key 3 for the Op Parameters screen.

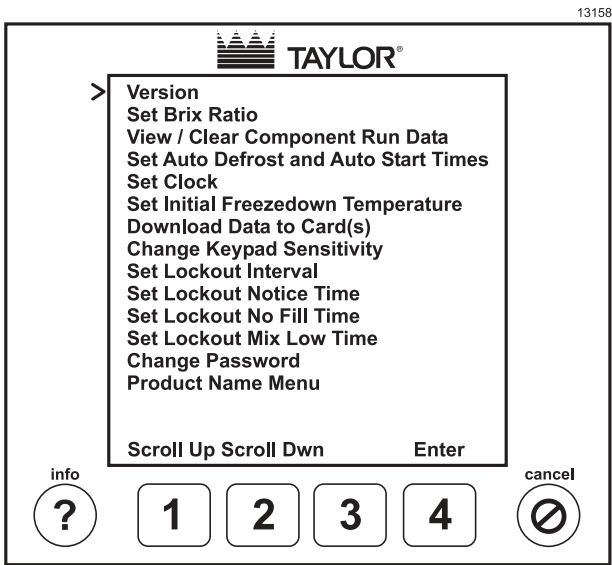


Figure 27

Press Key 4 to enter the desired screens.

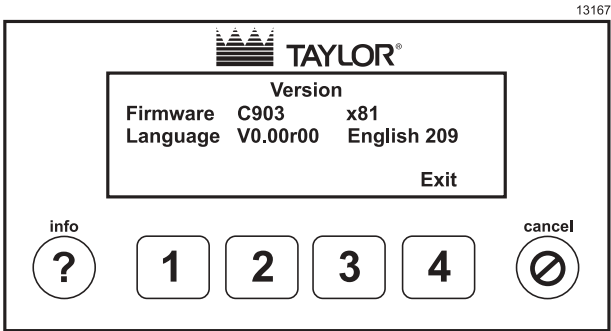


Figure 28

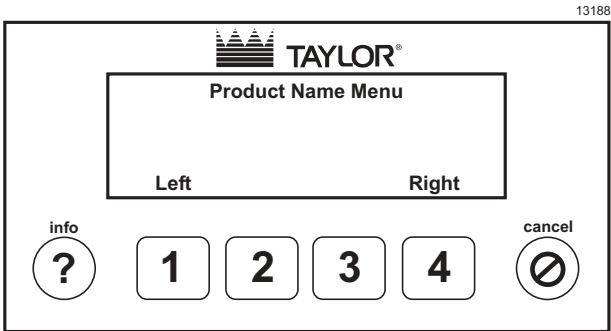


Figure 29

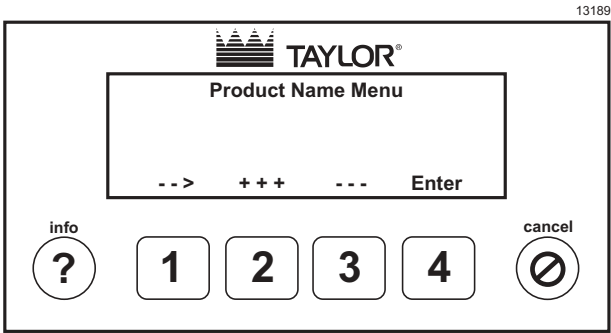


Figure 30

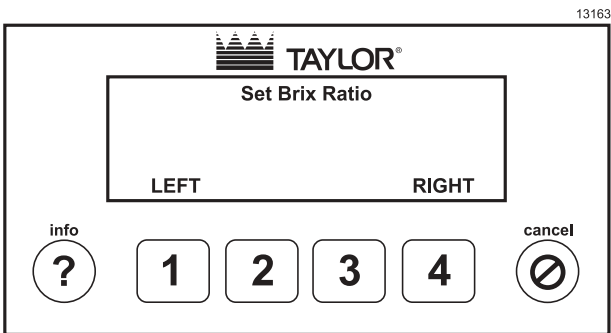


Figure 31

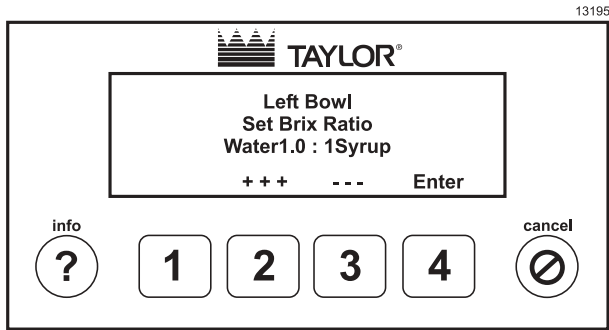


Figure 32

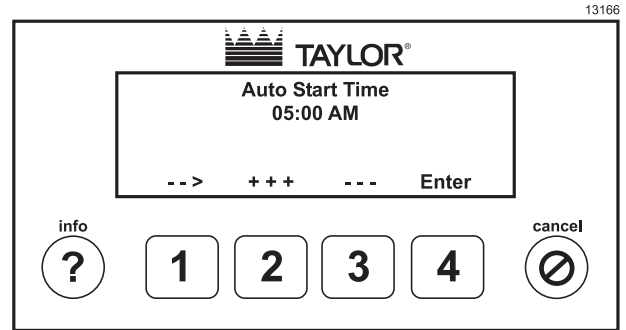


Figure 35

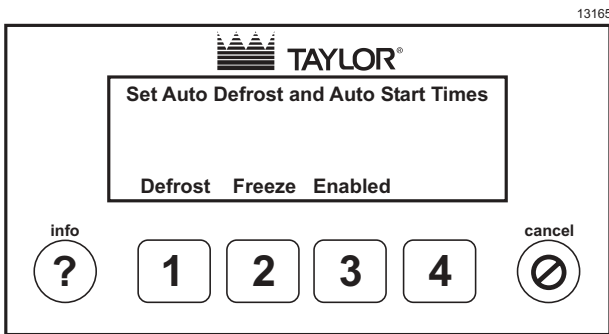


Figure 33

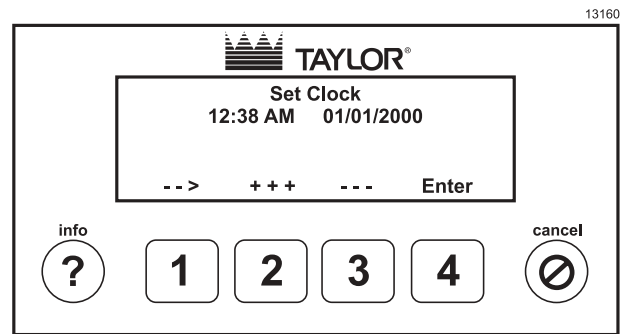


Figure 36

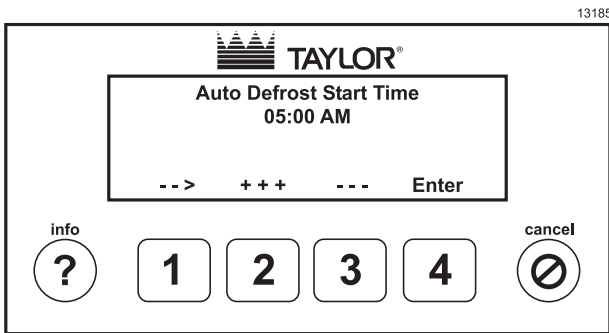


Figure 34

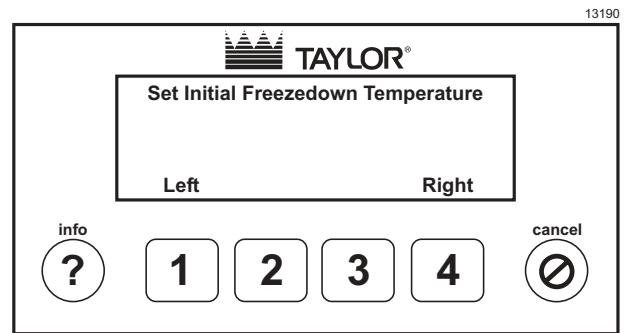


Figure 37

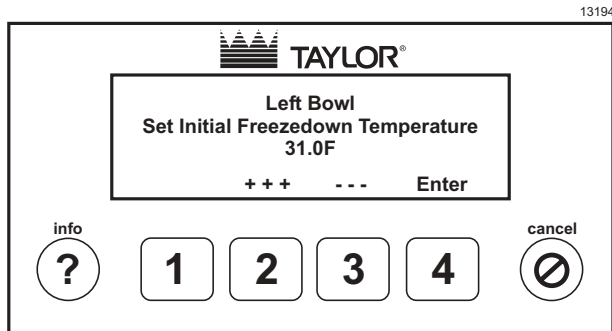


Figure 38

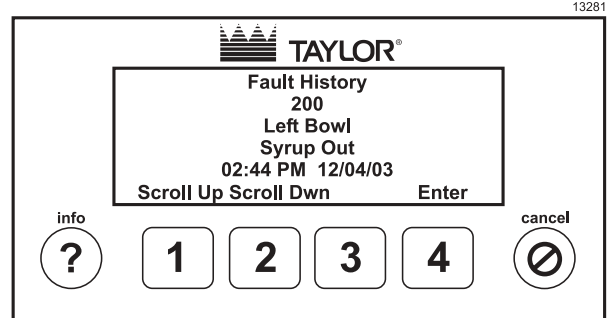


Figure 42

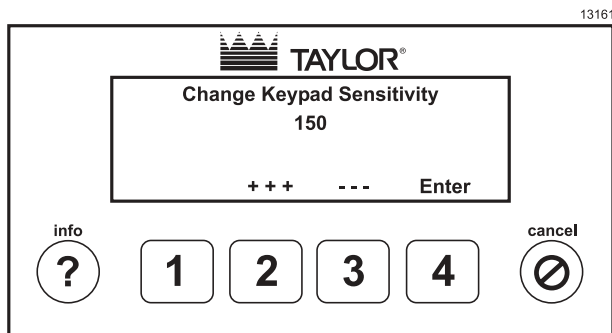


Figure 39

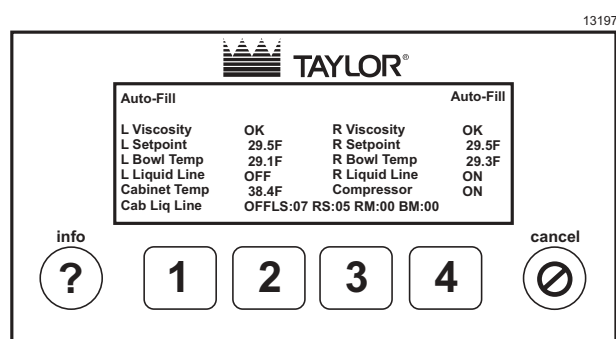


Figure 43

Select Key 1 to enter the DIAGNOSTIC mode.

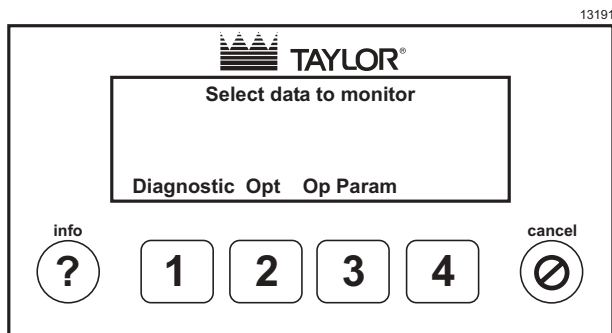


Figure 40

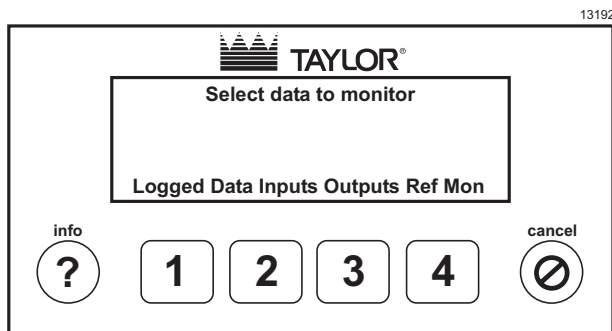


Figure 41

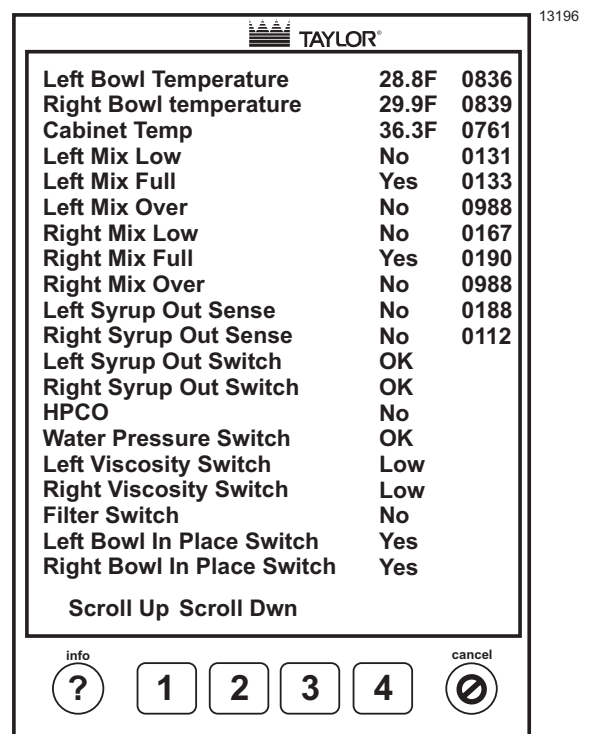


Figure 44

Section 6

Operating Procedures

We begin our instructions at the point where the parts are disassembled and laid out.

The following procedures will explain how to assemble the parts into the freezer, sanitize them, and prime the freezer with fresh product.

This unit is not pre-sanitized at the factory. Before serving product, the machine must be disassembled, cleaned and sanitized.

If you are disassembling the machine for the first time or need information to get to this starting point in our instructions, turn to "Disassembly" on page 28, and start there.

Assembly

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

Step 1

Install the rear bearing on the drive housing.

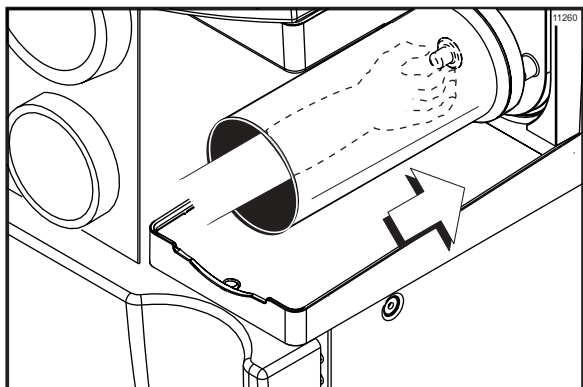


Figure 45

Step 2

Holding the front tip of the beater ONLY, insert it into the evaporator. The magnet will automatically pull the beater to the back of the evaporator.



CAUTION: DO NOT HOLD THE BEATER AROUND THE SIDES! The operator's fingers might be pinched if this instruction is not followed.

Note: To prevent damage to the beater, do not release the beater until it is pulled to the back of the evaporator.

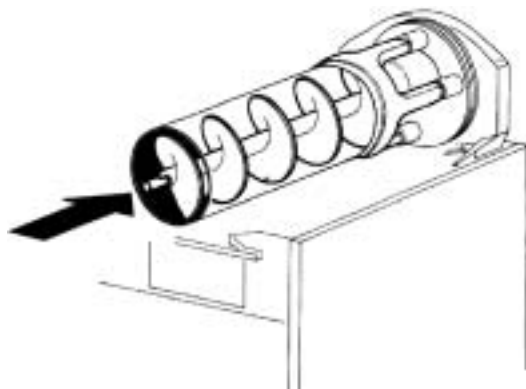


Figure 46

Step 3

Install the outer spiral scraper blade. Slide the blade over the evaporator until the front notch engages with the exposed end of the magnetic beater shaft.

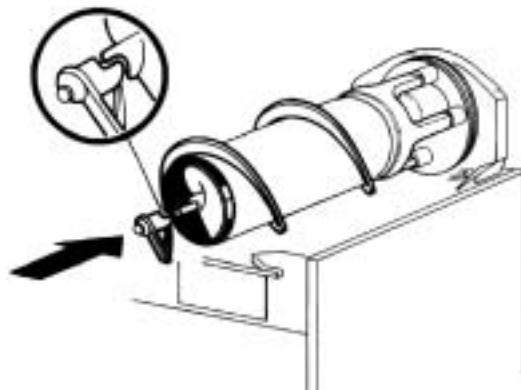


Figure 47

Note: If this alignment is incorrect, the bowl will not seal properly.

Step 4

Insert the front bearing into the front of the bowl.

Step 5

Install the bowl gasket on the back of the bowl. Lightly lubricate the grooves on the gasket.

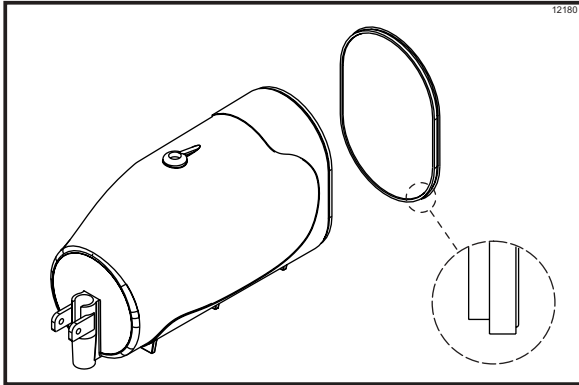


Figure 48

Step 6

Lift the bowl lock plunger up and slide the bowl back until the gasket goes into the groove in the back wall.

Step 7

Make sure the bowl locking pin snaps into the notch on the top of the bowl. Check to make sure the bowl is secure, with the front feet in the grooves.

Step 8

Install the o-rings on the draw valve and QD fitting. Lubricate the o-rings. Slide the valve into the top of the bowl spout with the opening facing the operator. Ensure that the opening in the draw valve is fully exposed.



Figure 49

Note: Failure to lubricate the o-rings may cause the o-rings to tear.

Step 9

Slide the spring over the draw handle.

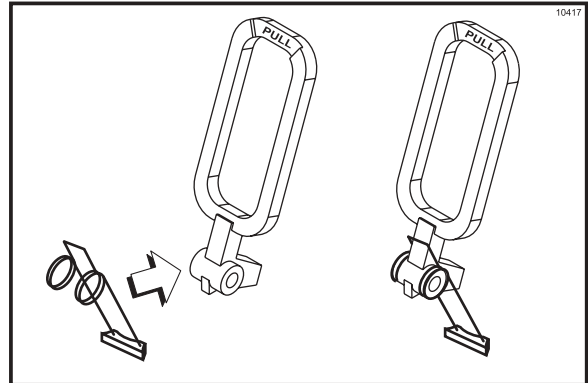


Figure 50

Step 10

Install the draw handle in the valve and slide the pin through the holes.

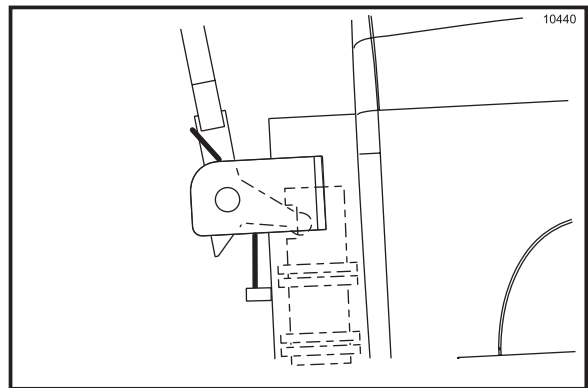


Figure 51

Step 11

Open the cabinet door. Install the drip tray bracket by aligning the slots in the rear of the bracket over the holding collars below the mix cabinet. Close the cabinet door. Install the drip tray and the splash shield.

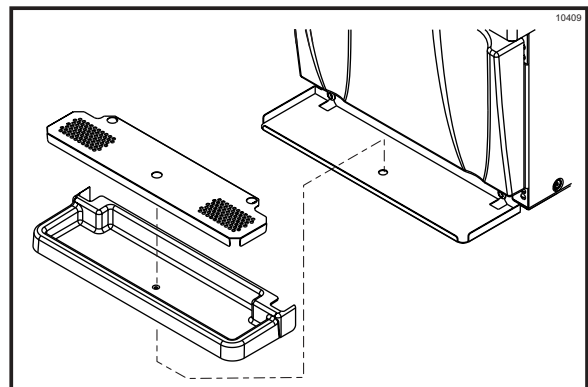


Figure 52

Sanitizing

Note: These are general guidelines. Sanitizing procedures must conform to local health authority guidelines.

Step 1

Prepare a clean mix tank or pail with 10 quarts (9.5 liters) of an approved 100 PPM sanitizing solution (example: Kay-5®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.

Make sure your hands are CLEAN and SANITIZED before proceeding.

Step 2

Insert the product tube into the mix tank. Place the mix tank into the cabinet. Fill the mix tank with sanitizing solution.

Step 3

Follow procedure A or B depending on whether or not your unit is equipped with quick disconnect fittings:

A. Units Equipped With Quick Disconnects

Brush clean the quick disconnect (QD) socket. Connect the QD fitting to the connector located at the top center of the cabinet.

B. Units NOT Equipped With Quick Disconnects

Using an empty bag of syrup, cut the syrup line connector from the end of the bag.

Note: Choose the appropriate illustration below showing the connector style used in your store.

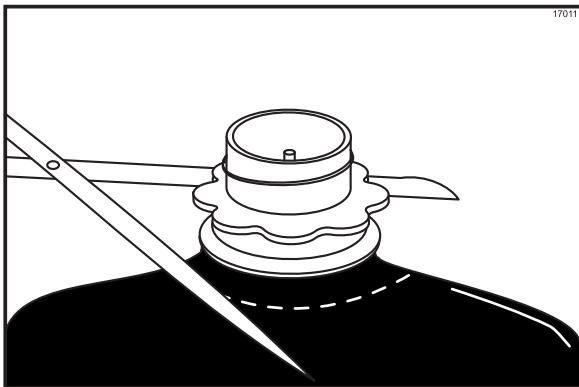


Figure 53

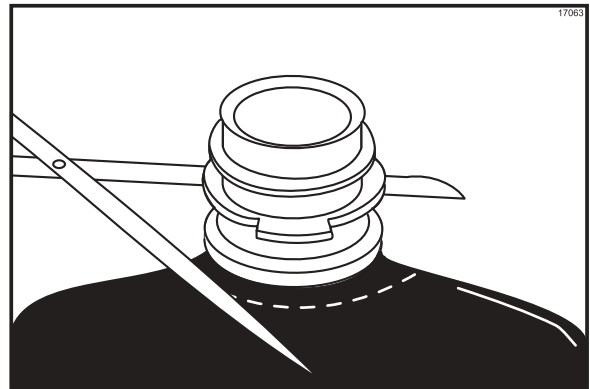


Figure 54

Connect the syrup line to the syrup line connector that was cut from the syrup bag.

Note: Choose the appropriate illustration below showing the connector style used in your store.

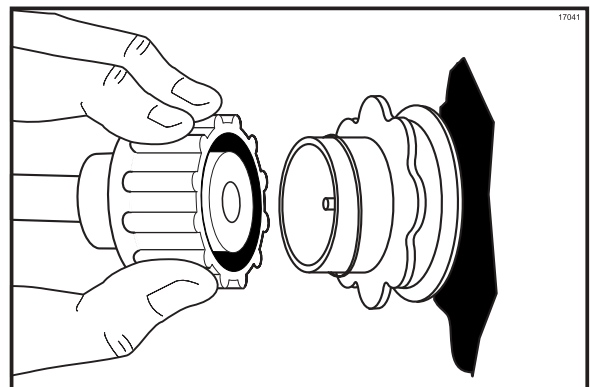


Figure 55

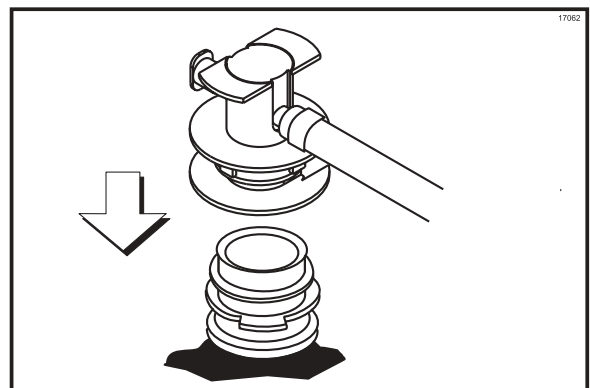


Figure 56

With the bag connector attached to the syrup line, place the syrup line into the tank of sanitizing solution.

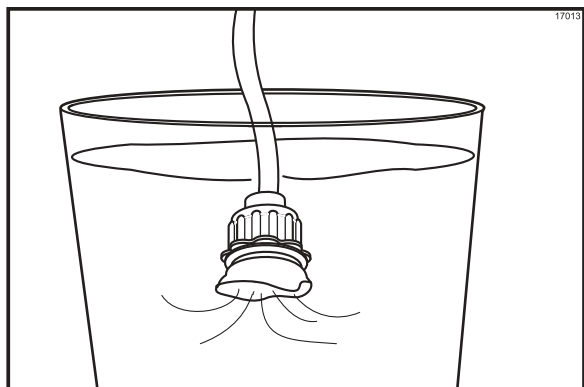


Figure 57

Step 4

If the power switch is OFF, remove the right side flavor card and place the power switch in the ON position.

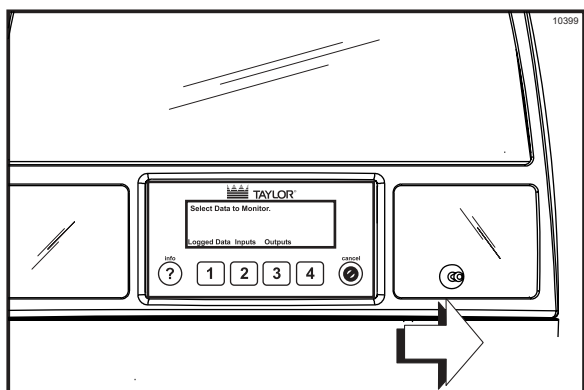


Figure 58

When the power switch is placed in the ON position, the large upper display and the side display will illuminate. The flavor card displays will illuminate when the product is ready to serve. The flavor card light will flash if an alarm occurs (syrup out, low water pressure, etc.).

Step 5

Enter the operator pass code (2133).

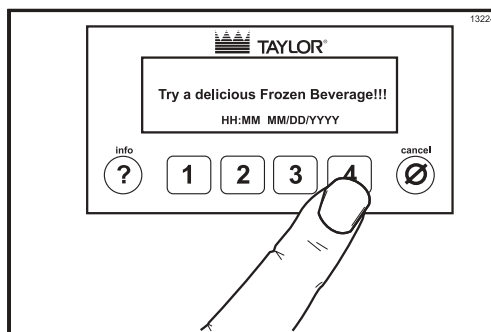


Figure 59

Step 6

Select the appropriate side of the unit. To select the left bowl, press Key 1. To select the right bowl, press Key 4.

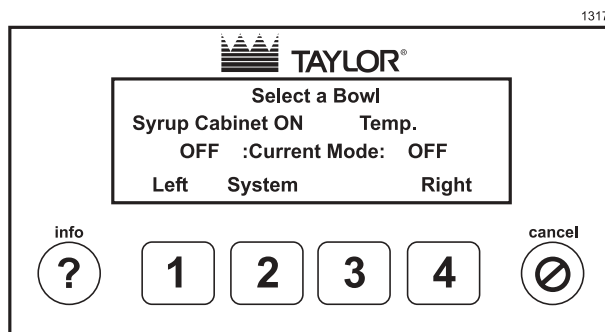


Figure 60

Step 7

Press the MORE Key (4).

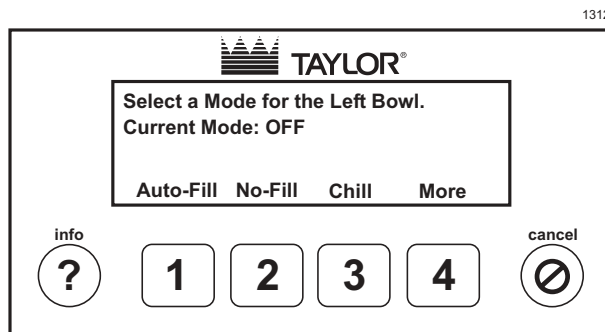


Figure 61

Step 8

Press the SANITIZE Key (2).

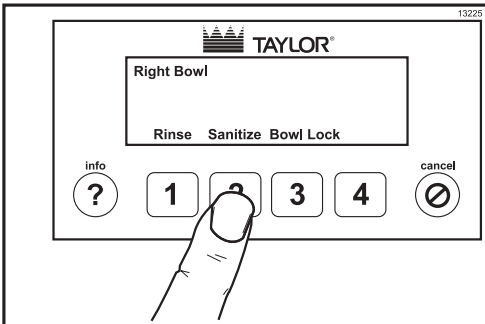


Figure 62

Step 9

Sanitizing solution will start flowing into the bowl. It automatically fills until the bowl is completely full and the Over-Fill sensor is satisfied. If the sanitizer in the mix tank/pail runs out before the bowl is full, add sanitizer from a second pail. The pump will turn off and the magnetic beater will continue turning.

Step 10

Allow the magnetic beater to run for five minutes to complete the sanitizing operation. After five minutes, press the FINISHED key to stop the magnetic beater.

Step 11

Disconnect the quick disconnect (QD) fitting.

Step 12

Drain off all of the solution from the bowl and the mix tank. Discard the solution in the sink.

Step 13

Repeat Steps 1 – 12 for the other side of the unit.

Step 14

Press the CANCEL key to return to the Main Menu when the sanitizing procedure is complete.

Installing the Mix Tanks

(Non Bag-In-Box Product Only)

Note: If your unit uses B.I.B., proceed to “Installing the Syrup Bag-In-Box” on page 23.

Step 1

Pour fresh syrup into a **clean, sanitized** mix tank.

Step 2

Insert the product tube into the mix tank and slide the mix tank into the cabinet.

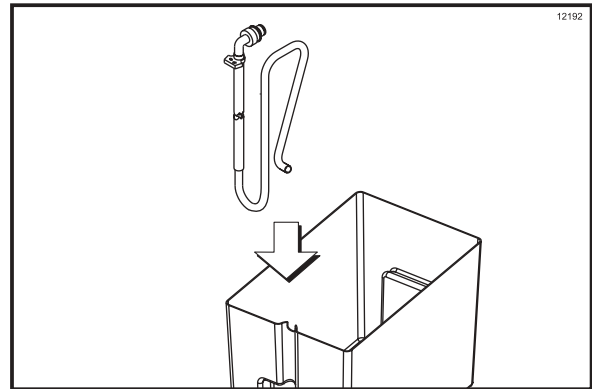


Figure 63

Step 3

Connect the QD fitting to the connector located at the top center of the cabinet.

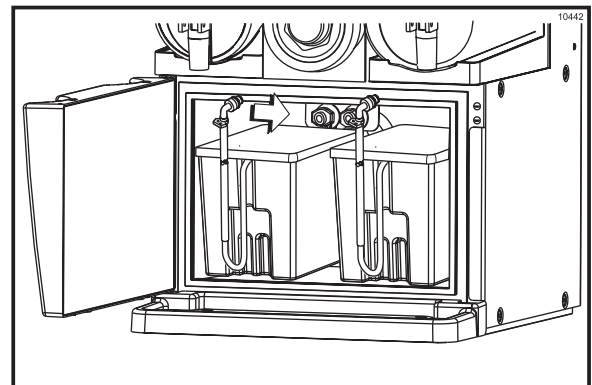


Figure 64

Step 4

Repeat steps 1 – 2 for the other side of the unit.

Installing the Syrup Bag-in-Box

(B.I.B. Product Only)

Step 1

Lay the box of syrup flat on the counter with the circular serrated punch-out facing up.

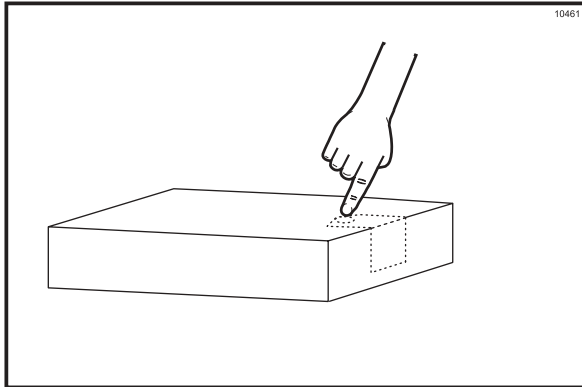


Figure 65

IMPORTANT! DO NOT use a sharp instrument to perform the next step! Failure to follow this instruction can result in the bag being torn.

Step 2

Punch out the serrated area on the syrup box and pull all the way back. Lift out the bag connector. Do not remove the serrated area, other than the circular piece.

Note: Choose the appropriate illustration below showing the connector style used in your store.

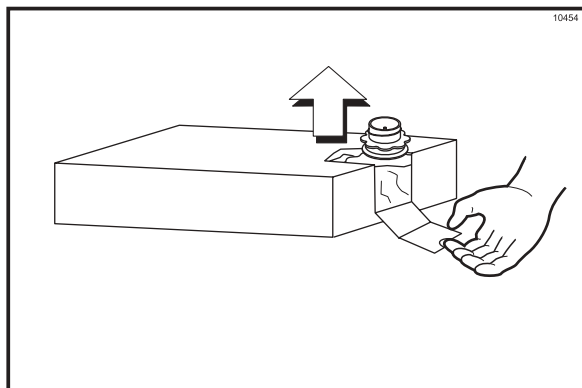


Figure 66

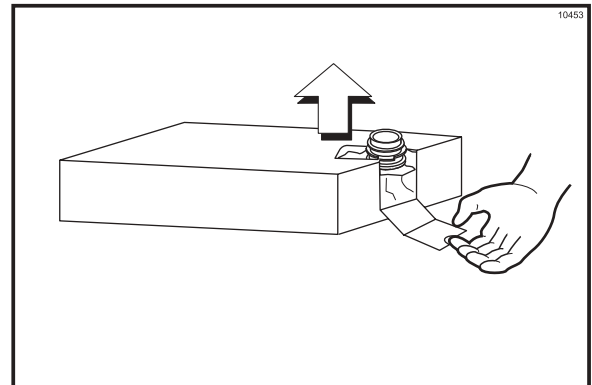


Figure 67

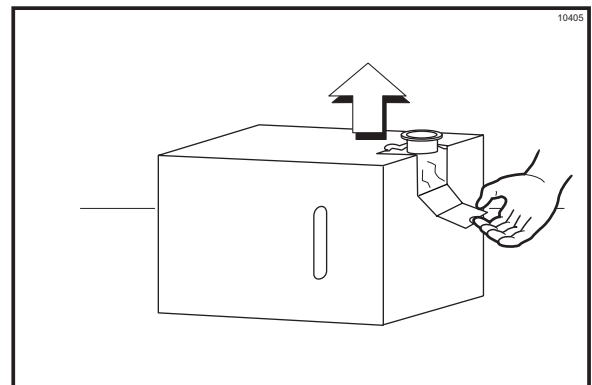


Figure 68

Step 3

Rinse and sanitize the BIB tube. Insert the matching connector on the B.I.B. tube. Twist the tube connector in a back and forth motion while pressing the connectors together. Once the bag seal is broken, the connector slides in easier.

Do not continue to twist, since the fitting could tear the bag. Make sure the connectors are securely fastened.

Note: Choose the appropriate illustration below showing the connector style used in your store.

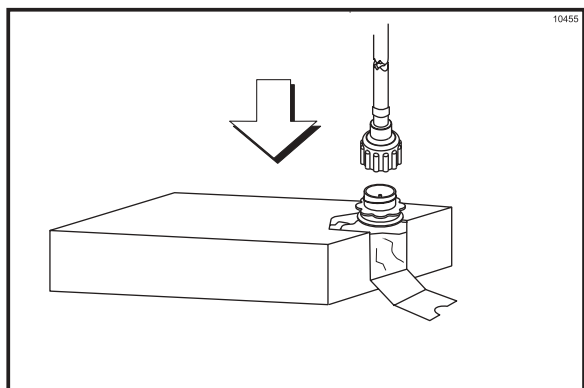


Figure 69

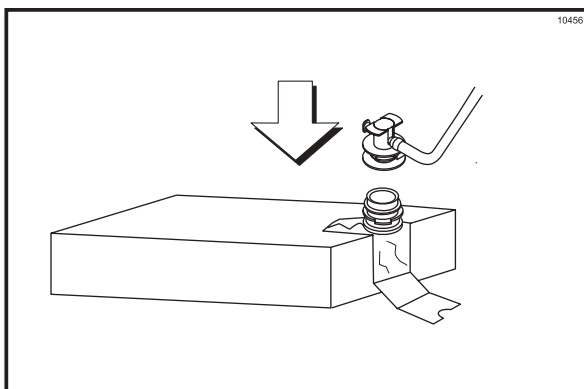


Figure 70

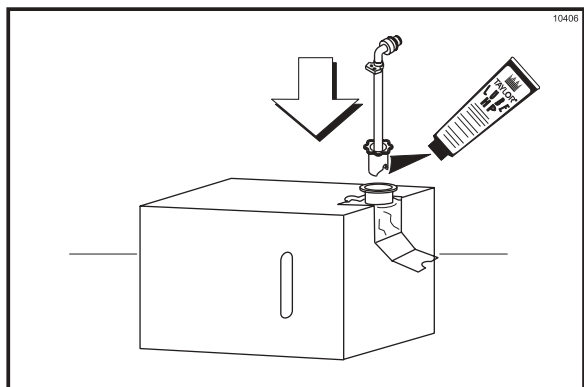


Figure 71

Step 4

Push the bag and the connectors back in the box. Fit the serrated cardboard back into its original position so that only the clear tube protrudes from the box.

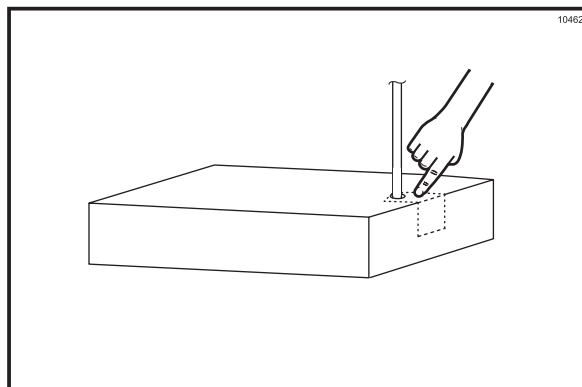


Figure 72

Step 5

Slide the B.I.B. box into the cabinet.

Note: Choose the appropriate illustration below showing the B.I.B. box style used in your store.

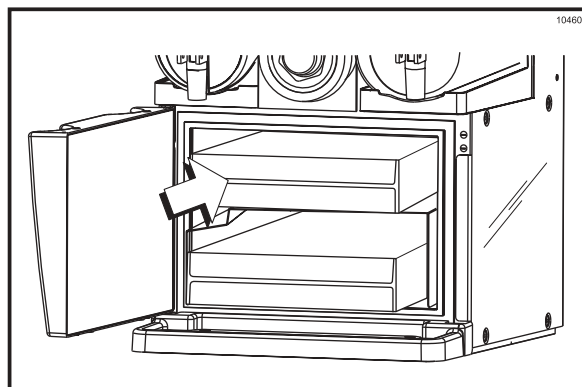


Figure 73

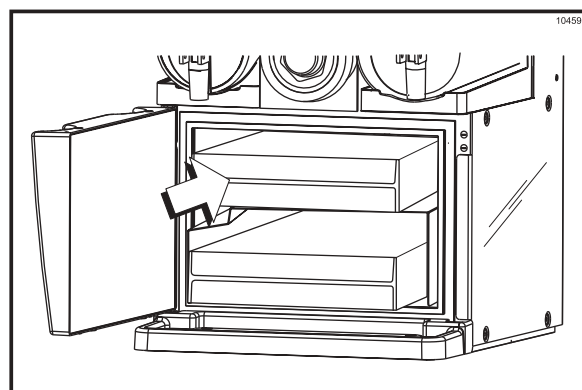


Figure 74

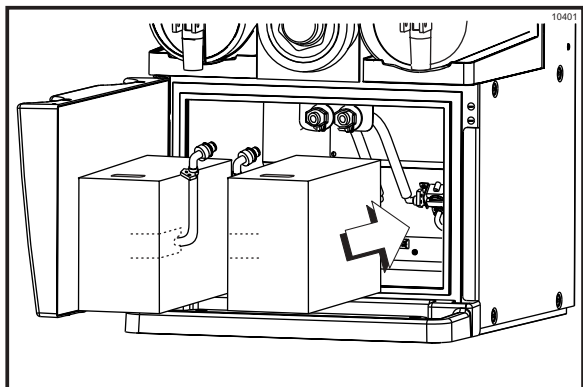


Figure 75

Step 6

Connect the B.I.B. tube to the QD fitting in the cabinet.

Step 7

Repeat Steps 1 – 6 for the other side of the unit.

Step 8

Close the cabinet door.

Brixing

(Products Requiring Brixing Only)

Note: If you do not have a product that requires brixing, proceed to “**Priming**” on page 25.

Definition

Brix is the ratio of syrup to water, which will directly affect the quality and taste of the product. Brixing procedures should be performed before priming the freezer and any time syrup flavors have been changed. Use a hand refractometer to check the brix.

Brix Reading Instructions

Draw product from the bowl and allow the product to flow over the prism of the refractometer. Place the cover plate over the prism, and hold the refractometer toward direct lighting. The brix reading (as read through the window of the refractometer) should register at 13 ± 1 . A reading higher than this indicates excess syrup, and will result in a darker richer product. The refrigeration system will have to run longer than normal to freeze-down the excessive syrup. A reading

lower than 13 ± 1 indicates excess water, and may cause a freeze-up in the barrel.

Brix Adjustment Procedures

Step 1

Go to the Manager Menu.

Step 2

Select SYSTEM.

Step 3

Select OP. PARAMETERS.

Step 4

Select SET BRIX RATIO.

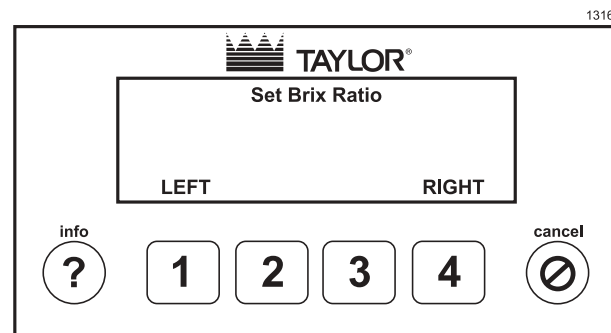


Figure 76

Step 5

Select the left or right side.

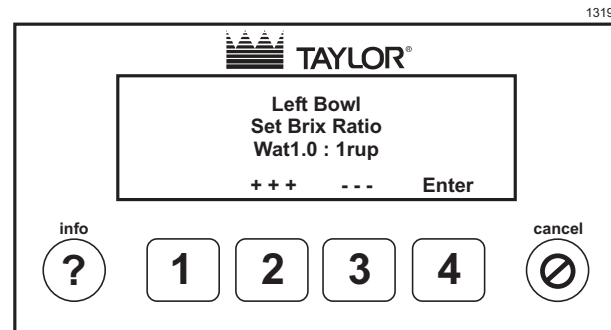


Figure 77

Step 6

Increase or decrease the water numerals to the proper setting. Press the ENTER Key (4) to hold the new setting.

Step 7

Press the CANCEL Key to return to the BOWL MODE SELECT screen.

Priming

Step 1

Select the corresponding side from the BOWL SELECT screen (left or right bowl).

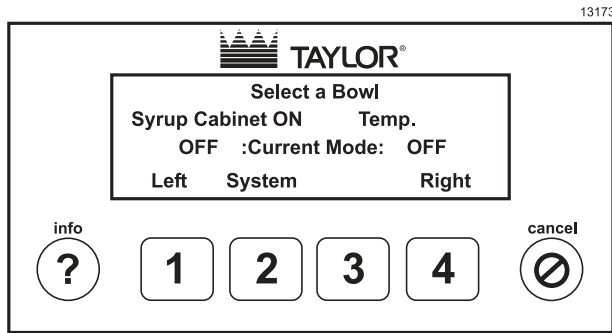


Figure 78

Step 2

Place an empty pail under the draw spout and open the draw valve. Press the AUTO FILL key to start the syrup flowing. This will push out any remaining sanitizer. When full strength syrup is flowing, close the draw valve.

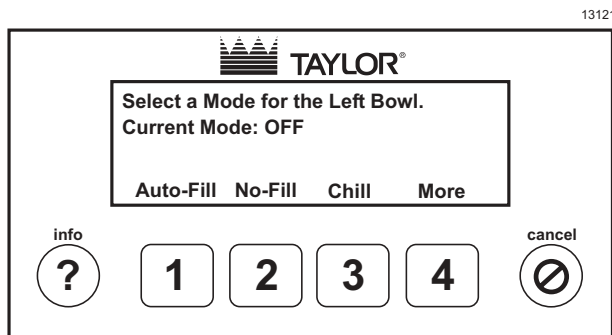


Figure 79

Step 3

The product will fill to the MIX LOW sensor and the magnetic beater will begin to rotate. The product will continue to flow until the MIX FILL sensor is reached. The pump will turn off and the product in the bowl will freeze down.

Step 4

Repeat Steps 7 - 3 for the other side of the unit.

Step 5

Press the CANCEL Key twice to return to the Main Screen.

Step 6

The light under the Product Flavor Display will illuminate when product is ready to serve.

Cleaning Procedure

Note: When the machine is near the 7 day cleaning requirement, one side at a time can be cleaned when the bag is empty. Place the control in the NO FILL mode (Key 2) to continue serving product until ready to clean.

To disassemble the Model C903, the following items will be needed:

- Two cleaning pails
- Necessary brushes provided with freezer
- Cleaner
- Single service towels

Rinsing

Step 1

If the machine is not already in the BOWL SELECT screen, enter the operator pass code (2133).

Step 2

Select the appropriate side (left or right).

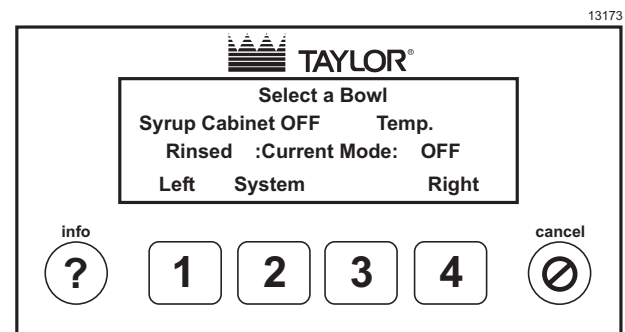


Figure 80

Step 3

Select the OFF Key (3) mode. The screen will display "OFF".

Step 4

Follow procedure A or B depending on whether or not your unit is equipped with quick disconnect fittings:

A. Machines Equipped With Quick Disconnects

Disconnect the B.I.B. tube from the QD fitting in the cabinet. Remove the B.I.B. container from the unit. Set the container on a level surface with the B.I.B. fitting facing up. Press in on the B.I.B. tube Q.D. fitting plunger to drain the syrup back into the box.

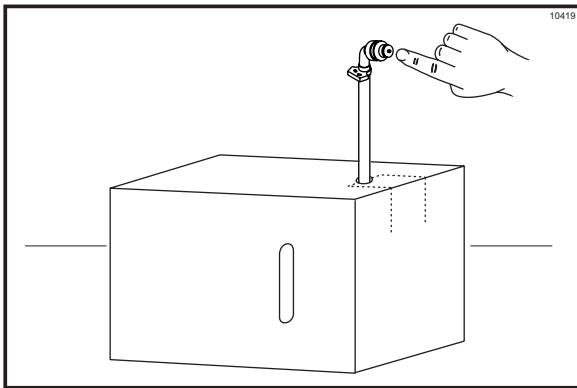


Figure 81

Taking care not to damage the bag, locate the two tabs on the bag fitting and push up to disconnect the fitting from the bag.

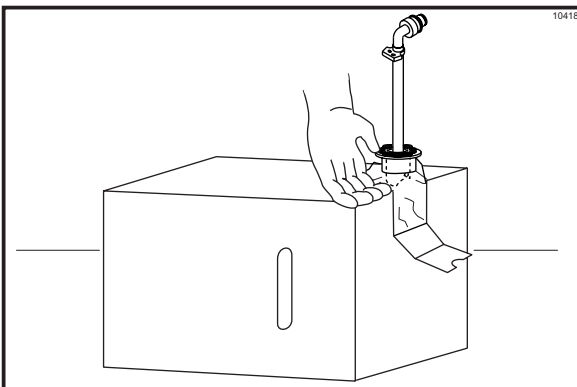


Figure 82

B. Units NOT Equipped With Quick Disconnects

Using an empty bag of syrup, cut the syrup line connector from the end of the bag.

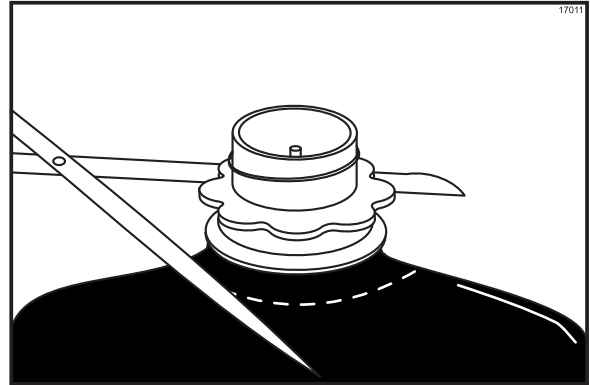


Figure 83

Connect the syrup line to the syrup line connector that was cut from the syrup bag.

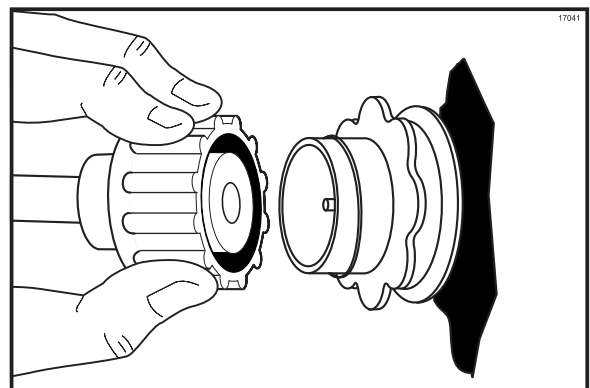


Figure 84

With the bag connector attached to the syrup line, place the syrup line into the mix tank/pail of water.

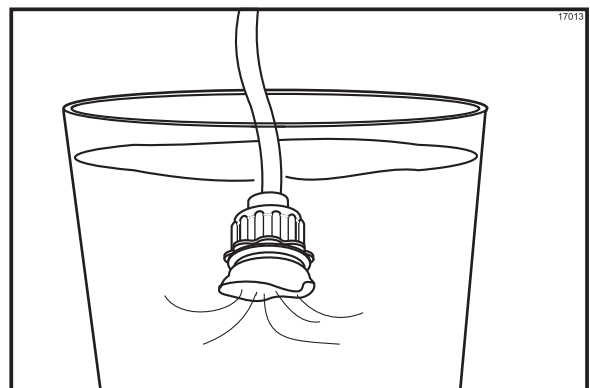


Figure 85

Step 5

Perform Steps 1 through 4 to the other side of the machine.

Step 6

Carefully pull the bag fitting as far out of the box as possible. **IMPORTANT: Don't pull on the tube!**

Step 7

Drain frozen product from the bowl.

Step 8

Dispose of the product.

Step 9

Place a mix tank/pail filled with clean, hot water into the cabinet.

Step 10

Insert the B.I.B. (Bag in Box) tubes into the mix tank/pail. Connect the QD fittings.

Step 11

Select the appropriate side of the unit.

Step 12

Select the MORE Key (4).

Step 13

Select the RINSE Key (1).

Step 14

Allow the bowl to completely fill with water. Replenish the water in the tank/pail in the cabinet as needed. The pump will shut off when the bowl is filled.

Step 15

Allow the unit to agitate for two minutes.

Step 16

Press the FINISHED Key to return to the BOWL SELECT screen.

Step 17

Using an empty pail, drain the rinse water completely from the bowl and discard the water.

Step 18

Fill the empty mix tank/pail with hot water. Add one packet of concentrated yellow dish soap to the full tank/pail to minimize sudsing. Repeat Steps 10 through 17. Discard the soapy water.

Step 19

Fill a clean mix tank/pail with clean, cold water. Repeat Steps 10 through 18. Discard the water.

Step 20

Repeat Steps 9 through 19 for the other side of the machine.

Disassembly

Note: These are general guidelines. Cleaning procedures must conform to local health authority guidelines.

Step 1

If the machine is not already in the SELECT A BOWL screen, enter the operator pass code (2133).

Step 2

Select the left bowl or the right bowl.

Step 3

Press the MORE Key.

Step 4

Select the BOWL LOCK Key to release the lock.

Step 5

Lift up and pull forward to remove the bowl.

Note: If the bowl has not been removed within 15 seconds, the bowl locking pin will attempt to close. Press the BOWL LOCK Key again to remove the bowl.

Step 6

Remove the front bearing from the bowl by prying all round the circumference a little at a time.

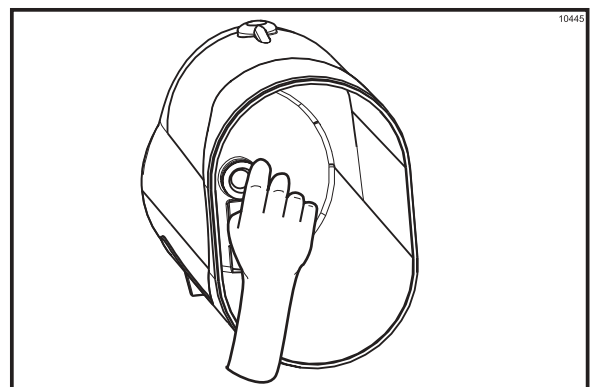


Figure 86

Step 7

Remove the bowl gasket, the magnetic beater, and the scraper blades. Place them inside the bowl.

Step 8

Using a dry, single service towel, twist to remove the rear bearing.

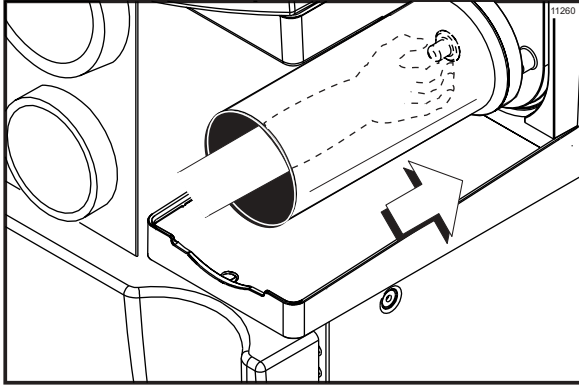


Figure 87

Step 9

Press the CANCEL Key to return to the BOWL SELECT screen.

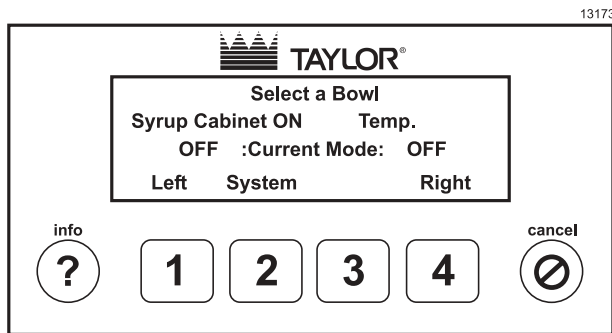


Figure 88

Step 10

Repeat Steps 1 through 9 for the other side of the machine.

Step 11

Remove the product/B.I.B. tubes.

Step 12

Take these parts to the sink for brush cleaning.

Step 13

Remove the pivot pins from the draw handles.

Step 14

Remove the springs and draw handles from the draw valves.

Step 15

Pushing from the bottom up, remove the draw valves from the top of the bowl spouts.



Figure 89

Step 16

Using a dry, single service towel, remove the front bearing from inside the bowl.

Brush Cleaning

Step 1

Prepare a sink with an approved 100 PPM concentrated dish soap (example: Kay-5®). USE HOT WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS. (Follow label directions, as too STRONG of a solution can cause parts damage, while too MILD of a solution will not provide adequate cleaning.)

IMPORTANT: Normal buffing action of the spiral scraper blade will create a black residue on the blade's magnetic drive. Take particular care to brush clean this residue from the component.

Step 2

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 and 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 will allow the o-ring to slide over the forward rings without falling into the open grooves.

Step 3

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

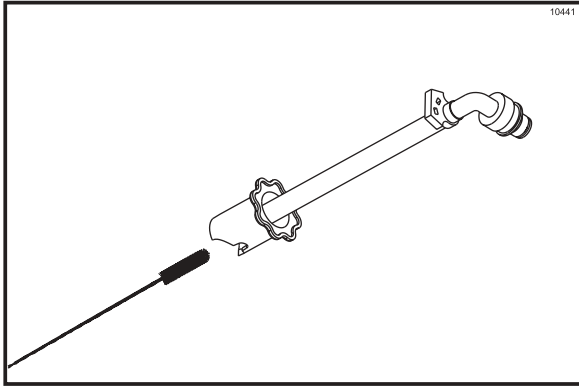


Figure 90

Step 4

Rinse all cleaned parts with cool, clean water.

Step 5

Prepare a sink with an approved 100 PPM sanitizing solution (example: Kay-5®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS. Sanitize all the parts in this solution.

IMPORTANT! DO NOT RINSE AFTER SANITIZING.

Step 6

Place all the sanitized parts on a clean, dry surface to air dry.

Step 7

Return to the freezer with a small amount of sanitizing solution. Place an empty pail on the drip tray with the spout facing into the cabinet to catch used cleaning solution. Brush clean the drip hole in the front of the bowl support.

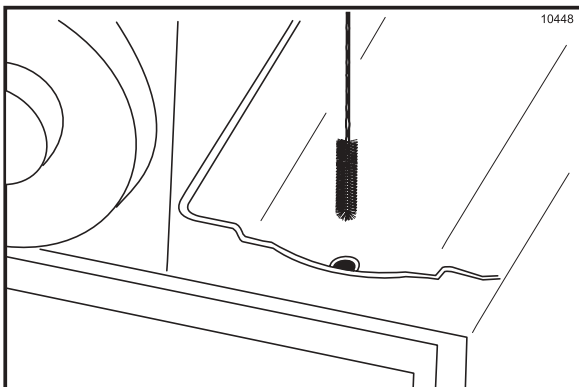


Figure 91

Step 8

Brush clean all accessible food contact parts. Using the straight end of the curled, double-ended brush, clean the groove in the back of the unit where the bowl gasket fits.

Step 9

Using the large end of the straight double-ended brush, clean the upper (overflow) hole.

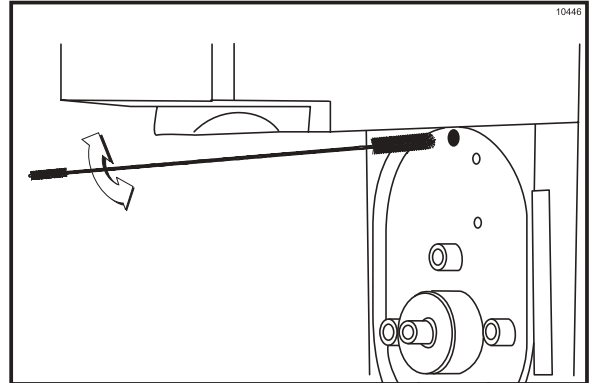


Figure 92

Step 10

Using the small end of the straight double-ended brush, clean the lower (mix inlet) hole.

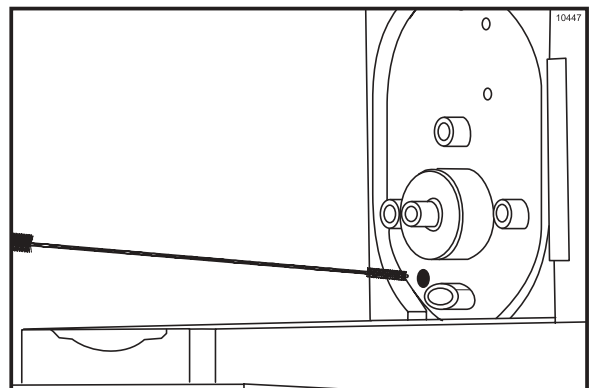


Figure 93

Step 11

In the same manner, clean the evaporator cylinders using a soft bristle brush.

Step 12

With a single service towel, wipe any excess liquid from beneath the evaporators.

Step 13

With the cabinet door open, brush clean the two drip holes in the mix cabinet doors. Brush from the top through all the way through the bottom.

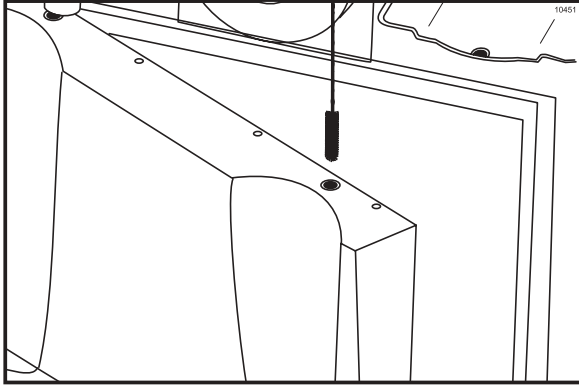


Figure 94

Step 14

Brush clean the Q.D. fittings.

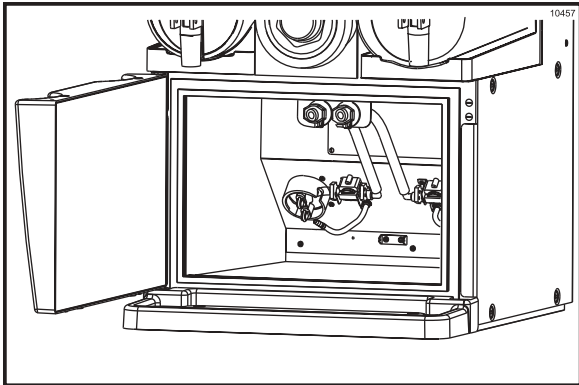


Figure 95

Step 15

Wipe down the exterior surface of the unit and the inside of the syrup cabinet.

Step 16

With the cabinet door closed, remove the drip tray and splash shield.

Step 17

With the cabinet door open, remove the drip tray support and clean underneath.

Daily Opening and Closing Procedures

Step 1

Prepare a small amount of an approved 100 PPM sanitizing solution (example: Kay-5®). **USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.**

Sanitize the front drip tray and splash shield in this solution.

Step 2

Return to the freezer with a small amount of sanitizing solution. Dip the end brush into the sanitizing solution and brush clean the bowl spout and bottom of the draw valve.

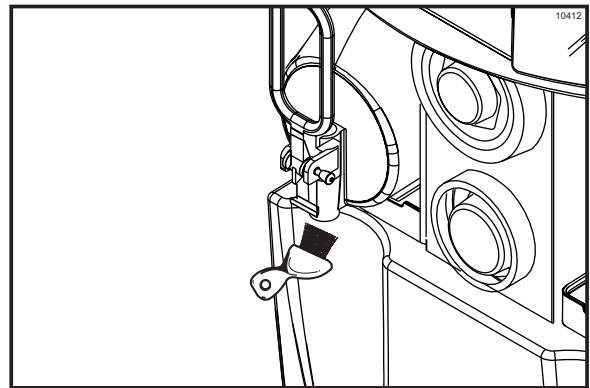


Figure 96

Note: To assure sanitary conditions are maintained, brush clean each item for a total of 60 seconds, repeatedly dipping the brush in sanitizing solution.

Step 3

Rinse a single service towel in sanitizing solution and wipe down the cabinet door and the area around the bottom of the freezer door.

Step 4

Replace the front drip tray and splash shield.

Section 7 Important: Operator Checklist

During Cleaning and Sanitizing



ALWAYS FOLLOW LOCAL HEALTH CODES.

Cleaning and sanitizing schedules are governed by your State or local regulatory agencies and must be followed accordingly. To eliminate bacteria, these schedules must be followed accordingly. The following check points should be stressed during the cleaning and sanitizing operations.

WE RECOMMEND DAILY CLEANING AND SANITIZING.

Troubleshooting Bacterial Count

- ☐ 1. Thoroughly clean and sanitize machine regularly, including complete disassembly and brush cleaning.
- ☐ 2. Properly prepare the cleaning and sanitizing solutions. Read and follow 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.

Regular Maintenance Checks

- ☐ 1. Replace blades that are nicked, damaged or worn.
- ☐ 2. Dispose of o-rings and seals if they are worn, torn, or fit too loosely, and replace with new ones.
- ☐ 3. Follow all lubricating procedures as outlined in "Assembly".

- ☐ 4. Check the air filter and condenser for accumulation of dirt and lint. Dirty filters and condensers will reduce the efficiency and capacity of the machine. They should be cleaned **monthly**. Remove the top P.O.P. and the shield to gain access to the filter.

- ☐ 5. Replace the micron filter yearly.



Make sure the power supply is disconnected before cleaning or replacing the filter. Failure to comply may cause injury or death from electrical shock!

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 to be left unheated and subject to freezing conditions.

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

Your local Taylor Distributor can perform this service for you.

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

Connect an air hose to the water connection. Open the water solenoids on each side and drain all water.

Section 8

Troubleshooting Guide

PROBLEM	PROBABLE CAUSE	REMEDY	PAGE REF.
1. The “Syrup Out” alarm sounds.	a. Mix low condition.	a. Add syrup to the mix tank. (For B.I.B. units, replace the syrup B.I.B.)	23
	b. The product/B.I.B. tube is not properly connected.	b. Make sure the tube is connected to the QD fitting all the way.	25
2. Product is too soft or stiff.	a. Viscosity needs adjustment.	a. Adjust accordingly.	- - -
3. The freezer will not operate with the power switch in the ON position.	a. The unit is unplugged.	a. Check the plug at wall receptacle.	- - -
	b. Blown fuse, or the circuit breaker is off.	b. Replace the fuse or turn the breaker on.	- - -
4. Leakage from rear of unit.	a. Improper fit of the bowl gasket.	a. Reinstall the bowl gasket properly.	19
5. Excessive mix leakage from bowl spout.	a. Inadequate lubrication of draw valve o-rings.	a. Lubricate properly.	19
	b. Wrong type of lubricant on draw valve o-rings.	b. Use food grade lubricant (example: Taylor Lube).	18
	c. Worn or missing draw valve o-rings.	c. Replace or install o-rings on draw valve.	19/ 34
6. The “Pump Run Too Long” alarm sounds.	a. The syrup is out.	a. Add syrup to the mix tank. (For B.I.B. units, replace the syrup B.I.B.) Then clear the alarm.	23/ 13
7. Product is not freezing.	a. Unit is not in the AUTO mode.	a. Go to the Bowl Mode Select screen and place it in AUTO-FILL.	10
	b. The syrup is out.	b. Add syrup to the mix tank. (For B.I.B. units, replace the syrup B.I.B.) Then clear the alarm.	23/ 13
8. The “Low Water Pressure” alarm sounds.	a. There is no water supplied to the unit.	a. Check the water source.	- - -

Section 9 Parts Replacement Schedule

PART DESCRIPTION	EVERY 3 MONTHS	EVERY 6 MONTHS
Outer Spiral Scraper Blade	Inspect & Replace as Necessary	Minimum
Rear Bowl Gasket	Inspect & Replace as Necessary	
Draw Valve O-Ring	X	

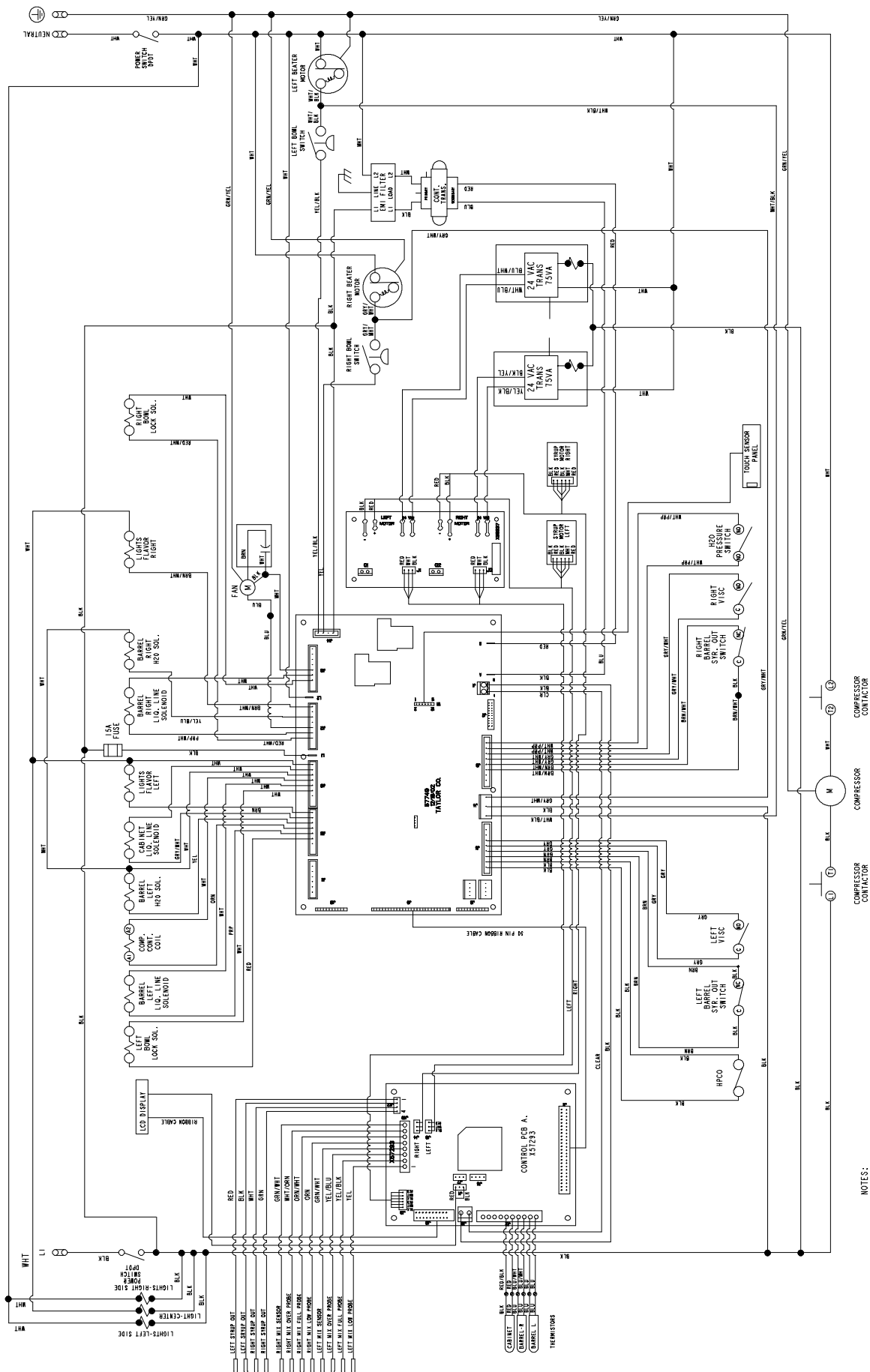
Refer to Parts Identification on the next page when ordering above parts.

Section 10

Parts List

ORDER QTY	PART NUMBER	DESCRIPTION
1	057300	ADAPTOR-FLOW REGUATOR *C9
1	057304	ADAPTOR-SHAFT-MIX PUMP *C
1	055300-12	BALLAST-120V 9W
1	055300-12	BALLAST-120V 9W
1	057158-12	BALLAST-FLUORESCENT LAMP
1	052204	BEATER-MAGNETIC
1	056754	BLADE-SCRAPER-OUTER SPIRA
1	057036	BOWL-MIX 10 QT *C903*
1	057157-12	BULB-FLUORESCENT U SHAPE LG
1	055298	BULB-FLUORESCENT-COMPACT-SM
1	X57269	BULKHEAD A.-EVAPORATOR *C
1	X39465	BRUSH A.-PACKAGE-GRAVITY
1	040040-013	CABLE-RIBBON-20C-17"L-DIL
1	040040-011	CABLE-RIBBON-50C-20"L-DIL
1	057739-12	CAPACITOR RELAY A.-EMBRAC
1	057357	CAPACITOR-RUN 6UF
1	057097-12	COMPRESSOR-EMBRACO NE9213
1	046556	CONDENSER-AC 12LX14HX1.87
1	055248-12	CONTACTOR 120VAC 50/60HZ
1	057144	DISPENSER-CUP-ADJUSTABLE
	057144-1	BOTTOM-DISPENSER-CUP
	057144-2	SPRING-DISPENSER-CUP
	057144-3	RING-TRIM-DISPENSER-CUP
	057144-4	KIT-GASKET-4-DISPENSER-CU
	057144-5	HOLDER-CUP-DISPENSER
1	057094	DISPLAY-LCD-GRAPH 240X64
1	057936	DRYER-CAP. TUBE .026 ID X
1	057262	DRYER-CAP. TUBE .036 ID X
1	052779-8	FILTER-AIR-17.00LX12.00HX
1	040140-001	FILTER-CORCOM 6EH1
1	057134	FITTING-BAG-BIB-KAN PAK
1	045293	FUSE-15 AMP-IN LINE-NON D
1	057042	GASKET-BOWL *C903*
1	046459-1	HANDLE-DRAW *370*BLACK
1	045606	HOLDER-FUSE-IN LINE-TYPE
1	057097-2	HOLDER-OVERLOAD-COMPRESSOR
1	057045	HOUSING-GEARMOTOR

ORDER QTY	PART NUMBER	DESCRIPTION
1	X57274-12	LINE A.-SOLENOID *VALVE *
1	046922	MANIFOLD-3/8S THRU-1/4S O
1	X57082-12	MOTOR A.-FAN *C903*44WATT
1	054229	MOTOR-GEAR TTS SYRUP
1	052213-12	MOTOR-GEAR-GENERATION 3
1	046458	O-RING *370*DRAW VALVE
1	057097-121	OVERLOAD-TI #MRA38110-326
1	023348	PAIL-6 QT.
1	X57293-SER	PCB A.-CONTROL *C903*
1	X57749-SER	PCB A.-KAN-PAK INTERFACE
1	X38539	PIN A.-PIVOT *168-SHORT*
1	057122	PUMP-HOUSING-PERISTALTIC*
1	057123	PUMP-ROTOR-PERISTALTIC *C
1	057132	REGULATOR-FLOW-WATER
1	057541	RETAINER-SWITCH *C903*SOL
1	X57117	SHROUD A.-CONDENSER *C903
1	057937-12	SOLENOID-PULL *C903*
1	046460	SPRING-DRAW *370*
1	027214	SWITCH-LEVER-SPDT-15A-125
1	500031	SWITCH-LEVER-SPST-MIX CAB
1	052663	SWITCH-PRESSURE 405 PSI-S
1	016292	SWITCH-PRESSURE-H2O
1	075772	SWITCH-TOGGLE-DPST
1	057136	SWITCH-VACUUM BIB FLOJET
1	057923	TANK-MIX *C903*
1	045754	TRANS.-CONT.-40VA 120/200
1	047964-12	TRANS.-CONT.-75VA-120V/24
1	057039	TRAY-CONDENSATION-BOWL
1	057125	TUBE-PERISTALTIC PUMP-SIL
1	X58141	TUBE A.-PRODUCT-KAN PAK *
	020943-8	TUBE-VINYL 3/8 ID X 9/16 OD
	052021	CLAMP-HOSE-SNAP IT-17/32-19/
	057134	FITTING-BAG-BIB-KAN PAK
	058143	FITTING-QD-MALE-3/8 BARB
1	047016	VALVE-ACCESS-1/4 MFLX1/4
1	046457	VALVE-DRAW *370*
1	046365	VALVE-EXP-AUTO-1/4S X1/4
1	057075	VALVE-LIQUID INJECTOR
1	043449-12	VALVE-SOLENOID 7/64ORF X
1	041589-12	VALVE-SOLENOID-3/16"ORIFI



- NOTES:
- 1.) STATIC ELECTRICITY MAY CAUSE DAMAGE TO SOLID STATE COMPONENTS. ELIMINATE STATIC ELECTRICITY BY TOUCHING GROUNDED UNIT BEFORE HANDLING SOLID STATE COMPONENTS.
- 2.) STRIPED WIRE ON RIBBON CABLES MUST BE CONNECTED TO PIN 1 AT EACH END.