

Model 161

Soft Serve Freezer

Original Operating Instructions

055155-M



**8/14/08 (Original Publication)
(Updated 5/29/12)**

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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055155-M



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

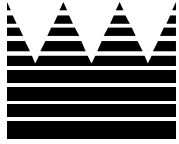


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Note: Continuing research results in steady improvements; therefore, information in this manual is subject to change without notice.

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 are general installation instructions. For complete installation details, please see the check out card.

Installer Safety



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

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

- Only authorized Taylor service personnel should perform installation and repairs on the equipment.
- Authorized service personnel should consult OSHA Standard 29CFR1910.147 or the applicable code of the local area for the industry standards on lockout/tagout procedures before beginning any installation or repairs.
- Authorized service personnel must ensure that the proper PPE is available and worn when required during installation and service.
- Authorized service personnel must remove all metal jewelry, rings, and watches before working on electrical equipment.



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

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



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

Site Preparation

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

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



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



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

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

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

Air Cooled Units

DO NOT obstruct air intake and discharge openings:

The Model 161 requires 6" (152 mm) on both sides, and 0" at the rear. Install the skirt provided on the right side of the unit. Minimum air clearances must be met to assure adequate air flow for optimum performance.

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. 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. 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.

Electrical Connections

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

In the United States, this equipment is intended to be installed in accordance with the National Electrical Code (NEC), ANSI/NFPA 70-1987. The purpose of the NEC code is the practical safeguarding of persons and property from hazards arising from the use of electricity. This code contains provisions considered necessary for safety. Compliance therewith and proper maintenance will result in an installation essentially free from hazard!

In all other areas of the world, equipment should be installed in accordance with the existing local codes. Please contact your local authorities.



FOLLOW YOUR LOCAL ELECTRICAL CODES!



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



This unit is provided with an equipotential grounding lug that is to be properly attached to the rear of the frame by the authorized installer. The installation location is marked by the equipotential bonding symbol (5021 of IEC 60417-1) on both the removable panel and the equipments 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 3mm 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.

Electrical Hook-Up Installation

(60 Cycle, 1 Ph, Supplied With Cord and Plug)

This freezer is supplied with a 3-wire cord and grounding type plug for connection to a single phase, 60 cycle, branch circuit supply. This unit must be plugged into a properly grounded receptacle. The cord and plug provided for 208/230/60/1, is 20A; therefore the wall outlet must also be 20A. Check the data label, located on the side panel, for electrical specifications.

Permanent wiring may be employed if required by local codes. Instructions for conversion to permanent wiring are as follows:



1. Be sure the freezer is electrically disconnected.
2. Remove the appropriate panel and locate the small electrical box at the base of the freezer.
3. Remove the factory-installed cord and strain relief bushing.
4. Route incoming permanent wiring through 7/8" (22 mm) hole in base pan.
5. Connect two power supply leads. Attach ground (earth) wire to the grounding lug inside the electrical box.
6. Be sure the unit is properly grounded before applying power.

Beater Rotation



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

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

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

Electrical connections are made directly to the terminal block provided in the splice boxes which are mounted mid-level on the frame channel on the sides of the freezer.

Refrigerant



In consideration of our environment, Taylor proudly uses only earth friendly HFC refrigerants. The HFC refrigerant used in this unit is R404A. This refrigerant is generally considered non-toxic and non-flammable, with an Ozone Depleting Potential (ODP) of zero (0).

However, any gas under pressure is potentially hazardous and must be handled with caution.

NEVER fill any refrigerant cylinder completely with liquid. Filling the cylinder to approximately 80% will allow for normal expansion.



Use only R134a refrigerant that conforms to the AHJ standard 700 specification. The use of any other refrigerant may expose users and operators to unexpected safety hazards.



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

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



WARNING: R404A refrigerant used in conjunction with polyolester oils is extremely moisture absorbent. When opening a refrigeration system, the maximum time the system is open must not exceed 15 minutes. Cap all open tubing to prevent humid air or water from being absorbed by the oil.

Section 2

To the Operator

The Model 161 soft serve freezer has been carefully engineered and manufactured to give you dependable operation.

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

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

The Model 161 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 personnel responsible for the equipment's operation, both assembly and disassembly, go through these procedures together in order to be properly trained and to make sure that no misunderstandings exist.

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

Note: Warranty is valid only if the parts are authorized Taylor parts, purchased from an authorized Taylor Distributor, and the required service work is provided by an authorized Taylor service technician. Taylor reserves the right to deny warranty claims on equipment or parts if non-approved parts or refrigerant were installed in the machine, system modifications were performed beyond factory recommendations, or it is determined that the failure was caused by neglect or abuse.



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

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

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

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



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

To Operate Safely:



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



Per IEC 60335-1 and its part 2 standards, “This appliance is to be used only by trained personnel. It is not intended for use by children or people with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless given supervision or instruction concerning the use of the appliance by a person responsible for their safety.”



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



- **DO NOT** operate the freezer unless it is properly grounded.
- **DO NOT** operate the freezer with larger fuses than specified on the freezer data label.
- All repairs must be performed by an authorized Taylor service technician.
- The main power supplies to the machine must be disconnected prior to performing any repairs.
- Cord Connected Units: Only Taylor authorized service technicians may install a plug on this unit.
- 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.

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 freezer. Failure to follow these instructions may result in serious electrical shock.



- **DO NOT** allow untrained personnel to operate this machine.
- **DO NOT** put objects or fingers in door spout.
- **DO NOT** operate the freezer unless all service panels and access doors are restrained with screws.
- **DO NOT** remove the freezer door or beater assembly unless the control switches are in the “OFF” position.

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



- **DO NOT** put objects or fingers in fill or discharge openings. Failure to follow this instruction may result in contaminated product or personal injury from blade contact.
- **USE EXTREME CAUTION** when removing the beater assembly. The scraper blades are very sharp and may cause injury.

DO NOT obstruct air intake and discharge openings: A minimum of 6” (152 mm) on both sides, and 0” in the rear is required. Install the skirt provided on the right side of the unit. Failure to follow this instruction may cause poor freezer performance and damage to the machine.



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

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

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

Section 4

Operator Parts Identification

Model 161

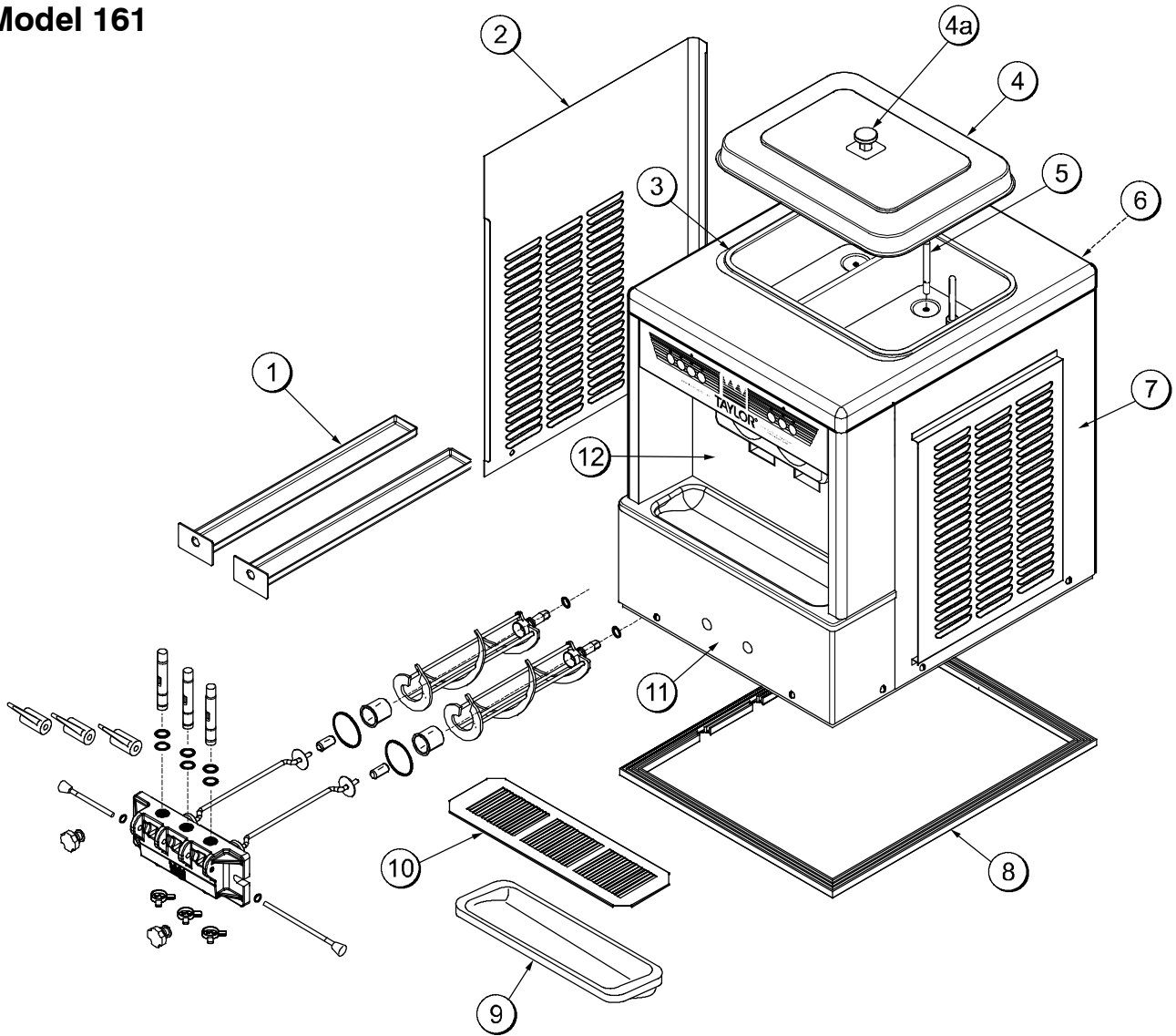


Figure 1

ITEM	DESCRIPTION	PART NO.
1	PAN-DRIP *161*	055206
2	PANEL -SIDE LEFT	058491
3	GASKET-HOPPER COVER	037042
4	COVER A.-HOPPER	X37963-SER
4a	KNOB-MIX COVER	025429
5	TUBE-FEED	030797
6	PANEL-REAR	058492

ITEM	DESCRIPTION	PART NO.
7	PANEL A.-SIDE-RIGHT	X58490
8	GASKET-BASE PAN	055815
9	TRAY-DRIP 16-7/8L X 4-5/16	020157-SP
10	SHIELD-SPLASH	022765
11	PANEL-LOWER FRONT	058493
12	PANEL A.-FRONT *161*	X58488

Beater Door Assembly

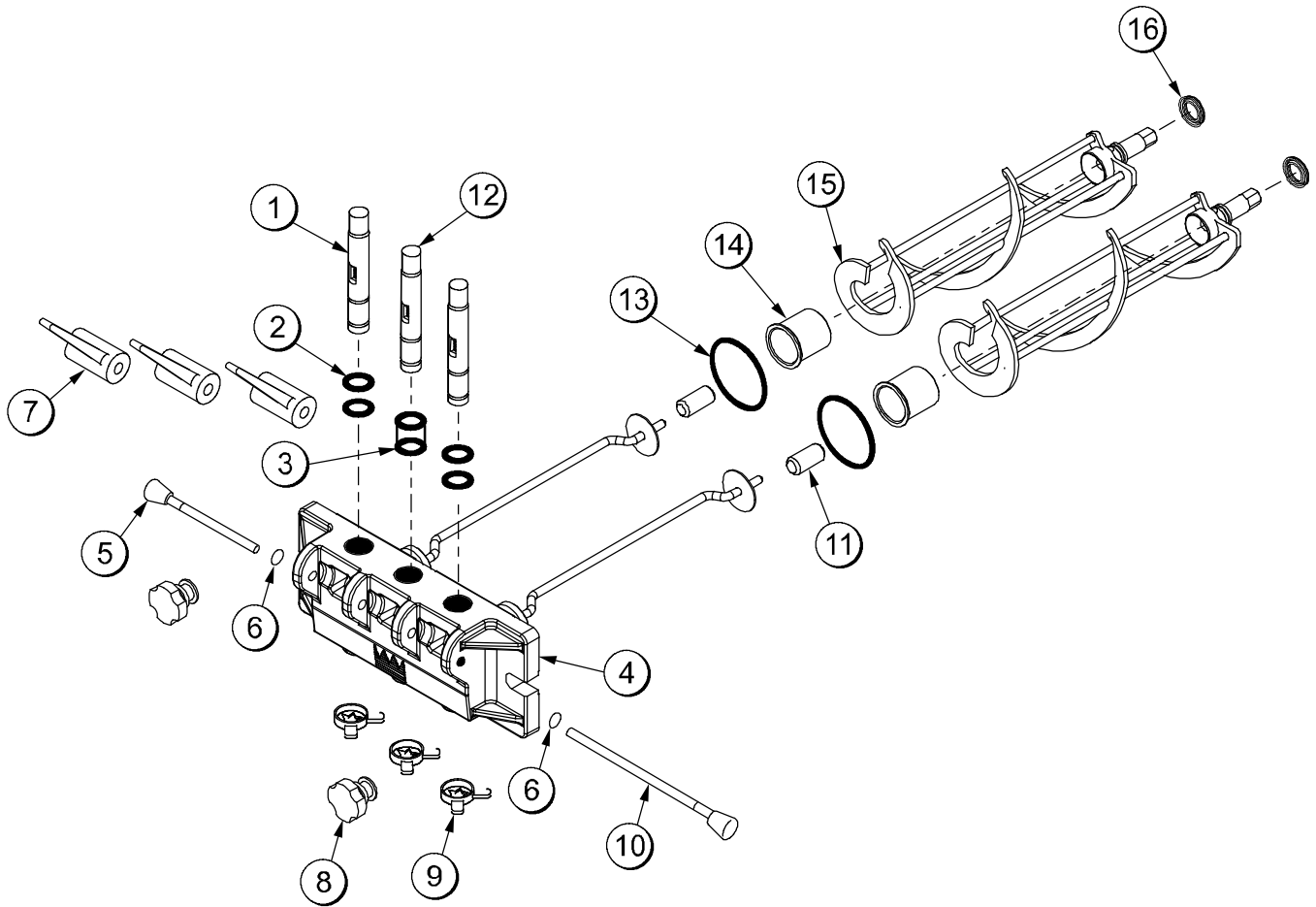


Figure 2

ITEM	DESCRIPTION	PART NO.
1	DRAW VALVE	024763
2	O-RING 7/8 OD X .103 W	014402
3	SEAL-VALVE	030930
4	KIT A.-DOOR 3 SPT 1.5 QT	X56906SER1
5	PIVOT PIN A.-SHORT	X38539
6	O-RING 5/16 OD X .070 W	016272
7	DRAW VALVE HANDLE	030564
8	NUT-STUD	056802

ITEM	DESCRIPTION	PART NO.
9	DESIGN CAP	014218
10	PIVOT PIN A.-LONG	X38538
11	GUIDE BEARING	014496
12	CENTER DRAW VALVE	031164
13	O-RING 2-3/4 OD X .139 W	019998
14	FRONT BEARING	023262
15	BEATER ASSEMBLY	X24689
16	SEAL-U-CUP	080534

Accessories



Figure 3

ITEM	DESCRIPTION	PART NO.
1	PAIL-6-QT.	023348
2	BRUSH-REAR BRG 1" D X 2" LG	013071
3	BRUSH-DOUBLE-ENDED	013072
4	BRUSH-DRAW-VALVE-1" OD X 2" X 17"	013073

ITEM	DESCRIPTION	PART NO.
5	BRUSH-MIX-PUMP-BODY-3"X7" WHITE	023316
6	LUBRICANT-TAYLOR-4-OZ.	047518
7	KIT-A.-TUNE-UP	X31167
*	SANITIZER KAY-5 25 PKTS	SEE NOTE

***Not Shown - Note:** A sample container of sanitizer is sent with the unit. For reorders, order Kay-5 part no. 041082 (200 packs) or Stera Sheen part no. 055492 (100 2 oz. packs).

Section 5

Important: To the Operator

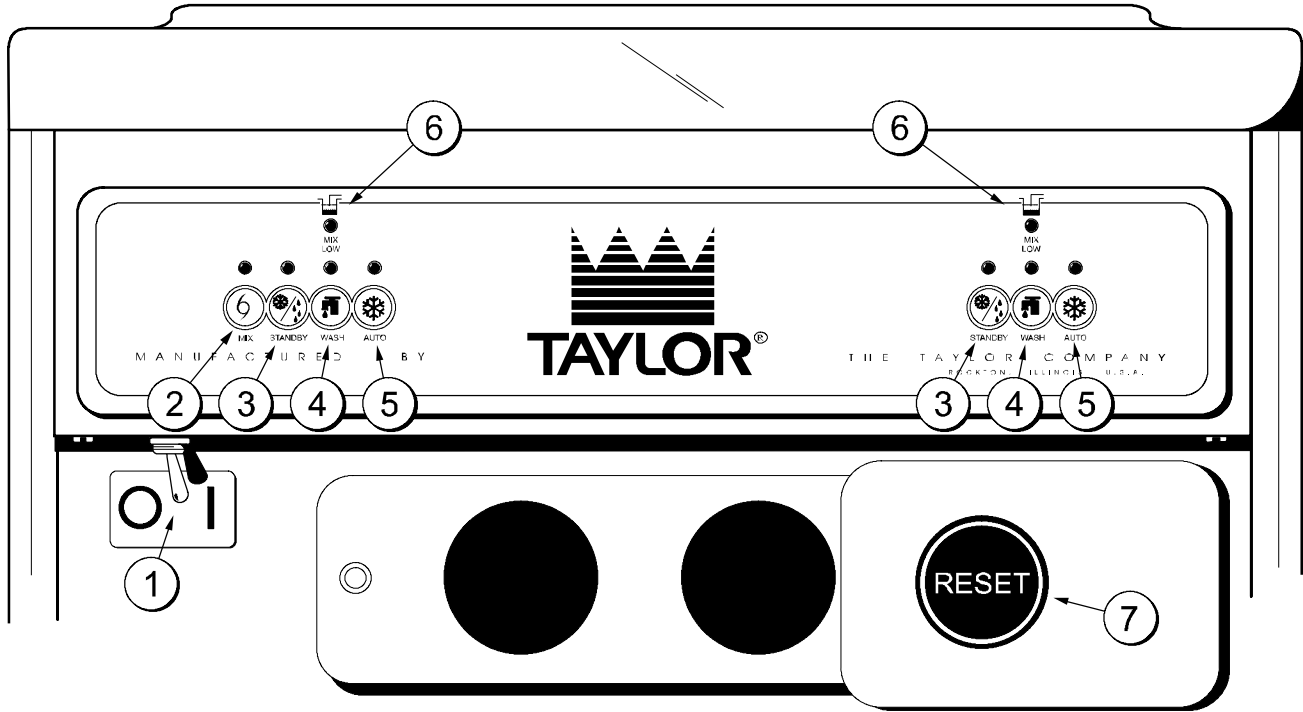


Figure 4

ITEM	DESCRIPTION
1	POWER SWITCH
2	MIX REFRIGERATION KEY
3	STANDBY KEY
4	WASH KEY
5	AUTO KEY
6	INDICATOR LIGHT "MIX LOW"
7	RESET BUTTON

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

-  = OFF
-  = ON
-  = MIX
-  = STANDBY
-  = WASH
-  = AUTO
-  = MIX LOW

Symbol Definitions

To better communicate in the International arena, the words on many of our operator switches and keys have symbols to indicate their functions. Your Taylor equipment is designed with these International symbols.

Power Switch

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

MIX REF

When the MIX REF key is pressed, the light comes on indicating the mix hopper refrigeration system is operating. MIX REF is controlled by the left side of the freezer as viewed from the operator end. The MIX REF function cannot be cancelled unless the AUTO or STANDBY modes are cancelled first.

STANDBY Key

The Separate Hopper Refrigeration System (SHR) and the Cylinder Temperature Retention System (CTR) are standard features on Softech™ machines. The SHR incorporates the use of a separate small refrigeration system. This maintains the mix in the hopper below 40° (4.4°C) to assure bacteria control. The CTR works with the SHR to maintain a good quality product. During long “No Sale” periods, it is necessary to warm the product in the freezing cylinder to approximately 35°F to 40°F (1.7°C to 4.4°C) to prevent over-beating and product breakdown.

To activate the SHR and CTR, press the STANDBY key. Place the end of the feed tube without the hole into the mix inlet hole.

When the STANDBY key is pressed, the light comes on, indicating the CTR (Cylinder Temperature Retention System) has been activated. In the STANDBY mode, the WASH and AUTO functions are automatically cancelled. The MIX REF function is automatically locked in to maintain the mix in the hopper.

To resume normal operation, press the AUTO key. When the unit cycles off, the product in the freezing cylinder will be at serving viscosity. At this time, place the orifice end of the feed tube into the mix inlet hole. Install the air orifice.

WASH Key

When the WASH key is pressed, the light comes on. This indicates beater motor operation. The STANDBY or AUTO modes must be cancelled first to activate the WASH mode.

AUTO Key

When the AUTO key is pressed, the light comes on. This indicates that the main refrigeration system has been activated. In the AUTO mode, the WASH or STANDBY functions are automatically cancelled. The MIX REF function is automatically locked in to maintain the temperature of the mix in the mix hopper.

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

Indicator Light - MIX LOW

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

Reset Button

The reset button is located on the front of the unit. The reset protects the beater motor from an overload condition. If an overload occurs, the reset mechanism will trip. To properly reset the freezer, press the AUTO key to cancel the cycle. Turn the power switch to the OFF position. Press the reset button firmly.



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

Turn the power switch to the ON position. Press the WASH key and observe the freezer’s performance. Open the side access panel. Make sure the beater motor is turning the drive shaft in a clockwise direction (from the operator end) without binding.

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

Feed Tube

The feed tube serves two purposes. One end of the tube has an orifice (hole) and the other end does not.

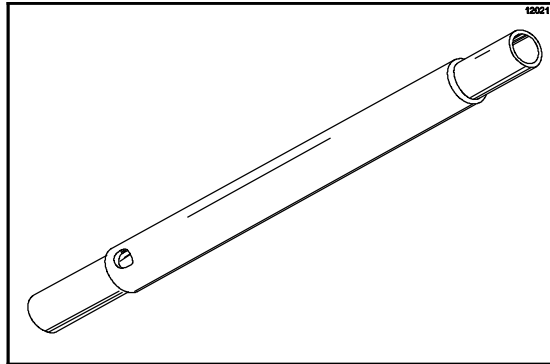


Figure 5

1. After priming the machine, place the orifice end of the feed tube into the mix inlet hole. Every time the draw handle is raised, new mix and air from the hopper will flow down into the freezing cylinder. This will keep the freezing cylinder properly loaded and will maintain overrun.
2. During long “No Sale” periods, remove the feed tube. Place the end of the feed tube without the orifice into the mix inlet hole. This will prevent any mix from entering the freezing cylinder.

The feed tube maintains overrun and allows enough mix to enter the freezing cylinder after a draw.

Section 6

Operating Procedures

The Model 161 is a soft serve counter model with a three spout door. Two individual flavors are available from the end spouts, and an equal combination of both is dispensed through the center spout to create a twist effect. It has a 1.5 quart (1.4 liter) capacity freezing cylinder. The mix flows by gravity from the hopper to the freezing cylinder through a feed tube.

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

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

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

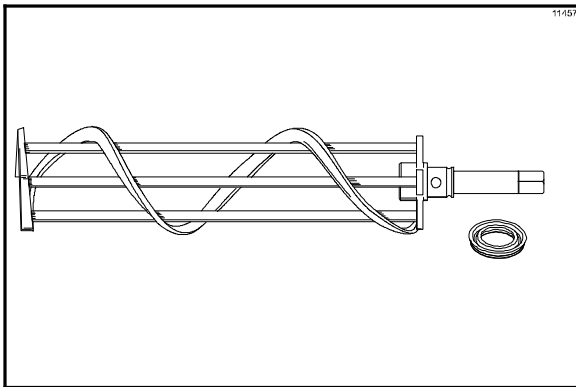


Figure 6

If you are disassembling the machine for the first time or need information to get to the starting point in our instructions, turn to page 19, "Disassembly", and start there.

Assembly

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

Step 1

Lubricate the groove on the beater drive shaft. With the opening of the cup seal facing away from the hex end, slide the seal into the groove. Apply an even coat of lubricant to the seal and the shaft. **Do not lubricate the hex end of the beater drive shaft.**

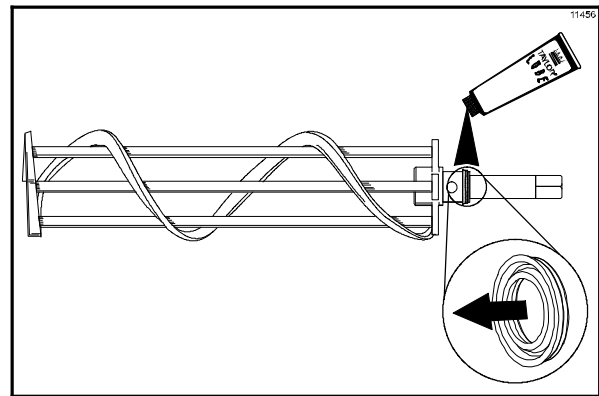


Figure 7

Step 2

Insert the beater assembly through the rear shell bearing at the back of the freezing cylinder and engage the hex end firmly into the female socket. When properly seated, the beater will not protrude beyond the front of the freezing cylinder.

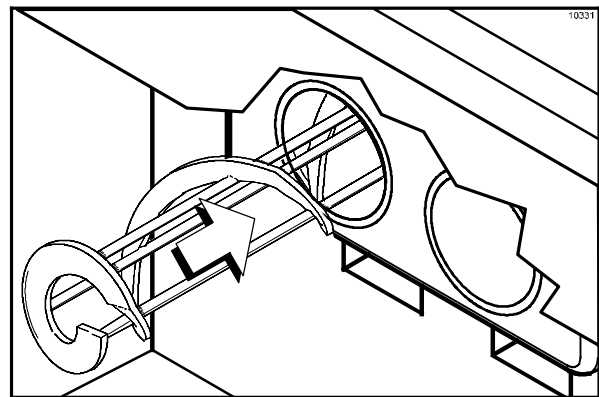


Figure 8

Repeat Steps 1 through 2 for the other side of the machine.

Step 3

Place the large o-rings into the grooves on the back of the machine door and lubricate.

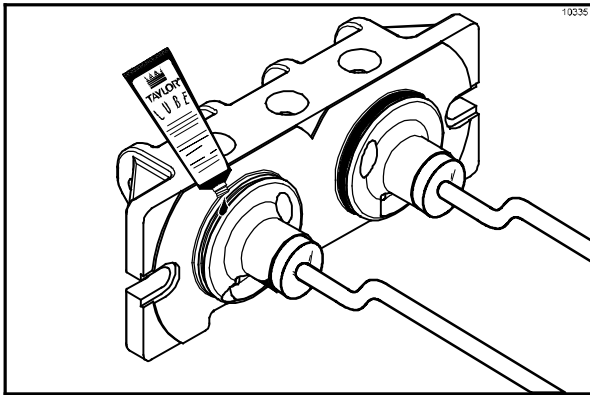


Figure 9

Step 4

Slide the front bearings over the baffle rods so the flanged edge is against the door. Place the white plastic guide bearings on the end of the baffle rods. **DO NOT** lubricate the front bearings or the guide bearings.

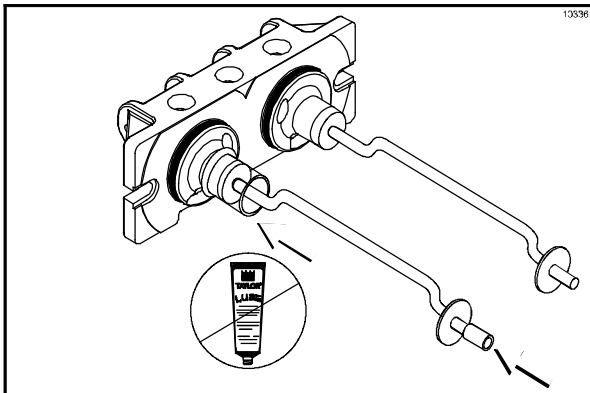


Figure 10

Step 5

Slide the slotted portion of the handscrews into the slots in the freezer door.

Step 6

With both hands, hold the sides of the freezer door and insert the baffle rods into the center of the beater assemblies. The white guide bearings must fit securely in the holes of the drive shafts.

Step 7

Finger-tighten the handscrews, making sure they are tightened equally and that the door is snug. Do not over-tighten the handscrews.

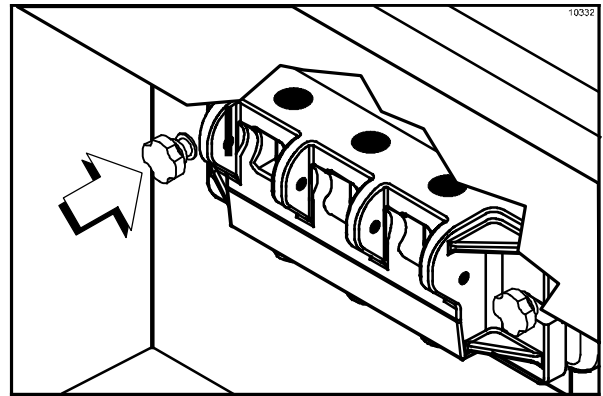


Figure 11

IMPORTANT! Handscrew and door damage can result if the handscrews are over-tightened or if one handscrew is tightened more than the other.

Step 8

Install the valve seal into the grooves on the center draw valve and lubricate. This special seal will prevent the mix in one freezing cylinder from traveling into the second cylinder.

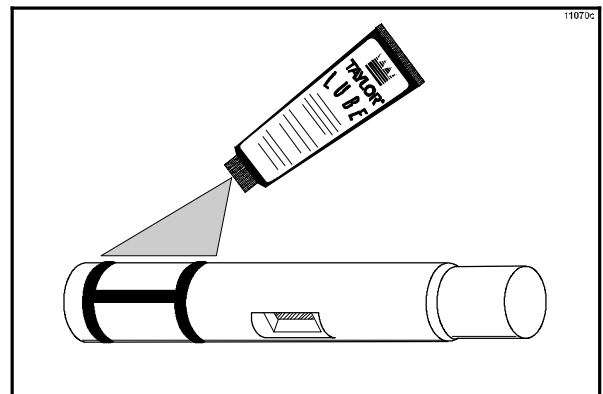


Figure 12

Step 9

Slide the two o-rings into the grooves on the remaining draw valves and lubricate.

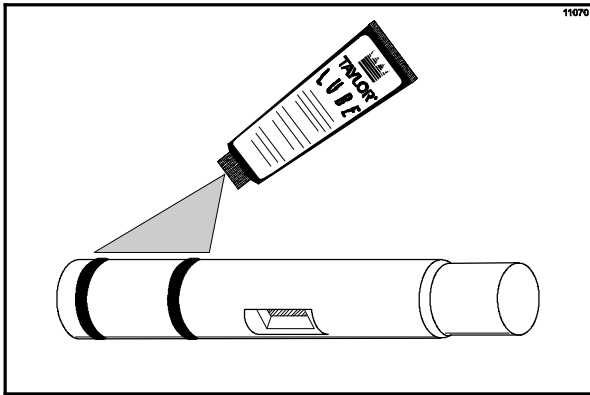


Figure 13

Step 10

Lubricate the inside of the freezer door spouts from the **bottom**. Insert the draw valves into the freezer door from the **bottom** until the slot in the draw valves comes into view.

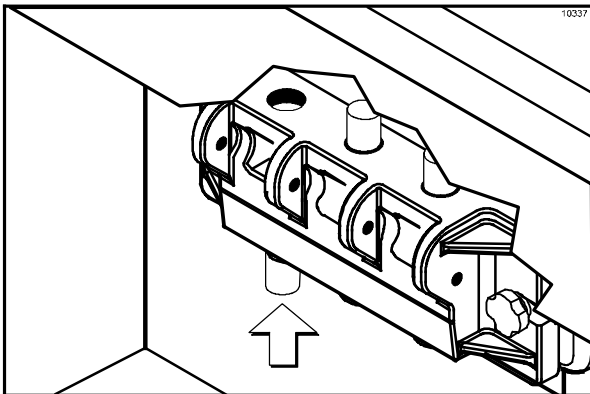


Figure 14

Step 11

Slide the o-ring onto each pivot pin and lubricate.

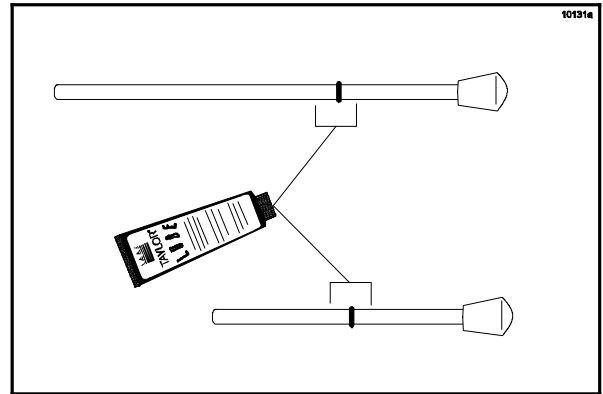


Figure 15

Step 12

Slide the tip of the draw handle into the slot of the draw valve, starting from the right. Slide the short pivot pin through the far right draw handle. Slide the long pivot pin through the far left and middle draw handles.

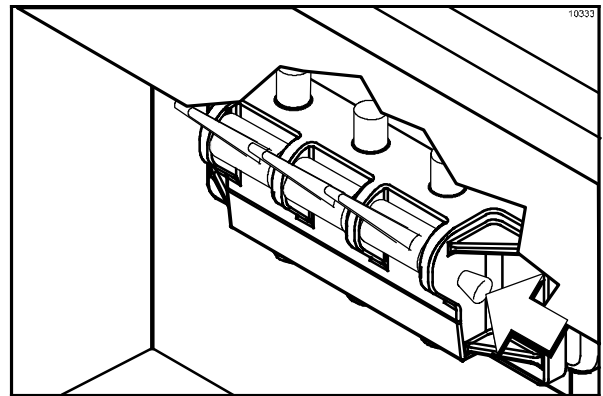


Figure 16

Step 13

Snap the design caps over the bottom of the freezer door spouts.

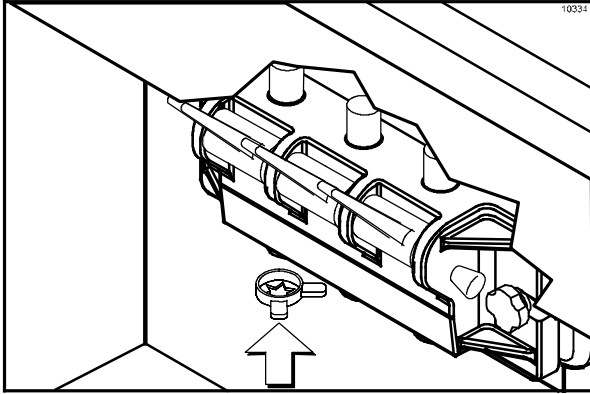


Figure 17

Step 14

Lay the feed tubes in the bottom of the mix hoppers.

Step 15

Install the front drip tray and splash shield under the freezer door.

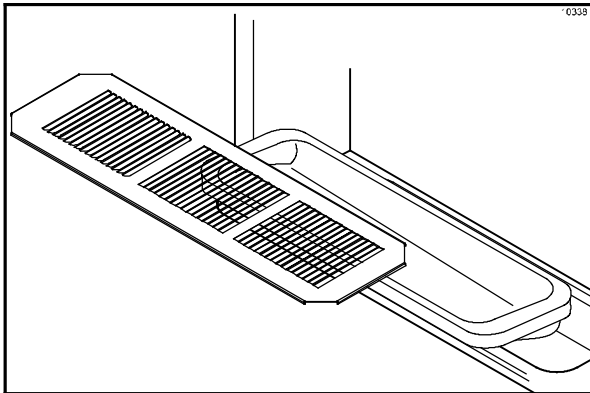


Figure 18

Step 16

Install the drip pans.

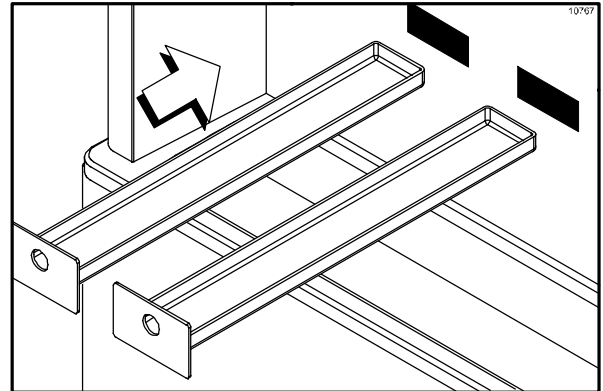


Figure 19

Sanitizing

Step 1

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

Step 2

Pour **one gallon** (3.8 liters) of sanitizing solution into the hopper and allow it to flow into the freezing cylinder.

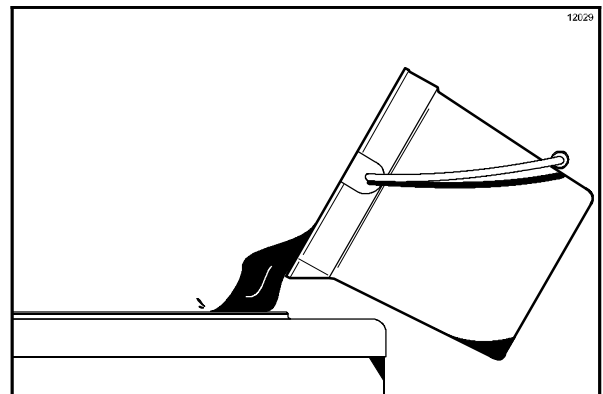


Figure 20

Step 3

While the solution is flowing into the freezing cylinder, brush clean the mix hopper, the mix inlet hole, and the feed tube.

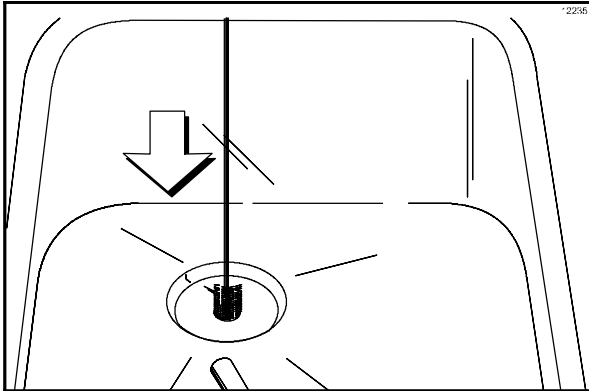


Figure 21

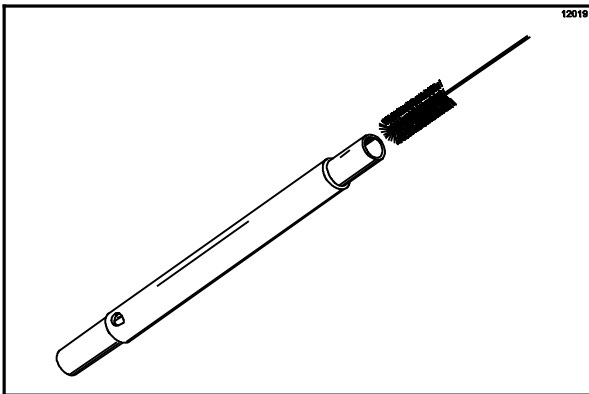


Figure 22

Step 4

Place the power switch in the ON position.

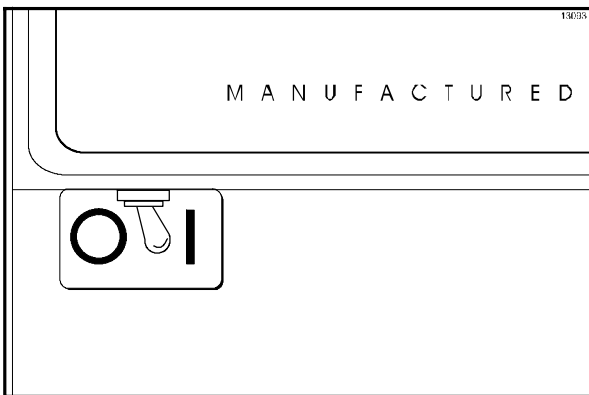


Figure 23

Step 5

Press the WASH key. This will cause the sanitizing

solution in the freezing cylinder to be agitated. Allow it to agitate for five minutes.

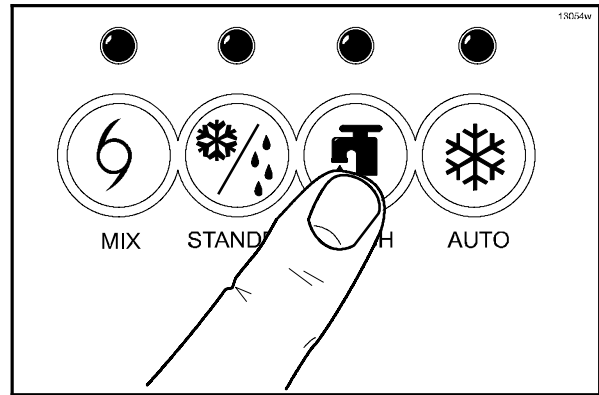


Figure 24

Step 6

Place an empty pail beneath the door spouts. Momentarily open the center draw valve to sanitize the center door spout. Open the remaining draw valves to remove all of the sanitizing solution. When the sanitizer stops flowing from the door spouts, close the draw valves. Press the WASH key to cancel the WASH mode.

Step 7

With sanitized hands, stand the feed tube in the corner of the mix hopper.

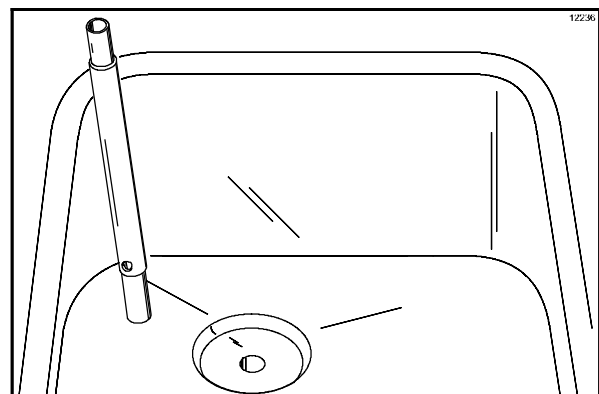


Figure 25

Repeat Steps 1 through 7 for the other side of the machine.

Priming

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

Step 1

With a pail beneath the door spouts, open the draw valves. Fill the mix hopper with FRESH mix and allow it to flow into the freezing cylinder. This will force out any remaining sanitizing solution. When full strength mix is flowing from the door spouts, close the draw valves.

Note: Use only fresh mix when priming the machine.

Step 2

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

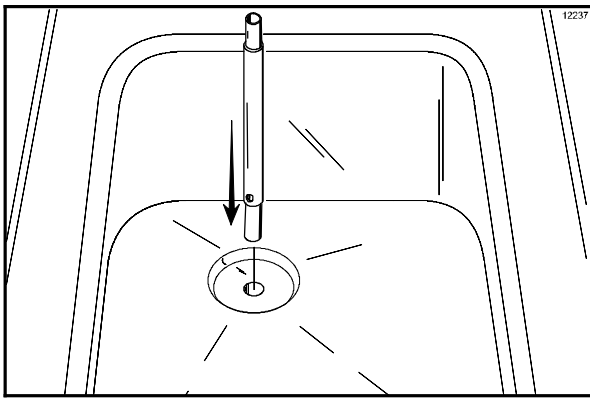


Figure 26

Step 3

Press the AUTO key. When the unit cycles off, the product will be ready to serve.

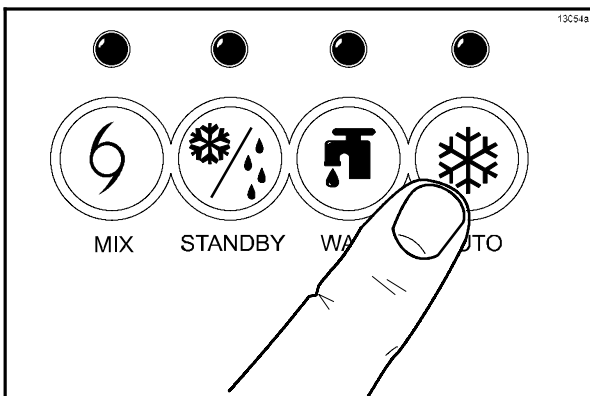


Figure 27

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

Step 4

Place the mix hopper gasket and the mix hopper cover in position.

Closing Procedure

To disassemble the Model 161, the following items will be needed:

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

Draining Product From the Freezing Cylinder

Step 1

Press the AUTO key to cancel operation. Press the MIX REF key to cancel hopper refrigeration. These operations should be cancelled as far ahead of cleaning time as possible. This will allow frozen product to soften for easier cleaning.

Step 2

Remove the mix hopper cover, the mix hopper gasket, and the feed tube. Take them 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 spouts. Press the WASH key and open the draw valves. When all the product stops flowing from the door spouts, close the draw valves and press the WASH key to cancel the WASH mode. Place the sanitized lid on the rerun container and place it in the walk-in cooler.

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



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

Rinsing

Step 1

Pour one gallon (3.8 liters) of **cool**, clean water into the mix hopper. With the brushes provided, scrub the mix hopper, and the mix inlet hole.

Step 2

With a pail beneath the door spouts, press the WASH key and open the draw valves.

Step 3

Drain all the rinse water from the freezing cylinder. When the rinse water stops flowing from the door spout, close the draw valves and press the WASH key to cancel.

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

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

Cleaning

Step 1

Prepare 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 **one gallon (3.8 liters)** of cleaning solution into the mix 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 and the mix inlet hole.

Step 4

Press the WASH key. This will cause the cleaning solution in the freezing cylinder to agitate.

Step 5

Place an empty pail beneath the door spouts and raise the draw valve. Draw off all the cleaning solution. When the solution stops flowing from the door spouts, close the draw valves. Press the WASH key to cancel.

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

Disassembly



MAKE SURE THE POWER SWITCH IS IN THE "OFF" POSITION. Failure to follow this instruction may result in severe personal injury to fingers or hands from hazardous moving parts.

Step 1

Remove the handscrews and the freezer door. Remove the beater assemblies from the freezing cylinders and take these parts to the sink for cleaning.

Step 2

Remove the front drip tray, the splash shield, and the drip pans from the machine. Take them to the sink for cleaning.

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.**

IMPORTANT: Follow label directions, as too **STRONG** of a solution can cause parts damage, while too **MILD** of a solution will not provide adequate cleaning.) Make sure all brushes provided with the machine are available for brush cleaning.

Step 2

Remove the cup seals from the drive shafts of the beater assemblies.

Step 3

From the freezer door, remove design caps, pivot pins, draw handles, and draw valves. Remove all o-rings.

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

Step 4

Remove the large o-rings, front bearings, and guide bearings from the back of the freezer door.

Step 5

Return to the machine with a small amount of cleaning solution. With the black bristle brush, brush clean the rear shell bearings at the back of the freezing cylinders.

Note: If the drip pan was filled with an excessive amount of mix, this is an indication that the drive shaft o-ring of the beater assembly should be replaced or properly lubricated.

Step 6

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

Step 7

Wipe clean all exterior surfaces of the machine.

Section 7 Important: Operator Checklist

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.

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 smaller, 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 to have 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. Mix 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).

Regular Maintenance Checks

- 1. Check the rear shell bearing for signs of wear (excessive mix leakage in rear drip pan) and be certain it is properly cleaned.
- 2. 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.
- 3. Dispose of o-rings or seals if they are worn, torn, or fit too loosely, and replace with new ones.
- 4. Follow all lubricating procedures as outlined in “Assembly”.

- 5. If your machine is air cooled, check the condenser for an accumulation of dirt and lint. A dirty condenser will reduce the efficiency and capacity of the machine. Condensers should be cleaned **monthly** with a soft brush. **Never** use screwdrivers or other metal probes to clean between the fins.
Note: For machines equipped with an air filter, it will be necessary to vacuum clean the filters on a monthly schedule.



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

- 6. If your machine is equipped with an auxiliary refrigeration system, check the auxiliary condenser for accumulation of dirt and lint. A dirty condenser will reduce the refrigeration capacity of the mix hopper. Condensers must be cleaned **monthly** with a soft brush. **Never** use screwdrivers or other metal probes to clean between the fins. Failure to comply may result in electrocution.
- 7. If your machine is water cooled, check the water lines for kinks or leaks. Kinks can occur when the machine is moved back and forth for cleaning or maintenance purposes. Deteriorated or cracked water lines should be replaced only by an authorized Taylor mechanic.

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 assembly and freezer door, and place them in a protected dry place. Rubber trim parts and gaskets can be protected by wrapping them with moisture-proof paper. All parts should be thoroughly cleaned of dried mix or lubrication accumulations which attract mice and other vermin.

Section 8

Troubleshooting Guide

PROBLEM	PROBABLE CAUSE	REMEDY	PAGE REF.
1. No product being dispensed.	a. The power switch is in the OFF position.	a. Place the power switch in the AUTO position.	17
	b. The mix level is inadequate in the mix hopper.	b. Fill the mix hopper with mix.	18
	c. The beater motor overloaded.	c. Reset the freezer.	11
	d. The unit is unplugged at the wall receptacle.	d. Plug in the power cord.	3
	e. The circuit breaker is tripped or the fuse is blown.	e. Place the circuit breaker in the "ON" position or replace the fuse.	- - -
	f. The freezer door is incorrectly assembled.	f. See "Operating Procedures" for proper installation.	14
	g. Product is being drawn off in excess of the freezer's capacity.	g. Stop drawing product and allow the unit to recover.	- - -
2. The machine will not operate in the AUTO mode.	a. The unit is unplugged.	a. Plug in the power cord.	3
	b. The refrigeration system is not activated.	b. Momentarily raise the draw switch to activate the refrigeration system.	- - -
	c. The circuit breaker is tripped, or the fuse is blown.	c. Place the circuit breaker in the ON position or replace the fuse.	- - -
	d. The beater motor overloaded, causing a loss of power to the power switch.	d. Reset the freezer.	11
3. The product is too stiff.	a. The control is set too cold.	a. Contact service technician.	- - -

PROBLEM	PROBABLE CAUSE	REMEDY	PAGE REF.
4. The product is too soft.	a. The control is set too warm.	a. Contact service technician.	- - -
	b. The air tube is not installed.	b. Install the air tube in the mix inlet hole at the bottom of the mix hopper.	18
	c. Out-drawing the freezer's capacity.	c. Two 4 oz. (113.4 gram) servings in one minute.	- - -
5. The freezing cylinder walls are scored.	a. Operating freezer without the front bearing on the freezer door.	a. Install the front bearing on the freezer door.	14
	b. The gear unit or the direct drive is out of alignment.	b. Contact service technician.	- - -
6. Excessive leakage in rear drip pan.	a. A worn or defective o-ring is on the beater drive shaft.	a. Replace o-rings every 3 months.	26
	b. The rear shell bearing is worn.	b. Contact service technician.	- - -
	c. Incorrect lubricant was used.	c. Use food grade lubricant (example: Taylor Lube).	13
	d. Inadequate lubrication of beater drive shaft.	d. Lubricate the beater drive shaft properly.	13
7. The draw valve is leaking.	a. Incorrect lubricant was used.	a. Use food grade lubricant (example: Taylor Lube).	14
	b. Worn or defective o-rings are on the draw valve.	b. Replace o-rings every 3 months.	26
	c. Inadequate lubrication of draw valve.	c. Lubricate the draw valve properly.	14
8. Product is not feeding into the freezing cylinder.	a. The mix level is inadequate in the mix hopper.	a. Fill the mix hopper with mix.	18
	b. The mix inlet hole is frozen.	b. Contact service technician.	- - -

PROBLEM	PROBABLE CAUSE	REMEDY	PAGE REF.
9. The unit goes out on overload excessively.	<ul style="list-style-type: none"> a. There are too many appliances plugged into the circuit. b. An extension cord has been placed between the power cord and the wall receptacle. 	<ul style="list-style-type: none"> a. A separate 20A circuit is needed for the freezer to operate properly. b. If the extension cord is used, it must match the power cord in size of circuit ampacity. 	<p style="text-align: center;">- - -</p> <p style="text-align: center;">- - -</p>
10. Mix from one freezing cylinder bleeds over to the second cylinder.	<ul style="list-style-type: none"> a. The center draw valve seal is worn, or is improperly lubricated. 	<ul style="list-style-type: none"> a. Lubricate properly and replace seal every 3 months. 	14 / 26

Section 9 Parts Replacement Schedule

PART DESCRIPTION	EVERY 3 MONTHS	EVERY 6 MONTHS	ANNUALLY	QTY.
Beater Drive Shaft Cup Seal	X			2
Freezer Door O-Ring	X			2
Freezer Door Front Bearing	X			2
Freezer Door Guide Bearing	X			2
Draw Valve O-Ring	X			4
Center Draw Valve Seal	X			1
Pivot Pin O-Ring	X			2
Black Bristle Brush, 1" x 2"		Inspect & Replace if Necessary	Minimum	1
Double Ended Brush		Inspect & Replace if Necessary	Minimum	1
White Bristle Brush, 1" x 2"		Inspect & Replace if Necessary	Minimum	1
White Bristle Brush, 3" x 7"		Inspect & Replace if Necessary	Minimum	1

Section 10

Parts List

DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS
ACTUATOR-SWITCH-PLASTIC	035609	2	103	DRAW SWITCH
ARM A.-SWITCH	X30736	2	103	DRAW SWITCH
BEAD-RUBBER	010613-17	1	000	
BEARING-FRONT	023262	2	000	
BEARING-GUIDE	014496	2	000	
BEATER A.	X24689	2	103	
BELT-AX24	055201	1	000	
BELT-AX45	045311	1	000	
BLOCK-TERMINAL 3P .25 SPADE	057201	1	103	
BOARD-LOGIC-GEN 2.10-W/SEL	X36641SER2	2	212	
BOARD-POWER-GEN 1 & 2	X32326-SER	2	212	
BOLT-CARRIAGE 1/4-20X3/4	012347	2	000	
BRUSH-DBL END-PUMP & FEED	013072	1	000	
BRUSH-DRAW VALVE 1"OD X 2	013073	1	000	
BRUSH-MIX PUMP BODY-3"	023316	1	000	
BRUSH-REAR BRG 1"D X 2"LG	013071	1	000	
BUSHING-SNAP 1 ID X 1-1/4OD	600288	1	000	
BUSHING-SNAP 11/16 ID X 7/8	010548	5	103	CONTROL BOX
BUSHING-SNAP 1-5/16ID X 1	017008	2	103	
BUSHING-SPLIT 43/64ID X 7/8	027691	2	103	CONTROL BOX
BUTTON-RESET-RED PLASTIC	055249	2	103	
CABLE-RIBBON-PWR/RELAY-60 IN	032445	2	103	
CAP-DESIGN 1.010"ID-6 POINT	014218	3	000	
CAPACITOR-START 72-88UF/330V	059757	2	103	
CAPACITOR-RUN 10UF/370V	059998	2	103	
CARD-CHECKOUT WARRANTY	033941-W5	1	000	
COMPRESSOR L63B562BBCB	048727-27E	1	512	
+CAPACITOR-START 161-193UF	031790	1	103	
+CAPACITOR-RUN 30UF/370V	038487	1	103	
+RELAY-START-COMPRESSOR	047067	1	103	

+ Available Separately

DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS
+GROMMET-COMPRESSOR MT.	037428	4	000	
+SLEEVE-MOUNTING-COMP.	039924	4	000	
+SCREW-5/16-18X1-1/2 HEX COMPRESSOR PL35G	001894	4	000	
	055187-27	1	512	
+CAPACITOR-START 60UF-220	047703	1	000	
+RELAY-START-COMPRESSOR	055358	1	000	
+KIT-MOUNTING-COMPRESSOR	047704	1	000	
CONDENSER-AC 7X6X1.25-2 ROW	027155	1	103	DANFOSS
+DRYER-CAP. TUBE .021 ID X 9F	055522	1	000	DANFOSS
+SCREW-1/4-20X1 HEX HEAD	017254	4	000	
CONDENSER-AC 12LX16HX2.5T	048935	1	103	
CONDENSER-AC 7X6X1.25-2 ROW	027155	1	103	
CONTACTOR 230VAC 1PH 50/60HZ	055248-27	3	103	
CORD-POWER-250V-15A-120"L	068754-27	1	103	S/N M0093177 & UP
COUPLING-3/8FS X 1/4FS	031791	4	103	
COVER A.-HOPPER	X37963-SER	1	103	
DECAL-DEC-TAYLOR 161 GEN	055511	1	000	
DECAL-INST-CLN HPR	019029	1	000	
DECAL-TROUBLESHOOT	038374	1	000	
DIAGRAM-WIRING *161*	063820-27S	1	000	
DOOR A.-3SPT 1.5QT W/BAFFLE	X56906SER1	1	103	
+CAP-DESIGN 1.010"ID-6 POINT	014218	3	000	
+O-RING-2-3/4 OD X .139W	019998	2	000	
+HANDLE-DRAW VALVE	030564	3	103	
+PIN A.-PIVOT *168-LONG*	X38538	1	103	
+O-RING-5/16 OD X .070W	016272	1	000	
+PIN A.-PIVOT *168-SHORT*	X38539	1	103	
+O-RING-5/16 OD X .070W	016272	1	000	
+VALVE-DRAW *150-2*	024763	2	103	
+O-RING-7/8 OD X .103W	014402	4	000	
+VALVE-DRAW-CENTER	031164	1	103	

+ Available Separately

DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS
+SEAL-DRAW VALVE *SMALL H-RING	030930	1	000	
DRYER-CAP. TUBE .021 ID X 9F	055522	1	000	DANFOSS
DRYER-FILTER 1/4 X 1/4 SOLDER	048878	1	000	LINE -LIQUID
DVD-OPS TRAIN VIDEO *161	066821-DVD	1	000	
EXCHANGER A.-HEAT *161*AC	X64357	1	103	
FAN-3 BLADE 12 " PULL 24D	063397	1	103	
FASTENER-CLIP 1/4-20 U-TYPE	045865	8	103	
FILTER-AIR 13.5X17.75X7/1	042703	1	000	
GASKET-BASE PAN *161*	055815	1	000	
+SCREW-10X7/16 UNSL TD HWH	066234	12	000	GASKET-BASE PAN
GASKET-HOPPER COVER-8QT	037042	1	000	
GEAR A.*REDUCER 4 TO 1 SERVICE	025770-SER	2	212	
+SCREW-1/4-20X3 HEX HEAD	025984	4	000	
+SCREW-1/4-20X3-1/4 HEX HEAD	025985	4	000	
HARNES-WIRE-CONTROL *161*	055838-27	1	103	
HARNES-WIRE-MAIN *161*	063573-27	1	103	
GUARD-FAN	028534-1	1	103	DANFOSS
HARNES-WIRE-CAP/RELAY *161*	063975-27	1	103	
HARNES-WIRE-DANFOSS *161*	063563	1	103	
KIT A.-MOTOR-FAN	X62253-27	1	103	
+FAN-3 BLADE 12 " PULL 24	063397	1	103	
KIT A.-TUNE UP	X31167	1	000	
BEARING-FRONT	023262	2	000	
BEARING-GUIDE	014496	2	000	
CAP-DESIGN 1.010"ID-6 POINT	014218	3	000	
SEAL-J-CUP	080534	2	000	
O-RING-2-3/4 OD X .139W	019998	2	000	
O-RING-5/16 OD X .070W	016272	2	000	
O-RING-7/8 OD X .103W	014402	4	000	
SEAL-DRAW VALVE *SMALL H-RING	030930	1	000	
TOOL-O-RING REMOVAL	048260VWHT	1	000	

+ Available Separately

DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS
LABEL-CAUTION-GRD-PERM	032164	1	000	
LABEL-DOOR-MOVE PART	032749	1	000	
LABEL-SW-POWER-OFF/ON	052632	1	000	
LABEL-WARN-CONDENSER	059287	2	000	
LABEL-WARN-COVER	051433	5	000	
LABEL-WARN-ELEC-TW-SMALL	032718	1	000	
LUBRICANT-TAYLOR 4 OZ.	047518	1	000	
MAN-OPER 161	055155-M	1	000	
MOTOR-1/2 HP REMOTE CAPS	055097-27G	2	212	
+SCREW-5/16-18X5/8 SERR.	017326	8	000	BEATER MOTOR
MOTOR-FAN 50 WATT W/GROUND	029770-27	1	103	
MOTOR-FAN 95.3 CFM 2700 RPM	062253-27	N/A		SEE - KIT A.-MOTOR-FAN
NUT-5/16-18 WHIZ FLANGE	017327	4	000	
NUTSERT-10-32/.020-.130 G	047597	6	000	
NUT-STUD	056802	2	000	
OVERLOAD-THERMAL-2P-2.4/3.6A	055249-27G	2	103	
PAIL-6 QT.	023348	1	000	
PAN-DRIP *161*	055206	2	103	
PANEL A.-FRONT *161*	X58488	1	103	
+SCREW-10-32X1/2 SERRATED	020982	4	000	PANEL-FRONT
PANEL A.-SIDE RIGHT *161*	X58490	1	103	
+SCREW-10-32X3/8 SLTD TRUSS	024298	2	000	PANEL-SIDE
PANEL-LOWER-FRONT *161*	058493	1	103	
PANEL-REAR *161*AC	058492	1	103	
PANEL-SIDE-LEFT *161*	058491	1	103	
+SCREW-1/4-20X3/8 SLTD ROUND	011694	8	000	PANELS
PLATE-DEC *161* GENII	055512	1	103	
+SCREW-6-32X3/8 SLTD BINDER	002201	2	000	DEC PLATE
+SCREW-10-24X1/2 TORX TRUSS	002077	6	000	DEC PLATE
PROBE-THERMISTOR-BARREL	038061-BLK	1	103	
PROBE A.-THERMISTOR	X31602	2	103	

+ Available Separately

DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS
PULLEY-5.7" PITCH DIA X 5	041498	2	103	
PULLEY-AK20X5/8	041162	2	103	
SANITIZER-STERA SHEEN -GREEN	055492	1	000	
SEAL-U-CUP	080534	2	000	
SHELL A.-INSULATED *161*	X68407-SER	1	512	S/N M1084472 AND UP
STUD-NOSE CONE-5/16-18X5/16-18	013496	2	103	
+NUT-STUD	056802	2	103	
SHELL A.-INSULATED *161*	X58457-SER	1	512	S/N M1084471 AND PRIOR
+ NUT-STUD	056802	2	103	
+ STUD-NOSE CONE-5/16-18X5/16-18	013496	2	103	
+STUD-NOSE CONE	NPN	2		M0023521-M0023537 SEE C HARPER
SHIELD-SPLASH *5454-8-752	022765	1	103	
SHROUD-CONDENSER *161*	064356	1	103	
SHROUD DANFOSS	048818	1	103	
SPRING-COMP. 720X.063X2.00	023664	2	103	DRAW SWITCH
SWITCH A.-DRAW *161*	X55234-SER	2	103	
BEARING-SWITCH	029244	2	000	
BRACKET-SWITCH *168*	035524	1	103	
INSULATOR-SWITCH 1/64	029099	1	000	
NUT-PUSH ON-1/2DIA. SHAFT	039735	2	000	
SCREW-4-40X5/8 SLTD ROUND	027219	2	000	
SWITCH-LEVER-SPDT-15A-125	027214	1	103	
+ACTUATOR-SWITCH-PLASTIC	035609	2	103	DRAW SWITCH
+ARM A.-SWITCH	X30736	2	103	DRAW SWITCH
+SPRING-COMP. 720X.063X2.00	023664	2	103	DRAW SWITCH
+E-RING-1/4 IN	034962	2	000	
SWITCH-PRESSURE 405 PSI	052663	1	103	LINE DISCHARGE
SWITCH-TOGGLE-4PDT*ON-NONE-ON	037394	1	103	SWITCH A.-POWER
TEE-1/4S-COPPER	003949	1	000	
TERMINAL-FEM.SP.22-18 .25	015850-L	13	103	
TERMINAL-FEM.SP.INS.16-14	023959-L	3	000	

+ Available Separately

DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS
TERMINAL-LOW VOLTAGE GROUND	034455	2	000	
TRAY-DRIP 16-7/8L	020157-SP	1	103	
TUBE-FEED-.166 HOLE-SS	030797	2	103	
VALVE-ACCESS 1/4FL X 1/4	044404	1	103	LINE SUCTION DANFOSS
VALVE-ACCESS-1/4MFL X 3/8ODS	053565	2	103	LINE ACCESS DISCHG/LOW
VALVE-ACCESS-1/4 MFLX1/4	047016	1	103	
VALVE-EPR 1/4S	022665	1	103	LINE SUCTION DANFOSS
VALVE-EXP-AUTO-1/4S X1/4	046365	2	103	
+BOOT-VALVE-EXPANSION	050900	2	000	
VALVE-SOL-1/4 ORFX3/8IN	062019-27	2	103	LINE SUCTION SOLENOID
VALVE-SOLENOID 7/64ORF X 1/4	043449-27	2	103	LINE LIQUID SOLENOID
WASHER-3/8 USS FLAT CR3	000653	8	000	
WASHER-5/16 SAE FLAT CR3	017660	8	000	
WASHER-5/16 USS FLAT CR3	000651	4	000	
WATER COOLED				
ADAPTOR-3/8MP X 1/2 BARB	011021	2	103	
BRACKET A.-FITTING *161*W	X63791	1	103	
BRACKET-VALVE-W/C	058440	1	103	
CLAMP-HOSE 3/4 ID CONST	067113	6	000	
CONDENSER-WC-SPIRAL 11-1/2	049309	1	103	
ELBOW-3/8MP X 1/2 BARB-BR	018641	2	103	
HOSE-RUBBER 1/2 ID X 7/8 OD	R50200	5'	000	
NUT-1/4-20 WHIZ FLANGE	017523	4	000	
PANEL-REAR *161*WC*	063837	1	103	
PANEL-SIDE *161*R*WC*	063838	1	103	
SWITCH-PRESSURE 350 PSI	048231	1	103	
VALVE-WATER 3/8 REG/HEAD	046686	1	103	

+ Available Separately

DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS
50HZ (STANDARD-ROHS)		-40		220-240V 50HZ 1PH
BLOCK-TERMINAL 7P GREEN	024156	1	103	220-240V 50HZ 1PH
CORD-1.5MM-3 HAR7 16GA 60	051656-95	1	103	220-240V 50HZ 1PH - STANDARD
CORD-POWER HARMONIZED	066395-95	1	103	220-240V 50HZ 1PH - ROHS
INDICATOR-DIGITAL TEMP	051356	2		DIGITAL THERMOMETER
DIAGRAM-WIRING *161*	063820-40S	1	000	220-240V 50HZ 1PH
DVD-OPS TRAIN VIDEO*TAYLOR	037665-DVD	1	000	220-240V 50HZ 1PH - STANDARD
DVD-OPS TRAIN VIDEO *0161	066821-DVD	1	000	220-240V 50HZ 1PH - ROHS
COMPRESSOR L63B562BBKB	048727-40E	1	512	220-240V 50HZ 1PH
+CAPACITOR-RUN 15UF/370V	027087	1	103	220-240V 50HZ 1PH
+CAPACITOR-START-88-108UF	059759	1	103	220-240V 50HZ 1PH
+RELAY-START-COMPRESSOR	048766	1	103	220-240V 50HZ 1PH
HARNESS-WIRE-MAIN	063573-40	1	103	220-240V 50HZ 1PH
HARNESS-WIRE-CAPIRELAY	063975-40	1	103	220-240V 50HZ 1PH
MOTOR-1/2 HP REMOTE CAPS	055097-40G	2	212	220-240V 50HZ 1PH
OPTIONAL				
BOARD-LOGIC-GEN 2.11-W/CHIME	X38523SER2	2	212	AUDIBLE MIX LOW
INDICATOR-DIGITAL TEMP	051356	2	103	
KIT A.-CONE DISPENSER-4 TUBE	X41141	1	103	
KIT A.-LEG/AIR SKIRT *161	X64119	1	103	
KIT A.-HOPPER LOCK TWIN *	X66359	1	103	
LEG-4" 3/8-16 STUJ	036397	4	103	
PANEL-LOWER-FRONT *161*	058493-SP2	2	103	
+SCREW-8-32X3/8 UNSLTD HEX	041951	4	000	
PANEL-SKIRT-AIR *161*	055508	1	103	
TUBE-FEED-219 HOLE-SS	030797-4	2	103	SPECIAL MIX FEED TUBES

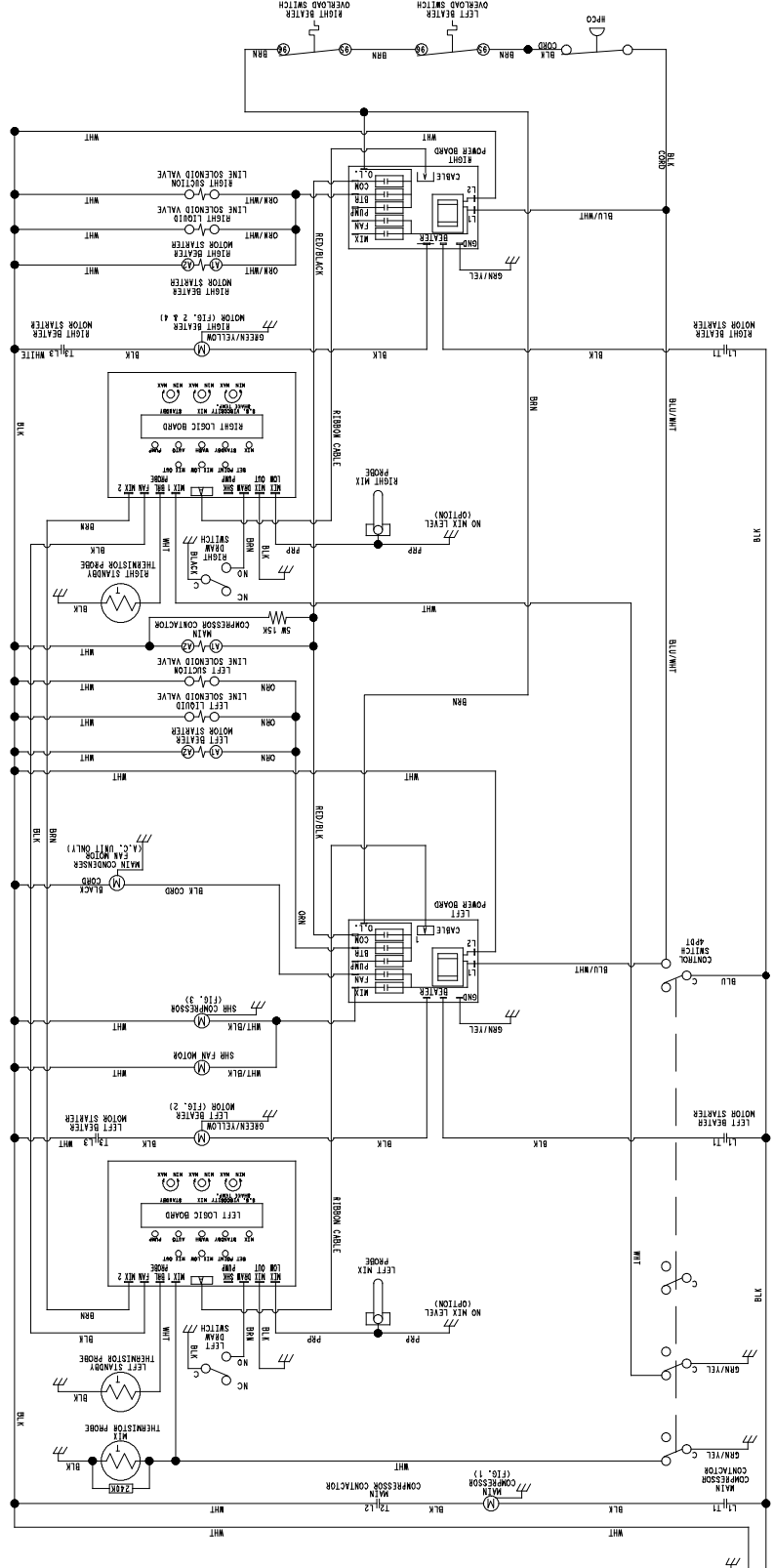
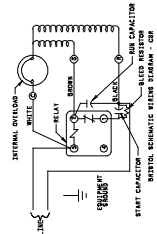
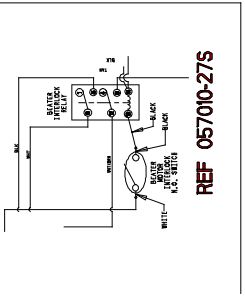
+ Available Separately

DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS
MARINE USE				
BLOCK-TERMINAL 7P GREEN	024156	1	105	
DIAGRAM-WIRING *161*	063820-40S	1	000	
HARNESS-WIRE-CAP/RELAY	063975-40	1	105	
HARNESS-WIRE-MAIN *161*	063573-40	1	105	
PANEL A.-FRONT *161*	X58488-SPN	1	103	
PANEL A.-SIDE RIGHT *161*	X58490-SPN	1	103	
PANEL-LOWER-FRONT *161*	058493-SPN	1	103	
PANEL-REAR *161*AC	058492-SPN	1	103	
PANEL-SIDE-LEFT *161*	058491-SPN	1	103	
PLATE-DEC *161* GEN2	055512-SPN	1	103	
SHIELD-SPLASH	022765-SPN	1	103	
MODEL 161 CHINA				
BLOCK-TERMINAL 7P GREEN	024156	1		
BRUSH-DBL END	C00101	1		
BRUSH-DRAW VALVE 1"OD X 2	C00104	1		
BRUSH-MIX PUMP BODY-3"X7"	C00032	1		
BRUSH-REAR BRG 1"D X 2"LG	C00100	1		
COMPRESSOR L63B562BBKB	048727-40E	1		
+CAPACITOR-RUN 15UF/370V	027087	1		
+CAPACITOR-START-88-108UF	059759	1		
+RELAY-START-COMPRESSOR	048766	1		
CAP-DESIGN 1.010"ID-6 POINT	014218	3		
CARD-CHECKOUT WARRANTY-CH	033941-CW5	1		
CORD-POWER HARMONIZED	066395-95	1		
COUPLING-3/8FS X 1/4FS	031791	2		
DECAL-INST-CLN HPR-CHINESE	019029-CH	1		
DECAL-TROUBLESHOOT-CHINESE	038374-CH	1		
DIAGRAM-WIRING *161*	063820-40S	1		
DRYER-FILTER 1/4 X 1/4	048878	1		

+ Available Separately

DESCRIPTION	PART NUMBER	QTY.	WARR. CLASS	REMARKS
FORM-QUALITY REPORT BY FAX	065712-SCH	1		
GEAR A.*REDUCER 4 TO 1	025770-SER	2		
HARNES-WIRE-CAP/RELAY	063975-40	1		
HARNES-WIRE-MAIN	063573-40	1		
INSTRUCTION-INSTALL-CHINESE	056904CINS	1		
INSTRUCTION-WEEEE END OF LIFE	064371-INS	1		
KIT A.-TUNE UP	X31167	1		
LABEL-ATTN SVC ENG-CHINESE	015068-CH	2		
LABEL-CAUTION-GRD-PERM-CH	032164-CH	1		
LABEL-DOOR-MOVE PART-CH	032749-CH	1		
LABEL-WARN-COVER-CHINESE	051433-CH	5		
LABEL-WARN-ELEC-TW-SMALL	032718-CH	1		
LUBRICANT-TAYLOR 4 OZ.	047518	1		
MAN-OPER 161 CHINESE	055155CM	1		
MOTOR-1/2 HP REMOTE CAPS	055097-40G	2		
PULLEY-5.7" PITCH DIA X 5	C00186	2		
PULLEY-AK20X5/8	C00185	2		
SANITIZER-STERA SHEEN-GREEN	C00001	1		
SWITCH-PRESSURE 405 PSI-S	052663	1		
TAG-WARRANTY-REFRIGERANT	047015-M5	2		
TERMINAL-FEM.SP.22-18 .25	015850-L	30		
TUBE-FEED-.166 HOLE-SS	030797	1		
VALVE-ACCESS-1/4MFL X 3/8	053565	2		
VALVE-SOL-1/4 ORFX3/8IN	062019-27	2		
VALVE-SOLENOID 7/64 ORF	043449-27	2		

+ Available Separately



NOTE:
 1. FOR CCW ROTATION OF A. O. SMITH BEATER MOTOR CONNECT INTERNAL REVERSE TERMINAL 4 TO INTERNAL BLACK TO TERMINAL 1.

GROUND FRAME SECURELY

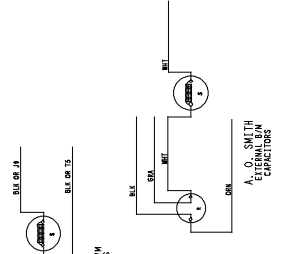


FIG. 4

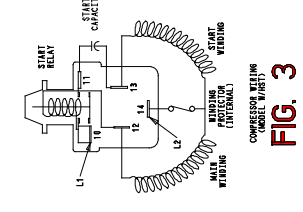
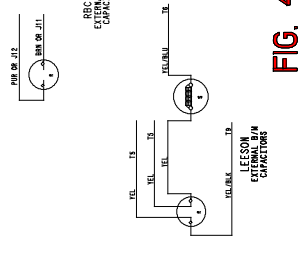


FIG. 3

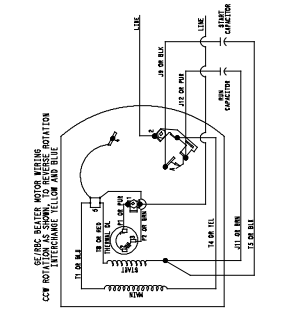
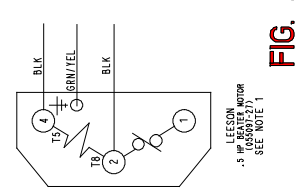


FIG. 2



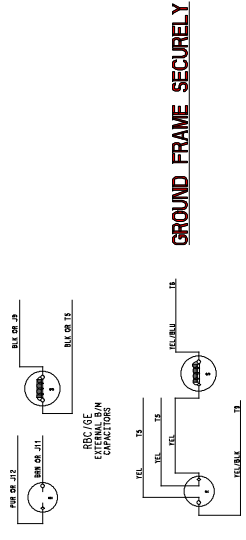
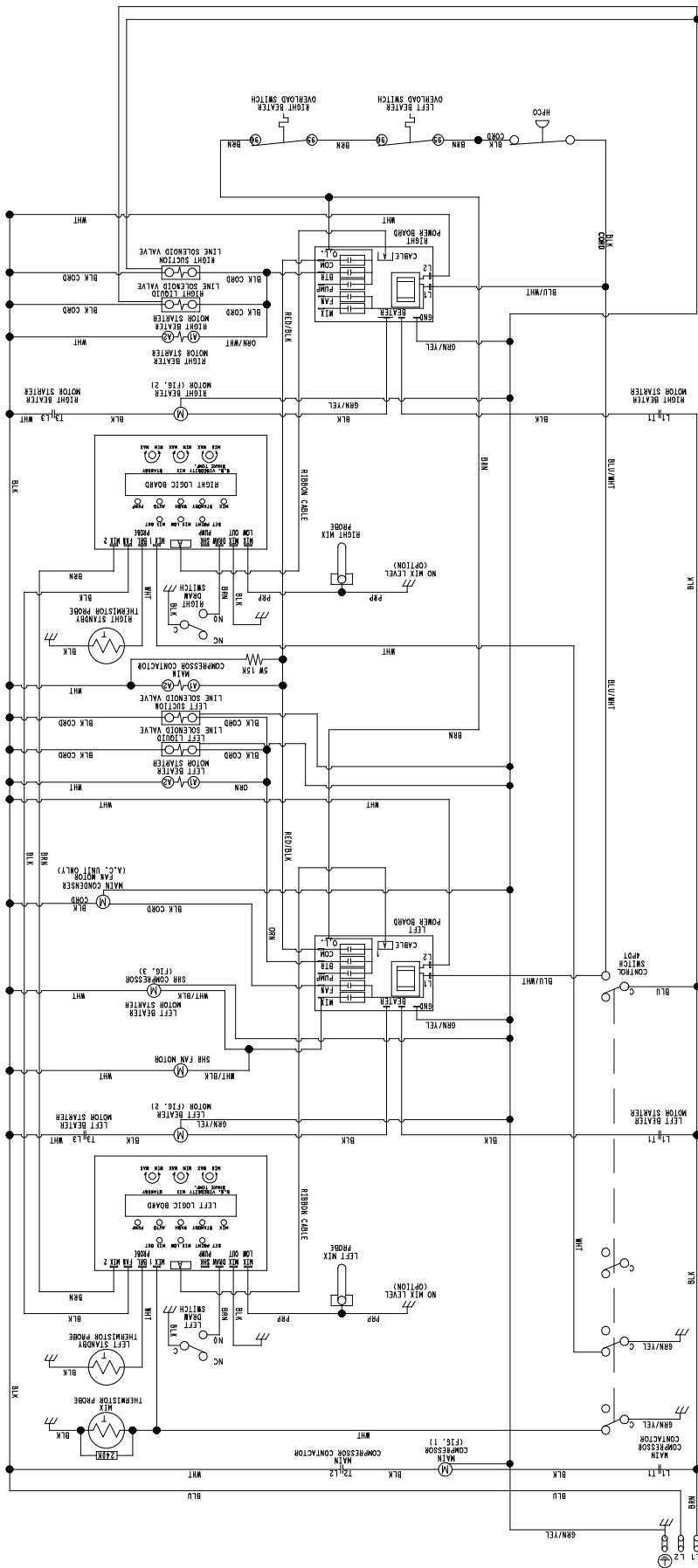


FIG. 1
 Model 161
 063820-40S
 Rev. 2/10

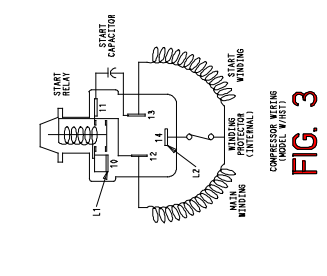


FIG. 2
 A. O. SMITH
 J-9 1055047-21 MOTOR
 SEE NOTE 1

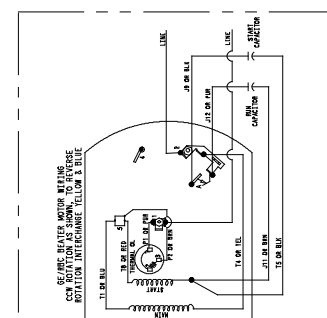


FIG. 3
 COMPRESSION MOTOR WINDING
 ROTATION INTERCHANGE YELLOW & BLUE
 SEE NOTE 1

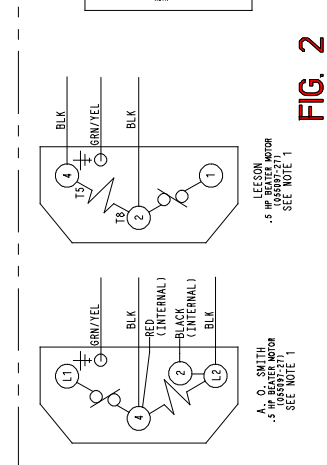


FIG. 4
 EXTERNAL B/W CAPACITORS
 SEE NOTE 1

GROUND FRAME SECURELY