

# **OPERATOR'S MANUAL**



## **Model 702 & 772 Navy Soft Serve Freezers**

**Original Operating Instructions**

**051469- M**

**December, 1998 (Original Publication)  
(Updated 7/1/15)**

**Complete this page for quick reference when service is required:**

Taylor Distributor: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Service: \_\_\_\_\_

Parts: \_\_\_\_\_

Date of Installation: \_\_\_\_\_

**Information found on the data label:**

Model Number: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Electrical Specs: Voltage \_\_\_\_\_ Cycle \_\_\_\_\_

Phase \_\_\_\_\_

Maximum Fuse Size: \_\_\_\_\_ A

Minimum Wire Ampacity: \_\_\_\_\_ A

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051469- M

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**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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# Section 1

# To the Installer

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

## Installer Safety



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

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

- Only authorized Taylor service personnel should perform installation, maintenance, and repairs on Taylor equipment.
- Authorized service personnel should consult OSHA Standard 29CFR1910.147 or the applicable code of the local area for the industry standards on lockout/tagout procedures before beginning any installation or repairs.
- Authorized service personnel must ensure that the proper 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.



The main power supply(s) to the unit 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 unit.

## Site Preparation

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

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



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



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

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

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



**DO NOT** install the machine in an area where a water jet could be used. Failure to follow this instruction may result in serious electrical shock.

## Water Connections (Water Cooled Units Only)

An adequate cold water supply must be provided with a hand shut-off valve. On the underside rear of the base pan, two 3/8" I.P.S. (for single head units) or two 1/2" I.P.S. (for double head units) water connections for inlet and outlet have been provided for easy hook-up. 1/2" inside diameter water lines should be connected to the machine. (Flexible lines are recommended, if local codes permit.) Depending on local water conditions, it may be advisable to install a water strainer to prevent foreign substances from clogging the automatic water valve. There will be only one water "in" and one water "out" connection for both single head and double head units. **DO NOT** install a hand shut-off 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.



**A back flow 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.

## Air Cooled Units

**DO NOT** obstruct the unit's air intake and discharge openings:

Model 702 units require a minimum of 3" (76 mm) clearance on both sides, and 6" (152 mm) on the back. Model 772 units require a minimum of 3" (76 mm) clearance around all sides of the freezer. This is necessary 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.

## Electrical Connections

In the United States, this unit is intended to be installed in accordance with the current edition of the National Electrical Code (NEC), ANSI/NFPA 70 which governs the installation of the unit at the local governmental level.

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 unit 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 unit for branch circuit overcurrent protection or fuse, circuit ampacity, and other electrical specifications. Refer to the wiring diagram provided inside of the electrical box for proper power connections.



**FOLLOW YOUR LOCAL ELECTRICAL CODES!**



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



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



- Stationary appliances which are not equipped with a power cord and a plug or another device to disconnect the appliance from the power source must have an all-pole disconnecting device with a contact gap of at least 3 mm installed in the external installation.
- Appliances that are permanently connected to fixed wiring and for which leakage currents may exceed 10 mA, particularly when disconnected or not used for long periods, or during initial installation, shall have protective devices such as a GFI, to protect against the leakage of current, installed by the authorized personnel to the local codes.

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

If the supply cord is damaged, it must be replaced by an authorized Taylor service technician in order to avoid a hazard.

## Running Specifications

### Expansion Valve Setting

404A/HP62: 20 to 22 PSI (138 to 152 kPa.) for normal products at temperatures of 18 to 20°F. (-7.8 to -6.7°C.).

### Low Side Pressure

Low side pressure = expansion valve setting.

To adjust the low side pressure, place the gauge on the low side suction port at the compressor. With the compressor running, turn the adjustment knob of the automatic expansion valve clockwise to raise low side pressure and counterclockwise to lower pressure.

### High Side Pressure

**Air Cooled:** The following chart indicates normal operating head pressures at various ambient temperatures:

Ambient Temperature		Normal Operating Head Pressures
F.	C.	PSI
70°	21.1°	240 - 270 (1,655 - 1,862 kPa.)
80°	26.7°	270 - 300 (1,862 - 2,069 kPa.)
90°	32.2°	300 - 340 (2,069 - 2,344 kPa.)
100°	37.8°	340 - 380 (2,344 - 2,620 kPa.)

**Note:** This chart applies to units using 502 or 404A refrigerant.

**Water Cooled:** High side pressure for water cooled units is determined by the water valve. The water valve is factory set to maintain a high pressure of 235 PSI (1,620 kPa.). To adjust the high pressure, place the gauge on the high side access port. Turn the adjustment knob on the water valve clockwise to lower the high side pressure and counterclockwise to raise the pressure.

The high side pressure switch is factory set at 440 PSI (3,034kPa) for 404A/HP62. In the event of a water loss, this switch will sense a rise in pressure and deactivate the freezer.

## Check Out

Once the unit is installed, it is advisable to check the following controls and mechanical operations of the freezer and to make any necessary adjustments. If applicable, repeat these checks for the second freezing cylinder on double head units.

## Controls

Place the control switch in the "AUTO" position. The main refrigeration system will operate (compressor, beater motor, and the condenser fan). The dial light and the mix low indicator will be lit.



Figure 1

If the freezer is water cooled, the automatic water valve will begin to open and cold water will flow into the condenser. This will remove heat from the refrigerant. As the water flows into the open trap drain, it should be warm to the touch. Place the control switch in the "OFF" position.

## Beater Rotation



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

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

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

To correct rotation on a single- phase unit, 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 upper left side panel for the Model 702, and behind the service panel for the Model 772.

**Note:** Electrical connections should be performed by a trained service technician.

## Gear Alignment

To prevent costly parts damage and to prevent excessive mix leakage, the gear unit must be perfectly aligned. To check gear alignment, insert the drive shaft through the rear shell bearing and into the gear unit. Move the drive shaft in and out of the gear unit, using all positions of the hex end. If any binding of the drive shaft occurs, the gear unit could be out of alignment.

Inspect the bolts which mount the gear unit. make sure they are tightened down.

To prevent excessive mix leakage, check the rear shell bearing. The locking tab should be folded over the nut to prevent the nut from working loose.



## Section 2

## Thermistor Control

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### Function

The thermistor control maintains temperature in the freezing cylinder by monitoring the resistance of the thermistor probe.

### Specifications

**Temperature Differential:** cut in = 2°F. (1.1°C.) above cut-out.

**Coarse Adjustment Range:** 10° to 30°F. (-12° to -1°C.).

**Fine Adjustment Range:** 4°F. (2°C.) total.

**Coarse Adjustment Potentiometer:** 1/4 turn = approximately 6°F. (3°C.).

**Input Voltage Supply:** 24 VAC.

### Thermistor Probe (Part # 038061 - BLK)

The resistance value of the thermistor probe corresponds with the product temperature in the freezing cylinder. As the product becomes colder, the probe resistance increases. As the product becomes warmer, the probe resistance decreases.

#### Approximate probe resistance readings:

1. 10,000 ohms at room temperature (78°F. / 25°C.).
2. 46.012 ohms at product temperature (20°F. / -6.6°C.).

### Operation

The thermistor probe is positioned in the bulb-well located at the front of the freezing cylinder. The thermistor control becomes operational when powered by the 24 VAC transformer.

When the desired product is achieved (control set-point) the thermistor control relay opens and discontinues the power sent to the compressor relay coil.

When the product in the freezing cylinder reaches 2°F. (1°C.) above the control set-point, the thermistor relay closes, sending L1 power to the compressor relay coil. The refrigeration system will run until the control set-point is achieved.

### Anticipator

The anticipator signals the thermistor control to activate the refrigeration system whenever product is drawn. As the draw valve is raised (freezer draw switch closes), continuity is created between the thermistor control anticipator terminals. The thermistor control relay will close within 1 second to start the refrigeration system.

Upon completing the draw, the thermistor control recognizes the loss of continuity between the anticipator terminals, but will continue refrigeration for at least 25 seconds. This allows for additional blending and freezing of the warmer mix which has entered the freezing cylinder. After approximately 25 seconds have elapsed, the thermistor control returns to normal operation and cycles off the refrigeration system when the set-point temperature is achieved.

## Setting Temperature

1. Position the thermistor fine adjustment at mid-range. This will limit the fine adjustment temperature range to  $\pm 2^{\circ}\text{F}$ . ( $\pm 1^{\circ}\text{C}$ ).
2. Turn the coarse adjustment clockwise to the coldest setting.
3. With the freezer correctly primed, place the control switch in the "AUTO" position.
4. After the appropriate freezing time, test the product temperature. When a sample portion temperature is approximately  $1^{\circ}$  above the desired temperature setting, slowly turn the coarse adjustment counterclockwise (warmer) until the refrigeration system cycles off.
5. Allow the refrigeration system to cycle through at least two "off" cycles. After the unit cycles off, draw a sample of product and check the temperature. Readjust the coarse adjustment as required, but make only small adjustments.

**Note:** The anticipator automatically activates the refrigeration system 0 - 1 second after the draw valve is opened. If several small samples are drawn, the temperature may drift lower. To accurately set the control, let the product temperature stabilize by allowing the thermistor control to cycle the freezer on and off by the control set point instead of the anticipator.

## Service Tips

If a problem arises with the thermistor control assembly, identify and replace only the faulty component. For example, if the probe is defective, replace only the probe.

A varistor must be connected to the thermistor control's 24 VAC terminals in order to protect the control from voltage spikes (varistor part number X31547).

Fill the bulb-well with automotive antifreeze before installing the thermistor probe, and be sure the probe is installed completely into the bottom of the bulb-well.

**Note:** Lower the probe to the point where the wires extend from the probe and a resistance is felt. This indicates the probe is installed completely in the bottom of the bulb-well.

If the thermistor relay which *starts* the compressor will not close, check the following items:



**ELECTRICAL SHOCK AREA! USE CAUTION!**

1. Make sure power is being supplied to the freezer and that all operating switches are in the correct position.
2. Using a voltmeter, check the voltage supply to the thermistor control. The control requires 24 volts to operate.
3. Using an ohmmeter, check probe resistance. (Refer to the thermistor curve chart on page 7 for proper readings.)

If the thermistor relay which *deactivates* the compressor will not open, check the following items:



**ELECTRICAL SHOCK AREA! USE CAUTION!**

1. Make sure the thermistor relay opens when the freezer control switch is in the "OFF" position.
2. Make sure the thermistor probe is connected to the correct probe terminals.
3. Using an ohmmeter, check the thermistor probe for proper resistance. (Refer to the thermistor curve chart on page 7 for proper readings.)
4. Disconnect one wire to an anticipator terminal. If the thermistor relay opens after approximately 25 seconds, the problem is in the anticipator wiring circuit.

When problems such as erratic product quality occur, it is of utmost importance to determine if the thermistor components are defective before replacing them.

**See page 34 for Troubleshooting Thermistor Components.**

## Thermistor Curve Chart

F.	C.	K OHM	F.	C.	K OHM	F.	C.	K OHM
-10	-23.3	118.201	22	-5.5	43.530	54	12.2	17.915
-9	-22.7	114.394	23	-5.0	42.340	55	12.7	17.451
-8	-22.2	110.709	24	-4.4	41.136	56	13.3	16.998
-7	-21.6	107.143	25	-3.8	39.967	57	13.8	16.557
-6	-21.1	103.692	26	-3.3	38.830	58	14.4	16.128
-5	-20.5	100.352	27	-2.7	37.727	59	15.0	15.710
-4	-20.0	97.120	28	-2.2	36.654	60	15.5	15.315
-3	-19.4	94.085	29	-1.6	35.612	61	16.1	14.929
-2	-18.8	91.144	30	-1.1	34.599	62	16.6	14.554
-1	-18.3	88.296	31	-0.5	33.616	63	17.2	14.187
0	-17.7	85.536	32	0	32.660	64	17.7	13.830
1	-17.2	82.863	33	0.5	31.760	65	18.3	13.482
2	-16.6	80.273	34	1.1	30.885	66	18.8	13.143
3	-16.1	77.765	35	1.6	30.035	67	19.4	12.812
4	-15.5	75.334	36	2.2	29.207	68	20.0	12.490
5	-15.0	72.980	37	2.7	28.403	69	20.5	12.185
6	-14.4	70.627	38	3.3	27.620	70	21.1	11.888
7	-13.8	68.350	39	3.8	26.859	71	21.6	11.598
8	-13.3	66.147	40	4.4	26.120	72	22.2	11.315
9	-12.7	64.014	41	5.0	25.400	73	22.7	11.039
10	-12.2	61.951	42	5.5	24.721	74	23.3	10.769
11	-11.6	59.953	43	6.1	24.059	75	23.8	10.507
12	-11.1	58.021	44	6.6	23.416	76	24.4	10.250
13	-10.5	56.150	45	7.2	22.789	77	25.0	10.000
14	-10.0	54.340	46	7.7	22.180	78	25.5	9.763
15	-9.4	52.854	47	8.3	21.586	79	26.1	9.532
16	-8.8	51.409	48	8.8	21.009	80	26.6	9.306
17	-8.3	50.003	49	9.4	20.447	81	27.2	9.085
18	-7.7	48.636	50	10.0	19.900	82	27.7	8.870
19	-7.2	47.306	51	10.5	19.384	83	28.3	8.659
20	-6.6	46.012	52	11.1	18.881	84	28.8	8.454
21	-6.1	44.754	53	11.6	18.392	85	29.4	8.254

When checking a thermistor probe, first determine the temperature at the probe and find it on this chart, along with the correct ohmmeter reading. If your ohmmeter reading varies from the correct reading, determine whether the difference is acceptable. If a probe is faulty, the difference will be great.

## Section 3

# Semi-Assembled Navy Units

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To disassemble and assemble the Model 702 unit for installation in a Navy submarine, perform the following steps. Use the illustrations on page 12 for the numerical references.

### Disassembly

#### Step 1

Remove the rear panel, both lower side panels, and the control box cover.

#### Step 2

Remove the door assembly, the drip pan, the beater assembly, and the shaft from the front of the unit.

#### Step 3

Remove the decorative plate from the front of the unit, then the fasteners from the following: (1) 24V transformer, (2) draw switch, (3) thermistor board, and (4) hopper temperature control.

#### Step 4

Disconnect the mix low light wires, and remove the thermistor probe and mix hopper temperature probe from their respective bulb well locations.

#### Step 5

Using a drill (1/8" to 5/32" bit), remove all (8) hood rivets.

#### Step 6

Remove the upper side panels, (remove the rear screws, then the lower front screws, then swing the panel out and up to remove the upper front screws).

#### Step 7

Disconnect the beater motor wires from the right hand side of the beater motor start relay. Remove the high pressure cut out wire and blue wire from the beater motor relay overload. Disconnect the high pressure cutout wire to the #13 terminal on the compressor relay and disconnect the blue wire from the transformer (if applicable).

#### Step 8

Remove the main condenser fan motor wire and the orange with white stripe wire from the compressor relay #14 terminal and remove the splice caps from the white wires in the control box (save the white jumper wire). Remove the fan motor ground wire.

#### Step 9

Remove the splice cap from the Danfoss system white with black stripe wire and white wire. Disconnect and remove the control channel wires, the black and gray wire from mix level sensor, the white with red stripe wire from the compressor relay coil, and the orange wire from the beater motor relay coil.

#### Step 10

For 115 volt units, disconnect the capacitor relay box assembly wires from the compressor relay, (or on 460 volt units the transformer wires from the beater motor relay), in the control box. Disconnect the compressor wires at the compressor.

#### Step 11

Disconnect the purple mix low probe wire and remove the control box from the unit.

#### Step 12

Remove the belts from the pulleys.

#### Step 13

Remove the two allen screws that secure the gearbox to the rear shell support. Remove the two screws that secure the drip tray guide, and the two screws that secure the auxiliary compressor bracket to the rear shell support.

#### Step 14

Remove the two carriage bolts and nuts that secure the front of the shell to the front panel.

#### Step 15

Disconnect all 5 sets of refrigeration junction fittings (2 on auxiliary, and 3 on main system). Use two wrenches and do not allow copper tubing to twist.

Remove discharge line coupling from the bracket on right side.

#### Step 16

Fasten the Danfoss dryer/capillary tube assembly to the shell assembly to protect the capillary tube from damage.

#### Step 17

Remove the shell and hood assembly in one piece.

#### Step 18

Remove the rear corner trim from the frame.

**Step 19**

Remove the front panel from the frame.

**Step 20**

Remove the condenser mounting screws (from the top of the bracket), remove the fan blade through the right side, and then remove the condenser, shroud, and receiver assembly.

**Step 21**

Remove the main compressor.

**Step 22**

Remove the fasteners that connect the top of the frame to the bottom of the frame. Remove the top half of the frame that includes the Danfoss compressor and condenser.

## Assembly

**Step 1**

Mount the compressor to the base pan.

**Step 2**

Mount and fasten the upper frame with the auxiliary system to the lower frame. Fasten the auxiliary compressor support to the rear shell support.

**Step 3**

Install the front panel assembly and connect the drip tray guide to the rear shell support.

**Step 4**

Install the rear corner trim.

**Step 5**

Install the shell and hood assembly. Connect the dryer and cap tube assembly to the Danfoss condenser assembly. (Be very careful with the cap tube.)

**Step 6**

Install the two carriage bolts through the front panel assembly, and place the nuts on the bolts to secure the shell.

**Step 7**

Connect the gearbox to the rear shell support with two allen head screws.

**Step 8**

Tighten the nuts on the carriage bolts, then tighten the screws that secure the gearbox.

**Step 9**

Using silicone, seal around the nose cone that protrudes through the front panel assembly.

**Step 10**

Slide the condenser, shroud and receiver assembly into place, then install the fan blade before bolting the condenser in. (**Note:** The fan blade should be positioned 1/3 within the shroud and 2/3 out.) Be sure the fan blade turns freely.

Attach the cap tube to the clips on the side of the condenser.

**Step 11**

Connect the compressor discharge coupling to the bracket on the right side of the shell. Connect all of the refrigerant couplings. Use two wrenches, and do not allow the copper tubing to twist. Perform leak check on both refrigeration systems.

**Step 12**

Install the belts on the pulleys.

**Step 13**

Install the control box assembly with two screws.

**Step 14**

Connect the beater motor wires to the right hand side of the beater motor start relay. Connect the capacitor relay box wires to the compressor relay (if applicable) or the black wires from the transformer to L1 and L2 on the beater motor relay. Reconnect the compressor wires at the compressor.

**Step 15**

Connect one high pressure cut out wire to the #95 terminal on the beater motor overload, and connect the blue wire from the control channel to the #96 terminal on the beater motor overload. Connect the other high pressure cutout wire to the #13 terminal on the compressor relay along with the blue wire from the transformer (if applicable).

**Step 16**

Connect one fan wire and orange with white stripe wire to the compressor relay #14 terminal, and splice the other fan wire and all white wires, in the control box, into two bundles using a white jumper wire. Connect the fan motor ground wire to the back of the box.

**Step 17**

Splice the Danfoss system white with black stripe wire. Connect the control channel wires: the black and gray wire to the mix level sensor, the white with red stripe wire to the compressor relay coil, and the orange wire to the beater motor relay coil.

**Step 18**

Connect the purple mix low probe wire.

**Note:** Double check all of the wire connections with the wiring diagram.

**Step 19**

Connect the power cord, supplied by the end user, and replace the control box cover.

**Step 20**

Replace the upper side panels and fasten the hood with rivets supplied (p/n: 022517).

**Step 21**

Replace all the panels.

**Step 22**

Connect the mix low light wires, and replace the thermistor probe, and mix hopper temperature probe into their respective bulb well locations.

**Note:** Be sure the thermistor probe bulb well has plenty of antifreeze before replacing the thermistor probe.

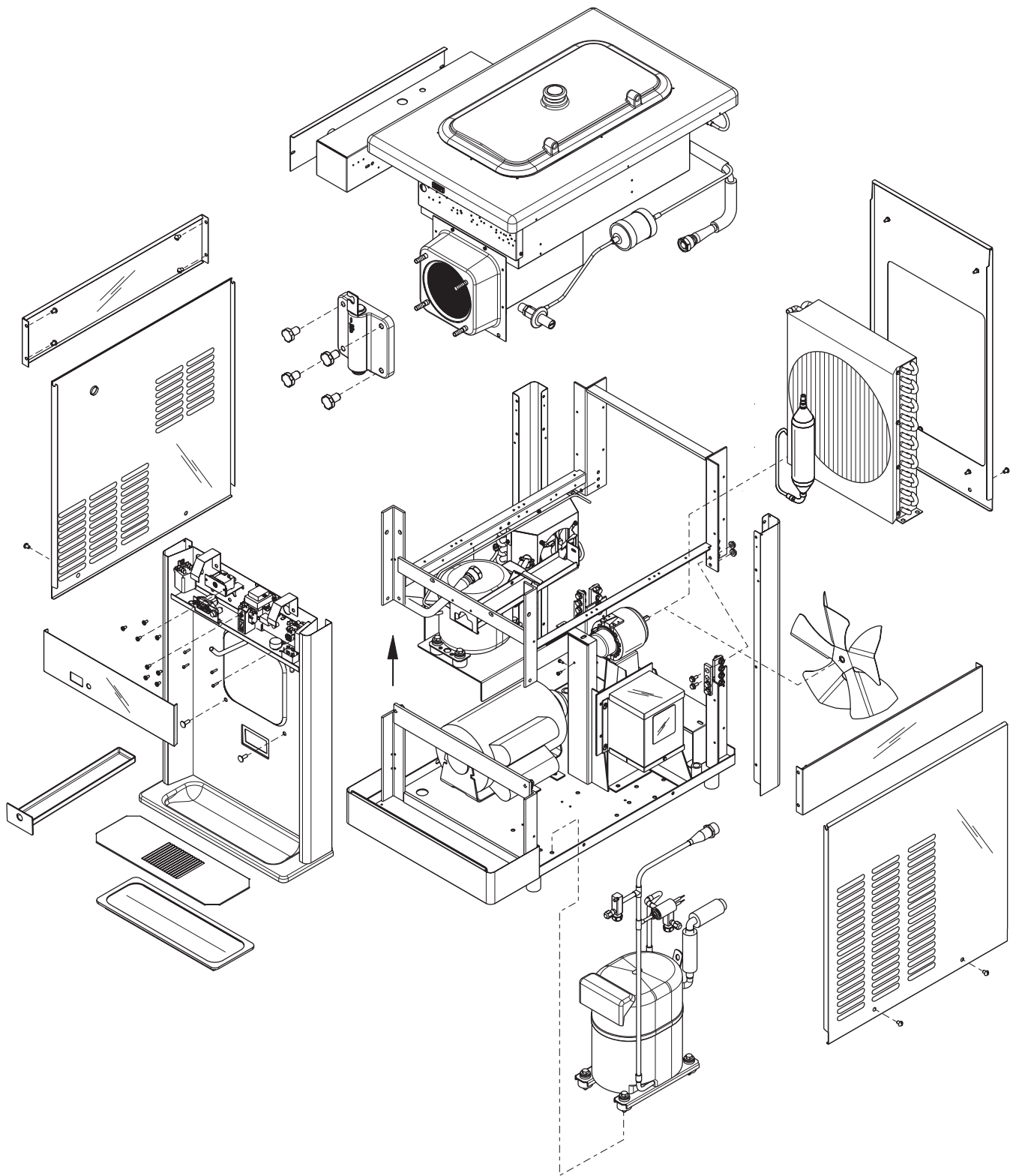
**Step 23**

Fasten all the components in the control channel area and install the decorative plate.

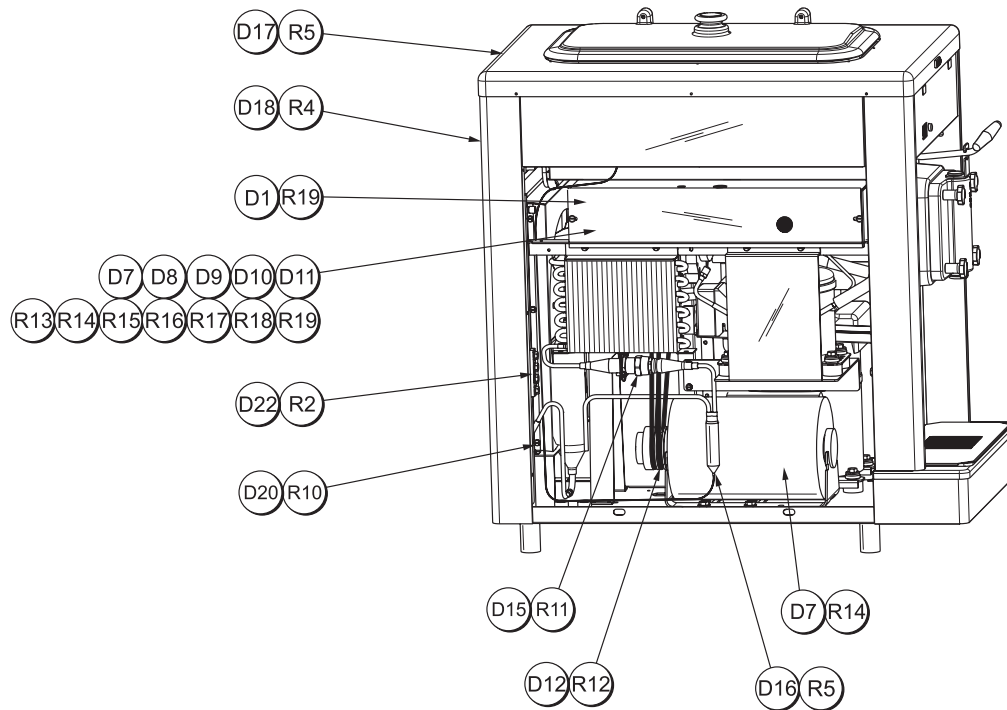
**Step 24**

Install the beater shaft, beater assembly and blade, door assembly, and the drip pan in the front of the unit.

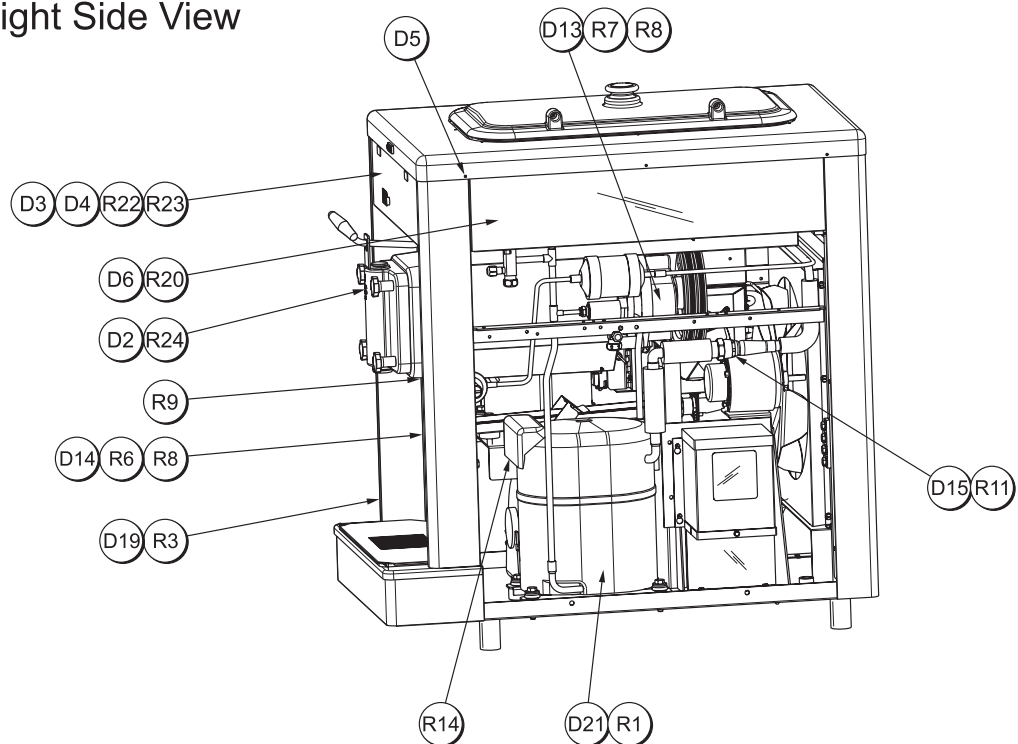
## Semi-Assembled Model 702 Exploded View



## Left Side View



## Right Side View



D=Disassembly  
R=Reassembly



## Section 4

## To the Operator

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

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

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

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

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

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



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

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

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

### Compressor Warranty Disclaimer

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

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

The Taylor Company will continue to monitor the industry and test new alternates as they are being developed. Should a new alternate prove, through our testing, that it would be accepted as a drop-in replacement, then the above disclaimer would become null and void. To find out the current status of an alternate refrigerant as it relates to your compressor warranty, call the local Taylor Distributor or the Taylor Factory. Be prepared to provide the Model/Serial Number of the unit in question.

**The freezer you have purchased uses refrigerants 404a and 134a. These "ozone friendly" refrigerants comply with the U.S. Clean Air Act of 1990.**

# Section 5

# Safety

We, at Taylor Company, are concerned about the safety of the operator at all times when they are coming in contact with the unit and its parts. Taylor makes every effort to design and manufacture built-in safety features to protect both operators and service technicians.

Installing and servicing refrigeration equipment can be hazardous due to system pressure and electrical components. Only trained and qualified service personnel should install, repair, or service refrigeration equipment. When working on refrigeration equipment, observe precautions noted in the literature, tags and labels attached to the unit, and other safety precautions that may apply. Follow all safety code requirements. Wear safety glasses and work gloves.



**IMPORTANT - 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 unit and/or its components. Such damage may result in component replacement and service repair expenses.**



**DO NOT** operate the unit without reading this entire Operator Manual first. Failure to follow all of these operating instructions may result in damage to the unit, poor performance, health hazards, personal injury, or death.



This unit is to be used only by trained personnel. It is not intended for use by children or people with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge. Where limited equipment operation is allowed for public use, such as a self-serve application, supervision or instruction concerning the use of the appliance by a person responsible for their safety is required. Children should be supervised to ensure that they do not play with the appliance.



- All repairs should be performed by an authorized Taylor service technician.
- The main power supplies to the unit must be disconnected prior to performing installation, repairs, or maintenance.
- **DO NOT** operate the unit unless it is properly grounded.
- **DO NOT** operate the unit with larger fuses than specified on the unit's data label.
- Units that are permanently connected to fixed wiring and for which leakage currents may exceed 10 mA, particularly when disconnected or not used for long periods, or during initial installation, shall have protective devices such as a GFI, to protect against the leakage of current, installed by the authorized personnel to the local codes.
- Stationary units which are not equipped with a power cord and a plug or another device to disconnect the appliance from the power source must have an all-pole disconnecting device with a contact gap of at least 3 mm installed in the external installation.
- 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 an authorized Taylor service technician in order to avoid a hazard.

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



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



- **DO NOT** allow untrained personnel to operate this unit.
- **DO NOT** operate the unit unless all service panels and access doors are restrained with screws.
- **DO NOT** remove any internal operating parts (including, but not limited to, freezer 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.



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.



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



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



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



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

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

**DO NOT** obstruct air intake and discharge openings:

**Counter Model:** 3" (76 mm) minimum air space on both sides, 6" (152 mm) on the back, and 4- 1/4" (108 mm) on the bottom.

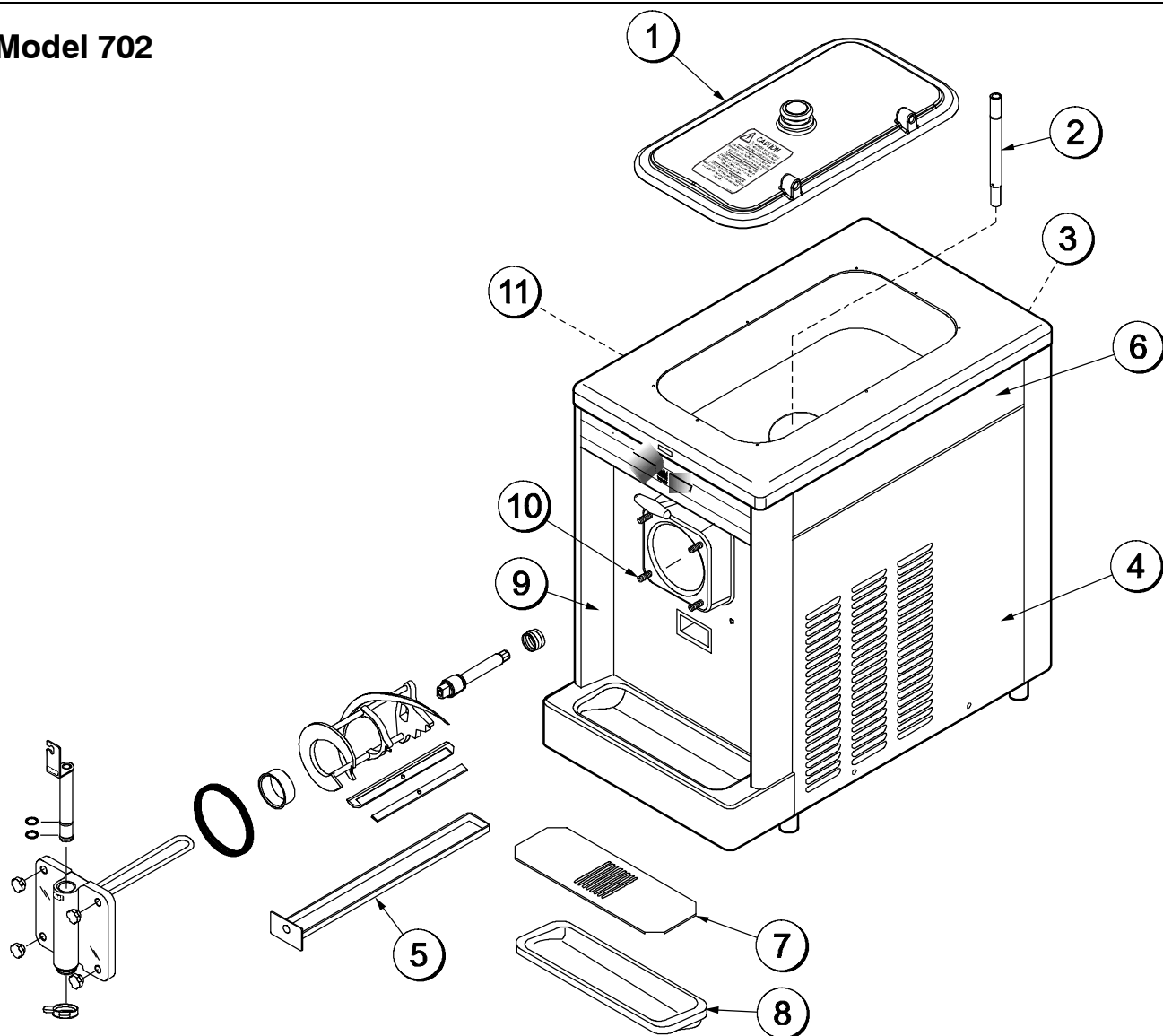
**Console Model:** 3" (76 mm) minimum air space on sides and rear, and 7- 1/2" (191 mm) minimum on bottom. Failure to follow this instruction may cause poor freezer performance and damage to the machine.

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

## Section 6

## Operator Parts Identification

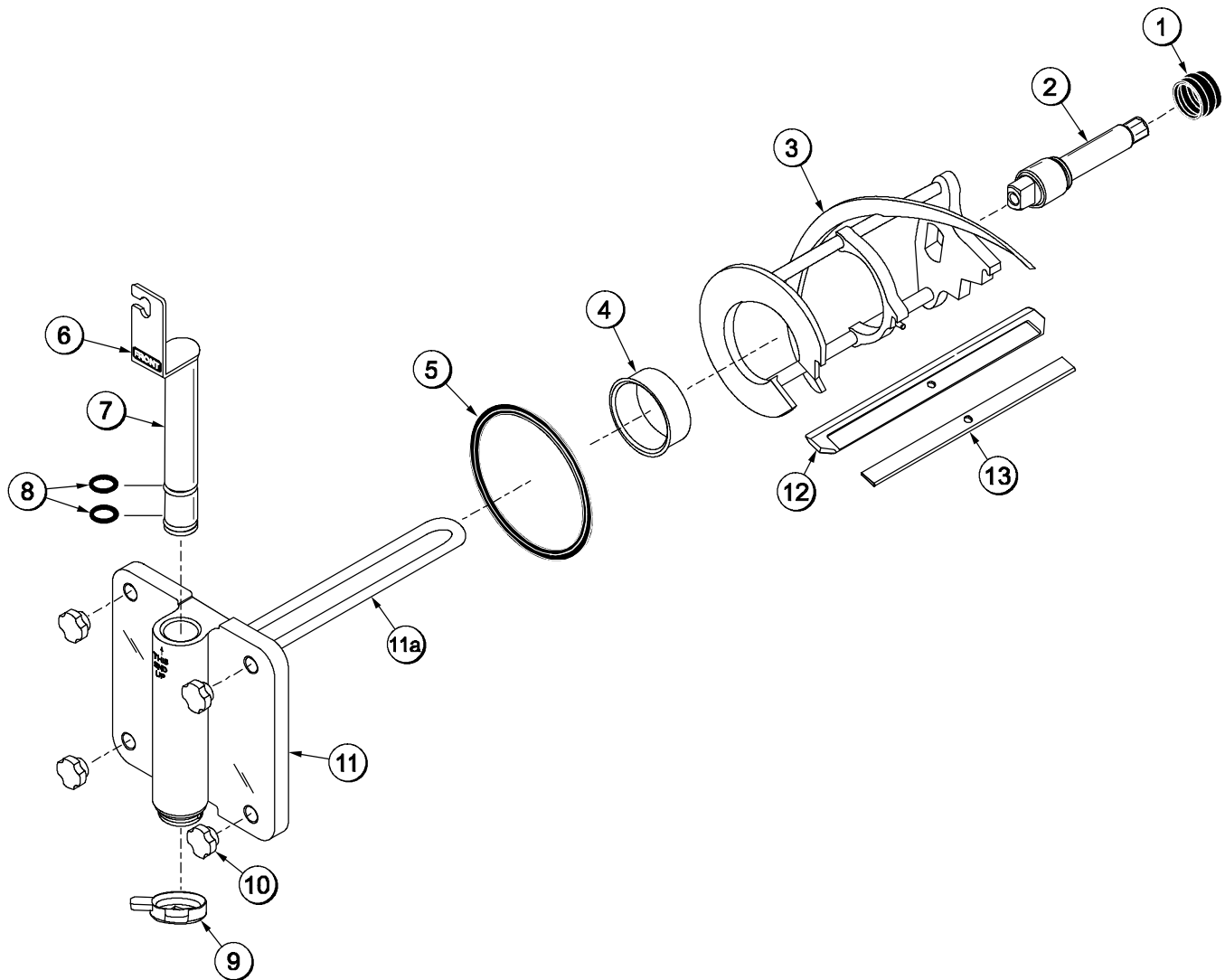
### Model 702



ITEM	DESCRIPTION	PART NO.
1	KIT A. - COVER- HOPPER*SGL	X65369
2	TUBE- FEED- SS- 5/32 HOLE	028967- 2
3	PANEL A.- REAR	X53034- SPN
4	PANEL- SIDE*RIGHT	050928- SPN
5	PAN- DRIP 13- 1/4 LONG	039027
6	PANEL- SIDE HT* UPPER	042317- SPN

ITEM	DESCRIPTION	PART NO.
7	SHIELD- SPLASH 18"	022763- SPN
8	TRAY- DRIP 14- 7/8L X 5- 1/8	013690
9	PANEL A- FRONT	X50930- SPN
10	STUD- NOSE CONE	022822
11	PANEL A.- LEFT SIDE	X50940- SPN

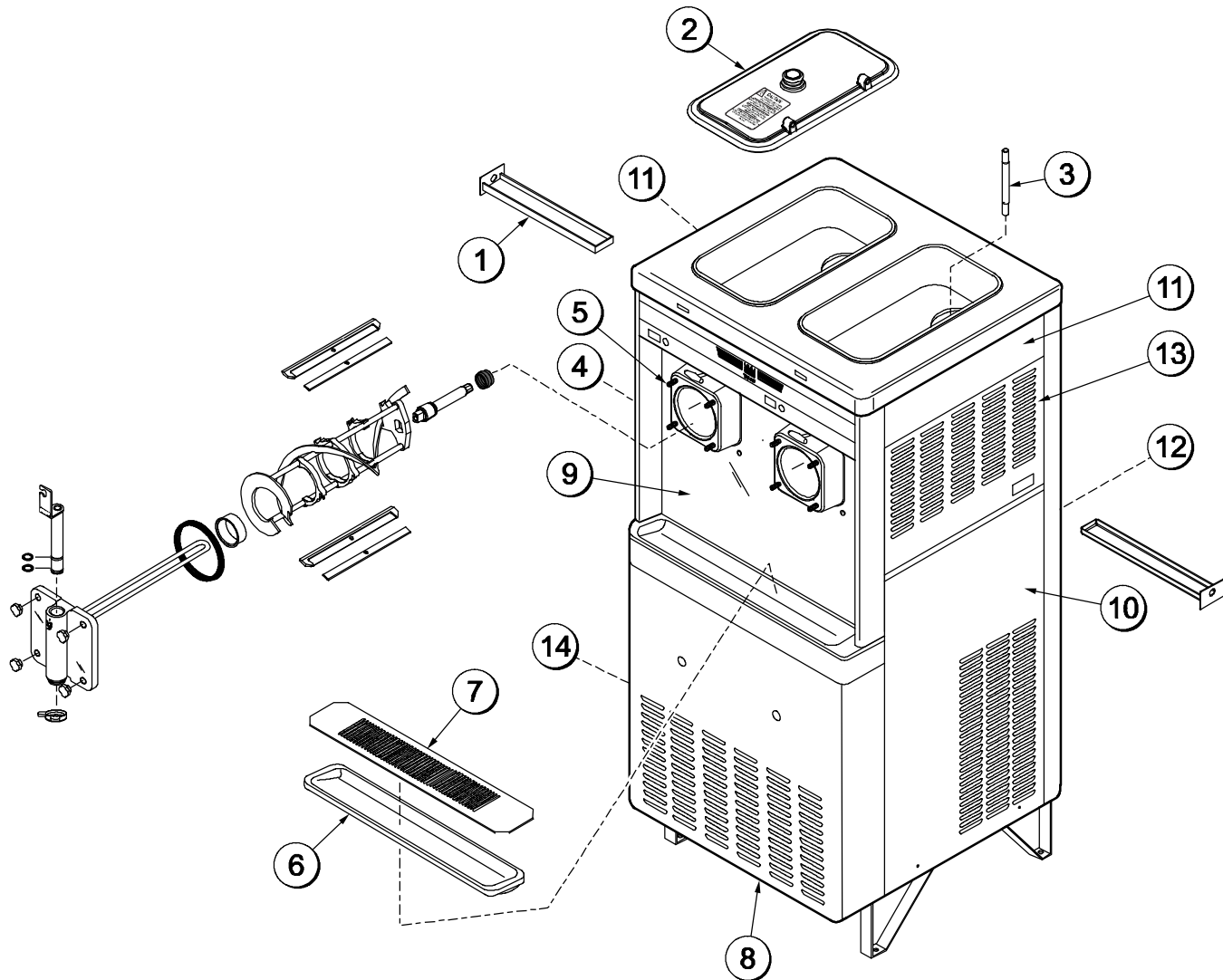
## Model 702 Door Assembly



ITEM	DESCRIPTION	PART NO.
1	SEAL- DRIVE SHAFT	032560
2	SHAFT- BEATER	033498
3	BEATER A.- 4QT- 1 PIN	X49490
4	BEARING- FRONT	013116
5	GASKET- DOOR 5.177ID	016672
6	DECAL- LIFT PLATE FRONT	015200
7	VALVE A.- DRAW	X13624- SP

ITEM	DESCRIPTION	PART NO.
8	O- RING- PKG *100 TO BAG*	020571- SER
9	CAP- DESIGN 1.188"ID- 6 PT	013139- 6
10	NUT- STUD	021508
11	DOOR A.- 1 SPOUT- 4 P	X30269- SER
11a	BAFFLE A.- 12 INCH	X30273
12	BLADE- SCRAPER- PLASTIC	046237
13	CLIP- SCRAPER BLADE 8.75	046238

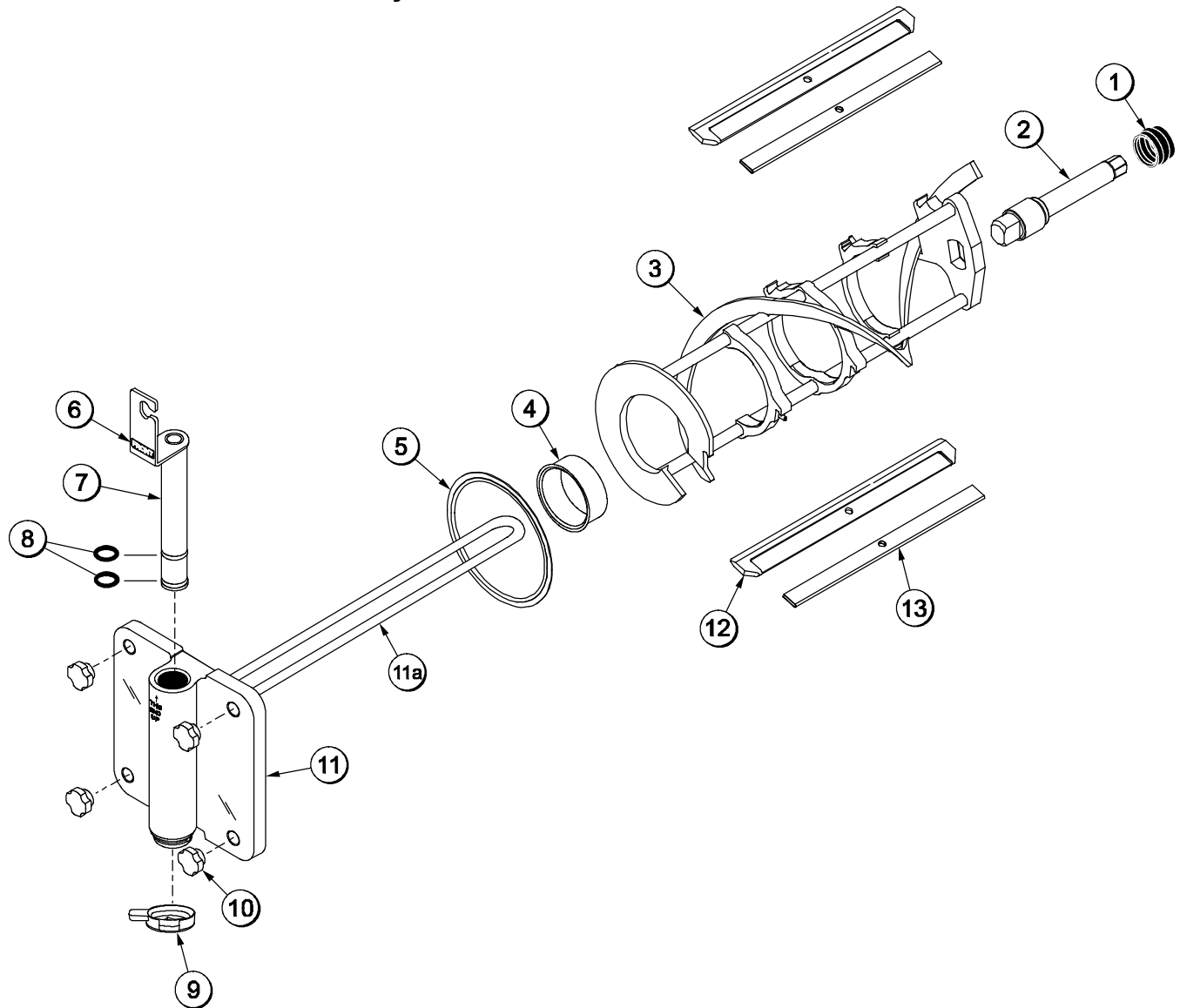
## Model 772



ITEM	DESCRIPTION	PART NO.
1	PAN- DRIP 11- 5/8 LONG	27503
2	KIT A.- COVER- HOPPER*SGL	X65369
3	TUBE- FEED- 3/16 HOLE SS	028967- 3
4	PANEL- UPPER SIDE L.	29981
5	STUD- NOSE CONE	22822
6	TRAY- DRIP	29998
7	SHIELD- SPLASH 25 L	29997

ITEM	DESCRIPTION	PART NO.
8	PANEL- SERVICE	29976
9	PANEL A.- FRONT	X50835
10	PANEL A.- SIDE *LWR*R	X44855- SPN
11	PANEL- SIDE TOP	29978
12	PANEL- REAR	29996
13	PANEL- UPPER SIDE R.	29980
14	PANEL A.- SIDE *LWR*L	X44853- SER

## Model 772 Door Assembly



ITEM	DESCRIPTION	PART NO.
1	SEAL- DRIVE SHAFT	032560
2	SHAFT- BEATER	033498
3	BEATER A.- 7QT- 1 PIN	X46233
4	BEARING- FRONT	013116
5	GASKET- DOOR 5.177ID	016672
6	DECAL- LIFT PLATE FRONT	015200
7	VALVE A.- DRAW	X13624- SP

ITEM	DESCRIPTION	PART NO.
8	O- RING- PKG *100 TO BAG	020571- SER
9	CAP- DESIGN 1.188"ID- 6 PT	013139- 6
10	NUT- STUD	021508
11	DOOR A.- 1 SPT- 7QT	X30272- SER
11a	BAFFLE A.- 19 INCH	X30274
12	BLADE- SCRAPER- PLASTIC	046237
13	CLIP- SCRAPER BLADE 8.75	046238

## Section 7

## Important: To the Operator

### Indicator Light “Mix Low”

The Models 702 and 772 are equipped with a “MIX LOW” light located on the front of the machine. When the light begins to flash, it indicates that the mix hopper has a low supply of mix. At this time, the hopper should be filled with mix. If you neglect to add mix when the light begins to flash, eventual damage to the beater, blades, drive shaft, and freezer door may occur.

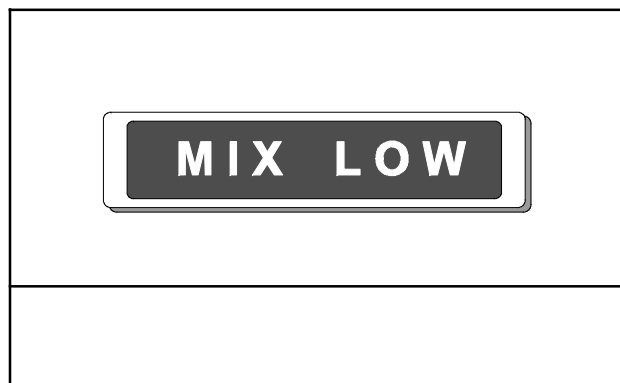


Figure 2

### Symbol Definitions

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



= The “WASH” keypad.



= The “OFF” keypad.



= The “ON/AUTO” keypad.

### Control Switch

The center position is “OFF”. The **right** position is “AUTO”, which activates the beater motor and the refrigeration system. The **left** position is “WASH” which activates the beater motor only.

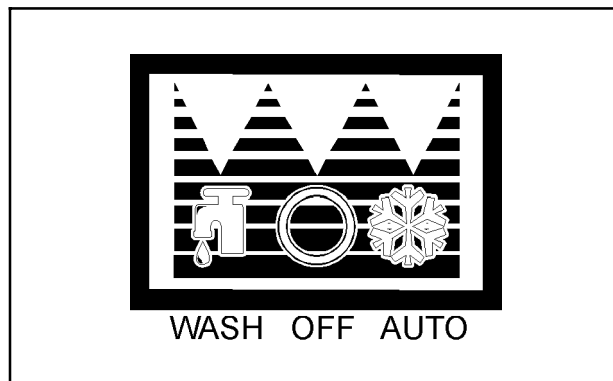


Figure 3

### Reset Button

On a Model 702, the reset button is located under the left upper side panel. On the Model 772, the reset button is located on the lower front panel.

The reset button protects the beater motor from an overload condition. If an overload occurs, the reset mechanism will trip. To properly reset the freezer, place the control switch in the “OFF” position. Press the reset button firmly. Place the control switch in the “WASH” position and observe the freezer’s performance. Once satisfied, place the control switch back in the “AUTO” position.

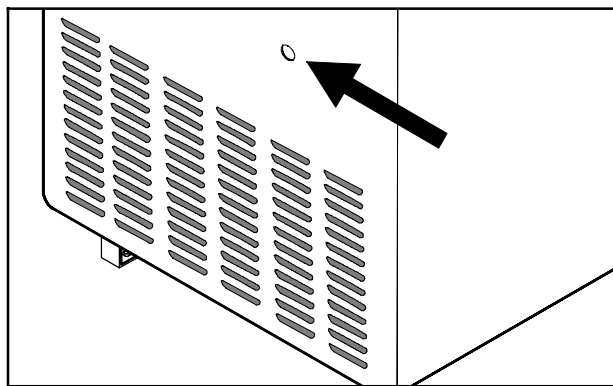


Figure 4





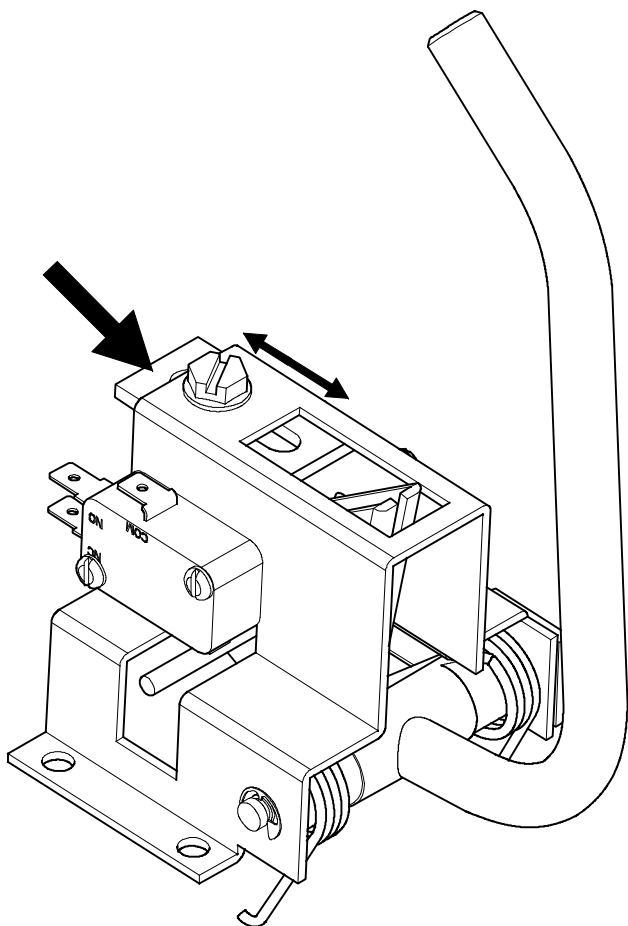
**IMPORTANT:** Do not use metal objects to press the reset button.

## Thermistor Control

The viscosity (thickness) of the product is controlled by a temperature sensing device called the thermistor. To achieve a thicker product, turn the control **clockwise**, and turn the control **counterclockwise** to achieve a thinner product. Allow the refrigeration system to cycle on and off 2 or 3 times before an accurate consistency can be evaluated.

## Draw Rate

The draw rate can be adjusted by raising and lowering the draw switch bracket. A technician should perform this task, and set the rate at 5 to 7.5 ounces of product per 10 seconds.



## Optional Features

### Separate Hopper Refrigeration System (SHR)

#### “Standby”

The Separate Hopper Refrigeration System (SHR) and the Cylinder Temperature Retention System (CTR) are **standard features**. This feature is referred to as “STANDBY”. The SHR incorporates the use of a separate small refrigeration system to maintain the mix temperature in the hopper to below 40°F. (4.4°C.) This assures bacteria control. The CTR works with the SHR to maintain a good quality product. During long “No Sale” periods, it becomes necessary to warm the product in the freezing cylinder to approximately 35°F. to 40°F. (1.7°C. to 4.4°C.) to prevent overheating and product breakdown.

**Note: Some local health codes do not permit the use of “STANDBY”.**



**ALWAYS FOLLOW LOCAL HEALTH CODES.**



**IMPORTANT: Make sure your hands are sanitized before performing these instructions:**

To activate SHR and CTR, place the air tube (end without the hole) into the mix inlet hole.

Place the control switch in the “AUTO” position, and turn the STANDBY switch to the “ON” position. The unit will operate as a refrigerator for product in the hopper and freezing cylinder.

To remove the unit from the “STANDBY” mode, place the control switch in the “AUTO” position, and turn the standby switch to the “OFF” position. The unit will resume the normal operating mode.

When the unit cycles off, remove the hopper cover, and place the feed tube in its original position.

Replace the hopper cover.



**IMPORTANT: The “STANDBY” mode should *not* be used in lieu of daily disassembly, cleaning, and sanitizing. Follow your local health codes regarding this issue.**

## Section 8

## Operating Procedures

The Model 702 has been selected to show you the pictured step-by-step operating procedures for both models contained in this manual. These two models, for practical purposes of operation, are the same.

They both store 20 quarts (18.9 liters) of mix in the hopper. The mix then flows **by gravity** through a mix feed tube down into the freezing cylinder.

Locate your model number below to determine the characteristics of your freezer:

702: (1) 4 quart (3.8 liter) freezing cylinder.

772: (2) 7 quart (6.6 liter) freezing cylinders.

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

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

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

### Assembly



**MAKE SURE THE CONTROL SWITCH IS IN THE "OFF" POSITION TO ELIMINATE THE CHANCE OF MOVING PARTS.**

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

#### Step 1

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 fits into place. **DO NOT** lubricate the hex end of the drive shaft. Fill the inside portion of the seal with 1/4" more lubricant and evenly lubricate the flat side of the seal that comes in contact with the bearing.

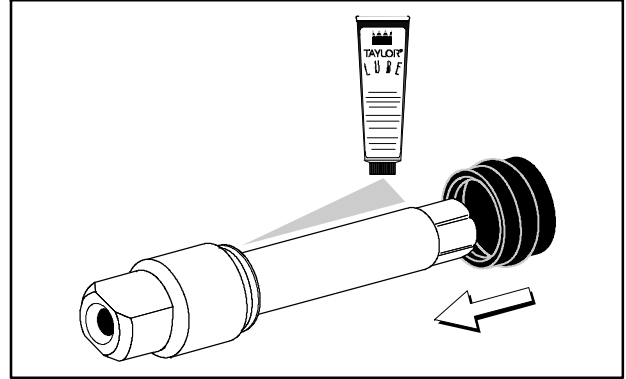


Figure 5

Insert the drive shaft through the rear shell bearing in the freezing cylinder and engage the hex end firmly into the gear box coupling.

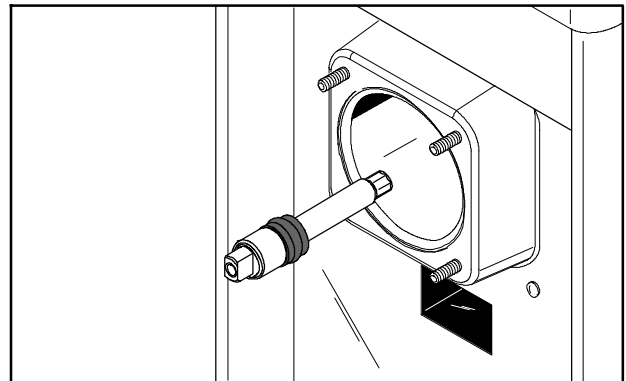


Figure 6



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

### Step 2

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

Check the scraper blade clips to make sure they are not bent and the slot is even for the entire length of the clip. Replace any damaged clips.

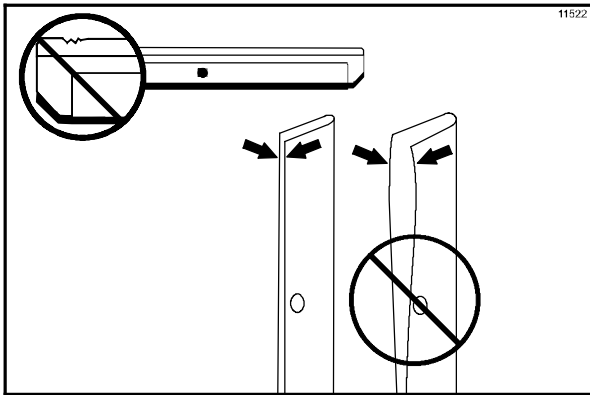


Figure 7

If the blades and clips are in good condition, place the rear scraper blade over the rear holding pin on the beater, knife edge to the outside.

**Note:** To prevent costly damage, the hole in the scraper blade must fit securely over the pin.

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

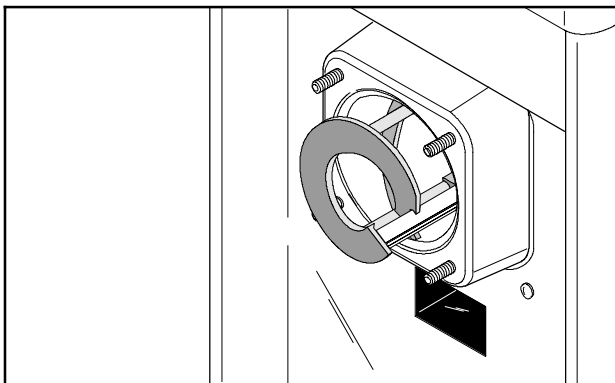


Figure 8

Make sure the beater assembly is in position over the drive shaft. Turn the beater slightly to be certain that the beater is properly seated. When in position, the

beater will not protrude beyond the front of the freezing cylinder.

### Step 3

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

### Step 4

Slide the two o-rings into the grooves on the draw valve and lubricate them with Taylor Lube.

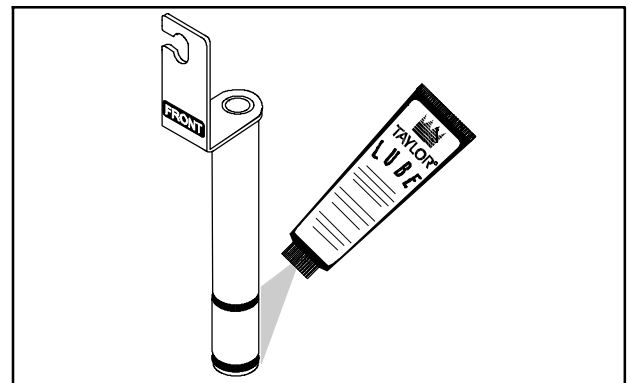


Figure 9

Lubricate the inside of the freezer door spout, top and bottom. Insert the draw valve into the freezer door from the **top**. It will be necessary to rotate the draw valve to the **left** when assembling the door to the freezer.

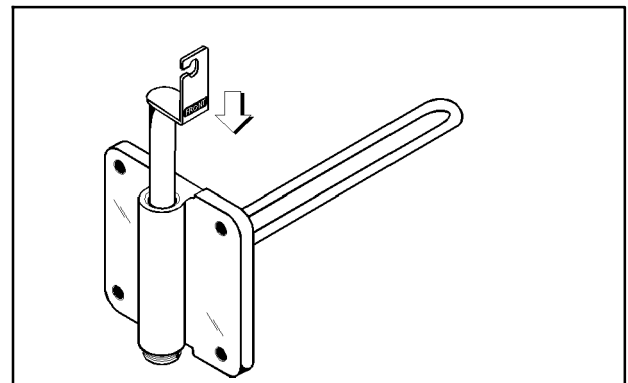


Figure 10

### Step 5

Place the freezer door gasket into the groove on the back of the freezer door. Slide the front bearing over the baffle rod so the flanged edge is against the door. **Do not lubricate the gasket or bearing.**

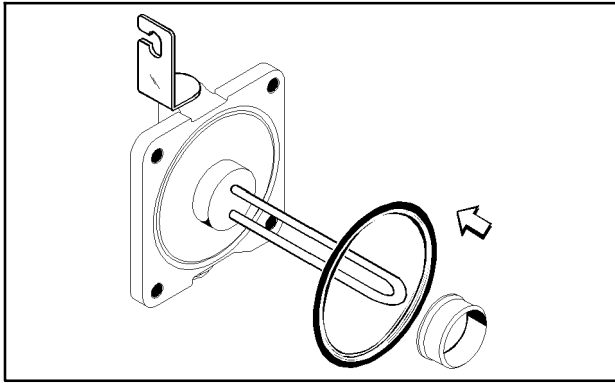


Figure 11

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

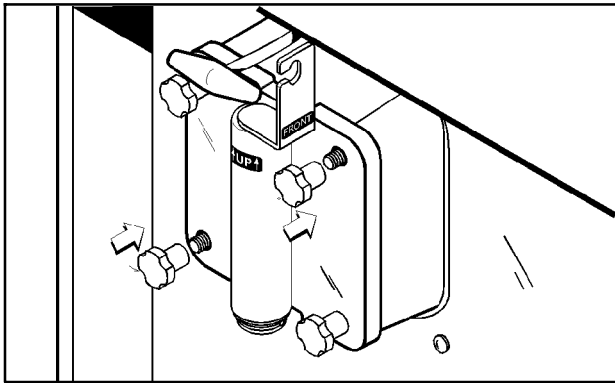


Figure 12

Rotate the draw valve bracket to the **left**. Center it into position by raising the draw arm and placing it into the slotted groove of the draw valve bracket.

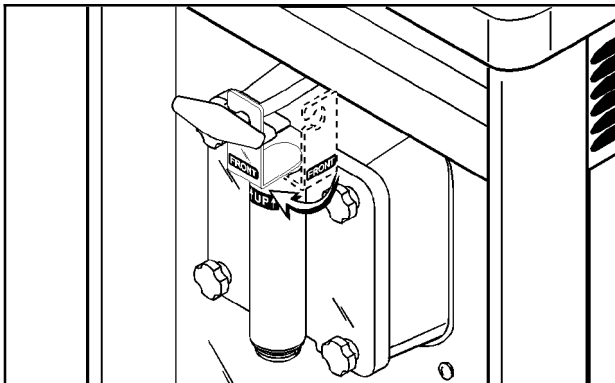


Figure 13

#### Step 6

Snap the design cap over the end of the door spout.

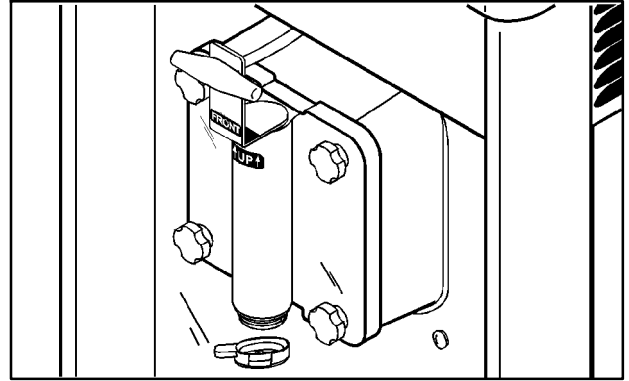


Figure 14

#### Step 7

Lay the mix feed tube in the bottom of the mix hopper.

**Repeat Steps 1 through 6** for the other side of the freezer on the Model 772.

#### Step 8

Install the front drip tray and splash shield under the door spout(s).

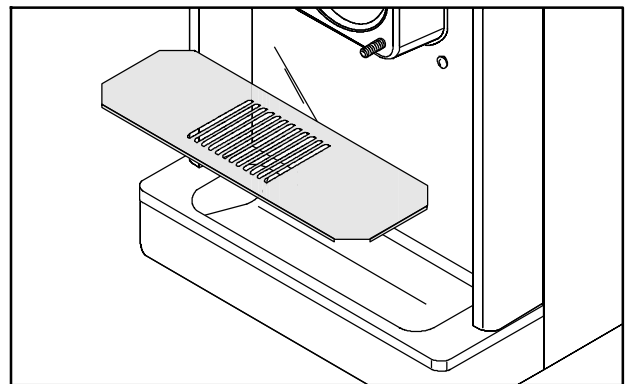


Figure 15

#### Step 9

Slide the rear drip pan into the hole(s) in the side panel.

## Sanitizing

### Step 1

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

### Step 2

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

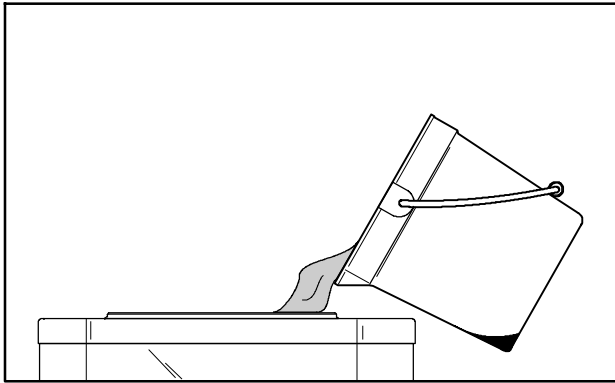


Figure 16

### Step 3

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

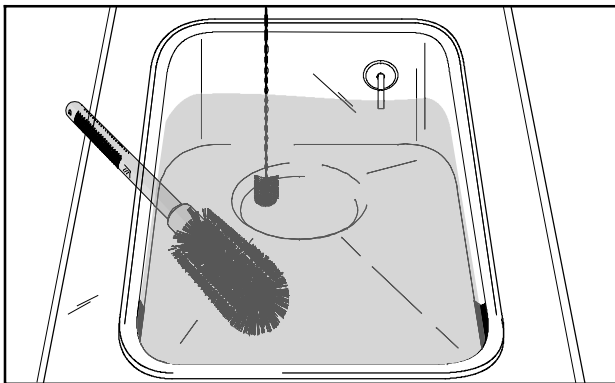


Figure 17

### Step 4

Place the control switch in the “WASH” position. This will cause the sanitizing solution in the freezing cylinder to agitate. Allow the solution to agitate for five minutes.



Figure 18

### Step 5

Place an empty pail beneath the door spout and raise the draw arm. Draw off all the sanitizing solution.

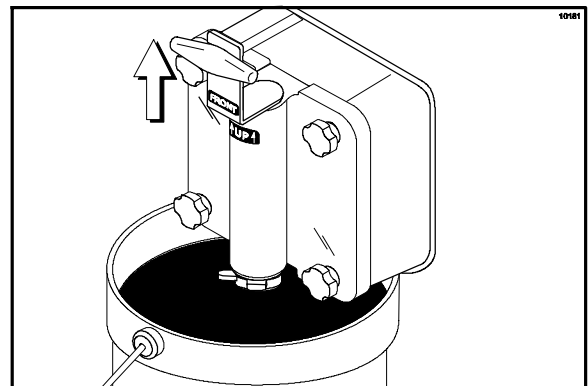


Figure 19

### Step 6

When the sanitizer stops flowing from the door spout, lower the draw arm and place the control switch in the “OFF” position.

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



**Note:** You have just sanitized the freezer; therefore, **be sure your hands are sanitized** before continuing these instructions.

### Step 7

Stand the mix feed tube in the corner of the mix hopper.

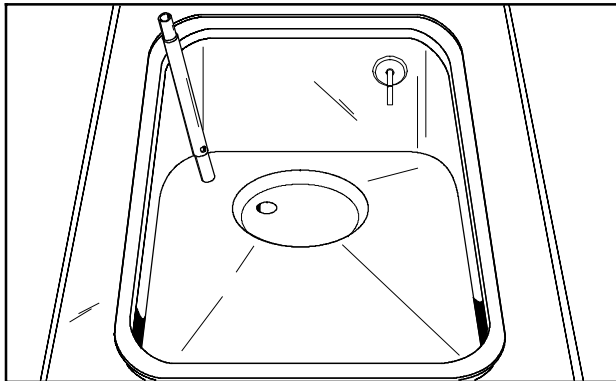


Figure 20

**Repeat Steps 1 through 7** for the other side of the freezer on the Model 772.

## Priming

Prime the machine as close to the time of first product draw as possible.

### Step 1

Place a pail beneath the door spout and raise the draw arm. Pour two gallons (7.6 liters) of **fresh** mix into the hopper and allow it to flow down into the freezing cylinder. This will force out any remaining sanitizing solution. When full strength mix is flowing from the door spout, lower the draw arm.

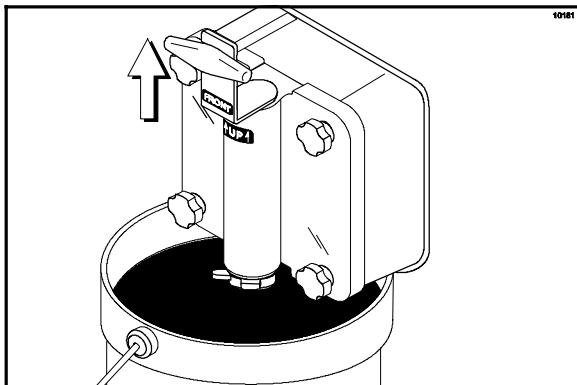


Figure 21

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

### Step 2

When the mix has stopped bubbling down into the freezing cylinder, install the mix feed tube into the mix inlet hole.

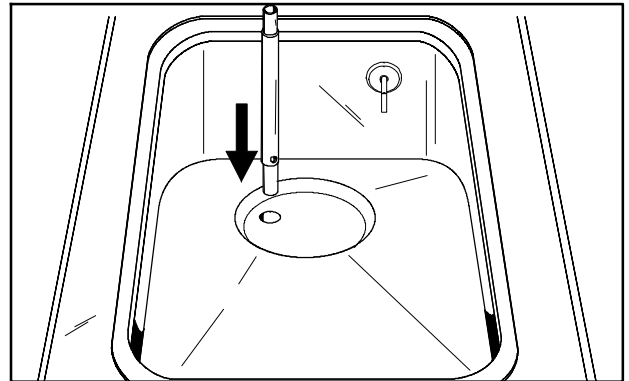


Figure 22

### Step 3

Place the control switch in the “AUTO” position. When the unit cycles off, the product will be at serving temperature.



Figure 23

### Step 4

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 extinguish.

### Step 5

Place the mix hopper cover in position.

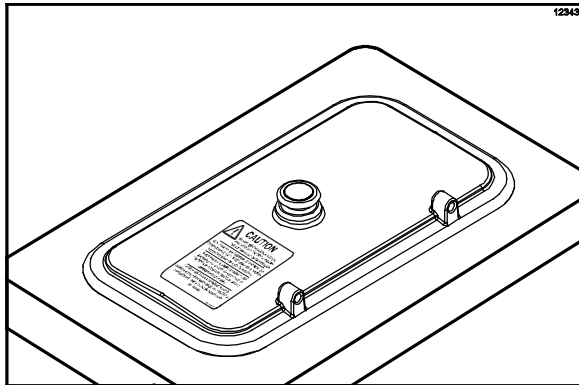


Figure 24

**Repeat Steps 1 through 5** for the other side of the freezer on the Model 772.

## 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

### Step 1

Place the control switch in the “OFF” position.

### Step 2

Remove the hopper cover and the mix feed tube. Take these parts to the sink for cleaning.

### Step 3

**If local health codes permit the use of rerun**, place a sanitized, NSF approved stainless steel rerun container beneath the door spout. Place the control switch in the “WASH” position and raise the draw arm. When all the product stops flowing from the door spout, lower the draw arm and place the control switch in the “OFF” position. Place a sanitized lid on the rerun container and place it in the walk-in cooler.

**(Note:** For additional information regarding the proper use of rerun, see item 5 on page 29.)

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

**Repeat these steps** for the second freezing cylinder on the Model 772.



**ALWAYS FOLLOW LOCAL HEALTH CODES.**

## Rinsing

### Step 1

Pour two gallons (7.6 liters) of **cool**, clean water into the mix hopper. With the brushes provided, scrub the mix hopper, the mix inlet hole, and the mix level sensing probe.

### Step 2

With a pail beneath the door spout, place the control switch in the “WASH” position and raise the draw arm. Drain all the rinse water from the freezing cylinder. When the rinse water stops flowing from the door spout, lower the draw arm and place the control switch in the “OFF” position.

Repeat this procedure until the rinse water being drawn from the freezing cylinder is **clear**.

**Repeat these steps** for the second freezing cylinder on the Model 772.

## Cleaning

### Step 1

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

### Step 2

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

### Step 3

While the solution is flowing into the freezing cylinder, brush clean the mix hopper, the mix inlet hole, and the mix level sensing probe.

### Step 4

Place the control switch in the “WASH” position. This will cause the cleaning solution in the freezing cylinder to agitate.

### Step 5

Place an empty pail beneath the door spout and raise the draw arm. Draw off all the cleaning solution. When the solution stops flowing from the door spout, lower the draw arm and place the control switch in the "OFF" position.

**Repeat Steps 1 through 5** for the second freezing cylinder on the Model 772.

## Disassembly

**Note:** Failure to remove parts, brush clean and then air dry these parts, will result in damage to the related parts.

### Step 1



**BE SURE THE CONTROL SWITCH IS IN THE "OFF" POSITION TO ELIMINATE THE CHANCE OF MOVING PARTS.**

### Step 2

Remove the handscrews, the freezer door, the gasket, the front bearing, the beater, the scraper blade(s), and the drive shaft from the freezing cylinder. Take these parts to the sink for cleaning.

### Step 3

Remove the rear drip pan from the front panel.

**Note:** If the drip pan is filled with an excessive amount of mix, it is an indication that the drive shaft seal should be replaced or was improperly lubricated.

**Repeat these steps** for the second freezing cylinder on the Model 772.

### Step 4

Remove the front drip tray and the splash shield.

## Brush Cleaning

### Step 1

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

If an approved cleaner other than Kay-5® or Stera-Sheen® is used, dilute it according to the label instructions. **IMPORTANT:** Follow the label directions. Too STRONG of a solution can cause parts damage. Too MILD of a solution will not provide adequate

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

### Step 2

Remove the seal(s) from the drive shaft(s).

### Step 3

From the freezer door(s) remove:

- the gasket(s)
- the front bearing(s)
- the design cap(s)
- the draw valve(s)

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.

### Step 4

Thoroughly brush clean all disassembled parts in the cleaning solution, making sure all lubricant and mix film is removed. Take particular care to brush clean the draw valve core in the freezer door(s). Place all the cleaned parts on a clean dry surface to air dry overnight.

### Step 5

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

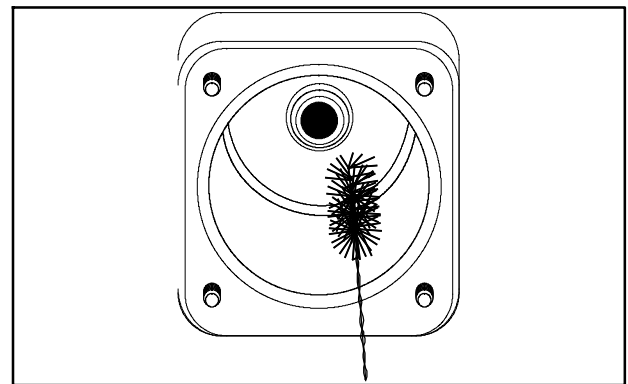


Figure 25

### Step 6

Wipe clean all exterior surfaces of the freezer.



# Section 9                      Important: Operator Checklist

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## 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 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 check points should be stressed during the cleaning and sanitizing operations.**



**CLEANING AND SANITIZING MUST BE PERFORMED DAILY.**

the rerun with fresh mix in a ratio of 50/50 during the day's operation.

- ☐ 6. On a designated day of the week, run the mix as low as feasible and discard after closing. This will break the rerun cycle and reduce the possibility of high bacteria and coliform counts.
- ☐ 7. 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.
- ☐ 8. The temperature of the mix in the mix hopper and walk-in cooler should be below 40°F. (4.4°C.).

## Troubleshooting Bacterial Count

- ☐ 1. Thoroughly clean and sanitize the machine regularly, including complete disassembly and brush cleaning.
- ☐ 2. Use all brushes supplied for thorough cleaning. The brushes are specially designed to reach all mix passageways.
- ☐ 3. Use the white bristle brush to clean the mix inlet hole which extends from the mix hopper down to the rear of the freezing cylinder.
- ☐ 4. Use the black bristle brush to thoroughly clean the rear shell bearing located at the rear of the freezing cylinder. Be sure there is a generous amount of cleaning solution on the brush.
- ☐ 5. IF LOCAL HEALTH CODES PERMIT THE USE OF RERUN, make sure the mix rerun is stored in a sanitized, covered stainless steel container and is used the following day. DO NOT prime the machine with rerun. When using rerun, skim off the foam and discard, then mix

## Regular Maintenance Checks

- ☐ 1. Rotate scraper blades to allow both sides of the knife edge to wear evenly. This will contribute to self-sharpening and help maintain fast, efficient freezing.
- ☐ 2. Replace scraper blades that are nicked, damaged or worn.
- ☐ 3. Before installing the beater, be certain that scraper blades are properly attached over the pins.
- ☐ 4. Check the rear shell bearing for signs of wear (excessive mix leakage in rear drip pan) and be certain it is properly cleaned.
- ☐ 5. 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.

- ☐ 6. Dispose of o-rings and seals if they are worn, torn, or fit too loosely, and replace with new ones.
- ☐ 7. Follow all lubricating procedures as outlined in "Assembly".
- ☐ 8. 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.
- ☐ 9. On water cooled units, check the water lines for kinks or leaks. Kinks can occur when the machine is moved back and forth for cleaning or maintenance purposes. Deteriorated or cracked water lines should be replaced only by an authorized Taylor 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 service for you.

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

## Section 10

## Troubleshooting Guide

PROBLEM	PROBABLE CAUSE	REMEDY	PAGE REF.
1. No product being dispensed with the draw valve open and the control switch in AUTO.	a. The freezer door is installed upside down.	a. Install the door correctly.	23
	b. There is a freeze-up in the mix inlet hole.	b. Call service technician to adjust the hopper temperature.	- -
	c. Beater motor out on reset.	c. Reset the freezer.	20
	d. The beater is rotating counterclockwise.	d. Contact service technician to correct the rotation to clockwise.	- -
	e. The draw valve is connected to the draw arm incorrectly.	e. The draw valve bracket must be correctly attached to the draw arm.	24
	f. The circuit breaker is off or the fuse is blown.	f. Turn the breaker on or replace the fuse.	- -
	g. There is inadequate mix in the hopper.	g. Fill the hopper with mix.	26
2. The product is too cold.	a. The temperature control is set too cold.	a. Adjust the temperature control knob warmer.	21
	b. The draw handle is not fully closed.	b. The draw handle must be fully closed.	- -
3. The product appears too soft.	a. The temperature control is set too warm.	a. Adjust the temperature control knob colder.	21
	b. Insufficient air space around the unit. (A/C)	b. Allow for adequate air flow across the condenser.	1
	c. The scraper blade(s) are worn.	c. Replace scraper blades regularly.	35
	d. Product is broken down from overbeating.	d. Draw off some product to allow fresh product to enter the freezing cylinder.	- -
	e. The mix is out of date.	e. Use only fresh mix.	- -
	f. Dirty condenser.	f. Clean regularly.	30
	g. The beater is rotating counterclockwise.	g. Contact service technician to correct rotation.	- -
	h. Loss of water (W/C)	h. Locate cause of water loss and correct.	30

PROBLEM	PROBABLE CAUSE	REMEDY	PAGE REF.
4. The mix in the hopper is too cold.	a. The temperature is out of adjustment.	a. Call service technician to adjust the hopper temperature.	- -
5. The mix in the hopper is too warm.	a. The temperature is out of adjustment.	a. Call service technician to adjust the hopper temperature.	- -
	b. Hopper cover is not in position.	b. Place the cover in position.	27
	c. The control switch is OFF.	c. Place the control switch in AUTO.	26
	d. Warm mix was placed in the hopper.	d. Mix added to the hopper must be below 40°F (4.4°C).	- -
6. The drive shaft is stuck in the gear box coupling.	a. Rounded corners of drive shaft, coupling, or both.	a. Call service technician to correct the cause and replace the necessary components. <b>Do not</b> lubricate the end of the drive shaft.	- -
7. The freezing cylinder walls are scored.	a. The scraper blades and/or blade clips are damaged.	a. Replace the scraper blades and/or clips.	23
	b. The front bearing is missing or worn.	b. Install or replace the front bearing.	23
	c. Unit was placed in AUTO before all sanitizing solution was removed from freezing cylinder.	c. Place unit in AUTO only after priming is complete and all sanitizing solution is removed.	25
	d. Broken pins on beater assembly.	d. Repair or replace the beater assembly. Be sure the scraper blades are properly seated on pins.	23
	e. The beater assembly is bent.	e. Call service technician to repair or replace the beater and to correct the cause of insufficient mix in the freezing cylinder.	- - -
8. Excessive mix leakage into the rear drip pan.	a. Worn or missing drive shaft seal.	a. Replace regularly.	35
	b. Inadequate lubrication of drive shaft seal.	b. Lubricate properly.	22
	c. Worn rear shell bearing.	c. Call service technician to replace rear shell bearing.	- -

<b>PROBLEM</b>	<b>PROBABLE CAUSE</b>	<b>REMEDY</b>	<b>PAGE REF.</b>
8. Excessive mix leakage into the rear drip pan. (Cont'd.)	d. The drive shaft works forward.	d. Call service technician to correct.	- -
	e. The seal is installed inside- out on the drive shaft.	e. Install correctly.	22
	f. The wrong type of lubricant is being used (example: petroleum base lubricant.).	f. Use the proper lubricant (example: Taylor Lube).	- -
9. Excessive mix leakage from the door spout.	a. Worn or missing draw valve o- rings.	a. Replace regularly.	35
	b. Inadequate lubrication of the draw valve o- rings.	b. Lubricate properly.	23
	c. The wrong type of lubricant is being used (example: petroleum base lubricant.).	c. Use the proper lubricant (example: Taylor Lube).	- -
10. No freezer operation with the control switch in AUTO.	a. The unit is unplugged.	a. Plug into wall receptacle.	- -
	b. Circuit breaker off or blown fuse.	b. Turn circuit breaker on or replace fuse.	- -
	c. Beater motor out on reset.	c. Reset the freezer.	20
11. Low overrun.	a. Worn scraper blade(s).	a. Replace regularly.	35
	b. The mix feed assembly is not installed.	b. Install in mix inlet hole.	26
	c. Product is broken down from over- beating.	c. Draw off some product to allow fresh product to enter the freezing cylinder.	- -
12. The freezer door works loose.	a. The freezer studs are damaged.	a. Call service technician to replace studs.	- -
	b. The handscrews are damaged.	b. Replace the handscrews.	- -
	c. There are enlarged holes in the freezer door.	c. Replace the door.	- -
	d. The handscrews are not tightened.	d. Tighten the handscrews equally in a crisscross pattern.	24
	e. The beater assembly is rubbing the back of the door.	e. Call service technician to correct the problem.	- -

## Troubleshooting Thermistor Components

### Step 1

#### Power Switch in the “AUTO” Position

Using a voltmeter, check the two terminals connecting the transformer wires to the controller. There should be a reading of 24 volts ( $\pm 15\%$ ); if not, the transformer is not receiving line voltage or the transformer is faulty and should be replaced. If a proper reading is obtained, proceed to the next step.

### Step 2

#### Power Switch in the “AUTO” Position

Using a voltmeter, make certain L1 power is being supplied to the common terminal of the controller. A reading of line voltage should be obtained. To accomplish this, measure voltage between the common terminal and any L2 power source. If a proper reading is not obtained, make sure there is line voltage at the incoming power supply. If there is incoming power, back track from the common terminal (L1) and determine where L1 is being interrupted and correct accordingly. If a proper reading is obtained, proceed to the next step.

### Step 3

#### Power Switch in the “AUTO” Position

Remove the probe wires from the controller. Place a wire between the two probe terminals of the controller to short the component. This should activate the compressor. If this procedure does not activate the compressor, check for line voltage. If there is line voltage at the compressor contactor coil, the controller is acceptable.

### Step 4

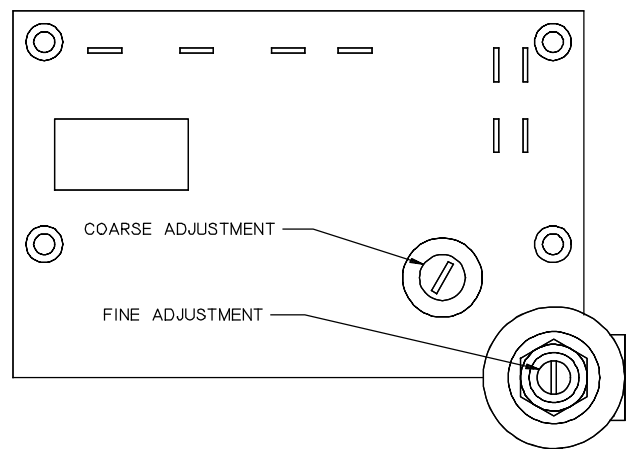
#### Power Switch in the “OFF” Position

Check the probe resistance. Disconnect both the yellow and black wires at the control, and measure their resistance with an ohmmeter. At room temperature, a reading of approximately 10,000 ohms should be obtained. If these readings are not obtained, replace the probe. When replacing the probe, fill the bulb-well with antifreeze. Connect the yellow wire to the white terminal and the black wire to the black terminal.

### Step 5

#### Power Switch in the “OFF” Position

Check the anticipator microswitch by removing the wires connecting the switch to the controller, and check for continuity. If switch continuity exists when the draw handle is raised, the switch is effective. Continuity should break when the draw handle is lowered.



# Section 11      Parts Replacement Schedule

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PART DESCRIPTION	EVERY 3 MONTHS	EVERY 4 MONTHS	EVERY 6 MONTHS	ANNUALLY
Scraper Blade		X		
Drive Shaft Seal	X			
Drive Shaft O- Ring	X			
Freezer Door Gasket	X			
Front Bearing	X			
Draw Valve O- Ring	X			
White Bristle Brush, 3" x 7"			Inspect & Replace if Necessary	Minimum
White Bristle Brush, 9/16" x 38"			Inspect & Replace if Necessary	Minimum
White Bristle Brush, 1- 1/2" x 2"			Inspect & Replace if Necessary	Minimum
Black Bristle Brush, 1" x 2"			Inspect & Replace if Necessary	Minimum
Double- Ended Brush			Inspect & Replace if Necessary	Minimum

## Section 12

## Service Parts Functions

PART DESCRIPTION	FUNCTION
Compressor	Provides circulation of refrigerant.
Condenser (air or water cooled)	Condenses refrigerant from a vapor to a liquid by removing heat from the refrigerant.
Dryer Filter	Removes foreign matter and moisture from the refrigerant.
Expansion Valve	Meters liquid refrigerant from the liquid line into the insulated shell evaporator.
Shell and Hopper Assembly	Insulated evaporator providing freezing and storage of product.
E.P.R. Valve	Controls pressure in the hopper evaporator.
Beater Line Starter	When the coil is energized, the relay closes. This permits power to flow to the overload relay, then to the beater motor.
Compressor Relay	When the coil is energized, the relay closes. This permits power to flow to the compressor.
Control Switch	When in "WASH", the control switch permits power to travel to the beater line starter. When in "AUTO", it permits power to travel to the thermistor control.
Thermistor Control	Monitors product in the freezing cylinder. When the product begins to get warm, the thermistor control allows power to flow to the compressor relay.
Transformer	Powers the thermistor control.
Mix Level Control	Activates the "MIX LOW" light when the mix level in the hopper becomes inadequate.
Door Switch	When the draw arm is raised, a micro switch closes and sends a signal to the thermistor control.
Water Valve (water cooled)	Controls the flow of water to the condenser by sensing the increasing and decreasing pressures at the high side of the compressor.
High Pressure Switch	Senses high head pressure at the compressor. In the event of a high pressure situation, the switch breaks power to the control switch and the freezer shuts down.
Blower (water cooled)	Dissipates heat from the interior of the freezer.
Fan Motor (air cooled)	Circulates air across the condenser.
Beater Motor	Drives the gear unit which in turn rotates the beater assembly.
Filter	Removes impurities from the refrigerant prior to the dryer.
Transformer	Used on high voltage units to reduce incoming voltage down to 230 volts to power the control circuitry.



# Section 13 Limited Warranty on Equipment

## TAYLOR COMPANY LIMITED WARRANTY ON FREEZERS

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

### LIMITED WARRANTY

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

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

### LIMITED WARRANTY CONDITIONS

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

### LIMITED WARRANTY EXCEPTIONS

This limited warranty does **not** cover:

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

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

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

#### **LIMITATION OF WARRANTY**

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

#### **LEGAL REMEDIES**

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

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

# Section 14

# Limited Warranty on Parts

## TAYLOR COMPANY LIMITED WARRANTY ON TAYLOR GENUINE PARTS

Taylor Company, a division of Carrier Commercial Refrigeration, Inc. ("Taylor") is pleased to provide this limited warranty on new Taylor genuine replacement components and parts available from Taylor to the market generally (the "Parts") to the original purchaser only.

### LIMITED WARRANTY

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

Part's Warranty Class Code or Part	Limited Warranty Period
Class 103 Parts <sup>1</sup>	Three (3) months
Class 212 Parts <sup>2</sup>	Twelve (12) months
Class 512 Parts	Twelve (12) months
Class 000 Parts	No warranty
Taylor Part #072454 (Motor- 24VDC *C832/C842*)	Four (4) years

### LIMITED WARRANTY CONDITIONS

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

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

## LIMITED WARRANTY EXCEPTIONS

This limited warranty does **not** cover:

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

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

## **LIMITATION OF WARRANTY**

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

## **LEGAL REMEDIES**

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

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

# Section 15

# Parts List

070263F944 AA MODEL 702 - 460V 60HZ 3PH - A/C-BRISTOL-(R404A) - NAVY-TYPE I - SUBMARINE HATCH  
077263C899 AA MODEL 772 - 460V 60HZ 3PH - A/C-COPELAWELED-(R404A) - NAVY-TYPE I - ANGLE BRACKET BASE

DESCRIPTION	PART NO.	702 QTY.	772 QTY.	WARR. CLASS	REMARKS
ACCUMULATOR-COPPER 2"DIA 10"	047062	1	2	103	
BEARING- FRONT	013116	1	2	000	
BEARING- REAR SHELL *NICK.PLATE	031324	1	2	000	
+GUIDE- DRIP SEAL	028992	1	2	000	
+NUT- BRASS BEARING	028991	1	2	000	
+WASHER- BEARING LOCK	012864	1	2	000	
BEATER A.- 4QT - 1 PIN- SUPPORT	X49490	1		103	
+BLADE- SCRAPER- PLASTIC	046237	1		000	
+CLIP- SCRAPER BLADE*8.75 INCH*	046238	1		103	
BEATER A.- 7QT - 1 PIN- SUPPORT	X46233		2	103	
+BLADE- SCRAPER- PLASTIC	046237		4	000	
+CLIP- SCRAPER BLADE*8.75 INCH*	046238		4	103	
BELT- AX46	023027	2		000	
BELT- AX39	023874		4	000	
BELT- AX38	023873		4	000	
BOLT- CARRIAGE 1/4- 20X3/4	012347	2	4	000	
BLOCK- TERMINAL 3P	039423	1	2	103	
BLOCK- TERMINAL 4 POLE GREEN	080967	2		103	
BLOWER A.- HIGH OUTPUT ROHS	X53478- 27C		1	103	
BOOT- CAPACITOR INSULATING	031314		1	000	
CAPACITOR- RUN- 10 UF/370V	033047		1	103	
MOTOR- FAN 208- 240V 50/60HZ	053480- 27		1	103	
+DEFLECTOR- BLOWER EXHAUST	046586		1	103	
BRUSH A.- PACKAGE- GRAVITY	X62412	1	1	000	
BRUSH- DOUBLE ENDED	013072	1	1	000	
BRUSH- DRAW VALVE 1- 1/2"OD X 3"	014753	1	1	000	
BRUSH- MIX PUMP BODY- 3"X7"WHITE	023316	1	1	000	
BRUSH- REAR BRG 1IN.DX2IN.LGX14	013071	1	1	000	
BUSHING- PANEL	013289	2	2	103	

+ Available Separately  
SHR (Separate Hopper Refrigeration)

140414

DESCRIPTION	PART NO.	702 QTY.	772 QTY.	WARR. CLASS	REMARKS
BUSHING- SNAP 11/16 ID X 7/8O	010548	2	5	103	
CAP- DESIGN- 1.188"ID- 6 POINT	013139- 6	1	2	000	
CLAMP- HOSE 1.813- 2.75" DI	074429	2		000	
COMPRESSOR L63B562DBVB	048727- 58E	1		512	460V 60HZ 3PH
COMPRESSOR CS18K6E- TFD- 256	052397- 58		2	512	460V 60HZ 3PH
COMPRESSOR - DANFOSS	047701- 27	1	1	512	SHR- 208/230VOLT
+CAPACITOR- START- 60UF- 220/275V	047703	1	1	103	
+COVER- TERMINAL- COMPRESSOR	047739	1	1	103	
+RELAY- START- COMPRESSOR	047702- 27	1	1	103	
CONDENSER- AC- 12LX16HX2.5T3ROW	048935	1		103	MAIN
CONDENSER- AC- 12LX18HX4ROW	050682		2	103	MAIN
CONDENSER- AC- 7X6X1.25- 2 ROW	027155	1	1	103	SHR
CONTROL- TEMPERATURE	028914	1	1	103	SHR
CONTROL- THERMISTOR- MIX LVL	X63019- SER	1	2	103	REPLACES X46015- SER
+KNOB- ALUMINUM	027422	1	2	103	
KIT A.- COVER- HOPPER*SINGLE*GRA	X65369	1	2	103	
DECAL- DEC- TAYLOR	021872	1	1	000	
DECAL- LIFT PLATE FRONT	015200	1	2	000	
DECAL- INST- CLN HPR	019029	1	1	000	
DECAL- TROUBLESHOOTING	038374	1	1	000	
LABEL- SWITCH- OFF/STANDBY- SYMBO	052017- SYM	1	2	000	REPLACES 048493
DEFLECTOR- BLOWER EXHAUST	047912		1	103	
DIAGRAM- WIRING *702*	063149- 63	1		000	
DIAGRAM- WIRING	063357- 63		1	000	
DOOR A.- 1 SPOUT- 4 QT	X30269- SER	1		103	
BAFFLE A.- 12 INCH	X30273	1		103	
+DECAL- LIFT PLATE FRONT	015200	1		000	
+VALVE A.- DRAW	X13624- SP	1		103	
+O- RING- 1- 1/16 OD X.139W	020571	2		000	
DOOR A.- 1 SPOUT- 7 QT	X30272- SER		2	103	
BAFFLE A.- 19 INCH	X30274		2	103	

+ Available Separately  
SHR (Separate Hopper Refrigeration)

DESCRIPTION	PART NO.	702 QTY.	772 QTY.	WARR. CLASS	REMARKS
+DECAL- LIFT PLATE FRONT	015200		2	000	
+VALVE A.- DRAW	X13624- SP		2	103	
+O- RING- 1- 1/16 OD X.139W	020571		4	000	
DRYER- CAP. TUBE- HP62/R134A	047699	1	1	000	SHR
DRYER- FILTER- HP62- 3/8 X 1/4S	048901	1	2	000	REPLACES 047521
DVD- OPS TRAIN VIDEO*700 SERIES	043568- DVD	1	1	000	
FASTENER- CLIP	045865	4	8	000	PANELS
FILTER- CORCOM 2VR1	032567	1	1	103	
FUSE- 4 AMP- 600 VOLT	051194	1	1	000	
+HOLDER- FUSE 600 VOLT PANE	051195	1	1	103	
GASKET- DOOR 5.177ID X 5.938OD	016672	1	2	000	
GEAR A.*REDUCER	012235- SER	1	2	212	
+SCREW- 5/16- 18X2- 3/4 HEX HEAD	004191	3	6	000	
GUIDE A.- DRIP PAN*702*	X50814	1		103	
GUIDE A.- DRIP PAN	X28698		2	103	
HOOD	021222	1		103	
HOOD *772*NAVY*	029977		1	000	
KIT A.- COVER- HOPPER*SINGLE*GRA	X65369	1	2	103	
KIT A.- TUNE UP*710- 715- 731- 741	X33926	1		000	
BEARING- FRONT	013116	1		000	
CAP- DESIGN- 1.188"ID- 6 POINT	013139- 6	1		000	
GASKET- DOOR 5.177ID X 5.938OD	016672	1		000	
O- RING- .643 OD X .077W	018572	2		000	FEED TUBE
O- RING- 1- 1/16 OD X.139W	020571	2		000	DRAW VALVE
SEAL- DRIVE SHAFT	032560	1		000	DRIVE SHAFT
TOOL- 0- RING REMOVAL	048260- WHIT	1		000	
KIT A.- TUNE UP*733- 777*	X33928		1	000	
BEARING- FRONT	013116		2	000	
CAP- DESIGN- 1.188"ID- 6 POINT	013139- 6		2	000	
GASKET- DOOR 5.177ID X 5.938OD	016672		2	000	
O- RING- .643 OD X .077W	018572		4	000	FEED TUBE

+ Available Separately  
SHR (Separate Hopper Refrigeration)



DESCRIPTION	PART NO.	702 QTY.	772 QTY.	WARR. CLASS	REMARKS
O-RING- 1- 1/16 OD X.139W	020571		4	000	DRAW VALVE
SEAL- DRIVE SHAFT	032560		2	000	DRIVE SHAFT
TOOL- 0- RING REMOVAL	048260- WHT		1	000	
KNOB- ALUMINUM	027422	1	2	103	THERMISTER CTRL
KNOB- DRAW VALVE	013635	1	2	103	
+NUT- LOCK KNOB	013649	1	2	103	
KIT- MOUNTING- COMPRESSOR	047704	1	1	000	
LABEL- 3PH MTR PROT/1PH C-	025949	1	1	000	
LABEL- ADJ- MIX COOL- SYMBOL	020217	1	1	000	
LABEL- ATTN SVC ENG	015068	1	2	000	
LABEL- CAUTION- GRD- PERM- ENG/S	032164	1	1	000	
LABEL- CK MTR ROTATE- CW- ENG/SPN	020090	1	1	000	
LABEL- DOOR CAUTION	032749	1	1	000	
LABEL- LEFT UNIT- RIGHT UNIT	023034		1	000	STIR TIMER
LABEL- SWITCH- POWER OFF/STANDBY (NEW)	052017- SYM	1	2	000	
LABEL- WARM- COLD INT'L SYMBOL	013749	1	2	000	
LABEL- WARN- COVER	051433	5	5	000	
LABEL- WARN- ELEC- SGL- SMALL	032717	1		000	
LABEL- WARN- ELEC- TW- SMALL	032718		1	000	
LIGHT- AMBER- RECT. 250VAC	047141- 27	1	2	103	
LIGHT- INDICATOR- ORANGE- ROUND	017450	1	2	103	
LUBRICANT- TAYLOR 4 OZ.	047518	1	1	000	
MAN- OPER 702/772 NAVY	051469- M	1	1	000	
MOTOR- 1.0 HP	013102- 33	1		212	
MOTOR- 2.0 HP	017650- 33		2	212	
MOTOR- FAN 95.3 CFM 2700 RPM	062253- 27	1	1	103	
+SHROUD DANFOSS *060*710	048818	1		103	
+SHROUD- DANFOSS	027386		1	103	
MOTOR- FAN 50 WATT	029770- 27	1		103	
+FAN- 5 BLADE 12" PUSH 22DEG CCW	049009	1		103	
+SHROUD- FAN *142&380&430&702	048877	1		103	

+ Available Separately  
SHR (Separate Hopper Refrigeration)

DESCRIPTION	PART NO.	702 QTY.	772 QTY.	WARR. CLASS	REMARKS
MOTOR- FAN 208- 240V 50/60HZ	053480- 27		1	103	HIGH OUTPUT BLOWER
+CAPACITOR- RUN 10UF/370V	033047		1	103	
NUT- STUD *GENERAL USAGE*	021508	4	8	103	HANDSCREWS
PAIL- 6 QT.	023348	1		000	
PAIL- MIX 10 QT.	013163		1	000	
PAN- DRIP 13- 1/4 LONG	039027	1		103	
PAN- DRIP 11- 5/8 LONG	027503		2	103	
PANEL A.- DUCT*702*NAVY*W/	X53035- SPN	1		103	
PANEL A.- FRONT *702*NAVY*	X50930- SPN	1		103	
PANEL A.- LEFT SIDE*710*NAVY	X50940- SPN	1		103	
PANEL A.- REAR *702*NAVY*	X53034- SPN	1		103	
PANEL- SIDE *710*RIGHT*	050928- SPN	1		103	
PANEL- SIDE *5472*HT*UPPER	042317- SPN	2		103	UPPER LEFT & RIGHT
PANEL A.- FRONT *772*	X50835		1	103	
PANEL A.- SIDE LEFT	X44853- SER		1	103	LOWER LEFT
PANEL A.- SIDE RIGHT	X44855- SER		1	103	LOWER RIGHT
PANEL- UPPER SIDE L.*777 NAVY	029981		1	103	UPPER LEFT
PANEL- UPPER SIDE R.*777 NAVY	029980		1	103	UPPER RIGHT
PANEL- REAR	029996		1	103	
PANEL- SERVICE	029976		1	103	
PLATE- DEC- SINGLE- ROCKER SWITCH	022604- SPN	1		103	
PLATE- DEC- 777 NAVY25*	029995		1	103	
PROBE A.- MIX *SQUARE*	X30922	1	2	103	
+DISC- PROBE *SQ HOLE*	030965	1	2	103	
+SPACER- PROBE *SQ HOLE*	030966	1	2	103	
PROBE A.- THERMISTOR	X31602	1	2	103	
PULLEY- 2AK27 X .625- .6265	011545	1		103	BEATER MOTOR
PULLEY- 2AK74- 5/8	027822	1		103	GEAR
PULLEY- 2AK22- 7/8	019987		2	103	BEATER MOTOR
PULLEY- 2AK64- 5/8 BORE	039695		2	103	GEAR
RELAY- 3 POLE- 30A- 208/240 50/60	066795- 33	1	2	103	

+ Available Separately  
SHR (Separate Hopper Refrigeration)

DESCRIPTION	PART NO.	702 QTY.	772 QTY.	WARR. CLASS	REMARKS
RELAY-DPDT-20 A-230 V	026581-27	1	2	103	STIR CYCLE TIMER 208/230V
SANITIZER- STERA SHEEN - GREEN	055492	1	1	000	
SCREW- 1/4-20X3/8 SLTD ROUND	011694	4	10	000	
SHAFT-BEATER	033498	1	2	103	
+SEAL- DRIVE SHAFT	032560	1	2	000	
SHELL A.- INSULATED*702*12 INCH	X50815-SER	1		512	
STUD- NOSE CONE	022822	4		103	
SHELL A.- INSULATED *772*NAVY	X50831		1	512	RIGHT SIDE
STUD- NOSE CONE	022822		4	103	
SHELL A.- INSULATED *772*NAVY	X50831- L		1	103	LEFT SIDE
STUD- NOSE CONE	022822		4	103	
SHIELD- MIX- GEAR REDUCER 3- 3/8"	013356	1	2	103	
SHIELD- SPLASH 18"	022763- SPN	1		103	
SHIELD- SPLASH 25 L	029997		1	103	
STARTER- 3 PHASE 1.6 TO 2.	066794- 33G	1		103	
OVERLOAD- THERMAL- 3P- 1.6/2.5A	067461- 3G	1		103	
STARTER- 3 PHASE 2.5 TO 4 AMP	066794- 33H		2	103	
OVERLOAD- THERMAL- 3P- 2.5/4.0A	067461- 3H		2	103	
STUD- NOSE CONE	022822	4	8	103	
SWITCH A.- DRAW *632- 710- 31- 41-	X51242- SER	1	2	103	
ARM A.- DRAW VALVE	X28874	1	2	103	
BRACKET- DOOR SWITCH	028875	1	2	103	
E- RING 3/16 .335 O.D.	049178	1	2	000	
PIN- PIVOT	015478	1	2	103	
PLATE- DRAW VALVE LIMITER *702*	051241	1	2	103	
SPRING- RETURN	015342	1	2	103	
SWITCH- LEVER- SPDT- 10A- 125- 250V	028889	2	4	103	
SCREW- 4- 40X1/2 HEX HEAD- 3/16	042604	4	8	000	
SCREW- 10- 32X1/2 SERRATED HWH	020982	1	2	000	
NUT- 10- 32 WHIZ FLANGE LOCKNU	020983	1	2	000	
SWITCH- PRESSURE 405 PSI- SOLDER	052663	1	2	103	

+ Available Separately  
SHR (Separate Hopper Refrigeration)

DESCRIPTION	PART NO.	702 QTY.	772 QTY.	WARR. CLASS	REMARKS
SWITCH-ROCKER-DPDT ON-OFF-ON	014237	1		103	
SWITCH-ROCKER-4 PDT ON-OFF-ON	020824		2	103	
+BRACKET-ROCKER SWITCH	020820	1	2	103	
+CARD-WASH-OFF-AUTO	014091	1	2	000	
SWITCH-TOGGLE-DPDT*ON-NONE-ON	024295	1	2	103	SHR/CTR
TIMER-CYCLE 5SEC ON/120SEC OFF	037188-27	1	2	103	
TRANS.-CONT.-500 VA	021091	1		103	
TRANS.-CONT.-1 KVA	021093		1	103	
TRANS.-120/208/240V PRI 24VS	081783-27		2	103	
TRAY-DRIP 14-7/8L X 5-1/8 SGL	013690	1		103	
TRAY-DRIP 22-7/8L X 5-1/8W	014533		1	103	
TRIM-CORNER *390*710*LEFT	047002-SS	1		103	
TRIM-CORNER *390*710*RIGHT	047003-SS	1		103	
TRIM-FRONT *340*DDO*	050913-SPN	1		103	
TRIM-REAR CORNER L.*777 NAVY	029982		1	103	LEFT
TRIM-REAR CORNER R.*777 NAVY	029983		1	103	RIGHT
TUBE-FEED-SS-5/32 HOLE	028967-2	1		103	
TUBE-FEED-SS-3/16	028967-3		2	103	
VALVE-ACCESS-1/4MFL X 3/8ODS	053565	2		103	K1060000 & UP REPLACES 043232
VALVE-ACCESS 1/4FL X 1/4SOLDER	044404	1	1	103	EPR
VALVE-ACCESS 1/4FL X 3/8SSDR-90	044455		2	103	
VALVE-ACCESS-1/4 MFLX1/4 S-90	047016	1	3	103	
VALVE-EPR 1/4S	022665	1	1	103	
VALVE-EXP-AUTO-1/4S X1/4 FPT	046365	1	2	103	
+BOOT-EXPANSION VALVE	050900	1	2	000	

+ Available Separately  
SHR (Separate Hopper Refrigeration)

# Section 16

# Motor Characteristics

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## 702 - Motor Characteristics and Performance Data

Item # \_\_\_\_\_

Sheet \_\_\_\_\_ of \_\_\_\_\_

**Manufacturer:** Leeson

**Master Drawing:** Taylor Part No. 013102- 12, Leeson Outline Drawing #032957

**Certification Data:** Cat. # 111197.00

**Auxiliary:** Taylor Part No. 013102- 12

**Equipment Model No.:** C6K17DR9

**Quantity:** 1 per machine

**Rating (HP/Volts/Phase):** 1/115/1

**Insulation:** B

**Weight:** 40 lbs.

**Cycles:** 60 HZ.

**Design:** N

**Torque- Starting:** 570%

**Ampers- Starting:** 63.9

Full Load: 11.2

**Enclosure:** Drip Proof

**Service:** 1.15

**Duty:** Continuous

**Type:** KD, Induction

**Ambient Degree °C:** 40°C

**Motor Frame:** F 56

Symbol No. \_\_\_\_\_

## 702 - Controller Data

Item # \_\_\_\_\_

Sheet \_\_\_\_\_ of \_\_\_\_\_

**Manufacturer:** Leeson

**Master Drawing:** Taylor Part No. 013102- 12, Leeson Outline Drawing #032957

**Certification Data:** Cat. # 111197.00

**Rating (HP/Volts/Phase):** 1/115/1

**Size:** F56

**Duty:** Continuous

**Overload Relay:** None

**Ambient Degree °C:** 40°C

**Quantity:** 1 per machine

Symbol No. \_\_\_\_\_

## 702 - Motor Characteristics and Performance Data

Item # \_\_\_\_\_

Sheet \_\_\_\_\_ of \_\_\_\_\_

**Manufacturer:** Leeson

**Master Drawing:** Taylor Part No. 013102- 33, Leeson Outline Drawing #032955

**Certification Data:** Cat. # 110907.00

**Auxiliary:** Taylor Part No. 013102- 33

**Equipment Model No.:** C6T17DB20

**Quantity:** 1 per machine

**Rating (HP/Volts/Phase):** 1/115/1

**Insulation:** B

**Weight:** 28 lbs.

**Cycles:** 60 HZ.

**Design:** B

**Torque- Starting:** 570%

**Ampers- Starting:** 63.9

Full Load: 11.2

**Enclosure:** Drip Proof

**Service:** 1.15

**Duty:** Continuous

**Type:** TD, Induction

**Ambient Degree °C:** 40°C

**Motor Frame:** E 56

**Efficiency:** 78%

Symbol No. \_\_\_\_\_

## 702 - Controller Data

Item # \_\_\_\_\_

Sheet \_\_\_\_\_ of \_\_\_\_\_

**Manufacturer:** Leeson

**Master Drawing:** Taylor Part No. 013102- 33, Leeson Outline Drawing #032955

**Certification Data:** Cat. # 110907.00

**Rating (HP/Volts/Phase):** 1 HP, 208- 230/460, 30

**Size:** E56

**Type:** TD

**Duty:** Continuous

**Overload Relay:** None

**Ambient Degree °C:** 40°C

**Weight:** 28 lbs.

**Quantity:** 1 per machine

Symbol No. \_\_\_\_\_



## 702 - Motor Characteristics and Performance Data

Item # \_\_\_\_\_

Sheet \_\_\_\_\_ of \_\_\_\_\_

**Manufacturer:** Magnetek

**Master Drawing:** 013102-33

**Certification Data:** 164420

**Rating (HP/Volts/Phase):** 1 HP, 208-230/460/60/50

**Insulation:** B

**Weight:** 36 lbs.

**Cycles:** 60/50

**Design:** B

**Torque- Starting:** 347%

Full Load: 48 oz. ft.

**Ampers- Starting:** 22.5

Full Load: 2.7

**Power Factor:**

Full Load: .815

1/2 Full: .663

3/4 Full: .703

Locked: .663

**Enclosure:** Drip Proof

**Duty:** Continuous

**Type:** Induction

**Ambient Degree °C:** 40°C

**Full Load KW:** .861

**Motor Frame:** T 56

**Efficiency:** .859

Symbol No. \_\_\_\_\_

## 702 - Controller Data

Item # \_\_\_\_\_

Sheet \_\_\_\_\_ of \_\_\_\_\_

**Manufacturer:** Magnetek

**Master Drawing:** 013102-33

**Certification Data:** 164420

**Rating (HP/Volts/Phase):** 1 HP, 208-230/460/60/50

**Size:** 56T

**Type:** SC

**Low Voltage Feature:** Standard

**Overload Relay:** None

**Ambient Degree °C:** 40°C

**Enclosure:** Drip Proof

**Quantity:** 1 per machine

Symbol No. \_\_\_\_\_

## 772 - Motor Characteristics and Performance Data

Item # \_\_\_\_\_

Sheet \_\_\_\_\_ of \_\_\_\_\_

**Manufacturer:** Magnetek

**Master Drawing:** 017650-33

**Certification Data:** 332970

**Quantity:** 2 per machine

**Rating (HP/Volts/Phase):** 2 HP, 208-220/440/3

**Insulation:** B

**Weight:** 42 lbs.

**Cycles:** 60

**Design:** B

**Torque- Starting:** 316%

Full Load: 96 oz. ft.

**Ampers- Starting:** 49

Full Load: 6.6

**Power Factor:**

Full Load: .729

1/2 Load: .501

3/4 Load: .627

Locked: .766

**Enclosure:** Drip Proof

**Duty:** Continuous

**Type:** Induction

**Ambient Degree °C:** 40°C

**Full Load KW:** 1.885

**Motor Frame:** 145T

**Efficiency:** .859

Symbol No. \_\_\_\_\_

## 772 - Controller Data

Item # \_\_\_\_\_

Sheet \_\_\_\_\_ of \_\_\_\_\_

**Manufacturer:** Magnetek

**Master Drawing:** 017650-33

**Certification Data:** 332970

**Rating (HP/Volts/Phase):** 2 HP, 208-220/440/3

**Size:** 145T

**Type:** SC

**Duty:** Continuous

**Low Voltage Feature:** Standard

**Overload Relay:**

Heater Catalog No: None

**Ambient Degree °C:** 40°C

**Enclosure:** Drip Proof

**Quantity:** 2 per machine

Symbol No. \_\_\_\_\_

## 772 - Motor Characteristics and Performance Data

Item # \_\_\_\_\_

Sheet \_\_\_\_\_ of \_\_\_\_\_

**Manufacturer:** Leeson Electric

**Master Drawing:** 017650- 33, Leeson Outline Drawing 33101

**Certification Data:** 120532.00

**Equipment Model No.:** C145T17DB21

**Quantity:** 2 per machine

**Rating (HP/Volts/Phase):** 2 HP, 208- 230/460/3

**Insulation:** B

**Cycles:** 60

**Design:** C

**Enclosure:** Drip Proof

**Service:** 1.15

**Duty:** Continuous

**Type:** TD Induction

**Ambient Degree °C:** 40°C

**Motor Frame:** F145T

**Efficiency:** 81%

Symbol No. \_\_\_\_\_

## 772 - Controller Data

Item # \_\_\_\_\_

Sheet \_\_\_\_\_ of \_\_\_\_\_

**Manufacturer:** Leeson

**Master Drawing:** 017650-33, Outline 33101

**Certification Data:** 120532.00

**Rating (HP/Volts/Phase):** 2 HP, 208-230/460, 3

**Size:** F145T

**Type:** TD

**Low Voltage Feature:** Standard

**Overload Relay:**

Heater Catalog No: None

**Ambient Degree °C:** 40°C

**Enclosure:** Drip Proof

**Quantity:** 2 per machine

Symbol No. \_\_\_\_\_

## 772 - Motor Characteristics and Performance Data

Item # \_\_\_\_\_

Sheet \_\_\_\_\_ of \_\_\_\_\_

**Manufacturer:** Magnetek

**Master Drawing:** 046536-27

**Certification Data:** DF2J026

**Quantity:** 2 per machine

**Rating (HP/Volts/Phase):** 1/2 HP, 208-240, 50/60

**Insulation:** B

**Weight:** 28 lbs.

**Cycles:** 50/60

**Design:** Special

**Torque- Starting:** 144%

Full Load: 121.09 oz. in.

**Ampers- Starting:** 4.9

Full Load: 3.2

**Power Factor:**

Full Load: .702

1/2 Load: .950

3/4 Load: .931

Locked: 0

**Enclosure:** Drip Proof

**Duty:** Continuous

**Type:** Induction

**Ambient Degree °C:** 40°C

**Full Load KW:** .1298

**Motor Frame:** 42

**Efficiency:** 39.5%

Symbol No. \_\_\_\_\_

## 772 - Controller Data

Item # \_\_\_\_\_

Sheet \_\_\_\_\_ of \_\_\_\_\_

**Manufacturer:** Magnetek

**Master Drawing:** 046536-27

**Certification Data:** DF2J026

**Rating (HP/Volts/Phase):**

**Size:** 42

**Low Voltage Feature:** Standard

**Overload Relay:**

Heater Catalog No: Thermally Protected

**Quantity:** 2 per machine

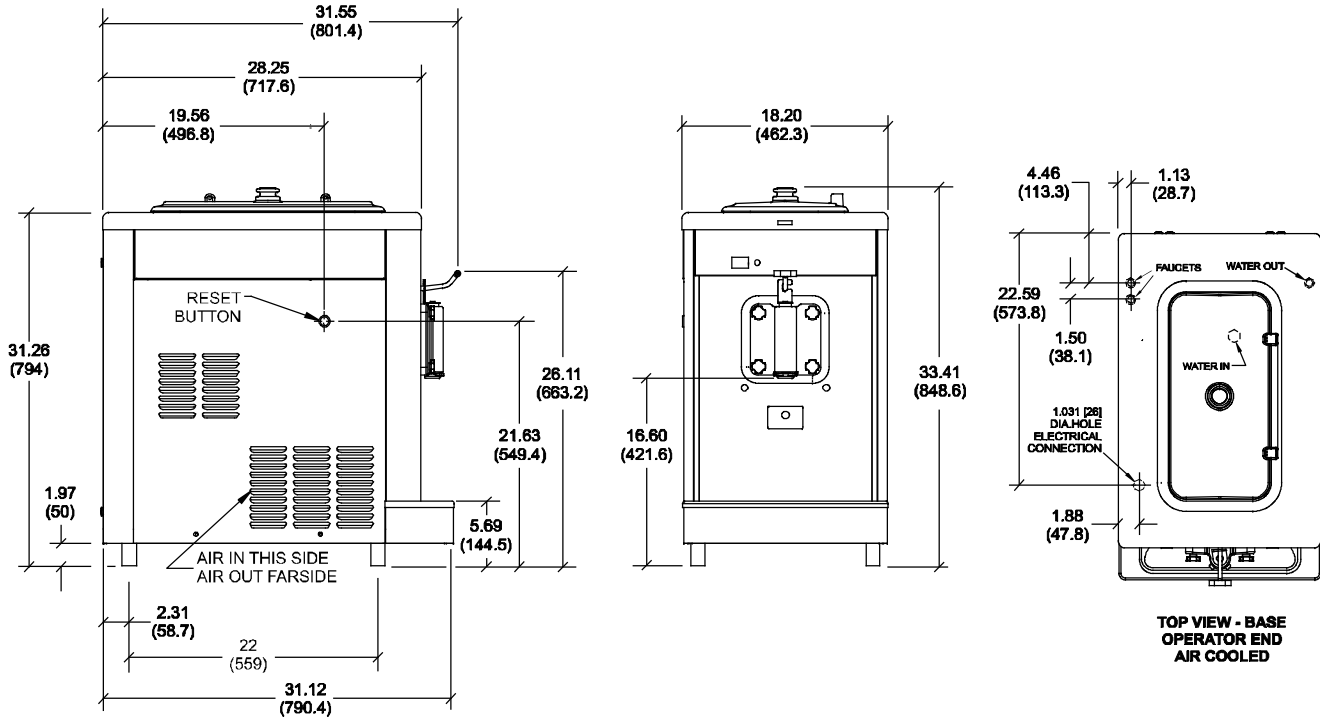
Symbol No. \_\_\_\_\_



# Section 17

# Navy Specifications

## Model 702



NOTE: FIGURES IN PARENTHESES INDICATE MILLIMETERS

## Freezing Cylinder

One, 4 quart (3.8 liter).

## Mix Hopper

One, 20 quart (18.9 liter). Separate hopper refrigeration (SHR) maintains mix temperature below 41°F (5°C) during AUTO and STANDBY modes.

## Beater Motor

1.0 HP

## Refrigeration Unit

One, 4,900 btu/hr. R404A.

Separate Hopper Refrigeration (SHR) - One, 400 btu/hr. R134a

## Electrical

Standard is 460/60/3; however, other electrical characteristics are available. All internal connections are completed at the factory.

Requires 8A maximum fuse size and 6A minimum circuit ampacity. Consult the unit data label.

## Air Cooled

Minimum of 3" (76 mm) on both sides and 6" (152 mm) at the rear of the unit.

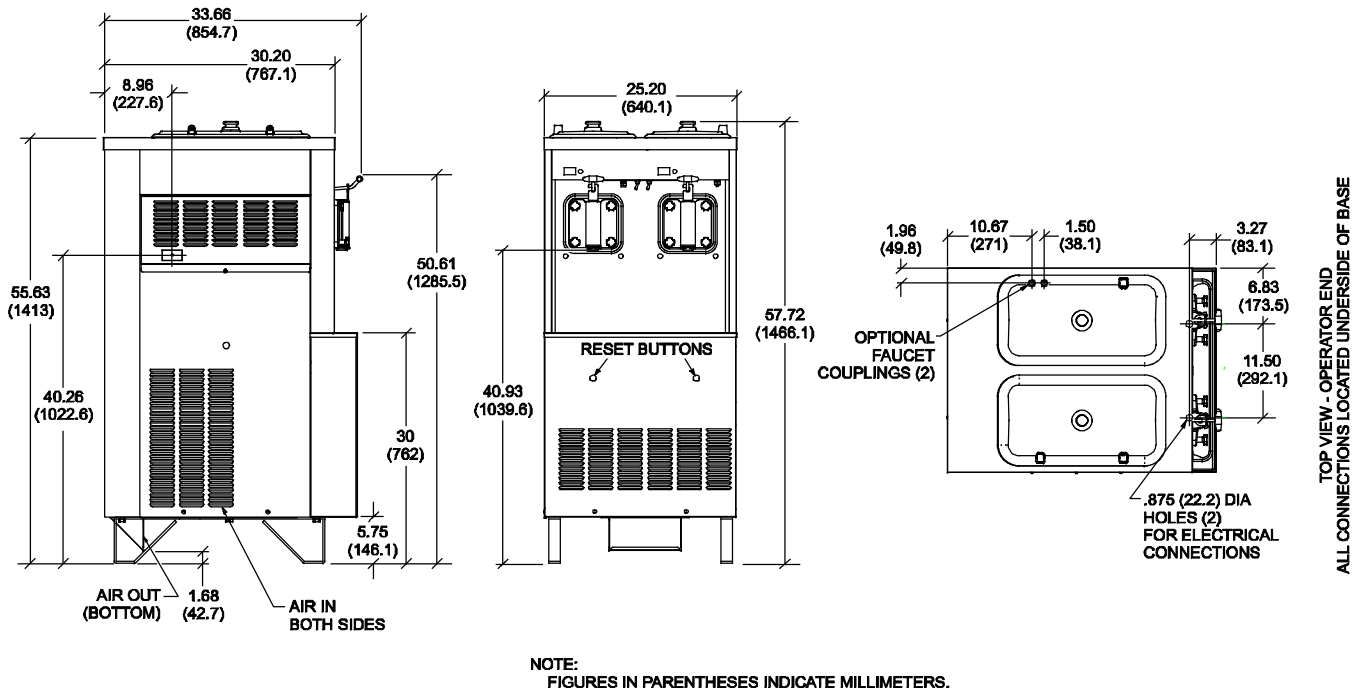
## Dimensions

Width: 18-1/4" (464 mm)  
 Depth: 31-9/16" (802 mm)  
 Height: 33-7/16" (849 mm)  
 Floor Clearance: 1-15/16" (49 mm)

## Approximate Weights

Net: 313 lbs. (142.0 kgs.)  
 Crated: 345 lbs. (156.5 kgs.)

## Model 772



### Freezing Cylinder

Two, 7 quart (6.6 liter).

### Mix Hopper

Two, 20 quart (18.9 liter). Separate hopper refrigeration (SHR) maintains mix temperature below 41°F (5°C) during AUTO and STANDBY modes.

### Beater Motor

Two, 2.0 HP.

### Refrigeration Unit

Two, 9,500 btu/hr. R404A.

Separate Hopper Refrigeration (SHR) - One 400 btu/hr. R134a.

### Electrical

Standard is 460/60/3; however, other electrical characteristics are available. All internal connections are completed at the factory.

The left side requires 15A maximum fuse size and 13A minimum circuit ampacity.

The right side requires 12A maximum fuse size and 9A minimum circuit ampacity. Consult the unit data label.

### Air Cooled

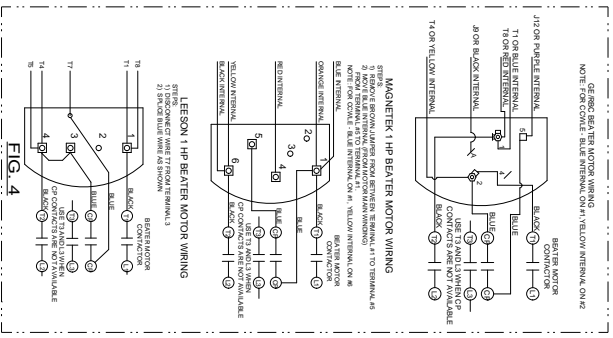
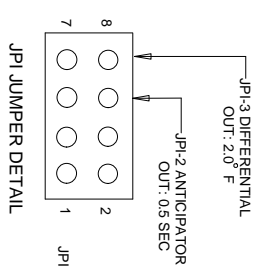
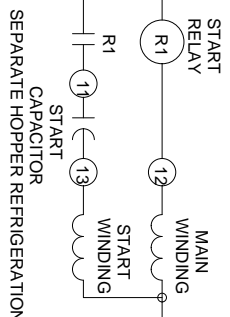
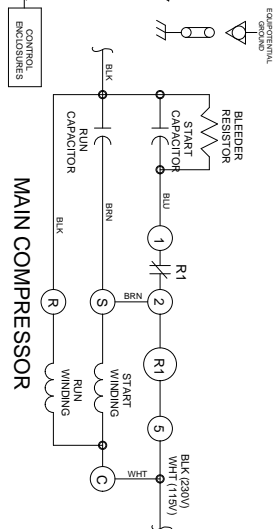
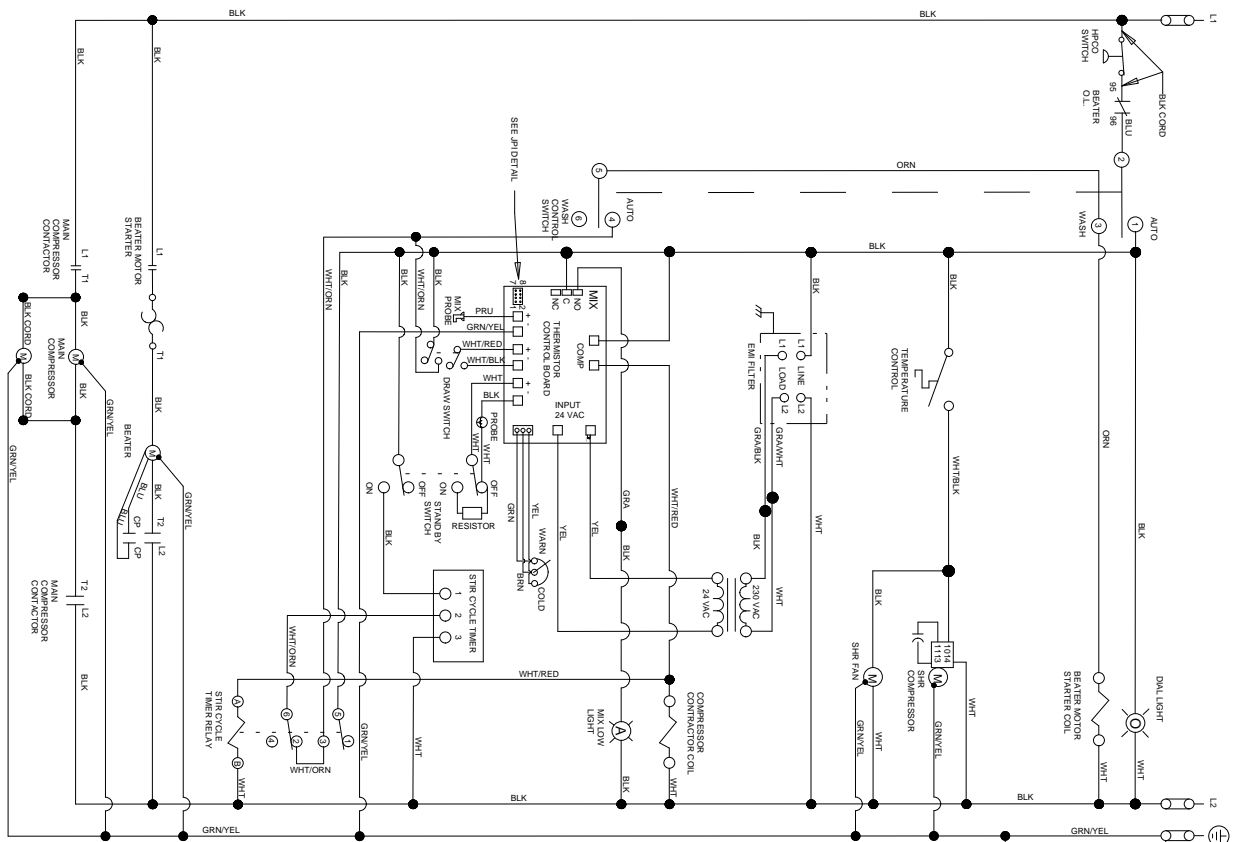
Minimum 3" (76 mm) around all sides. Install the deflector to prevent recirculation of warm air.

### Dimensions

Width: 25-1/4" (641 mm)  
Depth: 33- 11/16" (856 mm)  
Height: 57- 3/4" (1467 mm)  
Floor Clearance: 5- 3/4" (146 mm)

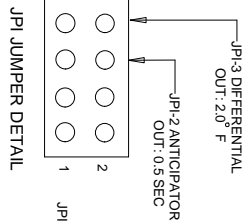
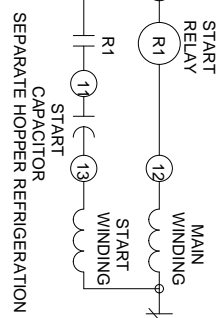
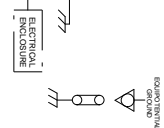
### Approximate Weights

Net: 800 lbs. (362.9 kgs.)  
Crated: 872 lbs. (395.5 kgs.)



**GROUND FRAME SECURELY**  
COMPRESSOR & BEATER PROTECTED UNDER  
PRIMARY SINGLE PHASING CONDITIONS.

**Taylor Company**  
**Model 702**  
**063149M27A**  
**12/14**



**GROUND FRAME SECURELY**  
COMPRESSOR & BEATER PROTECTED UNDER  
PRIMARY SINGLE PHASING CONDITIONS.

