

OPERATOR'S MANUAL



Model C612 Combination Freezer

Original Operating Instructions

088698-M

9/27/19 (Original Publication)
(Updated 5/17/2022)

Complete this page for quick reference when service is required:

Taylor distributor: _____

Address: _____

Phone: _____

Service: _____

Parts: _____

Date of installation: _____

Information found on the data label:

Model Number: _____

Serial Number: _____

Electrical Specs: Voltage _____ Cycle _____

 Phase _____

Maximum Fuse Size: _____ A

Minimum Wire Ampacity: _____ A

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

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

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088698-M

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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



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

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

- Only Taylor service personnel should perform installation, maintenance, and repairs on Taylor machines.
- 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 personal protective equipment (PPE) is available and worn when required during installation and service.
- Authorized service personnel must remove all metal jewelry, rings, and watches before working on electrical equipment.



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

Note: All repairs must be performed by a Taylor service technician.



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

Site Preparation

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



WARNING! Only install this machine in a location where its use and maintenance is restricted to trained personnel. Failure to comply may result in personal injury.

Air-Cooled Machine

The Model C612 air-cooled machine requires a minimum of 3 in. (76 mm) of clearance on all sides. Install the deflector provided to prevent recirculation of warm air. This will allow for adequate airflow across the condenser. Failure to allow adequate clearance can reduce the refrigeration capacity of the freezer and possibly cause permanent damage to the compressor.

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



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



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

The authorized installer should inspect the machine for damage and promptly report any damage to the local authorized Taylor distributor.

This machine is made using USA sizes of hardware. All metric conversions are approximate and vary in size.

Water Connections

(Water-Cooled Machines Only)

An adequate cold water supply must be provided with a hand shutoff valve. On the underside rear of the base pan, two 3/8 in. IPS water connections for inlet and outlet have been provided for easy hookup. Permanently connect machine using 1/2 in. (12.7 mm) inside diameter water lines. (Flexible lines are recommended, if local codes permit.) Depending on local water conditions, it may be advisable to install a water strainer to prevent foreign substances from clogging the automatic water valve. There will be only one **water-in** and one **water-out** connection. **Do not** install a hand shutoff valve on the **water-out** line! Water should always flow in this order: first, through the automatic water valve; second, through the condenser; and third, through the outlet fitting to an **open trap drain**. Maximum allowed water pressure of 150 psi (1,034 kPa).



IMPORTANT! A backflow prevention device is required on the incoming water connection side. Please see the applicable national, state, and local codes for determining the proper configuration. Water pressure to the unit must not exceed 150 psi (1034 kPa).

Electrical Connections



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

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

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

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



FOLLOW YOUR LOCAL ELECTRICAL CODES.



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



WARNING! Avoid injury.

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

- If the supply cord is damaged, it must be replaced by the manufacturer, service agent, or a similarly qualified person to avoid a hazard.
- Secure supply cord ground lead to machine in a location where if the cord is pulled the main power leads become taut before the ground lead can break loose.

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



IMPORTANT! An equipotential grounding lug is provided with this machine. Some countries require the grounding lug 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 machine's frame.

Beater Rotation



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

To correct the rotation on a three-phase machine, interchange any two incoming power supply lines at the machine main terminal block only. To correct rotation on a single-phase machine, exchange leads inside the beater motor. (Follow the diagram printed on the motor.)

Electrical connections are made directly to the terminal block provided in the main control box located behind the service panel.

It is recommended that beater rotation adjustment be performed by a Taylor service technician.

Refrigerant



CAUTION! This machine contains fluorinated greenhouse gases (F-Gas) to provide refrigeration using a hermetically sealed circuit or within foam insulation. This machine's type of gas, quantity, Global Warming Potential (GWP), and CO₂ tonnes equivalent information is recorded on the machine's data-label. The refrigerant used is generally considered nontoxic and nonflammable. 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



CAUTION! Use only approved refrigerant listed on the machine's data-label or authorized through a manufacturer's technical bulletin. The use of any other refrigerant may expose users and operators to unexpected safety hazards.



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



NOTICE! Taylor reminds technicians to be aware of and in compliance with local government laws regarding refrigerant recovery, recycling, and reclaiming systems. For information regarding applicable local laws, please contact your local authorized Taylor distributor.



IMPORTANT! Refrigerants and their associated lubricants may be 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.

TO THE INSTALLER

1

Your freezer has been carefully engineered and manufactured to give you dependable operation.

This machine, when properly operated and cared for, will produce a consistent quality product. Like all mechanical products, it will require cleaning and maintenance. A minimum amount of care and attention is necessary if the operating procedures outlined in this manual are followed closely.



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

Your Taylor machine will **NOT** compensate for and/or correct any errors made during the setup or filling operations. Thus, the initial assembly, setup, and priming procedures are of extreme importance. It is strongly recommended that all personnel responsible for the machine's operation, including assembly and disassembly, go through these procedures together in order to be properly trained and to make sure that all personnel understand their role in using and maintaining the machine.

If 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 a Taylor service technician. Taylor reserves the right to deny warranty claims on machines or parts if Taylor-unapproved parts or incorrect refrigerant were installed in the machine, system modifications were performed beyond factory recommendations, or it is determined that the failure was caused by 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.



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

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

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

Compressor Warranty Disclaimer

The refrigeration compressor(s) on this machine 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 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 Taylor compressor warranty. It is the machine owner's responsibility to make this fact known to any technician he or she 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 machine in question.

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

Operate Safely



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



NOTICE! DO NOT operate this machine without reading this entire manual first. Failure to follow all of these operating instructions may result in damage to the machine, poor performance, health hazards, or personal injury.



IMPORTANT! *This machine is to be used only by trained personnel. It is not intended for use, cleaning, or maintenance 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 machine by a person responsible for their safety. Children should be supervised to ensure that they do not play with the machine.*



IMPORTANT! *An equipotential grounding lug is provided with this machine. Some countries require the grounding lug 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 machine's frame.



WARNING! Avoid injury.

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

SAFETY

location where if the cord is pulled the main power leads become taut before the ground lead can break loose.

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



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

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WARNING! Avoid injury.

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

Failure to follow these instructions may result in severe personal injury, especially to fingers or hands, from hazardous moving parts.



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

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



WARNING! Only install this machine in a location where its use and maintenance is restricted to trained personnel. Failure to comply may result in personal injury.



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



NOTICE! Cleaning and sanitizing schedules are governed by your federal, 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 machine.



CAUTION! This machine is equipped with a refrigerated cabinet, designed to maintain product temperature at or below 41°F (5°C). Before replenishing the mix supply, the product must be refrigerated at or below 41°F (5°C). Failure to follow this instruction may result in health hazards and poor freezer performance.

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

DO NOT obstruct air intake and discharge openings. A minimum of 3 in. (76 mm) air clearance on both sides of the machine is required. It is recommended to place the rear of the machine against the wall to prevent the recirculation of warm air. Failure to follow this instruction may cause poor freezer performance and damage to the machine.

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

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

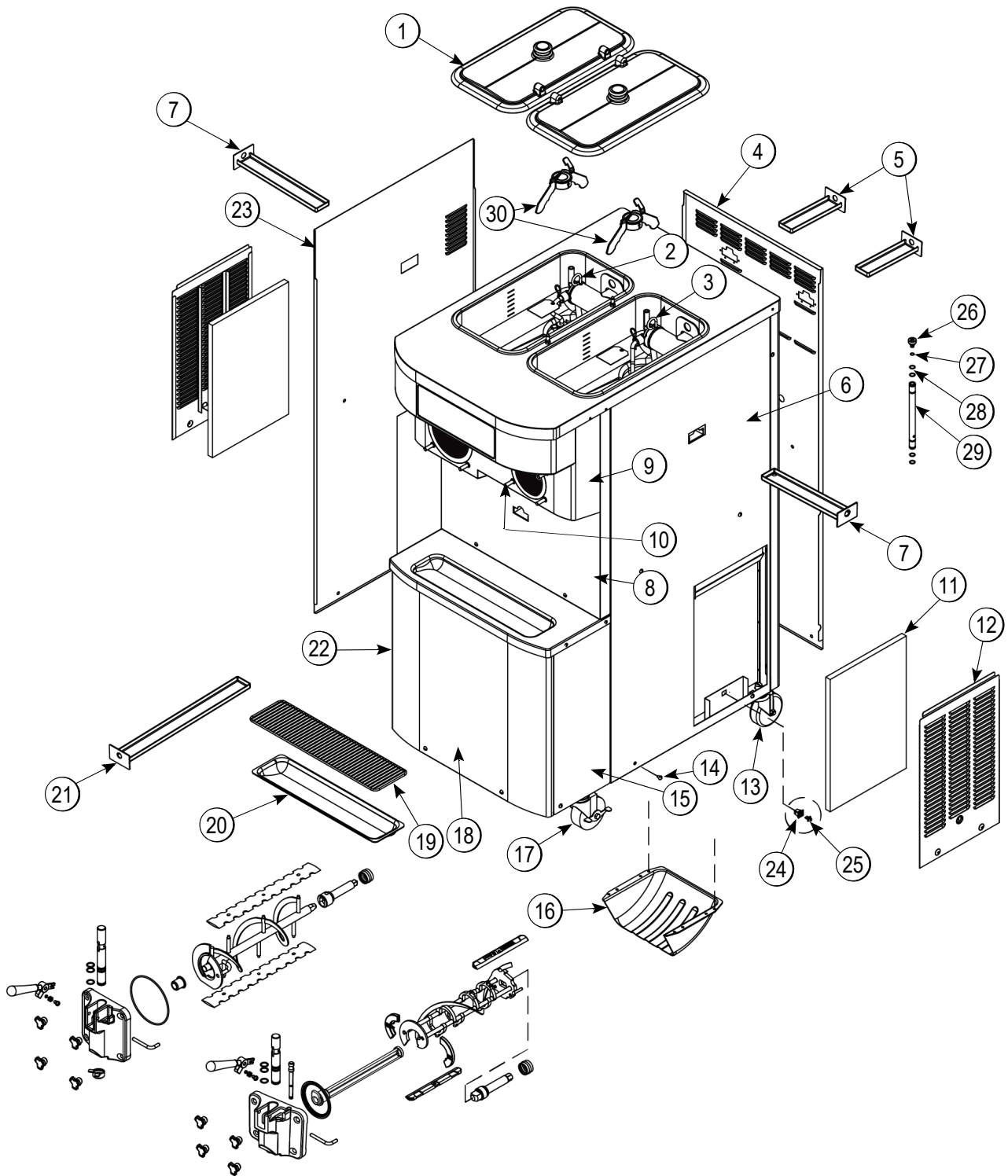


Figure 4-1

C612 Exploded View Parts Identification

4

Item	Description	Part No.
1	Kit A.-Cover-Hopper*Dual	X67061-SP
2	Pump A.-Mix Simplified Shake	X57028-14 See page 4-5
3	Pump A.-Mix Simplified Soft Serve	X57029-12 See page 4-6
4	Panel-Rear	088555
5	Pan-Drip -Rear	X56003
6	Panel-Side-Right	088548
7	Pan-Drip-Side	X56005
8	Panel A.-Front	X88532
9	Panel A.-Front-Upper	X88534
10	Stud-Nose Cone	055987
11	Filter-Air-Poly-Flo	052779-11
12	Panel A.-Filter-Louvered	X59928
13	Caster-4" SWV 3/4-10 STM	044106
14	Screw-1/4-20 X 3/8 RHM	011694
15	Panel-Corner-Frnt-R	063087
16	Deflector-Blower Exh	084447

Item	Description	Part No.
17	Caster-4" SWV 3/4-10 Stem w/Brake	046437
18	Panel A.-Front Lower	X59854
19	Shield-Splash-Wire-19-3/4 L	033813
20	Tray-Drip-19-5/8 L X 4-7/8	033812
21	Pan-Drip 19-1/2 Long	035034
22	Panel-Corner-Frnt-L	063088
23	Panel-Side-Left	088547
24	Fastener-Door Latch	030787
25	Fastener-Door Strike	030788
*26	Orifice	022465-100
*27	O-ring-3/8 OD X .070W (100 to Bag)	016137-SER
*28	O-ring-.643 OD X .077W (50 to Bag)	018572-SER
*29	Tube A.-Feed-SS-5/32 Hole	X29429-2
30	Blade A.-Agitator	X56591-SP1

*Optional Feed Tube

Model C612 Beater Door Assembly—Shake Side

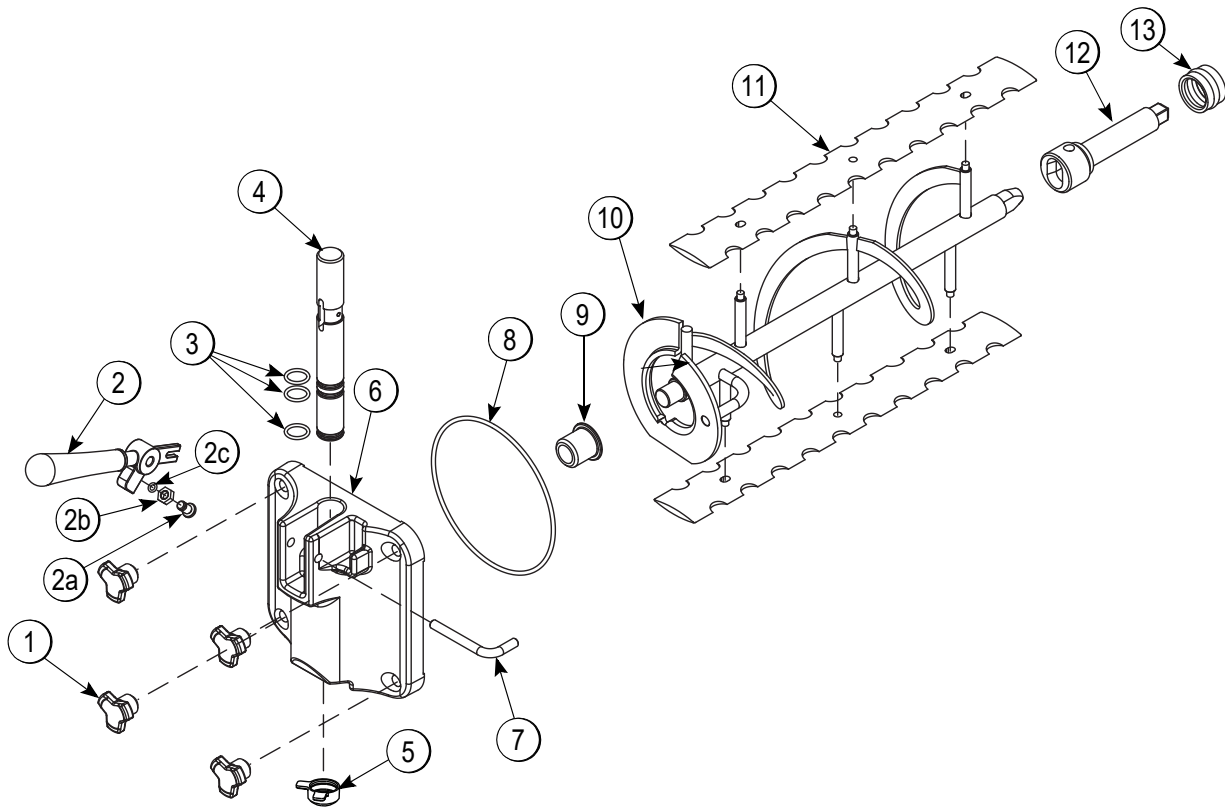


Figure 4-2

Item	Description	Part No.
1	Nut-Stud-Short-Black-1.00 Long	055989
2	Handle A.-Draw (Black)	X83800-1
2a	Screw-Adjustment-5/16-24	056332
2b	Nut-5/16-24 Finished Hex	029639-BLK
2c	O-ring-1/4 OD x .070W 50 Duro (25 to Bag)	015872-SER
3	O-ring -7/8 OD x .03W (100 to Bag)	014402-SER
4	Valve A.-Draw *C612* (Black)	X88542
5	Cap-Restrictor	088725

Item	Description	Part No.
6	Door A.-Shake Side	X88603
7	Pin-Handle-SS	055819
8	O-ring 6" (Freezer Door)	033493
9	Bearing-Door Front	055605
10	Beater A.-7 qt. Fluted Blade	X50958
11	Blade-Scraper 16"	041103
12	Shaft-Beater 7 qt.	050985
13	Seal-Drive Shaft	032560

Model C612 Beater Door Assembly—Soft Serve Side

4

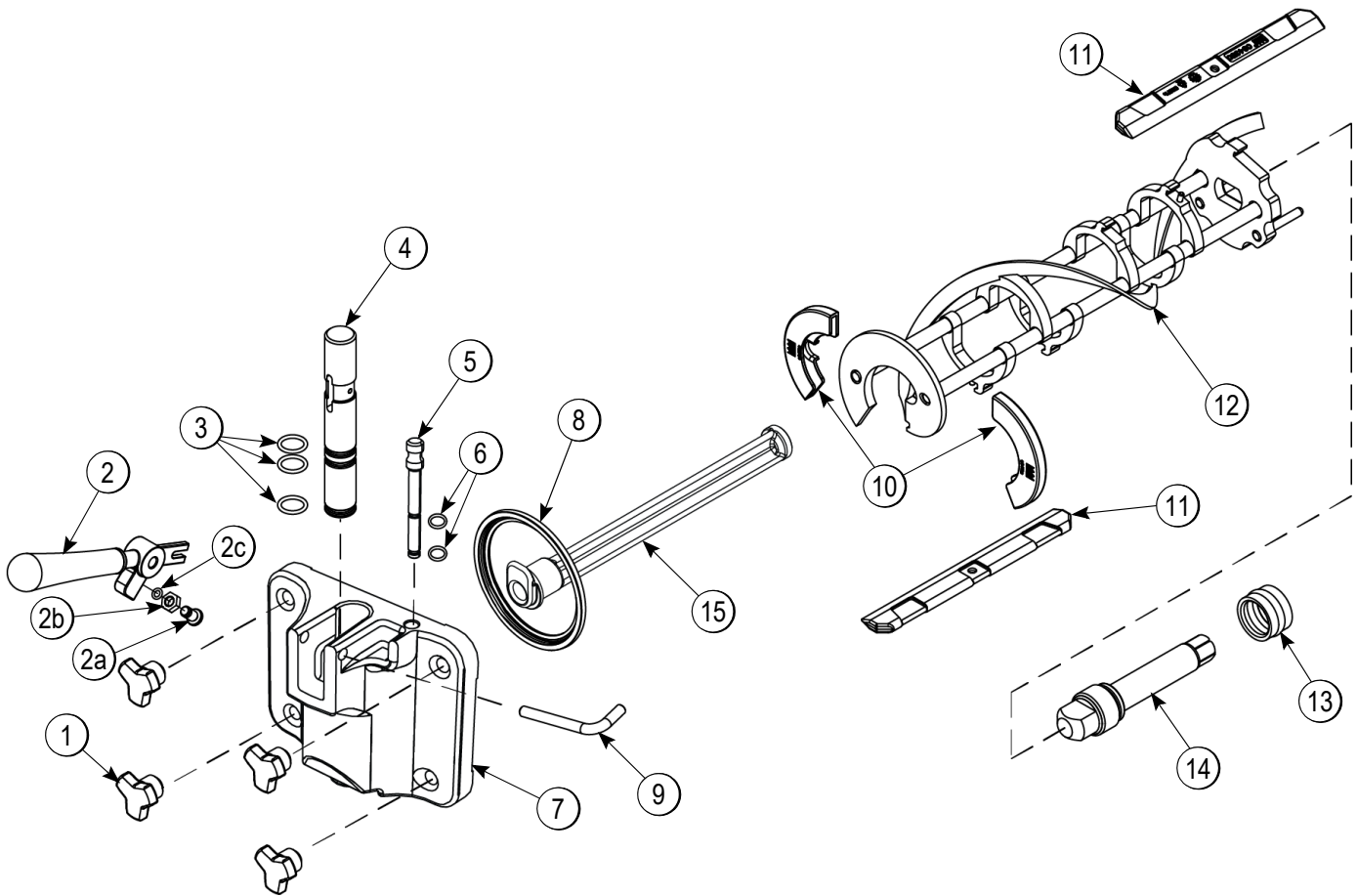


Figure 4-3

Item	Description	Part No.
1	Nut-Stud-Black-1.00 Long	055989
2	Handle A.-Draw (White)	X83800-2
2a	Screw-Adjustment-5/16-24	056332
2b	Nut-5/16-24 Finished Hex	029639-BLK
2c	O-ring-1/4 OD x .070W 50 Duro (25 to Bag)	015872-SER
3	O-ring-7/8 OD x .103W (100 to Bag)	014402-SER
4	Valve A. -Draw *C706* (White)	X56072
5	Plug-Prime	028805-SP
6	O-ring-3/8 OD x .070W (100 to Bag)	016137-SER

Item	Description	Part No.
7	Door A.-1SP 3.4 QT Threadless	X87683-SER
8	Gasket-Door HT 4"-Double	048926
9	Pin-Handle-SS	055819
10	Kit A.-Beater-Front Shoes-Bearing	X50350
11	Blade-Scraper-Plastic 8-1/8L	084350
12	Beater A.-3.4qt-1 Pin	X46231
13	Seal-Drive Shaft	032560
14	Shaft-Beater	032564
15	Baffle-Threadless	087708

X57028-14 Pump A. - Mix Simplified - Shake

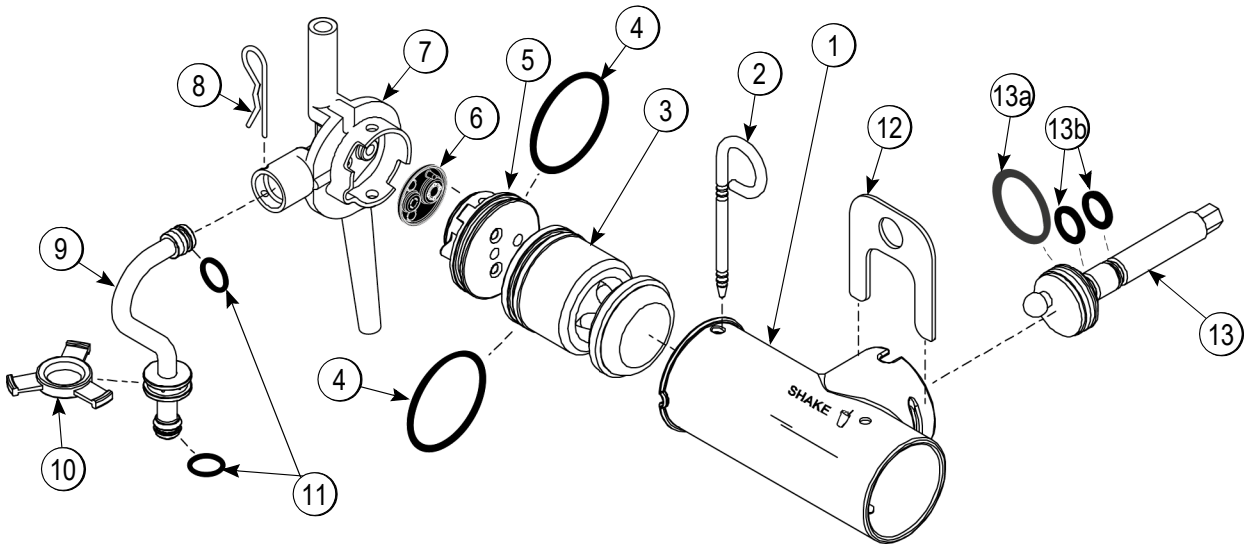


Figure 4-4

Item	Description	Part No.
1-7	Pump Assembly-Mix Simplified Shake	X57028-14*
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 (50 to Bag)	020051-SER
5	Cap-Valve Body Shake	056873-14*
6	Gasket - Simplified Pump Valve	086097
7	Adaptor - Mix Inlet - Shake Blue	054944
8	Pin-Cotter-Hairpin-1/8DIA	044731
9	Tube A.-Feed Tube-SHK	X55973

Item	Description	Part No.
10	Ring-Check-Feed-Tube	056524
11	O-ring-11/16ODX.103W-Red (50 to bag)	016132-SER
12	Clip-Retainer-Mix Pump	044641
13	Shaft A.-Drive-Mix Pump-Hopper	X41947
13a	O-ring-1-3/4 OD X .139W (25 to bag)	008904-SER
13b	O-ring 1/2 ID X .139W (25 to bag)	048632-SER

***Note:** The standard pump is X57028-14. Overrun can be changed higher or lower by substituting the valve body cap. The higher the (-), the higher the overrun. Your machine includes two optional caps, 056873-12 and 056873-16.

X57029-12 Pump A. - Mix Simplified - Soft Serve

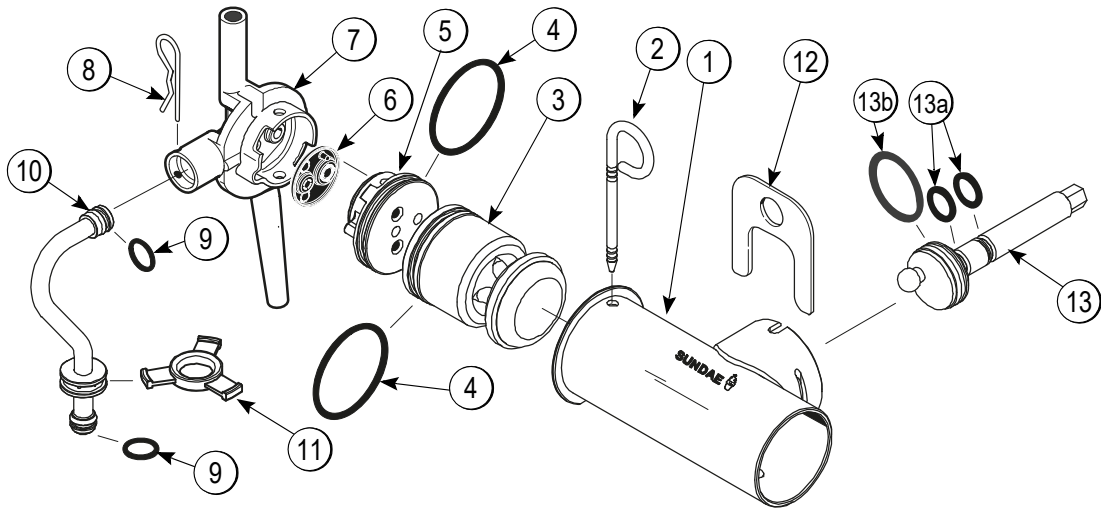


Figure 4-5

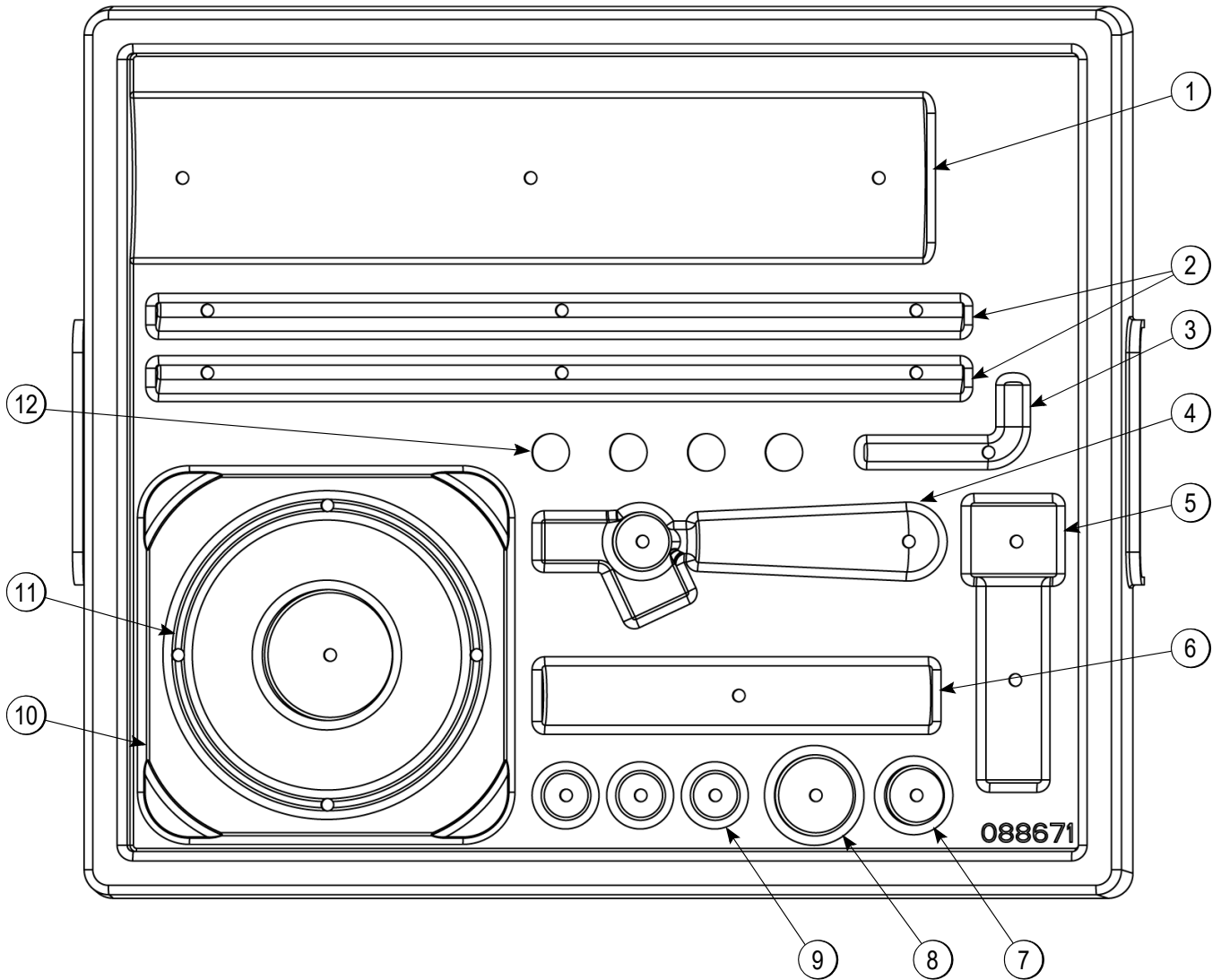
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Item	Description	Part No.
1-7	Pump Assembly - Mix Simplified Soft Serve	X57029-12*
1	Cylinder-Pump-Hopper- Soft Serve	057943
2	Pin-Retaining	X55450
3	Piston	053526
4	O-ring 2-1/8" OD x .139W-#225 (50 to Bag)	020051-SER
5	Cap-Valve	056874-12*
6	Gasket - Simplified Pump Valve	086097
7	Adaptor - Mix Inlet	054825
8	Pin - Cotter	044731

Item	Description	Part No.
9	O-ring - 11/16 OD x .103W-Red (50 to Bag)	016132-SER
10	Tube A.-Feed-Right	X55974
11	Ring-Check-Feed Tube	056524
12	Clip-Retainer-Mix Pump	044641
13	Shaft A.-Drive-Mix Pump	X41947
13a	O-ring - 1/2 ID x .139W (25 to Bag)	048632-SER
13b	O-ring 1-3/4 OD x .139W (25 to Bag)	008904-SER

***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. Your machine includes two optional caps, 056874-10 and 056874-14.

088671 Parts-Tray - Shake Side



4

Figure 4-6

Item	Description	Part No.
1	Beater A.-7 qt.	X50958
2	Blade-Scraper-16"	041103
3	Pin-Handle	055819
4	Handle A.-Draw	X83800-1
5	Shaft-Beater	050985
6	Valve A.-Draw	X56072

Item	Description	Part No.
7	Bearing-Door	055605
8	Seal-Drive Shaft	032560
9	O-ring - 7/8 OD x .103W	014402
10	Door A. -Shake Side	X88603
11	O-ring-6" (Freezer Door)	033493
12	Nut-Stud	055989

088672 Parts-Tray - Soft Serve Side

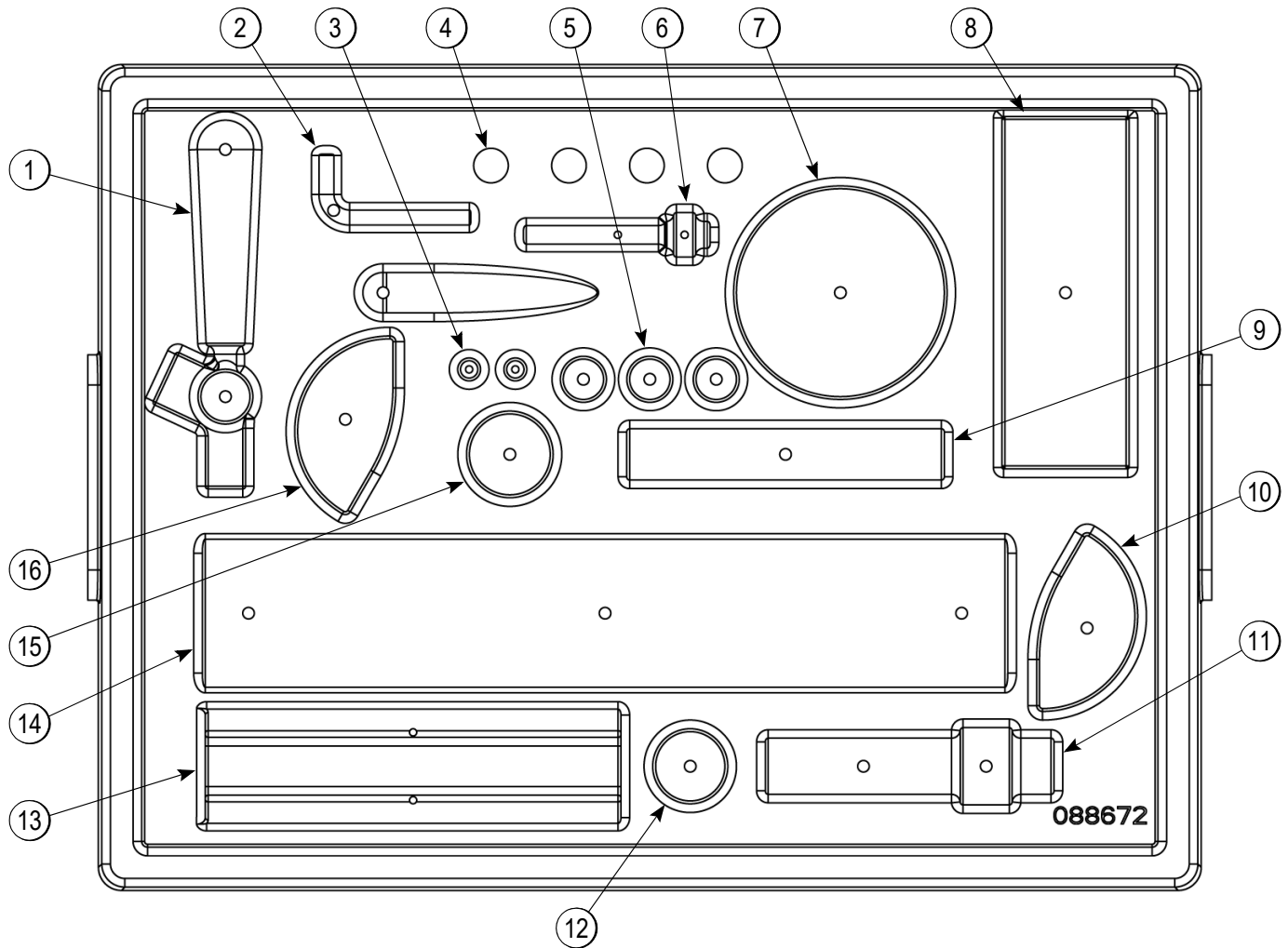


Figure 4-7

Item	Description	Part No.
1	Handle A.-Draw	X83800-2
2	Pin-Pivot	055819
3	O-ring - 3/8 OD x .070W	016137
4	Nut-Stud - Short	055989
5	O-ring -7/8 OD x .103W	014402
6	Plug - Prime	028805
7	Gasket-Door HT 4"-Double	048926
8	Door A.-w/Baffle *C612*SS	X88602

Item	Description	Part No.
9	Valve A.-Draw	X56072
10	Shoe-Front Helix- Rear	084109
11	Shaft - Beater	032564
12	Seal-Drive Shaft	032560
13	Blade-Scraper-Plastic 8-1/8L	084350
14	Beater A.	X46231
15	Bearing - Front - Shoe	050348
16	Shoe-Front Helix- Front	084108

Accessories

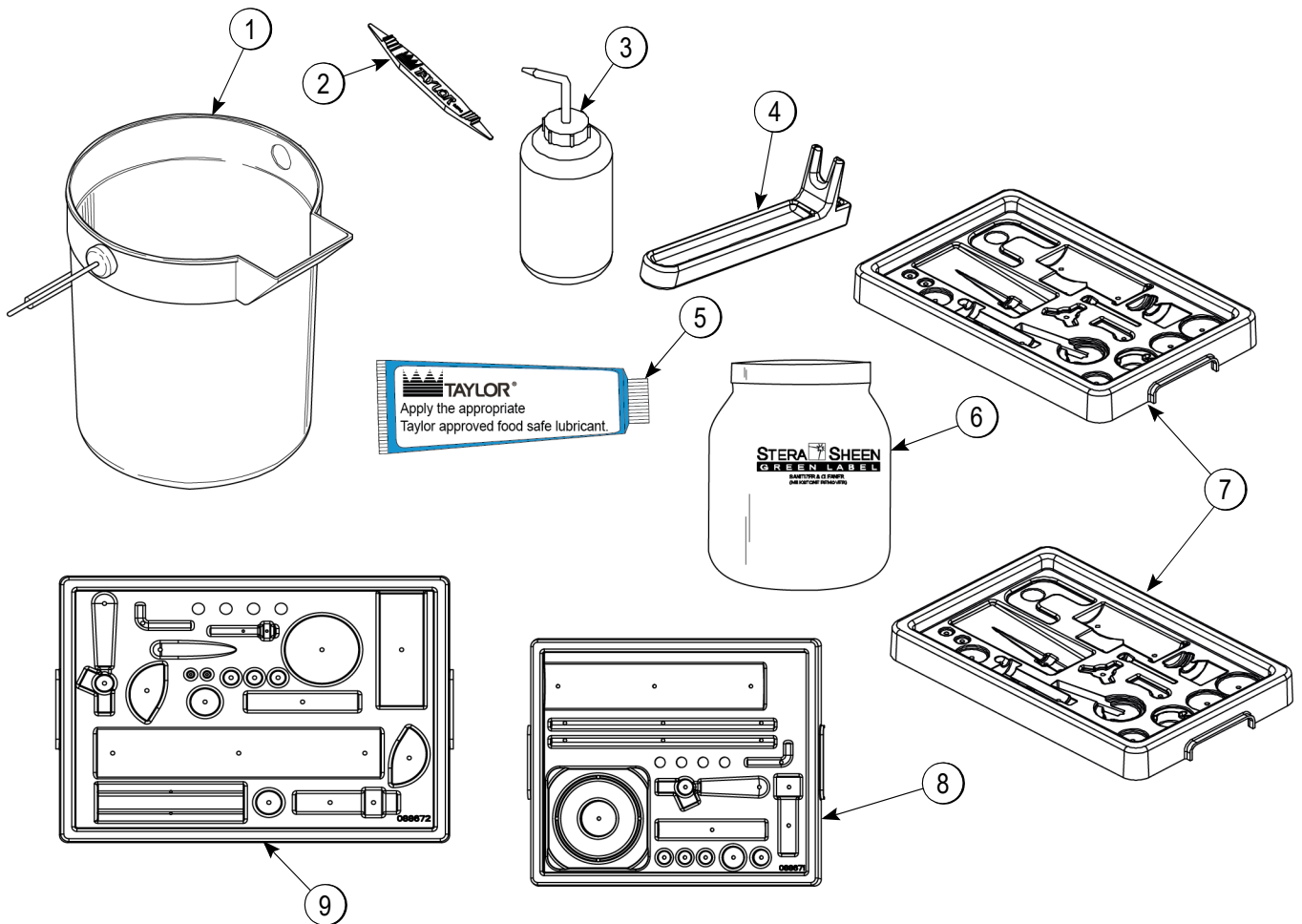


Figure 4-8

Item	Description	Part No.
1	Pail-10 qt.	013163
2	Tool-O-ring Removal	048260-WHT
3	Bottle-Wash-Plastic	044818
4	Tool-Mix Pump Shaft Removal	057167
5	Lubricant-Taylor 4 oz.	047518
*6	Sanitizer-Stera Sheen	See Note

Item	Description	Part No.
7	Tray -Parts-Pump SS	056525
8	Tray -Parts-Shake	088671
9	Tray -Parts-Soft Serve	088672
**	Kit A.-Tune-Up C612	X49463-87

***Note:** A sample container of sanitizer is sent with the machine. For reorders, order Stera-Sheen® part no. 055492 (100 packs) or Kay-5® part no. 041082 (125 packs).

**Not Shown

Brushes

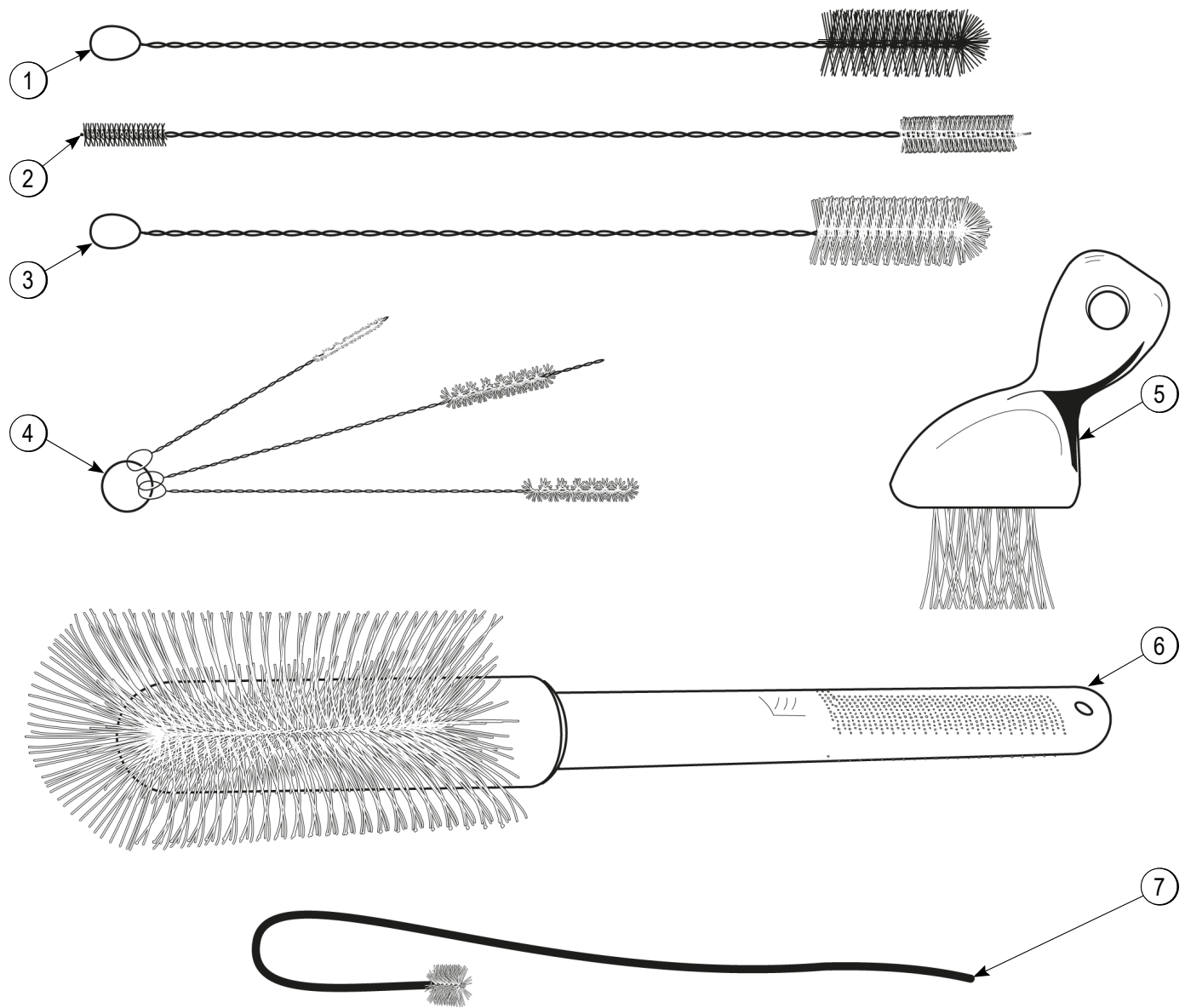
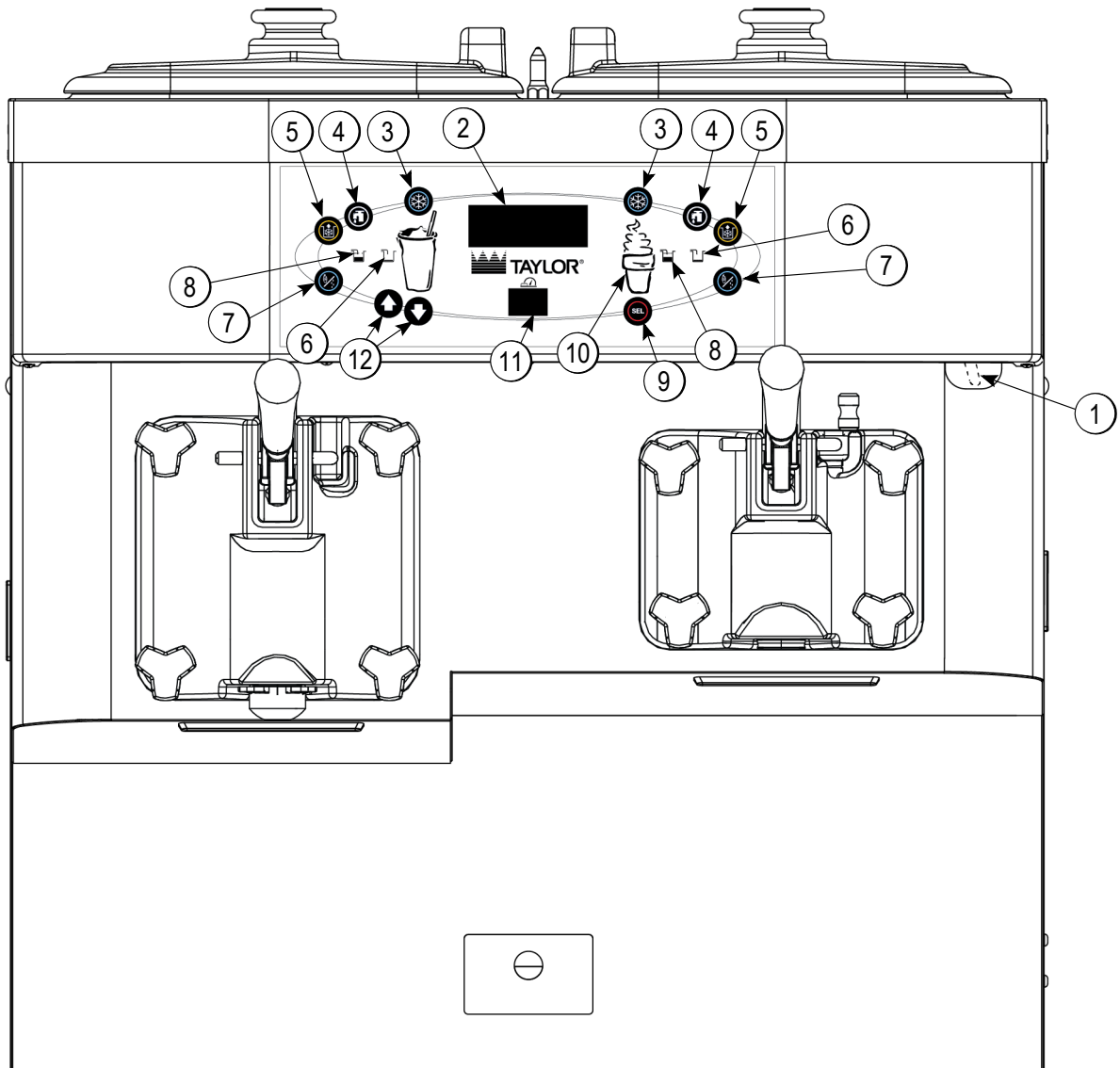


Figure 4-9

Item	Description	Part No.
1	Black Bristle Brush (1" X 2")	013071
2	Double End Brush	013072
3	Blue Bristle Brush (1" x 2")	013073
4	Brush Set (3)	050103

Item	Description	Part No.
5	Brush-End-Door-Spout	039719
6	Blue Bristle Brush (3" x 7")	023316
7	Brush-Pump Spout	054068



5

Figure 5-1

Item	Description
1	Power Switch
2	Fluorescent Display
3	Auto Key
4	Wash Key
5	Mix Pump Key
6	MIX OUT Indicator

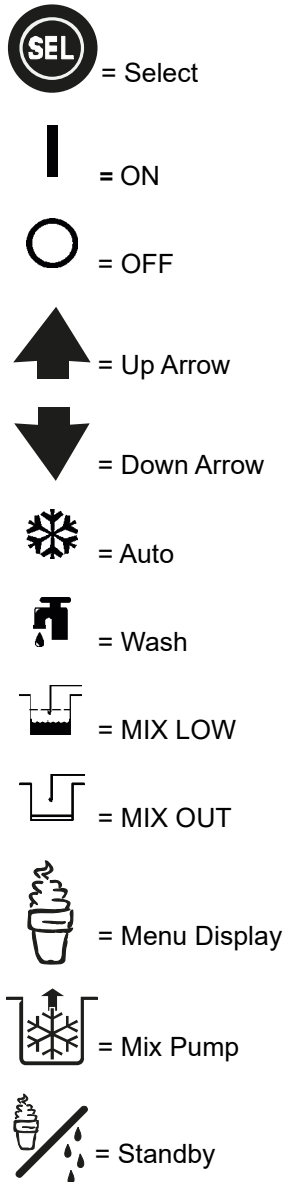
Item	Description
7	Standby Key
8	MIX LOW Indicator
9	Select (SEL) Key
10	Service Menu (Cone) Key
11	Brush-Clean Counter
12	Arrow Keys

Control Panel

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 machine is designed with these international symbols.

The following chart identifies the symbol definitions.



5


Power Switch


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


Fluorescent Display

The fluorescent display is 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. On international models, the display will indicate the temperature of the mix in the 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 press the Auto symbol . The freezer will automatically begin operation.

Standby Symbol

During long **no sale** periods, the machine can be placed in the Standby mode. This maintains product temperatures below 40°F (4.4°C) in both the hopper and the freezing cylinder, and helps prevent overbeating and product breakdown.

When Standby is selected, the Standby symbol  illuminates, indicating the Standby feature has been activated.

To resume normal operation, press the Auto

symbol . When the machine cycles off, the product in the freezing cylinder will be at serving viscosity.

Reset Mechanism

The reset buttons are in the back panel of the machine. They protect the beater motor from overloading. 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. Press the Wash symbol



and observe the freezer's performance.

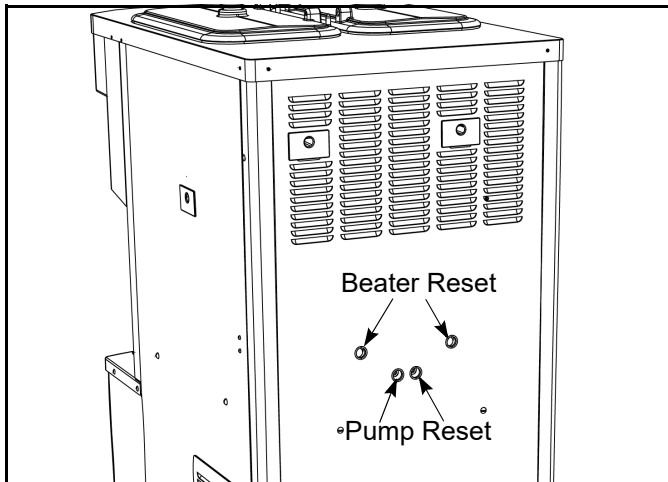


Figure 5-2



CAUTION! DO NOT use metal objects to press the reset button. Failure to follow this instruction may result in electrocution.

If the beater motor is turning properly, press the Wash



symbol to cancel the cycle. Press the Auto symbol



to resume normal operation. If the freezer shuts down again, contact your service technician.

Air/Mix Pump Reset Mechanism

This reset button 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.



CAUTION! DO NOT use metal objects to press the reset button. Failure to follow this instruction may result in electrocution.

Adjustable Draw Handle

This machine 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 soft serve: 5 oz. to 7-1/2 oz. (148 ml to 222 ml) of product by weight per 10 seconds. Shake: 7 oz (207 ml) of product by weight per 5 seconds. To **increase** the flow rate, tighten the screw. To **decrease** the flow rate, loosen the screw. (See Figure 5-3.)

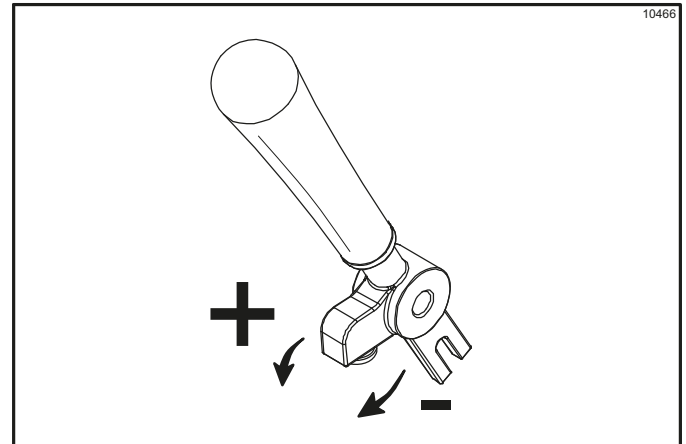


Figure 5-3

5

Optional Feed Tube (Backup Option)

If the air/mix pump has become inoperable because of a missing or damaged part, the operator can temporarily operate the unit using the feed tube. The product ejection rate will be slower when the feed tube is used instead of the air/mix pump.

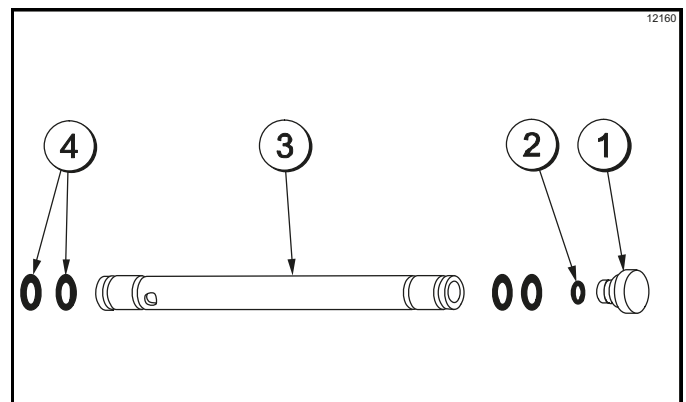


Figure 5-4

Item	Description	Part No.
1	Orifice	022465-100
2	O-ring-3/8 OD x .070 W	016137
3	Tube A.-Feed-SS 5/32 Hole	X29429-2
4	O-ring-.643 OD x .077 W	018572

The feed tube serves two purposes. One end of the tube has a hole and the other end does not.

1. Normal Operation

During normal operation the end of the feed tube with the hole is placed into the mix inlet hole. Every time the draw handle is raised, new mix and air from the hopper flow into the freezing cylinder. This keeps the freezing cylinder properly loaded and maintains overrun.

2. Long **No Sale** Periods

During long **no sale** periods, the machine can be placed in the Standby mode. This maintains product temperatures below 40°F (4.4°C) in both the hopper and the freezing cylinder and helps prevent overheating and product breakdown.

5 To place the machine in the Standby mode, press the STANDBY key. Remove the air orifice. Lubricate the O-rings on the end of the feed tube without the hole. Place that end of the tube into the mix inlet hole. This will prevent any mix from entering the freezing cylinder.

Note: *The air orifice is used to meter a certain amount of air into the freezing cylinder. The air orifice maintains overrun and allows enough mix to enter the freezing cylinder after a draw.*

Operating Screen Descriptions

The fluorescent display in the center of the control panel is normally blank during the daily operation of the machine. The display is activated when the SEL 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. The screen will display INITIALIZING. There are four types of data the system will check: LANGUAGE, SYSTEM DATA, CONFIG DATA, and LOCKOUT DATA.

During the INITIALIZING... LANGUAGE screen, the

alarm will be on. If the system detects corrupt data during INITIALIZING, the following display will alert the operator that the control settings may have been changed:

**NVRAM FAULT
RESET TO DEFAULTS
PRESS SEL KEY**

See NVRAM FAULT for instructions if the above message appears on the screen.

Once the system has initialized, the SAFETY TIMEOUT screen will display and the alarm will be on.

**SAFETY TIMEOUT
ANY KEY ABORTS**

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 following screen is displayed:

**POWER SWITCH OFF
- - - - -
UNIT CLEANED**

Power Switch ON



When the power switch is placed in the ON position, the control panel press keys become operative. The fluorescent display will either be blank or indicate that the machine has been cleaned.

UNIT CLEANED

Brush-Clean Counter

The brush-clean counter (item 9 on page 5-1) will display the number of hours since the freezer was last brush-cleaned. After hour 99, it will change to a letter and a number. (Example: A0, A1, B0, B1, etc.)

Manager's Menu

The Manager's Menu is used to enter the operator function displays. To access the Menu, press the center of the Cone symbol  on the control panel. The arrow symbols, the SEL symbol, and the Cone symbol  will be lit when the ACCESS CODE screen is displayed. (See Figure 5-5.)

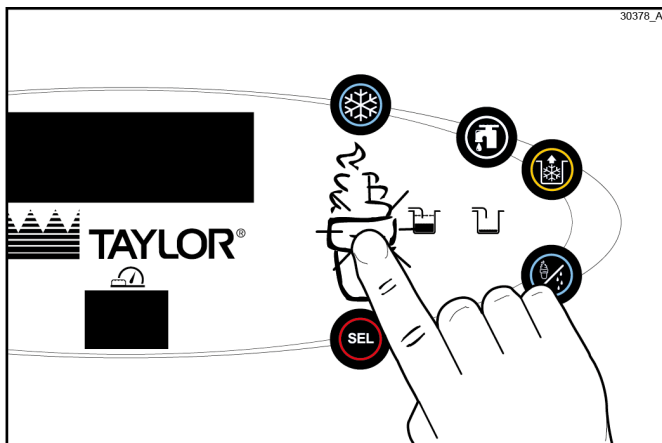


Figure 5-5

In the Menu program, the arrow symbols and the SEL symbol will function as menu keys.

Up Arrow—Increases the value above the cursor and is used to scroll upward in text displays.

Down Arrow—Decreases the value above the cursor and is used to scroll downward in text displays.

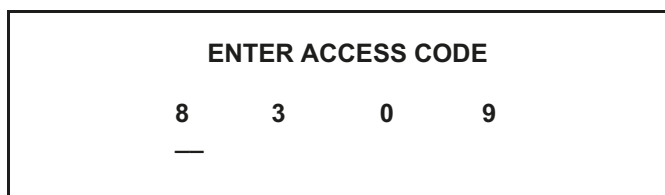
SEL—Advances the cursor position to the right and is used to select menu options.

Note: *The machine will continue operation in the mode it was in when the Menu was selected.*

However, the control keys will not be illuminated and are nonfunctional when the Manager's Menu is displayed.

Entering Access Code

With the ENTER ACCESS CODE screen on the display, use the SEL symbol to set the first code number in the cursor position. When the correct number is selected, press the SEL symbol to move the cursor to the next number position.



Continue to enter the proper access code numbers (8309) until all four numbers are displayed, then press the SEL 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 Manger's Menu program when the SEL symbol is selected. (See Figure 5-6.)



Figure 5-6

Menu Options

Press the arrow symbols to move up or down through the Menu. Select a Menu option by pressing the SEL symbol. Exit the Menu program by selecting EXIT FROM MENU

or press the Cone symbol .

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

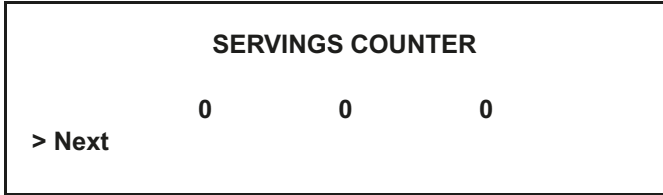
- EXIT FROM MENU
- SERVINGS COUNTER
- SET CLOCK
- AUTO START TIME
- AUTO STANDBY TIME
- STANDBY MODE
- MIX LEVEL AUDIBLE
- FAULT DESCRIPTION
- FAULT HISTORY
- LOCKOUT HISTORY
- SYSTEM INFORMATION
- CURRENT CONDITIONS
- NET SERVICE PIN

Exit From Menu

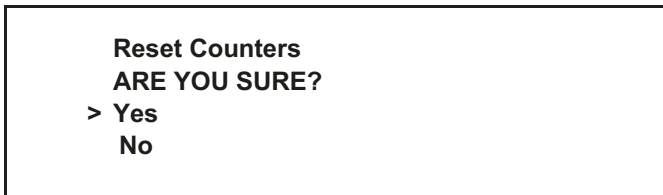
Selecting EXIT FROM MENU will exit the Manager's Menu and return the control panel keys to normal operation.

Servings Counter

The SERVINGS COUNTER is used to check or reset the number of servings dispensed from the machine. The SERVING COUNTER will automatically reset to zero when the machine is brush-cleaned.



Reset the SERVINGS COUNTER by pressing the SEL key, which advances to the next screen. Press the Up arrow key to move the arrow (>) to **Yes**, then press the SEL key. The servings counter will reset to zero and exit back to the Manager's Menu.

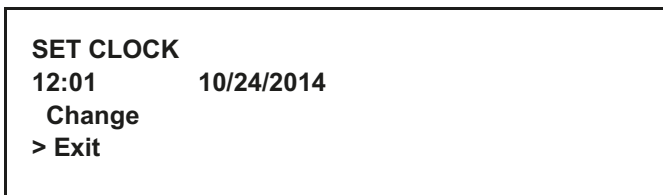


5 Set Clock

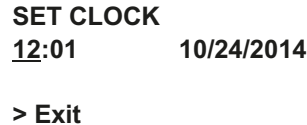
SET CLOCK allows the manager or service technician to adjust the real time clock if the machine is in the brush-cleaned state. The following message will display if SET CLOCK is selected when the machine is **not** in a brush-clean state:



If the machine is in the brush-cleaned state, pressing the SEL key would display the following screen:



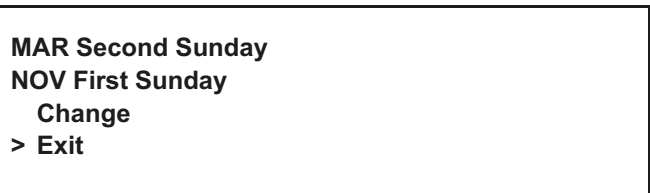
To make any changes, press the Up arrow to move to **Change** and press the SEL key. Pressing the SEL key will scroll the cursor to the right one digit for each key press. Pressing the Up or Down arrow keys increases or decreases the selected digits.



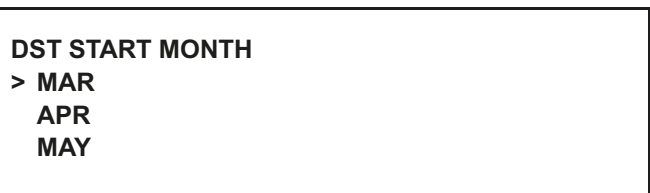
After all changes have been made and the year has been set, pressing the SEL key will display the first DAYLIGHT SAVING TIME (DST) screen.



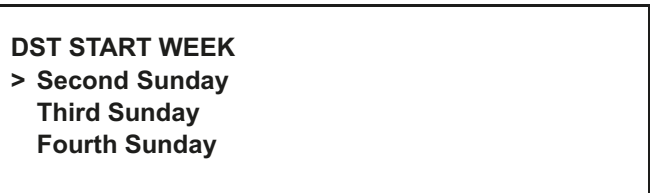
Pressing the Up or Down arrow keys will move the arrow to **Enable** or **Disable**. Pressing the SEL key next to **Disable** will disable Daylight Saving Time and return to the Manager's Menu. Pressing the SEL key next to **Enable** selects that option and displays the month and Sunday screen.



If the correct Sunday for the time change is not displayed, then **Change** should be selected. Pressing the SEL key with the arrow next to **Change** displays the DST START MONTH screen. Press the Up or Down arrow key to move the arrow to the appropriate month for the start of DST.



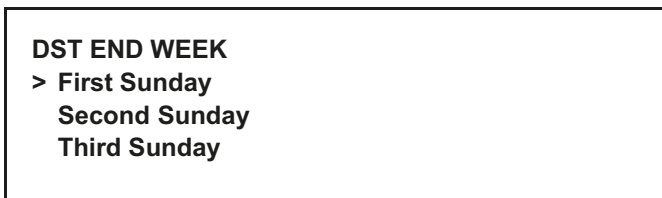
Pressing the SEL key with the arrow next to the appropriate month selects the DST START MONTH and then displays the DST START WEEK screen. Pressing the Up or Down arrow key will move the arrow to the appropriate week for the start of DST.



Pressing the SEL key next to the appropriate week will display the DST END MONTH screen. Press the Up or Down arrow key to move the arrow to the appropriate month for the end of DST.



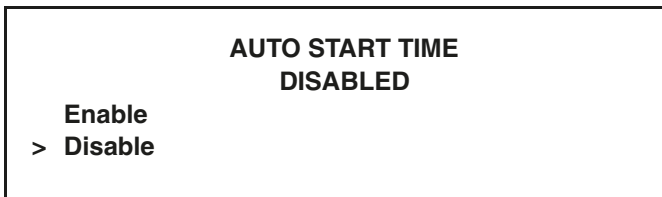
Pressing the SEL key next to the appropriate month will display the DST END WEEK screen. Press the Up or Down arrow key to move the arrow to the appropriate week for the end of DST.



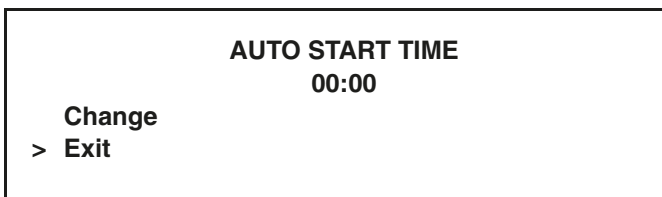
Pressing the SEL key with the arrow next to the appropriate week will select that setting and return to the Manager's Menu.

Auto Start Time

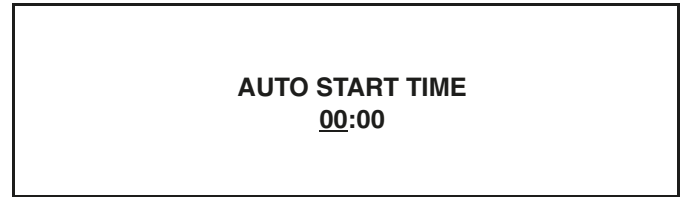
AUTO START TIME allows the manager to set the time of day at which the machine automatically enters the Auto mode from the Standby mode. The machine must be in Standby mode without a freezer lock condition in order to auto start at the programmable time. The AUTO START TIME can also be disabled and require starting the Auto mode manually.



Enable the AUTO START TIME by pressing the Up arrow key to move the arrow Up to **Enable**. Press the SEL key to advance to the next screen.



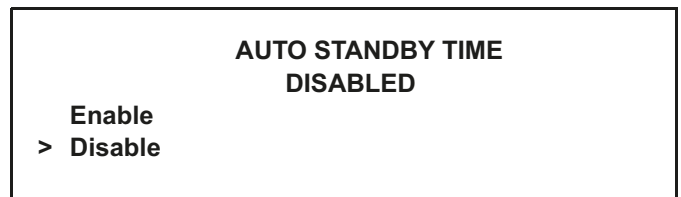
Program the AUTO START TIME by pressing the Up arrow key to move the arrow to **Change**. Press the SEL key to advance to the next screen.



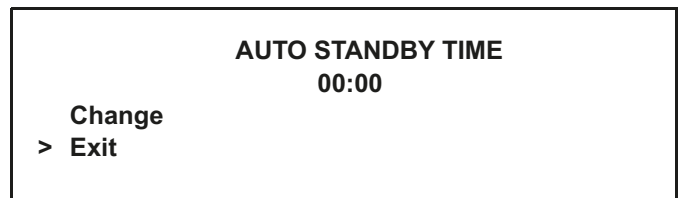
Use the arrow keys to program the AUTO START TIME by increasing or decreasing the hour setting above the cursor. Press the SEL key to advance the cursor and program the minutes setting. Press the SEL key to return to the previous screen with the new time setting displayed. Press the SEL key to exit the screen and return to the Manager's Menu.

Auto Standby Time

AUTO STANDBY TIME allows the manager to set the time of day at which the machine automatically enters the Standby mode from the Auto mode. The machine must be in Auto mode in order to auto start at the programmable time. The AUTO STANDBY TIME can also be disabled and require starting the Standby mode manually.



Enable the AUTO STANDBY TIME by pressing the Up arrow key to move the arrow up to **Enable**. Press the SEL key to advance to the next screen.



Program the AUTO STANDBY TIME by pressing the Up arrow key to move the arrow to **Change**. Press the SEL key to advance to the next screen.

AUTO STANDBY TIME
00:00

Use the arrow keys to program the AUTO STANDBY TIME by increasing or decreasing the hour setting above the cursor. Press the SEL key to advance the cursor and program the minutes setting. Press the SEL key to return to the previous screen with the new time setting displayed. Press the SEL key to exit the screen and return to the Manager's Menu.

Standby Mode

STANDBY MODE is used to manually place the machine into the Standby mode during long no-draw periods. Press the Up arrow key to place the arrow next to the appropriate side. Press the SEL key to place that side of the machine into Standby and return to the Main Menu.

STANDBY MODE

LEFT
RIGHT
> EXIT

Mix Level Audible

When MIX LEVEL AUDIBLE is selected, it alerts the operator with an audible tone that there is a MIX LOW or MIX OUT condition. The following screen is displayed upon selecting this option:

MIX LEVEL AUDIBLE
ENABLED

> Enable
Disable

Disable the audible tone feature by pressing the Down arrow key to move the arrow to **Disable**. Press the SEL key to save the new setting and return to the Manager's Menu. The control panel icons for MIX LOW and MIX OUT will illuminate as the mix level drops in the hopper, but the audible tone will be disabled.

Fault Description

The fluorescent display is 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. On international models, the display will indicate the temperature of the mix in the hopper. If a fault does occur, it will appear on the display.

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

BEATER OVERLOAD—Place the power switch in the OFF position. Press the beater reset button firmly. Place the power switch in the ON position and restart in Auto mode.

HPCO COMPRESSOR—Place the power switch in the OFF position. Wait 5 minutes for the machine to cool down. Place the power switch in the ON position and restart in Auto mode.

PRODUCT DOOR OFF—The door must be installed on the machine.

***HOPPER THERMISTOR FAIL**—Place the power switch in the OFF position. Replace the hopper thermistor probe.

***BARREL THERMISTOR FAIL**—Place the power switch in the OFF position. Replace the barrel thermistor probe.

***Note:** Three codes have been set up to assist in diagnosing bad thermistor probes. If a probe has shorted (resistance less than 1 ohm), **SHRT** will be displayed on the screen for its respective machine location. If the probe is open (resistance above 1 megohm), **OPEN** will be displayed. If the actual probe environment exceeds 200°F (93°C), the respective screen display will read **OVER**, indicating the temperature is **out of range**.

Fault History

FAULT HISTORY will display up to 100 faults that have occurred. Page numbers are displayed in the upper right-hand corner. Page 1 contains the most recent fault. Pressing the Up arrow key cycles through the FAULT HISTORY pages from most recent to oldest. Pressing the Down arrow key cycles from the oldest to the most recent. The date and time of the event are displayed on the second line. The third line displays the reason for the fault.

FAULT HISTORY	1
00/00/00	00:00
REASON	
> Exit	

Faults Occurring While in Auto or Standby Mode

(L/R) HPR>41F (5C) AFTER 4 HR—The mix temperature in the hopper was above 41°F (5°C) for more than 4 hours.

(L/R) BRL>41F (5C) AFTER 4 HR—The mix temperature in the freezing cylinder was above 41°F (5°C) for more than 4 hours.

(L/R) HPR>41F (5C) AFTER PF—The mix temperature in the hopper was above 41°F (5°C) for more than 4 hours following a power failure.

(L/R) HPR>45F (7C) AFTER 1 HR—The mix temperature in the left or right hopper was above 45°F (7°C) for more than 1 hour.

(L/R) BRL>45F (7C) AFTER 1 HR—The mix temperature in the left or right barrel was above 45°F (7°C) for more than 1 hour.

(L/R) BRL>41F (5C) AFTER PF—The mix temperature in the freezing cylinder was above 41°F (5°C) for more than 4 hours following a power failure.

(L/R) HPR>59F (15C)—The mix temperature in the hopper exceeded 59°F (15°C).

(L/R) BRL>59F (15C)—The mix temperature in the barrel exceeded 59°F (15°C).

(L/R) COMP ON TOO LONG—The compressor run time exceeded the 11-minute timer.

L/R PRODUCT TOO COLD—In Auto mode, the mix temperature in the left or right barrel was too low. This may indicate a starved barrel.

L/R PRODUCT TOO VISC—In Standby mode, the mix viscosity in the left or right barrel was too high. This may occur if a thermistor is reading too high.

L/R BEATER LOCKED—High beater motor current was detected indicating that the beater is locked.

Note: See your local health codes regarding temperature recommendations for procedures to follow if these fault screens appear.

Lockout History

LOCKOUT HISTORY 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.

LOCKOUT HISTORY	1
00/00/00	00:00
REASON	
> Exit	

The second line of the screen displays the date and time a failure occurs. The third line indicates the reason for a failure, or that a successful brush-cleaning has occurred. Some failures occur with multiple reasons. When this occurs, a record will be generated for each reason. Use the arrow keys to move forward or backward to view each screen.

System Information

The SYSTEM INFORMATION is displayed on three separate screens. The first screen contains the control and software version installed in the machine.

SOFTWARE VERSION
C612 UVC4
VERSION X X X
> Next

Press the SEL key to advance to the next System Information screen containing the software language version.

Language
V4.00 English
> Next

USER INTERFACE

Press the SEL key to advance to the third System Information screen containing the model bill of material (B.O.M.) and machine serial number.

B.O.M.	C61227B000
S/N	K0000000
> Next	

Pressing the SEL key again will return to the Manager's Menu screen.

Current Conditions

This screen provides the viscosity readings for the product when the machine is running, and the temperatures for the hopper and freezing cylinder.

VISC	0.0	0.0
HOPPER	41.0	41.0
BARREL	41.0	41.0

Press the SEL key to return to the Menu screen.

5

Net Service Pin

The NET SERVICE PIN allows the manager or service technician to initialize a network connection for networking kitchens.

NET SERVICE PIN
ARE YOU SURE?
Yes
> No

Pressing the Up or Down arrow key will move the arrow to **Yes** or **No**. Pressing the SEL key with the arrow next to **No** will return to the menu screen. Pressing the SEL key with the arrow next to **Yes** will connect to the network if a gateway card is connected. If **Yes** is selected, the machine will appear to **pause** until the memory is cleared and the defaults are loaded. The display may show the message COMMUNICATIONS FAILURE during this time.

The C612 machine stores mix in a hopper. It has a 3.4 qt. (3.2 L) freezing cylinder for soft serve and a 7 qt. (6.6 L) freezing cylinder for shake.

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

These opening procedures will show you how to assemble these parts into the freezer, sanitize them, and prime the freezer with **fresh** mix in preparation to serve your first portion.

If you are disassembling the machine for the first time or need information to get to this starting point in our instructions, turn to Disassembly on page 6-15 and start there.

Machine Setup

Freezing Cylinder Assembly—Shake Side



WARNING! 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.

Set up using the parts for the shake side.

1. Lubricate the groove on the shake beater driveshaft before installing. Slide the beater driveshaft boot seal over the small end of the beater driveshaft and engage it 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 6-1.)

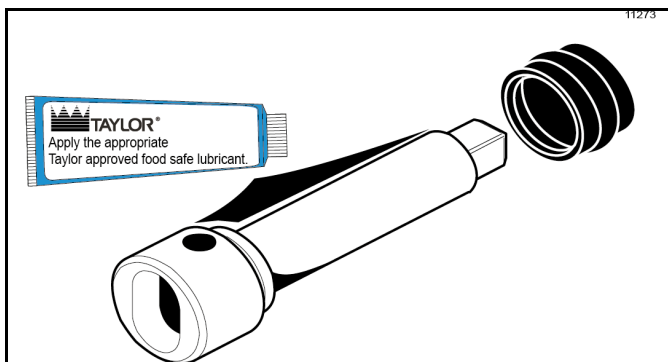


Figure 6-1

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

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 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 6-2.)

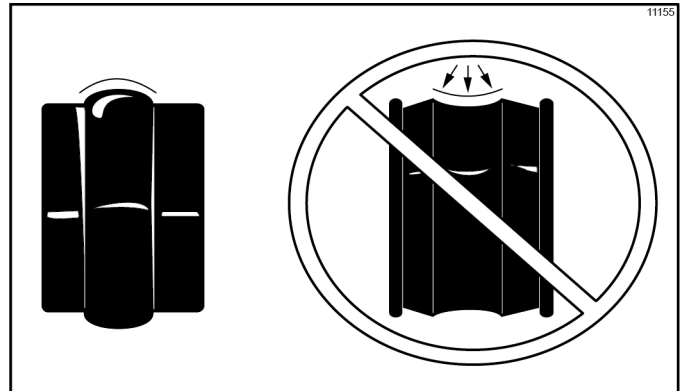


Figure 6-2

2. Install the shake beater driveshaft through the rear shell bearing in the freezing cylinder and engage the square end firmly into the driveshaft coupling. Make sure the driveshaft fits into the drive coupling without binding. (See Figure 6-3.)

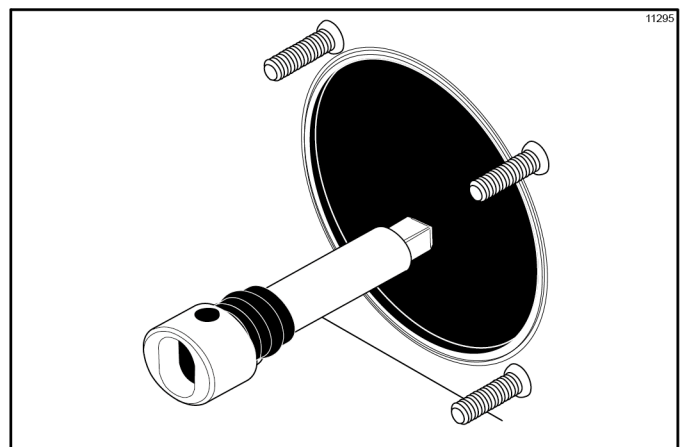


Figure 6-3

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

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

OPERATING PROCEDURES

4. If the blades are in good condition, place each scraper blade over the holding pins on the beater assembly. (See Figure 6-4.)

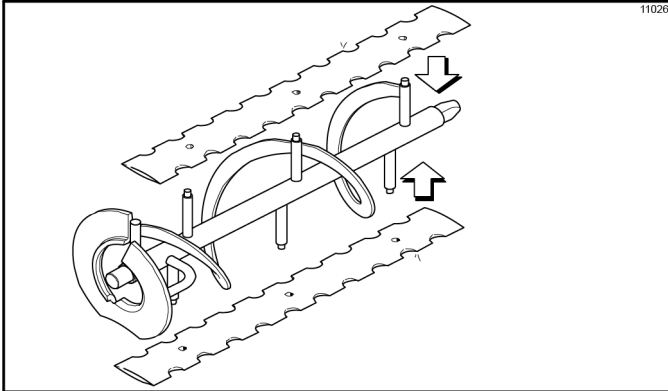


Figure 6-4

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

5. Holding the blades on the beater assembly, insert the beater assembly in the freezing cylinder. Engage the shaft end firmly into the driveshaft socket. (See Figure 6-5.)

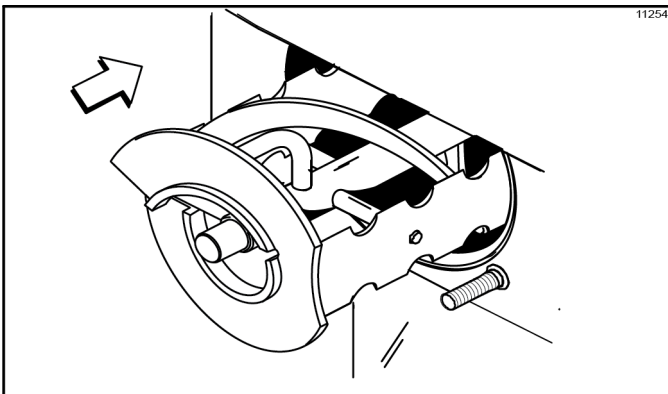


Figure 6-5

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

6. Before assembling the freezer door, check the following for any nicks, cracks, or signs of wear: the 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.

7. If the parts are in good condition, slide the three O-rings into the grooves on the draw valve and lubricate them. (See Figure 6-6.)

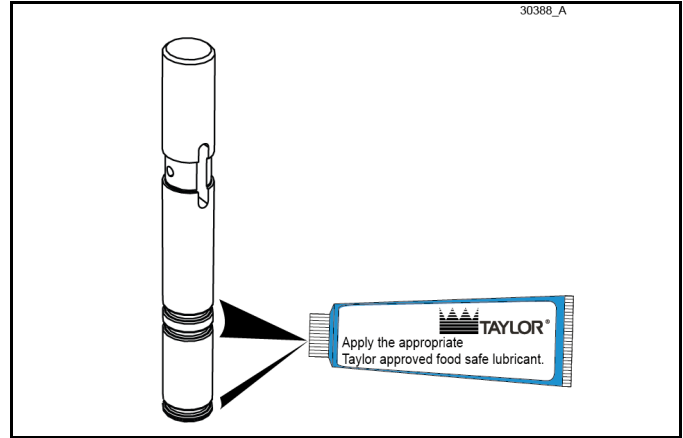


Figure 6-6

8. Lightly lubricate inside the top of the freezer door valve cavity. (See Figure 6-7.)

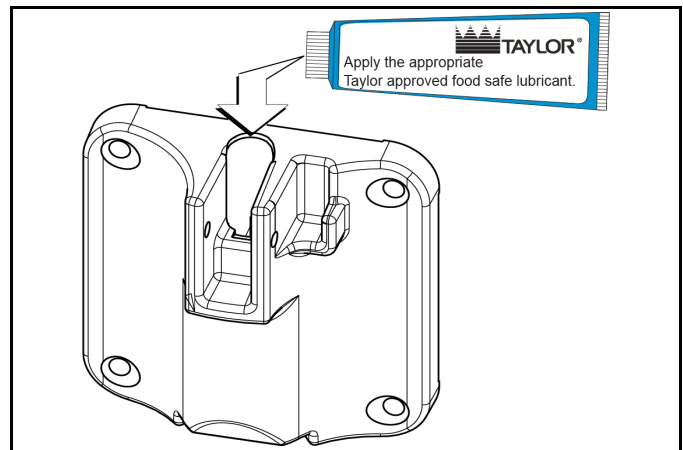


Figure 6-7

9. Insert the (black) draw valve from the top, with the draw handle slot facing forward. (See Figure 6-8.)

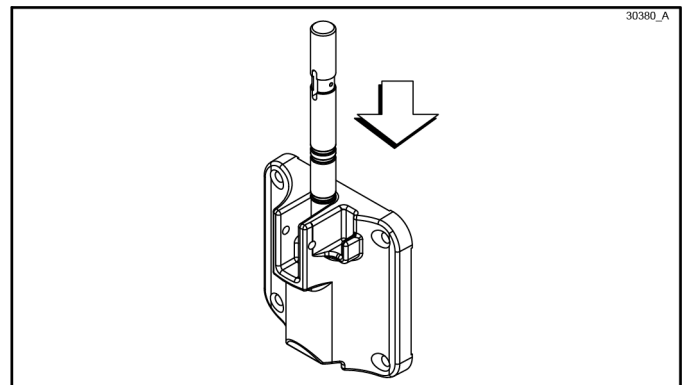


Figure 6-8

- 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 freezer door O-ring to keep it in place.

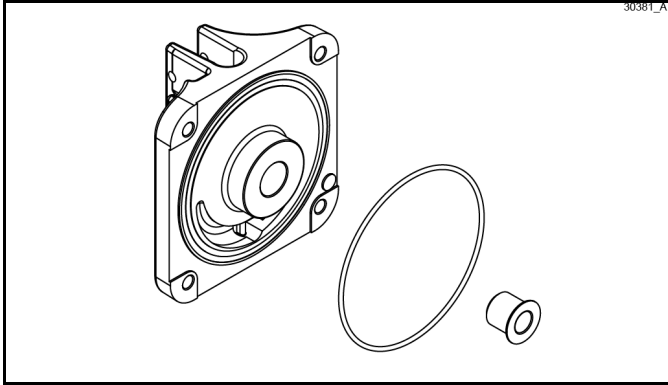


Figure 6-9

- Install the shake freezer door. Position the freezer door on the four studs on the front of the freezing cylinder with the door seated fully. Install the handscrews. Tighten equally in a crisscross pattern to ensure the door is secured.

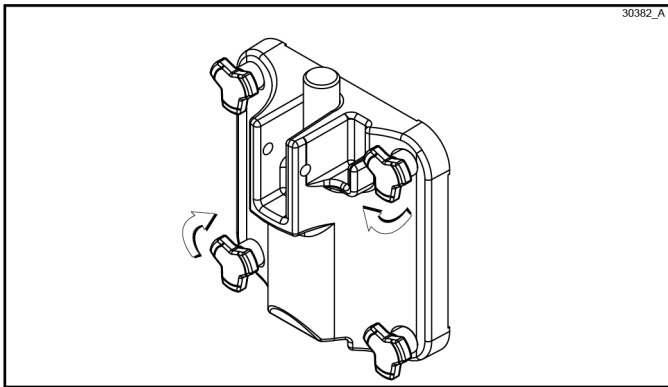


Figure 6-10

- Install the (black) draw handle. Secure it with the pivot pin. Install restrictor cap to bottom of spout.

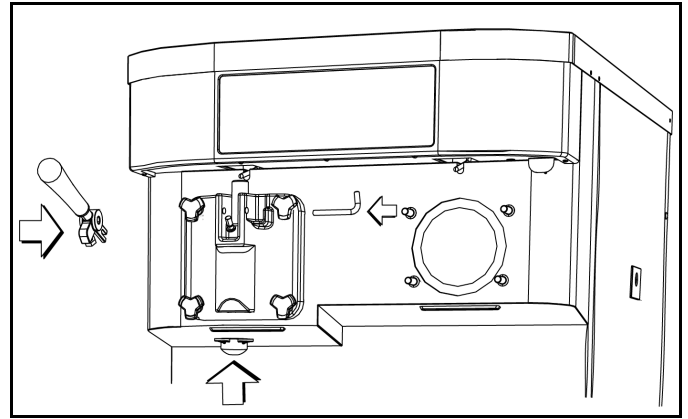


Figure 6-11

Freezing Cylinder Assembly—Soft Serve Side



WARNING! 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.

Set up using the parts tray for the soft serve side.

- Lubricate the groove on the soft serve beater driveshaft before installing. Slide the beater driveshaft boot seal over the small end of the beater driveshaft and engage into the groove on the shaft. Heavily lubricate the inside portion of the boot seal and 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 6-12.)

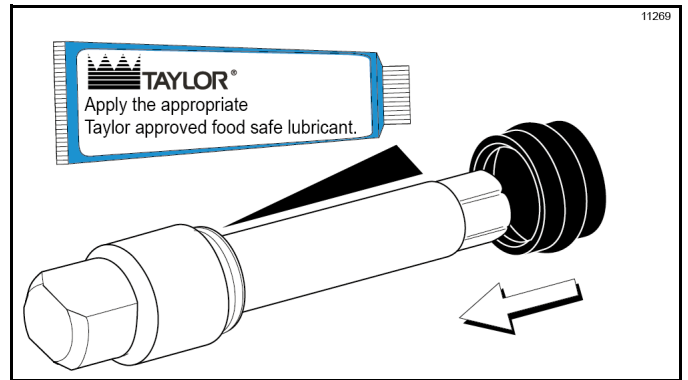


Figure 6-12

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

OPERATING PROCEDURES

Note: To ensure the mix does not leak from the back of the freezing cylinder, the middle section of the boot seal should be convex, or extend 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 6-13.)

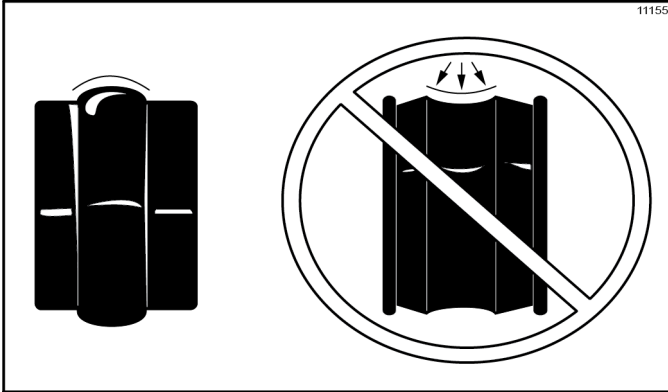


Figure 6-13

2. Insert the beater driveshaft through the rear shell bearing in the freezing cylinder and engage the hex end firmly into the drive coupling. (See Figure 6-14.)

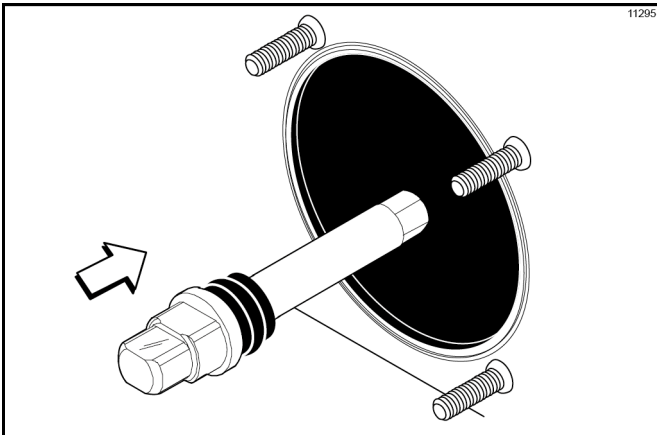


Figure 6-14



WARNING! Use extreme caution when handling the beater assembly. The scraper blades are very sharp and may cause injury.

3. Before installing the beater assembly, inspect the scraper blades for any signs of wear or damage. If a scraper blade is nicked or worn, replace both blades.

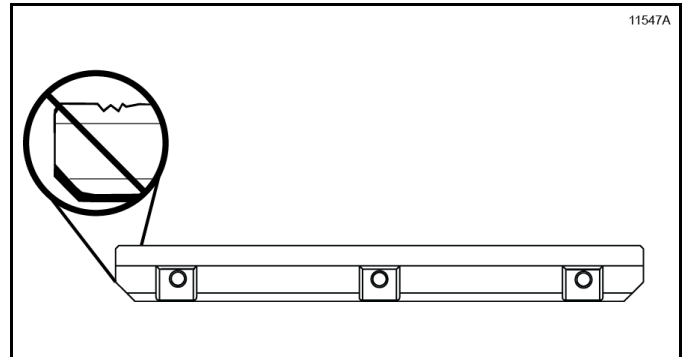


Figure 6-15

4. If the blades are in good condition, place the rear scraper blade over the rear holding pin on the beater.

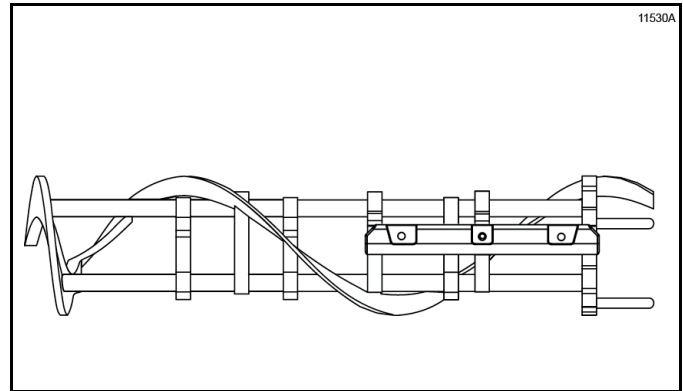


Figure 6-16

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.

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 6-17.)

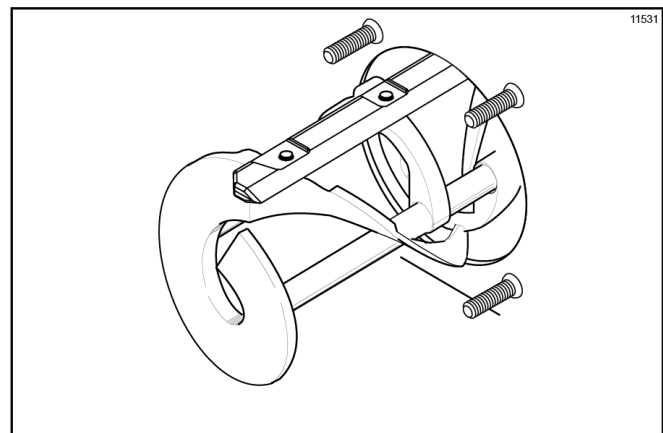


Figure 6-17

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.
7. Install the beater shoes. (See Figure 6-18.)

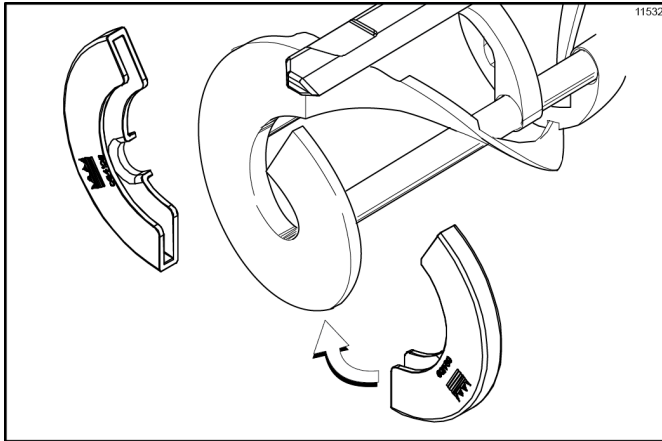


Figure 6-18

8. Slide the beater assembly the rest of the way into the freezing cylinder. Make sure the beater assembly is in position over the driveshaft 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 6-19.)

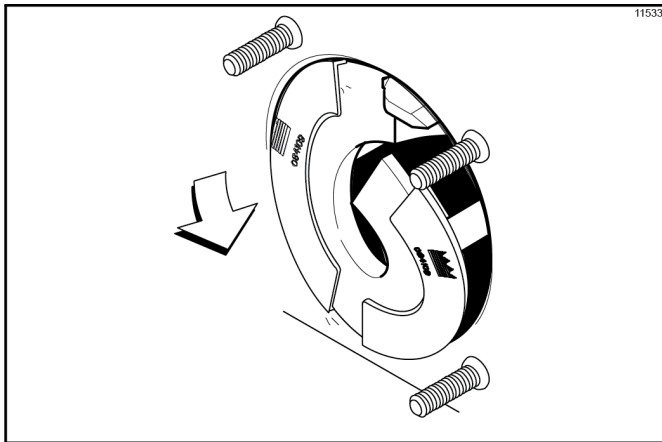


Figure 6-19

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

10. If the parts are in good condition, slide the three O-rings into the grooves on the draw valve and lubricate them. (See Figure 6-2.)

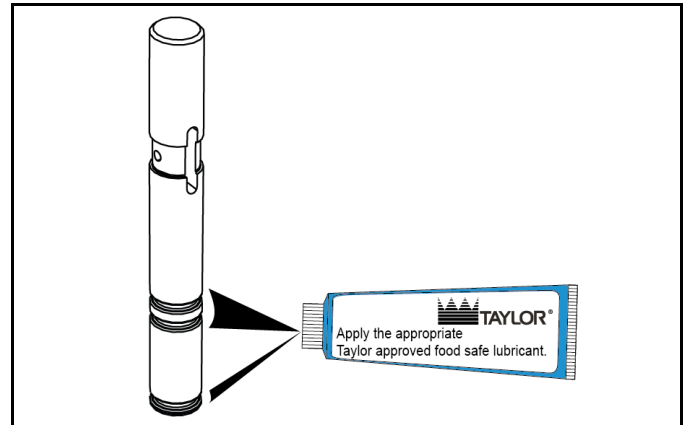


Figure 6-20

11. Lightly lubricate inside the top of the freezer door valve cavity. (See Figure 6-21.)

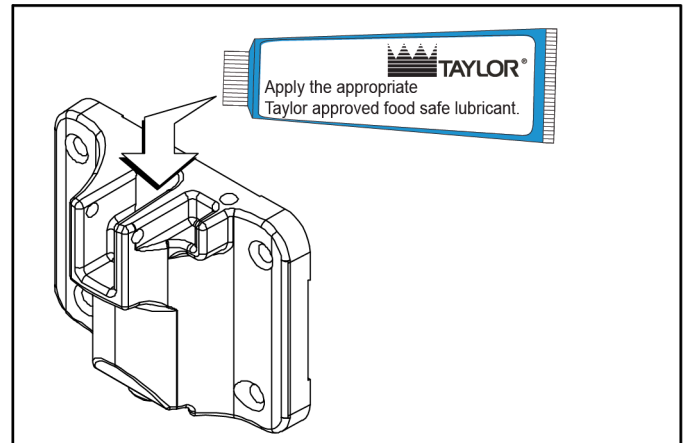


Figure 6-21

12. Insert the (white) draw valve from the top, with the draw handle slot facing forward. (See Figure 6-22.)

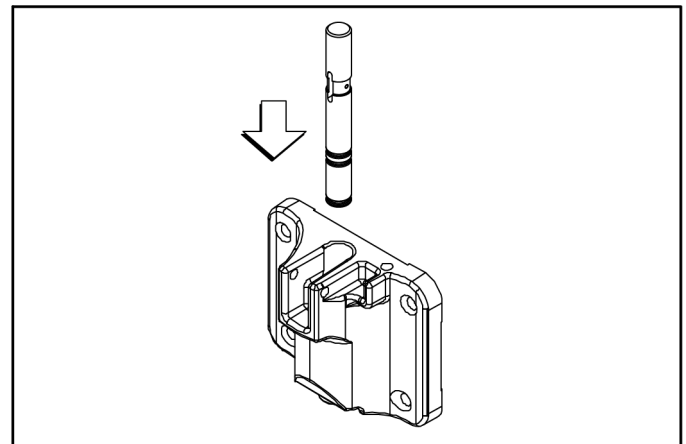


Figure 6-22

OPERATING PROCEDURES

13. Install the baffle by raising rounded end while engaging lug into the door pocket. Lower the round end to secure to the door. Place the door gasket into the groove on the back of the freezer door. **Do not** lubricate the gasket. (See Figure 6-23.)

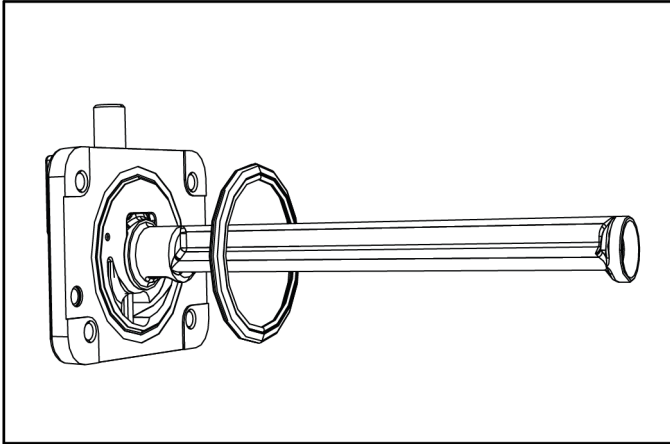


Figure 6-23

14. Insert the baffle rod through the beater in the freezing cylinder. With the door seated on the freezer studs, install the handscrews. Tighten them equally in a crisscross pattern to ensure the door is secured. (See Figure 6-24.)

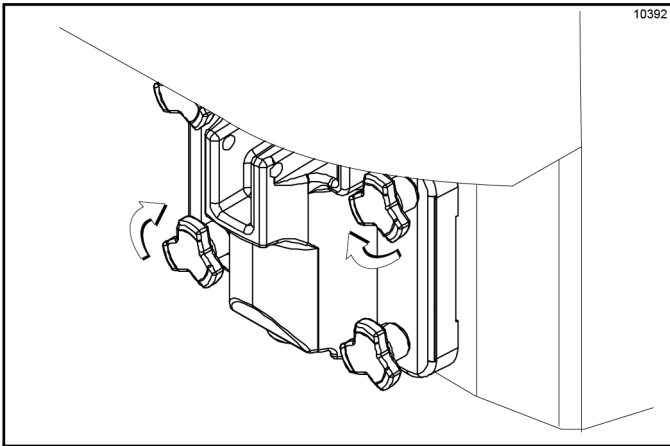


Figure 6-24

15. Install the (white) draw handle. Secure it with the pivot pin. (See Figure 6-25.)

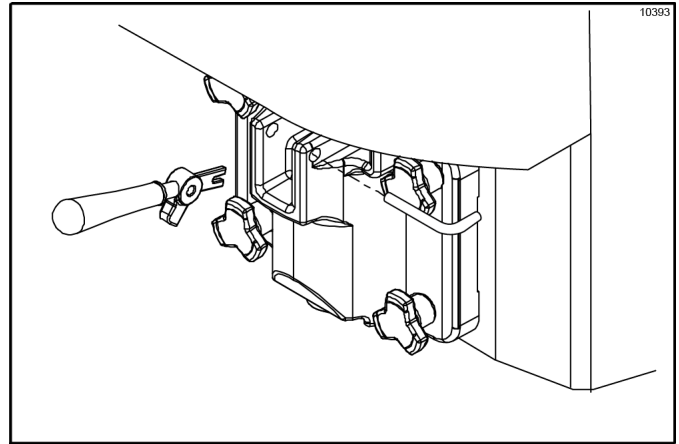


Figure 6-25

- Note:** This machine features adjustable draw handles to provide portion control, giving a more consistent quality to your product and controlling costs. The draw handles should be adjusted to provide a flow rate of soft serve: 5 oz. to 7-1/2 oz. (148 ml to 222 ml) of product by weight per 10 seconds. Shake: 7 oz (207 ml) of product by weight per 5 seconds. To increase the flow rate, turn the adjustment screw clockwise. Turn the adjustment screw counterclockwise to decrease the flow rate.

16. Slide the long drip pan into the hole in the front panel. (See Figure 6-26.)

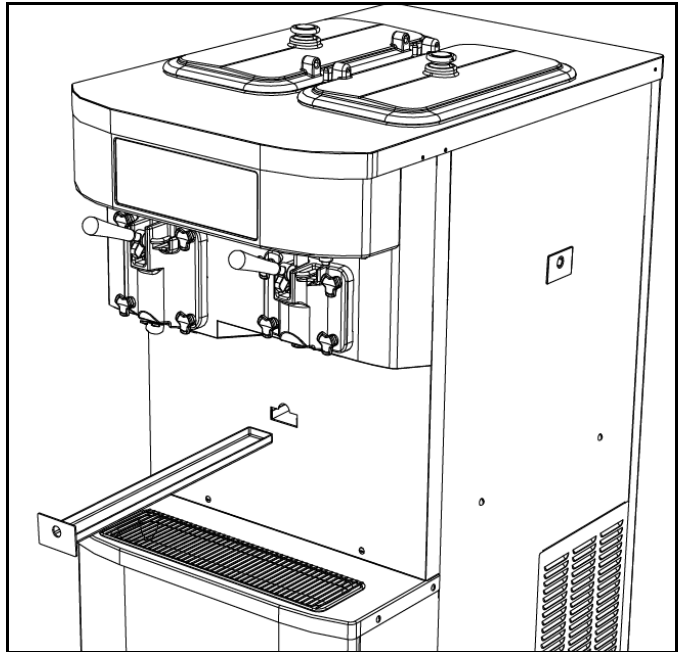


Figure 6-26

- Slide the two shorter drip pans into the holes in the rear panel. Slide the two drip pans with holes into the left and right side panels. (See Figure 6-27.)

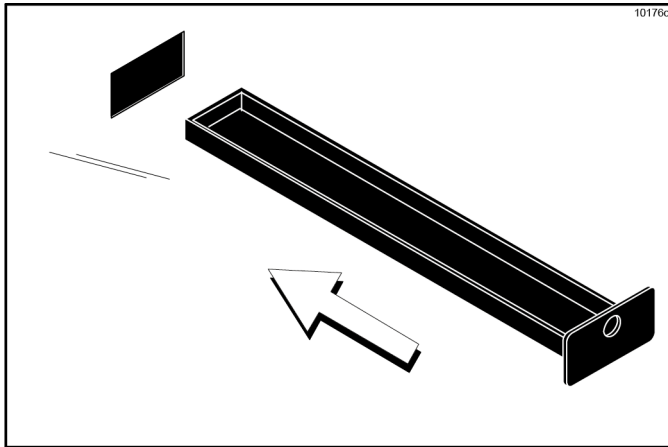


Figure 6-27

- Install the front drip tray and splash shield under the door spouts. (See Figure 6-28.)

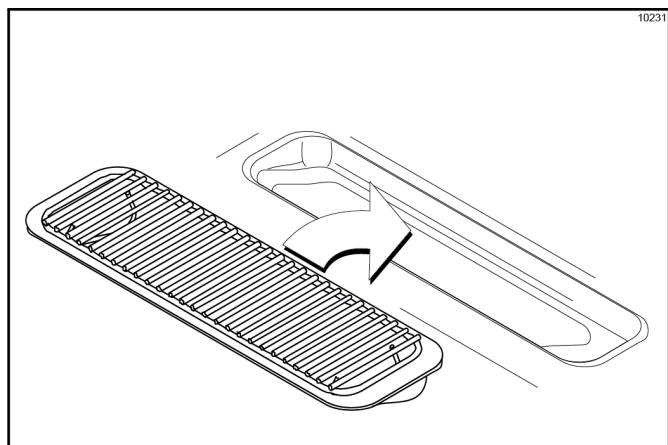


Figure 6-28

Mix Pump Assembly

- Inspect the rubber and plastic pump parts. The O-rings, check rings, and gaskets must be in 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 delamination of plastic.
Replace and discard any damaged parts immediately.

- Assemble the piston. Slide the red O-ring into the groove of the piston. **Do not** lubricate the O-ring. (See Figure 6-29.)

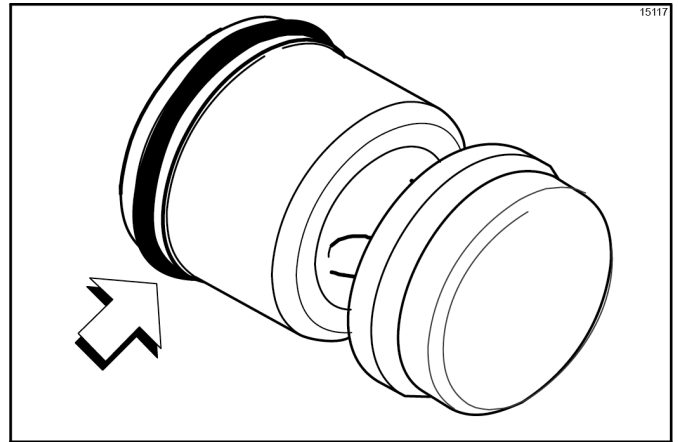


Figure 6-29

- Apply a thin layer of lubricant to the inside of the pump cylinder at the retaining pin end. (See Figure 6-30.)

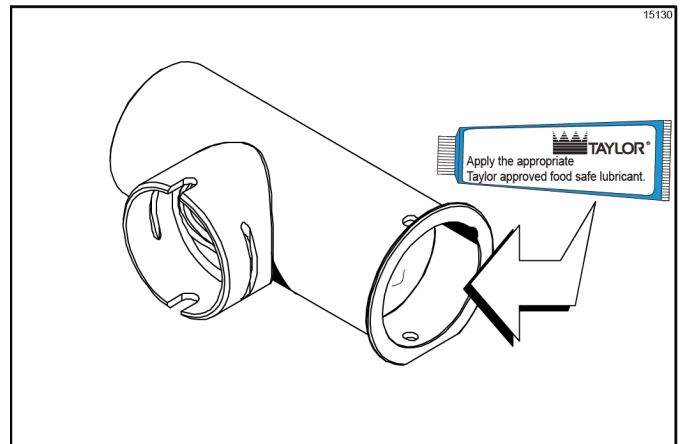


Figure 6-30

- Insert the piston into the retaining pin end of the pump cylinder. (See Figure 6-31.)

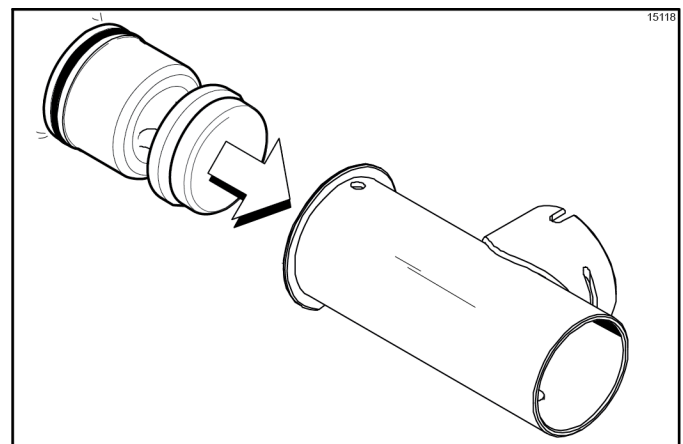


Figure 6-31

OPERATING PROCEDURES

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 6-32.)

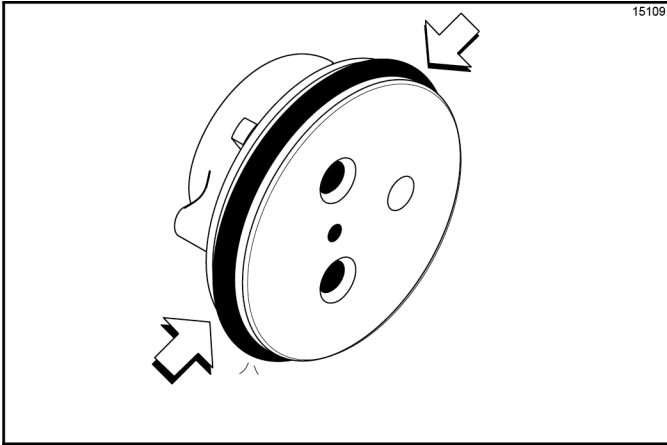


Figure 6-32

6. Slide the pump valve gasket into the holes on the cap. **Do not** lubricate the gasket. (See Figure 6-33.)

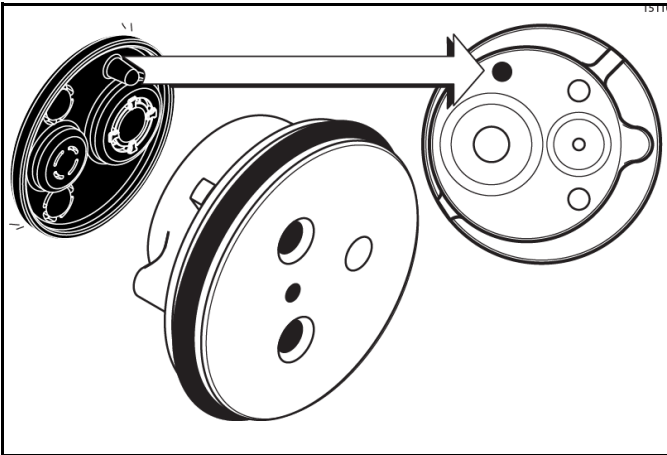


Figure 6-33

7. Insert the valve cap into the hole in the mix inlet adapter. (See Figure 6-34.)

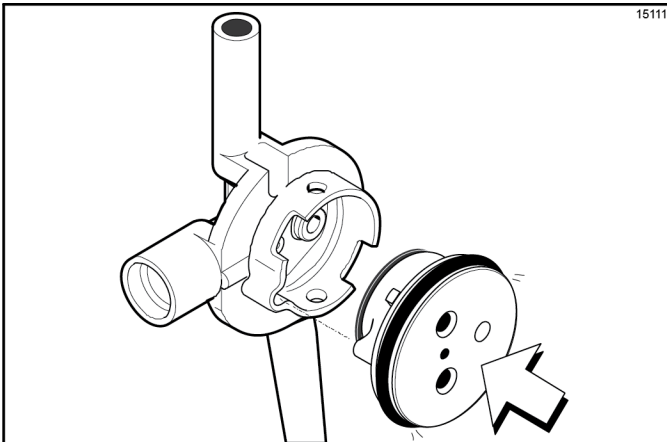


Figure 6-34

8. Insert the mix inlet assembly into the pump cylinder. (See Figure 6-35.)

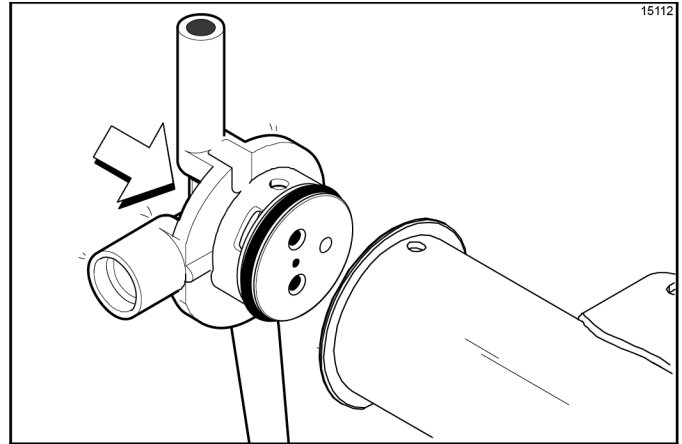


Figure 6-35

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

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 6-36.)

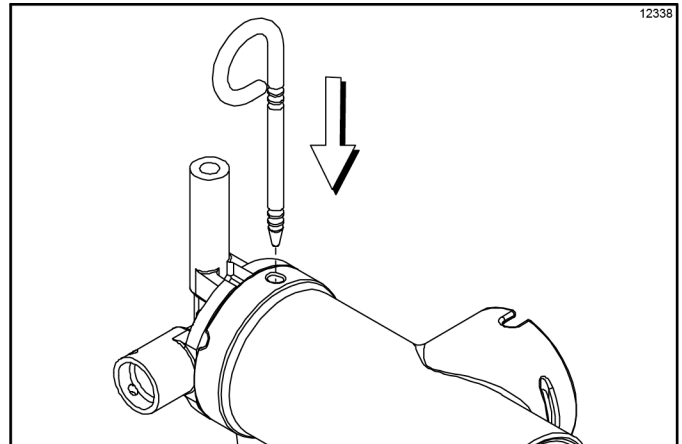


Figure 6-36

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

- 10. Assemble the feed tube assembly. Slide the check ring into the groove of the feed tube. (See Figure 6-37.)

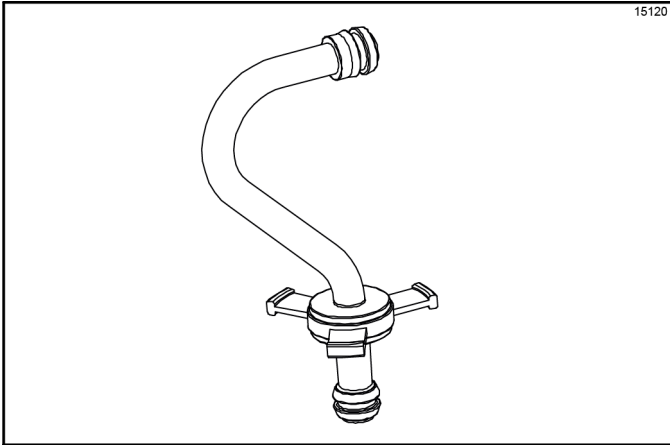


Figure 6-37

- 11. Install one red O-ring on each end of the mix feed tube, and thoroughly lubricate them. (See Figure 6-38.)

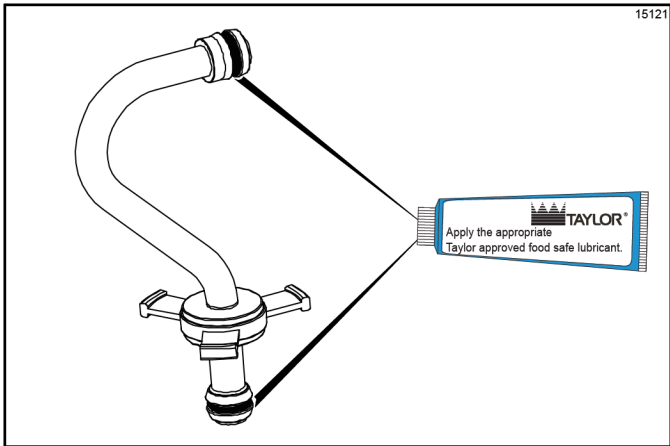


Figure 6-38

- 12. Lay the pump assembly, pump clip, cotter pin, and agitator in the bottom of the mix hopper for sanitizing. (See Figure 6-39.)

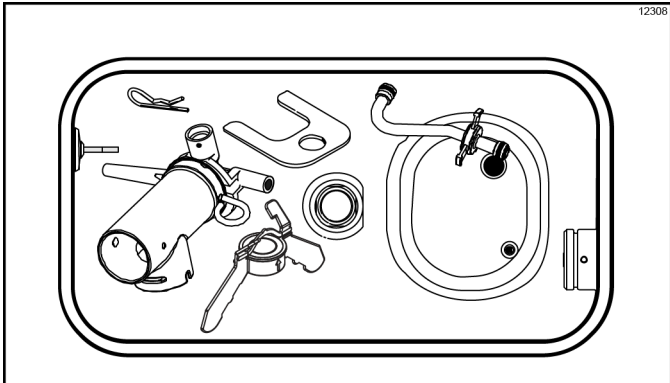


Figure 6-39

- 13. Slide the large black O-ring and the two smaller black O-rings into the grooves on the driveshaft. Thoroughly lubricate the O-rings and shaft. **Do not** lubricate the hex end of the shaft. (See Figure 6-40.)

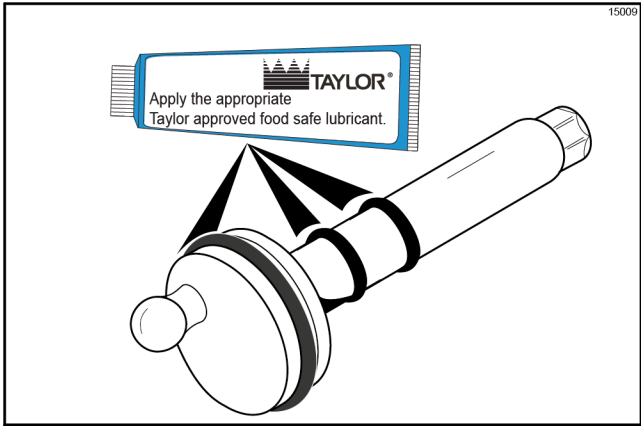


Figure 6-40

- 14. Install the hex end of the driveshaft into the drive hub at the rear wall of the mix hopper. (See Figure 6-41.)

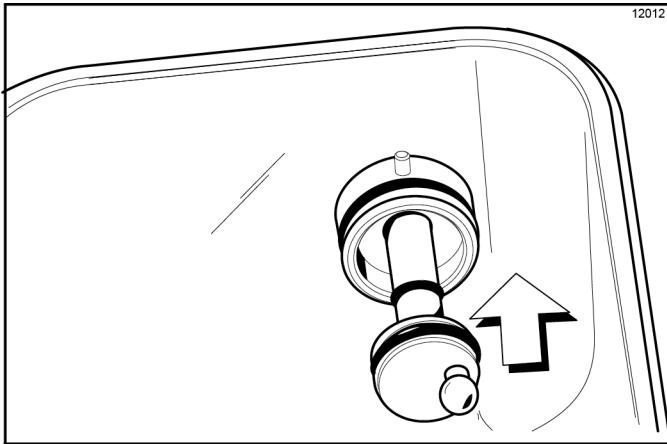


Figure 6-41

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

Sanitizing

Sanitizing—Shake Side

1. Prepare two pails of an approved 100 ppm sanitizing solution (examples: 2-1/2 gal. [9.5 L] of Kay-5[®] or 2 gal. [7.6 L] of Stera-Sheen[®]).

Important! Use warm water and follow the manufacturer's specifications.

2. Pour one pail of 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, make sure your hands are clean and sanitized before continuing these instructions.

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

3. 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 driveshaft. 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 6-42.)

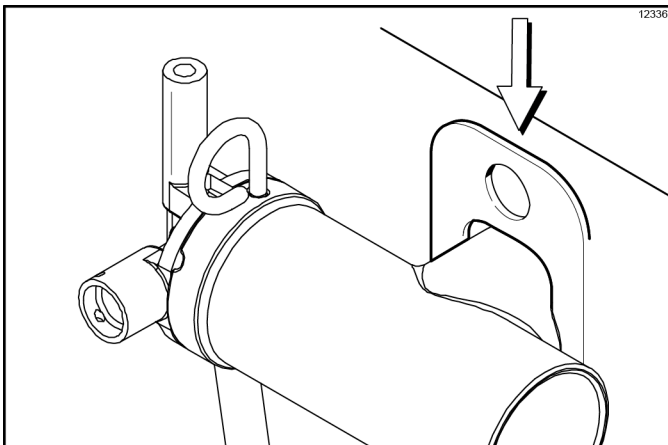


Figure 6-42

4. Install the pump end of the mix feed tube and **secure with the cotter pin.** (See Figure 6-43.)

Important! Failure to follow this instruction could result in sanitizer spraying on the operator.

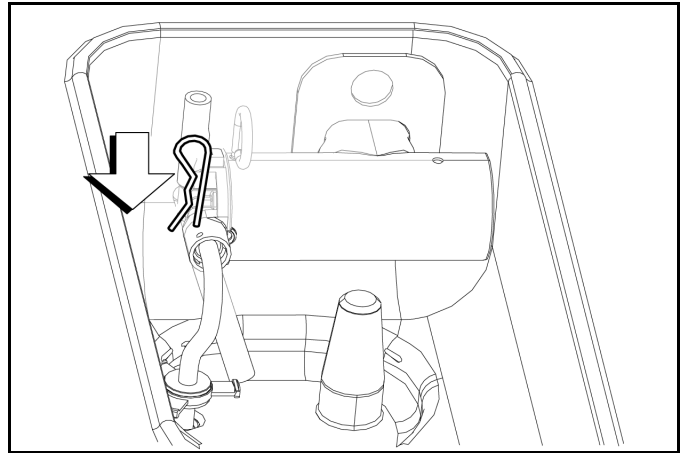



Figure 6-43

5. Pour the remaining pail of sanitizing solution into the mix hopper.
6. Using the blue hopper brush, scrub the exposed sides of the hopper. Install the agitator blade onto the agitator post.
7. Place the power switch in the ON position.
8. Press the Wash key . This will cause the sanitizing solution in the freezing cylinder to come in contact with all areas of the freezing cylinder. Wait at least 5 minutes before proceeding with these instructions. (See Figure 6-44.)

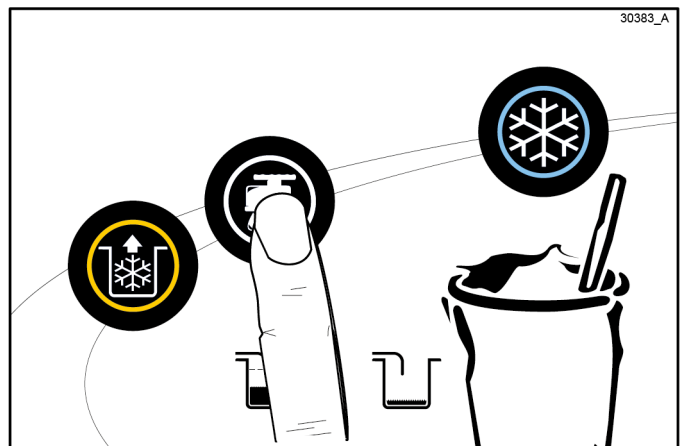





Figure 6-44

9. With a pail beneath the door spout, open the draw valve and press the Pump key . Open the draw valve and draw off the sanitizing solution. Open and close the draw valve six times.

10. Press the Wash  and Pump  keys to stop the Wash and Pump modes and then close the draw valve. (See Figure 6-45.)

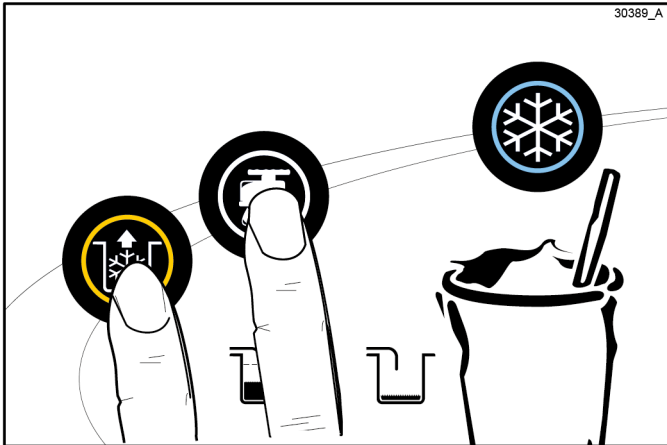


Figure 6-45

Important! The machine 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: Make sure your hands are clean and sanitized before continuing these instructions.

11. Place the agitator on the agitator driveshaft housing. (See Figure 6-46.)

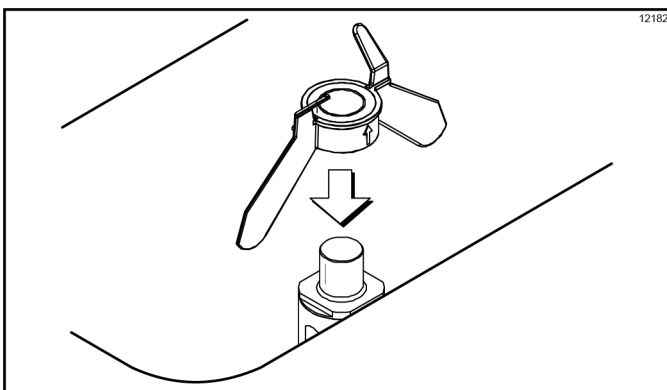


Figure 6-46

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

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 6-47.)

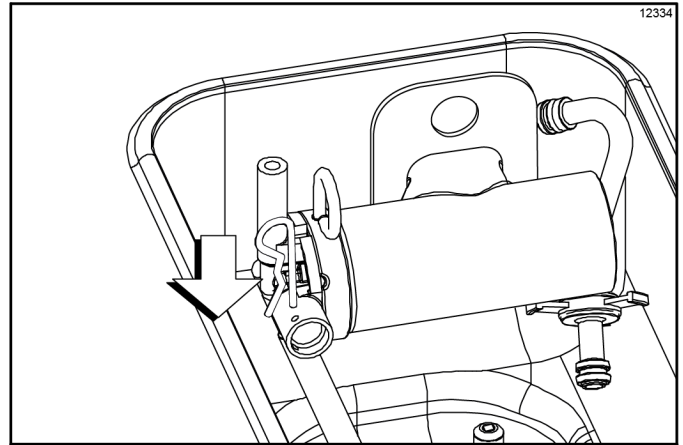


Figure 6-47

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

Sanitizing—Soft Serve Side

1. Prepare two pails of an approved 100 ppm sanitizing solution (examples: 2-1/2 gal. [9.5 L] of Kay-5[®] or 2 gal. [7.6 L] of Stera-Sheen[®]).

Important! Use warm water and follow the manufacturer's specifications.

2. Pour one pail of the sanitizing solution over all the 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, make sure your hands are clean and sanitized before continuing these instructions.

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

OPERATING PROCEDURES

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 driveshaft. 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 6-48.)

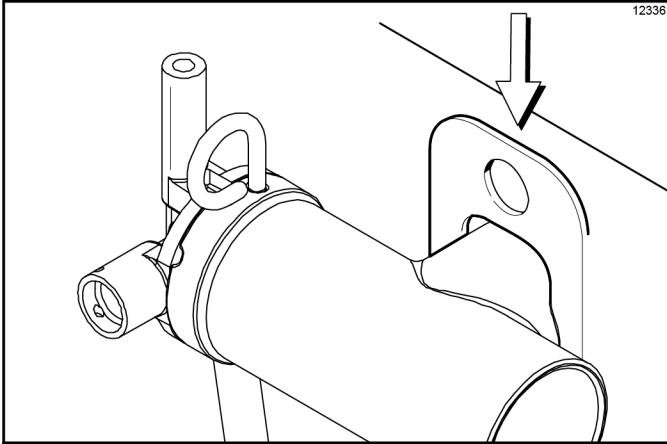


Figure 6-48

4. Install the pump end of the mix feed tube and secure with the cotter pin. (See Figure 6-49.)

Important! Failure to follow this instruction could result in sanitizer spraying on the operator.

6

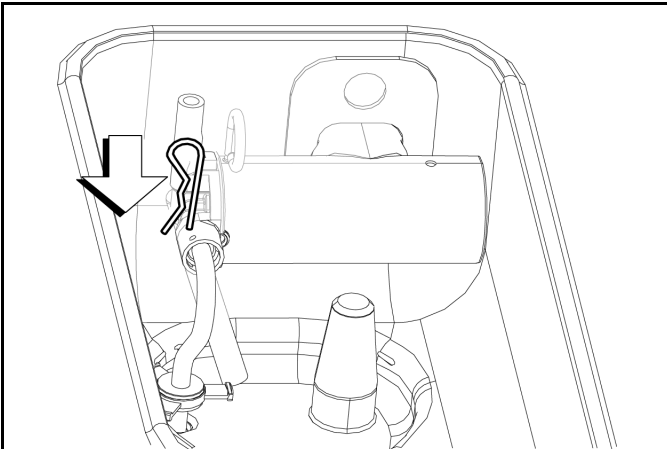






Figure 6-49

5. Pour the remaining pail of sanitizing solution into the mix hopper.
6. Using the blue hopper brush, scrub the exposed sides of the hopper. Install the agitator blade onto the agitator post.

7. Press the Wash key . This will cause the sanitizing solution in the freezing cylinder to come in contact with all areas of the freezing cylinder. Wait at least 5 minutes before proceeding with these instructions.
8. With a pail beneath the door spout, open the draw valve and press the Pump key . Open the draw valve and draw off the sanitizing solution. Open and close the draw valve six times.
9. Press the Wash  and Pump  keys and close the draw valve. (See Figure 6-50.)

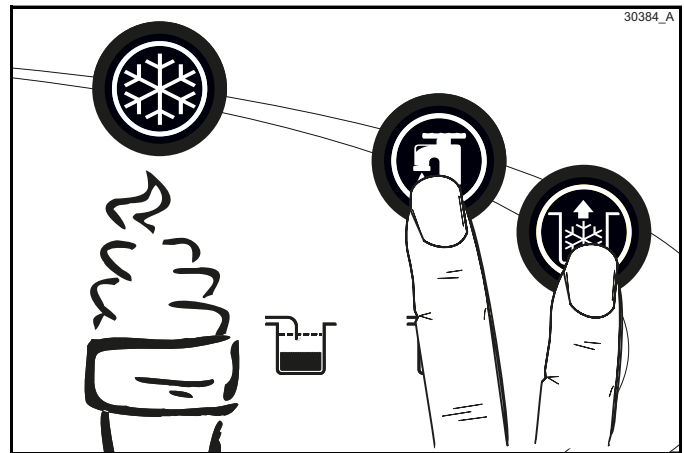


Figure 6-50

Important! The machine 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: Make sure your hands are clean and sanitized before continuing these instructions.

- Place the agitator on the agitator driveshaft housing.
(See Figure 6-46.)

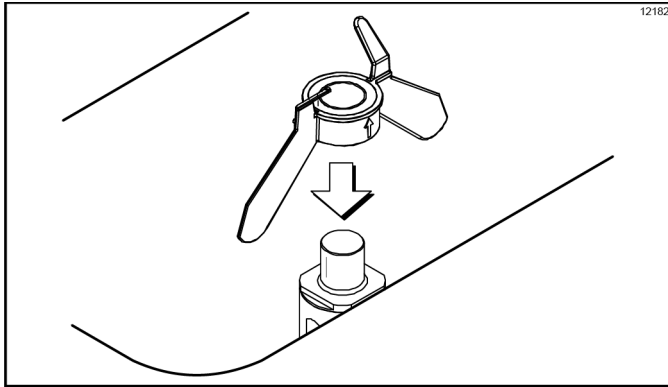


Figure 6-51

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

- 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 6-52.)

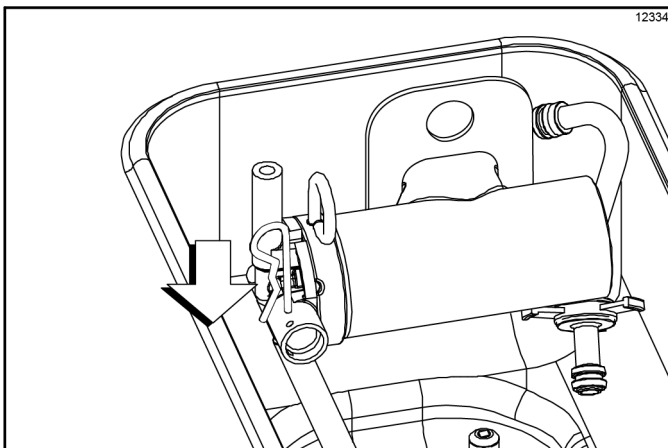


Figure 6-52

Note: You have just sanitized all food contact surfaces on the soft serve side of the freezer.

Priming

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

- Place an empty pail beneath the door spout. With the prime plug in the **up** position (soft serve side only), pour 2-1/2 gal. (9.5 L) of **fresh** mix into the mix hopper allowing it to start flowing into the freezing cylinder.
- Open the draw valve immediately to remove all sanitizing solution. When only **fresh** mix is flowing, close the draw valve.
- Once a steady stream of mix starts to flow from the prime plug opening in the bottom of the freezer door, push the prime plug down (soft serve side only).

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

- 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 the cotter pin.
- Select the Auto symbol ❄️.

Note: The Brush-Clean Counter will start at this time.

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

Repeat steps 1 through 6 for the other side of the machine.

Closing Procedure

Note: This procedure must be completed every day




To disassemble the Model C612, the following items will be needed.

- Two cleaning and sanitizing pails
- Sanitizer/cleaner
- Cleaning brushes (provided with machine)
- Single-service towels

Draining Product from the Freezing Cylinder


1. With a pail beneath the door spout, press the

Wash symbol  and open the draw valve to remove the barrel pressure. Close the draw valve, remove the cotter pin from the pump assembly and remove the feed tube.

Important! Removing the feed tube without first removing the barrel pressure will cause mix to spurt out.

Open the draw valve to drain the remaining product.

2. When the flow of product stops, close the draw valve

and press the Wash symbol  to stop the Wash mode.

3. Remove the pump clip and pump assembly.

Repeat steps 1 through 3 for the other side of the machine.

Rinsing

1. Pour 2 gal. (7.6 L) of cool, clean water into the mix hopper. With the blue hopper brush, scrub the mix hopper and the mix-level sensing probe. Using the double-ended brush, brush-clean the mix inlet hole. (See Figure 6-53.)

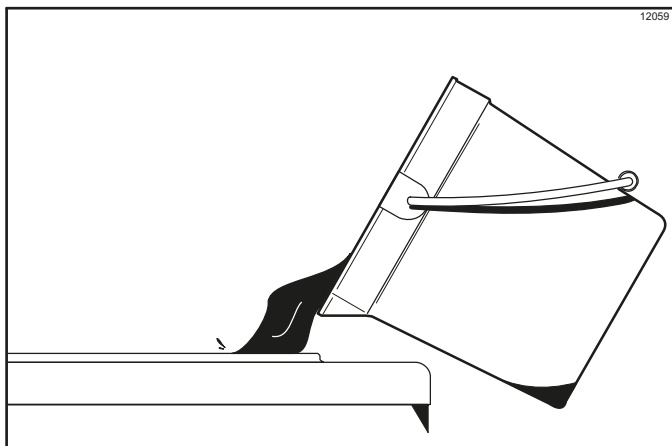



Figure 6-53

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

2. With a pail beneath the door spouts, raise the prime plug (soft serve side only) and press the Wash symbol . (See Figure 6-54.)

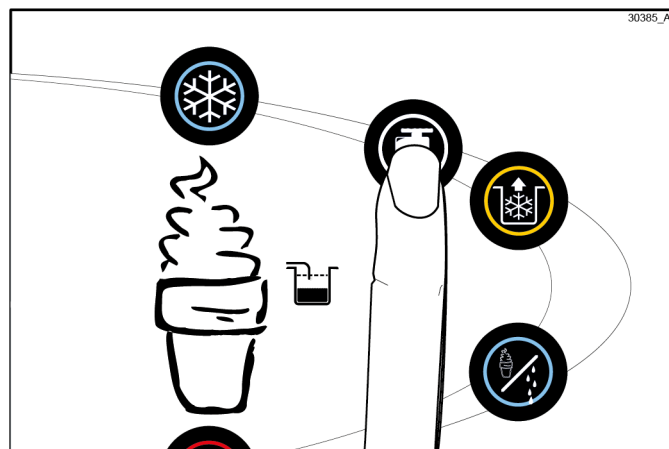



Figure 6-54

3. When a steady stream of rinse water is flowing from the prime plug opening in the bottom of the freezer door, open the draw valve. Drain all the rinse water from the door spout. Close the draw valve and push the prime plug down (soft serve side only).
4. Press the Wash symbol  to cancel the Wash mode.
5. **Repeat steps 1 through 4** using clean, warm water, until the water being discharged is clear.

Repeat steps 1 through 5 for the other side of the machine.


Hopper Cleaning

1. Prepare a pail of approved 100 ppm cleaning solution (examples: 2-1/2 gal. [9.5 L] of Kay-5[®] or 2 gal. [7.6 L] of Stera-Sheen[®]).

Important! Use warm water and follow the manufacturer's specifications.

2. With the prime plug pushed down (soft serve side only), pour the cleaning solution into the hopper. Allow the solution to flow into the freezing cylinder.
3. Using the blue hopper brush, clean the mix hopper and the mix-level sensing probes. 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.

4. Press the Wash symbol . This will cause the cleaning solution in the freezing cylinder to come in contact with all areas of the freezing cylinder. Wait at least 5 minutes before proceeding with these instructions. (See Figure 6-55.)

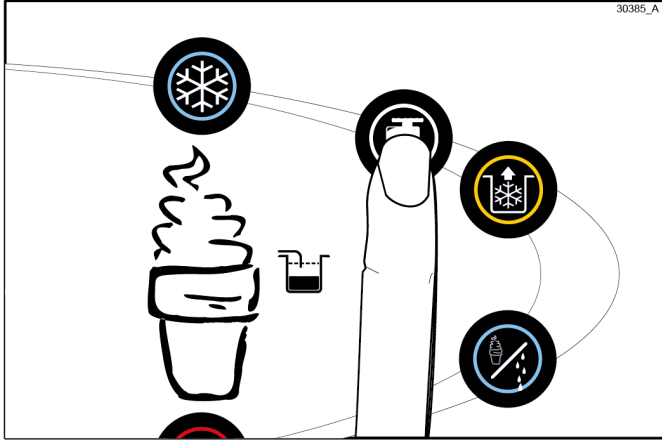



Figure 6-55

5. Place an empty pail beneath the door spout.
6. Raise the prime plug (soft serve side only).
7. When a steady stream of cleaning solution is flowing from the prime plug opening in the bottom of the freezer door (soft serve side only), open the draw valve. Draw off all the solution.
8. Once the cleaning solution stops flowing from the door spout, close the draw valve and the prime plug (soft serve side only).
9. Press the Wash symbol , canceling the Wash mode.

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

Disassembly



WARNING! 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.

1. Remove the handscrews, freezer door, beater and scraper blades, and driveshaft with the driveshaft seal from the freezing cylinder.
2. Remove the driveshaft seal from each driveshaft.
3. Remove the hopper covers, agitator blades, pump

retaining clips, and pumps.

4. From each pump cylinder, remove the retaining pin, mix inlet adaptor, valve cap, pump gasket, and piston. Remove the O-ring from the piston and valve cap.
5. Remove the freezer door gaskets, front bearings, pivot pin, draw handles, draw valves, prime plugs, and design caps. Remove the O-rings from the draw valves.
6. Remove the pump driveshafts from the drive hubs in the rear wall of the mix hoppers. (See Figure 6-56.)

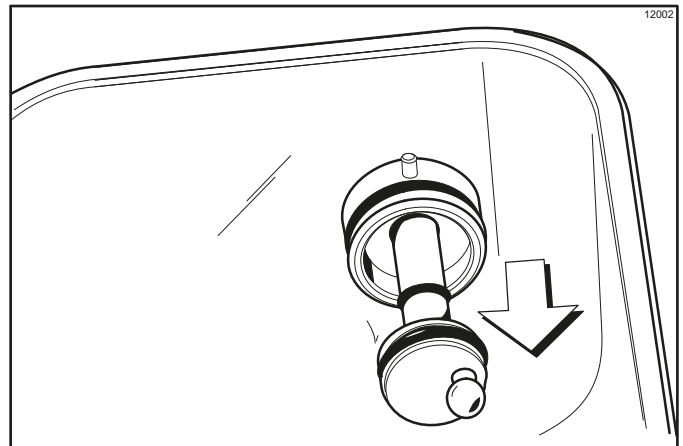


Figure 6-56

7. Remove the two small O-rings and one large O-ring from each pump driveshaft.
8. Remove the front drip tray and splash shield.
9. Remove all drip pans. Take them to the sink for cleaning. (See Figure 6-57.)

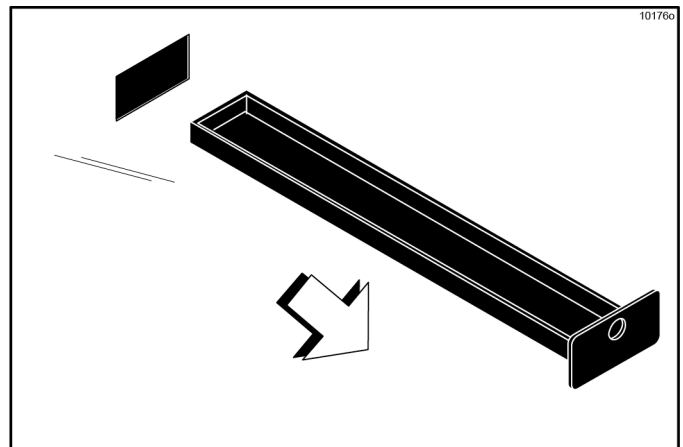


Figure 6-57

Note: If the drip pans are filled with an excessive amount of mix, the driveshaft seal(s) or O-ring(s) should be replaced or properly lubricated.

Manual Brush-Cleaning

These procedures must be completed according to the frequency specified by your federal, state, or local regulatory agencies. Please consult your governing food code to determine the maximum number of days allowed between brush-clean cycles.

Use the recommended cleaning procedure outlined in the manual, or an alternate procedure used in conjunction with a cleaning/sanitizing system that has been certified by NSF.



1. Prepare a sink with an approved 100 ppm cleaning/sanitizing solution (examples: Kay-5[®] or Stera-Sheen[®]).

Important! Use warm water and follow the manufacturer's specifications.

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

2. Thoroughly brush-clean all disassembled parts in the cleaning solution, making sure all lubricant and mix film is removed. Make sure to brush all surfaces and holes, especially the holes in the pump components and the draw valve holes in the freezer door. Rinse all parts with clean, warm water. Place the parts on a clean, dry surface to air-dry overnight (use parts trays, if available).
3. Return to the freezer with a small amount of cleaning solution. Using the black brush, clean the rear shell bearing at the back of each freezing cylinder. (See Figure 6-58.)

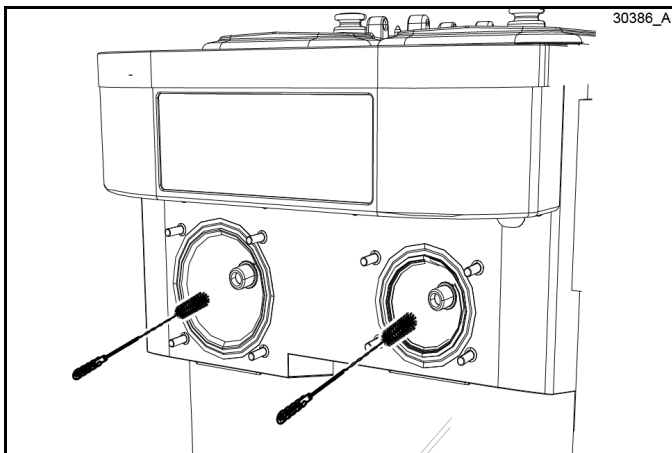


Figure 6-58

4. Using the black brush, clean the drive hub opening in the rear wall of each mix hopper. (See Figure 6-59.)

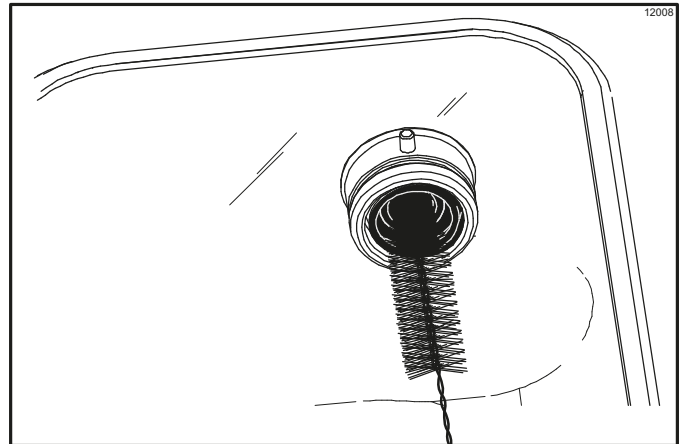


Figure 6-59

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

Note: The Brush-Clean Counter will reset to zero at this time.

During Cleaning and Sanitizing



ALWAYS FOLLOW LOCAL HEALTH CODES.

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



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

Troubleshooting Bacterial Count

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

Regular Maintenance Checks

- Replace scraper blades that are nicked or damaged. Before installing the beater assembly, make sure the scraper blades are properly attached to the helix.
- Check the rear shell bearing for signs of wear (excessive mix leakage in drip pan) and make sure it is properly cleaned.
- Using a screwdriver and cloth towel, clean the rear shell bearing and the female hex drive socket of lubricant and mix deposits.
- Dispose of O-rings and seals if they are worn, torn, or fit too loosely, and replace them with new ones.
- Follow all lubricating procedures as outlined in Machine Setup on page 6-1.



CAUTION! *Always disconnect the electrical power prior to cleaning the condenser. Failure to follow this instruction may result in electrocution.*

- If your machine is air-cooled, check the condenser(s) for 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 monthly.*

- 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. 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 will be left unheated and subject to freezing conditions.

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

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

Important! *Failure to follow this procedure may cause severe 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 the beater, blades, driveshaft, 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 accumulation, which can attract mice and other vermin.

It is recommended that a Taylor service technician perform winter storage draining to ensure all water has been removed. This will guard against freezing and rupturing of the components.

Table 8-1

Problem	Probable Cause	Remedy	Page Ref.
1. No product is being dispensed.	a. Low on mix. The MIX OUT light is on.	a. Add mix to the mix hopper. Return to Auto mode.	6-13
	b. The power switch is in the OFF position.	b. Turn the power switch to ON and select Auto.	6-13
	c. Machine not in Auto mode.	c. Select Auto and allow machine to cycle off before drawing product.	6-13
	d. Beater motor is out on reset. The BEATER OVERLOAD message displayed.	d. Turn the machine off. Press the reset button. Restart the machine in Auto mode.	5-3
	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.	5-3
	f. Freeze-up in mix inlet hole.	f. Contact a Taylor service technician.	---
	g. The mix pump ball crank is broken.	g. Contact a Taylor service technician.	---
	h. Feed tube or check ring not properly installed.	h. Make sure feed tube and rubber check ring are properly installed.	6-9,6-10
	i. Butterfat buildup in the pump.	i. Carefully remove the mix pump. Clean and re-install.	6-7
2. The product is too stiff.	a. Draw rate is set too slow.	a. Soft Serve: Adjust draw rate of 5 oz. to 7-1/2 oz. (148 ml to 222 ml) of product by weight in 10 seconds. a. Shake: 7 fl. oz. (207 ml) in 5 seconds.	5-3
3. The product is too soft.	a. Draw rate is set too fast.	a. Soft Serve: Adjust draw rate of 5 oz. to 7-1/2 oz. (148 ml to 222 ml) of product by weight in 10 seconds. a. Shake: 7 fl. oz. (207 ml) in 5 seconds.	5-3
4. The product is too thick.	a. Freezing cylinder not primed correctly.	a. Drain the freezing cylinder and reprime the machine.	6-13
	b. Air/mix pump incorrectly assembled.	b. Follow assembly procedures carefully.	6-7
	c. The viscosity control is set too cold.	c. Contact a Taylor service technician.	---
	d. Freeze-up in mix inlet hole.	d. Contact a Taylor service technician.	---
5. 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.	6-13
	b. The hopper temperature is out of adjustment.	b. Contact a Taylor service technician.	---
6. The mix in the hopper is too cold.	a. The hopper temperature is out of adjustment.	a. Contact a Taylor service technician.	---
7. MIX LOW and MIX OUT probes are not functioning.	a. Milkstone buildup in the hopper.	a. Clean hoppers thoroughly.	6-14 through 6-16
8. 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.	6-2, 6-5
9. 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.	6-2, 6-5

TROUBLESHOOTING GUIDE

Problem	Probable Cause	Remedy	Page Ref.
10.Excessive mix leakage into the long drip pan.	a. The seal on driveshaft is improperly lubricated or worn.	a. Lubricate properly or replace the seal.	6-3, 6-4
	b. The seal is installed inside out on the driveshaft.	b. Install correctly.	6-3, 6-4
	c. Inadequate lubrication of the driveshaft.	c. Lubricate properly.	6-3, 6-4
	d. The driveshaft and beater assembly work forward.	d. Contact a Taylor service technician.	---
	e. Worn rear shell bearing.	e. Contact a Taylor service technician.	---
	f. Gearbox out of alignment.	f. Contact a Taylor service technician.	---
11.The driveshaft is stuck in the drive coupling.	a. Mix and lubricant collected in drive coupling.	a. Brush-clean the rear shell bearing area regularly.	6-14 through 6-16
	b. Rounded corners of driveshaft, drive coupling, or both.	b. Contact a Taylor service technician.	---
	c. Gearbox is out of alignment.	c. Contact a Taylor service technician.	---
12.The freezing cylinder walls are scored.	a. Missing or worn front bearing and beater shoes.	a. Install or replace the front bearing and beater shoes.	6-3, 6-5, 6-6
	b. Scraper blades are damaged.	b. Replace scraper blades.	6-2, 6-4
	c. Machine was placed in Auto before all sanitizing solution was removed from freezing cylinder.	c. Place machine in Auto only after priming is complete and all sanitizing solution is removed.	6-10, 6-13
	d. Broken freezer door baffle rod.	d. Replace freezer door.	6-6
	e. Broken beater pins.	e. Replace beater assembly.	6-2, 6-4
	f. Beater assembly is bent.	f. Replace beater assembly.	6-2, 6-4
	g. Gearbox is out of alignment.	g. Contact a Taylor service technician.	---
13.The product makes a popping sound when drawn.	a. Draw rate is set too fast.	a. Soft Serve: Adjust draw rate of 5 oz. to 7-1/2 oz. (148 ml to 222 ml) of product by weight in 10 seconds. a. Shake: Adjust draw rate of 7 oz. (207 ml) of product by weight in 5 seconds.	5-3
	b. Pump assembled incorrectly.	b. Assemble and lubricate according to instructions in this manual.	6-7
	c. Freezing cylinder not primed correctly.	c. Drain the freezing cylinder and reprime the machine.	6-13
14.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.	---
15.Hard lock message appears on display.	a. If enabled, the machine has detected that the product over allowable temperature.	a. The machine must be brush-cleaned.	6-13 through 6-16
	b. A barrel or hopper thermistor is faulty.	b. Contact a Taylor service technician.	---
16.The mix pump will not operate in the Pump mode.	a. Pump motor is not running.	a. Push the pump reset button.	5-3
17.The mix pump runs constantly in the Auto mode.	a. Draw valve is not fully closed.	a. Raise the draw handle so the draw valve is closed all the way.	---

Table 9-1

Part Description	Every 3 Months	Every 6 Months	Annually
Scraper Blade-Shake		X	
Scraper Blade-Soft Serve	X		
Driveshaft 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		
Mix Feed Tube O-ring	X		
Pump O-ring	X		
Pump Valve Gasket	X		
Mix Feed Tube Check Ring	X		
Pump Driveshaft O-ring	X		
Blue Bristle Brush, 3" x 7"		Inspect and replace if necessary.	Minimum
White Bristle Brush, 3" x 1/2"		Inspect and replace if necessary.	Minimum
White Bristle Brush, 1-1/2" x 3"		Inspect and replace if necessary.	Minimum
Blue Bristle Brush, 1" x 2"		Inspect and replace if necessary.	Minimum
Black Bristle Brush, 1" x 2"		Inspect and replace if necessary.	Minimum
Double-Ended Brush		Inspect and replace if necessary.	Minimum
Yellow Bristle Brush		Inspect and replace if necessary.	Minimum
Brush Set (3)		Inspect and replace if necessary.	Minimum

TAYLOR COMPANY LIMITED WARRANTY ON FREEZERS

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

LIMITED WARRANTY

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

Table 10-1

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

LIMITED WARRANTY CONDITIONS

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

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

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

LIMITATION OF WARRANTY

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

LEGAL REMEDIES

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

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

TAYLOR COMPANY LIMITED WARRANTY ON TAYLOR GENUINE PARTS

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

LIMITED WARRANTY

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

Table 11-1

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

LIMITED WARRANTY CONDITIONS

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

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

LIMITED WARRANTY ON PARTS

LIMITED WARRANTY EXCEPTIONS

This limited warranty does **not** cover:

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

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

LIMITATION OF WARRANTY

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

LEGAL REMEDIES

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

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