OPERATOR'S MANUAL



Model 336, 338, 339 Soft Serve Freezer

Original Operating Instructions

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 Cycle

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

Maximum Fuse Size: ______A

Minimum Wire Ampacity:

Phase_____

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

© 2009 Taylor Company 036029-M

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

All rights reserved.



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

Table of Contents

Section 1: To the Installer

	Installer Safety	1-1
	Site Preparation	
	Air-Cooled Units	1-1
	Water Connections	1-2
	Electrical Connections	1-2
	Beater Rotation	1-3
	Refrigerant	1-3
Sec	tion 2: To the Operator	
	Compressor Warranty Disclaimer	2-2
Sec	tion 3: Safety	
Sec	tion 4: Operator Parts Identification	
	Model 336	4-1
	Model 338	4-2
	Model 339	4-3
	Three Spout Door	4-4
	Accessories	4-5
Sec	tion 5: User Interface	
	Symbol Definitions	5-1
	Power Switch	5-2
	Indicator Light – MIX LOW	5-2
	MIX Button	5-2
	STANDBY Button	5-2
	WASH Button	5-2
	AUTO Button	5-2
	RESET Button	5-2
	Air Tube	5-3
	Adjustable Draw Handle	5-3

Section 6: Operating Procedures

	Assembly	6-1
	Sanitizing	6-6
	Priming	6-7
	Closing Procedure	6-8
	Draining Product from the Freezing Cylinder	6-9
	Rinsing	6-9
	Cleaning	6-9
	Disassembly	6-9
	Manual Brush Cleaning	6-10
Section	on 7: Operator's Checklist	
	During Cleaning and Sanitizing	7-1
	Troubleshooting Bacterial Count	7-1
	Regular Maintenance Checks	7-1
	Winter Storage	7-2
Section	on 8: Troubleshooting Guide	
Section	on 9: Parts Replacement Schedule	
	Maintenance Intervals	9-1
Section	on 10: Limited Warranty on Equipment	
Section	on 11: Limited Warranty on Parts	

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, equipment should be installed in accordance with existing local codes. Please contact your local authorities if you have any questions.

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

- Only authorized Taylor service personnel should perform installation and repairs on the equipment.
- Authorized service personnel should consult OSHA Standard 29CFRI910.147 or the applicable code of the local area for the industry standards on lockout/tagout procedures before beginning any installation or repairs.
- Authorized service personnel must ensure that the proper 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 freezer must be disconnected prior to performing any repairs. Failure to follow this instruction may result in personal injury or death from electrical shock or hazardous moving parts as well as poor performance or damage to the equipment.

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

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

Site Preparation

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

Air-Cooled Units

Do not obstruct air intake and discharge openings.

Air-cooled units require a minimum of 3 in. (76 mm) of clearance around **all** sides of the freezer to allow for adequate air flow across the condenser(s). 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 unit 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 unit must **NOT** be installed in an area where a water jet or hose can be used. **NEVER** use a water jet or hose to rinse or clean the unit. Failure to follow this instruction may result in electrocution.

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

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

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

Water Connections

(Water-Cooled Units Only)

An adequate cold water supply must be provided with a hand shutoff valve. On the underside rear of the base pan, two 1/2 in. IPS water connections for inlet and outlet have been provided for easy hookup. Permanently connect the 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 for both single-head and double-head units.

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.

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

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.

Electrical Connections

In the United States, this equipment is intended to be installed in accordance with National Electrical Code (NEC) ANSI/NFPA 70-1987. The purpose of the NEC code is the practical safeguarding of persons and property from hazards arising from the use of electricity. This code contains provisions considered necessary for safety. In all other areas of the world, equipment should

be installed in accordance with the existing local codes. Please contact your local authorities.



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

CAUTION! This equipment must be properly grounded! failure to do so can result in severe personal injury from electrical shock!

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

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

NOTICE! Stationary appliances which are not equipped with a power cord and a plug or another device to disconnect the appliance from the power source must have an all-pole disconnecting device with a contact gap of at least 0.125 in. (3 mm) installed in the external installation.

IMPORTANT! Appliances that are permanently connected to fixed wiring and for which leakage currents may exceed 10 mA, particularly when disconnected or not used for long periods, or during initial

installation, shall have protective devices to protect against the leakage of current, such as a GFI, installed by the authorized personnel to the local codes.

NOTICE! Supply cords used with this unit shall be oil-resistant, sheathed flexible cable not lighter than ordinary polychloroprene or other equivalent synthetic elastomer-sheathed cord (code designation 60245 IEC 57) installed with the proper cord anchorage to relieve conductors from strain, including twisting, at the terminals and protect the insulation of the conductors from abrasion.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified person in order to avoid a hazard.

Beater Rotation

NOTICE! Beater rotation must be clockwise as viewed looking into the freezing cylinder of any model freezer.

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

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

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

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

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 immediately with cold water. If burns are severe, apply ice packs and contact a physician immediately.

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

IMPORTANT! 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.

Notes:

1

140100.		

The freezer you have purchased has been carefully engineered and manufactured to give you dependable operation. The Taylor softserve models covered in this manual consist of the following: 336, 338, and 339.

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

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

Your Taylor freezer will **not** eventually compensate for and correct any errors during the setup or filling operations. Thus, the initial assembly and priming procedures are of extreme importance. It is strongly recommended that personnel responsible for the equipment's operation, both assembly and disassembly, go through these procedures together in order to be properly trained and to prevent misunderstandings.

When requiring 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 if all required service work is provided by a Taylor service technician. Taylor reserves the right to deny warranty claims on units or parts if unapproved parts or incorrect refrigerant were installed in the unit, system modifications were performed beyond factory recommendations, or it is determined that the failure was caused by abuse, misuse, neglect, or failure to follow all operating instructions. For full details of your Taylor warranty, please see "Section 10: Limited Warranty on Equipment" and "Section 11: Limited Warranty on Parts".

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

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

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

municipal waste.

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

Compressor Warranty Disclaimer

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

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, the above disclaimer would become null and void. To find the current status of an alternate refrigerant as it relates to your compressor warranty, call the local Taylor distributor or the Taylor factory. Be prepared to provide the model/serial number of the unit in question.

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

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

NOTICE! DO NOT operate the freezer without reading the Operator Manual. Failure to follow this instruction may result in equipment damage, poor freezer 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! This unit is provided with an equipotential grounding lug that is to be properly attached to the rear of the frame by the authorized installer. The installation location is marked by the equipotential bonding symbol (5021 of IEC 60417- 1) on the removable panel and the frame.

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.



→ WARNING! Avoid injury.

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

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

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

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



WARNING! Avoid injury.

- DO NOT operate the freezer unless it is properly grounded.
- **DO NOT** operate freezer with larger fuses than specified on the data label.
- All repairs must be performed by an authorized Taylor service technician.
- The main power supplies to machine must be disconnected prior to performing repairs.

- For Cord-Connected Units: Only authorized Taylor service technicians or licensed electricians may install a plug or replacement cord on the machine.
- Stationary appliances which are not equipped with a power cord and a plug or another device to disconnect the appliance from the power source must have an all-pole disconnecting device with a contact gap of at least 0.125 in. (3 mm) installed in the external installation.
- Appliances that are permanently connected to fixed wiring and for which leakage currents may exceed 10 mA, particularly when disconnected or not used for long periods, or during initial installation, shall have protective devices to protect against the leakage of current, such as a GFI, installed by the authorized personnel to the local codes.
- Supply cords used with this unit shall be oilresistant, 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, or service agent, or a similarly qualified person, in order to avoid a hazard.
- Secure the supply cord ground lead to the machine in a location where if the cord is pulled, the main power leads will become taut before the ground lead can break loose.

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

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

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 unit.

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

Do not obstruct air intake and discharge openings. A minimum of 3 in. (76 mm) of air space on the sides and rear and 7-1/2 in. (191 mm) on the bottom is required. Model 338 requires 4-1/4 in. (108 mm) on the bottom.

Failure to follow this instruction may cause poor freezer performance and damage to the machine.

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

Do not run the machine without product. Failure to follow this instruction can result in damage to the machine.

Noise Level: Airborne noise emission does not exceed 78 dB (A) when measured at a distance of 3.3 ft. (1.0 m) from the surface of the machine and at a height of 5.25 ft. (1.6 m) from the floor.

Model 336

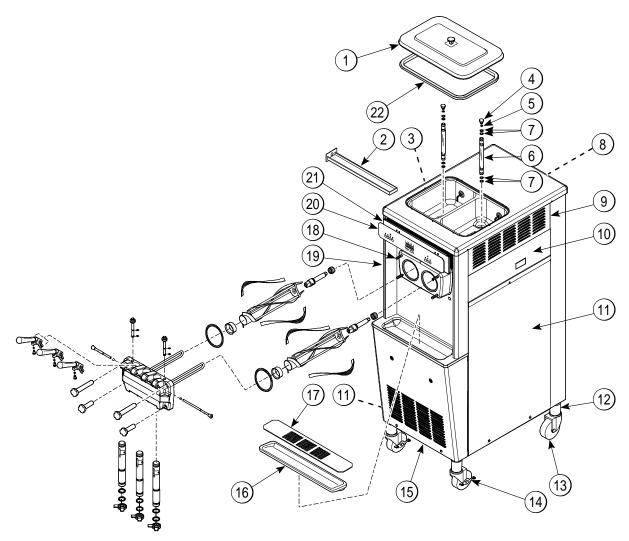


Figure 4-1

Item	Description	Part No.
1	Cover AHopper	X37963-SER
2	Pan-Drip 17-1/4" Long	027504
3	Panel-Upper Side L.	028740
4	Orifice	022465-100
5	O-ring-3/8 OD X .070W	016137
6	Tube-Feed 5/32 Dia. Hole	043461-2
7	O-ring563 OD X .070W	043758
8	Panel-Rear	029816
9	Louver-Side-Top	051191
10	Panel-Upper Side R.	028741
11	Panel ALower Side	X24424-SER

Item	Description	Part No.
12	Adapter A. Caster	X18915
13	Caster-SWV 5/8 Stem 4"	018794
14	Caster-4" SWV W/Brake	034081
15	Panel-Service	082483
16	Tray-Drip 16-7/8I X 5-1/8	020157
17	Shield-Splash	022765
18	Stud-Nose	022822
19	Panel AFront	X68530
20	Decal-Dec-Taylor	045812
21	Plate-Dec	041854
22	Gasket-Hopper Cover	037042

Model 338

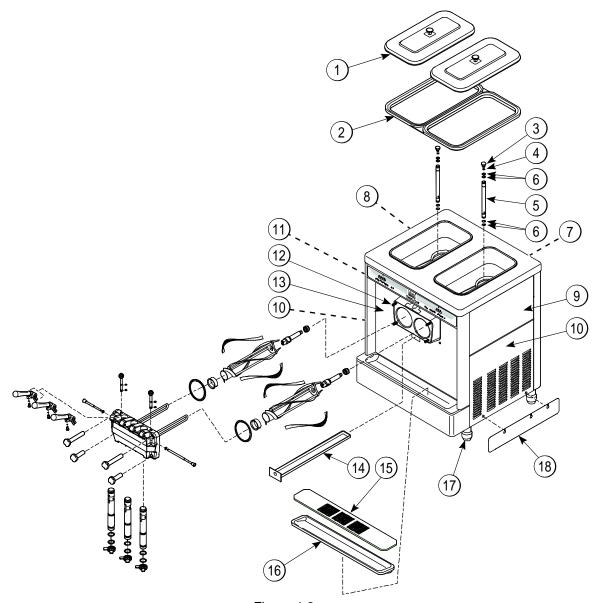


Figure 4-2

Item	Description	Part No.
1	Cover AHopper	X38458-SER
2	Gasket-Hopper Cover	038474
3	Orifice	022465-100
4	O-ring 3/8 OD X .070 W	016137
5	Tube AFeed SS 5/32 Hole	X29429-2
6	O-ring.643 OD X .077 W	018572
7	Panel-Rear	051600
8	Louver-Side Top	051191
9	Panel ASide Upper Right	X48596

Item	Description	Part No.
10	Panel-Side	048487
11	Panel ASide Left	X51596-SER
12	Stud-Nose Cone	022822
13	Panel AFront	X51590
14	Pan ADrip-15-1/8 Long	X51601
15	Shield-Splash 23 Long	022766
16	Tray-Drip 22-7/8 L X 5-1/8 W	014533
17	Leg-4" SS W/O-ring	013458
18	Skirt-Air Flow	048489

Model 339

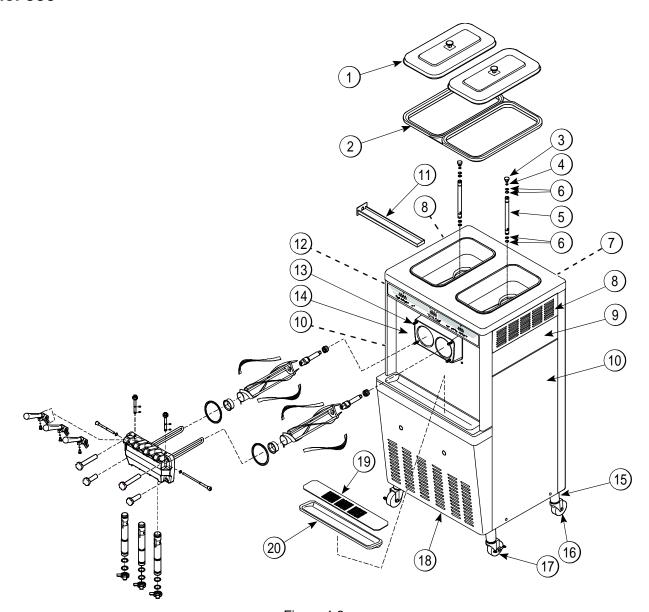


Figure 4-3

Item	Description	Part No.
1	Cover AHopper-Std	X38458-SER
2	Gasket-Hopper Cover	038474
3	Orifice	022465-100
4	O-ring 3/8 OD X .070 W	016137
5	Tube AFeed SS 5/32 Hole	X29429-2
6	O-ring .643 OD X . 077 W	018572
7	Panel-Rear	053782
8	Louver-Side Top	051191
9	Panel-Upper Side Right	028741
10	Panel ALower Side (R/I)	X24424-SER

Item	Description	Part No.
11	Pan-Drip 17-1/4" Long	027504
12	Panel-Upper Side Left	028740
13	Stud-Nose Cone	022822
14	Panel AFront	X32956
15	Adapter ACaster	X18915
16	Caster-SWV 5/8 Stem 4"	018794
17	Caster-4" SWV W/Brake	034081
18	Panel-Service	024439
19	Shield-Splash 23 L	022766
20	Tray-Drip 22-7/8l X 5-1/8 W	014533

Three Spout Door

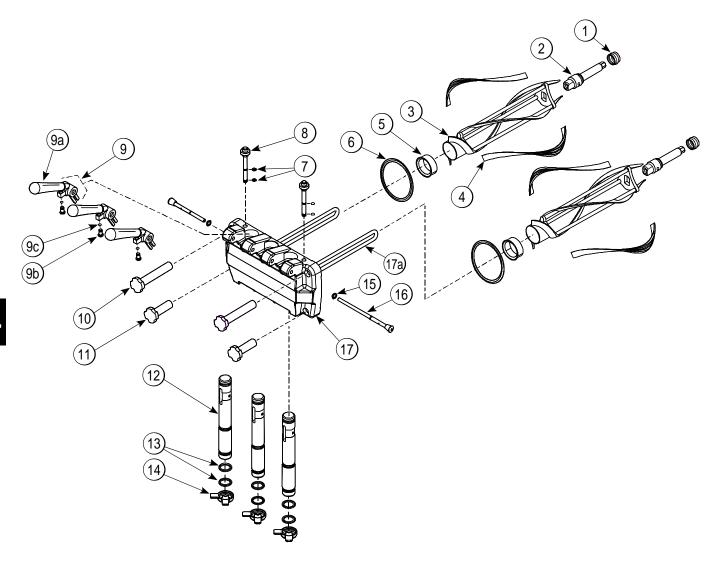


Figure 4-4

Item	Description	Part No.
1	Seal-Drive Shaft	032560
2	Shaft-Beater	033235
3	Beater A2.8qt-Helicore	X35466
4	Blade-Scraper-Plastic	035480
5	Bearing-Front	050216
6	Gasket-Door Ht 4"-Double	048926
7	O-ring-3/8 OD X .070W	016137
8	Plug-Prime	028805
9	Handle ADraw *White	X81010-SP
9a	Handle-Draw-White	056248-1
9b	Screw-Adjustment	056332

Item	Description	Part No.
9c	O-ring-1/4 OD X .070W 50	015872
10	Nut-Stud	034382
11	Nut-Stud	034383
12	Valve ADraw	X69539
13	O-ring-7/8 OD X .103W-SIL	083693
14	Cap-Design 1.010"ID-6 Point	014218
15	O-ring-5/16 OD X .070W	016272
16	Rod APivot	X20683
17	Door A3 Spout	X51532-15
17a	Baffle AShort 4"	X50883

Accessories

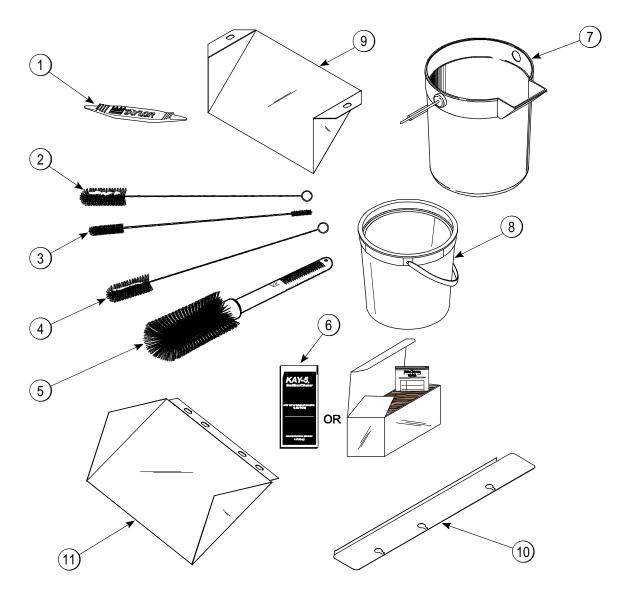


Figure 4-5

Item	Description	Part No.
1	Tool-O-ring Removal	048260-WHT
2	Brush-Rear Bearing 1" D X 2" L	013071
3	Brush-Double Ended	013072
4	Brush-Draw Valve 1" X 2" X 17"	013073
5	Brush-Mix Pump Body 3" X 7"	023316
6*	Sanitizer-Kay-5® (200 Pk)	041082
	Sanitizer-Stera-Sheen® (100 Pk)	055492

Item	Description	Part No.
7	Pail-10 qt. (336 and 339)	013163
8	Pail-6 qt. (338)	023348
9	Deflector-Blower (339)	047912
10	Skirt-Air Flow (338)	048489
11	Deflector-Blower - Side Discharge (336)	048345

*Not Shown: A sample of Kay-5[®] or Stera-Sheen[®] is shipped with new equipment. Order additional sanitizer using one of the part numbers listed.

4	
	ı

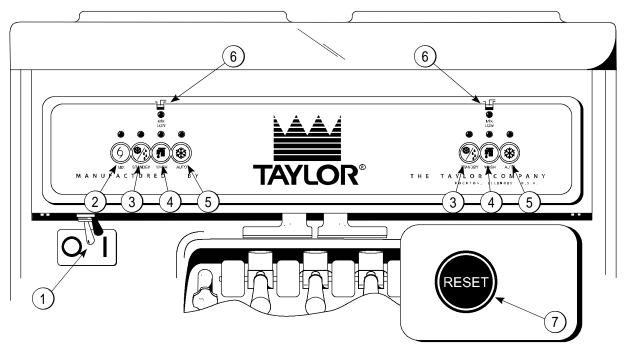


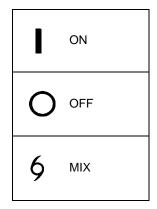
Figure 5-1

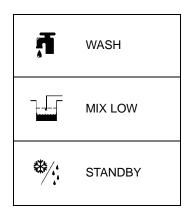
Item	Description
1	Power Switch
2	MIX Button
3	STANDBY Button
4	WASH Button

Item	Description
5	AUTO Button
6	Indicator Light - MIX LOW
7	RESET Button

Symbol Definitions

The following chart identifies the symbol definitions used on the operator switches.





Power Switch

When placed in the ON position, the power switch allows Softech[™] control panel operation.

Indicator Light - MIX LOW

A mix level indicating light is located on the front of the machine. When the light is flashing, it indicates that the mix hopper has a low supply of mix and should be refilled as soon as possible. Always maintain at least 3 in. (76 mm) of mix in the hopper. If you neglect to add mix, a freeze-up may occur. This will cause eventual damage to the beater, blades, drive shaft, and freezer door.

MIX Button

When the MIX button is pressed, the light comes on, indicating the mix hopper refrigeration system is operating. The mix refrigeration is controlled by the left side of the freezer as viewed from the operator end. The Mix Refrigeration function cannot be canceled unless the Auto or Standby modes are canceled first.

STANDBY Button

The separate hopper refrigeration (SHR) system and the cylinder temperature retention (CTR) system are standard features. The SHR feature incorporates the use of a separate, small refrigeration system to chill the mix in the hopper and to maintain the mix's temperature below 40°F (4.4°C). It also ensures bacteria control. The CTR feature works with the SHR to maintain a good quality product. During long "no sale" periods, it is necessary to warm the product in the freezing cylinder to approximately 35° to 40°F (1.7° to 4.4°C) to prevent overbeating and product breakdown.

To activate the SHR and CTR features, press the STANDBY button. Remove the air orifice and place the air tube (**end without the hole**) into the mix inlet hole.

When the STANDBY button is pressed, the light comes on, indicating the CTR system feature has been activated. In the Standby mode, the Wash and Auto functions are automatically canceled. The Mix Refrigeration function is automatically locked in to maintain the mix in the hopper.

To resume normal operation, press the AUTO button. When the unit cycles off, the product in the freezing cylinder will be at serving viscosity. At this time, place the air tube (**end with the hole**) into the mix inlet hole and

install the air orifice.

WASH Button

When the WASH button is pressed, the light comes on. This indicates beater motor operation. The Standby or Auto modes must be canceled first to activate the Wash mode.

NOTICE! The Model 336 cannot be operated in the WASH mode if the opposite side of the freezer is in AUTO. Failure to comply with this instruction will cause the rinse or sanitizing solution to freeze.

AUTO Button

When the AUTO button is pressed, the light comes on. This indicates that the main refrigeration system has been activated. In the Auto mode, the Wash or Standby functions are automatically canceled. The Mix Refrigeration function is automatically locked in to maintain the mix in the mix hopper.

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

RESET Button

The RESET button is located in the service panel. The Reset function protects the beater motor from an overload condition. If an overload occurs, the reset mechanism will trip. To properly reset the freezer:

- 1. Press the AUTO button to cancel the cycle.
- Place the power switch in the OFF position.
- 3. Press the RESET button firmly.

DANGER! DO NOT use metal objects to press the RESET button. Failure to comply may result in severe personal injury or death. Turn the power switch to the ON position. Press the WASH button and observe the freezer's performance. Open the side access panel. Make sure the beater motor is turning the drive shaft in a clockwise direction (from the operator end) without binding.

If the beater motor is turning properly, press the WASH button to cancel the cycle. Press the AUTO button (on both sides of the unit) to resume normal operation. If the freezer shuts down again, contact a Taylor service technician.

Air Tube

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

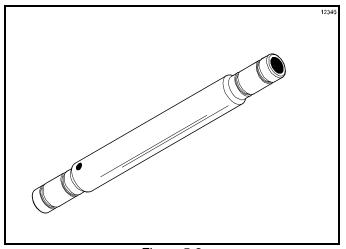


Figure 5-2

- After priming the machine, lubricate the O-rings on the air tube (the end with the hole) and place it into the mix inlet hole. Every time the draw handle is raised, new mix and air from the hopper will flow down into the freezing cylinder. This will keep the freezing cylinder properly loaded and will maintain overrun.
- During long "ensure" periods, remove the air orifice.
 Lubricate the O-rings on the air tube (the end without the hole), and place it into the mix inlet hole.
 This will prevent any mix from entering the freezing cylinder.

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.

Adjustable Draw Handle

These units feature an adjustable draw handle to provide the best portion control. The draw handle should be adjusted to provide a flow rate of 5 to 7-1/2 oz. of product per 10 seconds. To **increase** the flow rate, turn the screw **counterclockwise**. Turn the screw **clockwise** to **decrease** the flow rate. During sanitizing and rinsing, the flow rate can be increased by removing the pivot pin and placing the restrictive bar on the **top**. When drawing product, **always** place the restrictive bar on the bottom.

Important! When dispensing product, pull only one draw handle at a time.

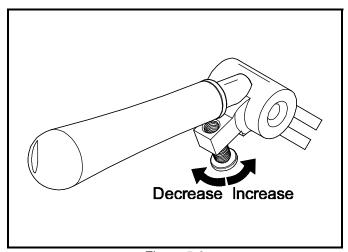


Figure 5-3

Each unit stores mix in a hopper. The mix then flows by **gravity** through an air tube down into the freezing cylinder. They all have 2.8 qt. (2.6 L) capacity freezing cylinders. All models have 20 qt. (18.9 L) mix hoppers.

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

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 6-9.

Duplicate the following procedures where they apply for the second freezing cylinder.

Assembly

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

IMPORTANT! Make sure the power switch is in the "OFF" position.

 Install the drive shaft. Lubricate the groove and shaft portion that comes in contact with the bearing on the beater drive shaft. Slide the seal over the shaft and groove until it snaps into place.

NOTICE! DO NOT lubricate the hex end of the drive shaft. Fill the inside portion of the seal with 1/4 in. more lubricant and lubricate the flat side of the seal that fits onto the rear shell bearing.

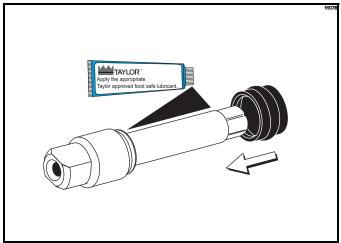


Figure 6-1

 Insert the drive shaft into the freezing cylinder, hex end first, and into the rear shell bearing until the seal fits securely over the rear shell bearing. Engage the hex end firmly into the drive coupling. Make sure the drive shaft fits into the drive coupling without binding.

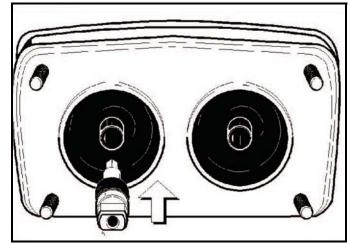


Figure 6-2

3. Take one of the scraper blades and slip it under the hook at the front of the beater. Wrap the blade around the beater, following the helix and pushing the blade down onto the helix as you wrap. At the back end of the beater, slip the blade under the hook. Repeat this step for the second scraper blade.

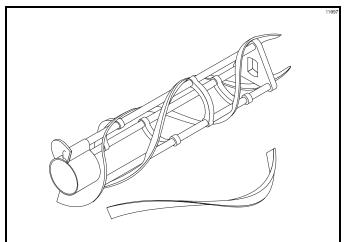


Figure 6-3

4. Holding the beater securely, slide the beater one third of the way into the freezing cylinder. Looking into the freezing cylinder, align the hole at the rear of the beater with the flats on the end of the drive shaft.

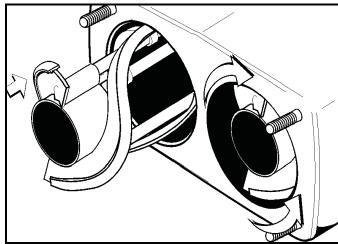


Figure 6-4

5. Slide the beater the remainder of the way into the freezing cylinder and over the end of the drive shaft. The beater should fit snugly, but not so tightly that the beater cannot be turned slightly to engage the drive shaft. If the beater slides in with little or no resistance, there will not be enough force against the beater to hold the blades in place. If this is the case, contact your authorized Taylor service agent.

- 6. Repeat step 1 through step 5 for the other side of the freezer.
- Assemble the freezer door. Place the large rubber gaskets into the grooves on the back side of the freezer door.

Slide the white plastic front bearings over the baffle rods onto the bearing hubs, making sure that the flanged end of the bearing is resting against the freezer door.

NOTICE! DO NOT lubricate the gaskets or the front bearings. Damage to components may occur.

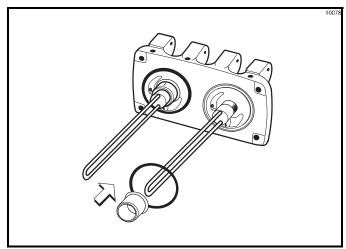


Figure 6-5

 Slide the two O-rings into the grooves on the prime plugs. Apply an even coat of Taylor Lube to the Orings and shafts.

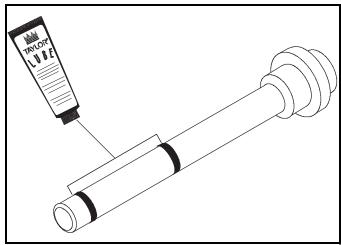


Figure 6-6

9. Insert the prime plugs into the holes in the top of the freezer door, and push down.

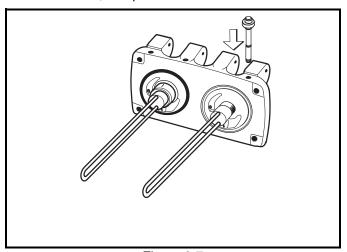


Figure 6-7

10. Install the freezer door. Insert the baffle rods through the opening in the beaters and seat the door flush with the freezing cylinder. With the door seated on the freezer studs, install the handscrews. Tighten equally in a crisscross pattern to make sure the door is snug.

IMPORTANT! The short handscrews go on the bottom, and the long handscrews go on top.

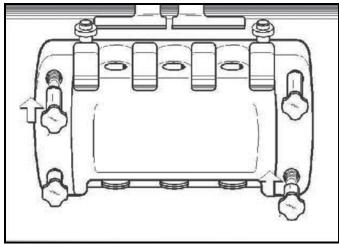


Figure 6-8

11. Install the three draw valves. Slide the two O-rings into the grooves on the draw valves, and lubricate.

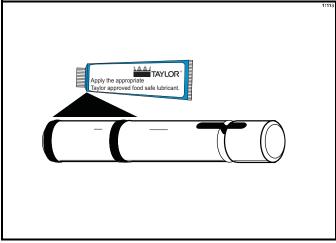


Figure 6-9

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

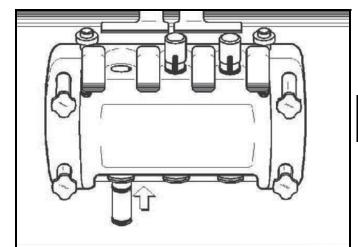


Figure 6-10

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

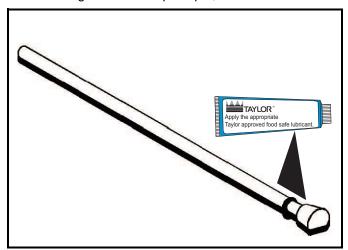


Figure 6-11

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

Note: Models 336, 338 and 339 have three draw handles. Slide the fork of the draw handle in the slot of the draw valve, starting from the right. Slide the pivot pin through each draw handle as you insert them into the draw valves.

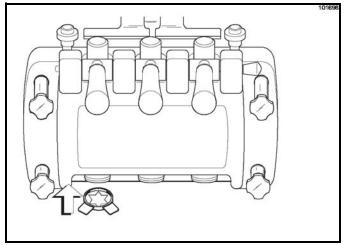


Figure 6-12

Note: These units feature adjustable draw handles to provide the best portion control. The draw handles can be adjusted for different flow rates. See "Adjustable Draw Handle" on page 5-3 for more information on adjusting these handles.

15. Snap the design caps over the end of the door spouts.

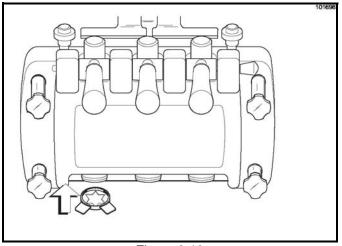


Figure 6-13

16. Install the front drip tray and the splash shield under the door spouts.

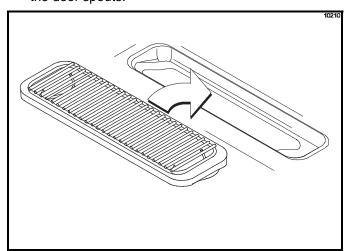


Figure 6-14

17. Slide the rear drip pan into the hole in the side panel (front panel on Model 338).

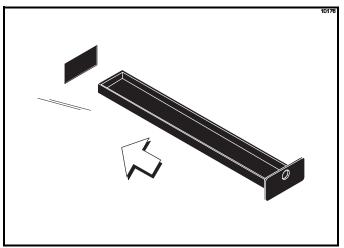


Figure 6-15

18. Slide two O-rings on one end of the air tube. Slide two O-rings on the other end of the air tube.

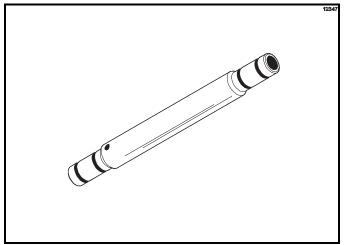


Figure 6-16

19. Slide the small O-ring into the groove of the air orifice. **Do not** lubricate the O-ring.

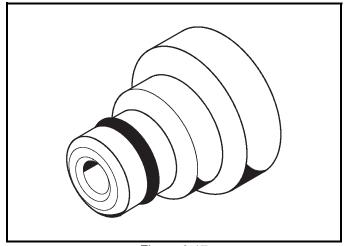


Figure 6-17

Note: Make sure the hole in the air orifice is clean and is not clogged. If the hole in the air orifice should become clogged, use soap and hot water to clear the hole.



NOTICE! DO NOT enlarge the hole in the air

orifice.

Install the air orifice into the hole in the top of the air tube (in the end without the small hole on the side).

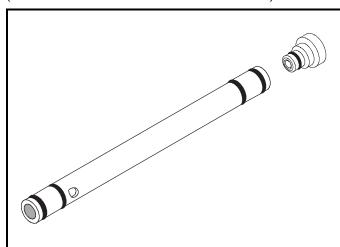


Figure 6-18

- 20. Lay the air tube (with the air orifice installed) and the hopper gasket in the bottom of the mix hopper for sanitizing.
- 21. Repeat step 18 through step 20 for the other side of the freezer.

- Sanitizing
- Prepare a pail of 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[®]). Use warm water and follow the manufacturer's specifications.
- 2. Pour the sanitizing solution into the hopper and allow it to flow into the freezing cylinder.

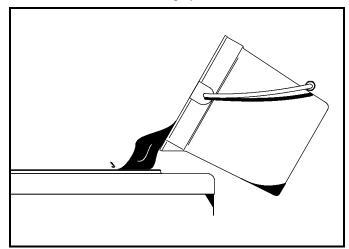


Figure 6-19

3. While the solution is flowing into the freezing cylinder, brush clean the mix hopper. When cleaning the hopper, take particular care in brushing the mix level sensing probe on the rear wall of the hopper, the mix inlet hole, the air tube, and the hopper gasket.

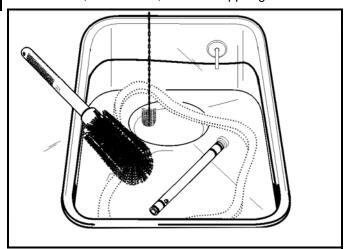


Figure 6-20

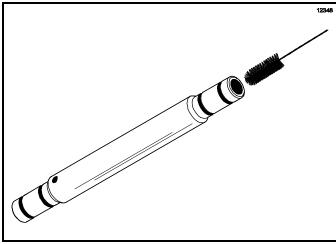


Figure 6-21

4. Place the power switch in the ON position.

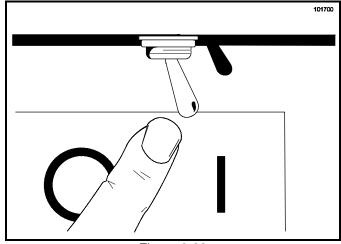


Figure 6-22

 Press the WASH button. This will cause the sanitizing solution in the freezing cylinder to agitate.
 Allow it to agitate for five minutes.

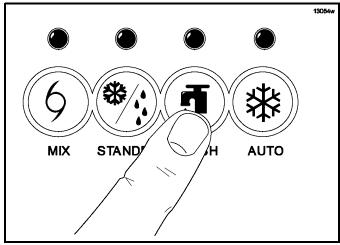


Figure 6-23

6

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

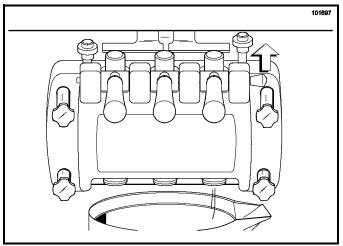


Figure 6-24

7. When a **steady** stream of sanitizing solution is flowing from the prime plug opening in the bottom of the freezer door, lower the draw handle. Draw off all the sanitizing solution.

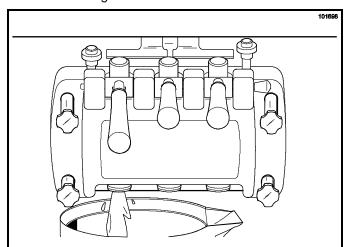


Figure 6-25

Note: Momentarily pull the center draw handle down to sanitize the center door spout.

 Once the sanitizer stops flowing from the door spout, raise the draw handle and press the WASH button, canceling the beater motor operation.

IMPORTANT! For newly sanitized freezer, make sure your hands are sanitized before continuing these instructions.

Assemble the hopper gasket around the top edge of the mix hopper. Stand the air tube in the corner of the hopper.

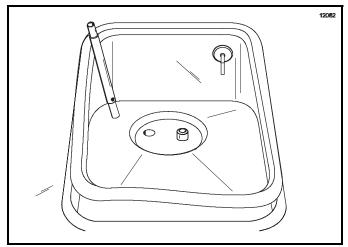


Figure 6-26

10. Repeat step 1 through step 9 for the other side of the freezer.

Priming

 With a pail beneath the door spout, lower the draw handle. Make sure the prime plug is still in the UP position. Pour 2 gal. (7.6 L) of fresh mix into the mix hopper and allow it to flow into the freezing cylinder. This will force out any remaining sanitizing solution. When full strength mix is flowing from the door spout, raise the draw handle.

Note: Use only **fresh** mix when priming the freezing cylinder.

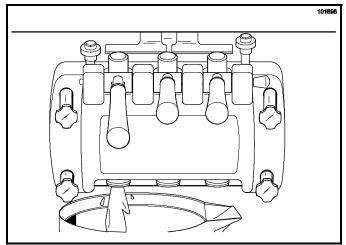


Figure 6-27

Operating Procedures Model 336, 338, 339 6-7

2. Once a **steady** stream of mix starts to flow from the prime plug opening in the bottom of the freezer door, push down the prime plug.

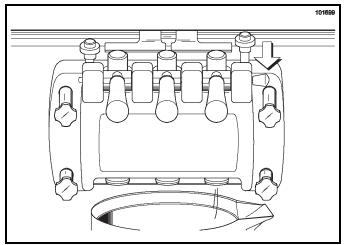


Figure 6-28

- 3. Lubricate the O-rings on the air tube on the end with the small hole on the side.
- 4. Install the air tube in the AUTO position.

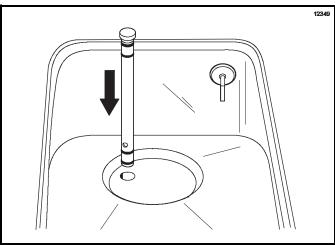


Figure 6-29

 Press the AUTO button. The AUTO light will come on, indicating the main refrigeration system is operating. When the unit cycles off, the product will be at serving viscosity.

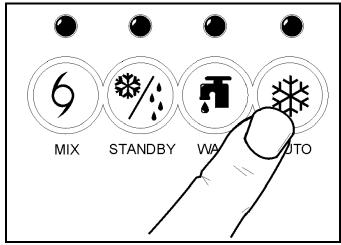


Figure 6-30

Note: The mix refrigeration light will come on, indicating the mix refrigeration system is operating to maintain the mix in the mix hopper.

- Fill the hopper with mix. As the mix level comes in contact with the mix level sensing probe on the rear wall of the hopper, the MIX LOW light will shut off.
- 7. Place the mix hopper cover in position over the mix hopper.
- 8. Repeat step 1 through step 7 for the other side of the freezer.

Closing Procedure

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

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

Draining Product from the Freezing Cylinder

- 1. Press the AUTO button, canceling compressor and beater motor operation.
 - Press the MIX button, canceling the mix hopper refrigeration system.
- 2. Remove the hopper cover, hopper gasket, and air tube. Take these parts to the sink for cleaning.
- 3. If local health codes permit the use of rerun, place a sanitized, NSF-approved stainless steel rerun container beneath the door spout. Press the WASH button and lower the draw handle. Drain the remaining product from the freezing cylinder and mix hopper. When the flow of product stops, press the WASH button and raise the draw handle. Place the sanitized lid on the rerun container and place it in the walk-in cooler.

Note: If local health codes do not permit the use of rerun, the product must be discarded. Drain the product into a pail and properly discard it.

Repeat step 1 through step 3 for the other side of the freezer.

Note: For Model 336, both sides must be in Wash mode. If one side is in Auto mode and the other is in Wash mode, the side that is in Wash mode will continue to freeze.



Rinsing

- 1. Pour 2 gal. (7.6 L) of **cool** clean water into the mix hopper. With the brushes provided, scrub the mix hopper, mix inlet hole, and mix level sensing probe.
- 2. With a pail beneath the door spout, raise the prime plug and press the WASH button.
- When a steady stream of rinse water is flowing from the prime plug opening in the bottom of the freezer door, lower the draw handle. Drain all the rinse water from the freezing cylinder, raise the draw handle, and press the WASH button, canceling the Wash mode.
- Repeat step 1 through step 3 for the other side of the freezer.

Cleaning

- 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[®]). Use warm water and follow the manufacturer's specifications.
- 2. Push down the prime plug. Pour the cleaning solution into the mix hopper.
- While the solution is flowing into the freezing cylinder, brush clean the mix hopper, mix level sensing probe, and mix inlet hole.
- 4. Press the WASH button to cause the cleaning solution in the freezing cylinder to agitate.
- 5. Place an empty pail beneath the door spout and raise the prime plug.
- When a steady stream of cleaning solution is flowing from the prime plug opening in the bottom of the freezer door, lower the draw handle. Draw off all of the solution.
- Once the cleaner stops flowing from the door spout, raise the draw handle and press the WASH button, canceling the Wash mode.
- 8. Repeat step 1 through step 7 for the other side of the freezer.

Disassembly

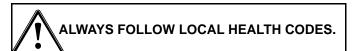
WARNING! Make sure the power switch is in the OFF position. Make sure no lights are lit on the control panel.

- Remove the handscrews, freezer door, beaters, scraper blades, and drive shafts from the freezing cylinders. Take these parts to the sink for cleaning.
- 2. Remove the front drip tray and the splash shield.

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.



 Prepare a sink with an approved cleaning solution (examples: Kay-5[®] or Stera-Sheen[®]). Use warm water and follow the manufacturer's specifications. If another approved cleaner is used, dilute it according to the label instructions.

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

- 2. Remove the seals from the drive shafts.
- 3. From the freezer door, remove the following:
 - Gaskets
 - Front bearings
 - Pivot pins
 - Adjustable draw handles
 - Design caps
 - Draw valves
 - Prime plugs
- 4. Remove all O-rings.

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

Remove the O-rings from the air tubes and air orifices. Return to the freezer with a small amount of cleaning solution. Brush clean the rear shell bearings at the back of the freezing cylinders with the black bristle brush.

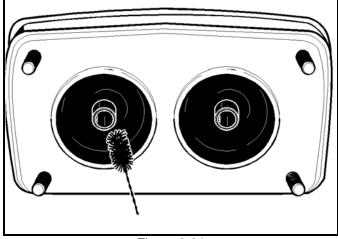


Figure 6-31

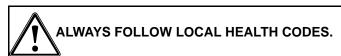
Remove the rear drip pan and take it to the sink for cleaning.

Note: If the drip pan is filled with an excessive amount of mix, refer to "Section 8: Troubleshooting Guide".

- 8. Thoroughly brush clean all disassembled parts in the cleaning solution, making sure all lubricant and mix film is removed. Take particular care to brush clean the draw valve cores in the freezer door. Place all the cleaned parts on a clean, dry surface to air dry overnight.
- 9. Wipe clean all exterior surfaces of the freezer.

Operator's Checklist

During Cleaning and Sanitizing



Cleaning and sanitizing schedules are governed by federal, state, or local regulatory agencies and must be followed accordingly. If the unit has a Standby mode, it must not be used in lieu 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 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 that 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 located at the rear of the freezing cylinder. Make sure to have a generous amount of cleaning solution on the brush.
- ☐ If local health codes permit the use of rerun, make sure the mix rerun is stored in a sanitized, covered stainless steel container and used the following day. Do not prime the machine with rerun. When using rerun, skim the foam and discard. Mix the rerun with fresh mix in a ratio of 50:50 during the day's operation.

- On a designated day of the week, run the mix as low as feasible and discard it after closing. This will break the rerun cycle and reduce the possibility of high bacteria and coliform counts.
- ☐ Properly prepare the cleaning and sanitizing solutions. Read and follow 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.
- ☐ Make sure the temperature of the mix in the mix hopper and walk-in cooler is below 40°F (4.4°C).

Regular Maintenance Checks

- ☐ Replace scraper blades that are nicked or damaged. Before installing the beater assembly, make sure that scraper blades are properly attached to the helix.
- ☐ Check the rear shell bearing for signs of wear (excessive mix leakage in rear drip pan) and make sure it is properly cleaned.
- ☐ Using a screwdriver and cloth towel, keep the rear shell bearing and the female hex drive socket clean and free of lubricant and mix deposits.
- ☐ Dispose of O-rings and seals if they are worn, torn, or fit too loosely, and replace with new ones.
- ☐ Follow all lubricating procedures as outlined in "Assembly" on page 6-1.
- ☐ If your machine is air-cooled, check the condensers for accumulation of dirt and lint. Dirty condensers will reduce the efficiency and capacity of the machine. Condensers should be cleaned monthly with a soft brush. Never use screwdrivers or other metal probes to clean between the fins.

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

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

☐ If your machine is equipped with an auxiliary refrigeration system, check the auxiliary condenser for accumulation of dirt and lint. Dirty condensers will reduce the refrigeration capacity of the mix hopper. Condensers must be cleaned monthly with a soft brush. Never use screwdrivers or other metal probes to clean between the fins.

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

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

Winter Storage

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

- Disconnect the freezer from the main power source to prevent possible electrical damage.
- On water-cooled freezers, disconnect the water supply. Relieve pressure on the spring in the water valve. Use air pressure on the outlet side to blow out any water remaining in the condenser. This is extremely important. Failure to follow this procedure may cause severe and costly damage to the refrigeration system.
 - Your local Taylor distributor can perform this winter storage service for you.
- Wrap detachable parts of the freezer, such as beater, blades, drive shaft, and freezer door, and place them in a protected dry place. Rubber trim parts and gaskets can be protected by wrapping them with moisture-proof paper. All parts should be thoroughly cleaned of dried mix or lubrication, which attract mice and other vermin.

Troubleshooting Guide

Table 8-1

Problem	Probable Cause	Remedy	Page Ref.
No product is being dispensed with draw	a. Freeze-up in mix inlet hole.	a. Call a service technician to adjust the mix hopper temperature.	
valve open and the machine in the Auto	b. Beater motor out on reset.	b. Reset the freezer.	5-2
mode.	c. The beater is rotating counterclockwise from the operator end.	Contact a service technician to correct rotation to clockwise from operator end.	
	d. The circuit breaker is off, or the fuse is blown.	d. Turn the breaker on, or replace the fuse.	
	e. There is inadequate mix in the mix hopper.	e. Fill the mix hopper with mix.	6-8
	f. The air orifice is not installed.	f. Install air orifice in air tube.	6-5
	g. Air tube is installed in the STANDBY position.	g. Install the air tube in the AUTO position.	6-8
2. The product is too stiff.	a. The viscosity needs adjustment.	a. Contact a service technician.	
	b. The air orifice is not installed.	b. Install air orifice in air tube.	6-5
3. The product is too soft.	a. Viscosity needs adjustment.	a. Contact service technician.	
	b. Not enough air space around unit (air- cooled units).	b. Allow for adequate air flow across the condenser.	3-2
	c. Worn scraper blades.	c. Replace regularly.	9-1
	d. Dirty condenser (A/C).	d. Clean monthly.	7-1
	e. Mix is out of date.	e. Use only fresh mix.	
	f. Loss of water (W/C).	Locate cause of water loss and correct.	7-2
	g. Loss of refrigerant.	g. Call a service technician.	
4. The mix in the mix hopper is too cold.	a. The temperature is out of adjustment.	a. Call a service technician to adjust the mix hopper temperature.	
5. The mix in the mix hopper is too warm.	a. The temperature is out of adjustment.	a. Call a service technician to adjust the mix hopper temperature.	
	b. Missing or damaged mix hopper gasket.	b. Replace/install the gasket around the mix hopper.	6-7
	c. The mix hopper cover is not in position.	c. Place the cover in position.	6-8
	d. The MIX light is not lit.	d. Press the MIX button.	6-9
	e. The condenser is dirty.	e. Clean the condenser.	7-1

Problem	Probable Cause	Remedy	Page Ref.
6. The drive shaft is stuck in the drive coupling.	a. Rounded corners of drive shaft, coupling, or both.	a. Call a service technician to correct cause and to replace the necessary components. Do not lubricate the hex end of the drive shaft.	
	b. Mix and lubricant collected in the drive coupling.	b. Brush clean the rear shell bearing area regularly.	6-10
7. The freezing cylinder walls are scored.	a. The beater assembly is bent.	a. Call a service technician to repair or replace the beater and to correct the cause of insufficient mix in the freezing cylinder.	
	b. The front bearing is missing or worn on the freezer door.	b. Install or replace the front bearing.	6-2
Excessive mix leakage into the rear drip pan.	a. Missing or worn drive shaft seal on drive shaft.	a. Install or replace regularly.	6-1/9-1
	b. The rear shell bearing is worn.	b. Call a service technician to replace rear shell bearing.	
9. Excessive mix leakage	a. Missing or worn draw valve O-rings.	a. Install or replace regularly.	6-3/9-1
from door spout.	b. Inadequate lubrication of draw valve O-rings.	b. Lubricate properly.	6-3
	c. Wrong type of lubricant is being used (example: petroleum-based lubricant).	c. Use the proper lubricant (example: Taylor Lube).	6-1
10.No freezer operation	a. Unit is unplugged.	a. Plug into wall receptacle.	
after pressing the AUTO button.	b. The circuit breaker is off or the fuse is blown.	b. Turn the breaker on, or replace the fuse.	
	c. The beater motor is out on reset.	c. Reset the freezer.	5-2
	d. The unit has gone off on high pressure cut-out.	d. Allow the unit to cool and reset. Check for dirty condenser (aircooled) or loss of water (watercooled).	7-1
11.Product is not feeding into the freezing cylinder.	a. Inadequate level of mix in the mix hopper.	a. Fill the mix hopper with mix.	6-8
	b. The mix inlet hole is frozen up.	b. The mix hopper temperature needs adjustment. Call a service technician.	
	c. The air tube is installed incorrectly.	c. Install the air tube in the mix inlet hole, using the end with the small hole in the side.	6-8
	d. The air orifice is not installed.	d. Install the air orifice in the air tube.	6-5

9

Maintenance Intervals

Table 9-1

Part Description	Every 3 Months	Every 6 Months	Annually
Drive Shaft Seal	X		
Scraper Blade	X		
Freezer Door Gasket	X		
Front Bearing	X		
Draw Valve O-ring	X		
Pivot Pin O-ring	X		
Prime Plug O-ring	X		
Air Tube O-ring	X		
Air Orifice O-ring	X		
White Bristle Brush, 3" x 7"		Inspect and replace if necessary.	Minimum
White 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

Notes:

TAYLOR COMPANY LIMITED WARRANTY ON FREEZERS

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

LIMITED WARRANTY

Taylor warrants the Product against failure due to defects 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 defects during the applicable warranty period, Taylor, through a Taylor-authorized 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 and 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) year

LIMITED WARRANTY CONDITIONS

- 1. If the date of original installation of the Product cannot be verified, then the limited warranty period begins ninety (90) days from the date of Product manufacture (as indicated by the Product serial number). Proof of purchase may be required at time of service.
- 2. This limited warranty is valid only if the Product is installed and all required service work on the Product is performed by a Taylor-authorized 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 Taylor-authorized distributor or service agency for credit.
- 5. The use of any refrigerant other than that specified on the Product's data label will void this limited warranty.

LIMITED WARRANTY EXCEPTIONS

This limited warranty does not cover:

- 1. Labor or other costs incurred for diagnosing, repairing, removing, installing, shipping, servicing, or handling of defective parts, replacement parts, or new Products.
- 2. Normal maintenance, cleaning, and lubrication as outlined in the Taylor Operator's Manual, including cleaning of condensers.
- 3. Replacement of wear items designated as Class 000 parts in the Taylor Operator's Manual.
- 4. External hoses, electrical power supplies, and machine grounding.
- 5. Parts not supplied or designated by Taylor, or damages resulting from their use.
- 6. Return trips or waiting time required because a service technician is prevented from beginning warranty service work promptly upon arrival.
- 7. Failure, damage, or repairs due to faulty installation, misapplication, abuse, no or improper servicing, unauthorized alteration, or improper operation or use as indicated in the Taylor Operator's Manual, including but not limited to the failure to use proper assembly and cleaning techniques, tools, or approved cleaning supplies.
- 8. Failure, damage, or repairs due to theft, vandalism, wind, rain, flood, high water, water, lightning, earthquake, or any other natural disaster, fire, corrosive environments, insect or rodent infestation, or other casualty, accident, or condition beyond the reasonable control of Taylor; operation above or below the electrical or water supply specification of the Product; 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 for any reason whatsoever.
- 12. Damages resulting from the use of any refrigerant other than that specified on the Product's data label.
- 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.

10

<u> 10</u>

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.

Notes:

Limited Warranty on Parts

TAYLOR COMPANY LIMITED WARRANTY ON TAYLOR GENUINE PARTS

Taylor Company, is pleased to provide this limited warranty on genuine, new Taylor replacement components and parts (the "Parts") available from Taylor to the market generally 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 defects during the applicable warranty period, Taylor, through a Taylor-authorized distributor or service agency, will provide a new or re-manufactured Part, at Taylor's option, to replace the failed defective Part at no charge for the Part. Except as otherwise stated herein, these are Taylor's exclusive obligations under this limited warranty for a Part failure. This limited warranty is subject to all provisions, conditions, limitations, and exclusions listed below and on the reverse (if any) of this document.

Part's Warranty Class Code or Part

Class 103 Parts¹

Class 212 Parts²

Twelve (12) months

Class 512 Parts

Twelve (12) months

Class 000 Parts

No warranty

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

Four (4) years

Table 11-1

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 a Taylor-authorized 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 Taylor-authorized 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.

11

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

LIMITED WARRANTY EXCEPTIONS

This limited warranty does **not** cover:

- 1. Labor or other costs incurred for diagnosing, repairing, removing, installing, shipping, servicing, or handling of defective Parts, replacement Parts, or new Parts.
- 2. Normal maintenance, cleaning, and lubrication as outlined in the Taylor Operator's Manual, including cleaning of condensers or carbon and grease buildup.
- 3. Required service, whether cleaning or general repairs, to return the cooking surface assemblies, including the upper platen and lower plate, to an operational condition to achieve proper cooking or allow proper assembly of release sheets and clips as a result of grease build-up on the cooking surfaces, including but not limited to the platen and plate, sides of the shroud, or top of the shroud.
- 4. Replacement of cooking surfaces, including the upper platen and lower plate, due to pitting or corrosion (or in the case of the upper platen, due to loss of plating) as a result of damage due to the impact of spatulas or other small wares used during the cooking process or as a result of the use of cleaners, cleaning materials, or cleaning processes not approved for use by Taylor.
- 5. Replacement of wear items designated as Class 000 Parts in the Taylor Operator's Manual, as well as any release sheets and clips for the Product's upper platen assembly.
- 6. External hoses, electrical power supplies, and machine grounding.
- 7. Parts not supplied or designated by Taylor, or damages resulting from their use.
- 8. Return trips or waiting time required because a service technician is prevented from beginning warranty service work promptly upon arrival.
- 9. Failure, damage, or repairs due to faulty installation, misapplication, abuse, no or improper servicing, unauthorized alteration or improper operation or use as indicated in the Taylor Operator's Manual, including but not limited to the failure to use proper assembly and cleaning techniques, tools, or approved cleaning supplies.
- 10. Failure, damage or repairs due to theft, vandalism, wind, rain, flood, high water, water, lightning, earthquake, or any other natural disaster, fire, corrosive environments, insect or rodent infestation, or other casualty, accident or condition beyond the reasonable control of Taylor; operation above or below the gas, electrical, or water supply specification of the unit in which a part is installed; 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 for 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.
- 15. Any cost to replace, refill, or dispose of refrigerant, including the cost of refrigerant.
- 16. Any special, indirect, or consequential property or commercial damage of any nature whatsoever. Some jurisdictions do not allow the exclusion of incidental or consequential damages, so this limitation may not apply to you.

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

LIMITATION OF WARRANTY

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

LEGAL REMEDIES

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

Taylor Company

750 N. Blackhawk Blvd.

Rockton, IL 61072, U.S.A.

11

Notes: