

OPERATOR'S MANUAL



Model C606 Combination Freezer

Original Operating Instructions

059714-M

**May, 2004 (Original Publication)
(Updated 7/1/16)**

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

© 2004 Carrier Commercial Refrigeration, Inc.
059714-M

Any unauthorized reproduction, disclosure, or distribution of copies by any person of any portion of this work may be a violation of Copyright Law of the United States of America and other countries, could result in the awarding of Statutory Damages of up to \$250,000 (17 USC 504) for infringement, and may result in further civil and criminal penalties. All rights reserved.



Taylor Company
a division of Carrier Commercial Refrigeration, Inc.
750 N. Blackhawk Blvd.
Rockton, IL 61072

Table of Contents

Section 1	To the Installer	1
	Installer Safety	1
	Site Preparation	1
	Air Cooled Units	1
	Electrical Connections	2
	Beater Rotation	2
	Refrigerant	3
Section 2	To the Operator	4
Section 3	Safety	6
Section 4	Operator Parts Identification	8
	Exploded View	8
	Front View	10
	Syrup Cabinet View	12
	Syrup Pump & Tubes	13
	X57028-XX Pump A. - Mix Simplified - Shake	14
	X57029-XX Pump A. - Mix Simplified - Soft Serve	15
	X59304 Syrup Line Assembly - Thin Viscosity Syrup	16
	X56652 Syrup Line Assembly - Thick Viscosity Shake Syrup (Optional)	17
	X58450 Syrup Line Assembly - Syrup-In-Bag Option	18
	Mix Hopper - Top View	19
	Accessories	20
	X44127 Brush Kit Assembly	22
	X53800-BRN/TAN Syrup Pump	23
	Beater Door Assembly - Shake Side	24
	Beater Door Assembly - Soft Serve Side	26
	059088 Tray-Parts-Shake Side	27
	059087 Tray-Parts-Soft Serve Side	28
	056525 Tray-Parts-Pump-Simplified	29
Section 5	Important: To the Operator	30
	Symbol Definitions	31
	Power Switch	31
	Vacuum Fluorescent Display	31

Indicator Lights	31
Heat Mode Symbol	32
Reset Mechanism	32
Air/Mix Pump Reset Mechanism	32
Adjustable Draw Handle	32
Shake Fill Level Adjustment	33
VFD Screens	33
Manager's Menu	38
Section 6 Operating Procedures	52
Equipment Set-Up	52
Freezing Cylinder Assembly - Shake Side	52
Freezing Cylinder Assembly - Soft Serve Side	56
Mix Pump Assembly	60
Sanitizing - Shake Side	63
Sanitizing - Soft Serve Side	66
Priming - Shake Side	67
Priming - Soft Serve Side	68
Daily Closing Procedures	68
Daily Opening Procedures	73
Syrup System	78
Syrup Topping Pump	81
Manual Brush Cleaning	87
Draining Product From The Freezing Cylinder	88
Rinsing	89
Cleaning and Sanitizing	89
Disassembly - Shake Side	90
Disassembly - Soft Serve Side	91
Brush Cleaning	92
Syrup System - Scheduled Maintenance	93
Section 7 Important: Operator Checklist	97
During Cleaning and Sanitizing	97
Troubleshooting Bacterial Count	97
Regular Maintenance Checks	97
Winter Storage	98

Section 8	Troubleshooting Guide	99
Section 9	Parts Replacement Schedule	111
Section 10	Limited Warranty on Equipment	112
Section 11	Limited Warranty on Parts	114

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.

© 2004 Carrier Commercial Refrigeration, Inc. (Original Publication)
(Updated July 2016)
059714-M

Any unauthorized reproduction, disclosure, or distribution of copies by any person of any portion of this work may be a violation of Copyright Law of the United States of America and other countries, could result in the awarding of Statutory Damages of up to \$250,000 (17 USC 504) for infringement, and may result in further civil and criminal penalties. All rights reserved.



Taylor Company
a division of Carrier Commercial Refrigeration, Inc.
750 N. Blackhawk Blvd.
Rockton, IL 61072

Notes:

[illegible]

Section 1

To the Installer

The following information has been included in the manual as safety and regulatory guidelines. For complete installation instructions, please see the Installation Checklist.

Installer Safety



In all areas of the world, equipment 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 equipment.

- Only authorized Taylor service personnel should perform installation and repairs on the equipment.
- Authorized service personnel should consult OSHA Standard 29CFR1910.147 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 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.



The main power supply(s) to the freezer 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 equipment.

Note: All repairs must be performed by an authorized Taylor Service Technician.



This unit has many sharp edges that can cause severe injuries.

Site Preparation

Review the area where the unit will be installed before uncrating the unit. Make sure that all possible hazards to the user and the equipment have been addressed.

Air Cooled Units

DO NOT obstruct air intake and discharge openings:

Air cooled units require a minimum of 3" (76 mm) of clearance around **all** sides of the freezer to allow for adequate air flow across the condensers. Install the deflector provided to prevent recirculation of warm air. Failure to allow adequate clearance can reduce the refrigeration capacity of the freezer and possibly cause permanent damage to the compressors.

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



This unit 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 unit. Failure to follow this instruction may result in electrocution.



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

Uncrate the unit 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.

Electrical Connections

In the United States, this equipment is intended to be installed in accordance with the National Electrical Code (NEC), ANSI/NFPA 70-1987. 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, equipment should be installed in accordance with the existing local codes. Please contact your local authorities.



FOLLOW YOUR LOCAL ELECTRICAL CODES!

Each unit requires one power supply for each data label on the unit. Check the data label(s) on the freezer for branch circuit overcurrent protection or fuse, circuit ampacity and other electrical specifications. Refer to the wiring diagram provided inside of the electrical box, for proper power connections.



CAUTION: THIS EQUIPMENT MUST BE PROPERLY GROUNDED! FAILURE TO DO SO CAN RESULT IN SEVERE PERSONAL INJURY FROM ELECTRICAL SHOCK!



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



This unit 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 both the removable panel and the equipment's frame.



Stationary appliances which are not equipped with a power cord and a plug or another device to disconnect the appliance from the power source must have an all-pole disconnecting device

with a contact gap of at least 3 mm installed in the external installation.



Appliances 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 such as a GFI, to protect against the leakage of current, installed by the authorized personnel to the local codes.



Supply cords used with this unit 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, its service agent, or similarly qualified person, in order to avoid a hazard.

Beater Rotation



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

Note: The following procedures should be performed by a trained service technician.

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

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

Electrical connections are made directly to the terminal block. The terminal block is provided in the splice box located behind the right side panel.

Refrigerant



In consideration of our environment, Taylor uses only earth friendly HFC refrigerants. The HFC refrigerant used in this unit is R404A. This refrigerant is generally considered non-toxic and non-flammable, 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.



Use only R404A refrigerant that conforms to the AHRI standard 700 specification. The use of any other refrigerant may expose users and operators to unexpected safety hazards.



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



Taylor reminds technicians to be cautious of government laws regarding refrigerant recovery, recycling, and reclaiming systems. If you have any questions regarding these laws, please contact the factory Service Department.



WARNING: 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.

Section 2

To the Operator

The freezer you have purchased has been carefully engineered and manufactured to give you dependable operation. The Taylor freezer, 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.

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

Your Taylor freezer will NOT eventually compensate and correct for 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 all personnel responsible for the equipment's operation review these procedures in order to be properly trained and to make sure that there is no confusion.

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

Note: Your Taylor warranty is valid only if the parts are authorized Taylor parts, purchased from the local authorized Taylor Distributor, and only if all required service work is provided by an authorized Taylor service technician. Taylor reserves the right to deny warranty claims on units or parts if non-Taylor approved parts or incorrect refrigerant were installed in the unit, system modifications were performed beyond factory recommendations, or it is determined that the failure was caused by abuse, misuse, neglect, or failure to follow all operating instructions. For full details of your Taylor Warranty, please see the Limited Warranty section in this manual.

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



If the crossed out wheeled bin 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 returning the product to the appropriate collection facility, as specified by your local code.

For additional information regarding applicable local laws, please contact the municipal facility and/or local distributor.

Compressor Warranty Disclaimer

The refrigeration compressor(s) on this unit are warranted for the term stated in the Limited Warranty section in this manual. 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 unit's refrigeration system, **only the refrigerant specified on the affixed data label should be used**. The unauthorized use of alternate refrigerants will void your Taylor compressor warranty. It is the unit owner's responsibility to make this fact known to any technician he employs.

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/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 or death. 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.



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



This appliance is to be used only by trained personnel. It is not intended for use by children or people with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless given supervision or instruction concerning the use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.



This unit 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 both the removable panel and the equipment's frame.



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



- **DO NOT** operate the freezer unless it is properly grounded.
- **DO NOT** operate the freezer with larger fuses than specified on the freezer data label.
- All repairs must be performed by an authorized Taylor service technician.
- The main power supplies to the machine must be disconnected prior to performing any repairs.
- Cord Connected Units: Only Taylor authorized service technicians may install a plug on this unit.
- Stationary appliances which are not equipped with a power cord and a plug or another device to disconnect the appliance from the power source must have an all-pole disconnecting device with a contact gap of at least 3 mm installed in the external installation.
- Appliances 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 such as a GFI, to protect against the leakage of current, installed by the authorized personnel to the local codes.
- Supply cords used with this unit 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, its service agent, or similarly qualified person, in order to avoid a hazard.

Failure to follow these instructions may result in electrocution. Contact your local authorized Taylor Distributor for service.



- **DO NOT** allow untrained personnel to operate this machine.
- **DO NOT** operate the freezer unless all service panels and access doors are restrained with screws.
- **DO NOT** remove any internal operating parts (example: freezer door, beater, scraper blades, etc.) unless all control switches are in the OFF position.

Failure to follow these instructions may result in severe personal injury from hazardous moving parts.



This unit 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.
- **CAUTION-SHARP EDGES:** Two people are required to handle 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.



Access to the service area of the unit is restricted to persons having knowledge and practical experience with the appliance, in particular as far as safety and hygiene are concerned.



This freezer must be placed on a level surface. Failure to comply may result in personal injury or equipment damage.



Cleaning and sanitizing schedules are governed by your state or local regulatory agencies and must be followed accordingly. Please refer to the cleaning section of this manual for the proper procedure to clean this unit.



This machine is designed to maintain product temperature under 41°F (5°C). Any product being added to this machine must be below 41°F (5°C). Failure to follow this instruction may result in health hazards and poor freezer performance.

DO NOT obstruct air intake and discharge openings: 3" (76 mm) minimum air space all sides is required. Install the deflector provided to prevent recirculation of warm air. Failure to follow this instruction may cause poor freezer performance and damage to the machine.

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

DO NOT run the machine without product. Failure to follow this instruction can result in 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.

Section 4

Operator Parts Identification

Exploded View

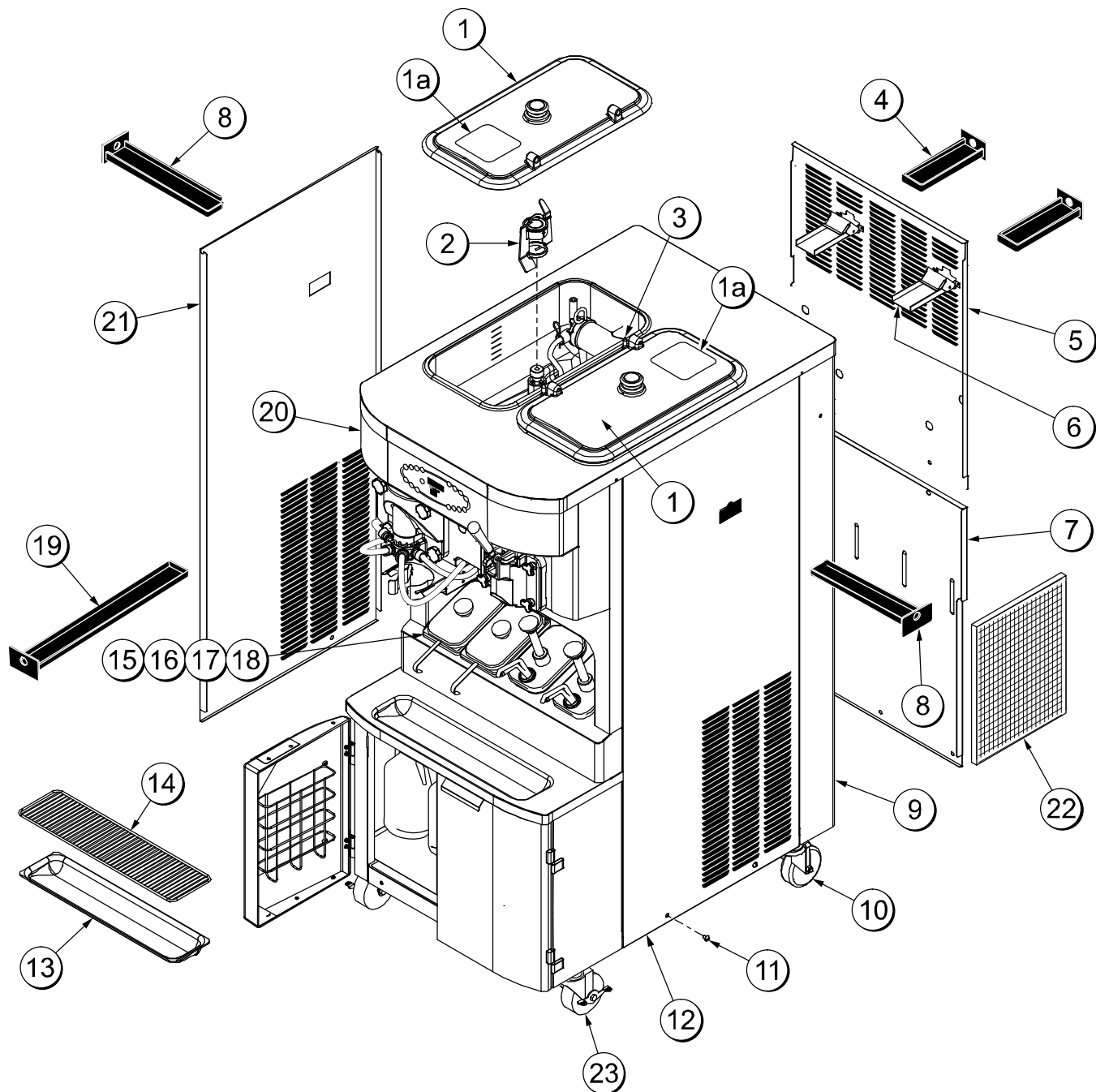


Figure 1

Exploded View (See Figure 1)

ITEM	DESCRIPTION	PART NO.
1	KIT A.-COVER-HOPPER	X65368-SP
1a	LABEL-CAUTION-AGITATOR	045191
2	AGITATOR A.-MIX HOPPER-20	X44797
3	PIN-RETAINING HOPPER CVR	043934
4	PAN-DRIP-REAR	X56003
5	PANEL-REAR-UPPER	066724
6	GUIDE A.-DRIP PAN-MIX PUMP	X48228
7	PANEL-REAR-LOWER	055959
8	PAN-DRIP-SIDE	X56005
9	TRIM-CORNER-REAR-R	056692
	TRIM-CORNER-REAR-L	056693
10	CASTER-4"	044106
11	SCREW-1/4-20X3/8	011694

ITEM	DESCRIPTION	PART NO.
12	PANEL-SIDE RIGHT	055950
13	TRAY-DRIP	033812
14	SHIELD-SPLASH	033813
15	LID-SYRUP JAR	042706
16	JAR-SYRUP*PLASTIC	036573
17	JAR-SYRUP*STAINLESS	036574
18	LADLE-1 OZ	033637-1
19	PAN-DRIP 19-1/2 LONG	035034
20	PLATE-DEC	056131-1
21	PANEL-SIDE LEFT	055957
22	FILTER-AIR-18.00LX13.50HX.70	052779-3
23	CASTER-4" SWV 3/4-10 STEM W/BRAKE	046437

Front View

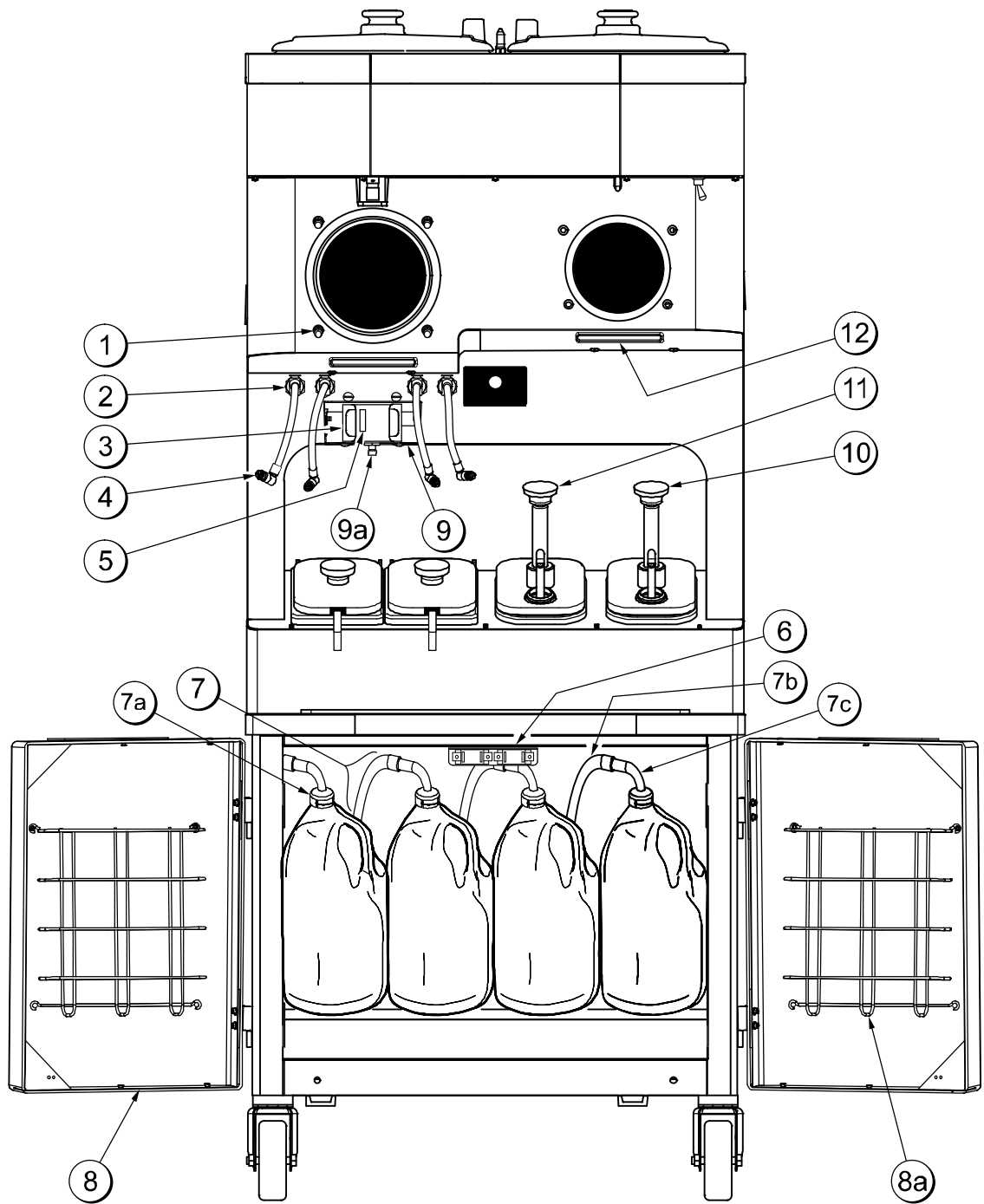


Figure 2

Front View (See Figure 2)

ITEM	DESCRIPTION	PART NO.
1	STUD-NOSE CONE	055987
2	FITTING-PANEL MOUNT QD	056674
3	CLIP-SPRING-CUP HOLDER	068394
4	LINE A.-SYRUP DOOR	X59304
5	SENSOR A.-PYROELECTRIC	X59268-SER
6	KIT A.-SYRUP DOOR (MAGNETIC CATCH)	X65932 CONSISTS OF:
	SCREW-6-32X3/8 SLTD	(4) 002201
	MAGNET-CATCH ASSY.	(2) 016121
	NUT-10-32 FLANGE LOCKNUT	(4) 020983
	SCREW-10-32X3/8 SLTD	(4) 024298
	HANDLE-DOOR SHORT	(2) 065933
	BRACKET-MAGNET DOOR	(1) 065934
7	FITTING A.-SYRUP JUG 36"	X53353-BLU
	FITTING A.-SYRUP JUG 36"	X53353-BRN
	FITTING A.-SYRUP JUG 36"	X53353-RED
	FITTING A.-SYRUP JUG 36"	X53353-WHT
7a	CAP-ULTIMATE SYRUP	053040-BLU
	CAP-ULTIMATE SYRUP	053040-RED
	CAP-ULTIMATE SYRUP	053040-BRN
	CAP-ULTIMATE SYRUP	053040-WHT

ITEM	DESCRIPTION	PART NO.
7b	HOSE-BEVERAGE 3/8"ID X 5/8	053052-36
7c	TUBE A.-SYRUP PICK UP	X53175
*7d	FERRULE-.625 ID NP BRASS	053036
*7e	FITTING-PERISTALTIC PUMP	054526
*7f	O-RING-.500 OD X .070W (50 TO BAG)	024278
*	LINE A.-SYRUP (FOR USE WITH BAG SYRUP SYSTEM)	X58450
8	DOOR A.-CABINET	X58607-SER
8a	BASKET-DOOR-WIRE	059144
9	HOLDER A.-25DCC PYR SNS	X69102
9a	SCREW-ADJUSTMENT-5/16-18	051574
10	PUMP A.-SYRUP-HEATED-BRN	X53800-BRN
11	PUMP A.-SYRUP-HEATED-TAN	X53800-TAN
12	GASKET-DRIP LIP	036435

*NOT SHOWN

Syrup Cabinet View

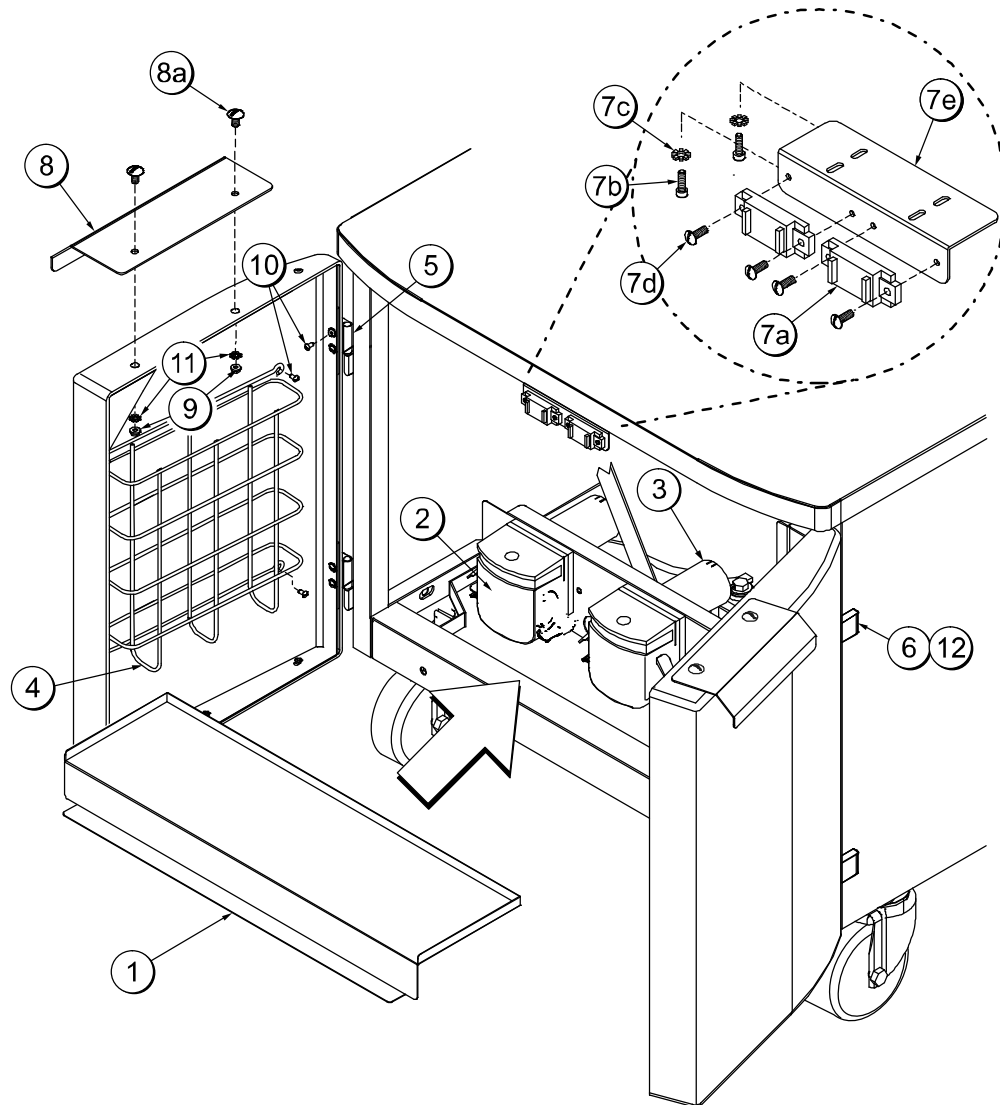


Figure 3

ITEM	DESCRIPTION	PART NO.
1	SHELF-SYRUP	056016
2	PUMP-PERISTALTIC	052916
3	MOTOR-GEAR 161 RPM/ SHORT SHAFT	058725-SER
4	BASKET-DOOR-WIRE	059144
5	BLOCK-HINGE	058613
6	BLOCK-HINGE	058614
*7a	MAGNET-CATCH ASSY.	016121
7b	SCREW-4-40X3/8 SOCKET CAP	058317

ITEM	DESCRIPTION	PART NO.
7c	WASHER-#4 EXT TOOTH LOCK	043075
7d	SCREW-6-32X3/8 SLTD BIND	002201
7e	BRACKET-MAGNET DOOR	065934
8	HANDLE-DOOR SHORT	065933
8a	SCREW-10-32X3/8 SLTD TRUS	024298
9	NUT-10-32 FLANGE LOCKNUT	020983
10	SCREW-10-32X3/8 SLTD	006749
11	WASHER-#8 EXT TOOTH LOCK	000964
12	SCREW-8-32X1/4 SLTD ROUND	016540

*PRIOR TO S/N K4091994, USE 058630 LATCH-DOOR-MAGNETIC.

Syrup Pump & Tubes

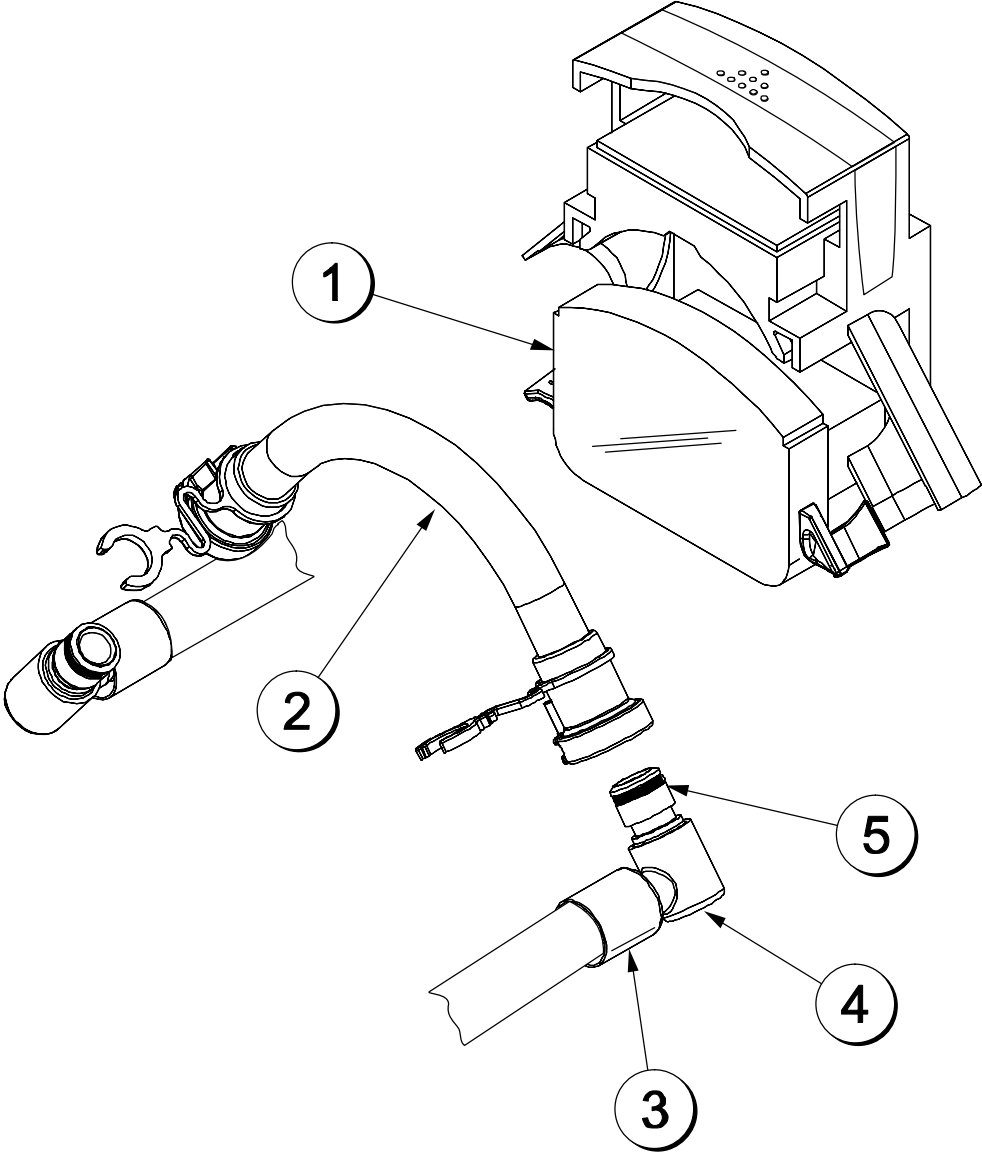


Figure 4

ITEM	DESCRIPTION	PART NO.
1	PUMP-PERISTALTIC	052916
2	KIT A.-PERISTALTIC PUMP TUBE (1 TUBE KIT)	X54978
	KIT A.-PERISTALTIC PUMP TUBE (4 TUBE KIT)	X54979

ITEM	DESCRIPTION	PART NO.
3	FERRULE- .625 ID	053036
4	FITTING-PERISTALTIC PUMP	054526
5	O-RING 1/2 OD x .070	024278
*6	LINE A.-SYRUP	X62426-8

*NOT SHOWN

X57028-XX Pump A. - Mix Simplified - Shake

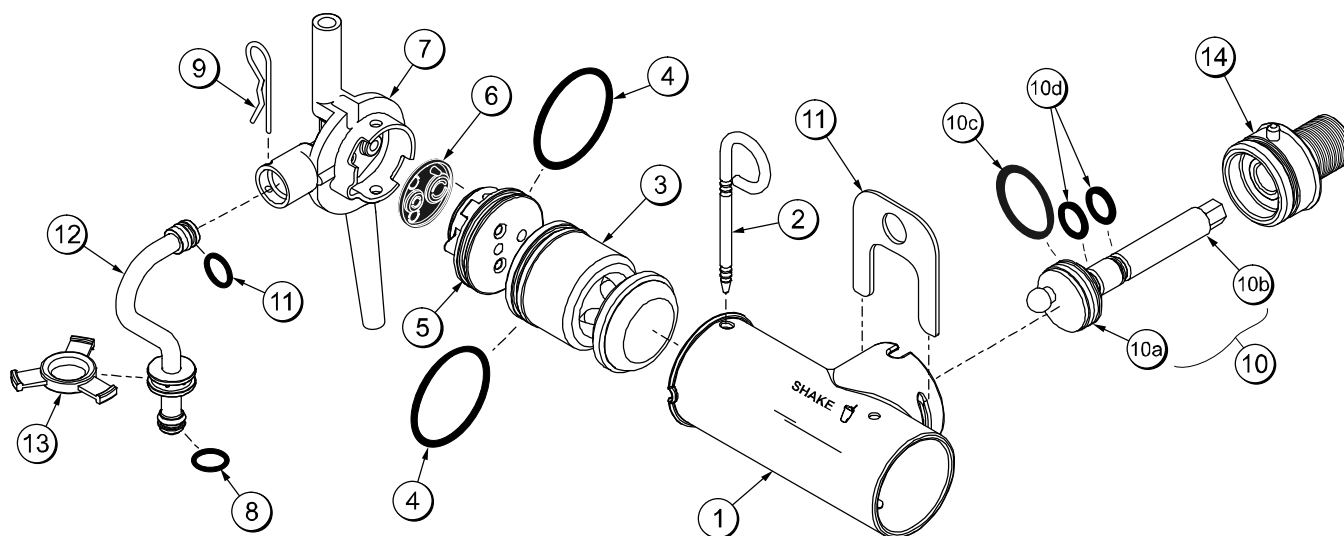


Figure 5

ITEM	DESCRIPTION	PART NO.
1 - 7	PUMP ASSEMBLY - MIX SIMPLIFIED SHAKE	X57028-10
1	CYLINDER-PUMP HOPPER SHAKE	057944
2	PIN-RETAINING	X55450
3	PISTON-PUMP-SIMPLIFIED	053526
4	O-RING-2-1/8 OD X .139W-#225	020051
*5	CAP-VALVE BODY SHAKE	056873-10
6	GASKET - SIMPLIFIED PUMP VALVE	053527
7	ADAPTOR - MIX INLET - SHAKE BLUE	054944
8	O-RING-11/16ODX.103W-RED (50 TO BAG)	016132
9	PIN-COTTER-HAIRPIN-1/8DIA	044731

ITEM	DESCRIPTION	PART NO.
10	SHAFT A.-DRIVE-MIX PUMP-HOPPER	X41947
10a	CRANK-DRIVE-HOPPER MIX PUMP	039235
10b	SHAFT-DRIVE-MIX PUMP-HOPPER	041948
10c	O-RING-1-3/4 OD X .139W (25 TO BAG)	008904
10d	O-RING 1/2 ID X .139W (25 TO BAG)	048632
11	CLIP-RETAINER-MIX PUMP	044641
12	TUBE A.-FEED TUBE-SHK	X55973
13	RING-CHECK-FEED-TUBE	056524
14	SLEEVE A.-MIX PUMP	X44761

*STANDARD CAP-VALVE BODY SHAFT IS -10.
AVAILABLE IN OTHER SIZES

X57029-XX Pump A. - Mix Simplified - Soft Serve

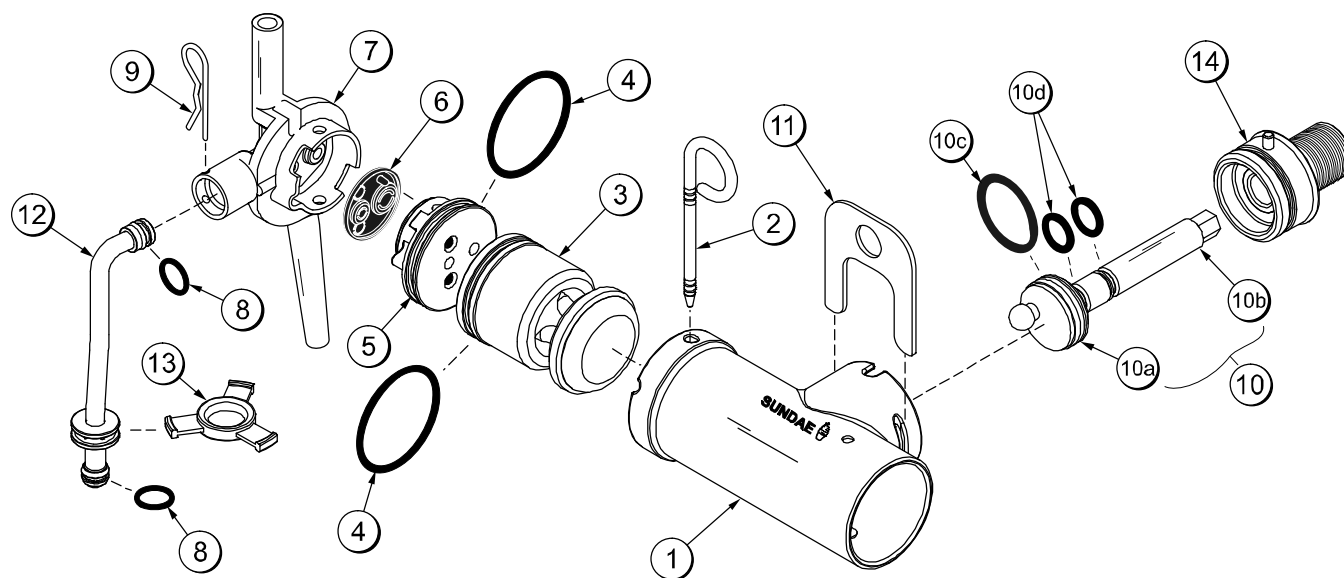


Figure 6

ITEM	DESCRIPTION	PART NO.
1 - 7	PUMP A.-MIX SIMPLIFIED S.S.	X57029-12
1	CYLINDER-PUMP HOPPER SOFTSERVE	057943
2	PIN-RETAINING	X55450
3	PISTON-PUMP-SIMPLIFIED	053526
4	O-RING-2-1/8 OD X .139W-#225	020051
5	CAP-VALVE BODY SS	056874-12
6	GASKET-SIMPLIFIED PUMP VALVE	053527
7	ADAPTOR-MIX INLET-SS-RED	054825
8	O-RING-11/16ODX.103W-RED	016132
9	PIN-COTTER-HAIRPIN-1/8DIA	044731
10	SHAFT A.-DRIVE-MIX PUMP- HOPPER	X41947

ITEM	DESCRIPTION	PART NO.
10a	CRANK-DRIVE-HOPPER MIX PUMP	039235
10b	SHAFT-DRIVE-MIX PUMP- HOPPER	041948
10c	O-RING-1-3/4 OD X .139W	008904
10d	O-RING 1/2 ID X .139W	048632
11	CLIP-RETAINER-MIX PUMP	044641
12	TUBE A.-FEED TUBE-SS	X55974
13	RING-CHECK-FEED-TUBE	056524
14	SLEEVE A.-MIX PUMP *HT	X44761

*NOTE: THE STANDARD PUMP IS X57029-12.
OVERRUN CAN BE CHANGED HIGHER OR LOWER
BY SUBSTITUTING THE VALVE BODY CAP. THE
HIGHER THE (-) THE HIGHER THE OVERRUN.

X59304 Syrup Line Assembly - Thin Viscosity Syrup

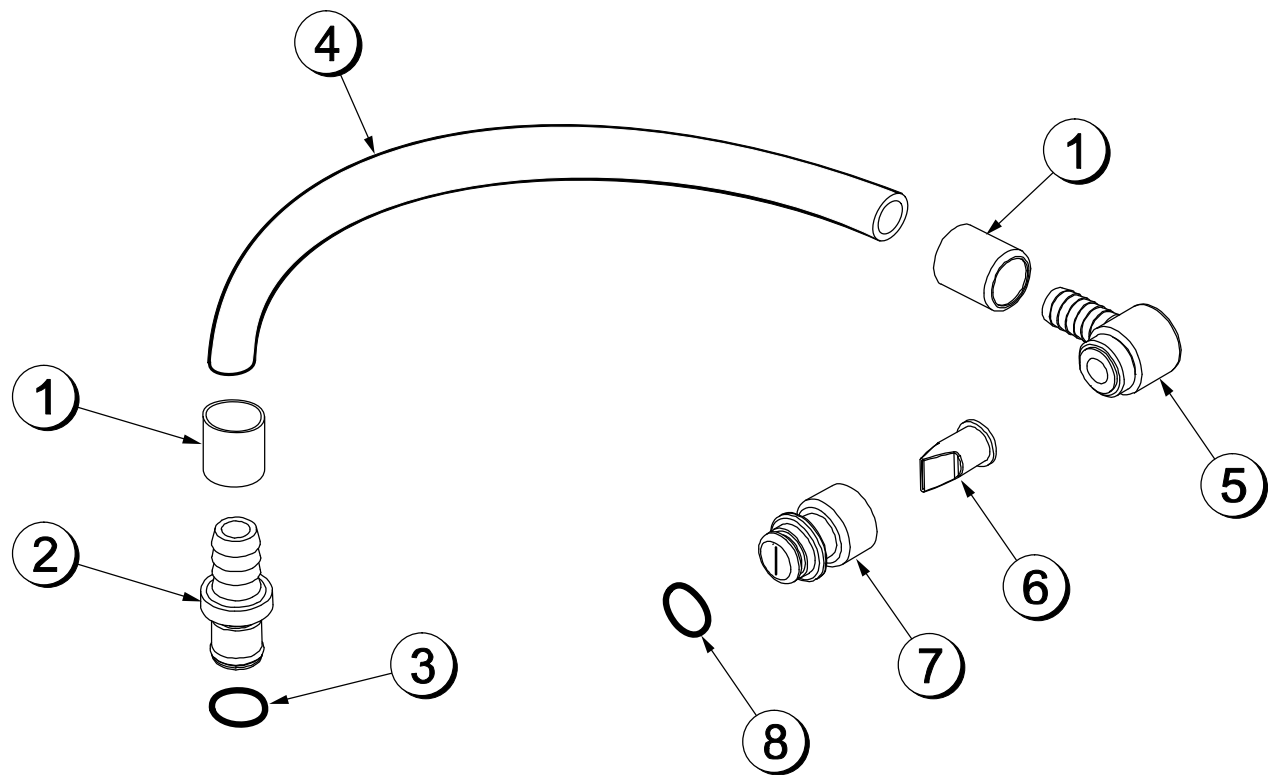


Figure 7

ITEM	DESCRIPTION	PART NO.
1	FERRULE-.650 ID NP BRASS	029834
2	INSERT-QD-CPC-3/8 BARB	056675
3	O-RING-11MM ID X 2MM W GREEN (25 TO BAG)	053890
4	TUBE-NYLOBRADE 3/8IDX5/8	500038-9
5	FITTING-SYRUP ELBOW	056651

ITEM	DESCRIPTION	PART NO.
6	VALVE-CHECK-DUCKBILL	500598
7	FITTING-SYRUP NOSE .075 SLOT	056649
8	O-RING-11MM ID X 2MM W GREEN	053890

X56652 Syrup Line Assembly - Thick Viscosity Shake Syrup (Optional)

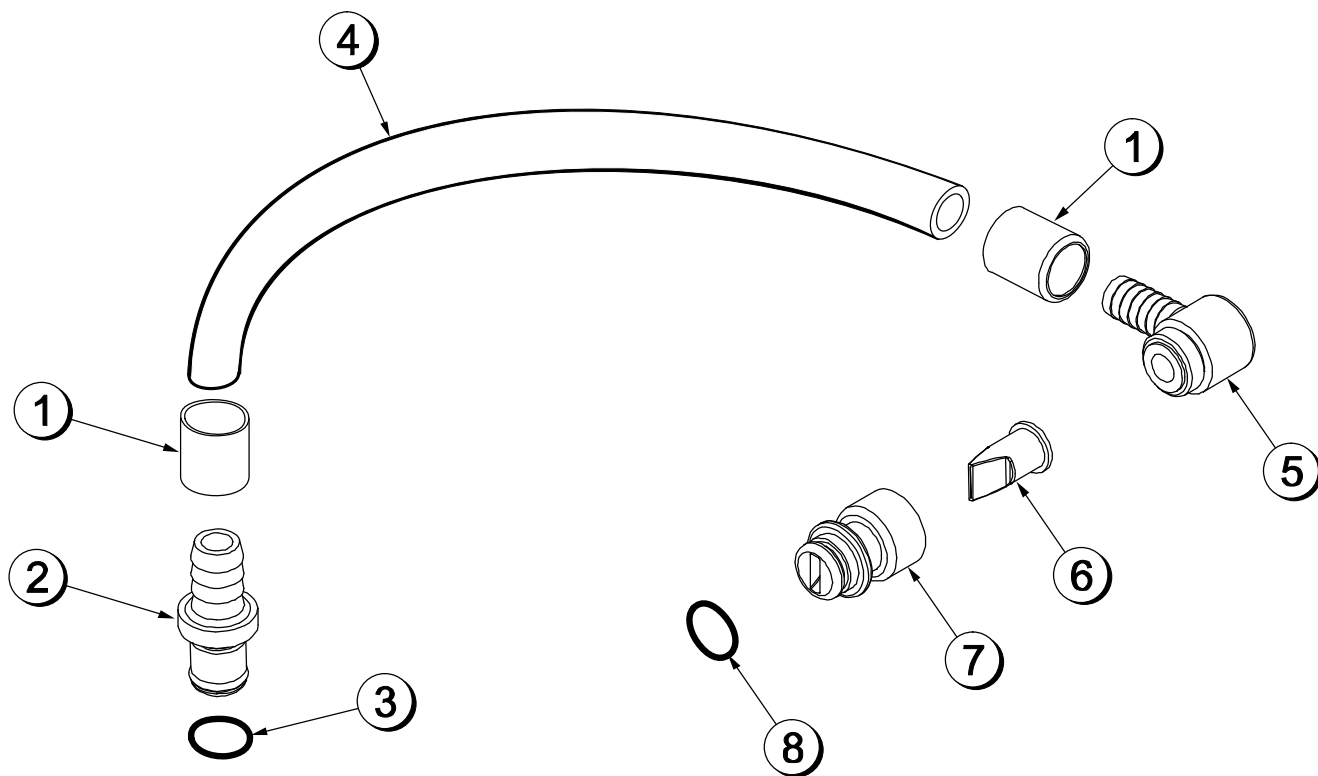


Figure 8

ITEM	DESCRIPTION	PART NO.
1	FERRULE-.625 ID	053036
2	FITTING BARB	056675
3	O-RING	500205
4	HOSE-BEVERAGE	053052-9
5	FITTING-SYRUP ELBOW	056651

ITEM	DESCRIPTION	PART NO.
6	VALVE-CHECK DUCKBILL	500598
7	FITTING-SYRUP NOSE (LARGE SLOT)	056650
8	O-RING-11 MM GREEN (SYRUP HOLE PLUG)	053890

X58450 Syrup Line Assembly - Syrup-In-Bag Option

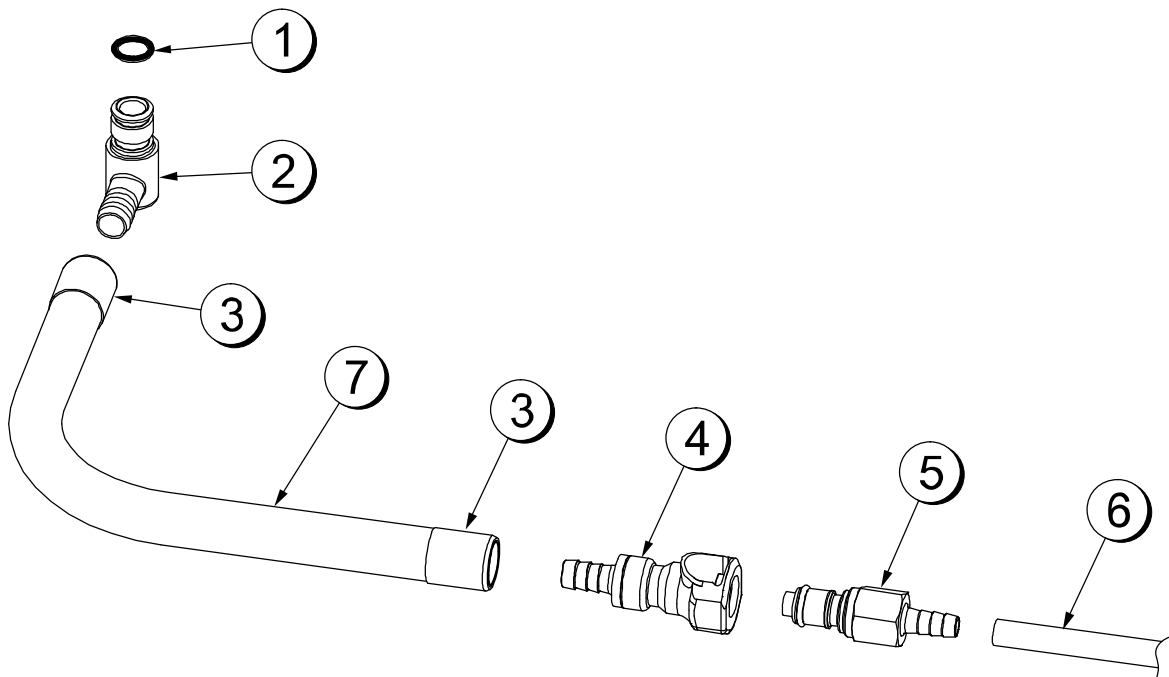


Figure 9

ITEM	DESCRIPTION	PART NO.
1	O-RING 1/2 OD X .070	024278
2	FITTING-MALE	054526
3	FERRULE- .625 ID NP BRASS	053036
4	COUPLING-QD FEMALE 3/8	058451

ITEM	DESCRIPTION	PART NO.
5	COUPLING-QD MALE 1/4 BARB	058452
6	TUBE-VINYL 3/16 ID X 1/16 W (R30314)	020940-8
7	HOSE-BEVERAGE 3/8 ID	053052-36

Mix Hopper - Top View

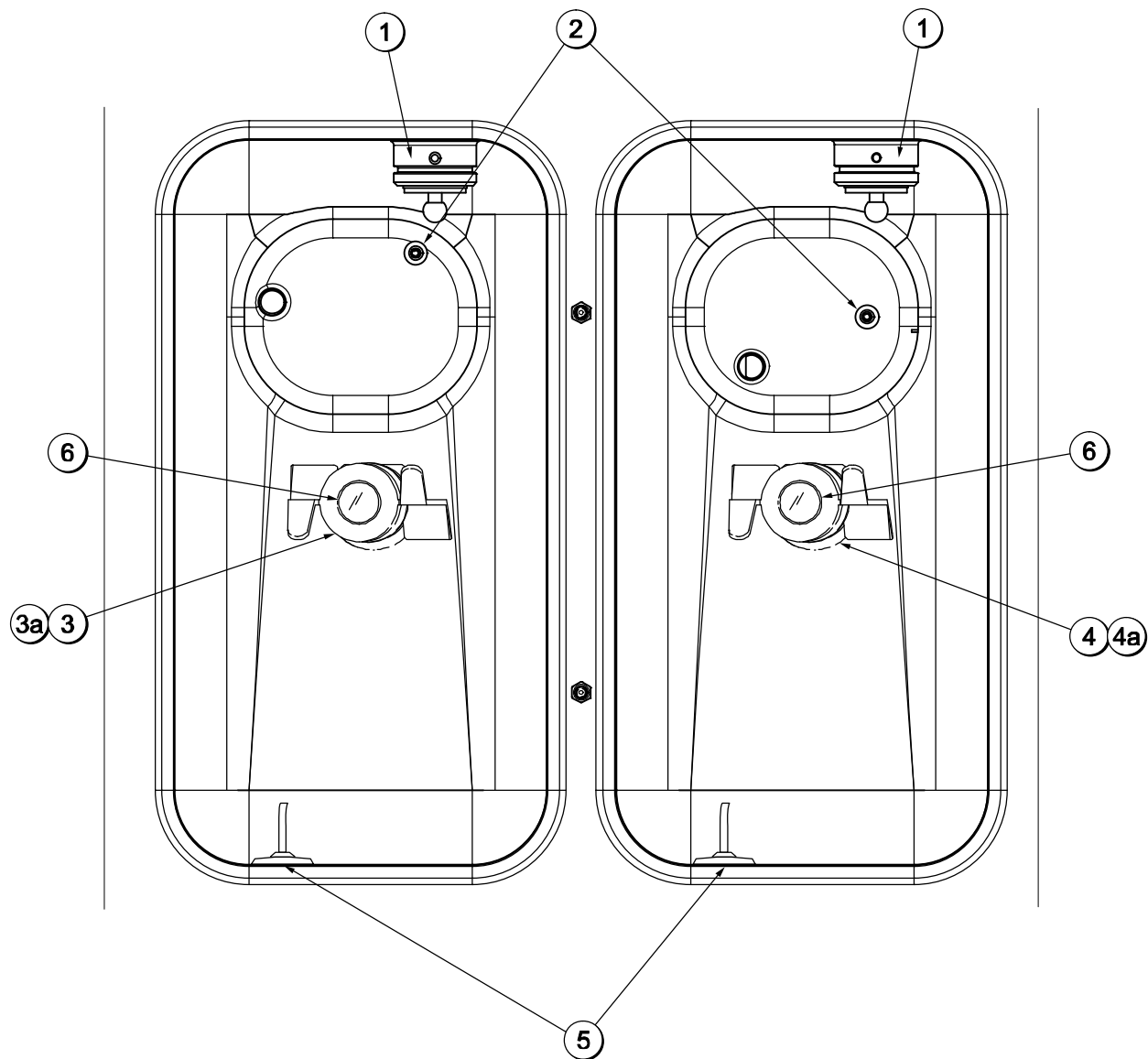


Figure 10

ITEM	DESCRIPTION	PART NO.
1	SLEEVE A.-MIX PUMP	X44761
2	PROBE A.MIX OUT	X41348
3	HOUSING A.-AGITATOR (SHAKE)	X51664
3a 4a	MAGNET A.-AGITATOR-INNER	X41733

ITEM	DESCRIPTION	PART NO.
4	HOUSING A.-AGITATOR (SOFT SERVE)	X51661
5	PROBE A.-MIX LOW	X42077
6	CAP-MAGNET	080826

Accessories

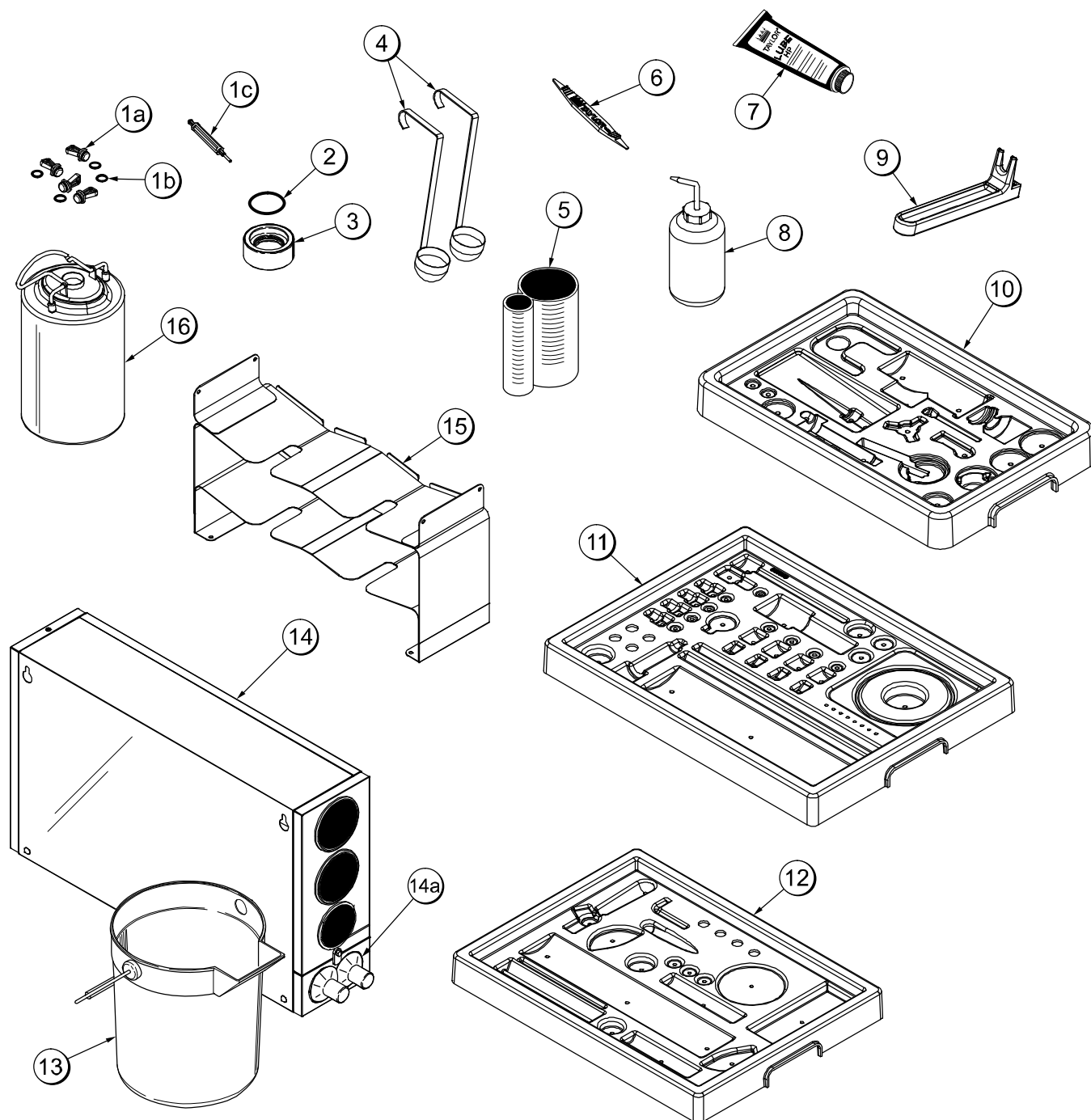


Figure 11

Accessories (See Figure 11)

ITEM	DESCRIPTION	PART NO.
1	KIT A.-SYRUP PLUG KIT TTS	X58474
1a	PLUG-SYRUP PORT TTS	053867
1b	O-RING-11MM ID X 2MM W GREEN (25 TO BAG)	053890
1c	TOOL-SEAL INSTALL-REMOVE	035460
2	O-RING-1-11/16 OD X.139W (25 TO BAG) (DRAW VALVE CAP)	041923
3	CAP A.-VALVE-DRAW	X54704
4	LADLE-1 OZ-120D BEND	033637-1
5	CUP-DIVIDED SYRUP	017203
6	TOOL-O-RING REMOVAL	048260-WHT
7	LUBRICANT-TAYLOR HI PERF	048232
8	BOTTLE-WASH-PLASTIC	044818
9	TOOL-MIX PUMP SHAFT REMOVAL	057167
10	TRAY-PARTS-PUMP-SIMPL	056525
11	TRAY-PARTS-SHAKE SIDE	059088

ITEM	DESCRIPTION	PART NO.
12	TRAY-PARTS-SS SIDE	059087
13	PAIL-10 QT.	013163
14	DISPENSER A.-CUP-2 CONE	X56121
14a	BAFFLE-RUBBER CONE	052193
15	TRAY A.-SYRUP (OPTIONAL SYRUP IN BAG SYSTEM)	X59143
16	TANK-SYRUP 4QT. PSD (OPTIONAL 4 TANK SYRUP SYSTEM)	056673
*	KIT A.-PERISTALTIC PUMP TUBE	X54978
*	KIT A.-TOPPING PUMP SPARES	X53795
*	KIT A.-TUNE UP BLADE	X49463-94
*	DEFLECTOR-BLOWER EXHAUST	047912
*	BOX-TOOL 15 INCH PLASTIC	058669

*NOT SHOWN

X44127 Brush Kit Assembly

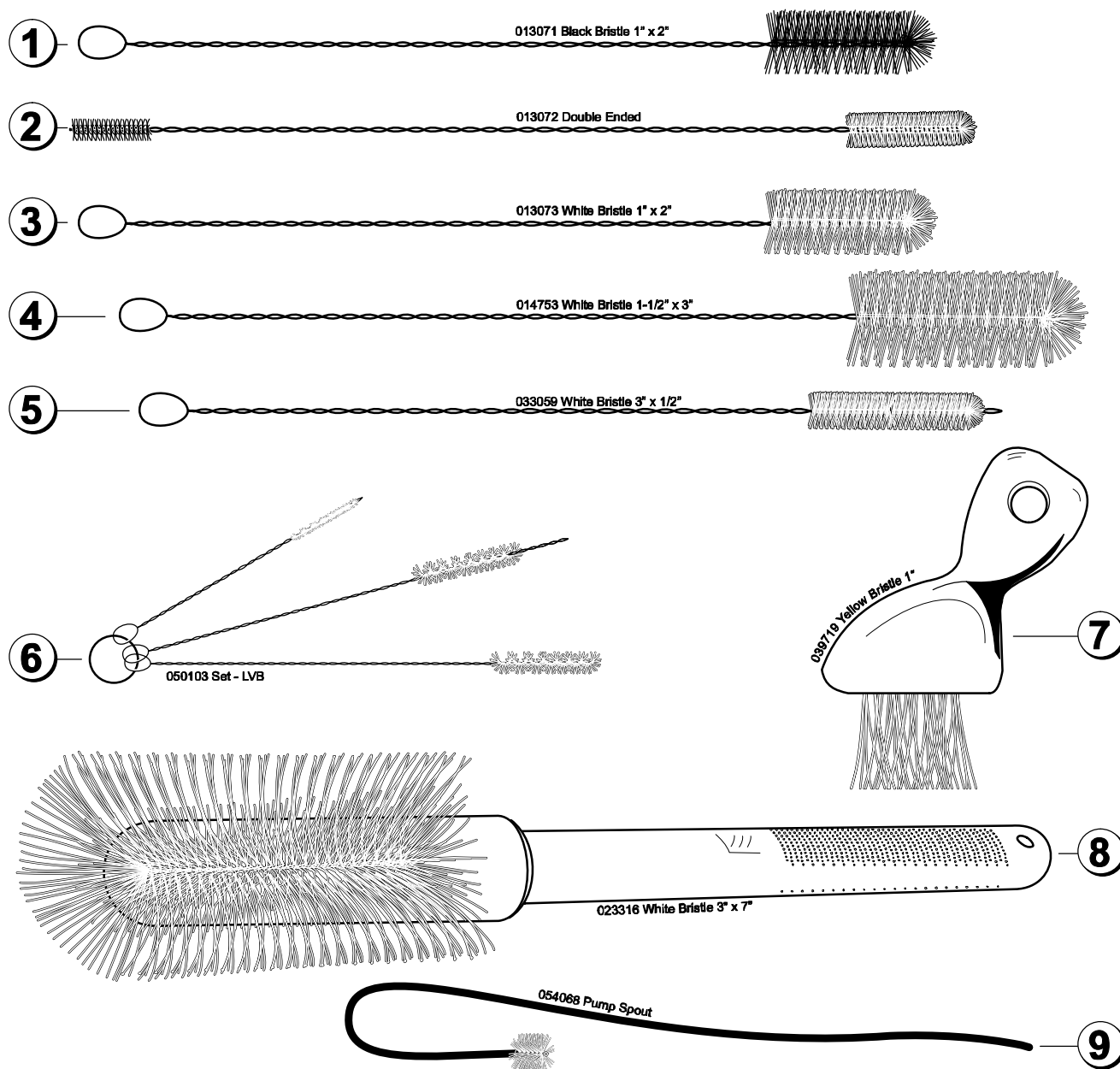
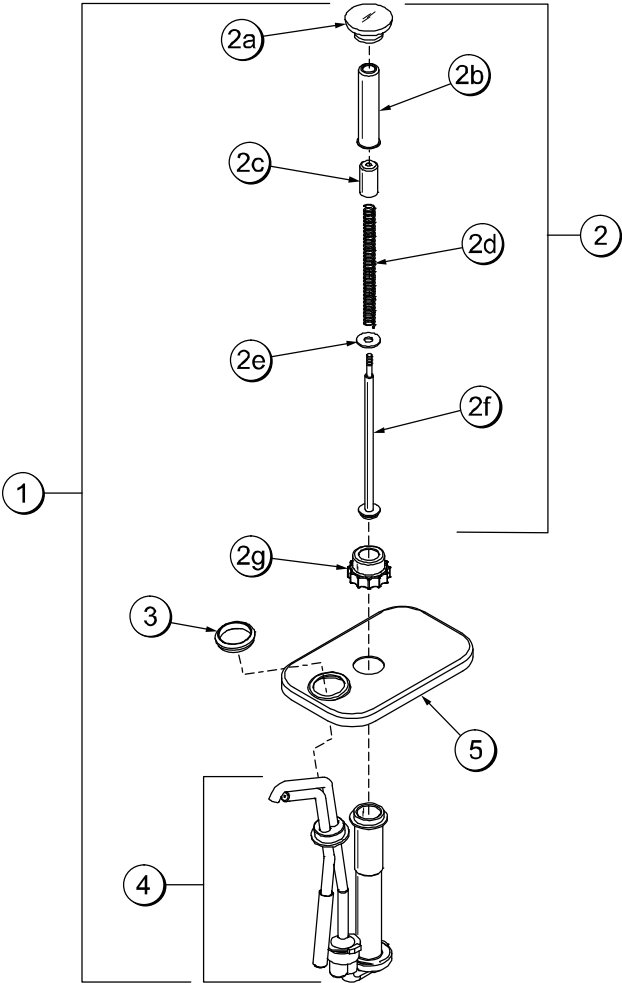


Figure 12

ITEM	DESCRIPTION	PART NO.
1	BLACK BRISTLE BRUSH	013071
2	DOUBLE END BRUSH	013072
3	WHITE BRISTLE BRUSH (1" x 2")	013073
4	WHITE BRISTLE BRUSH (1-1/2" x 3")	014753
5	WHITE BRISTLE BRUSH (1/2" x 3")	033059

ITEM	DESCRIPTION	PART NO.
6	BRUSH Set (3)	050103
7	YELLOW BRISTLE BRUSH	039719
8	WHITE BRISTLE BRUSH (3" x 7")	023316
9	BRUSH-PUMP SPOUT	054068

X53800-BRN/TAN Syrup Pump



ITEM	DESCRIPTION	PART NO.
1	PUMP A.-SYRUP-HEATED	X53800-BRN
	PUMP A.-SYRUP-HEATED	X53800-TAN
2	PLUNGER A.-BROWN	X36576-BRN
	PLUNGER A.-TAN	X36576-TAN
2a	KNOB-PLUNGER BROWN-SYRUP PUMP	032762-BRN
	KNOB-PLUNGER TAN-SYRUP PUMP	032762-TAN
2b	TUBE-PLUNGER	032757
2c	INSERT-PLUNGER	032758
2d	SPRING-PLUNGER-SYRUP PUMP	032761
2e	WASHER-NYLON	032760
2f	PLUNGER	036578
2g	SEAL A.	X33057
2h	NUT-PLUNGER	036577
3	NUT-LOCK-SYRUP PUMP	039680
4	PUMP A.-SYRUP HEATED SHALLOW	X53798-SER
5	LID	036579

NOTE: SHOWN FOR REFERENCE ONLY. NOT SUPPLIED WITH NEW UNITS.

Figure 13

Beater Door Assembly - Shake Side

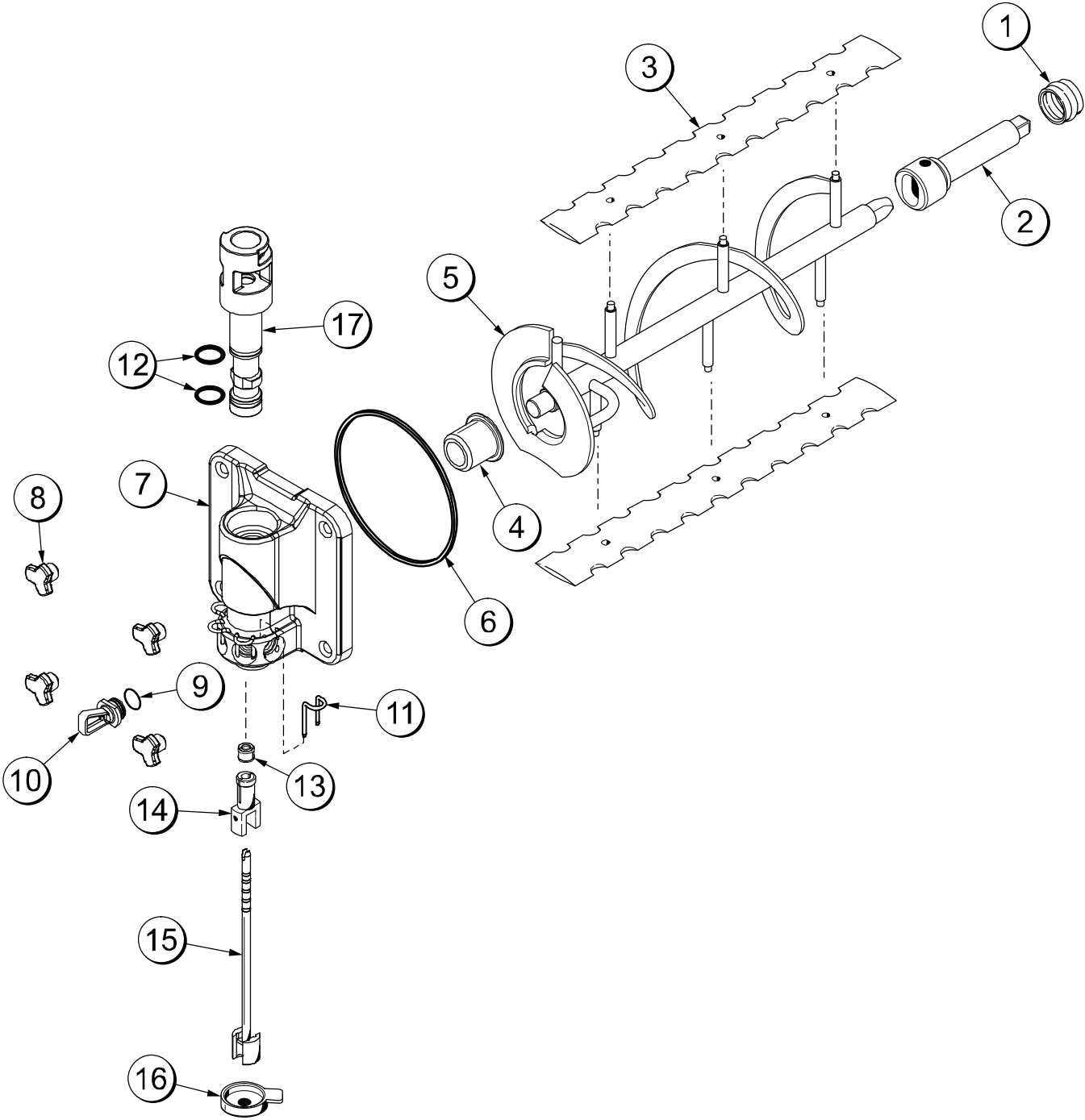


Figure 14

Beater Door Assembly - Shake Side (See Figure 14)

ITEM	DESCRIPTION	PART NO.
1	SEAL-DRIVE SHAFT	032560
2	SHAFT-BEATER 7 QT.	050985
3	BLADE-SCRAPER 16"	041103
4	BEARING-DOOR FRONT	055605
5	BEATER A.-7 QT. FLUTED BLADE	X50958
6	O-RING 6" (FREEZER DOOR)	033493
7	DOOR A.-SHAKE SIDE	X55825SER2
8	NUT-STUD-SHORT	055989
9	O-RING SYRUP PORT 11 MM	053890

ITEM	DESCRIPTION	PART NO.
10	PLUG-SYRUP PORT	053867
11	RETAINER-SYRUP VALVE	054554
12	O-RING 1-1/16 OD X .139 W (DRAW VALVE)	020571
13	SEAL-SPINNER SHAFT	036053
14	SPINNER	034054
15	BLADE A.-SPINNER	X59331
16	CAP-RESTRICTOR	033107
17	VALVE A.-DRAW	059000

Beater Door Assembly - Soft Serve Side

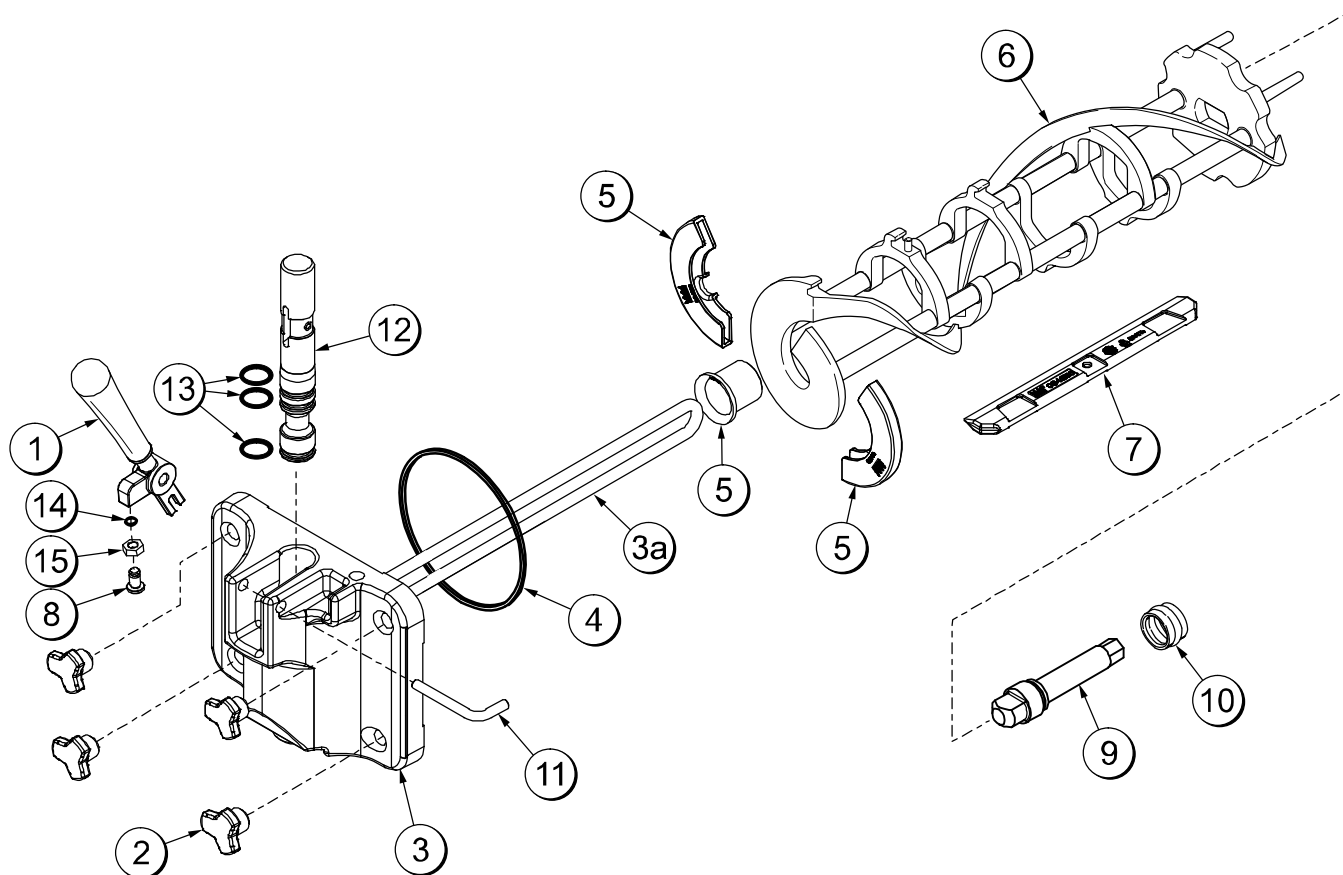


Figure 15

ITEM	DESCRIPTION	PART NO.
1	HANDLE A.-DRAW	X56421-1
2	NUT-STUD-BLACK-1.00	055989
3	DOOR A.-W/BAFFLE	X57332-SER
3a	BAFFLE A.-LONG 4 IN	X50882
4	GASKET-DOOR HT 4"-DOUBLE	048926
5	KIT A.-BEATER-FRONT SHOES-BEARING	X50350
6	BEATER A.-3.4QT-1 PIN	X46231
7	BLADE-SCRAPER-PLASTIC	084350

ITEM	DESCRIPTION	PART NO.
8	SCREW-ADJUSTMENT-5/16-24	056332
9	SHAFT-BEATER	032564
10	SEAL-DRIVE SHAFT	032560
11	PIN-HANDLE-SS	055819
12	VALVE A.-DRAW	X55820
13	O-RING-7/8 OD X .103W (100 TO BAG)	014402
14	O-RING-1/4 OD X .070W 50 DURO (25 TO BAG)	015872
15	NUT-5/16-24 FINISHED HEX	029639-BLK

059088 Tray-Parts-Shake Side

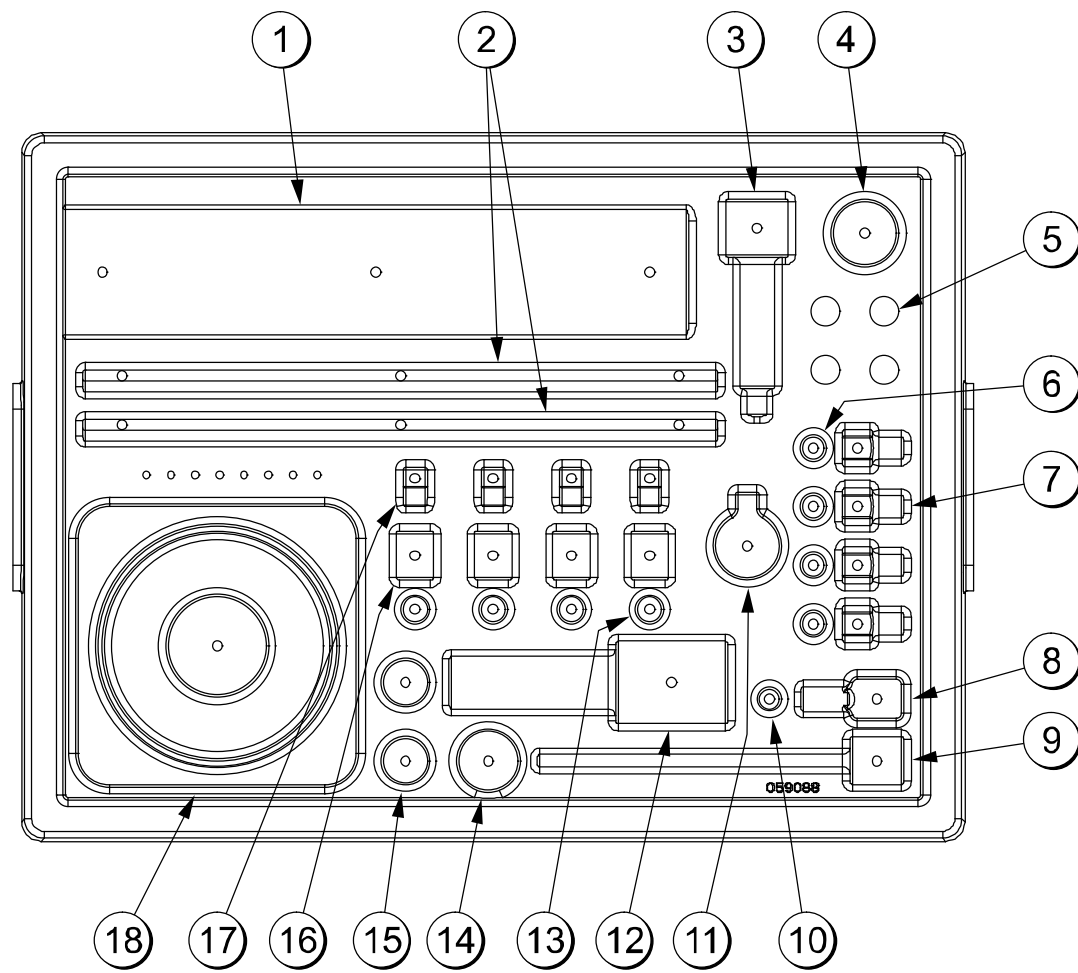


Figure 16

ITEM	DESCRIPTION	PART NO.
1	BEATER A.-7 QT.	X50958
2	BLADE-SCRAPER-16"	041103
3	SHAFT-BEATER 7 QT.	050985
4	SEAL-DRIVE SHAFT	032560
5	NUT-STUD	055989
6	O-RING -SYRUP PORT 11MM ID GREEN	053890
7	PLUG-SYRUP PORT	053867
8	SPINNER	034054
9	BLADE A.-SPINNER	X59331
10	SEAL-SPINNER SHAFT	036053

ITEM	DESCRIPTION	PART NO.
11	CAP-RESTRICTOR	033107
12	VALVE A.-DRAW	X57169
13	VALVE-CHECK DUCKBILL	500598
14	BEARING-DOOR FRONT	055605
15	O-RING - 1-1/16 OD (DRAW VALVE)	020571
16	FITTING-SYRUP NOSE	SEE PAGES 16 & 17
17	RETAINER-SYRUP VALVE	054554
18	O-RING 6" - DOOR	033493
18	DOOR A.-SHAKE	X55825SER2

059087 Tray-Parts-Soft Serve Side

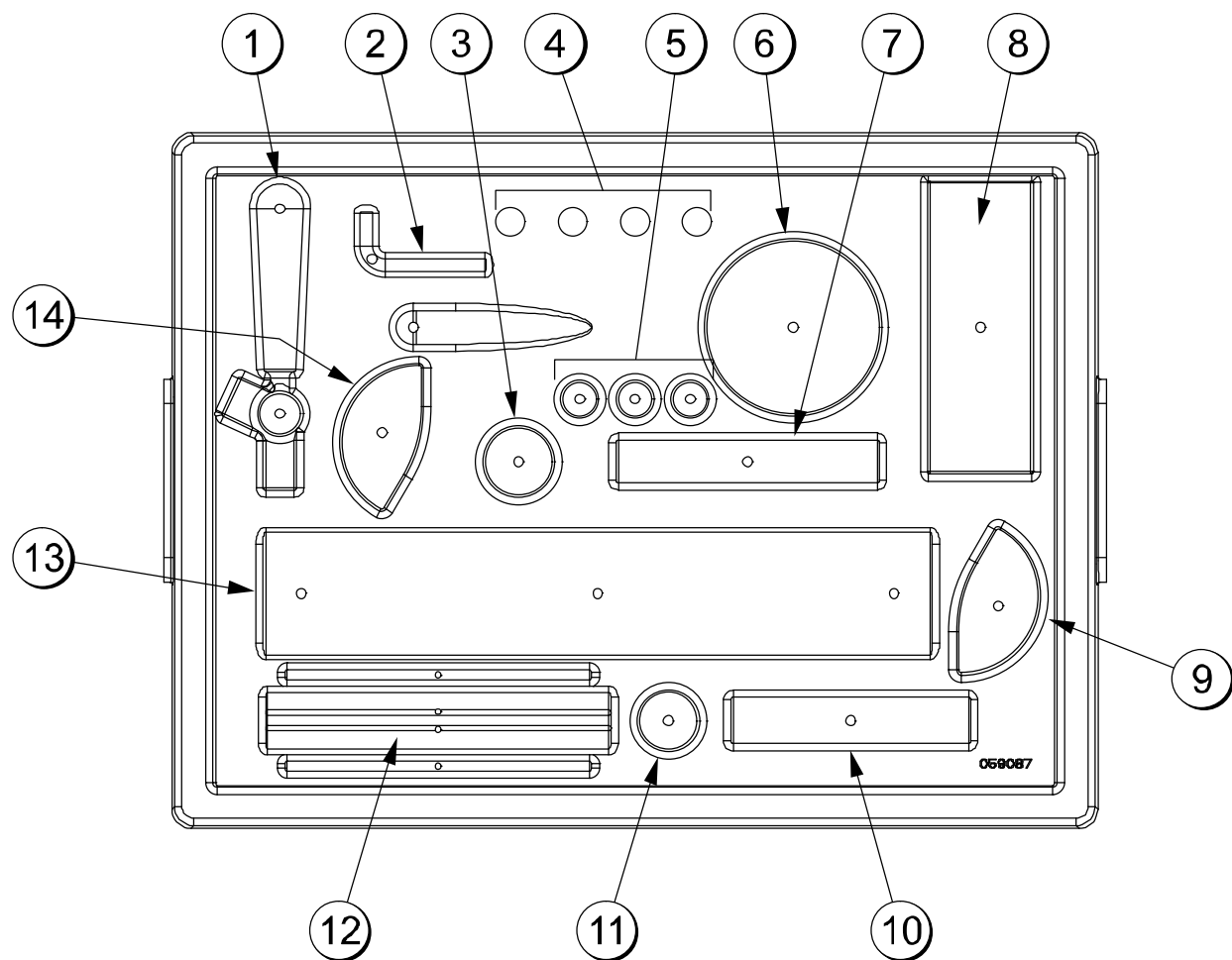


Figure 17

ITEM	DESCRIPTION	PART NO.
1	HANDLE A.-DRAW	X56421-1
2	PIN-PIVOT	055819
3	BEARING-FRONT	050348
4	NUT-STUD	055989
5	O-RING (DRAW VALVE)	014402
6	GASKET (FREEZER DOOR)	048926
7	VALVE A.-DRAW	X55820

ITEM	DESCRIPTION	PART NO.
8	DOOR A.-W/BAFFLE	X57332-SER
9	SHOE-FRONT HELIX- FRONT	084108
10	DRIVE SHAFT	032564
11	SEAL-DRVE SHAFT	032560
12	BLADE-SCRAPER-PLASTIC	084350
13	BEATER A.	X46231
14	SHOE-FRONT HELIX- REAR	084109

056525 Tray-Parts-Pump-Simplified

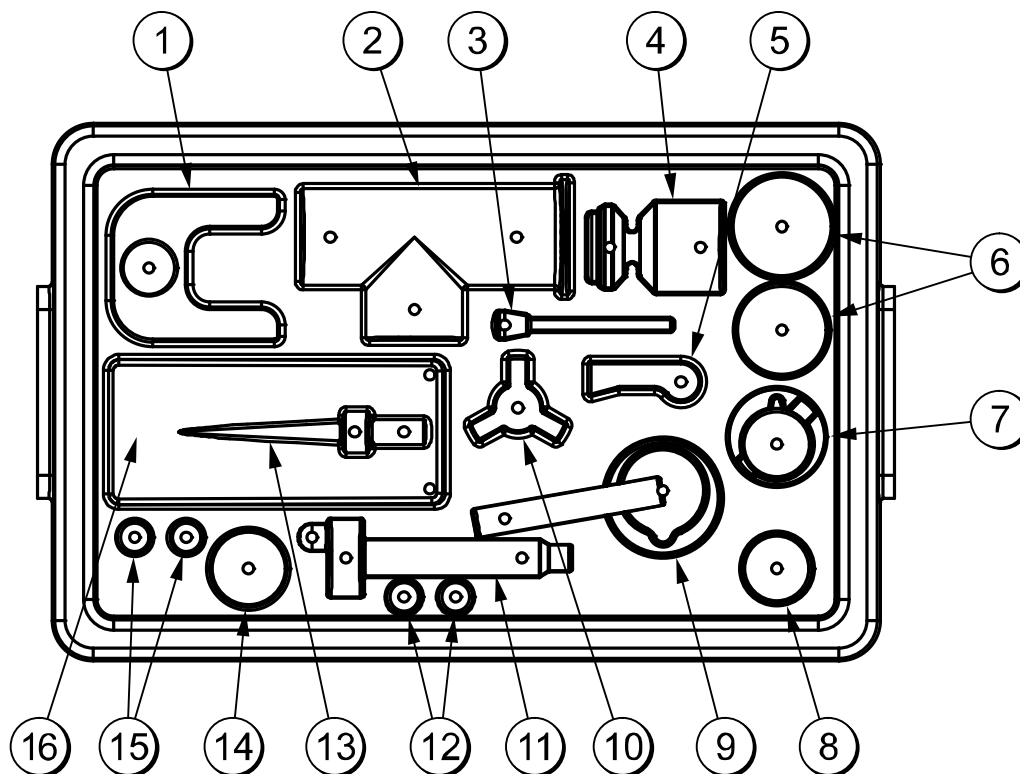


Figure 18

Shake Side

ITEM	DESCRIPTION	PART NO.
1	CLIP-MIX PUMP RETAINER	044641
2	CYLINDER-PUMP-HOPPER SHAKE	057944
3	PIN A.-RETAINING	X55450
4	PISTON	053526
5	PIN-COTTER	044731
6	O-RING 2-1/8" OD - RED	020051
7	CAP-VALVE	056873-XX
8	GASKET-SIMPLIFIED PUMP	053527
9	ADAPTOR-MIX INLET SHAKE-BLUE	054944
10	RING-CHECK .120 OD	056524
11	SHAFT A.-DRIVE MIX PUMP	X41947
12	O-RING-DRIVE SHAFT	048632
13	TUBE A.-FEED-HOPPER SHAKE	X55973
14	O-RING 1-3/4	008904
15	O-RING-11/16 OD - RED	016132

Soft Serve Side

ITEM	DESCRIPTION	PART NO.
1	CLIP-MIX PUMP RETAINER	044641
2	CYLINDER-PUMP-HOPPER-SOFT SERVE	057943
3	PIN A.-RETAINING	X55450
4	PISTON	053526
5	PIN-COTTER	044731
6	O-RING 2-1/8" OD - RED	020051
7	CAP-VALVE	056874-XX
8	GASKET-SIMPLIFIED PUMP	053527
9	ADAPTOR-MIX INLET SOFT SERVE-RED	054825
10	RING-CHECK .120 OD	056524
11	SHAFT A.-DRIVE MIX PUMP	X41947
12	O-RING-DRIVE SHAFT	048632
13	TUBE A.-FEED-HOPPER SOFT SERVE	X55974
14	O-RING 1-3/4	008904
15	O-RING-11/16 OD - RED	016132
16	AGITATOR A.-MIX HOPPER	X44797

Section 5

Important: To the Operator

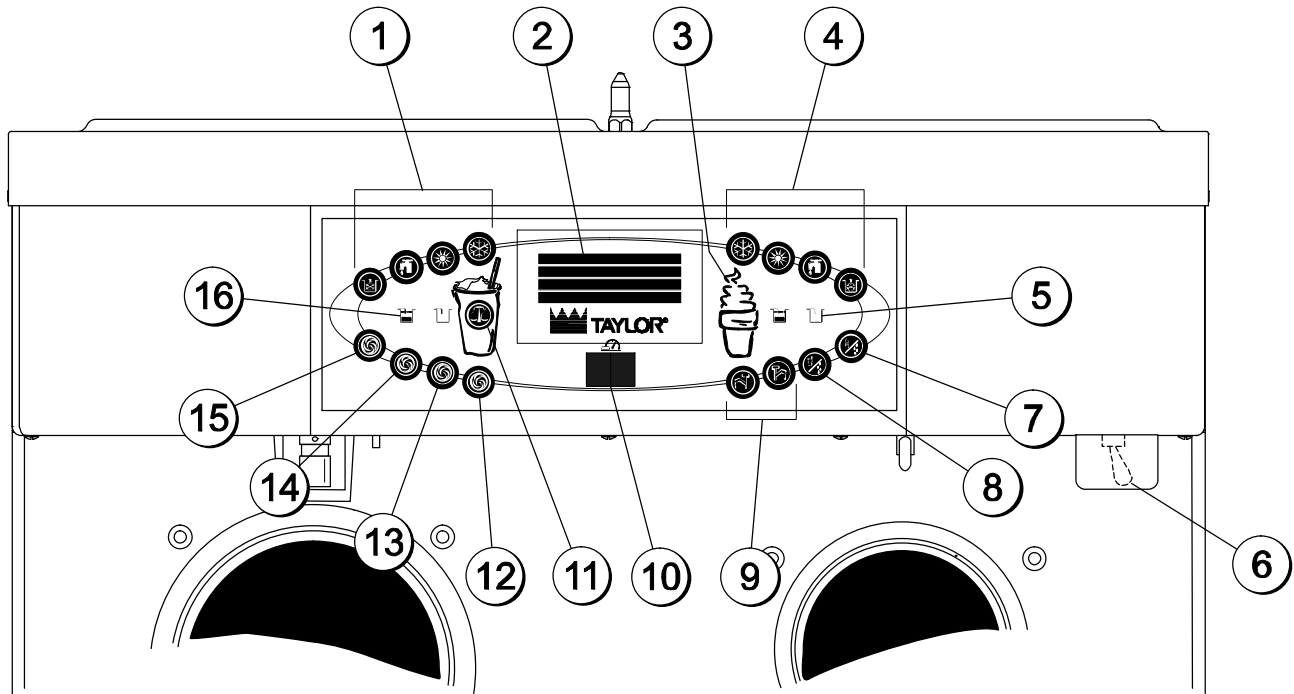


Figure 19

ITEM	DESCRIPTION
1	Keypads-Shake
2	Display-Vacuum Fluorescent Menu (VFD)
3	Keypad-Menu (Entry/Exit)
4	Keypads-Soft Serve
5	Indicator Light-Mix Out
6	Switch-Power
7	Standby-Soft Serve
8	Standby-Shake

ITEM	DESCRIPTION
9	Keypads-Topping Heaters
10	Display-LED (Brush Clean Countdown)
11	Keypad-Calibrate Menu
12	Keypad-Optional Flavor
13	Keypad-Vanilla Flavor
14	Keypad-Strawberry Flavor
15	Keypad-Chocolate Flavor
16	Indicator Light-Mix Low

Note: See the Manager's Menu on page 38 for additional key functions when the Calibration or Manager's Menu is displayed.

Symbol Definitions

To better communicate in the International arena, symbols have replaced words on many of our operator switches, function, and fault indicators. Your Taylor equipment is designed with these International symbols.

The following chart identifies the symbol definitions.



= AUTO



= HEAT CYCLE



= WASH



= MIX PUMP



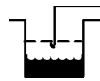
= STANDBY (SHAKE)



= STANDBY (SOFT SERVE)



= FLAVOR SELECTION



= MIX LOW



= MIX OUT



= TOPPING HEATER-LEFT



= TOPPING HEATER-RIGHT



= CALIBRATE



= MENU DISPLAY


Power Switch



When placed in the ON position, the power switch allows control panel operation.

Vacuum Fluorescent Display


The vacuum fluorescent display (VFD) is located on the front control panel. During normal operation the display is blank. The display is used to show menu options and notifies the operator if a fault is detected. The display will indicate the temperature of the mix in each hopper.

Indicator Lights

MIX LOW - When the MIX LOW symbol  is illuminated, the mix hopper has a low supply of mix and should be refilled as soon as possible.

MIX OUT - When the MIX OUT  symbol is illuminated, the mix hopper has been almost completely exhausted and has an insufficient supply of mix to operate the freezer. At this time, the AUTO mode is locked out and the freezer will be placed in the STANDBY mode. To initiate the refrigeration system, add mix to the mix hopper and touch the AUTO symbol . The freezer will automatically begin operation.


Heat Mode Symbol

When the HEAT MODE symbol  is illuminated, the freezer is in the process of a heat cycle. The heat mode symbol may be selected to start a heat cycle following a freezer soft lock condition.

For some models, the heat symbol can be selected to manually start a heat cycle at any time.

Brush Clean Countdown - Displays the number of days before the next brush cleaning is required. When the display has counted down to "1", the machine must be disassembled and brush cleaned within 24 hours.

Reset Mechanism

The reset button is located in the service panel at the rear of the machine. (See Figure 20.) It protects the beater motor from an overload condition. Should an overload occur, the reset mechanism will trip. To properly reset the freezer place the power switch in the OFF position. Press the reset button firmly. Turn the power switch to the ON position. Touch the WASH symbol  and observe the freezer's performance. (See Figure 20.)

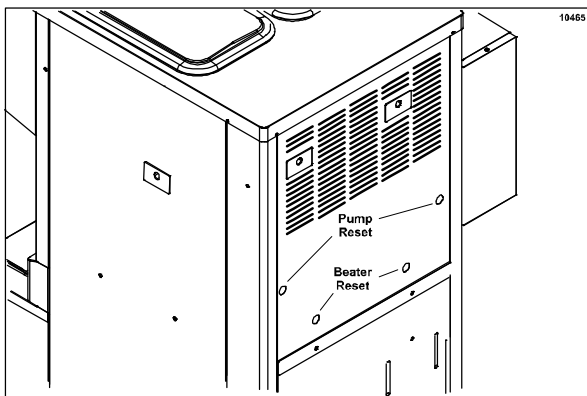




Figure 20



WARNING: Do not use metal objects to press the reset button. Failure to comply may result in severe personal injury or death.

If the beater motor is turning properly, touch the WASH symbol  to cancel the cycle. Touch the AUTO symbol  to resume normal operation. If the freezer shuts down again, contact your authorized service technician.

Air/Mix Pump Reset Mechanism

The reset button for the pump is located in the service panel at the rear of the machine. (See Figure 20.) The reset protects the pump from an overload condition. Should an overload occur, the reset mechanism will trip. To reset the pump, press the reset button firmly.



WARNING: Do not use metal objects to press the reset button. Failure to comply may result in severe personal injury or death.

Adjustable Draw Handle

This unit features an adjustable draw handle to provide the best portion control, giving a better, consistent quality to your product and controlling costs. The draw handle should be adjusted to provide a flow rate of 5 to 7-1/2 oz. (142 to 213 g.) of product by weight per 10 seconds. To INCREASE the flow rate, tighten the screw. To DECREASE the flow rate, loosen the screw. After setting the flow rate, tighten the jam nut to secure the adjustment screw. (See Figure 21.)

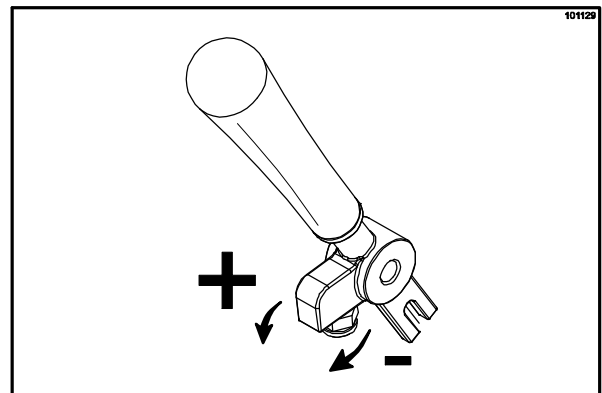


Figure 21

Shake Fill Level Adjustment

The portion control sensor located under the cup holder can be adjusted to fill the cup to the desired level. If the fill level is too low, or the cup is overfilling, it may be necessary to adjust the sensor position. (See Figure 22.)

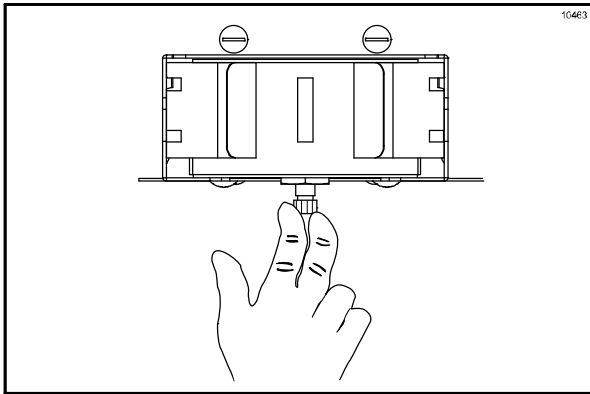


Figure 22

Step 1

Using a crescent wrench, loosen the locking nut on the screw adjuster below the sensor.


Step 2

Turn the adjustment screw clockwise to raise the fill level, or counterclockwise to lower the fill level.

Step 3

Once the desired fill level is achieved, tighten the locking nut.

VFD Screens

The vacuum fluorescent display (VFD) located in the center of the control panel is normally blank during the daily operation of the machine. The display is activated when the CALIBRATE symbol  or the Manager's Menu is selected. The display screen will also alert the operator of specific faults detected by the control.

Power Up

When the machine is powered, the control system will initialize to perform a system check. There will be four types of data that the system will check when the control is initializing: Lamp Test, Lockout Data, Configuration Data, and System Data. (See Figure 23.)

C602 / C606 UVC4
V01.01.000
lamp
test

Figure 23

Lamp Test: The control and software version is displayed and all of the LED's on the display panel are illuminated. (See Figure 24.)

Initializing

Figure 24

Following the lamp test, three separate screens will appear during initialization.

Initializing Lockout Data

Initializing Config Data

Initializing System Data

If the system detects corrupt data during the INITIALIZING, the following display will alert the operator that the control settings have changed (See Figure 25.)

SERVICE REQ'D
NVRAM FAULT
RESET TO DEFAULTS
< Press to clear

Figure 25

Once the system has initialized, the number of days remaining before the next required brush cleaning is indicated on the control panel and the SAFETY TIMEOUT screen is displayed with the alarm turned on. (See Figure 26.)

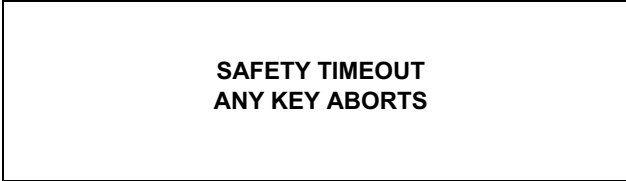


Figure 26

The SAFETY TIMEOUT screen will be displayed with the alarm on, for 60 seconds or until any control symbol is selected.

After the safety timeout has been completed and the power switch is OFF, the status screen will display. When the brush clean requirements have been met, the following screen will display. (See Figure 27.)

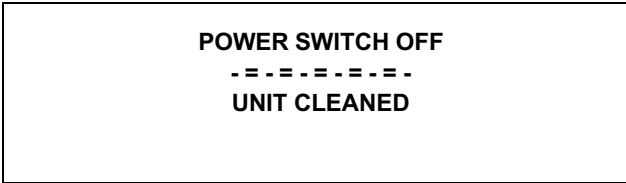


Figure 27

If a brush cleaning was not completed, the status screen will display the current hopper temperature, barrel temperature, and the five minute brush clean timer. (See Figure 28.)

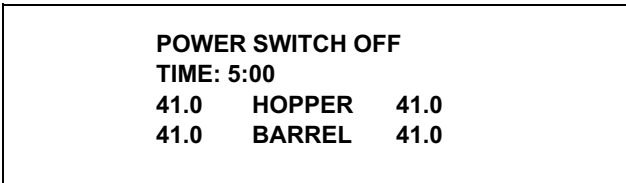


Figure 28

Power Switch ON

When the power switch is placed in the ON position, the control panel touch keys become operative. The VFD will be either blank or indicate that the unit has been cleaned. (See Figure 29.)

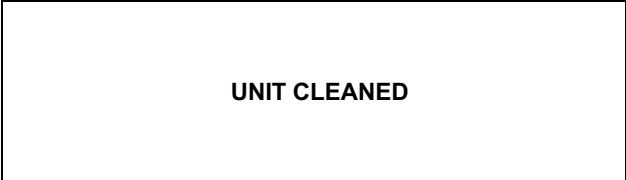


Figure 29

Some models will continuously display the temperature of each mix hopper when the power switch is in the ON position. (See Figure 30.)

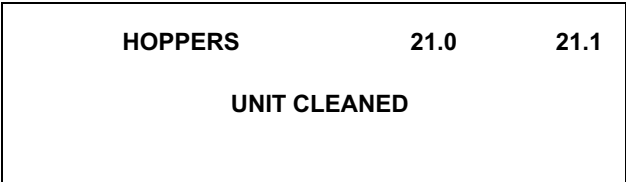


Figure 30

Heat Cycle

The HEAT symbols * on the control panel are illuminated throughout the heat treatment cycle. Two warning messages will be displayed on the screen. “DO NOT DRAW” will be displayed when the mix temperature is below 130°F (54.4°C). (See Figure 31.)

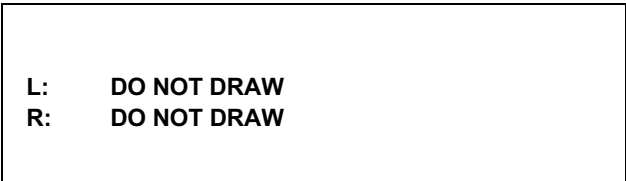


Figure 31

When the temperature of the mix is above 130°F (54.4°C) the screen will display a message indicating that HOT PRODUCT is in the machine. (See Figure 32.)

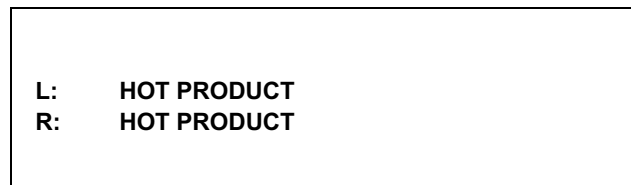


Figure 32






DO NOT attempt to draw product or disassemble the unit during the HEAT cycle. The product is hot and under extreme pressure.

In the HEAT cycle, the mix temperature in the hoppers and freezing cylinders must be raised to 151°F (66.1°C) within 90 minutes.

When the heating phase is complete, the freezer goes into the holding phase of the cycle. The holding phase will keep the temperature above 151°F (66.1°C) for a minimum of 30 minutes.

The final phase of the heat treatment cycle is the cooling phase. The freezer must cool the mix below 41°F (5°C) within two hours.

When the entire heat cycle has been completed, the HEAT symbols  will no longer be illuminated. The machine will enter the STANDBY mode (STANDBY symbols  and  illuminate). The machine can be placed in AUTO or left in STANDBY.

Heat Cycle Failure Messages

To comply with health codes, heat treatment system freezers **must** complete a heat treatment cycle daily, and **must** be disassembled and brush cleaned a minimum of every 14 days. Brush cleaning is the normal disassembly and cleaning procedure found in this manual. Failure to follow these guidelines will cause the control to lock the freezer out of the AUTO mode.

Always comply with local guidelines for the maximum number of days allowed between brush clean cycles. (See the Manager's Menu for setting the Brush Clean interval, on page 44.)

If the Heat Treatment Cycle fails, the VFD will display a failure message and return the freezer to the STANDBY mode. A "lock" is defined as a special STANDBY mode of operation which does not allow the machine to operate in the AUTO mode.

There are two types of freezer lock conditions that can occur: Hard Lock or Soft Lock. A Hard Lock requires the machine be disassembled and brush cleaned. A Soft Lock can be corrected by either disassembling and brush cleaning the machine, or by starting another heat treatment cycle.

Hard Lock: There are two causes of a hard lock failure:

1. The brush clean timer has elapsed (maximum setting of 14 days). (See Figure 33.)

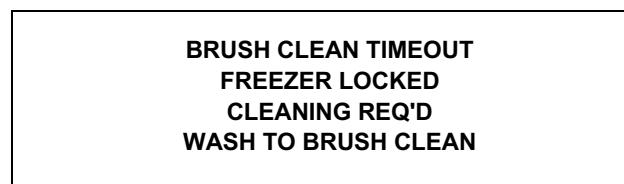



Figure 33

Selecting the WASH symbol  will display the following screen. (See Figure 34.)

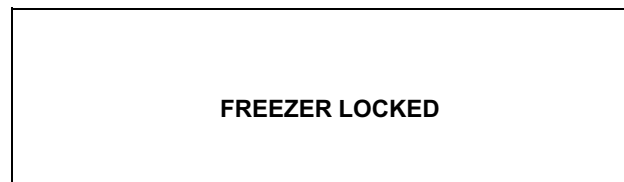


Figure 34

2. There has been a thermistor failure (freezing cylinder, hopper, or glycol) during the heat treatment process. (See Figure 35.)

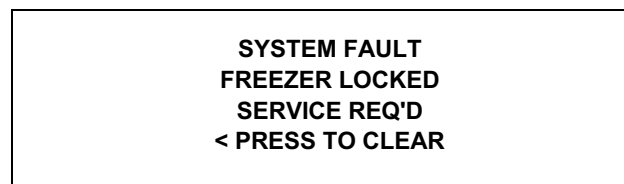



Figure 35

Selecting the CALIBRATE symbol  will indicate which thermistor caused the Hard Lock. (See Figure 36.)

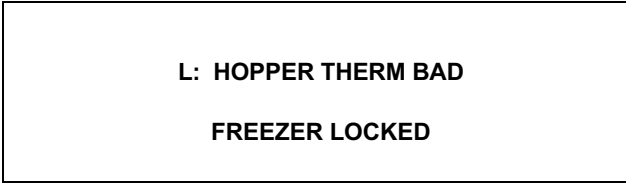


Figure 36

If the machine has hard locked and an attempt is made to enter AUTO, the machine will enter the STANDBY mode and display the following message. (See Figure 37.)

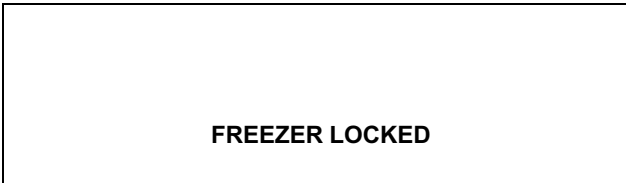


Figure 37

To restore the message that identified the reason for the hard lock, turn the power switch OFF for five seconds and then return the power switch to the ON position. The original message with the reason for the Hard Lock will be displayed. The FAULT DESCRIPTION can also be found in the Manager's Menu (See page 44.)



The FREEZER LOCKED message will remain on the display until the brush clean requirements are fulfilled. The freezer must be disassembled in order to activate the five minute timer on the display screen. Once the timer counts down to zero, the lockout is cleared.

Soft Lock: If a heat treatment cycle has not been initiated within the last 24 hours, a soft lock failure will occur. A soft lock allows the operator to correct the cause of the soft lock. The operator has the option of either starting another heat cycle or brush cleaning the machine.

When a soft lock occurs, the machine will go into the STANDBY mode. The following message is displayed on the screen. The reason for the soft lock is indicated on the second line. (See Figure 38.)



Figure 38

If the reason for the soft lock has been corrected, selecting the HEAT symbol  initiates a Heat Cycle immediately. Selecting the WASH symbol  when the above message is displayed will hard lock the machine and brush cleaning will be necessary.

Following are the variable messages for soft lock failures that appear on the second line of the screen.

POWER SWITCH OFF	Power switch was in the OFF position.
MIX OUT PRESENT	There was a mix out condition present.
AUTO OR STANDBY OFF	The machine was not in the AUTO or STANDBY mode.
NO HEAT CYCLE TRIED	A heat treatment cycle was not attempted in the last 24 hours. (AUTO HEAT TIME was advanced,a power loss was experienced at the time the cycle was to occur, or a heat cycle failure not due to a thermistor failure.)

If the following screen appears, a soft lock has occurred during the heat treatment cycle. (See Figure 39.)

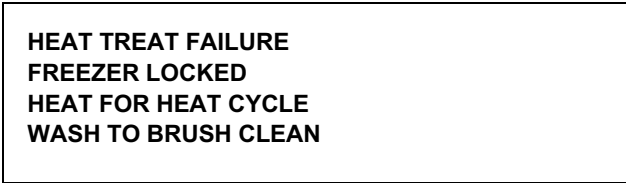


Figure 39

A soft lock can also occur any time during operation when the hopper or freezing cylinder temperature rises above 59°F (15°C), rises and remains above 45°F(7°C) for more than one hour, or rises and remains above 41°F(5°C) for more than four hours. If a PRODUCT OVER TEMPERATURE condition occurs during operation, the following screen will appear. (See Figure 40.)

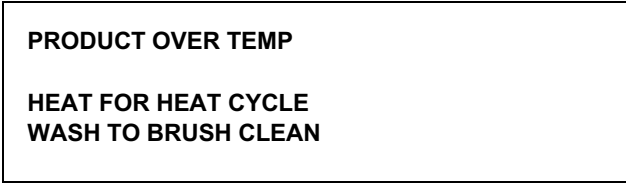




Figure 40

When one of these messages appears, automatic freezer operation cannot take place until the freezer is disassembled and brush cleaned, or has completed a heat treatment cycle. Select the HEAT symbol  to start a heat cycle, or select the WASH symbol  to disassemble and brush clean the machine.



Once the freezer is unlocked by starting a heat treatment cycle the HEAT symbol  will illuminate and the following message will be displayed on the screen. (See Figure 41.)



Figure 41

If the WASH symbol  is selected to clear the lockout by brush cleaning the machine, the FREEZER LOCKED message will remain on the display until the brush clean requirements are fulfilled. The freezer must be disassembled in order to activate the five minute timer on the display screen. Once the timer counts down to zero, the lockout is cleared. (See Figure 42.)

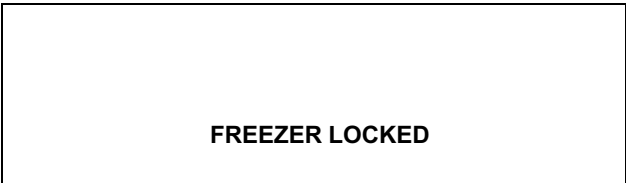


Figure 42

To restore the message that identified the reason for the soft lock, turn the power switch OFF for five seconds, and then return the power switch to the ON position. The original message with the reason for the soft lock will be displayed. (See Figure 43.)

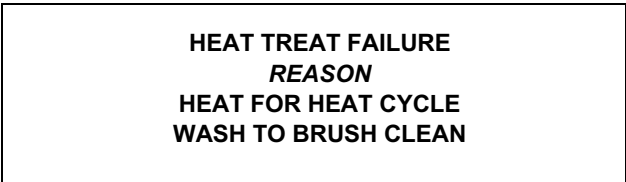



Figure 43

The FAULT DESCRIPTION can also be found in the Manager's Menu. (See page 44.)

Note: A record of Heat Cycle Data and Lock Out History can be found in the Manager's Menu. (See page 47.)

Manager's Menu

The Manager's Menu is used to enter the operator function displays. To access the Menu, touch the center of the CONE symbol  on the control panel. (See Figure 44.)

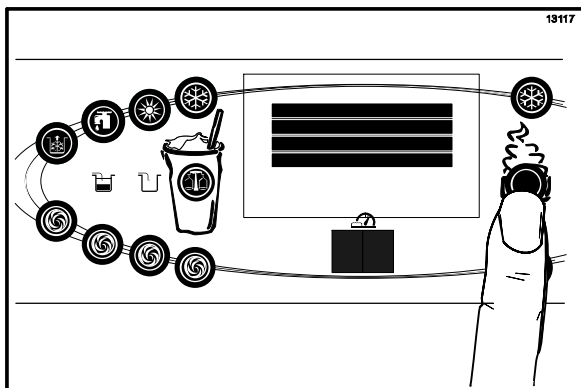











Figure 44

The shake AUTO symbol , the OPTIONAL FLAVOR symbol  and the CONE symbol  will be lit when the ACCESS CODE screen is displayed.

In the Menu program, the shake side AUTO symbol , OPTIONAL FLAVOR symbol , and CALIBRATION symbol  will function as menu keys.

AUTO () - increases the value above the cursor and used to scroll upward in text displays

OPTIONAL FLAVOR () - decreases the value above the cursor and used to scroll downward in text displays.




CALIBRATION () - advances the cursor position to the right and is used to select menu options.

Note: You will not be able to dispense shakes while accessing the Manager's Menu options, except when the CURRENT CONDITIONS screen is displayed.

The soft serve side will continue operation in the mode it was in when the Menu was selected. However, the soft serve side control keys will not be lit and are non-functional when the Manager's Menu or Calibration Menu is displayed.

The control keys for both sides are functional in the Manager's Menu when the CURRENT CONDITIONS screen is displayed. (See CURRENT CONDITIONS on page 51.)

Entering Access Code

With the ACCESS CODE screen on the display use the AUTO () or OPTIONAL FLAVOR () symbols to set the first code number in the cursor position. When the correct number is selected, touch the CALIBRATION symbol  to move the cursor to the next number position.

The access code for the Manager Menu is 8309. (See Figure 45.)

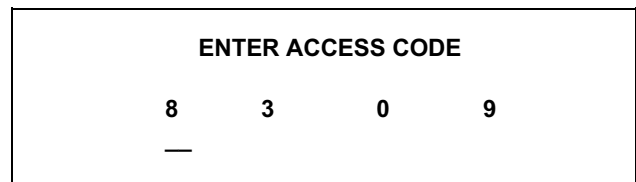




Figure 45

Continue to enter the proper access code numbers until all four numbers are displayed, then touch the CALIBRATION symbol . The Manager's menu list will display on the screen provided the correct access code is entered.

If an incorrect number is entered for the access code, the display will exit the Menu program when the CALIBRATION symbol  is selected. (See Figure 46.)

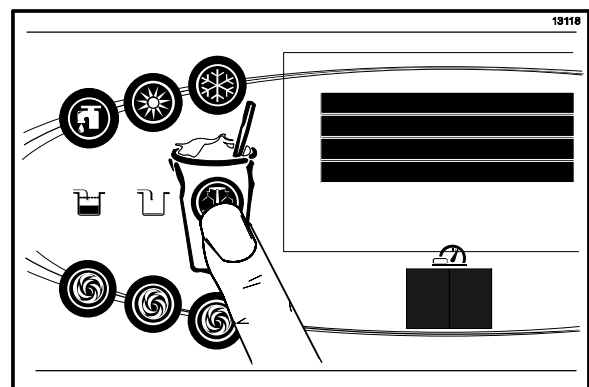






Figure 46

Menu Options

Touch the AUTO symbol  or OPTIONAL FLAVOR symbol  to move up or down through the Menu. Select a Menu option by aligning the option with the arrow on the left side of the screen, then touch the CALIBRATION symbol . Exit the Menu program by selecting EXIT FROM MENU or touch the CONE symbol .

The following menu options are listed in the Manager's Menu.

EXIT FROM MENU
SYRUP CALIBRATION
VERIFY CALIBRATION
SERVINGS COUNTER
SET CLOCK
AUTO HEAT TIME
AUTO START TIME
STANDBY MODE
BRUSH CLEAN CYCLE
MIX LEVEL AUDIBLE
FAULT DESCRIPTION
LOCKOUT HISTORY
FAULT HISTORY
HEAT CYCLE SUMMARY
HEAT CYCLE DATA
SYSTEM INFORMATION
CURRENT CONDITIONS

Selecting “**EXIT FROM MENU**” will exit the Manager's Menu and return the control panel symbols to normal operation.

The **SYRUP CALIBRATION** option allows the manager to access the calibration screen selections from the Manager's Menu. The same functions found in the calibration menu are displayed on the screen when this menu option is selected. (See “SYRUP SYSTEM” on page 78.)

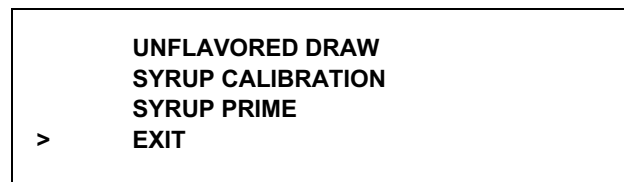


Figure 47

Note: The unflavored draw option will only appear on the screen when the shake side is in the AUTO mode.

The **VERIFY CALIBRATION** option is used to verify the amount of syrup dispensed is within the proper specification. (See Figure 48)

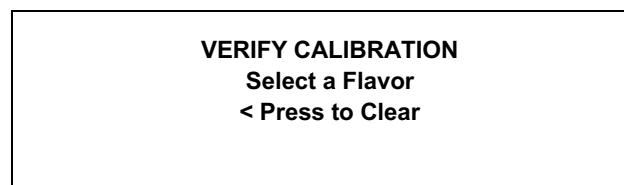



Figure 48

Remove the syrup valve from the dispensing door. With the line fully primed with syrup, position the syrup valve over the small chamber side of the divided syrup cup, then select the corresponding favor selection. Syrup will flow into the cup and automatically stop. Place the cup on a flat surface and check the amount of syrup dispensed. If the level is not within the correct specification, the flavor will need to be recalibrated. (See SYRUP CALIBRATION on page 78.)

It is recommended to verify the calibration of each syrup flavor and note any flavors that need to be recalibrated before exiting the Manager's Menu to access the CALIBRATION Menu.

Select the CALIBRATION symbol  to exit the VERIFY CALIBRATION screen and return to the Manager's Menu list.

The **SERVINGS COUNTER** screen is used to check or reset the number of servings dispensed from the machine. (See Figure 49.)

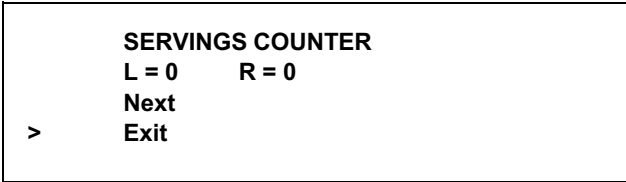



Figure 49

Reset the **SERVINGS COUNTER** by selecting the **AUTO** symbol  to move the arrow (>) to "Next". The Reset Counters and Details selections will be displayed on the next screen. (See Figure 50.)

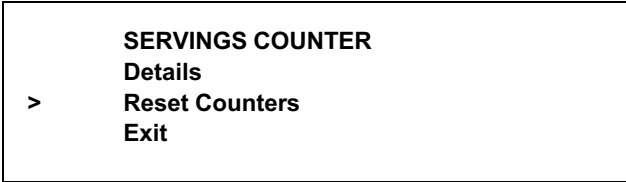




Figure 50

Select the **AUTO** symbol  to move the arrow to **RESET COUNTERS**. Then select the **CALIBRATION** symbol . (See Figure 51.)

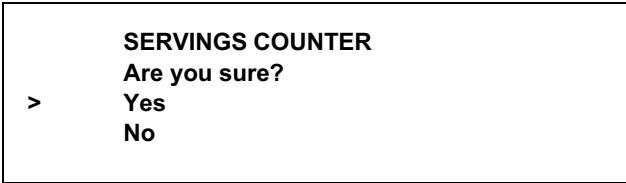





Figure 51

The display will ask, "Are you sure?" To reset the counters, select the **AUTO** symbol  to move the arrow to **YES**. Select the **CALIBRATION** symbol  to clear the left and right counters and return to the **SERVINGS COUNTER** screen. If you do not want to clear the serving counter, move the arrow to "No" and select the **CALIBRATION** symbol  to return to the **SERVINGS COUNTER** screen without resetting the counters to zero.

Note: The **SERVINGS COUNTER** will automatically reset to zero when the machine is brush cleaned. (See Figure 52.)

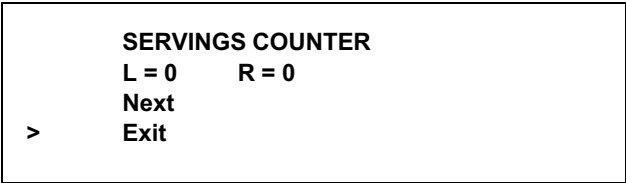



Figure 52

Access the **Details** screen by selecting "Next" in the **SERVINGS COUNTER** screen. Move the arrow to "Details" and then select the **CALIBRATION** symbol . (See Figure 53.)

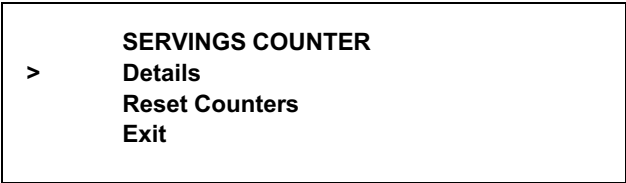


Figure 53

The counter menu will also display details for the number of servings for each flavor (chocolate, strawberry, vanilla, option, unflavored, and soft serve), and count the method that ended the draw for each flavor (pyroelectric sensor detection, manually selecting a flavor key, draw safety timeout, and other). (See Figure 54.)

Example:

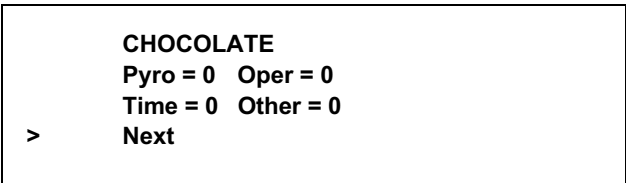


Figure 54

Pyro = Pyrosensor detected and triggered the end of the draw.

Time = The Draw Safety Time setting was reached before the pyrosensor detection or before a flavor key was selected.

Oper = A flavor key was selected to terminate the draw.

Other = Any draw termination that is not Pyro, Time, or Oper (example: power switch turned off while product is dispensing)

The **SET CLOCK** option allows the Manager to adjust the control clock date and time. The date and time may only be changed after the freezer has been manually cleaned but before it has been placed in the AUTO or STANDBY mode. The following message will be displayed if the SET CLOCK option is selected when the machine is not in a brush clean state. (See Figure 55.)

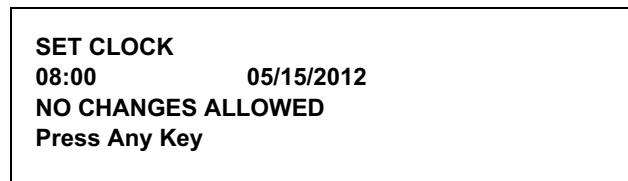


Figure 55

To change the date or time, select the SET CLOCK option in the menu. Touch the AUTO symbol to advance the arrow from Exit to Change, then touch the CALIBRATION symbol to select the Change option. (See Figure 56.)

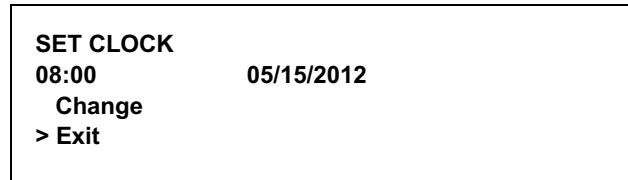


Figure 56

Change the time by touching the AUTO or OPTIONAL FLAVOR symbol with the cursor under the hour position. Move the cursor to the minutes by selecting the CALIBRATION symbol . Once the correct minutes are entered, select the CALIBRATION symbol to advance the cursor to the month. (See Figure 57.)

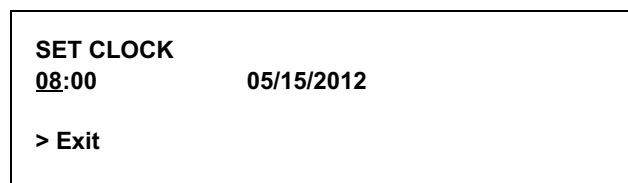


Figure 57

Enter the correct month, day, and year. Then select the CALIBRATION symbol to advance to the DAYLIGHT SAVING TIME screen. (See Figure 58.)



Figure 58

To Disable the Daylight Saving Time feature, select the AUTO symbol to move the arrow to “Disable”. Touch the CALIBRATION symbol to save the selection.

To enable the Daylight Saving Time feature, select the AUTO symbol to move the arrow to “Enable”. Touch the CALIBRATION symbol to save the selection.

The Daylight Saving Time feature, when enabled, will automatically adjust the control clock for Daylight Saving Time. Change the month and week for Daylight Savings Time by selecting the AUTO symbol to advance the arrow from “Exit” to “Change”. Touch the CALIBRATION symbol to select the Change option and move to the next screen. (See Figure 59.)



Figure 59

Use the arrow keys to scroll to the appropriate month. Touch the CALIBRATION symbol to accept the selection. (See Figure 60.)

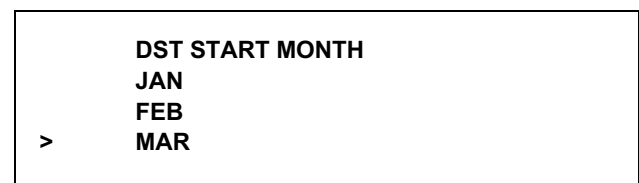


Figure 60


Once the appropriate month has been entered, scroll to the appropriate week. Touch the CALIBRATION symbol  to accept the selection. (See Figure 61.)



Figure 61

Note: Scroll down to see selections “FOURTH SUNDAY” and “LAST SUNDAY”.


Select the month that Daylight Saving Time will end. Touch the CALIBRATION symbol  to accept the selection. (See Figure 62.)



Figure 62



Select the appropriate week that Daylight Saving Time will end. Touch the CALIBRATION symbol  to accept the selection. (See Figure 63.)



Figure 63



Select the CALIBRATION symbol  to exit the screen and return to the Menu.

The **AUTO HEAT TIME** screen allows the Manager to set the time of day in which the heat treatment cycle will start. (See Figure 64.)



Figure 64

Note: Do not advance the Auto Heat Time setting except on the day the unit is brush cleaned. Increasing the time between heat cycles will cause the machine to soft lock if the start of the cycle does not begin within 24 hours from the start of the previous heat treatment cycle.

To set the AUTO HEAT TIME select the AUTO symbol  to move the arrow to Change. Then select the CALIBRATION symbol . The screen will display the time with the cursor under the hour position. (See Figure 65.)

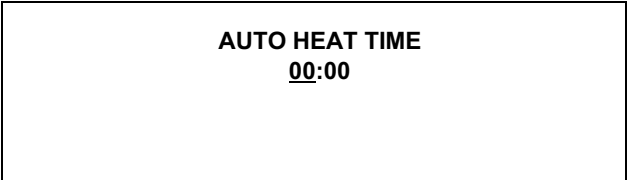







Figure 65

Select the AUTO symbol  or the OPTIONAL FLAVOR symbol  to increase or decrease the hour to the desired setting. Then move the cursor to the minutes position by selecting the CALIBRATION symbol . Adjust the setting for minutes, then select the CALIBRATION symbol  to save the setting and return to the AUTO HEAT TIME screen. Select the CALIBRATION symbol  to exit the screen and return to the Menu.

The **AUTO START TIME** option allows the Manager to set the time of day at which the machine automatically enters the AUTO mode from the STANDBY mode. The machine must be in the STANDBY mode without a freezer lock condition in order to AUTO start at the programmable time. The AUTO START TIME can also be Disabled and require starting the AUTO mode manually. (See Figure 66.)

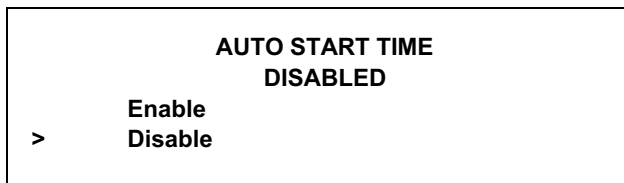




Figure 66

Enable the AUTO START TIME by selecting the AUTO symbol  to move the arrow up to Enable. Select the CALIBRATION symbol  to advance to the next screen. (See Figure 67.)

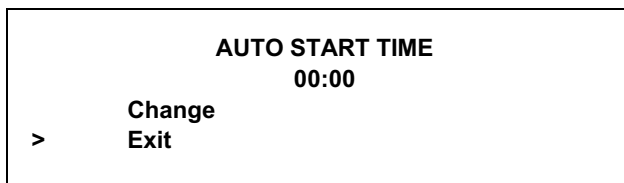




Figure 67

Program the AUTO START TIME by selecting the AUTO symbol  to move the arrow to Change. Select the CALIBRATION symbol  to advance to the next screen. (See Figure 68.)

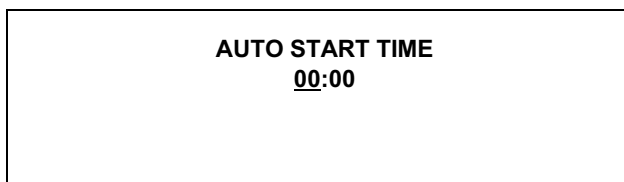









Figure 68

Program the AUTO START TIME by increasing (AUTO symbol ) or decreasing (OPTIONAL FLAVOR symbol ) the hour setting above the cursor. Select the CALIBRATION symbol  to advance the cursor and program the minutes setting.

Select the CALIBRATION symbol  to return to the previous screen with the new time setting displayed.

Select the CALIBRATION symbol  to exit the screen and return to the Menu.

The **STANDBY MODE** option is used only on models which have the control panel Standby keys disabled.

The STANDBY option is used to manually place the left or right side in the standby mode during long, no draw periods. Select the STANDBY screen from the Menu. Select the AUTO symbol  to move the arrow up to the left (shake) or right (soft serve) side. Select the CALIBRATION symbol  to activate Standby for the selected side.

Repeat the steps to activate Standby on the remaining side. (See Figure 69.)

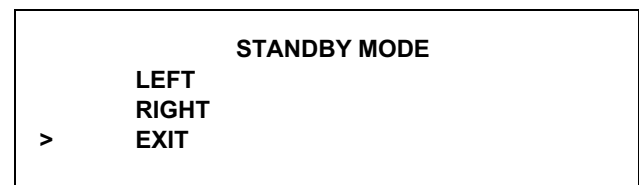


Figure 69

Discontinue Standby operation for either side by exiting the Manager's Menu and select the AUTO mode.

The **BRUSH CLEAN CYCLE** option allows the Manager to select the maximum number of days between brush cleaning the machine. The brush clean cycle may only be changed after the freezer has been manually cleaned but before it has been placed in the AUTO or STANDBY mode.

The following message will be displayed if the BRUSH CLEAN CYCLE option is selected when the machine is not in a brush clean state. (See Figure 70.)

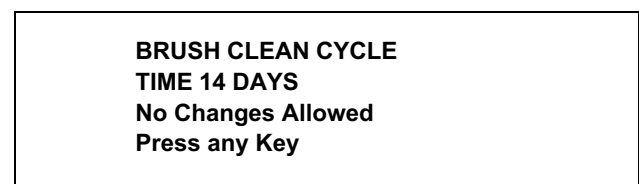





Figure 70

Change the number of days between brush clean intervals by selecting the AUTO symbol  to decrease the days or the OPTIONAL FLAVOR symbol  to increase the number of days. Select the CALIBRATION symbol  to save the setting and exit back to the Menu. The number of days displayed on the brush clean counter will change to the new setting. (See Figure 71.)

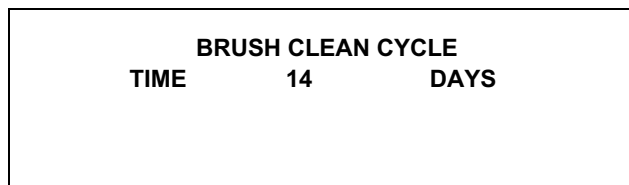


Figure 71

Always comply with local guidelines on the number of days allowed between brush clean cycles.

The **MIX LEVEL AUDIBLE** option, when enabled, will alert the operator with an audible tone when there is mix low or mix out condition. The following screen is displayed upon selecting this option. (See Figure 72.)

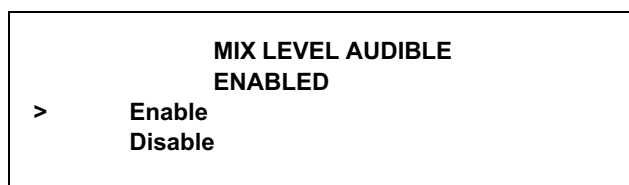




Figure 72

Disable the audible tone feature by selecting the AUTO symbol  to move the arrow to DISABLE. Select the CALIBRATION symbol  to save the new setting and return to the Menu. The control panel icons for Mix Low and Mix Out will light as the mix level drops in the hopper but the audible tone will be disabled.

The **FAULT DESCRIPTION** display will indicate if there is a fault with the freezer and the side of freezer where the fault occurred. When no faults are detected the following screen will be displayed. (See Figure 73.)

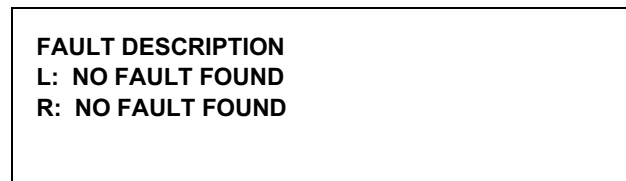




Figure 73

Select the CALIBRATION symbol  to display the next fault found or return to the Menu if no other faults exist. Selecting the CALIBRATION symbol  any time faults are displayed will clear the faults if corrected, upon returning to the Menu screen.

Listed below are the variable messages which will appear, along with an explanation for the corrective action.

NO FAULT FOUND - There was no fault found in the freezer. Nothing will appear on the screen after this variable message appears.

BEATER OVERLOAD - Press the beater reset button firmly for the side of the freezer with the fault. (See page 32.)

HPCO COMPRESSOR - Place the power switch in the OFF position. Wait 5 minutes for the machine to cool. Place the power switch in the ON position and restart each side in AUTO.

HOPPER THERMISTOR BAD - Place the power switch in the OFF position. Call your Taylor authorized service technician.

HOPPER OVER TEMP - Place the power switch in the ON position and verify that the AUTO or STANDBY symbol is illuminated.

BARREL OVER TEMP - Place the power switch in the ON position and verify that the AUTO or STANDBY symbol is illuminated.

BARREL THERMISTOR BAD - Place the power switch in the OFF position. Call your Taylor authorized service technician.

GLYCOL THERMISTOR BAD - Place the power switch in the OFF position. Call your Taylor authorized service technician.

PRODUCT DOOR OFF - Place the power switch in the OFF position. Check for proper installation of the dispensing door and that the hand screws are tight.

COMP ON TOO LONG - Compressor ran more than 11 consecutive minutes without the product reaching set point temperature. Clean the condenser filter, replace the scraper blades and reprime the unit using fresh mix. If the fault appears again, call your Taylor authorized service technician.

The **LOCKOUT HISTORY** screen displays a history of the last 100 soft locks, hard locks, brush clean dates, or aborted heat cycles. Page numbers are indicated in the upper right hand corner. Page 1 always contains the most recent failure. (See Figure 74.)

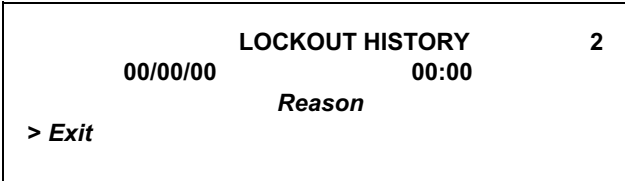




Figure 74

The second line of the screen displays the date and time a failure occurs. The third line indicates the reason for a failure, or will indicate if a successful brush cleaning has occurred. Some failures occur with multiple reasons. When this occurs, a page will be generated for each reason.

Select the AUTO symbol  or OPTIONAL FLAVOR symbol  to advance forward or backward to view each screen.

Listed below are the variable messages that may appear.

Faults Occurring Entering a Heat Treatment Cycle

POWER SWITCH OFF - The power switch is OFF.

AUTO OR STBY OFF - The control was not in AUTO or STANDBY.

MIX OUT FAILURE - A mix out condition was present.

NO HEAT CYCLE TRIED - The Auto Heat Time was set to attempt a heat cycle more than 24 hours after the last successful heat cycle.

Faults Occurring While in the Heat Mode

HEAT MODE FAILURE - The 90 minute maximum allowable heat mode time was exceeded.

COOL MODE FAILURE - The 120 minute maximum allowable cool mode time was exceeded.

TOTAL TIME FAILURE - The 4 hour maximum allowable total heat treatment time was exceeded.

BRUSH CLEAN TIMEOUT - The total days in operation exceeded the brush clean cycle setting.

POWER SWITCH OFF - The power switch was turned OFF during the heat cycle.

POWER FAIL IN H/C - A power failure occurred during the heat treatment cycle.

(L/R) MIX LOW FAILURE - The mix level in the (left/right) Hopper is too low for a successful heat cycle.

(L/R) BEATER OVLD H/C - The overload tripped for the (left/right) side beater motor.

(L/R) BRL THERM FAIL - The thermistor sensor for the (left/right) side barrel failed.

(L/R) HOPPER THERM FAIL - The thermistor sensor for the (left/right) side hopper failed.

(L/R) HPCO H/C - The (left/right) side high pressure switch opened during the heat treatment cycle.




Faults Occurring While in AUTO Mode

- (L/R) HPR>41F (5C) AFTER 4 HR** - The mix temperature in the left or right hopper was above 41°F (5°C) more than four hours.
- (L/R) BRL>41F (5C) AFTER 4 HR** - The mix temperature in the left or right barrel was above 41°F (5°C) more than four hours.
- (L/R) HPR>45F (7C) AFTER 1 HR** - The mix temperature in the left or right hopper was above 45°F (7°C) more than one hour.
- (L/R) BRL>45F (7C) AFTER 1 HR** - The mix temperature in the left or right barrel was above 45°F (7°C) more than one hour.
- (L/R) HPR>41F (5C) AFTER PF** - The mix temperature in the left or right hopper was above 41°F (5°C) more than four hours following a power failure.
- (L/R) BRL>41F (5C) AFTER PF** - The mix temperature in the left or right barrel was above 41°F (5°C) more than four hours following a power failure.
- (L/R) HPR>59F (15C)** - The mix temperature in the left or right hopper exceeded 59°F (15°C).
- (L/R) BRL>59F (15C)** - The mix temperature in the left or right barrel exceeded 59°F (15°C).

The **FAULT HISTORY** screens will display up to 100 faults that have occurred. The most recent fault is displayed on screen 1. The date, time, and fault description is displayed on each screen. (See Figure 75.)

	FAULT HISTORY	1
	05/15/12	08:00
	FAULT DESCRIPTION	
>	Exit	

Figure 75

Advance to the next most recent occurring fault by selecting the **AUTO** symbol . Scroll the screens in the opposite direction by selecting the **OPTIONAL FLAVOR** symbol . Exit the **FAULT HISTORY** screen and return to the menu by selecting the **CALIBRATION** symbol .



Fault Descriptions

- (L/R) Comp On Too Long** - The left or right main compressor has run for more than 11 consecutive minutes without dispensing product.
- (L/R) Product Door Off** - The left or right freezer door is not completely installed or the safety interlock circuit has opened.
- (L/R) Hopper Therm Bad** - The left or right hopper thermistor probe is **SHORTED** or **OPEN**.
- (L/R) Hopper Over Temp** - The left or right hopper thermistor probe is reading over 200°F (93°C).
- (L/R) Barrel Over Temp** - The left or right barrel thermistor probe is reading over 200°F (93°C).
- (L/R) Beater Overload** - The left or right reset mechanism has tripped.
- (L/R) HPCO Compressor** - The left or right high pressure switch contacts have opened.
- (L/R) Glycol Therm Bad** - The left or right glycol thermistor probe is reading over 200°F (93°C).

The **HEAT CYCLE SUMMARY** screen displays the hours since the last heat cycle, the hours since the product temperature was above 150°F (65.6°C), and the number of heat cycles completed since the last brush clean date.

HEAT CYCLE SUMMARY	
HRS SINCE HC	0
HRS SINCE 150	0
HC SINCE BC	0

Figure 76

The **HEAT CYCLE DATA** screen contains a record of up to 366 heat treatment cycles. The most recent heat cycle data will be shown first. The Standard records have each heat cycle recorded in three screens. Select the **AUTO** symbol  to move the arrow to “Standard records” and select the **CALIBRATION** symbol . (See Figure 77.)



	HEAT TREAT CYCLE
>	Standard records
	Details
	Exit

Figure 77

The first screen displays the month and day of the heat cycle, the start time and end time, and the fault description. The bottom line displays the record number and indicates if a power failure occurred during the heat cycle (POWER FAILURE IN HC). (See Figure 78.)

HEAT TREAT CYCLE			
01/01	02:00	05:14	
NO FAULT FOUND			
		1	

Figure 78

Select the AUTO symbol  to advance forward through the data pages. Select the OPTIONAL FLAVOR symbol  to reverse the page direction.

Hopper and barrel temperature records for each side of the freezer are displayed in the second and third screens. The second screen shows the left side (L) side of the freezer. (See Figure 79.)

H: 40.9		B:26.3		L
HEAT	OVER		COOL	PEAK
1:12	0:49	h	1:19	161.0
0:46	1.11	b	0:15	169.7

Figure 79

The third screen shows the right side (R) of the freezer. (See Figure 80.)

H: 38.0		B:23.7		R
HEAT	OVER		COOL	PEAK
1:09	0:52	h	1:11	161.2
0:66	1.00	b	0:15	169.9

Figure 80

The top line of these screens shows the hopper (H) and barrel (B) temperatures recorded at the end of the Heat Treat Cycle and indicates the side (L or R) of the freezer.

The remaining lines indicate the following:



HEAT = Total time for the hopper (h) and barrel (b) to reach 150.9°F (66.1°C).

OVER = Total time the hopper (h) and barrel (b) temperature was above 150°F (65.6°C).

COOL = Total time the hopper (h) and barrel (b) temperature was above 41°F (5°C) during the COOL phase.

PEAK = Highest temperature reading for the hopper (h) and barrel (b) during the Heat Treatment Cycle.

The HEAT time indicates the amount of time taken in each zone to reach 150.9°F (66.1°C). Each zone must remain above 150°F (65.6°C) for a minimum of 35 minutes. In addition, each zone must be heated for a minimum of 115 minutes.

Select the AUTO symbol  to advance to the next page or the OPTIONAL FLAVOR symbol  to view the previous page.

A Heat Cycle Failure message will display on the first screen if a failure occurred.

Listed below are variable failure code messages which could appear on line 2.



- HT HEAT TIME FAILURE
Mix temperature did not rise above 151°F (66.1°C) in less than 90 minutes.
- CL COOL MODE FAILURE
Mix temperature in the hopper and freezing cylinder did not fall below 41°F (5°C) in less than 120 minutes.
- TT TOTAL TIME FAILURE
The heat treatment cycle must be completed in no more than 4 hours.
- MO MIX OUT FAILURE
A mix out condition was detected at the start or during the heat cycle.
- ML MIX LOW FAILURE
The Heat Phase or Cool Phase time was exceeded and a mix low condition was present.
- BO BEATER OLVD IN HC
A beater overload occurred during the heat cycle.
- HO HPCO IN HEAT CYCLE
A high pressure cut-out condition occurred during the heat cycle.

- PF POWER FAILURE IN HC**
A power failure caused the Heat Phase, Cool Phase, or Total Cycle Time to exceed the maximum allowed time. If a power failure occurs, but the heat treatment cycle does not fail, an asterisk(*) will appear on the third line of the display.
- PS POWER SWITCH OFF**
The power switch was placed into the OFF position during the heat cycle.
- TH THERMISTOR FAILURE**
A thermistor probe has failed.
- OP OPERATOR INTERRUPT**
Indicates the heat cycle was aborted in the OPERATOR INTERRUPT option in the Service Menu.
- PD PRODUCT DOOR OFF**
A product door is not in place or is loose.

The HEAT CYCLE DATA Details record the temperature in the freezing cylinders and mix hoppers every five minutes during the heat treatment cycle. Up to 366 heat treatment cycles are recorded. The time and temperature is displayed for the left hopper, left barrel, right hopper, and right barrel for each phase during the heat treat cycle. An individual phase or a complete heat treat cycle containing all four phases can be viewed.

Heat Treatment Phases

HEAT	The phase that heats the mix in the barrels and hoppers to 151°F (66.1°C).
HOLD	The phase that maintains the mix temperature above 151°F (66.1°C) for a minimum of 30 consecutive minutes.
SOAK	The additional heating time that may follow the HOLD phase to insure the total HEAT, HOLD, and SOAK time is not less than 115 minutes.
COOL	The phase that refrigerates the mix until all four temperature zones are cooled below 41°F (5°C).

In the HEAT CYCLE DATA screen, select the AUTO  symbol to move the arrow up to “Details,” and then select the Calibration symbol .

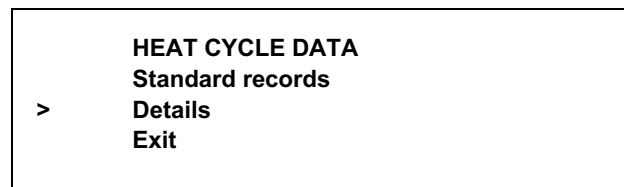




Figure 81

The most recent heat treat cycle record (Recd 1) is displayed with the date and time. Access a different heat treatment cycle record by selecting the OPTIONAL FLAVOR symbol  to move the arrow to “Next record,” and select the Calibration symbol . Repeat this step until the desired record with the date and time is displayed.

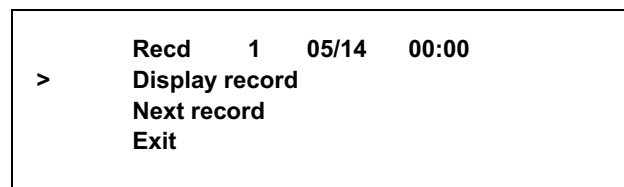



Figure 82

With the arrow on the Display record line, select the Calibration symbol .

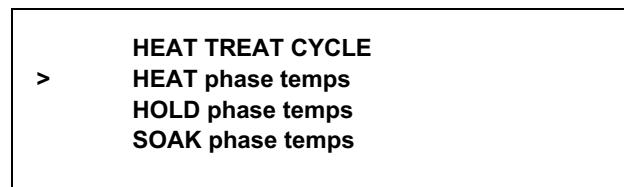



Figure 83

Select the OPTIONAL FLAVOR symbol  to scroll down to the phase to be reviewed. Selecting “ALL phase temps” will display all four phases of the heat treat cycle record in sequential order.

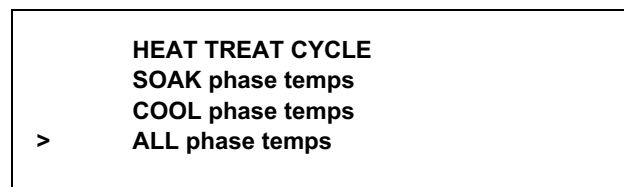


Figure 84


The four temperature readings are recorded at the same time on individual screens. Align the arrow with the phase to be reviewed and select the Calibration symbol .



Figure 85

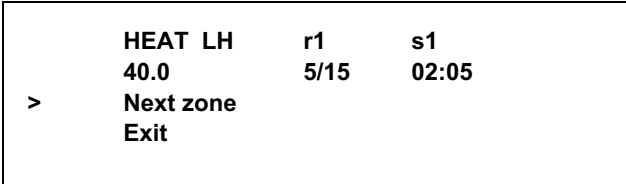



Figure 86

Line 1	Displays the Phase	HEAT / HOLD / SOAK / COOL
	LH	Left Hopper
	r 1	Record Number
	s 1	Sample Number
Line 2	Zone Temperature	
	Date & Time Temperature was recorded	

Note: An L or an H displayed to the left of the temperature reading indicates the temperature was the lowest or highest recorded during the phase.

Selecting the Calibration symbol  will advance the screen to the next zone. The second temperature zone displayed is the left barrel (LB).

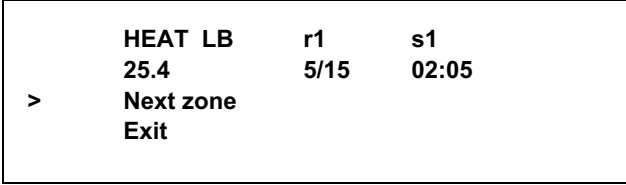



Figure 87

Select the Calibration symbol  to advance to the next temperature zone; the right hopper (RH).

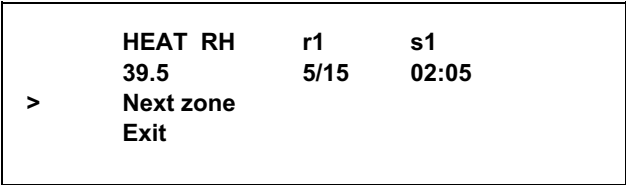



Figure 88

Select the Calibration symbol  to advance to the last temperature zone in the recorded sample; the right barrel (RB).

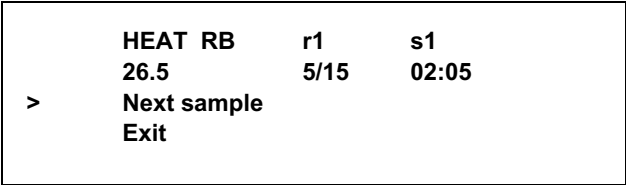



Figure 89

Select the Calibration symbol  again to advance to the next sample. Each sample is displayed in 5 minute increments.

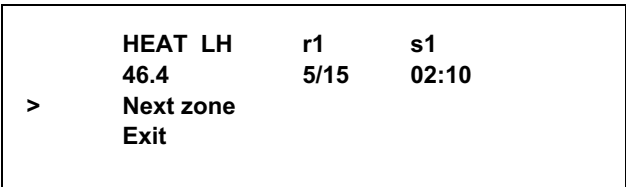


Figure 90

When the final sample in the phase is displayed, the Heat Cycle results screen can be selected.

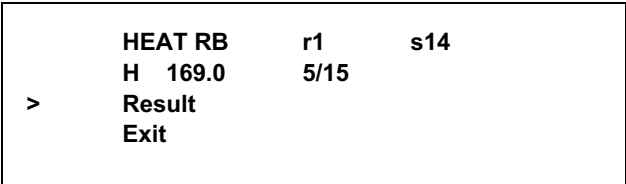



Figure 91

If the COOL phase data or “All phase data” were reviewed, the final temperature zone sample in the record will be displayed with the selection for the result screen.


	COOL RB	r14	s42
	20.0	5/15	04:15
>	Result		
	Exit		

Figure 92

Select the Calibration symbol  to view the Heat Cycle results screen.


	PASS	r1	s43
	Heat Cycle results		
>	Next record		
	Exit		

Figure 93

To view the details for the same phase in the preceding record (“Next record”), select the Calibration symbol . If “All phase data” was selected, the record number will remain the same and the next phase sample will be displayed.

	HOLD	LH	r1	s16
	158.7		5/15	04:15
>	Next zone			
	Exit			

Figure 94


Exit the record screens by moving the arrow to “Exit” and select the Calibration symbol .

The average heat treatment cycle will contain approximately 40 samples of the four temperature zone screens.

The **SYSTEM INFORMATION** is displayed on four separate screens. The first screen contains the control and software version installed in the machine. (See Figure 95.)


	SOFTWARE VERSION
	C602 / C606 UVC
	VERSION V01.01.00
>	Next

Figure 95

Select the CALIBRATION symbol  to advance to the next system information screen containing the software language version. (See Figure 27.)


	LANGUAGE
	V3.00
	English
>	Next

Figure 96

For UVC4 models only, select the CALIBRATION symbol  to advance to the third system information screen containing the Boot loader version. (See Figure 97.)


	Boot loader
	V1.13.000
>	Next

Figure 97

Select the CALIBRATION symbol  to advance to the last system information screen containing the model bill of material and machine serial number. (See Figure 98.)

	B.O.M.	C60000000
	S/N	M0000000
>	Next	

Figure 98

Selecting the CALIBRATION symbol  again will return to the Menu list.


Note: In order to display the machine details in the system information screen, the model and serial number information must have been previously entered into the EDIT UNIT ID screens in the Service Menu.

The **CURRENT CONDITIONS** screen provides the viscosity readings for the product when the machine is running and the hopper and barrel temperatures for both sides of the machine. The left column displays the readings for the shake side and the right column displays the soft serve side readings. (See Figure 99.)


VISC	0	0.0
HOPPER	38.0	38.0
BARREL	25.0	18.0

Figure 99

CURRENT CONDITIONS is the only Menu screen that will return the left and right side control panel keys to normal operation. The Menu keys will not be lit when this option is selected so shakes can be dispensed and all panel touch keys are fully functional. Use this screen when you wish to remain in the Manager's Menu and dispense a shake.

Exit the CURRENT CONDITIONS screen and return to the Menu by selecting the CALIBRATION symbol .

Dispensing Shake Without Syrup

Beginning with software version 1.04, shakes can be dispensed without flavoring by selecting the left side pump symbol .

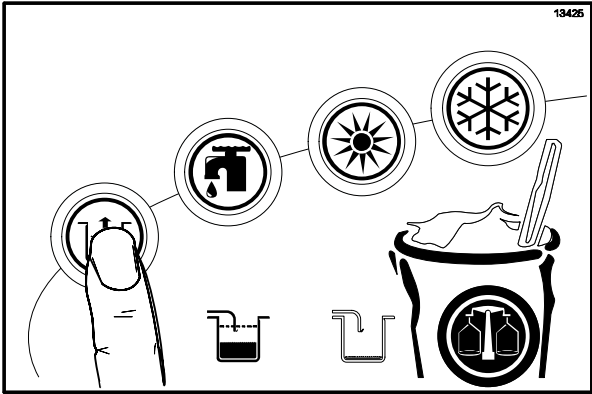


Figure 100

The following screen will display.

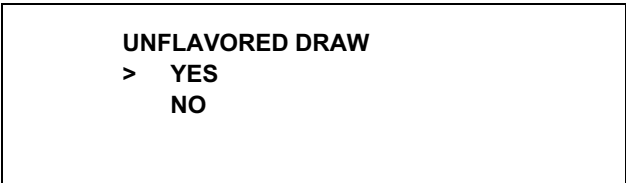




Figure 101

Select the CALIBRATION symbol . The left side PUMP symbol illuminates and unflavored product immediately starts to dispense. The unflavored draw ends and the PUMP light extinguishes when the pyroelectric sensor detects the cup is full. The unflavored draw can also be terminated by selecting the PUMP symbol a second time.

Note: To cancel the UNFLAVORED DRAW screen, touch the OPTIONAL FLAVOR symbol to move the arrow to “NO”, and select the CALIBRATION symbol .

Section 6

Operating Procedures

If you are disassembling the machine for the first time or need information to get to this starting point in our instructions, turn to page 90, "Disassembly" and start there.

Equipment Set-Up

Freezing Cylinder Assembly - Shake Side



Make sure the power switch is in the OFF position. Failure to follow this instruction may result in severe personal injury from hazardous moving parts.

With the parts tray available for the shake side:

Step 1

Before installing the shake beater drive shaft, lubricate the groove on the beater drive shaft. Slide the beater drive shaft boot seal over the small end of the beater drive shaft and engage into the groove on the shaft. Heavily lubricate the inside portion of the boot seal and also lubricate the flat end of the boot seal that comes in contact with the rear shell bearing. Apply an even coat of lubricant to the shaft. **DO NOT** lubricate the square end. (See Figure 102.)

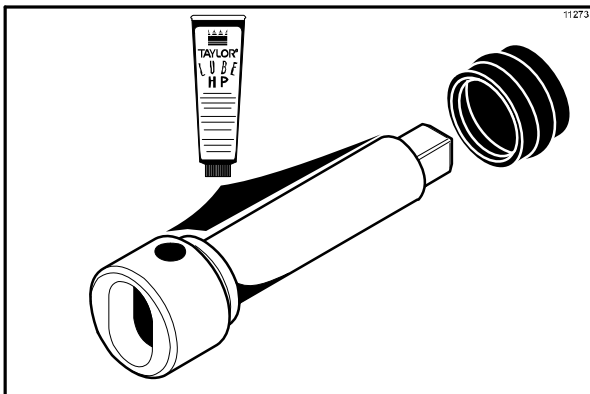


Figure 102

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

Note: To ensure that the mix does not leak out of the back of the freezing cylinder, the middle section of the boot seal should be convex or extend out from the seal. If the middle section of the boot seal is concave or extending into the middle of the seal, turn the seal inside out. (See Figure 103.)

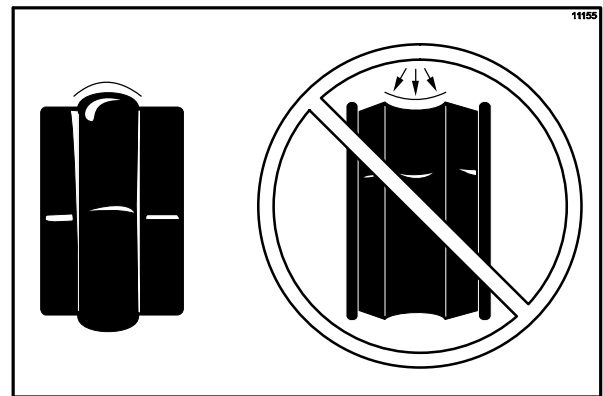


Figure 103

Step 2

Install the shake beater drive shaft through the rear shell bearing in the freezing cylinder and engage the square end firmly into the drive shaft coupling. Be sure the drive shaft fits into the drive coupling without binding. (See Figure 104.)

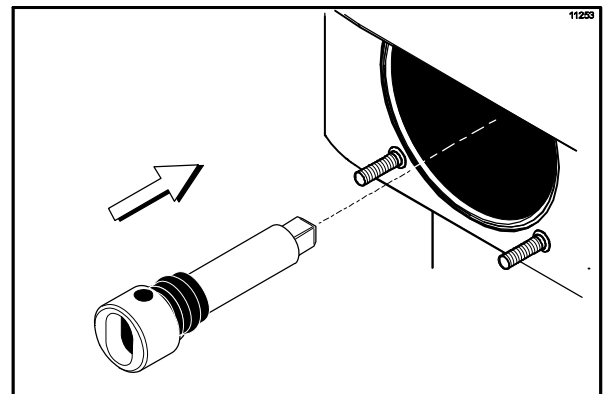


Figure 104

Step 3

Check scraper blades for any nicks or signs of wear. If any nicks are present, replace the blades.

Note: Shake side scraper blades should be replaced every 6 months.

Step 4

If the blades are in good condition, place each scraper blade over the holding pins on the beater assembly. (See Figure 105.)

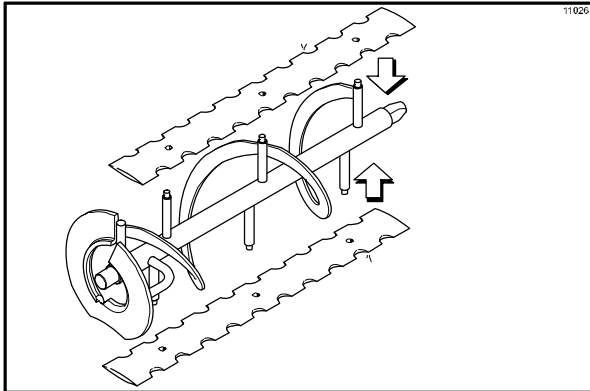


Figure 105

Note: The holes in the scraper blade must fit over the pins to prevent damage.

Step 5

Holding the blades on the beater assembly, insert the beater assembly in the freezing cylinder. Engage the shaft end firmly into the drive shaft socket. (See Figure 106.)

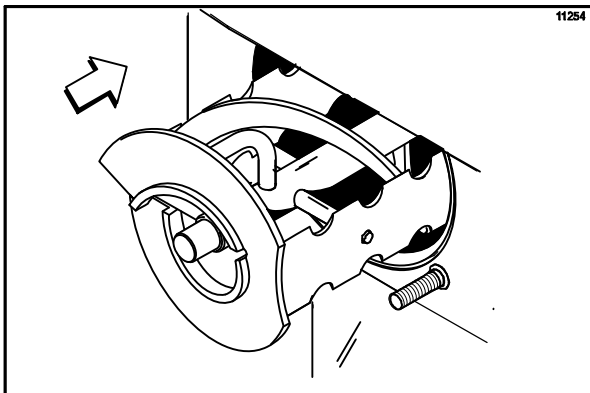


Figure 106

Note: When properly seated, the beater will not protrude beyond the front of the freezing cylinder.

Step 6

Assemble the draw valve spinner assembly. Inspect draw valve o-rings for cuts or nicks. (Replace if cut or nicked.) If draw valve o-rings are in good condition, slide the 2 o-rings into the grooves of the draw valve and lubricate. (See Figure 107.)

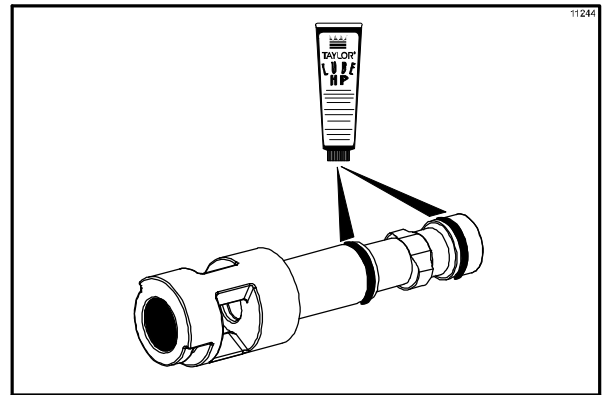


Figure 107

Step 7

Lubricate the outer diameter of the spinner shaft seal. Fill the cups on each end of the seal with lubricant.

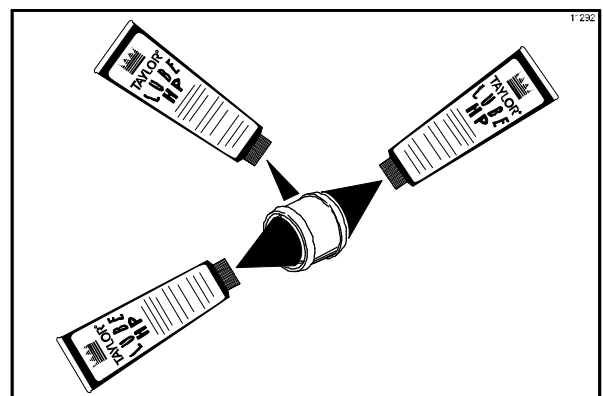


Figure 108

Step 8

Insert the spinner shaft seal into the bottom of the draw valve as far as it will go. The spinner shaft seal should fit into the seal groove located inside the draw valve cavity.

Important: Inspect to see that the spinner shaft seal is correctly installed in the groove. A worn, missing, or improperly installed spinner shaft seal will cause product leakage out the top of the draw valve. (See Figure 109.)

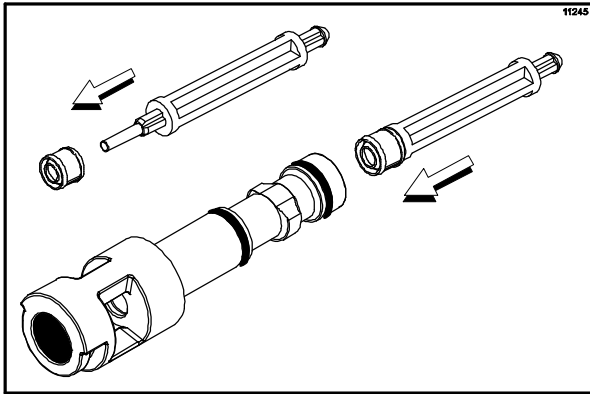


Figure 109

Step 9

Lubricate the smaller end of the driven spinner. (See Figure 110.)

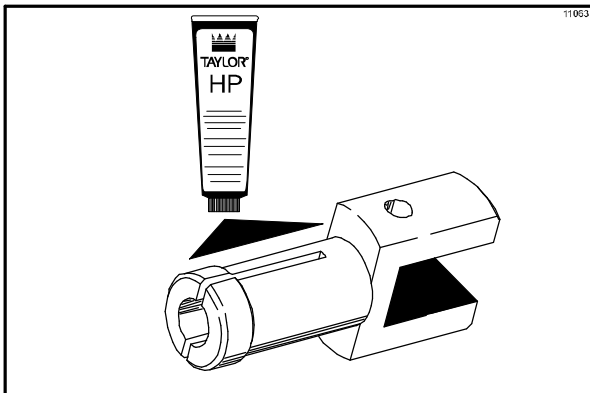


Figure 110

Step 10

Squeezing the split end together, insert the driven spinner through the metal opening of the draw valve until it snaps into place. (See Figure 111.)

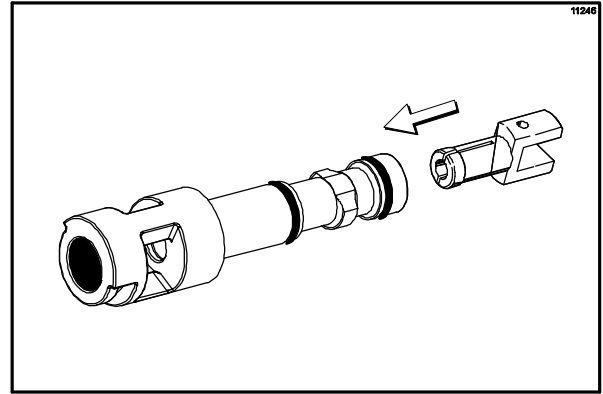


Figure 111

Step 11

Insert and align the draw valve spinner assembly into the shake door as shown. (See Figure 112.)

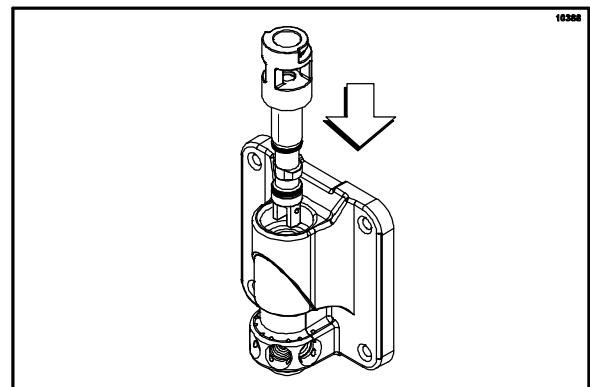


Figure 112

Step 12

Place the freezer door o-ring into the groove on the back of the freezer door. Lubricate the outside diameter of the front bearing. Slide the front bearing into the door hub.

Note: If necessary, put two small spots of lubricant at the 10 o'clock and 2 o'clock positions on the upper portion of the freezer door o-ring to keep it in place.

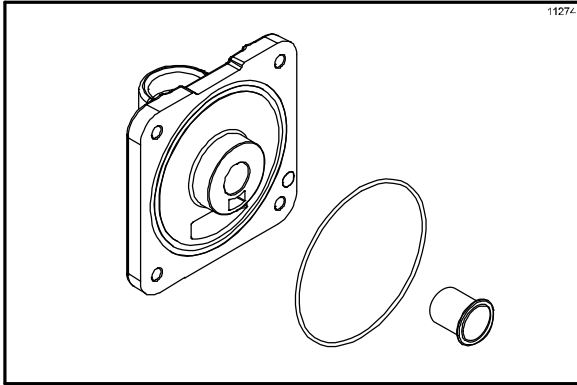


Figure 113

Step 13

Install the shake freezer door. Position the freezer door on the four studs on the front of the freezing cylinder. Align the top of the draw valve with the actuator bracket. Install the handscrews (short handscrews at the bottom of the door). Tighten equally in a criss-cross pattern to insure the door is snug. **Do not over-tighten.**

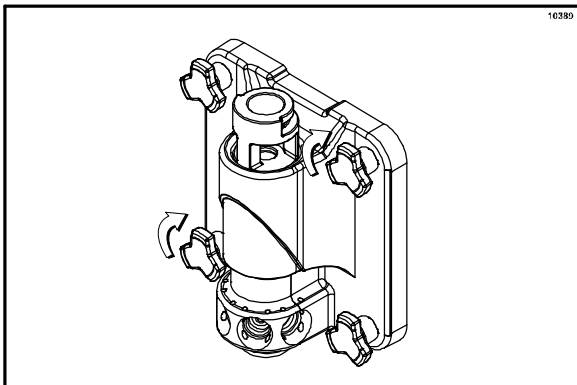


Figure 114

Step 14

Lubricate the shaft of the spinner blade up to the groove. (See Figure 115.)

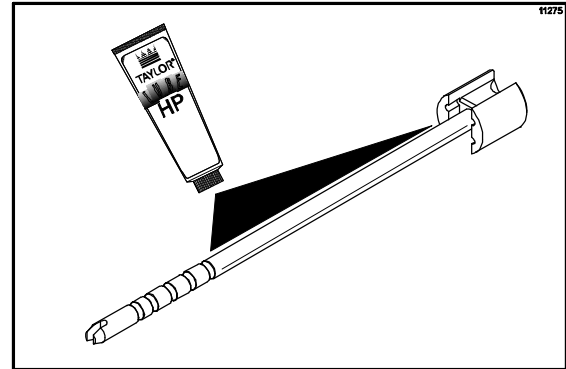


Figure 115

Step 15

Insert the spinner blade shaft into the center of the driven spinner, and through the draw valve cavity until the shaft appears at the top of the draw valve. The spinner blade must be aligned and engaged to the driven spinner at the bottom. This allows the spinner shaft to raise high enough to be engaged into the spinner coupling at the top. (See Figure 116.)

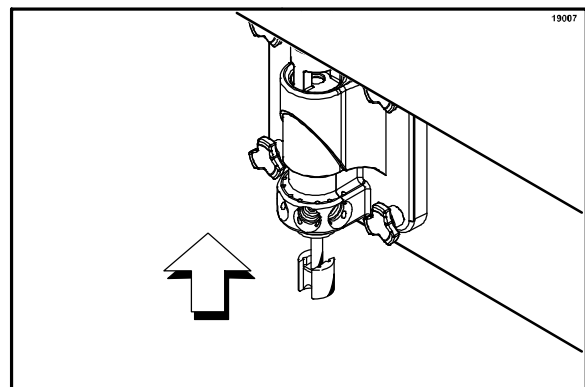


Figure 116

Step 16

Raise the locking collar of the spinner coupling and insert the spinner shaft into the cavity of the coupling until the locking collar can drop into the locked position. (See Figure 117.)

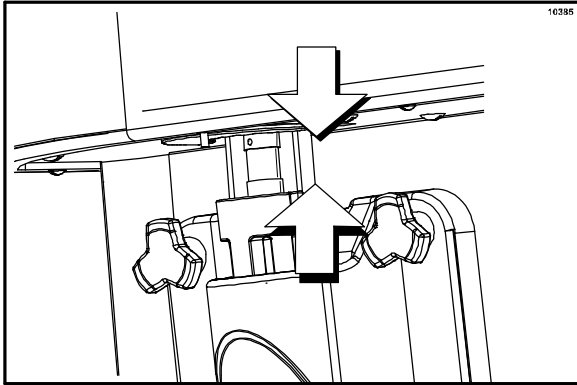


Figure 117

Step 17

Snap the restrictor cap over the end of the door spout and install the syrup valve retainer pins. (See Figure 118.)

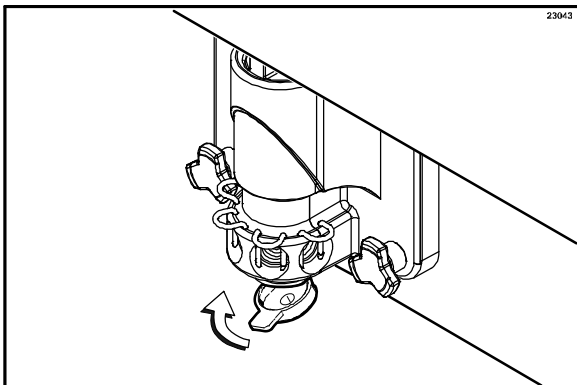


Figure 118

Freezing Cylinder Assembly - Soft Serve Side



Make sure the power switch is in the OFF position. Failure to follow this instruction may result in severe personal injury from hazardous moving parts.

With the parts tray available for the soft serve side:

Step 1

Before installing the soft serve beater drive shaft, lubricate the groove on the beater drive shaft. Slide the beater drive shaft boot seal over the small end of the beater drive shaft and engage into the groove on the shaft. Heavily lubricate the inside portion of the boot seal and also lubricate the flat end of the boot seal that comes in contact with the rear shell bearing. Apply an even coat of lubricant to the shaft. DO NOT lubricate the hex end. (See Figure 119.)

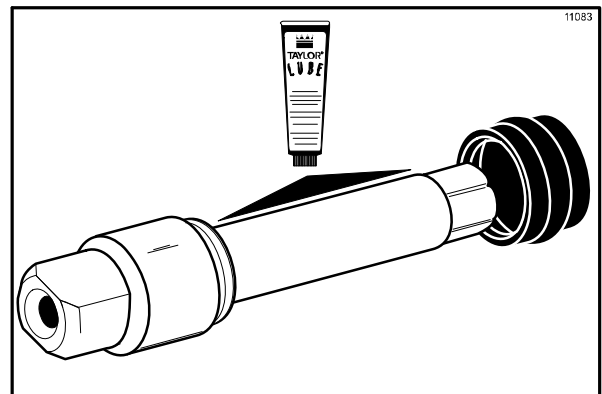


Figure 119

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

Note: To ensure the mix does not leak out of the back of the freezing cylinder, the middle section of the boot seal should be convex or extend out from the seal. If the middle section of the boot seal is concave or extending into the middle of the seal, turn the seal inside out. (See Figure 120.)

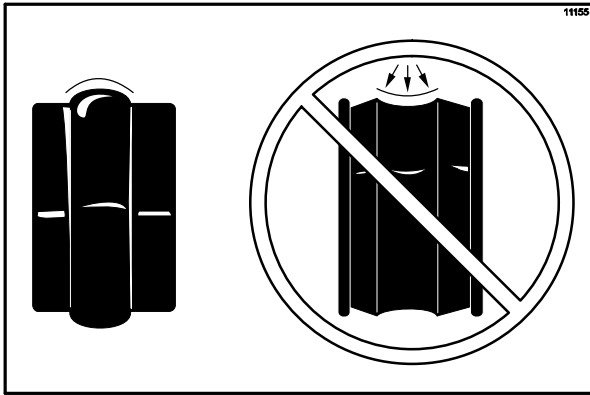


Figure 120

Step 2

Insert the beater drive shaft through the rear shell bearing in the freezing cylinder and engage the hex end firmly into the drive coupling. (See Figure 121.)

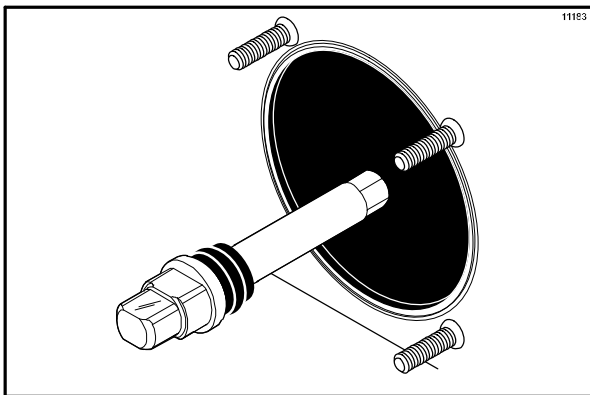


Figure 121



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

Step 3

Before installing the beater assembly, inspect the scraper blades.

Check the scraper blades for any signs of wear or damage. If a scraper blade is nicked or worn, replace both blades.

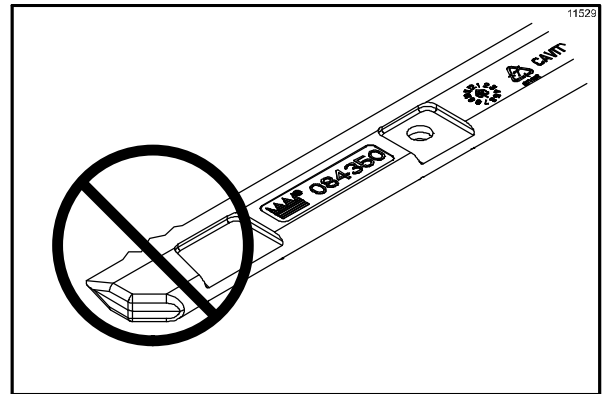


Figure 122

Step 4

If the blades are in good condition, place the rear scraper blade over the rear holding pin on the beater. (See Figure 123.)

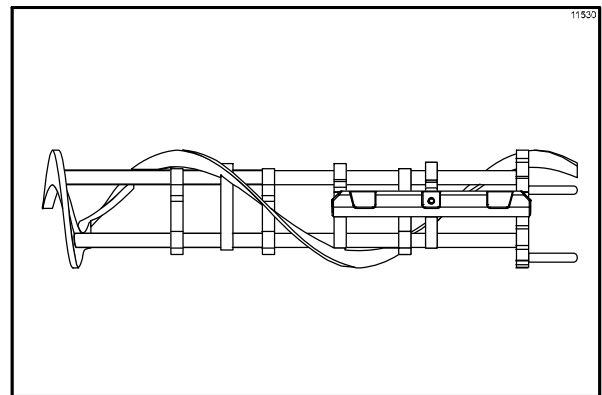


Figure 123

Note: Soft serve side scraper blades should be replaced every 3 months.

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

Step 5

Holding the rear blade on the beater, slide it into the freezing cylinder halfway. Install the front scraper blade over the front holding pin. (See Figure 124.)

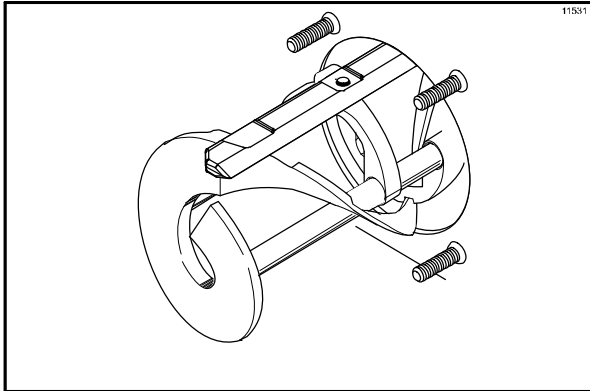


Figure 124

Step 6

Before installing the beater shoes, check the shoes for any nicks, cracks, or signs of wear. If any defects are present, replace the beater shoes.

Step 7

If the beater shoes are in good condition, install the beater shoes. (See Figure 125.)

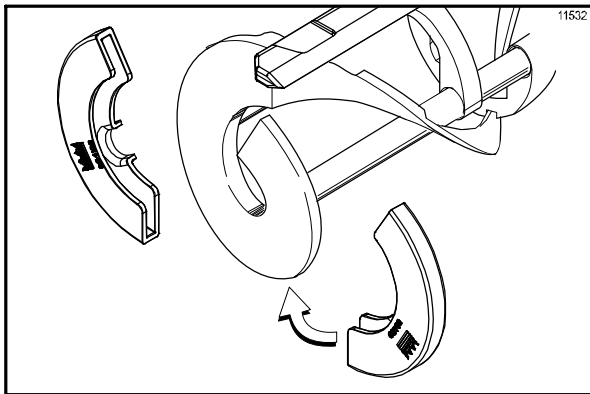


Figure 125

Step 8

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 by turning the beater slightly until the beater is properly

seated. When in position, the beater will not protrude beyond the front of the freezing cylinder. (See Figure 126.)

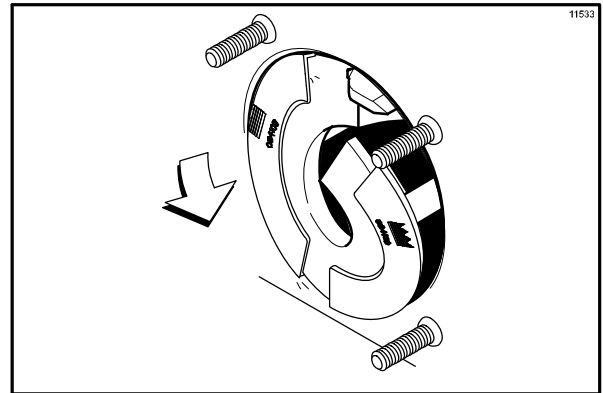


Figure 126

Step 9

Before assembling the freezer door, check the following for any nicks, cracks, or signs of wear: door bearing, door gasket, draw valve, o-rings, and all sides of the door assembly, including the inside of the draw valve bore. Replace any damaged parts.

Step 10

If the parts are in good condition, slide the 3 o-rings into the grooves on the draw valve and lubricate. (See Figure 127.)

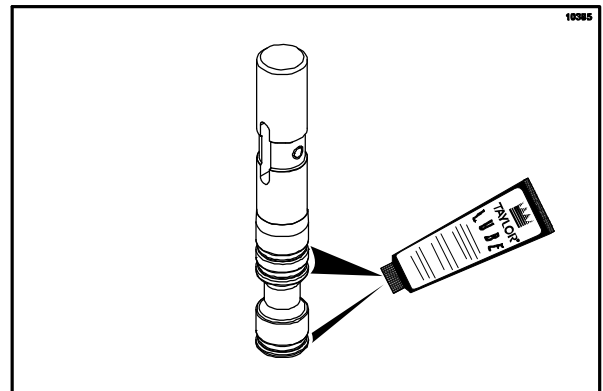


Figure 127

Step 11

Lightly lubricate inside of the top of the freezer door valve cavity. (See Figure 128.)

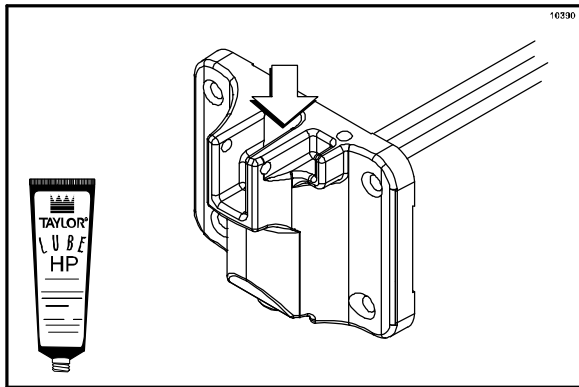


Figure 128

Step 12

Insert the draw valve from the top, with the draw handle slot facing forward. (See Figure 129.)

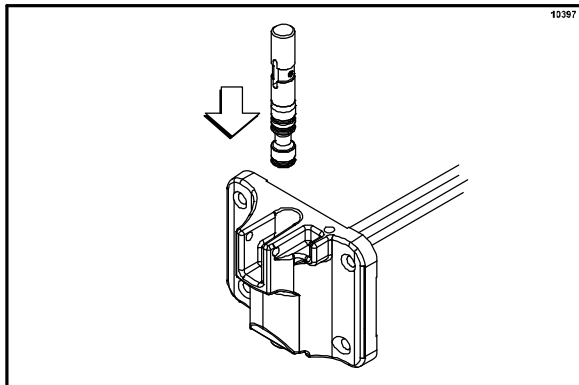


Figure 129

Step 13

Place the door gasket into the groove on the back of the freezer door. Slide the front bearing over the baffle rod so the flanged edge is against the door. DO NOT lubricate the gasket or bearing. (See Figure 130.)

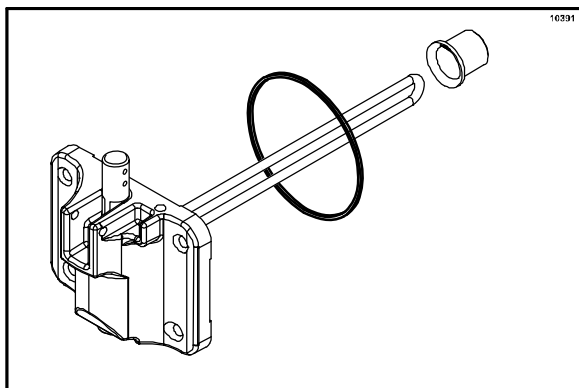


Figure 130

Step 14

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 criss-cross pattern to insure the door is snug. (See Figure 131.)

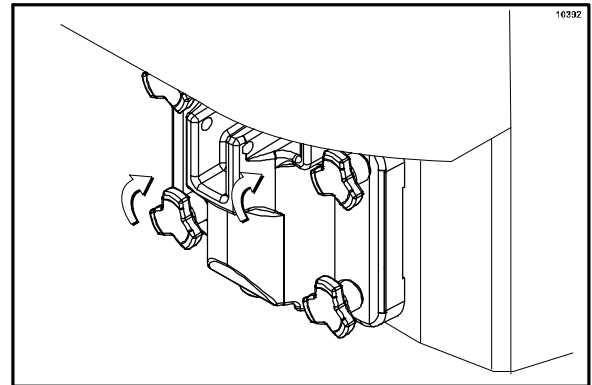


Figure 131

Step 15

Install the draw handle. Slide the fork of the draw handle in the slot of the draw valve. Secure with pivot pin. (See Figure 132.)

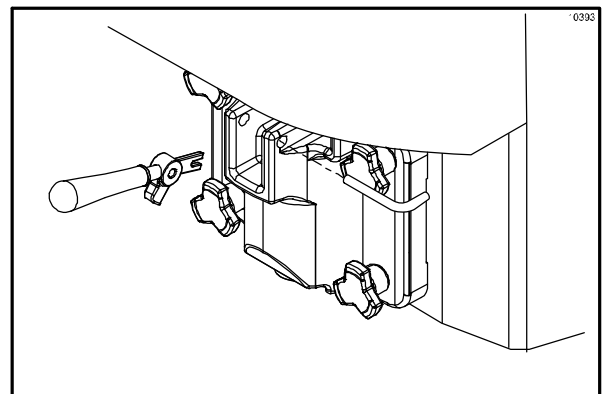


Figure 132

Note: The soft serve side features an adjustable draw handle to provide portion control, giving a better consistent quality to your product and controlling costs. The draw handle should be adjusted to provide a flow rate of 5 to 7-1/2 oz. (142 g. to 213 g.) of product by weight per 10 seconds. To INCREASE the flow rate, turn the adjustment screw CLOCKWISE. Turn the adjustment screw COUNTER-CLOCKWISE to DECREASE the flow rate.

Step 16

Slide the long drip pan into the hole in the front panel above the syrup topping dispensers. (See Figure 133.)

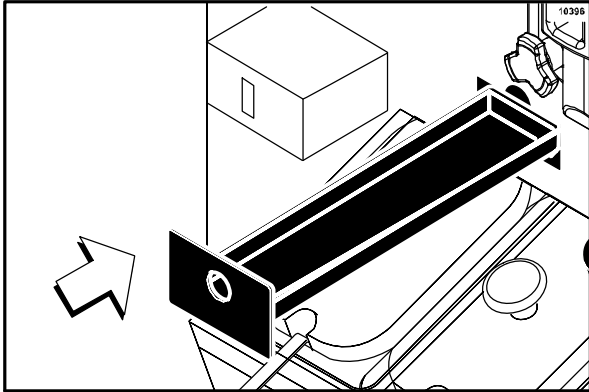


Figure 133

Step 17

Slide the two shorter drip pans into the holes in the rear panel. Slide the two notched drip pans into the left and right side panels. (See Figure 134.)

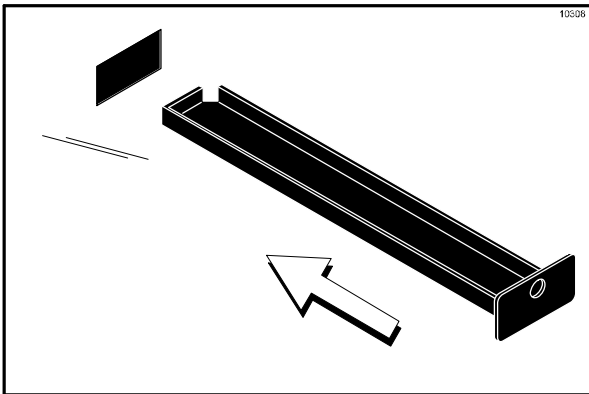


Figure 134

Step 18

Install the front drip tray and splash shield under the door spouts. (See Figure 135.)

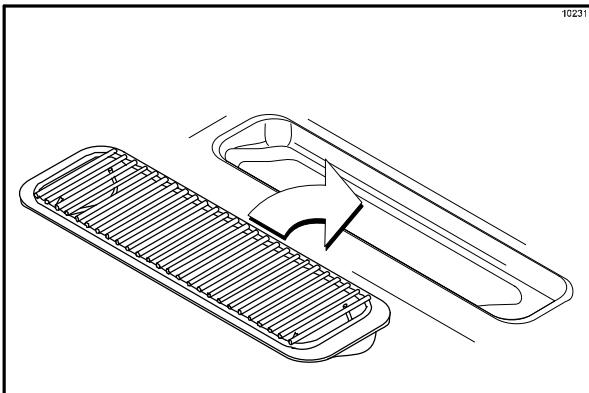


Figure 135

Mix Pump Assembly

Step 1

Inspect the rubber and plastic pump parts. The o-rings, check rings, and gaskets must be in 100% good condition for the pump and entire machine to operate properly. They cannot properly serve their intended function if nicks, cuts, or holes in the material are present.

Inspect the plastic pump parts for cracks, wear, and de-lamination of plastic.

Replace any defective parts immediately and discard the old.

Step 2

Assemble the piston. Slide the red o-ring into the groove of the piston. DO NOT lubricate the o-ring. (See Figure 136.)

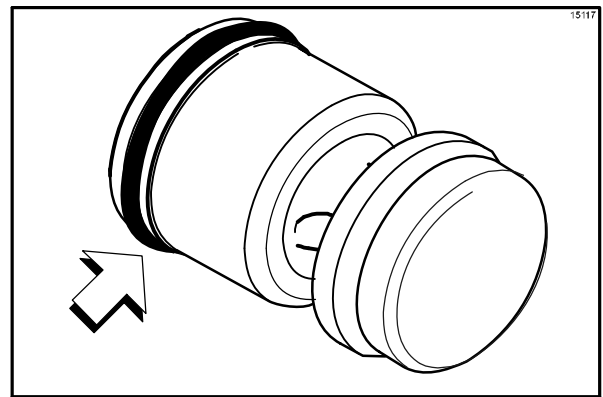


Figure 136

Step 3

Apply a thin layer of lubricant to the inside of the pump cylinder at the retaining pin hole end. (See Figure 137.)

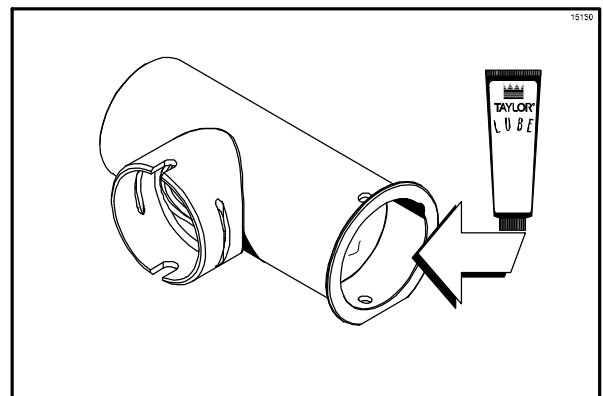


Figure 137

Step 4

Insert the piston into the retaining pin hole end of the pump cylinder. (See Figure 138.)

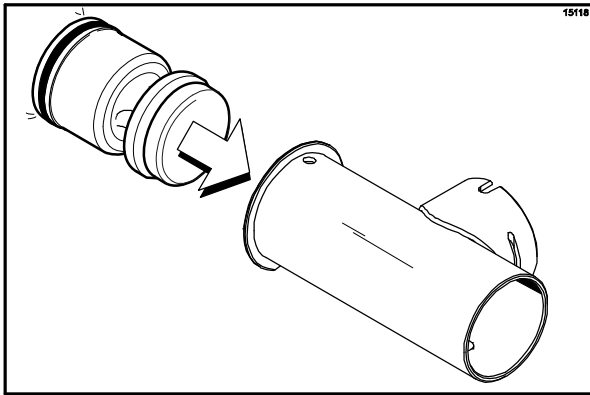


Figure 138

Step 5

Assemble the valve cap. Slide the red o-ring into the groove of the valve cap. DO NOT lubricate the o-ring. (See Figure 139.)

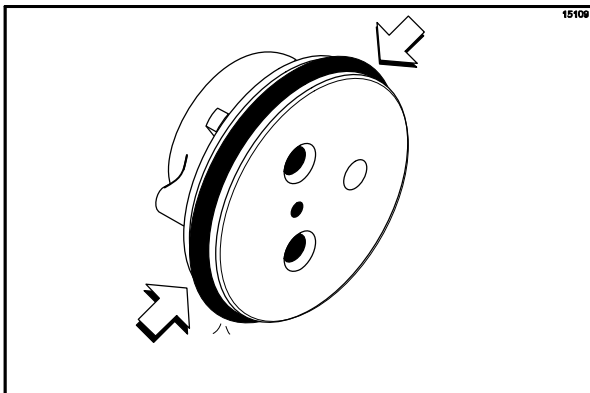


Figure 139

Step 6

Slide the pump valve gasket into the holes on the cap. DO NOT lubricate the gasket. (See Figure 140.)

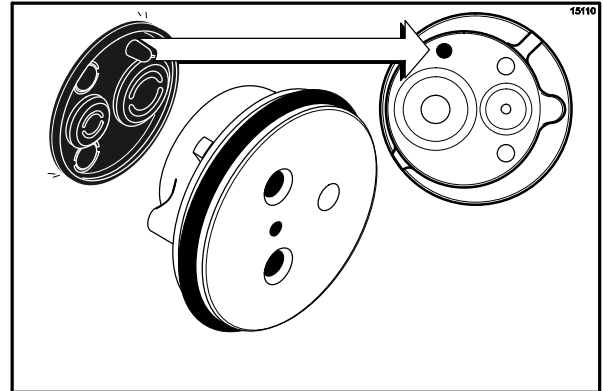


Figure 140

Step 7

Insert the valve cap into the hole in the mix inlet adapter. (See Figure 141.)

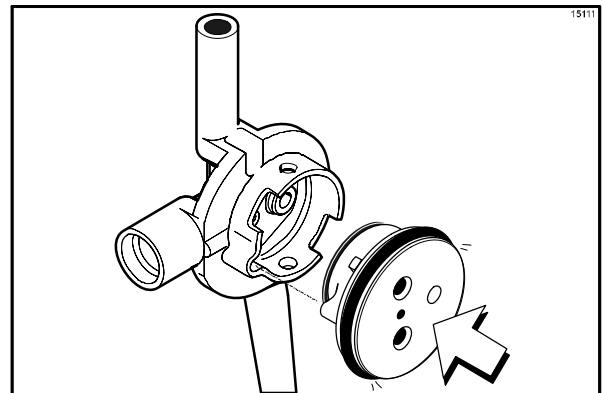


Figure 141

Step 8

Insert the mix inlet assembly into the pump cylinder. (See Figure 142.)

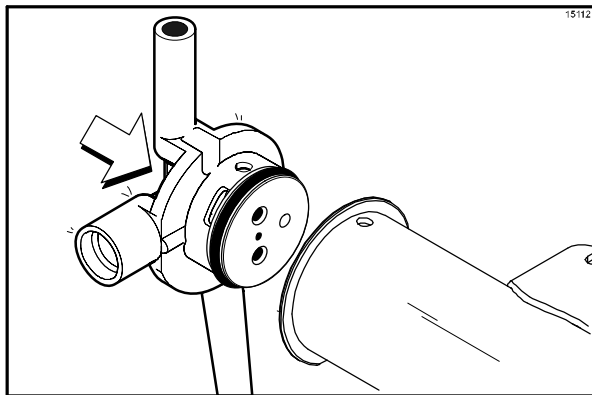


Figure 142

Note: The adapter must be positioned into the notch located at the end of the pump cylinder.

Step 9

Secure the pump parts in position by sliding the retaining pin through the cross holes located at one end of the pump cylinder. (See Figure 143.)

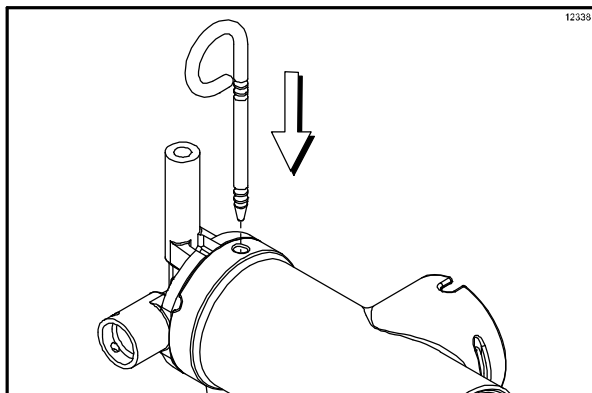


Figure 143

Note: The head of the retaining pin should be located at the top of the pump when installed.

Step 10

Assemble the feed tube assembly. Slide the check ring into the groove of the feed tube. (See Figure 144.)

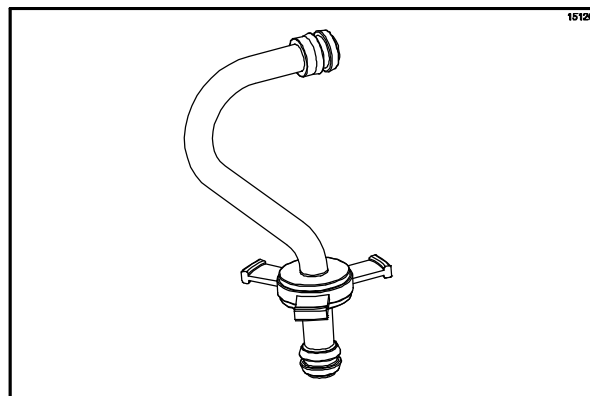


Figure 144

Step 11

Install one red o-ring on each end of the mix feed tube, and thoroughly lubricate. (See Figure 145.)

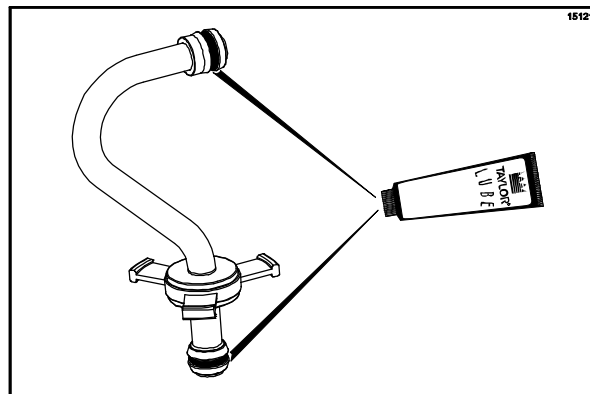


Figure 145

Step 12

Lay the pump assembly, pump clip, cotter pin and agitator in the bottom of the mix hopper for sanitizing. (See Figure 146.)

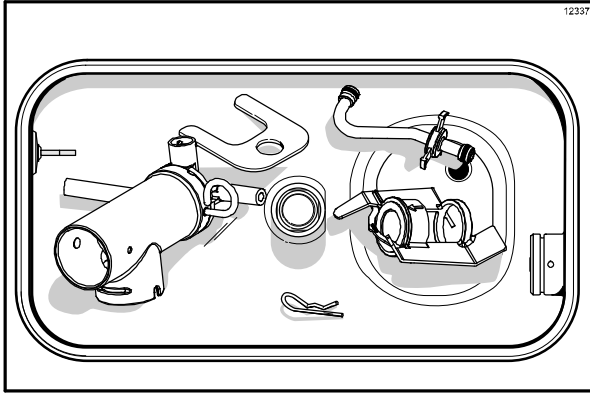


Figure 146

Step 13

Slide the large black o-ring and the two smaller black o-rings into the grooves on the drive shaft. Thoroughly lubricate the o-rings and shaft. DO NOT lubricate the hex end of the shaft. (See Figure 147.)

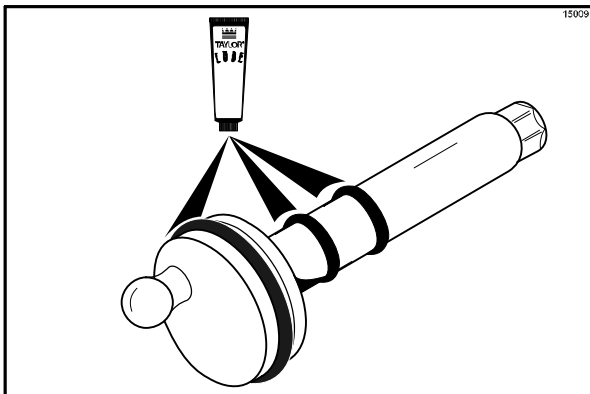


Figure 147

Step 14

Install the hex end of the drive shaft into the drive hub at the rear wall of the mix hopper. (See Figure 148.)

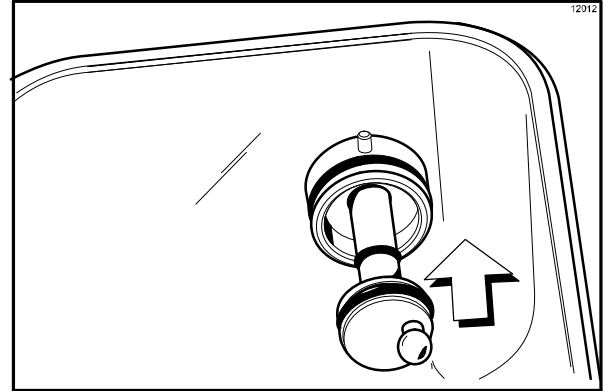


Figure 148

Note: For ease in installing the pump, position the ball crank of the drive shaft in the 3 o'clock position.

Sanitizing - Shake Side

Step 1

Prepare a pail of an approved 100 PPM sanitizing solution (examples: 2-1/2 gal. [9.5 liters] of Kay-5® or 2 gal. [7.6 liters] of Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.

Step 2

Install syrup hole plugs in the syrup ports in the freezer door. (See Figure 149.)

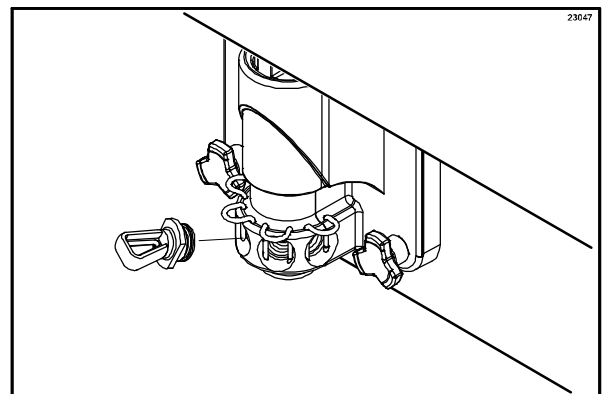


Figure 149

Step 3

Pour the sanitizing solution over all parts in the bottom of the mix hopper and allow it to flow into the freezing cylinder.

Note: You have just sanitized the mix hopper and parts; therefore, be sure your hands are clean and sanitized before going on in these instructions.

Step 4

Prepare two more pails of an approved 100 PPM sanitizing solution (examples: Kay-5® or Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.

Step 5

Install the air/mix pump assembly at the rear of the mix hopper. To position the pump on the drive hub, align the drive slot in the piston with the drive crank of the drive shaft. Secure the pump in place by slipping the pump clip over the collar of the pump, making sure the clip fits into the grooves in the collar. (See Figure 150.)

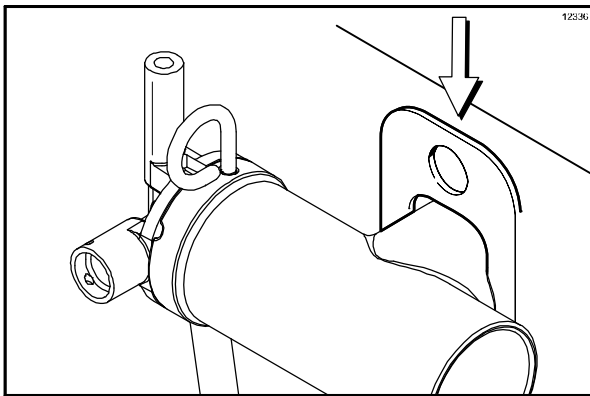


Figure 150

Step 6



CAUTION!

Install the pump end of the mix feed tube and secure with the cotter pin. Failure to follow this instruction could result in sanitizer spraying on the operator.

Step 7

Using the white hopper brush, clean the mix level sensing probes, the mix hopper, mix inlet hole, the outside of the agitator drive shaft housing, the agitator, the air/mix pump, pump clip, mix feed tube and cotter pin.

Step 8

Pour the two pails of sanitizing solution into the mix hopper. The sanitizing solution should be within 1" (25 mm) of the top of the hopper.


Step 9

Using the white hopper brush, scrub the exposed sides of the hopper. Wait at least five minutes before proceeding with these instructions.

Step 10

Place the power switch in the ON position.

Step 11

Touch the WASH symbol . This will cause the sanitizing solution in the freezing cylinder to come in contact with all areas of the freezing cylinder. (See Figure 151.)

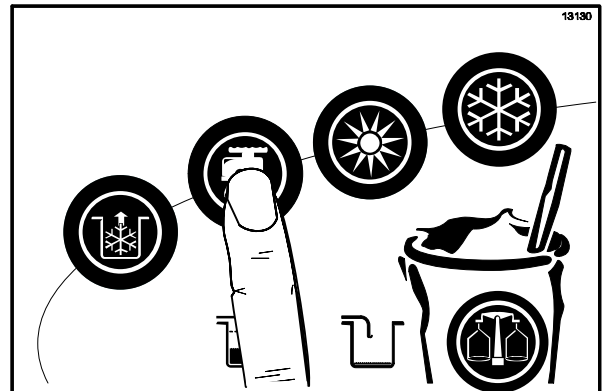



Figure 151

Step 12

With a pail beneath the door spout, open and close the draw valve six times.

Step 13

Touch the PUMP symbol  to sanitize the inside of the air/mix pump and the mix feed tube.



Step 14

Open the draw valve and draw off all the remaining sanitizing solution.

IMPORTANT! The unit must NOT be placed in AUTO until all sanitizing solution has been removed from the freezing cylinder and proper priming procedures have been completed.

Failure to follow this instruction may result in damage to the freezing cylinder.

Step 15

Touch the WASH and PUMP symbols   to stop the WASH and PUMP modes and to close the draw valve. (See Figure 152.)

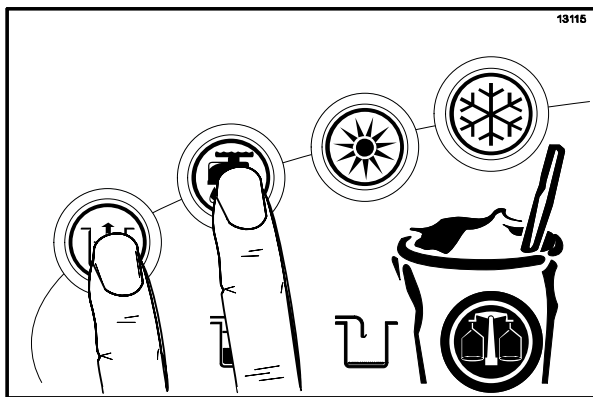


Figure 152

Note: Be sure your hands are clean and sanitized before going on in these instructions.

Step 16

Place the agitator on the agitator drive shaft housing. (See Figure 153.)

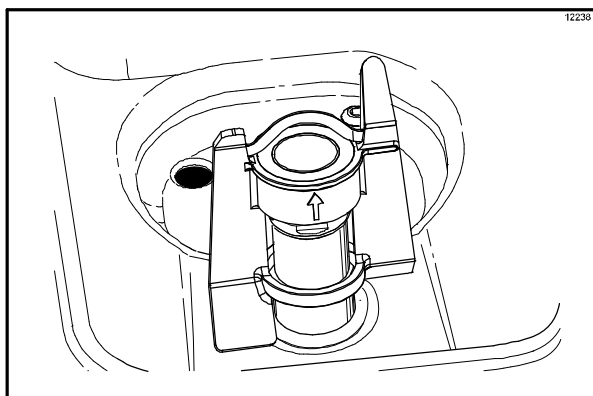


Figure 153

Note: If the agitator paddle should stop turning during normal operation, with **sanitized hands**, remove the agitator from the agitator drive shaft housing and brush clean with sanitizing solution. Install the agitator back onto the agitator drive shaft housing.

Step 17

Remove the cotter pin from the pump. Stand the mix feed tube in the corner of the mix hopper. Place the cotter pin in position in the outlet fitting of the pump.

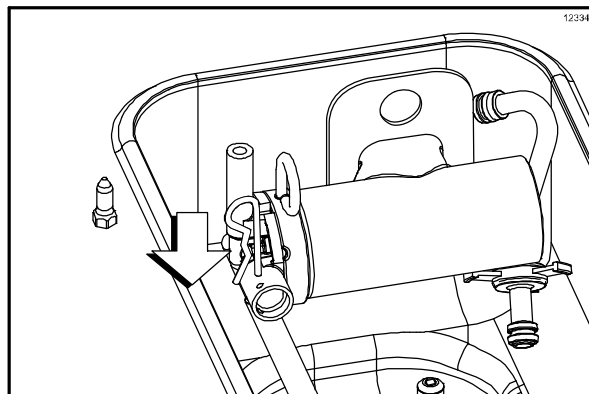


Figure 154

Step 18

Remove the restrictor cap and the syrup hole plugs.

Step 19

Return to the freezer with a small amount of sanitizing solution. With a pail below the door spout, dip the door spout brush into the sanitizing solution and brush clean the syrup ports in the freezer door, door spout, bottom of the driven spinner and spinner blade, and syrup line fittings.

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 20

With the syrup port brush, brush each syrup port hole 10 to 15 times. Dip the brush in sanitizing solution before brushing each port.

Step 21

Fill the squeeze bottle with sanitizing solution. With a pail beneath the door, insert the tube end of the squeeze bottle into the syrup port, and squeeze the bottle firmly. This action will force solution out of the adjacent port and down around the spinner. This procedure should be performed for at least 10 seconds per port.

Step 22

Install the syrup valves and the restrictor cap.

Sanitizing - Soft Serve Side

Step 1

Prepare a pail of an approved 100 PPM sanitizing solution (examples: 2-1/2 gal. [9.5 liters] of Kay-5® or 2 gal. [7.6 liters] of Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.

Step 2

Pour the sanitizing solution over all parts in the bottom of the mix hopper and allow it to flow into the freezing cylinder.

Note: You have just sanitized the mix hopper and parts; therefore, be sure your hands are clean and sanitized before going on in these instructions.

While the solution is flowing into the freezing cylinder, take particular care to brush clean the mix level sensing probes, the mix hopper, mix inlet hole, the outside of the agitator housing, the agitator, the air/mix pump, pump clip, mix feed tube and cotter pin.

Step 3

Install the pump assembly at the rear of the mix hopper. To position the pump on the drive hub, align the drive hole in the piston with the drive crank of the drive shaft. Secure the pump in place by slipping the pump clip over the collar of the pump, making sure the clip fits into the grooves in the collar. (See Figure 155.)

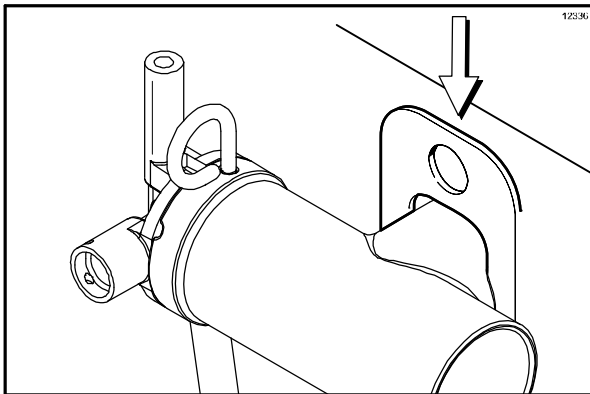


Figure 155

Step 4



CAUTION!

Install the pump end of the mix feed tube and secure with the cotter pin. Failure to follow this

instruction could result in sanitizer spraying on the operator.

Step 5

Prepare another pail of an approved 100 PPM sanitizing solution (examples: Kay-5® or Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.


Step 6

Pour the sanitizing solution into the mix hopper.


Step 7

Brush the exposed sides of the hopper. Wait at least 5 minutes before proceeding with these instructions.



Step 8

Touch the WASH symbol . This will cause the sanitizing solution in the freezing cylinder to be agitated.

Step 9

With a pail beneath the door spout, open the draw valve and touch the PUMP symbol . Open and close the draw valve 6 times. Open the draw valve and draw off the sanitizing solution.

Step 10

Touch the WASH and PUMP symbols   and close the draw valve. (See Figure 156.)

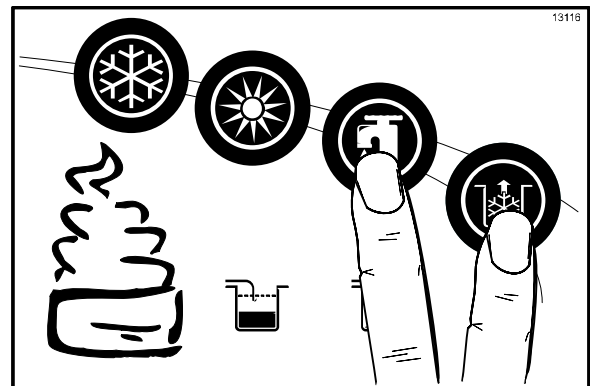


Figure 156

IMPORTANT! The unit must NOT be placed in AUTO until all sanitizing solution has been removed from the freezing cylinder and proper priming procedures have been completed. Failure to follow this instruction may result in damage to the freezing cylinder.

Note: Be sure your hands are clean and sanitized before going on in these instructions.

Step 11

Place the agitator on the agitator drive shaft housing. (See Figure 157.)

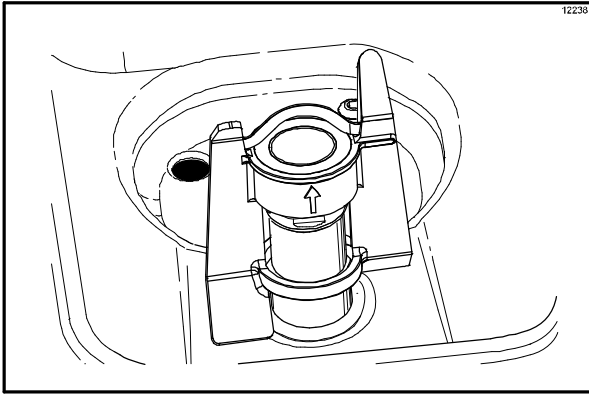


Figure 157

Note: If agitator should stop turning during normal operation, with **sanitized hands**, remove agitator from agitator drive shaft housing and brush clean with sanitizing solution. Install the agitator back onto the agitator drive shaft housing.

Step 12

Remove the cotter pin from the pump. Stand the mix feed tube in the corner of the mix hopper. Place the cotter pin in position in the outlet fitting of the pump. (See Figure 158.)

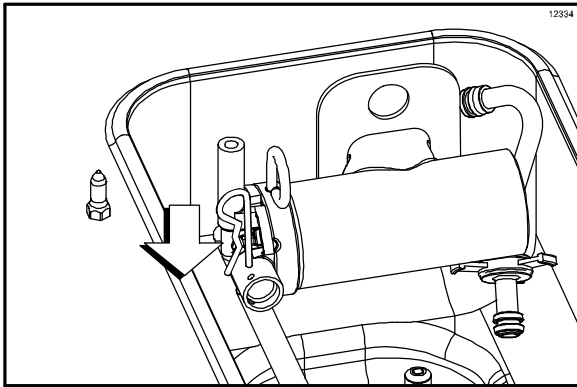




Figure 158

Note: You have just sanitized all food contact surfaces of the freezer.

Priming - Shake Side

Note: Use only FRESH MIX when priming the freezer.

Step 1

With a pail beneath the door spout, touch any FLAVOR SELECT symbol  to open the draw valve. Pour 2-1/2 gallons (9.5 liters) of FRESH mix into the mix hopper and allow it to flow into the freezing cylinder. This will force out any remaining sanitizing solution. When full strength mix is flowing from the door spout, touch any FLAVOR SELECT symbol  to close the draw valve.

IMPORTANT! Failure to remove all sanitizing solution may result in damage to the freezing cylinder.

Step 2

When mix stops bubbling down into the freezing cylinder, remove the cotter pin from the outlet fitting of the mix pump. Insert the outlet end of the mix feed tube into the mix inlet hole in the mix hopper. Place the inlet end of the mix feed tube into the outlet fitting of the mix pump. Secure with cotter pin. (See Figure 159.)

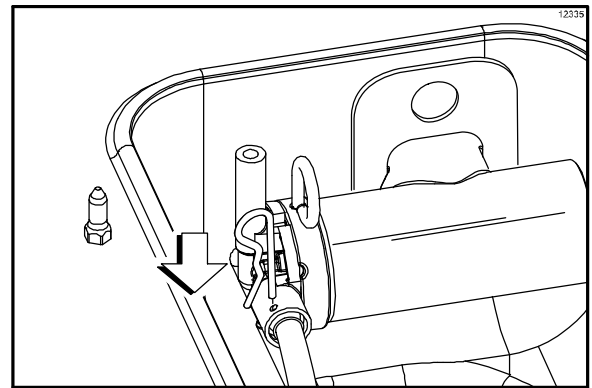


Figure 159

Step 3

Install the shake cup holder. (See Figure 160.)

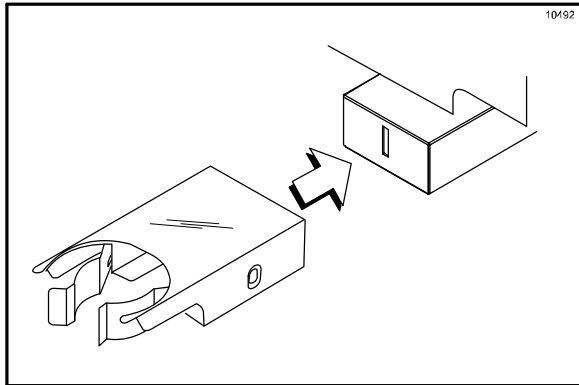


Figure 160

Step 4

Select the AUTO symbol ❄.

Step 5

Fill the hopper with fresh mix and place the mix hopper cover in position.

Priming - Soft Serve Side

Note: Use only FRESH MIX when priming the freezer.

Step 1

With a pail beneath the door spout, open the draw valve. Pour 2-1/2 gallons (9.5 liters) of FRESH mix into the mix hopper and allow it to flow into the freezing cylinder. This will force out any remaining sanitizing solution. When full strength mix is flowing from the door spout, close the draw valve.

IMPORTANT! Failure to remove all sanitizing solution may result in damage to the freezing cylinder.

Step 2

When mix stops bubbling down into the freezing cylinder, remove the cotter pin from the outlet fitting of the mix pump. Insert the outlet end of the mix feed tube into the mix inlet hole in the mix hopper. Place the inlet end of the mix feed tube into the outlet fitting of the mix pump. Secure with cotter pin.

Step 3

Select the AUTO symbol ❄.

Note: This procedure should be done 15 minutes before product is expected to be served.

Step 4

Fill the hopper with fresh mix and place the mix hopper cover in position.

Daily Closing Procedures

This procedure must be done at the close of business.

Shake Side

Important: Fill the mix hopper with mix up to the fill level indicator on the agitator paddle. (See Figure 161.)

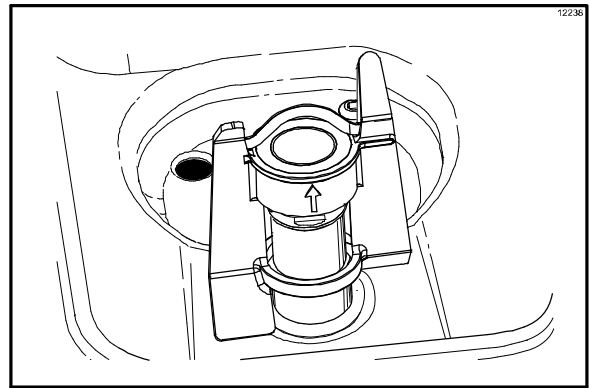


Figure 161

Both sides of the freezer must be in the AUTO mode (AUTO symbol ❄ is illuminated) or in the STANDBY mode (STANDBY symbols ⚡ and ⚡ are illuminated) before the HEAT cycle may be started.

Note: If the BRUSH CLEAN COUNTER display has counted down to 1 day, **do not add mix**. The machine must be disassembled and brush cleaned within 24 hours.

Step 1

Remove the hopper cover, shake cup holder, splash shield and drip pans.

Make sure your hands are clean and sanitized before performing these next steps.

Note: Select the CALIBRATION symbol ⚙ to stop agitator movement for 10 seconds. Select the CALIBRATION symbol ⚙ again to exit the calibration mode. The agitator will automatically restart after 10 seconds.

Step 2

Remove the agitator from the mix hopper and the restrictor cap from the shake freezer door spout.

Step 3

Take the agitator, hopper cover, shake cup holder, drip pans, front drip tray, splash shield and restrictor cap to the sink for further cleaning and sanitizing.

Take the syrup hole plugs, spout cap, and spout cap o-ring to the sink for further cleaning and sanitizing.

Step 4

Rinse these parts in cool, clean water.

Step 5

Prepare a small amount of an approved 100 PPM cleaning solution (examples: Kay-5® or Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.

Step 6

Brush clean these parts.

Step 7

Place the restrictor cap, front drip tray, shake cup holder and splash shield on a clean, dry surface to air-dry overnight or until the heating cycle is complete.

Step 8

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

Step 9

Sanitize the syrup hole plugs, spout cap, spout cap o-ring, drip pans, agitator, and hopper cover.

Step 10

Install the agitator back onto the agitator drive shaft housing. Replace the hopper cover. (See Figure 162.)

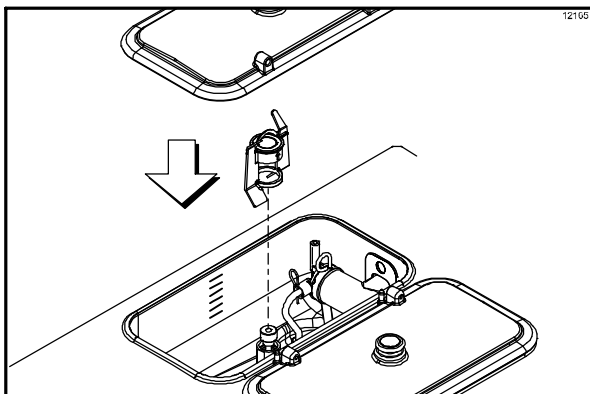


Figure 162

Important: If you do not install the agitator correctly, the machine will fail the heat cycle and will lock out in the morning.

Step 11

Remove the syrup lines from the freezer door. (See Figure 163.)

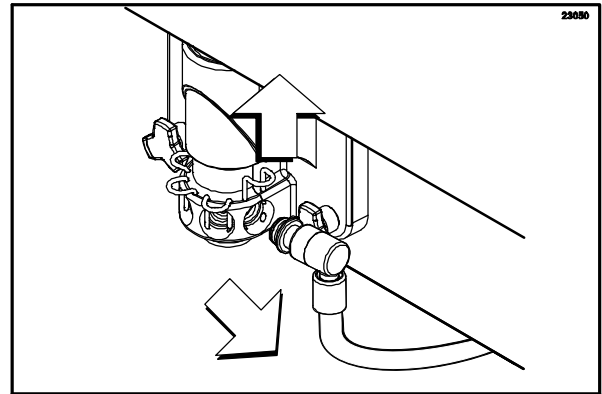


Figure 163

Step 12

Return to the freezer with a small amount of cleaning solution. With a pail below the door spout, dip the door spout brush into the cleaning solution and brush clean the syrup ports in the freezer door, door spout and bottom of the driven spinner, spinner blade, and syrup line fittings. (See Figure 164.)

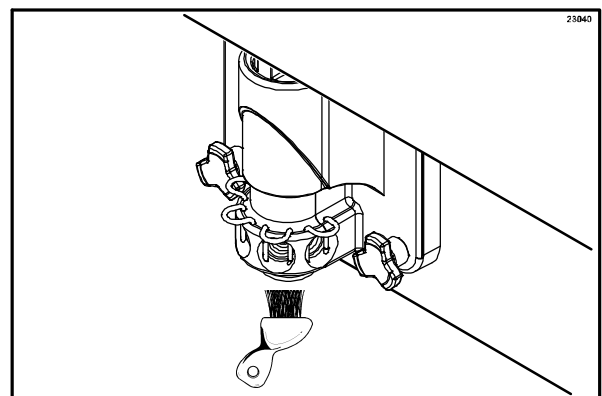


Figure 164

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

Step 13

With the syrup port brush, brush each syrup port hole 10 to 15 times. Dip the brush in the cleaning solution before brushing each port. (See Figure 165.)

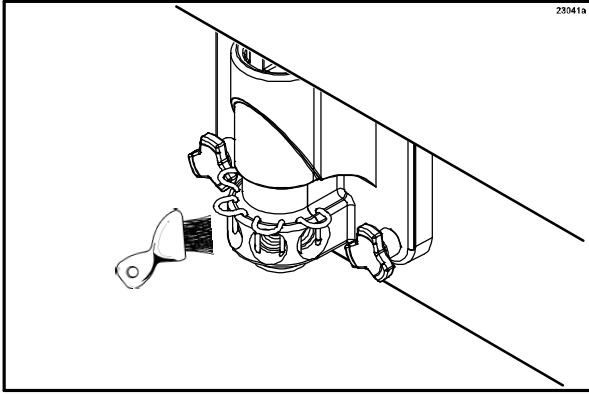


Figure 165

Step 14

With sanitized hands, remove the syrup valve retainers. Brush clean the retainers and retainer holes. Replace the syrup valve retainers.

Step 15

Fill the squeeze bottle with cleaning solution. With a pail beneath the door, insert the tube end of the squeeze bottle into the syrup ports, and squeeze the bottle firmly. This action will force solution out of the adjacent port and down around the spinner. This procedure should be performed for at least 10 seconds per port. (See Figure 166.)

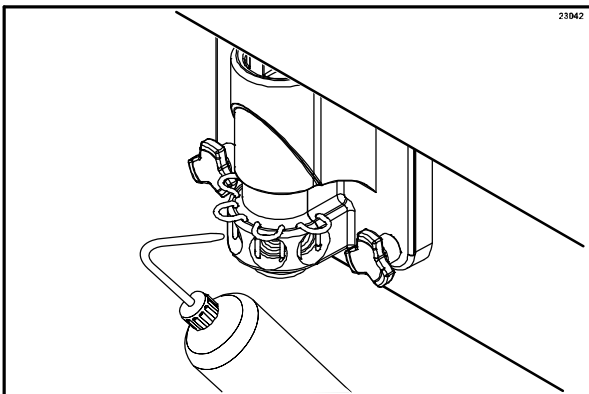


Figure 166

Step 16

Place the spout cap o-ring in the spout cap. Fill the spout cap with sanitizing solution. Install the spout cap over the end of the door spout. (See Figure 167.)

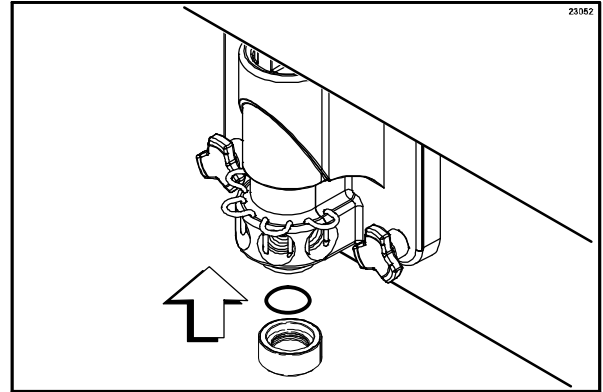


Figure 167

Step 17

Raise each retainer pin. Install the syrup hole plugs in the syrup ports in the freezer door. Lower the retainer pins to secure the hole plugs in the door. (See Figure 168.)

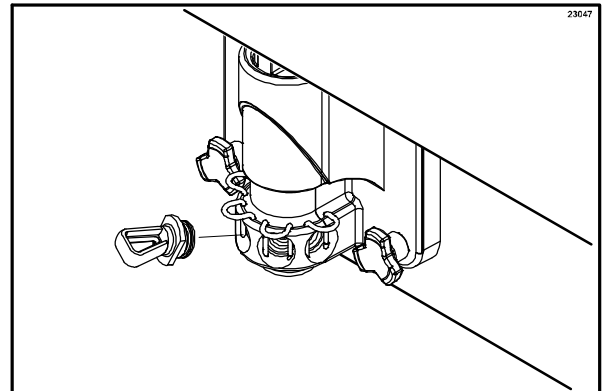


Figure 168

Step 18

Fill the squeeze bottle with sanitizing solution. Hold the bottle over a pail. Squeeze the bottle and thoroughly rinse the slot of each syrup nose fitting.

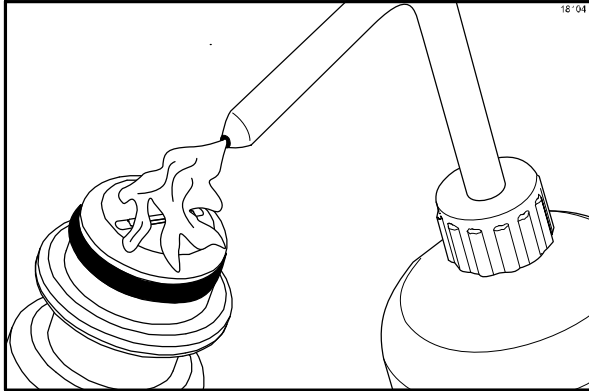


Figure 169

Step 19

Wipe the outside of each syrup nose fitting with a sanitized towel.

Step 20

Using a clean, sanitized towel, wipe down the freezer door, front panel, the area around the bottom of the freezer door, and any other areas that demonstrate a build-up of either moisture or food substance.

Soft Serve Side

This procedure must be done at the close of business.

Important: Fill the mix hopper with mix up to the fill level indicator on the agitator paddle. (See Figure 170.)

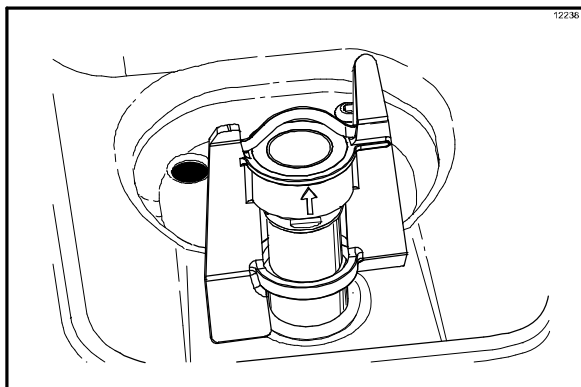







Figure 170

Note: If the BRUSH CLEAN COUNTER display has counted down to one day, **do not add mix**. The machine must be disassembled and brush cleaned within 24 hours.

Both sides of the freezer must be in the AUTO (AUTO symbol  is illuminated) or in the STANDBY mode (STANDBY symbols  and  are illuminated) before the HEAT cycle may be started.

Step 1

Place the heater topping switches in the OFF position by touching the heater symbols  . The symbols will not be illuminated when the heaters are off. (See Figure 171.)

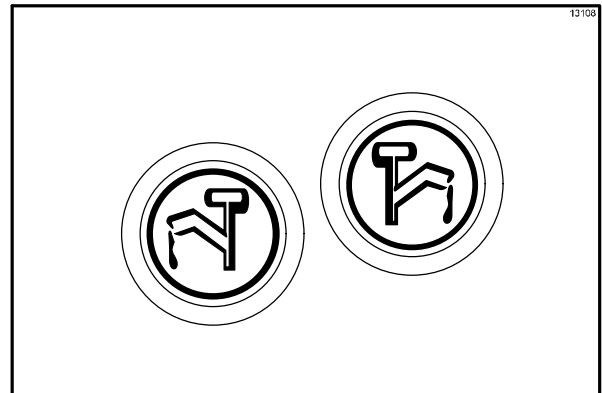




Figure 171

Step 2

Remove the hopper cover.

MAKE SURE YOUR HANDS ARE CLEAN AND SANITIZED BEFORE PERFORMING THESE NEXT STEPS.

Note: Select the CALIBRATION symbol  to stop agitator movement for 10 seconds. Select the CALIBRATION symbol  again to exit the calibration mode. The agitator will automatically restart after 10 seconds.

Step 3

Remove the agitator from the mix hopper.

Step 4

Take the agitator and hopper cover to the sink for further cleaning and sanitizing.

Step 5

Rinse these parts in cool, clean water.

Step 6

Prepare a small amount of an approved 100 PPM sanitizing solution (examples: Kay-5® or Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS. Brush clean the parts.

Step 7

Prepare a small amount of an approved 100 PPM sanitizing solution (examples: Kay-5® or Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS. Sanitize the agitator and hopper cover.

Step 8

Install the agitator back onto the agitator drive shaft housing. Replace the hopper cover.

Important: If you do not install the agitator correctly, the machine will fail the heat cycle and will lock out in the morning.

Step 9

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

Note: To assure sanitary conditions are maintained, brush each item for a total of 60 seconds, repeatedly dipping the brush in cleaning solution. (See Figure 172.)

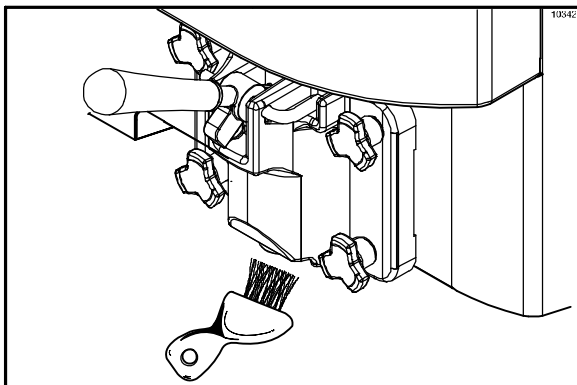


Figure 172

Step 10

Remove, clean and reinstall the long drip pan through the front panel. (See Figure 173.)

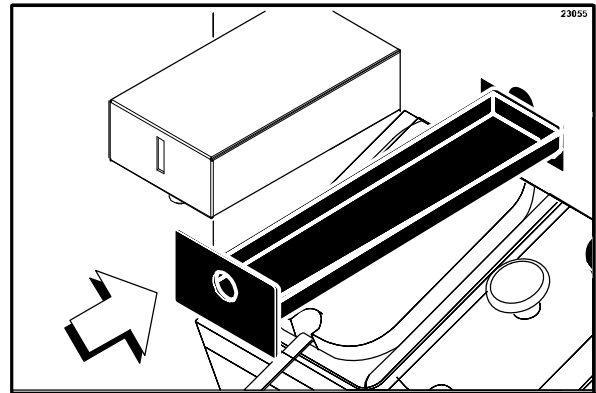


Figure 173

Step 11

Remove, clean and reinstall the two short drip pans in the rear panel.

Step 12

Remove, clean and reinstall the two notched drip pans in the left and right side panels. (See Figure 174.)

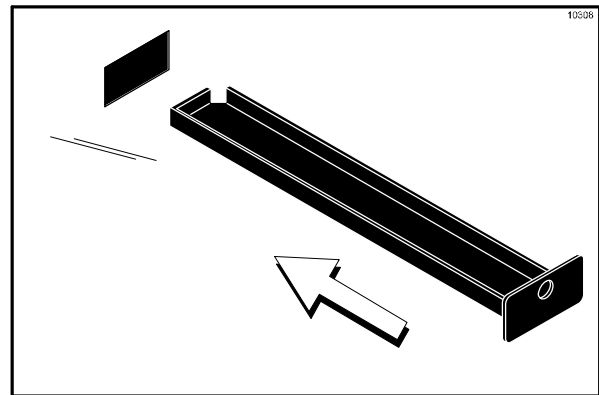


Figure 174



Step 13

Using a clean, sanitized towel, wipe down the freezer door, front panel, the area around the bottom of the freezer door, and any other areas that demonstrate a build-up of either moisture or food substance.

The heat cycle will start at the AUTO HEAT TIME setting in the Manager's Menu (see page 42).

There are three phases of the heat cycle: Heating, Holding and Cooling. Each phase has a time limit. If any one of the three phases fail to reach the proper temperatures within the time limit, the cycle will



automatically abort and return to the STANDBY mode.

A failure message will appear on the vacuum fluorescent display (VFD) to inform the operator that the machine did not successfully complete the heat treatment cycle. The product may not be safe to serve. The freezer will be locked out (softlock) of the AUTO mode. The operator will be given the option of selecting the HEAT symbol  which will begin a new heat cycle, or touching the WASH symbol  which will place the side(s) into the OFF mode to allow a brush clean of the machine.

Note: Once the heating cycle has started, it cannot be interrupted. The heating cycle will take a maximum of 4 hours to complete with full hoppers.



DO NOT attempt to draw product or disassemble the unit during the HEAT cycle. The product is hot and under extreme pressure.

When the heating cycle is complete, the control will return to the STANDBY mode. The STANDBY symbols  and  will be illuminated.

Daily Opening Procedures

Before performing the opening procedures, check the display panel for any error messages. Normally the display is blank unless an operational fault has occurred. If a fault has been detected, investigate the cause and follow the instructions on the display before proceeding with the opening procedures. (See Failure Messages, pages 35 and 45.)



Set-Up - Complete The Following

Make sure your hands are clean and sanitized before performing these next steps.

Step 1

With the drain plugs closed, check the water level in the two heated topping wells. Fill the wells with water to the indicating mark on the bottom of the well.

Step 2

Place the topping heaters in the ON position by touching the topping heater symbols  .

CAUTION: As soon as the heaters are turned on, the topping wells will begin heating. This heating process will take approximately 2-1/2 hours to reach temperature. The water level in the wells should be checked daily.

Step 3

Prepare a pail of an approved 100 PPM sanitizing solution (examples: Kay-5® or Stera-Sheen®). **USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.** Sanitize the topping pumps by placing the entire pump assembly in the pail of sanitizing solution. Pump the solution through to thoroughly sanitize the pump.

Step 4

Fill the topping containers with topping. Place the caramel and fudge topping containers in the heated wells. Place the remaining two topping containers in the unheated wells. Cover the containers.

Step 5

Sanitize the two topping ladles and place in the cold topping containers.

Step 6


Fill the cup dispensers, cup lid holder, and cone dispenser.

Step 7

To fill the cone dispenser, slide the drawer up and pull out. Push the spring guide all the way back to its locking position. Place the cones in the drawer and release the spring guide.

Shake Side

Step 1

When the heating cycle is complete, the heat cycle symbols  will no longer be illuminated and the machine will automatically enter the STANDBY mode. Prepare a small amount of an approved 100 PPM sanitizing solution (examples: Kay-5® or Stera-Sheen®). **USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.**

Step 2

Remove the syrup hole plugs, the syrup valve retainers, and the valve cap from the freezer door. Sanitize the restrictor cap, syrup hole plugs, syrup valve retainers, spout cap and o-ring, shake cup holder, front drip tray and splash shield, in this solution.

Step 3

Return to the freezer with a small amount of sanitizing solution. With a pail below the door spout, dip the door spout brush into the sanitizing solution. Brush clean the door spout, the bottom of the driven spinner and spinner blade, and the syrup line fittings. (See Figure 175.)

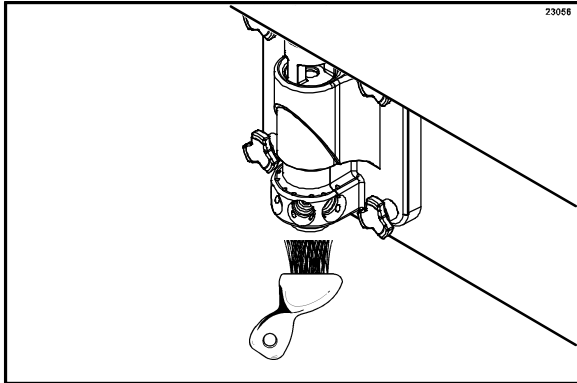


Figure 175

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 4

With the syrup port brush, brush each syrup port hole 10 to 15 times. Dip the brush in sanitizing solution before brushing each port. (See Figure 176.)

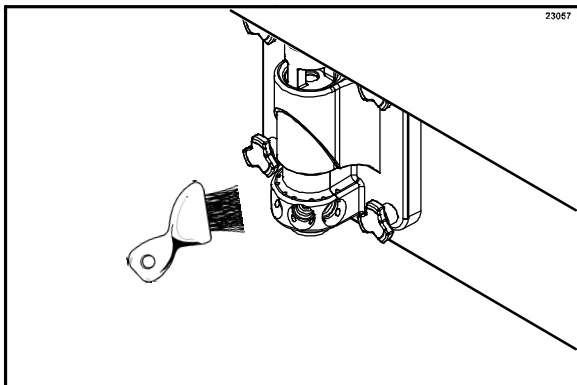


Figure 176

Step 5

Fill the squeeze bottle with sanitizing solution. With a pail beneath the door, insert the tube end of the squeeze bottle into the syrup port, and squeeze the bottle firmly. This action will force solution out of the adjacent port and down around the spinner. This procedure should be performed for at least 10 seconds per port. (See Figure 177.)

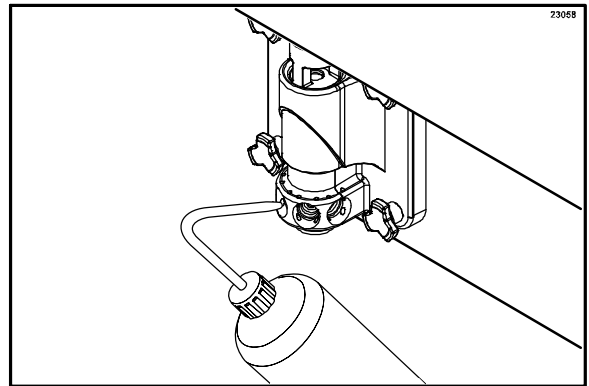


Figure 177

Step 6

Reinstall the syrup valve retainers.

Step 7

Install the restrictor cap on the freezer door spout. (See Figure 178.)

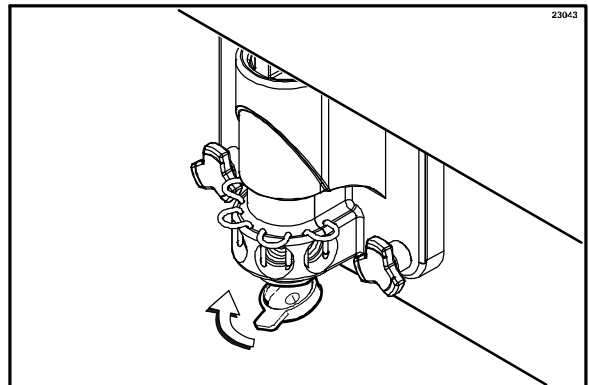


Figure 178

Step 8

With the pail still beneath the door, remove the syrup nose fitting from the syrup line fitting by turning it counter-clockwise. Hold the syrup fittings in an “up” position to minimize syrup loss. (See Figure 179.)

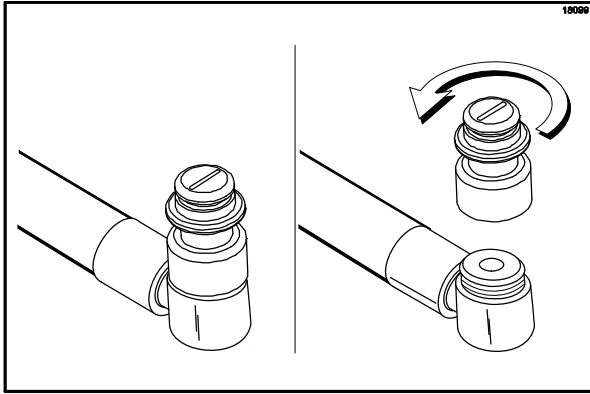


Figure 179

Step 9

Remove the duckbill valve and o-ring from the syrup nose fitting.

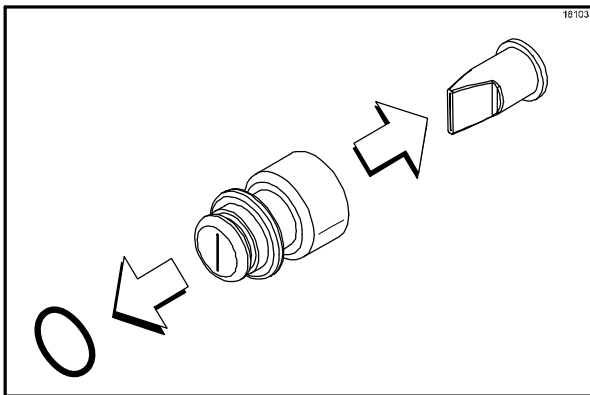


Figure 180

Step 10

Using the white end of the double-ended brush, scrub the inside of the syrup nose fitting to remove any residual particles.

Step 11

Using a shake cup filled with an approved 100 PPM sanitizing solution, rinse the syrup nose fitting thoroughly.

Step 12

Using a clean, sanitized towel, gently wipe any syrup from the duckbill valve.

Step 13

Using a shake cup filled with sanitizing solution, thoroughly rinse the duckbill valve.

Step 14

Install the duckbill valve into the syrup nose fitting with the flat end aligned with the open slot in the syrup nose fitting.

Note: Replace the duckbill valve if it is damaged or extends past the syrup nose fitting slot. (See Figure 181.)

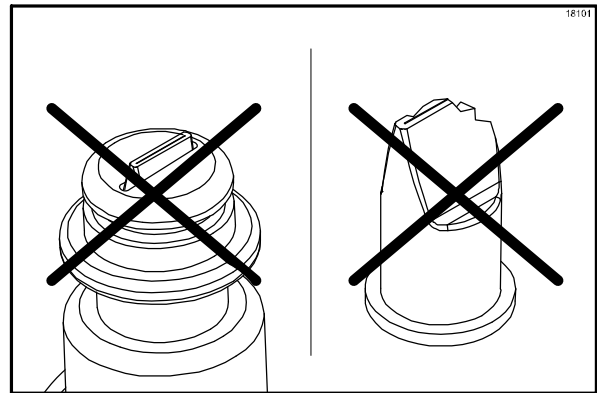


Figure 181

Step 15

Install the syrup nose fitting onto the syrup line fitting. Tighten by hand until snug.

Note: The **duckbill valve must be wet** when the syrup nose fitting is assembled on the syrup line fitting. The sanitized water will lubricate the bottom flat surface and prevent the duckbill from twisting when the the syrup nose fitting is tightened.

Step 16

Inspect the duckbill valve for proper installation inside the syrup nose fitting. The tip of the duckbill valve **must be flat** to seal the syrup line. (See Figure 182.)

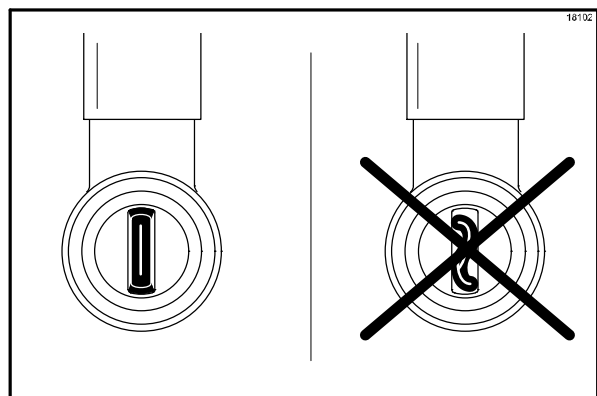


Figure 182

If the tip is not flat, remove the syrup nose fitting and remove/reinstall the duckbill valve. Using a shake cup filled with sanitizing solution, rinse the syrup nose fitting to wet the bottom of the duckbill valve. Reinstall the syrup nose fitting onto the syrup line fitting. If the tip will not remain flat when the syrup fitting is assembled, replace the duckbill valve.

Step 17

Install the o-ring on the syrup nose fitting.

Step 18

Repeat steps 8 through 17 for all syrup flavors.

Step 19

Each syrup flavor must be primed to purge the air out of the syrup lines. To prime each syrup line, hold the syrup line up over an empty cup. (See Figure 183.)

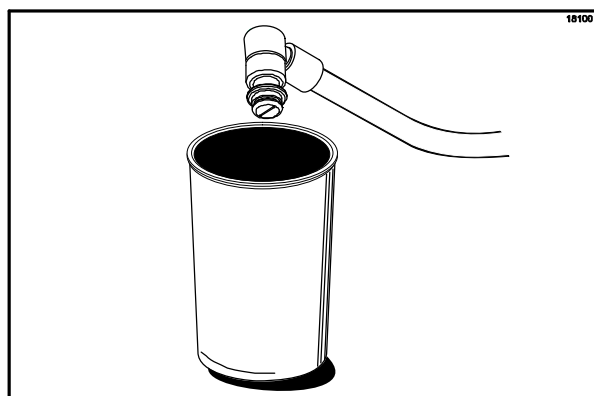






Figure 183

Step 20

Touch the CALIBRATION symbol  to display the menu options. The CALIBRATION symbol , the AUTO symbol  on the shake side, and the OPTIONAL FLAVOR symbol  will be illuminated.

The screen will display the calibration menu options. (See Figure 184.)

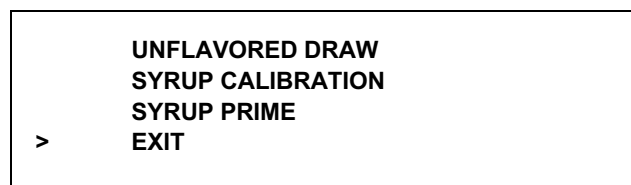




Figure 184

Step 21

Touch the AUTO symbol  or the OPTIONAL FLAVOR symbol  to scroll the arrow to SYRUP PRIME. (See Figure 185.)

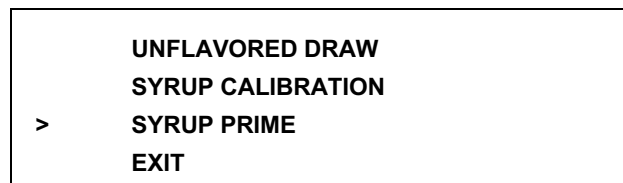



Figure 185

Step 22

Touch the CALIBRATION symbol  to enter the SYRUP PRIME mode. (See Figure 186.)

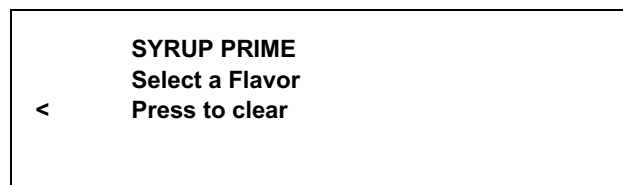



Figure 186

Step 23

Touch the corresponding syrup flavor symbol . The flavor symbol should be illuminated and the syrup pump for the selected flavor will start running at the maximum speed. (See Figure 187.)

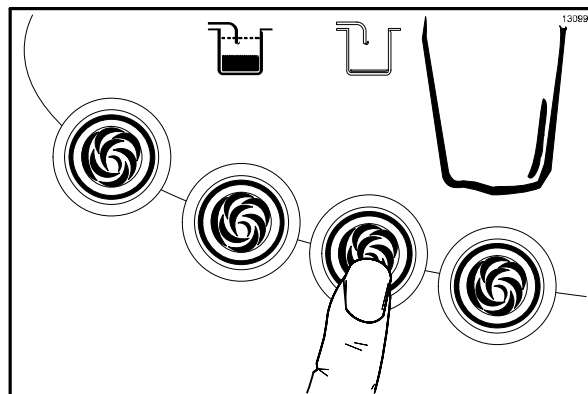




Figure 187

Step 24

When a steady stream of syrup is flowing from the syrup valve and all air has been purged from the syrup line, touch any syrup flavor symbol  to stop the pump.

Step 25

Repeat steps 23 - 24 to prime the rest of the syrup lines. After priming is complete, exit the SYRUP PRIME mode by touching the CALIBRATION symbol .

Step 26

Using the squeeze bottle filled with sanitizing solution, sanitize the syrup valve nose fittings.

Step 27

Lubricate the o-ring. Raise the syrup valve retainer. Install the syrup valve. Push the syrup valve retainer down to hold the valve in place. Repeat this procedure for each syrup valve. (See Figure 188.)

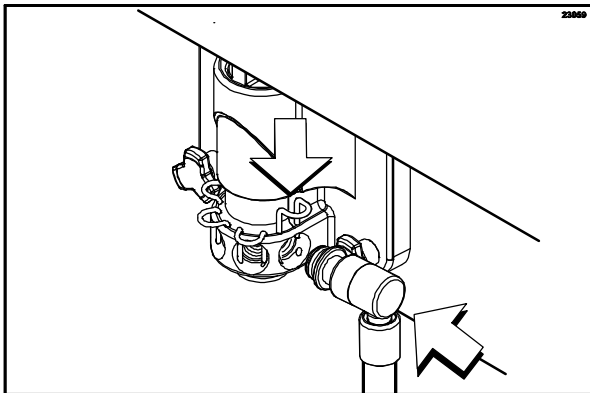


Figure 188

Note: Do not install an empty syrup line in the freezer door. Insert a syrup port plug in the door whenever a syrup line is not in use. This will prevent an accumulation of mix inside the valve fitting and the syrup line.


Step 28

Using a clean, sanitized towel, wipe down the freezer door, front panel, the area around the bottom of the freezer door, and any other areas that demonstrate a build-up of either moisture or food substance.

Step 29

Install the shake cup holder, the front drip tray and the splash shield.

Step 30

When ready to resume normal operation, touch the AUTO symbol . (See Figure 189.) The control has a feature in the Manager's Menu to enable or disable the AUTO START feature. When AUTO START is enabled, the machine will automatically exit the STANDBY mode and start both sides in the AUTO mode at a designated time each day.

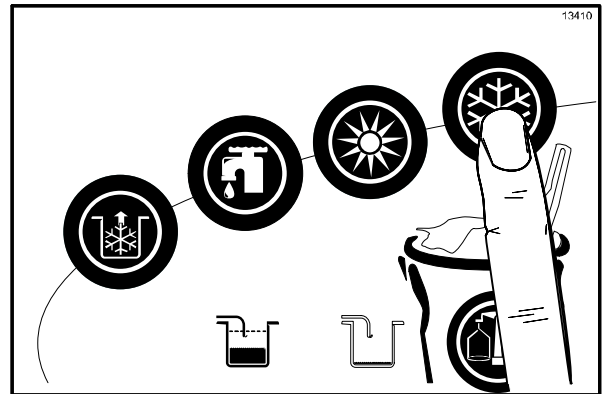


Figure 189

Note: Placing the machine in AUTO should be performed approximately 15 minutes prior to serving product.

Soft Serve Side

Step 1

Prepare a small amount of an approved 100 PPM sanitizing solution. USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.

Step 2

Return to the freezer with a small amount of sanitizing solution. Dip the door spout brush into the sanitizing solution and brush clean the door spout, and bottom of the draw valve. (See Figure 190.)

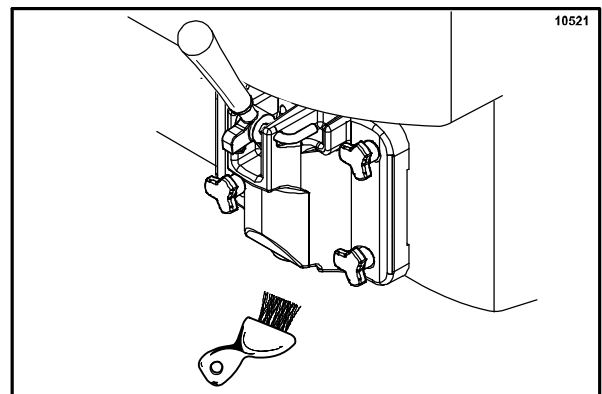


Figure 190

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

Using a clean, sanitized towel, wipe down the freezer door, front panel, the area around the bottom of the freezer door, and any other areas that demonstrate a build-up of either moisture or food substance.

Step 4

When ready to resume normal operation, touch the AUTO symbol ❄️. (See Figure 191.) The control has a feature in the Manager's Menu to enable or disable the AUTO START feature. When AUTO START is enabled, the machine will automatically exit the STANDBY mode and start both sides in the AUTO mode at a designated time each day. (See page 42.)

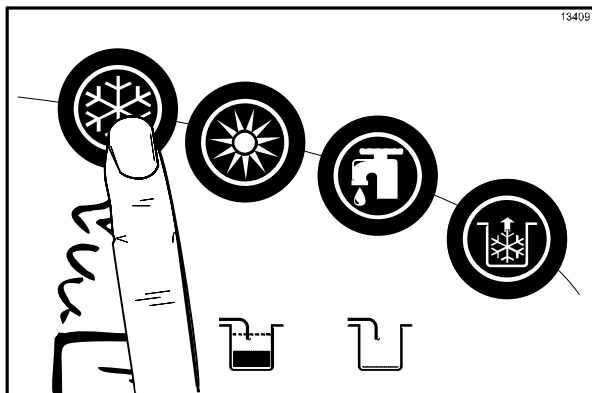


Figure 191

Note: This procedure should be performed 15 minutes prior to serving product.

Syrup System

Syrup Calibration

Calibrating the syrup flow should be performed weekly when the syrup system is cleaned. It is vital that the correct amount of syrup be incorporated into the frozen mix to obtain a quality shake.

To determine the rate of syrup flow, you will need a calibration cup indicating fluid ounces. The proper rate of syrup flow is 1 fl. oz. (30 ml) of syrup in 5 seconds. For thick viscosity shake syrups, the proper syrup flow rate is 1 fl. oz. +/- 1/8 fl. oz. (30 ml +/- 4 ml) in 7 seconds. Once this rate is set, the correct amount of syrup will be blended with the shake base regardless of the size of shake served. Please note that syrup calibration is critical when changing the promotional 4th flavor syrup.

Calibration Procedure

Syrup lines must be properly primed with syrup to eliminate air in the line before the calibration procedure is performed. (See the Syrup Priming Procedures on page 80.)

Step 1

Touch the CALIBRATION symbol 🍹 to display the menu options. The CALIBRATION symbol 🍹, the AUTO symbol ❄️ on the Shake side, and the OPTIONAL FLAVOR symbol 🌀 will be illuminated. (See Figure 192.)

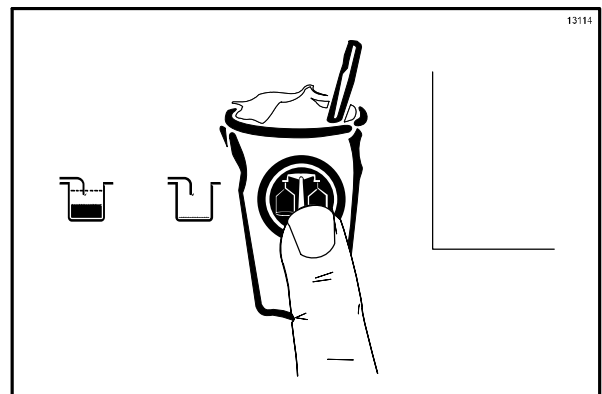


Figure 192

The screen will display the calibration menu options.
(See Figure 193.)

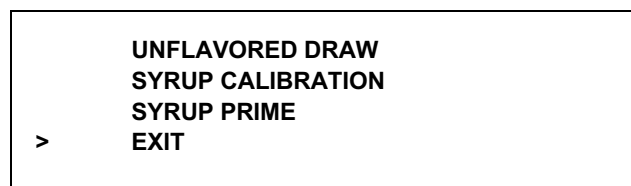





Figure 193

Note: When the CALIBRATION screen is displayed, the flavor selection symbols  will not raise the draw valve to dispense shake product.

Step 2

Touch the AUTO symbol  or the OPTIONAL FLAVOR symbol  to scroll the arrow to SYRUP CALIBRATION. (See Figure 194.)

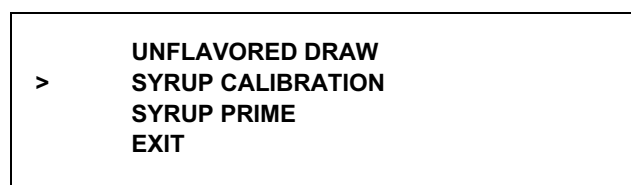



Figure 194

Step 3

Touch the CALIBRATION symbol  to enter the syrup calibration mode. (See Figure 195.)

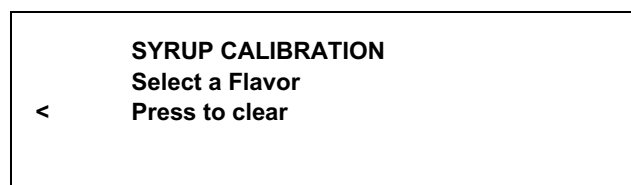


Figure 195

Step 4

Disconnect the syrup valve from the freezer door. Raise the syrup valve retainer and pull the valve straight out. (See Figure 196.)

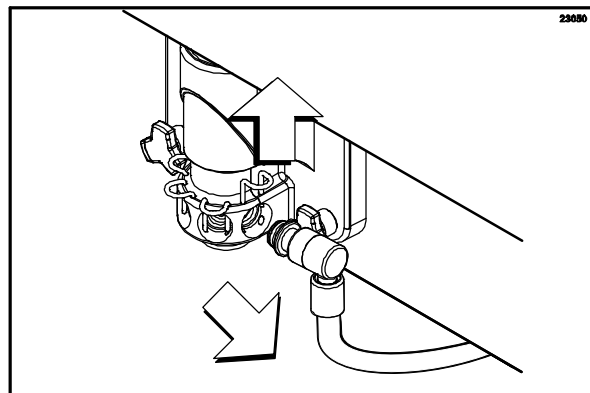




Figure 196

Step 5

To calibrate the syrup dispensing rate, hold the small portion of the calibration cup under the valve for the flavor to be calibrated. Touch the corresponding FLAVOR SELECT symbol  to activate the syrup pump and start the flow of syrup. When the syrup level measures one ounce, touch the same FLAVOR SELECT symbol  to stop the syrup flow.

Verify the level of syrup in the cup. If the measurement is not within the specification, repeat step 4 for the same flavor until the correct syrup calibration is achieved. (See Figure 197.)

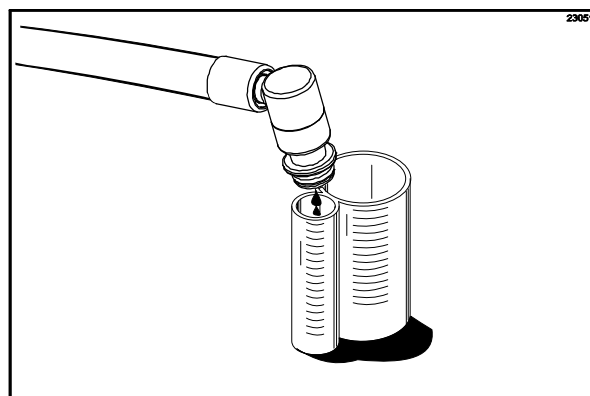





Figure 197

Note: You can verify the syrup dispensing rate in the Manager's Menu. (See "Verify Calibration" on page 39.)

Step 6

Repeat steps 4 and 5 for the remaining syrup flavors.

Step 7

Exit the CALIBRATION mode by touching the CALIBRATION symbol . A blank screen will appear and the AUTO symbol  and the OPTIONAL FLAVOR symbol  will return to their normal function.

Note: Whenever a particular syrup line is not used, the syrup hole plug found in the spare parts kit must be installed. Place the syrup hole plug o-ring into the groove of the syrup hole plug, and lubricate. Install the hole plug in the door. Lower the retaining pin to secure the plug in place.

Syrup Priming Procedure

The purpose of priming the syrup line is to eliminate any air in the syrup delivery system. Air in the syrup line can cause irregular shake blending, flavor carry-over, and syrup leaking from the door spout after the draw valve has closed. Each time a syrup container is drained or replaced, prime the syrup system until all the air has been removed and the syrup flow is uniform.

Step 1

Retrieve a full syrup container from the dry storage area.

Step 2

Shake the syrup container prior to opening it. Open the full syrup container.

Step 3

Pull the feed tube from the empty syrup container and clean the outside of the feed tube with a clean, sanitized towel.

For Syrup Bag System: Disconnect the empty bag and clean the hose connector fitting with a clean, sanitized towel. Attach the hose connector fitting to a full bag of syrup. Place the bag on the shelf in the syrup compartment. Make sure the hose is not pinched and there are no kinks in the tubing.

Step 4

Place the feed tube into the full syrup container and replace the syrup container in the syrup cabinet.





Step 5

Dispose of the empty syrup container.

Step 6

Prime the syrup line by removing the syrup valve from the freezer and hold it over an empty cup.

Step 7

Touch the CALIBRATION symbol  to display the menu options. The CALIBRATION symbol , the AUTO symbol  on the shake side, and the OPTIONAL FLAVOR symbol  will be illuminated.

Note: The screen will display the calibration menu options. (See Figure 198.)

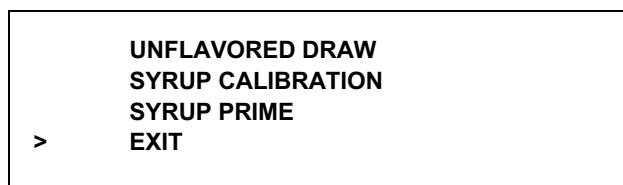




Figure 198

Step 8

Touch the AUTO symbol  or the OPTIONAL FLAVOR symbol  to scroll the arrow to SYRUP PRIME. (See Figure 199.)

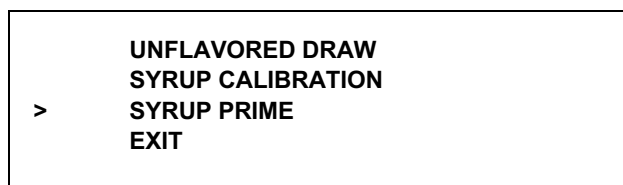



Figure 199

Step 9

Touch the CALIBRATION symbol  to enter the SYRUP PRIME mode. (See Figure 200.)

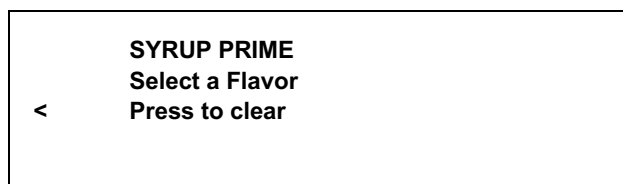



Figure 200

Step 10

Touch the corresponding syrup flavor symbol . The flavor symbol should be illuminated and the syrup pump for the selected flavor will start running at the maximum speed. (See Figure 201.)

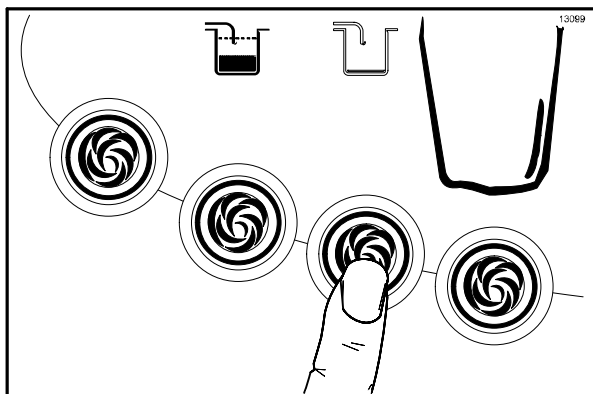




Figure 201

Step 11

When a steady stream of syrup is flowing from the syrup valve and all air has been purged from the syrup line, touch any syrup flavor symbol  to stop the pump.

Step 12

Repeat steps 10 -11 for any other syrup lines to be primed, or exit the SYRUP PRIME mode by touching the CALIBRATION symbol .

Syrup Topping Pump

Syrup Topping Pump Disassembly

Before the first use, and after use weekly, disassemble and clean the pump.

Step 1

Flush and rinse the pump in a container of warm water. Place the lower end of the pump into the water container. Operate the pump until only warm water flows from the discharge tube.

Step 2

Remove the pump from the container of water for disassembly.

Step 3

Remove the plunger assembly from the pump body by turning the plunger nut counterclockwise. (See Figure 202.)

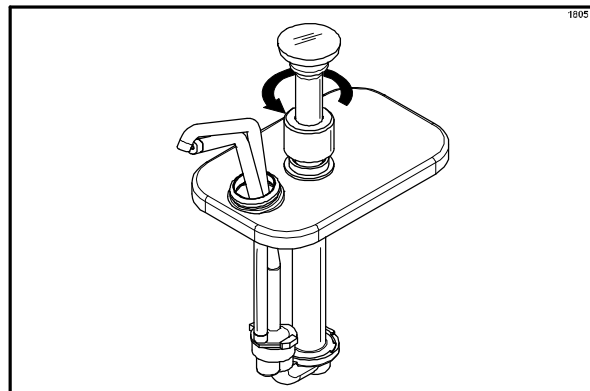


Figure 202

Step 4

To remove the knob, compress the spring toward the knob, using the washer. Compress it enough to grab onto the plunger with your hand for support. Begin removing the knob with your other hand. Remove the knob o-ring. Remove the plunger nut from the plunger tube. (See Figure 203.)

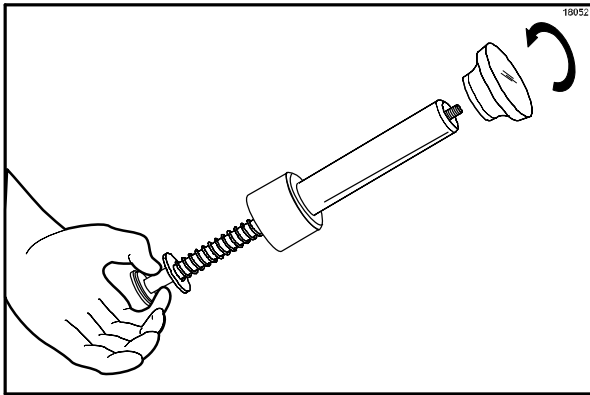


Figure 203

Step 5

Remove the plunger tube and the insert from the plunger assembly. (See Figure 204.)

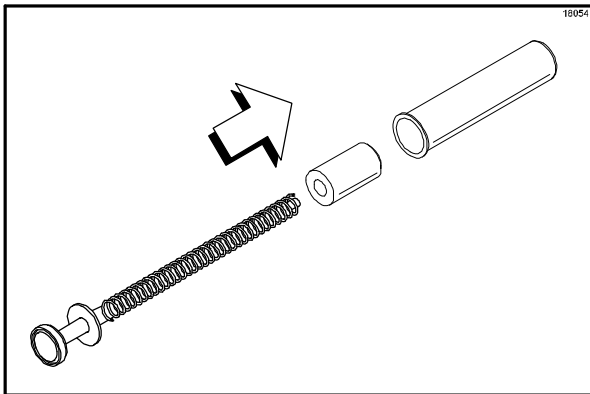


Figure 204

Step 6

Remove the spring and washer from the plunger assembly. (See Figure 205.)

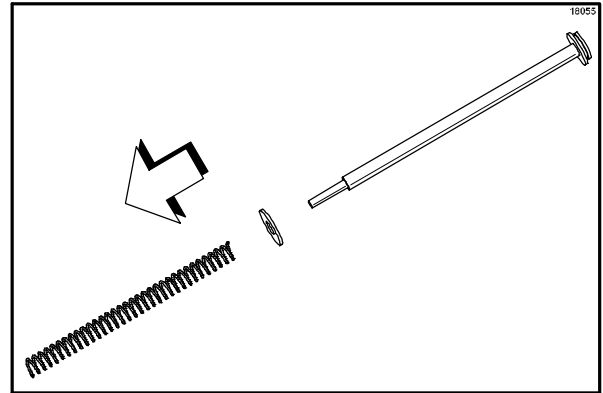


Figure 205

Step 7

Remove the seal assembly from the plunger assembly. (See Figure 206.)

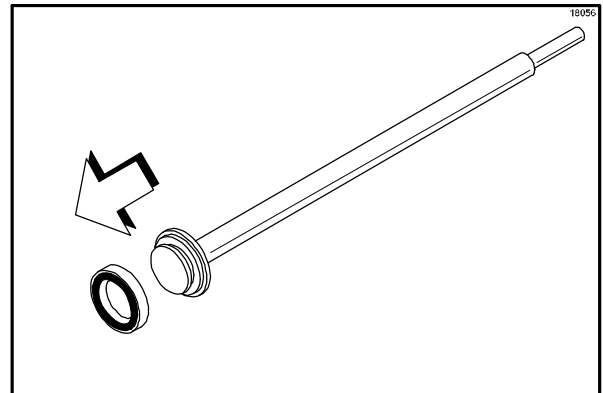


Figure 206

Step 8

Remove the seal o-ring from the seal. (See Figure 207.)

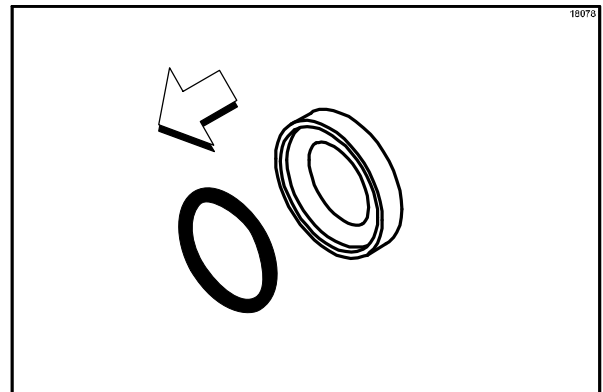


Figure 207

Step 9

Remove the discharge tube lock nut by turning it counterclockwise. Remove the discharge lock nut from the discharge tube. (See Figure 208.)

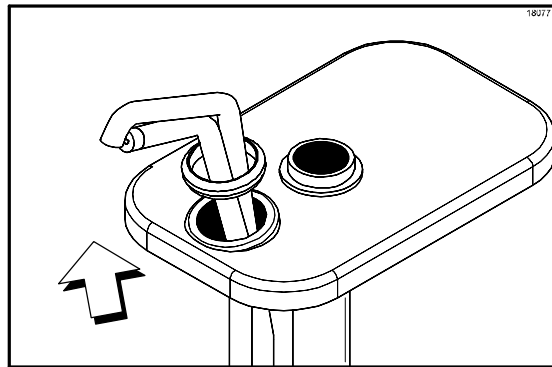


Figure 208

Step 10

Remove the lid by sliding it off the discharge tube.

Step 11

Remove the cylinder from the valve body. (See Figure 209.)

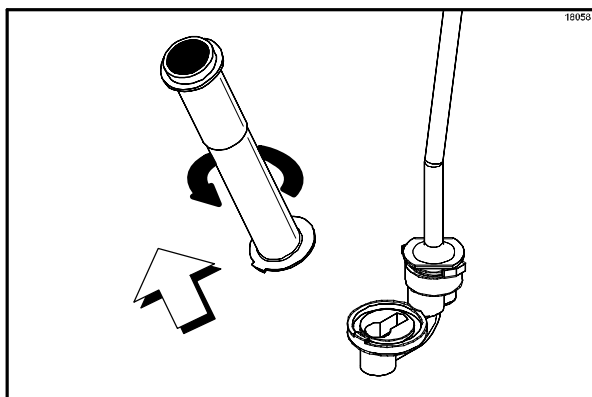


Figure 209

Step 12

Remove the discharge tube from the valve body. (See Figure 210.)

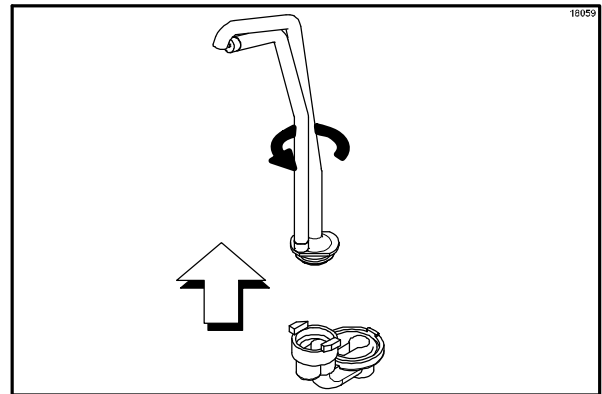


Figure 210

Step 13

Remove the 1-5/16" o-ring from the valve body, and remove the 1" o-ring from the discharge tube.

Cleaning the Syrup Pump**Step 1**

Wash and scrub all parts in an approved 100 PPM cleaning solution (examples: Kay-5® or Stera-Sheen®).

Step 2

Insert the black shielded brush through the tip of the discharge tube. Move the brush back and forth to scrub the tip of the discharge tube. (See Figure 211.)

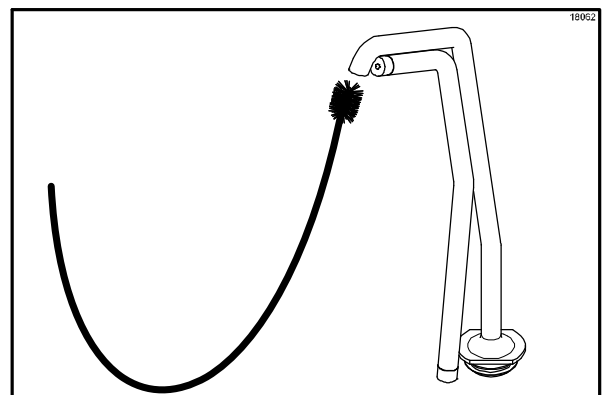


Figure 211

Step 3

Advance the brush completely through the discharge tube and pull the brush from the bottom of the tube.

Step 4

Insert the black shielded brush into the top side of the inlet valve. Scrub this area, specifically around the steel ball. (See Figure 212.)

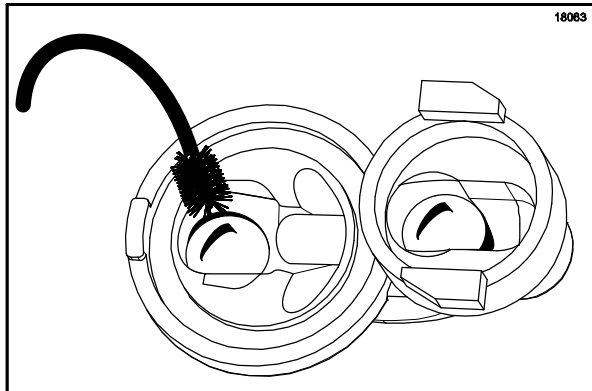


Figure 212

Step 5

Insert the black shielded brush into the top side of the outlet valve. Scrub this area, specifically around the steel ball. (See Figure 213.)

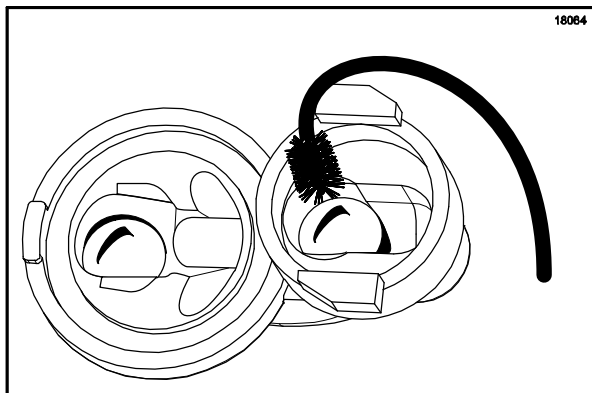


Figure 213

Step 6

Insert the black shielded brush, by the non-bristle end, into the passageway between the inlet valve and the outlet valve. (See Figure 214.)

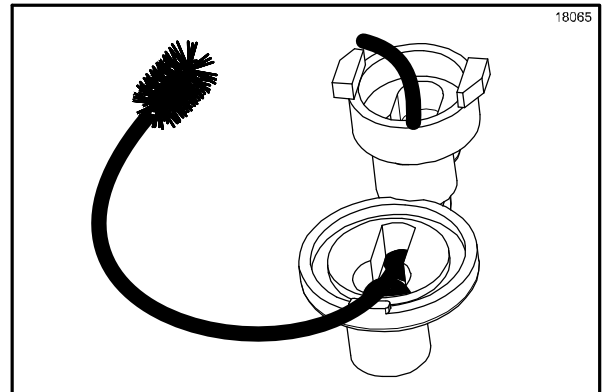


Figure 214

Step 7

Move the brush back and forth to scrub this passageway. Advance the brush completely, and pull the brush out of the valve body. (See Figure 215.)

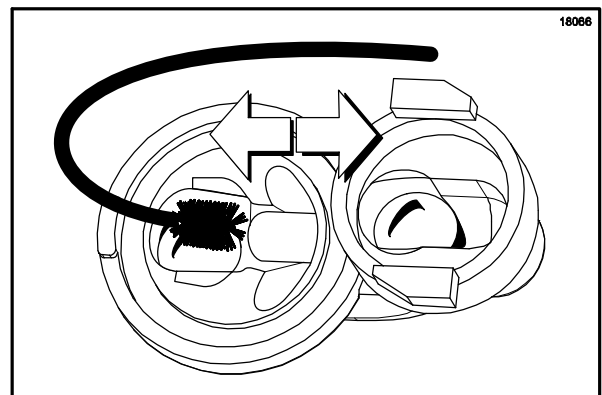


Figure 215

Step 8

Insert the black shielded brush into the bottom side of the inlet valve. Move the brush back and forth to scrub this area, specifically around the steel ball. (See Figure 216.)

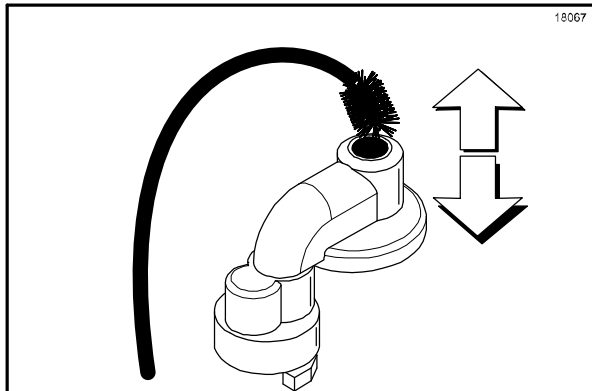


Figure 216

Step 9

Advance the brush completely through the inlet valve, and pull the brush out of the valve body.

Step 10

Rinse all parts with clear water.

Step 11

Sanitize the parts in an approved 100 PPM sanitizing solution (examples: Kay-5® or Stera-Sheen®). Allow the parts to air dry after sanitizing.

Syrup Topping Pump Assembly

After pump disassembly and cleaning is complete, assemble the pump.

Step 1

Lubricate and install the seal o-ring into the seal. (See Figure 217.)

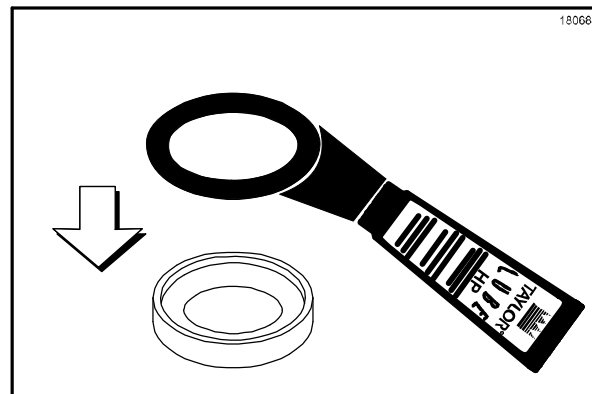


Figure 217

Step 2

Install the seal assembly onto the piston end of the plunger assembly.

Step 3

Install the washer and spring onto the plunger assembly. (See Figure 218.)

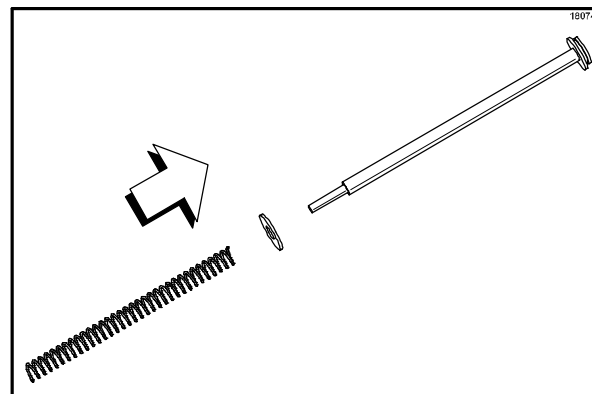


Figure 218

Step 4

Install the plunger insert into the plunger tube by positioning the end of the insert with the beveled edge and smaller hole to enter into the plunger tube first.

Step 5

Install the plunger nut onto the plunger tube.

Step 6

Install the knob o-ring into the groove provided in the knob.

Step 7

Install the plunger tube assembly onto the plunger assembly by inserting the plunger assembly into the larger opening on the plunger tube. Push the plunger assembly, compressing the spring, until the threaded end of the stem projects through the smaller opening on the plunger tube and the insert. (See Figure 219.)

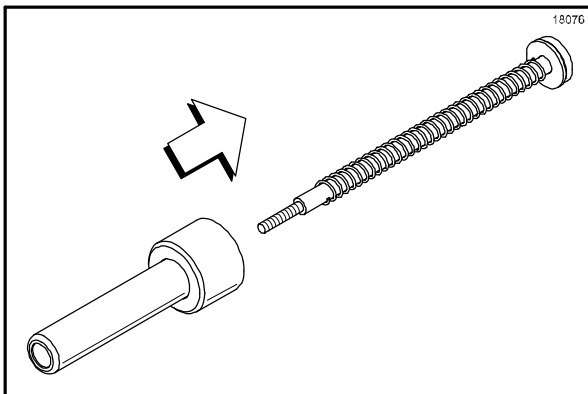


Figure 219

Step 8

Install the knob with the knob o-ring onto the threaded end of the plunger assembly. Hold the plunger assembly so that the plunger tube, compressing the spring, is pulled toward the piston end as far as it will go. Tighten the knob by turning it clockwise.

Step 9

Lubricate and install the 1" o-ring onto the groove provided on the discharge tube. (See Figure 220.)

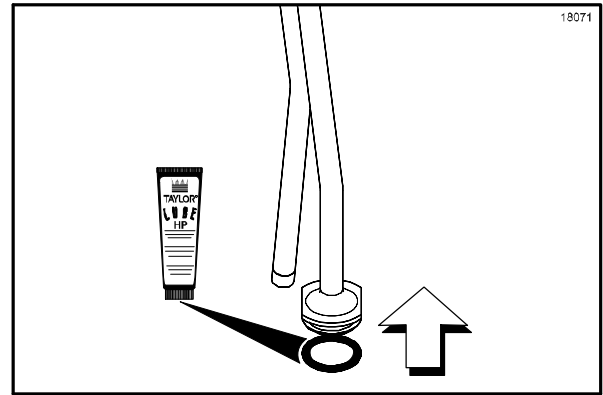


Figure 220

Step 10

Lubricate and install the 1-5/16" o-ring into the valve body. (See Figure 221.)

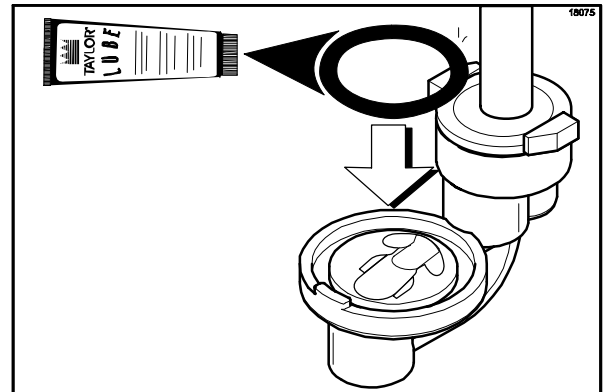


Figure 221

Step 11

Install the discharge tube onto the smaller opening in the valve body by aligning the flats on the discharge tube with the locking grooves on the valve body. Push down the discharge tube until it is seated into the valve body opening. Turn the discharge tube clockwise to fully engage it into locking grooves on the valve body.

Step 12

Install the cylinder onto the larger opening in the valve body by tilting the cylinder away from the discharge tube and sliding the widest section of flange under the center locking groove on the valve body. Align the tabs on the cylinder with the locking grooves on the valve body. Turn the cylinder clockwise until the tabs fully engage into the locking grooves on the valve body.

Step 13

Install the lid by inserting the discharge tube through the smaller hole in the lid. Slide the lid until the larger hole fits around the top of the cylinder. The discharge tube lock nut will secure the lid in position.

Step 14

Install the discharge tube lock nut. Tighten the lock nut by turning it clockwise.

Step 15

Lubricate and install the plunger assembly into the cylinder opening in the pump body. (See Figure 222.)

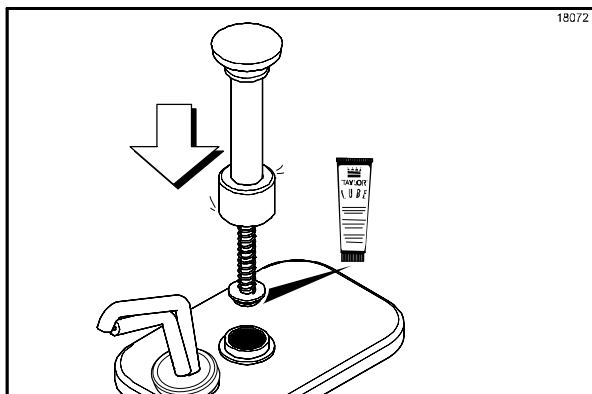


Figure 222

Step 16

Tighten the plunger nut by turning it clockwise. (See Figure 223.)

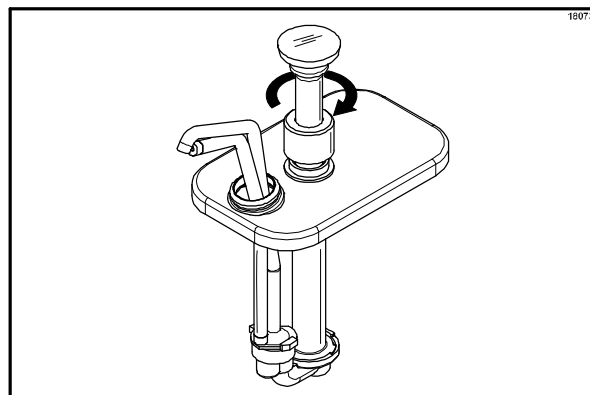


Figure 223

Manual Brush Cleaning

This Procedure Must Be Completed Every Two Weeks!



ALWAYS FOLLOW LOCAL HEALTH CODES.



To disassemble the Model C606, the following items will be needed:

- Two cleaning and sanitizing pails for each side of the freezer
- Necessary brushes (provided with freezer)
- Cleaning solution
- Sanitizing solution
- Single service towels
- Parts trays


Draining Product From The Freezing Cylinder

To drain the product from the freezing cylinders on both sides of the machine, the steps will be the same. Therefore, first drain the product from the shake side, then go back and duplicate these procedures for the soft serve side.

Step 1

Place the heater topping switches in the OFF position by touching the heater symbols  . The symbols will not be illuminated when the heaters are off.

Step 2

Cancel automatic operation by touching the AUTO symbol . (See Figure 224.)

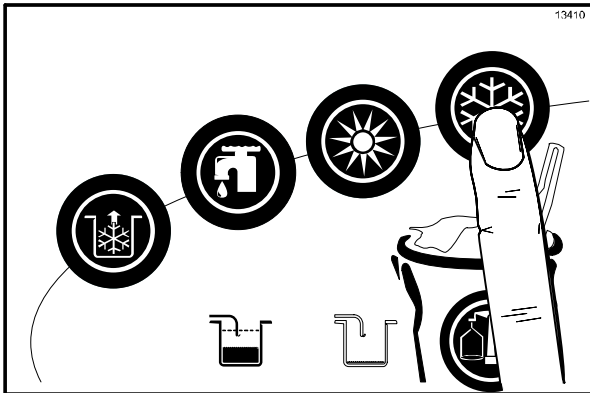


Figure 224



Step 3

Shake Side Only: Remove the shake cup holder. Set it aside for cleaning later with all parts.

Step 4

Remove the hopper cover and agitator. Take these parts to the sink to wash, rinse and sanitize.

Step 5

With a pail beneath the door spout, touch the WASH and PUMP symbols   and open the draw valve. **(Shake Side: Touch any flavor selection symbol to open the draw valve.)**

Drain the product from the freezing cylinder and the mix hopper. (See Figure 225.)

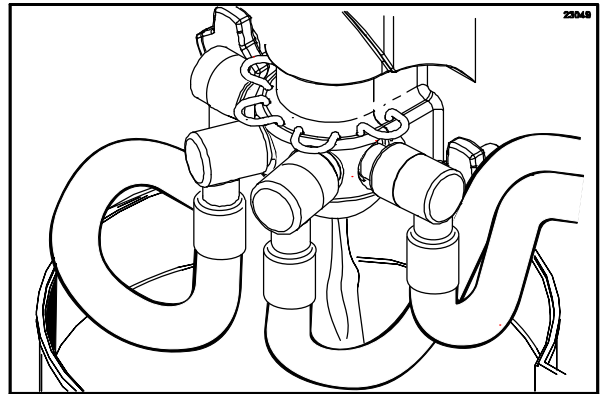




Figure 225

Step 6

When the flow of product stops, touch the WASH and PUMP symbols  , cancelling the WASH and PUMP modes. The shake draw valve will automatically close when the WASH operation is cancelled.

Step 7

Remove the locking clip, mix feed tube, pump clip and the assembled air/mix pump. Place the parts into the parts tray.

Step 8

Shake Side Only: Remove the syrup lines from the freezer door by raising the syrup valve retainers and pulling the valves straight out of the door. Insert the syrup hole plugs in the syrup ports. Lower the retainer pins to secure the hole plugs in the door.

Step 9

Repeat steps 2 through 7 for the soft serve side of the freezer.

Rinsing

Step 1

Pour two gallons (7.6 liters) of cool, clean water into the shake mix hopper. With the white hopper brush, scrub the mix hopper, mix level sensing probes and the outside of the agitator drive shaft housing. Using the double ended brush, brush clean the mix inlet hole. (See Figure 226.)

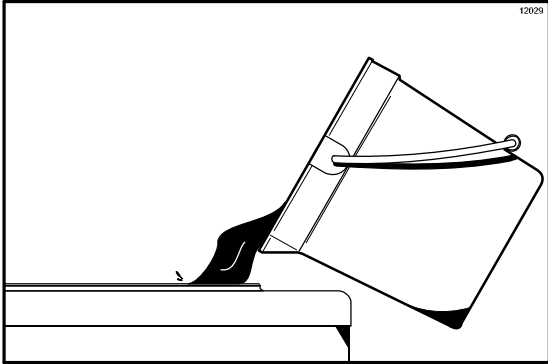



Figure 226

Note: Do not brush clean the mix inlet hole while the machine is in the WASH mode.

Step 2

With a pail beneath the door spout, touch the WASH symbol . (See Figure 227.)

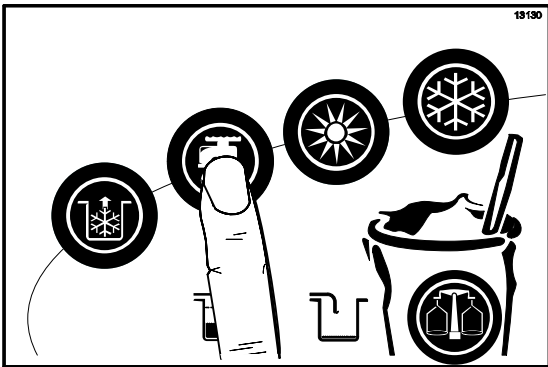



Figure 227

Step 3

Open the draw valve on the freezer door. Drain all the rinse water from the door spout, close the draw valve, and touch the WASH symbol,  cancelling the wash mode. (**Note: The shake draw valve will automatically close when the WASH operation is cancelled.**)

Step 4

Repeat this procedure using clean, warm water, until the water being discharged is clear.

Step 5

Repeat steps 1 through 4 for the soft serve side of the freezer.

Cleaning and Sanitizing

Step 1

Prepare a pail of an approved 100 PPM cleaning solution (examples: 2-1/2 gal. [9.5 liters] of Kay-5® or 2 gal. [7.6 liters] of Stera-Sheen®). **USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.**

Step 2


Pour the cleaning solution into the hopper and allow it to flow into the freezing cylinder.

Step 3

Using the white hopper brush, clean the mix hopper, mix level sensing probes and the outside of the agitator drive shaft housing. Using the double ended brush, clean the mix inlet hole.

Note: Do not brush clean the mix inlet hole while the machine is in the WASH mode.

Step 4

Touch the WASH symbol . This will cause the cleaning solution in the freezing cylinder to come in contact with all areas of the freezing cylinder.


Step 5

Place an empty pail beneath the door spout.

Step 6

Open the draw valve on the freezer door and draw off all the solution.

Step 7

Once the cleaner stops flowing from the door spout, close the draw valve and touch the WASH symbol , cancelling the wash mode. (**Note: The shake draw valve will automatically close when the WASH operation is cancelled.**)

Step 8

Prepare a pail of an approved 100 PPM sanitizing solution (examples: 2-1/2 gal. [9.5 liters] of Kay-5® or 2 gal. [7.6 liters] of Stera-Sheen®). **USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.**

Step 9

Repeat steps 2 through 7 with the sanitizing solution.

Step 10

Repeat steps 1 through 8 for the soft serve side of the freezer.

Disassembly - Shake Side

Note: Failure to remove the parts specified below for brush cleaning and lubrication will result in damage to the machine. These parts must be removed every 14 days or the machine will lock out and will not operate.

Step 1

Be sure the power switch is in the OFF position.
(See Figure 228.)

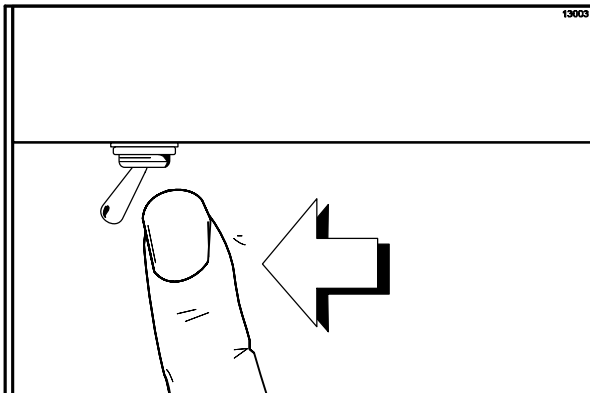


Figure 228

Step 2

Remove the hole plugs from the syrup ports, and remove the restrictor cap from the bottom of the door spout.

Step 3

Remove the spinner blade from the bottom of the door spout by lifting up the locking collar on the spinner coupling and pulling down the blade.

Step 4

Remove the handscrews, freezer door, beater assembly, drive shaft, drive shaft seal, and scraper blades from the freezing cylinder.

Step 5

Remove the drive shaft seal from the drive shaft.

Step 6

Remove the freezer door o-ring, front bearing, retainer pins, and the draw valve spinner assembly.

Remove the driven spinner from the draw valve by grasping the draw valve and pulling the driven spinner out. Remove the spinner shaft seal. (See Figure 229.)

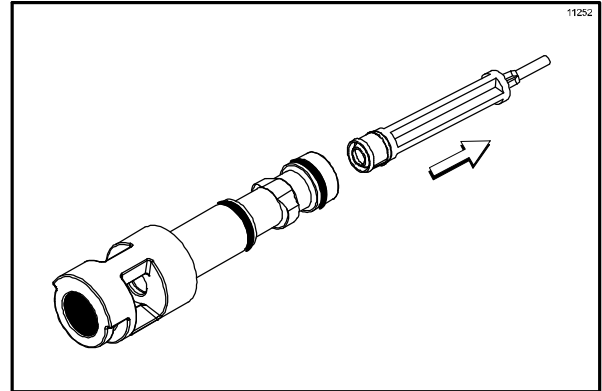


Figure 229

Step 7

Remove the two o-rings from the draw valve.

Note: To remove o-rings, use a clean, sanitized 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 easily be 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 o-rings without falling into the open grooves.

Step 8

From the shake pump cylinder, remove the retaining pin, mix inlet adaptor, valve cap, pump gasket, and the piston. Remove the o-ring from the piston and valve cap.

Step 9

Remove the pump drive shaft from the drive hub in the rear wall of the mix hopper. (See Figure 230.)

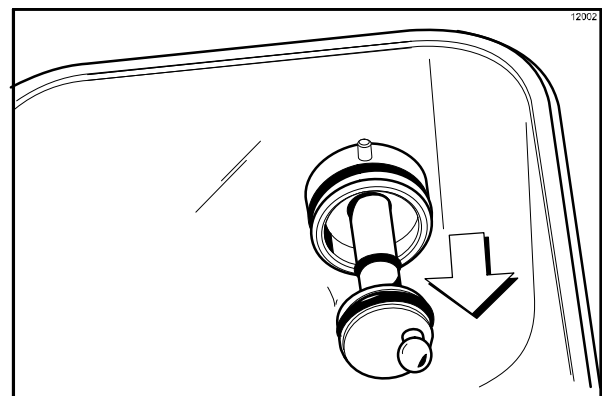


Figure 230

Remove the two small o-rings and one large o-ring from the pump drive shaft.

Disassembly - Soft Serve Side

Note: Failure to remove the parts specified below for brush cleaning and lubrication will result in damage to the machine. These parts must be removed every 14 days or the machine will lock out and will not operate.

Step 1

Be sure the power switch is in the OFF position.

Step 2

Remove the handscrews, freezer door, beater, scraper blades, and drive shaft with drive shaft seal from the freezing cylinder.

Step 3

Remove the drive shaft seal from the drive shaft.

Step 4

From the soft serve pump cylinder, remove the retaining pin, mix inlet adaptor, valve cap, pump gasket, and the piston. Remove the o-ring from the piston and valve cap.

Step 5

Remove the freezer door gasket, front bearing, pivot pin, draw handle, and draw valve. Remove the three o-rings from the draw valve.

Note: DO NOT attempt to remove the star design from the door. The star design is part of the door and is NOT a removable piece.

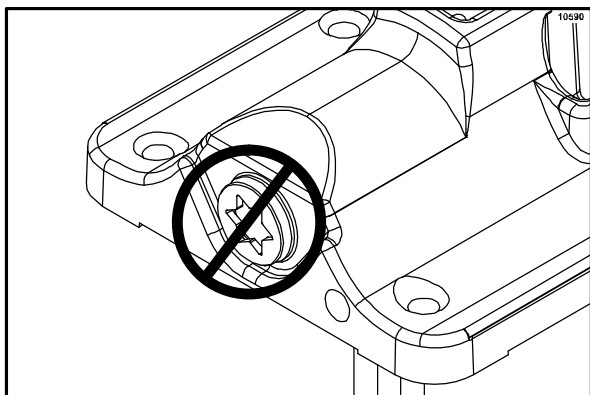


Figure 231

Step 6

Remove the pump drive shaft from the drive hub in the rear wall of the mix hopper. (See Figure 232.)

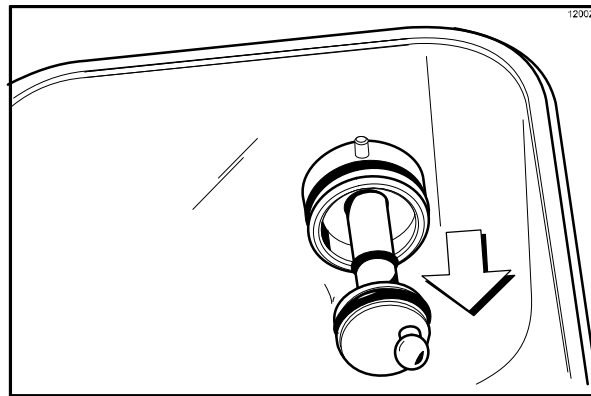


Figure 232

Remove the two small o-rings and one large o-ring from the pump drive shaft.

Step 7

Remove the front drip tray and splash shield. Remove the ladles from the two cold topping containers.

Step 8

Remove the long drip pan from the front panel. Take it to the sink for cleaning. (See Figure 233.)

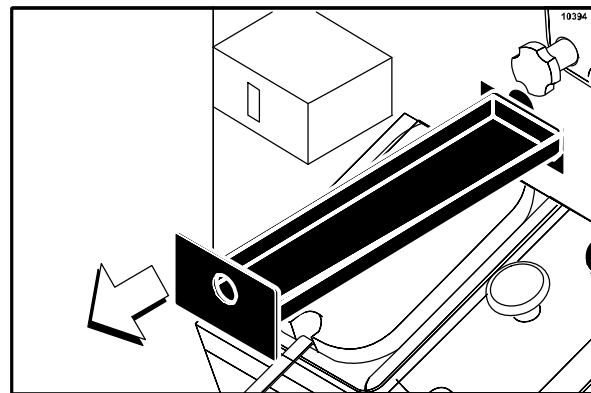


Figure 233

Step 9

Remove the two short drip pans from the rear panel. Remove the two notched drip pans from the left and right side panels. Take them to the sink for cleaning. (See Figure 234.)

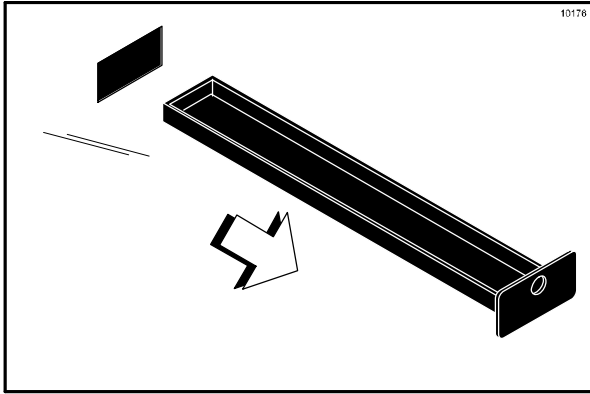


Figure 234

Note: If the drip pans are filled with an excessive amount of mix, it is an indication that the drive shaft seal(s), or o-ring(s) should be replaced or properly lubricated.

Brush Cleaning

We recommend brush cleaning all the shake parts, then go back and duplicate these steps (where they apply) for brush cleaning all the soft serve parts. By doing so, you will not confuse or interchange these parts for assembly the next morning. Place the parts in their proper place in the parts tray.

Step 1

Prepare a sink with an approved 100 PPM cleaning solution (examples: Kay-5® or Stera-Sheen®). **USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.**

Make sure all brushes provided with the freezer are available for brush cleaning.

Step 2

Thoroughly brush clean all disassembled parts and parts trays in the cleaning solution, making sure all lubricant and mix film is removed. Be sure to brush all surfaces and holes, especially the holes in the pump components and the small syrup holes in the shake freezer door.

Rinse all parts with clean, warm water, one tray at a time, including the tray.

Step 3

Return to the freezer with a small amount of cleaning solution. Using the black brush, clean the rear shell bearings at the back of the freezing cylinders. (See Figure 235.)

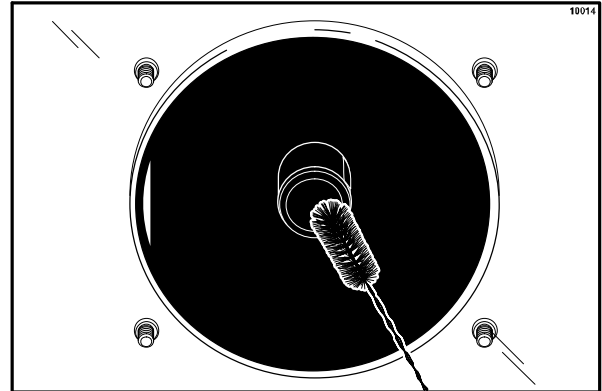


Figure 235

Step 4

Using the black brush, clean the drive hub openings in the rear wall of the mix hoppers. (See Figure 236.)

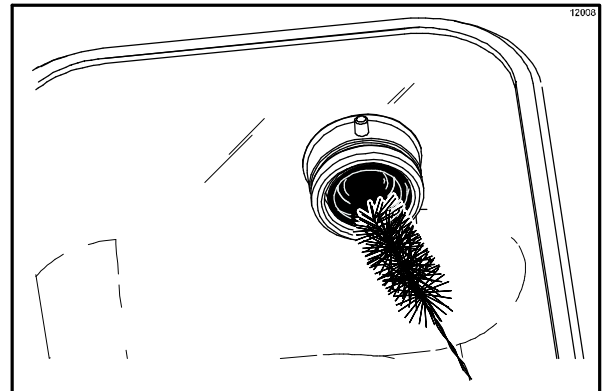


Figure 236

Step 5

Using the double end brush, brush clean the syrup line fittings.

Step 6

Prepare a sink with an approved 100 PPM sanitizing solution (examples: Kay-5® or Stera-Sheen®). **USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.**

Step 7

Sanitize all parts in the sanitizing solution for a minimum of 1 minute.

Step 8

Repeat step 3 with the sanitizing solution.

Step 9

Place disassembled parts on clean and sanitized parts trays.

Step 10

Wipe all exterior surfaces of the freezer with a clean, sanitized towel.

Step 11

Repeat steps 1 through 10 for the soft serve side of the freezer.

Syrup System - Scheduled Maintenance

Syrup Pump Tube Removal

Step 1

Remove the pick up tubes from the syrup containers. Wipe the outside of the tubes with a clean, sanitized towel.

For Syrup Bag System: Disconnect the syrup bag fitting from each bag.

Step 2

Remove the syrup containers and the pump cover tray from inside the cabinet.

Step 3


Place the pick up tubes in a pail of an approved 100 PPM cleaning solution (examples: Kay-5® or Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS. To avoid contamination, cover the syrup containers with a plastic wrap.

For Syrup Bag System: Place the syrup hose with the bag connection fitting in a pail of an approved 100 PPM cleaning solution (examples: Kay-5® or Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.



Step 4

Raise the retainer and remove the syrup valve from the freezer door. Place the valve in a pail located under the draw valve.


Step 5

Select the CALIBRATION symbol  on the control panel to display the menu options.

Step 6

Touch the AUTO symbol  to move the arrow to SYRUP PRIME. Touch the CALIBRATION symbol  again to display the SYRUP PRIME screen.

Step 7


Select the FLAVOR SELECT symbol  for the corresponding syrup valve to start the flow of cleaning solution through the syrup line.

Step 8

Allow the cleaning solution to flow until all of the syrup is flushed from the line.

Step 9

Once the line is free of syrup, remove the pick up tube from the cleaning solution and continue to run the pump until the syrup line is free from liquid.

Select the FLAVOR SELECT symbol  to stop the pump.

Step 10

Repeat steps 3 through 9 using an approved 100 PPM sanitizing solution (examples: Kay-5® or Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.

Step 11

Open the pump by pushing up on the hinged cover. (See the arrow in Figure 237.)

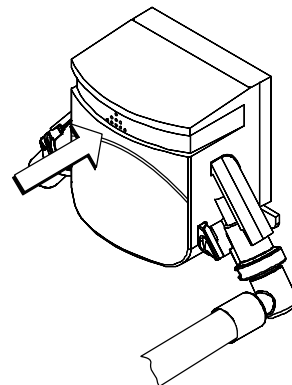


Figure 237

Step 12

Grasp the pump tube by both ends and remove it from the pump body. (See Figure 238.)

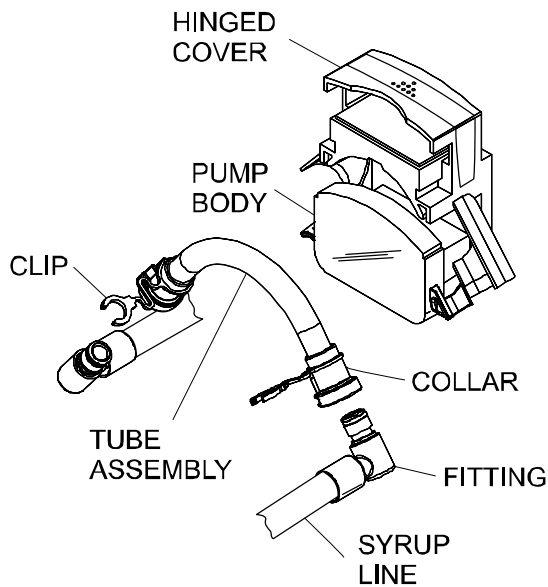


Figure 238

Step 13

Remove the clips from their respective collars.

Step 14

Remove the fittings from the pump tube.

Pump Tube Installation

Step 1

Lubricate the o-rings on the syrup line fittings with Taylor Lube HP.

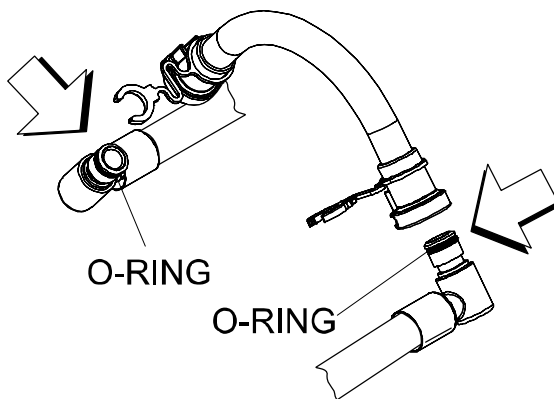


Figure 239

Step 2

Press the fittings into the new pump tube.

Step 3

Install the clips into their respective collars.

Step 4

Using your hands, rotate the pump rollers so they are in the 10 and 2 o'clock position.

Step 5

Place the tube assembly into the pump body. (Make sure the syrup lines are pushed through the rear of the cabinet.)

Step 6

Push down on the top of the pump to close it.

Step 7

Replace the pump cover tray and the syrup containers.

Step 8

Prime the syrup lines.

Step 9

Calibrate the syrup system according to the instructions on page 78.

Syrup Line Cleaning/Sanitizing - Weekly

Step 1

Remove the pick up tubes from the syrup containers. Wipe the outside of the tubes with a clean, sanitized towel.

For Syrup Bag System: Disconnect each syrup bag and clean the hose connector fitting with a clean, sanitized towel.

Step 2


Prepare a pail of an approved 100 PPM cleaning solution (examples: 2-1/2 gal. [9.5 liters] of Kay-5® or 2 gal. [7.6 liters] of Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS. Place the pick up tubes in the pail.

For Syrup Bag System: Place the syrup hose with the bag connection fitting in the pail of approved 100 PPM cleaning solution (examples: Kay-5® or Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.



Step 3

Raise the retainer and remove the syrup valve from the freezer door. Place the valve in a pail located under the draw valve.


Step 4

Select the CALIBRATION symbol  on the control panel to display the menu options.

Step 5

Touch the AUTO symbol  to move the arrow to SYRUP PRIME. Touch the CALIBRATION symbol  again to display the SYRUP PRIME screen.


Step 6

Select the FLAVOR SELECT symbol  for the corresponding syrup valve to start the flow of cleaning solution through the syrup line.

Step 7

Allow the cleaning solution to flow until all the syrup is flushed from the line.

Step 8

Touch the FLAVOR SELECT symbol  to stop the flow of cleaning solution.

Step 9

Repeat steps 2 - 8 using an approved 100 PPM sanitizing solution (examples: Kay-5® or Stera-Sheen®). USE WARM WATER AND FOLLOW THE MANUFACTURER'S SPECIFICATIONS.

Step 10

Remove the syrup nose fitting from the syrup valve by turning the cap counter-clockwise.

Step 11

Remove the duckbill valve and the o-ring from the syrup nose fitting.

Step 12

Using the white end of the double-ended brush, scrub the inside of the syrup nose fitting and the syrup line fitting to remove any residual particles.

Step 13

Using a shake cup filled with an approved 100 PPM sanitizing solution, rinse the syrup valve fitting thoroughly.

Step 14

Using a clean, sanitized towel, gently wipe any syrup from the duckbill valve.

Step 15

Install the duckbill valve into the syrup nose fitting, with the flat end aligned with the open slot in the syrup nose fitting.

Note: Replace the duckbill valve if it is damaged or extends past the syrup nose fitting slot. (See Figure 181.)

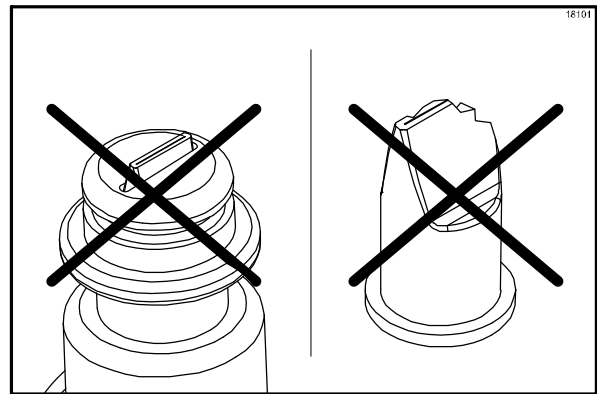


Figure 240

Step 16

Install the syrup nose fitting onto the syrup line fitting. Tighten by hand until snug.

Note: The **duckbill valve must be wet** when the syrup nose fitting is assembled on the syrup line fitting. The sanitized water will lubricate the bottom flat surface and prevent the duckbill from twisting when the the syrup nose fitting is tightened.

Step 17

Inspect the duckbill valve for proper installation inside the syrup nose fitting. The tip of the duckbill valve **must be flat** to seal the syrup line. (See Figure 182.)

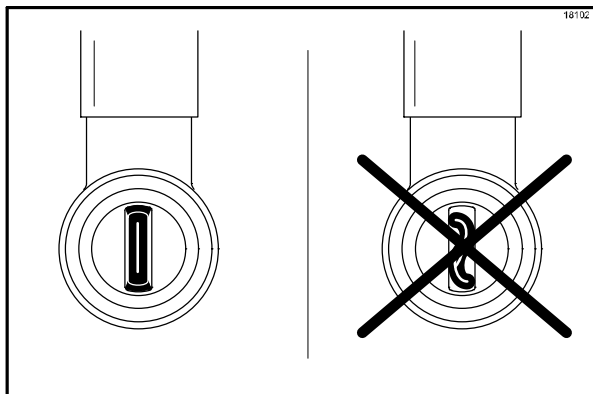


Figure 241

If the tip is not flat, remove the syrup nose fitting and remove/reinstall the duckbill valve. Using a shake cup filled with sanitizing solution, rinse the syrup nose fitting to wet the bottom of the duckbill valve. Reinstall the syrup nose fitting onto the syrup line fitting. If the tip will not remain flat when the syrup fitting is assembled, replace the duckbill valve.

Step 18

Install the o-ring on the syrup nose fitting.

Step 19

Repeat steps 3 -18 for all syrup flavors.

Step 20


Remove the pick up tubes from the pail of sanitizing solution and allow them to drain.

Step 21



Place all the pick up tubes into the syrup containers. Ensure the syrup lines match their respective flavors.

For Syrup Bag System: Attach the bag connector fitting to the proper syrup flavor.


Step 22

Select the CALIBRATION symbol  on the control panel to display the menu options.

Step 23

Touch the AUTO symbol  to move the arrow to SYRUP PRIME. Touch the CALIBRATION symbol  again to display the Syrup Prime screen.

Step 24

Select the FLAVOR SELECT symbol  for the corresponding syrup valve to start the flow of syrup.

Step 25

Allow the syrup to flow until all of the sanitizing solution and air is purged from the line.

Step 26

Touch the FLAVOR SELECT symbol  to stop the flow of syrup.

Step 27

Lubricate the o-ring on the syrup nose fitting. Install the syrup valve into the shake door. Secure the valve by lowering the retainer.

Step 28

Repeat steps 20 - 27 for all syrup flavors.

Step 29

Clean the syrup cabinet interior with a clean, sanitized towel. Spray resistant areas with the sanitizing solution.

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. The following check points should be stressed during the cleaning and sanitizing operations.



CLEANING AND SANITIZING MUST BE PERFORMED EVERY TWO WEEKS.

Troubleshooting Bacterial Count

- ☐ 1. Thoroughly clean and sanitize the machine regularly, including complete disassembly and brush cleaning.
- ☐ 2. Use all brushes supplied for thorough cleaning. The brushes are specially designed to reach all mix passageways.
- ☐ 3. Use the white bristle brush to clean the mix inlet hole which extends from the mix hopper down to the rear of the freezing cylinder.
- ☐ 4. Use the black bristle brush to thoroughly clean the rear shell bearing located at the rear of the freezing cylinder and the drive hub opening in the rear wall of the mix hopper. Be sure there is a generous amount of cleaning solution on the brush.
- ☐ 5. 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.
- ☐ 6. The temperature of the mix in the mix hopper and walk-in cooler should be below 40°F. (4.4°C.).

- ☐ 7. Discard remaining mix from the freezer during “Closing Procedures”.

Regular Maintenance Checks

- ☐ 1. Replace scraper blades that are nicked or damaged. Before installing the beater assembly, be certain that scraper blades are properly attached to the helix.
- ☐ 2. Check the rear shell bearing for signs of wear (excessive mix leakage in rear drip pan) and be certain it is properly cleaned.
- ☐ 3. Using a screwdriver and cloth towel, keep the rear shell bearing and the female hex drive socket clean and free of lubricant and mix deposits.
- ☐ 4. Dispose of o-rings and seals if they are worn, torn, or fit too loosely, and replace with new ones.
- ☐ 5. Follow all lubricating procedures as outlined in “Assembly”.
- ☐ 6. If your machine is air cooled, 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 between the fins.
Note: For machines equipped with an air filter, it will be necessary to vacuum clean the filters on a monthly schedule.



Caution: Always disconnect electrical power prior to cleaning the condenser. Failure to follow this instruction may result in electrocution.

- ☐ 7. If your machine is water cooled, 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 distributor.

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. **This is extremely important.** Failure to follow this procedure may cause severe and costly damage to the refrigeration system.

Your local Taylor Distributor can perform this winter storage service for you.

Wrap detachable parts of the freezer such as beater, blades, drive shaft, and freezer door, and place them 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.

Note: It is recommended that an authorized service technician perform winter storage draining, to insure all water has been removed. This will guard against freezing and rupturing of the components.

PROBLEM	SHAKE SIDE PROBABLE CAUSE	SOFT SERVE SIDE PROBABLE CAUSE	EITHER SIDE PROBABLE CAUSE	REMEDY	PAGE REF.
1. Soft lock message appears on display.			a. An equipment fault has occurred.	a. Determine reason the failure occurred. Correct cause for failure, then select HEAT symbol to start a heat cycle or WASH to disassemble and brush clean the machine.	36
			b. More than 24 hours since the last HEAT cycle.	b. The freezer must go through a HEAT cycle every 24 hours. The freezer must now be disassembled and brush cleaned or placed in a heat cycle.	36
			c. The power switch is in the OFF position.	c. The power switch must be in the ON position. The freezer must now be disassembled and brush cleaned or placed in a heat cycle.	36
			d. The freezer is not in the AUTO or STANDBY mode when the heat cycle was programmed to start.	d. The freezer must be in the AUTO or STANDBY mode. The freezer must now be disassembled and brush cleaned or placed in a heat cycle.	36

PROBLEM	SHAKE SIDE PROBABLE CAUSE	SOFT SERVE SIDE PROBABLE CAUSE	EITHER SIDE PROBABLE CAUSE	REMEDY	PAGE REF.
1. Soft lock message appears on display. (Continued)			e. Mix out condition.	e. The level of mix in the mix hopper must be up to the fill level indicator on the agitator paddle. The freezer must now be disassembled and brush cleaned, or placed in a heat cycle.	36
			f. The agitator is not installed.	f. The agitator must be cleaned and installed before starting the HEAT cycle. The freezer must now be disassembled and brush cleaned or placed in a heat cycle.	69 / 72
2. Hard lock message appears on display.			a. Brush clean interval exceeded.	a. The freezer must be disassembled and brush cleaned within 24 hours when the counter indicates one day remaining.	35
			b. A barrel or hopper thermistor is faulty.	b. Call an authorized service technician.	---

PROBLEM	SHAKE SIDE PROBABLE CAUSE	SOFT SERVE SIDE PROBABLE CAUSE	EITHER SIDE PROBABLE CAUSE	REMEDY	PAGE REF.
3. No product is being dispensed.			a. Low on mix. The MIX OUT light is on.	a. Add mix to the mix hopper. Return to AUTO mode.	67 / 68
			b. The power switch is in the OFF position.	b. Place the power switch to ON and select AUTO.	64
			c. Machine not in AUTO mode.	c. Select AUTO and allow machine to cycle off before drawing product.	68
			d. Beater motor is out on reset, BEATER OVERLOAD message displayed.	d. Call an authorized service technician.	---
			e. The pump motor is not running in the AUTO mode.	e. Push the pump reset button. Check pump motor is operating when the draw valve is raised.	32
			f. Freeze-up in mix inlet hole.	f. Call an authorized service technician.	---
			g. The mix pump ball crank is broken.	g. Call an authorized service technician.	---
			h. Feed tube or check ring not properly installed.	h. Make sure feed tube and rubber check ring are properly installed.	62
	i. Menu is displayed making flavor select keys inoperative.			i. Exit the menu by moving the cursor arrow to "EXIT" and touching the CAL symbol. This will restore the control keys to their normal function.	78

PROBLEM	SHAKE SIDE PROBABLE CAUSE	SOFT SERVE SIDE PROBABLE CAUSE	EITHER SIDE PROBABLE CAUSE	REMEDY	PAGE REF.
3. No product is being dispensed. (Continued)	j. Draw valve not opening.			j. Draw valve not aligned with actuator bracket when freezer door installed. Reassemble with correct alignment.	55
4. The product is too soft.	a. Too much syrup - 1 fl oz (30 ml) in 5 seconds. For Triple Thick Shake Syrup: 1 oz (30 ml) \pm 1/8 oz (4 ml) in 7 seconds.			a. Calibrate the syrups.	78
		b. Draw rate is set too fast.		b. Adjust draw rate of 5 to 7 1/2 oz. (142 g. to 213 g.) of product by weight in 10 seconds.	78
5. The product is too thick.	a. Not enough syrup - 1 fl oz (30 ml) in 5 seconds. For Triple Thick Shake Syrup: 1 oz (30 ml) \pm 1/8 oz (4 ml) in 7 seconds.			a. Calibrate the syrups. Check that the syrup containers are not empty.	78
			b. Freezing cylinder not primed correctly.	b. Drain the freezing cylinder and reprime the machine.	67 / 68
			c. Air/mix pump incorrectly assembled.	c. Follow assembly procedures carefully.	60
			d. The viscosity control is set too cold.	d. Call an authorized service technician.	---
			e. Freeze-up in mix inlet hole.	e. Call an authorized service technician.	---

PROBLEM	SHAKE SIDE PROBABLE CAUSE	SOFT SERVE SIDE PROBABLE CAUSE	EITHER SIDE PROBABLE CAUSE	REMEDY	PAGE REF.
6. The mix in the hopper is too warm.			a. Hopper cover is not in position.	a. Clean and sanitize hopper cover and place in position.	68
			b. The agitator is not installed.	b. Clean and sanitize the agitator and install.	65 / 67
			c. The hopper temperature is out of adjustment.	c. Call an authorized service technician.	---
7. The mix in the hopper is too cold.			a. The hopper temperature is out of adjustment.	a. Call an authorized service technician.	---
8. Mix Low and Mix Out probes are not functioning.			a. Milkstone build-up in the hopper.	a. Clean hoppers thoroughly.	92
9. Product is collecting on top of the draw valve.	a. Inadequate lubrication of spinner shaft or seal.			a. Lubricate properly.	53
	b. Spinner shaft seal is missing or worn.			b. Install or replace the spinner shaft seal.	53
10. Product is collecting on top of the freezer door.			a. The top o-ring on draw valve is improperly lubricated or worn.	a. Lubricate properly or replace the o-ring.	53 / 58
11. Excessive mix leakage from the bottom of door spout.			a. Bottom o-ring on draw valve is improperly lubricated or worn.	a. Lubricate properly or replace the o-ring.	53 / 58

PROBLEM	SHAKE SIDE PROBABLE CAUSE	SOFT SERVE SIDE PROBABLE CAUSE	EITHER SIDE PROBABLE CAUSE	REMEDY	PAGE REF.
12. Excessive mix leakage into the long drip pan.			a. The seal on drive shaft is improperly lubricated or worn.	a. Lubricate properly or replace the seal.	52 / 56
			b. The seal is installed inside-out on the drive shaft.	b. Install correctly.	52 / 56
			c. Inadequate lubrication of the drive shaft.	c. Lubricate properly.	52 / 56
			d. The drive shaft and beater assembly work forward.	d. Call an authorized service technician.	---
			e. Worn rear shell bearing.	e. Call an authorized service technician.	---
			f. Gear box out of alignment.	f. Call an authorized service technician.	---
13. The drive shaft is stuck in the drive coupling.			a. Mix and lubricant collected in drive coupling.	a. Brush clean the rear shell bearing area regularly.	92
			b. Rounded corners of drive shaft, drive coupling, or both.	b. Call an authorized service technician.	---
			c. Gear box is out of alignment.	c. Call an authorized service technician.	---

PROBLEM	SHAKE SIDE PROBABLE CAUSE	SOFT SERVE SIDE PROBABLE CAUSE	EITHER SIDE PROBABLE CAUSE	REMEDY	PAGE REF.
14. The freezing cylinder walls are scored.	a. Missing or worn front bearing.			a. Install or replace the front bearing.	55
		b. Missing or worn front bearing and beater shoes.		b. Install or replace the front bearing and beater shoes.	58
		c. Broken freezer door baffle rod.		c. Replace freezer door.	59
			d. Sanitizing solution was still in the freezing cylinder when unit was placed in AUTO.	d. Unit must NOT be placed in AUTO during sanitizing. Place in AUTO only after unit has been primed and all sanitizing solution has been removed.	64 / 66
			e. Broken beater pins.	e. Replace beater assembly.	53 / 57
			f. Beater assembly is bent.	f. Replace beater assembly.	53 / 57
			g. Gear box is out of alignment.	g. Call an authorized service technician.	---
15. The product makes a popping sound when drawn.		a. Draw rate is set too fast.		a. Adjust draw rate of 5 to 7 1/2 oz. (142 g. to 213 g.) of product by weight in 10 seconds.	59
			b. Pump assembled incorrectly.	b. Assemble and lubricate according to instructions in this manual.	60
			c. Freezing cylinder not primed correctly.	c. Drain the freezing cylinder and reprime the machine.	67 / 68

PROBLEM	SHAKE SIDE PROBABLE CAUSE	SOFT SERVE SIDE PROBABLE CAUSE	EITHER SIDE PROBABLE CAUSE	REMEDY	PAGE REF.
16. No control panel functions with power switch ON.			a. Machine is unplugged.	a. Plug into wall receptacle.	---
			b. Circuit breaker OFF or blown fuse.	b. Turn the breaker ON or replace the fuse.	---
17. The draw valve is not opening.	a. The power switch is off.			a. Place the power switch in the ON position.	36
	b. The shake side is in the STANDBY mode.			b. Cancel the STANDBY mode.	43
	c. A heat cycle is in progress.			c. Wait for the completion of the heat treatment cycle.	35
	d. The menu is displayed, making the flavor select keys inoperative.			d. Exit the menu by moving the cursor arrow to "EXIT" and touching the CAL symbol. This will restore the control keys to their normal function.	78
	e. The draw valve wasn't aligned with the actuator bracket when the freezer door was installed.			e. Reassemble with the correct alignment. Tighten the handscrews in a criss-cross pattern when installing the freezer door.	55
	f. The draw valve was not lubricated.			f. Lubricate the draw valve and o'rings.	53
	g. The shake actuator assembly is out of alignment or is malfunctioning.			g. Call an authorized service technician.	---

PROBLEM	SHAKE SIDE PROBABLE CAUSE	SOFT SERVE SIDE PROBABLE CAUSE	EITHER SIDE PROBABLE CAUSE	REMEDY	PAGE REF.
18. The draw valve is not closing.	a. The draw valve was not aligned with the actuator bracket when the freezer door was installed.			a. Reassemble with the correct alignment. Tighten the handscrews in a criss-cross pattern when installing the freezer door.	55
	b. The draw valve was not lubricated.			b. Lubricate the draw valve and o'rings.	53
	c. The spinner shaft was not lubricated.			c. Lubricate the spinner shaft.	53
	d. The spinner blade became disengaged from the driven spinner when the draw valve was raised.			d. Call an authorized service technician to check the spinner coupling position on the motor.	---
	e. The product is too thick.			e. Check that the product temperature is within specification. (See problem "Product Too Thick" on page 102.)	---
	f. The shake actuator assembly is out of alignment or is malfunctioning.			f. Call an authorized service technician.	---
19. The mix pump will not operate in the PUMP mode.			a. Pump motor is not running.	a. Push the pump reset button.	32

PROBLEM	SHAKE SIDE PROBABLE CAUSE	SOFT SERVE SIDE PROBABLE CAUSE	EITHER SIDE PROBABLE CAUSE	REMEDY	PAGE REF.
20. The mix pump runs constantly in the AUTO mode.		a. Draw valve is not fully closed.		a. Raise draw handle so draw valve is closed all the way.	68
21. Syrup cannot be calibrated or inconsistent calibration readings.	a. The pump tube has collapsed.			a. Replace pump tube.	93
	b. Syrup temperature too cold.			b. Allow the syrup to warm up before using. Note: Never refrigerate the syrup. Keep a replacement container near the shake machine location so the syrup temperature can stabilize before use.	80
	c. Thick syrup in bottom of container.			c. Shake well before use.	80
	d. Syrup leak.			d. Inspect syrup system for leaks.	---
	e. Syrup lines are not matched with the syrup flavor or are not properly connected.			e. Match the color of the syrup pick-up tube and cap with the correct syrup container. Make sure the tube is properly connected.	96
	f. Plugged syrup line fitting at freezer door connection.			f. Clean the syrup line fitting.	80
	g. The pick-up tube is pinched or kinked.			g. Adjust the line routing so that it is not pinched or kinked.	80

PROBLEM	SHAKE SIDE PROBABLE CAUSE	SOFT SERVE SIDE PROBABLE CAUSE	EITHER SIDE PROBABLE CAUSE	REMEDY	PAGE REF.
21. Syrup cannot be calibrated or has inconsistent calibration readings. (Continued)	h. The syrup line is plugged or restricted.			h. Flush and sanitize the syrup lines. Clean the syrup system weekly. Do not attach the short syrup line to the door when the line is not primed with syrup.	94
	i. Air in syrup line.			i. Follow syrup line priming procedure to remove air from line.	80
	j. Air intake line to pump will not hold syrup prime.			j. Lubricate pump tube fitting o-rings. Inspect the intake line for leaks.	94
22. Syrup continues to flow after drawing a shake.	a. Air in syrup line.			a. Follow syrup prime procedure.	80
	b. Duckbill valve damaged.			b. Remove syrup nose fitting and clean. Replace duckbill valve.	95
23. Spinner shaft will not rotate to blend mix and syrup.	a. Flexible coupling is broken.			a. Call an authorized service technician.	---
	b. Pin is missing in quick disconnect of spinner coupling.			b. Call an authorized service technician.	---
	c. Spinner motor is out on thermal overload.			c. Allow the spinner motor to cool. Check lubrication on the spinner shaft.	53

PROBLEM	SHAKE SIDE PROBABLE CAUSE	SOFT SERVE SIDE PROBABLE CAUSE	EITHER SIDE PROBABLE CAUSE	REMEDY	PAGE REF.
24. Syrup toppings are not hot.		a. Topping heaters are not ON.		a. Select topping heater symbols. Symbols will be lit when heaters are ON.	73
		b. No water is in topping well.		b. Fill to indicating mark.	73
		c. The water is not hot enough.		c. Using a thermometer, check the water temperature in the topping well. It should be 140° F (60 °C).	---

Section 9

Parts Replacement Schedule

PART DESCRIPTION	EVERY 3 MONTHS	EVERY 6 MONTHS	ANNUALLY
Scraper Blade-Shake		X	
Scraper Blade-Soft Serve	X		
Drive Shaft Seal	X		
Freezer Door O-Ring-Shake	X		
Freezer Door Gasket-Soft Serve	X		
Front Bearing	X		
Front Beater Shoes-Soft Serve	X		
Draw Valve O-Ring	X		
Spinner Shaft Seal-Shake	X		
Restrictor Cap-Shake	X		
Mix Feed Tube O-Ring	X		
Pump O-Ring	X		
Pump Valve Gasket	X		
Mix Feed Tube Check Ring	X		
Pump Drive Shaft O-Ring	X		
Syrup Valve-Duckbill	X		
Peristaltic Pump Tubes		Inspect & Replace if Necessary	
White Bristle Brush, 3" x 7"		Inspect & Replace if Necessary	Minimum
White Bristle Brush, 3" x 1/2"		Inspect & Replace if Necessary	Minimum
White Bristle Brush, 1-1/2" x 3"		Inspect & Replace if Necessary	Minimum
White Bristle Brush, 1" x 2"		Inspect & Replace if Necessary	Minimum
Black Bristle Brush, 1" x 2"		Inspect & Replace if Necessary	Minimum
Double-Ended Brush		Inspect & Replace if Necessary	Minimum

Yellow Bristle Brush		Inspect & Replace if Necessary	Minimum
Brush Set (3)		Inspect & Replace if Necessary	Minimum

Section 10 Limited Warranty on Equipment

TAYLOR COMPANY LIMITED WARRANTY ON FREEZERS

Taylor Company, a division of Carrier Commercial Refrigeration, Inc. ("Taylor") 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 re-manufactured 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.

Product	Part	Limited Warranty Period
Soft Serve	Insulated shell assembly	Five (5) years
Frozen Yogurt	Refrigeration compressor	Five (5) years
Shakes	(except service valve)	
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) year

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
a division of Carrier Commercial Refrigeration, Inc.

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

Section 11 Limited Warranty on Parts

TAYLOR COMPANY LIMITED WARRANTY ON TAYLOR GENUINE PARTS

Taylor Company, a division of Carrier Commercial Refrigeration, Inc. ("Taylor") 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 re-manufactured 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.

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
Taylor Part #072454 (Motor-24VDC *C832/C842*)	Four (4) years

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 build-up 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
a division of Carrier Commercial Refrigeration, Inc.
750 N. Blackhawk Blvd.
Rockton, IL 61072, U.S.A.