

**Models 60 & 62**

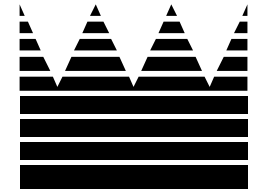
# **Shake Freezers**

**Service Manual**

**051059-S**







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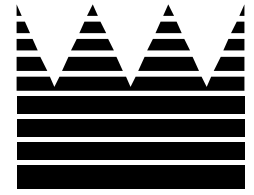
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051059-S



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750 N. Blackhawk Blvd.  
Rockton, IL 61072



# **Section 1: Introduction**

- **Specifications**
- **Running Specifications**
- **Installation Instructions**

# Safety

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We at Taylor are committed to manufacturing safe operating and serviceable equipment. The many built-in safety features that are part of all Taylor equipment are aimed at protecting operators and trained service technicians alike.

This manual is intended exclusively for Taylor authorized service personnel.



**DO NOT** operate the freezer unless it is properly grounded.



Stationary appliances which are not equipped with a power cord and a plug or other 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. Failure to follow this instruction may result in electrocution.



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



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

These machines are designed to operate indoors, under normal ambient temperatures of 70°-75°F (21°-24°C). The machines have successfully performed in high ambient temperatures of 104°F (40°C) at reduced capacities.

**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.

# Refrigerant

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Taylor uses R404A refrigerant. This refrigerant is generally considered non-toxic and non-flammable; however, any gas under pressure is potentially hazardous.



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



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.



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.

# Model 60 Specifications

## Freezing cylinder

One, 7 quart (6.6 liter) capacity.

## Mix Hopper

One, 20 quart (18.9 liter) capacity. Refrigerated and insulated.

## Beater Motor

One, 1.0 hp.

## Refrigeration Unit

One, approximately 11,000 btu/hr compressor. Refrigerant R404A.  
One independent (SHR) compressor, approximately 400 btu/hr. Refrigerant R134a.

## Electrical

Electrical	One dedicated connection.	
	Maximum Fuse Size	Minimum Circuit Ampacity
208-230/60/1 Air	25	21
208-230/60/1 Water	25	20
208-230/60/3 Air	20	17
208-230/60/3 Water	20	17

This unit is manufactured in other electrical characteristics. Refer to the Distributor Data Book for availability. (For exact electrical information, always refer to the data label of the unit.)

## Air Cooled

Clearance: 3" (76 mm) around all sides.

## Water Cooled

Water inlet under side of base 3/8" FPT.

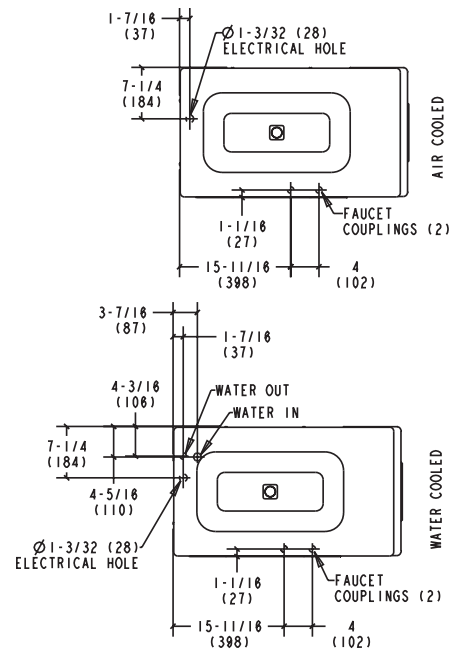
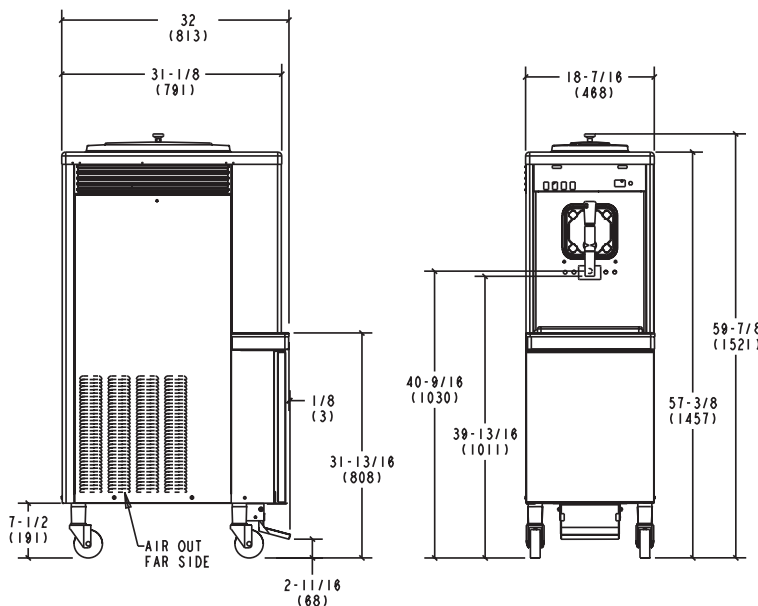
## Dimensions

Width: 18-7/16" (468 mm)  
Depth: 32" (813 mm)  
Height: 59-7/8" (1,521 mm)  
Floor Clearance: 7-1/2" (191 mm) mounted on standard casters.

## Approximate Weights

Net: 520 lbs. (235.9 kgs.)  
Crated: 580 lbs. (263.1 kgs.), 35.4 cu. ft. (1.0 cu. m.)  
Specifications are subject to change without notice.

This unit is designed and constructed to meet stringent safety and sanitation requirements for NSF and UL.



NOTE:  
FIGURES IN PARENTHESES  
INDICATE MILLIMETERS.

TOP VIEW - OPERATOR END  
ALL CONNECTIONS LOCATED UNDERSIDE OF BASE

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# Model 62 Specifications

## Freezing cylinder

One, 7 quart (6.6 liter) capacity.

## Mix Hopper

One, 20 quart (18.9 liter) capacity.  
Refrigerated and insulated.

## Beater Motor

One, 1.0 hp.

## Refrigeration Unit

One, approximately 11,000 btu/hr compressor.  
Refrigerant R404A.  
One independent (SHR) compressor, approximately  
400 btu/hr. Refrigerant R134a.

## Electrical

Electrical	One dedicated connection.	
	Maximum Fuse Size	Minimum Circuit Ampacity
208-230/60/1 Air	20	17
208-230/60/1 Water	20	16
208-230/60/3 Air	20	15
208-230/60/3 Water	20	14

This unit is manufactured in other electrical characteristics. Refer to the Distributor Data Book for availability. (For exact electrical information, always refer to the data label of the unit.)

## Air Cooled

Clearance: 6" (152 mm) on both sides. It is recommended to place the rear of the unit against the wall to prevent recirculation of warm air.

## Water Cooled

Water inlet under side of base 3/8" FPT.

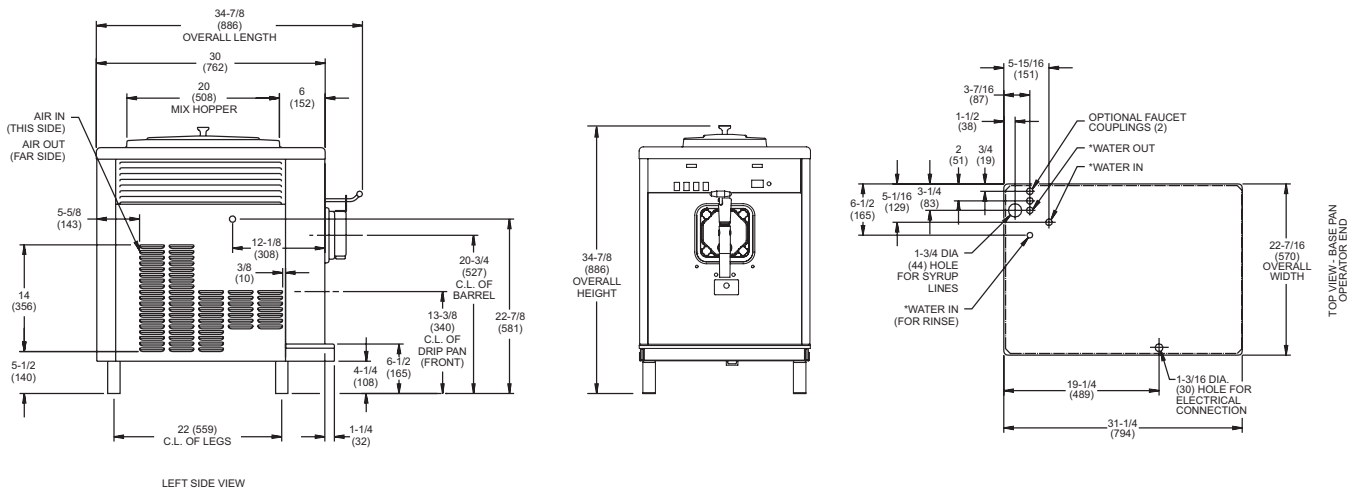
## Dimensions

Width: 22-7/16" (575 mm)  
Depth: 31-3/16" (792 mm)  
Height: 32" (813 mm)  
Counter Clearance: 4" (102 mm) mounted on standard legs.

## Approximate Weights

Net: 346 lbs. (157.0 kgs.)  
Crated: 378 lbs. (171.5 kgs.), 20 cu. ft. (.56 cu. m.)  
Specifications are subject to change without notice.

This unit is designed and constructed to meet stringent safety and sanitation requirements for NSF and UL.



NOTES:  
1. FIGURES IN PARENTHESES INDICATE MILLIMETERS.  
2. \*NOTES FOR WATER COOLED UNITS ONLY.



# Running Specifications

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## Expansion Valve (AXV) Setting

31-33 (213.7 - 227.54 kPa) for most products.

### 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°	270-300 (1,862 - 2,069 kPa)
80°	26.7°	300-330 (2,069 - 2,275 kPa)
90°	32.2°	330-360 (2,275 - 2,482 kPa)
100°	37.8°	360-400 (2,482 - 2,758 kPa)

**Water Cooled:** Recommended head pressure is 255 PSI (1,758 kPa).

## E.P.R. Valve Setting

The product temperature in the mix hopper is maintained by the main refrigeration system and can be adjusted by the E.P.R. valve. The E.P.R. valve is factory set at 20 - 22 PSI (137.9 - 151.7 kPa) in order to maintain hopper product temperature at approximately 40°F. (4°C.). To adjust the hopper temperature, place the gauge on the access port at the inlet of the E.P.R. valve. With the compressor running, loosen the locking nut and turn the adjustment screw (located on the top of the valve) clockwise to raise the pressure for higher hopper temperatures and counterclockwise to decrease the pressure for lower temperatures. When the adjustment is complete, tighten the locking nut.

# Installation Instructions

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## Air Cooled Units

Air cooled units require a minimum of 6" (152 mm) of clearance around all sides of the freezer. Failure to allow for adequate clearance can reduce the refrigeration capacity of the freezer and possibly cause damage to the compressor.

## Water Cooled Units

A cold water supply must be provided with a hand shut-off valve. Refer to the "Specifications" section in this manual to identify inlet and outlet water connections for the condensers. 3/8" FPT water connections have been provided. 1/2" water lines should be connected to the unit. If there is more than one unit, larger lines should be used. (Flexible lines are recommended if local codes permit.) The water lines must be flushed of foreign substances before connection. Depending on local water conditions, it may be advisable to install a water strainer to prevent foreign substances from clogging the water system. After connecting the inlet water line, install a flexible drain line to an open trap drain. An open trap drain is used so that drain water flow can be observed. Do not install a shut-off valve on the drain line. Incorrect hook-up will result in continuous water flow through the lines.

Recommended water pressure supplied to the unit is 35 PSI (241.3 kPa).

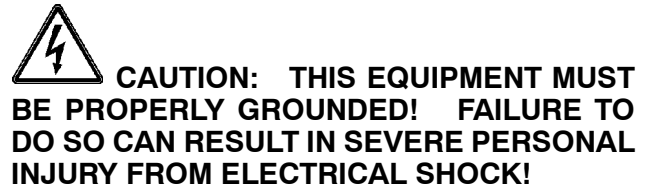
## Electrical Connections

Each freezer requires one power supply. Check the data label on the freezer for fuse, circuit ampacity and electrical specifications. Refer to the wiring diagram, provided inside the control 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.

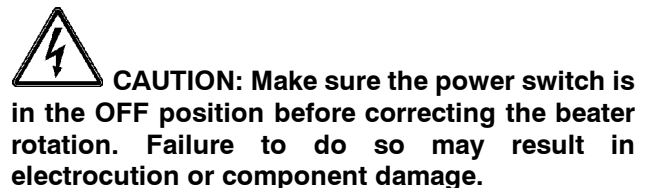
Stationary appliances which are not equipped with a power cord and a plug or other device to disconnect the appliance from the power source must have an all-pole disconnecting device with a contact gap of at least 3 mm installed in the external installation.



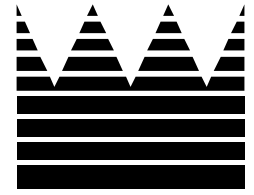
## Beater Rotation

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

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 control box.



## **Section 2: Controls**

- **Taylor Torque Control**
- **Auto Lift System**
- **Air/Syrup Delivery System**

# The Taylor Torque Control

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## Function and Operation

The thickness of the shake product is controlled by a sensing device called the torque switch. The refrigeration system is de-activated by a micro switch. The refrigeration system is activated by a timer.

Thickness of the product in the freezing cylinder is measured by the torque rotor. The torque rotor is installed through the center of the beater assembly. When the beater assembly turns, the moving product freezes and thickens. As the product thickens, it exerts pressure on the torque rotor. This pressure causes the torque arm at the end of the rotor to move to the right.

As the torque arm moves, it forces the operating lever against a spring which trips a micro switch. This switch de-activates the coil of a time delay relay. In turn, the time delay relay stops the compressor, and refrigeration ceases. When the OFF cycle has elapsed, the compressor and the beater motor are activated.

The beater motor must be running to monitor the thickness of the product and to determine whether refrigeration is needed. When drawing product, the beater motor is running and the product thickness is being monitored. If no product is drawn for long periods of time, the beater motor will run every 4 minutes for approximately 9 seconds to verify product viscosity. If refrigeration is required, the compressor will start. If not, the beater will stop after the 9 seconds.

Each time the draw handle is raised, the micro switch is tripped and the beater motor will start.

## Adjusting the Torque Switch

To serve a thicker shake product turn the adjustment knob **clockwise**. This will increase the spring tension, making it more difficult for the torque arm to move the operating lever which trips the micro switch.

For a thinner shake product, turn the adjustment knob **counterclockwise**.

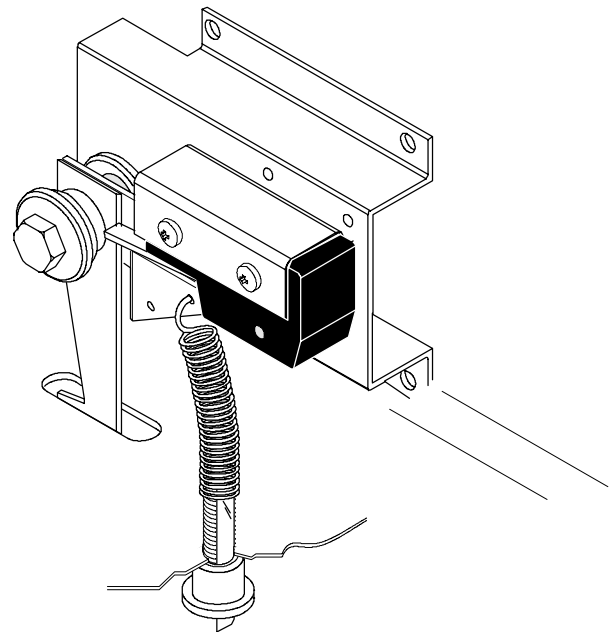


Figure 1.

# Auto-Lift System

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## Function

The auto-lift mechanism consists of a motor, a cam, and two micro switches. The cam lifts the draw arm, and the switches control rotation of the cam. One switch stops the draw arm when it is in the raised position. The other switch stops the draw arm when it is lowered. These two switches are controlled by the foot pedal switch.

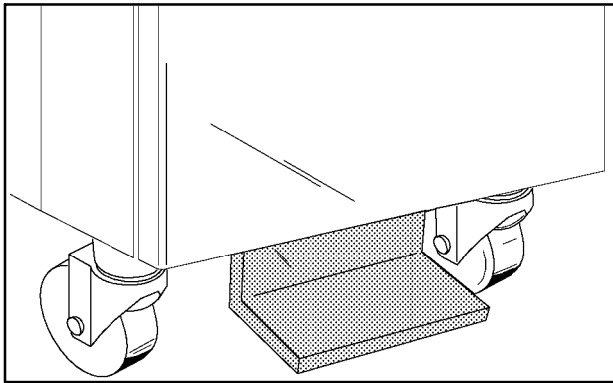


Figure 2.

When the foot switch is pressed, the coil of the lift relay is energized and the switch points start the lift motor. The motor runs until the return switch roller drops into the cam notch. Once this occurs, the motor discontinues with the draw arm in the raised position.

When the foot switch is released, the lift relay returns to its rest position. The motor runs until the front or lift switch roller drops into the cam notch.

**Note:** The auto-lift will operate in the AUTO or WASH positions.

## Lift Motor

A disc type brake is mounted to the lift motor armature. This brake keeps the motor from “free-wheeling” after the power supply is disconnected, and allows the cam to stop at the correct position. When either of the cam switches stop the power supply to the lift motor, a spring moves the armature backward to engage the disc brake. When power is supplied to the motor, the torque moves the armature forward which overcomes the spring tension and separates the discs. The motor also is protected thermally with an automatic reset.

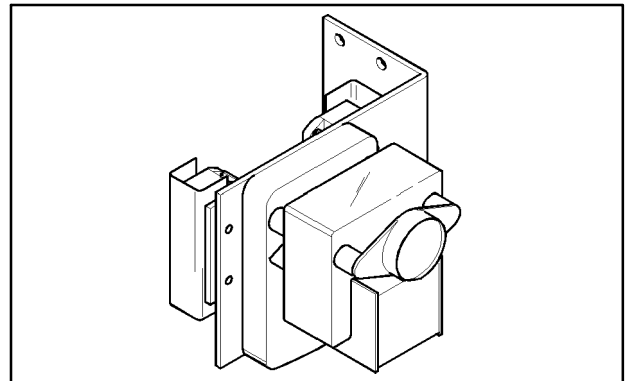


Figure 3.

## Auto-Lift Relay

The auto-lift relay (encased in a clear, plastic housing) is located in the upper control panel and is mounted into a plug type socket base. The wires are connected to the socket base.

The auto-lift relay is an ordinary double pole, double throw relay. It controls the auto-lift system. The relay coil is energized by the foot switch. When the foot pedal is pressed, the relay energizes and supplies power to the auto-lift motor assembly. When the foot pedal is released, the relay de-energizes.

If the relay does not operate, the auto-lift system will not work. If the relay sticks in the energized position, the draw arm will be held in the raised position. If this occurs, place the control switch in the OFF position. This will discontinue beater operation and syrup delivery.

## Draw Switch Assembly

The switch assembly consists of three switches:

- the left hand switch which operates the syrup solenoid valves
- the center switch which operates the spinner motor
- the right hand switch which operates the beater motor

All three switches are controlled by draw arm movement. The left switch activates when the draw arm is raised 1/2 to 5/8 of an inch (1.3 to 1.6 cm.). The center and right switches are activated when the draw arm is raised 1/4 to 3/8 of an inch (.64 to .95 cm.).

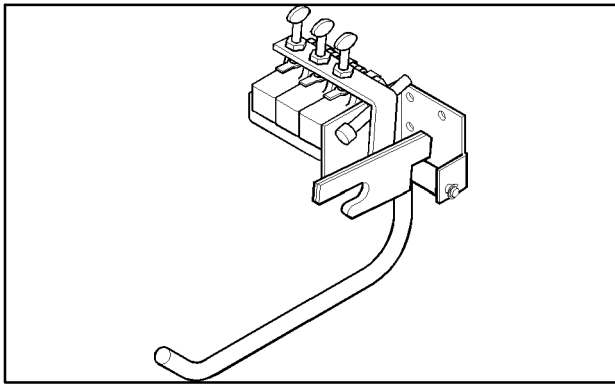


Figure 4.

All 3 draw switches are adjustable.

If the left switch is out of adjustment, the following symptoms will occur:

- Too much syrup will be present at the top and at the bottom of the shake. The syrup solenoid is opening too soon and closing too late.
- Too little syrup will be present at the top and at the bottom of the shake. The syrup solenoid is opening too late and closing too soon.

If the center switch is out of adjustment, the following symptoms will occur:

- The spinner motor will run continuously after the draw valve is lowered.
- Product will be dispensed from the spinner housing before the spinner starts.

**Note:** The spinner motor will continue to operate 5 seconds after the draw arm is lowered. This is due to the 5 second time delay relay.

If the right switch is out of adjustment, the following symptoms will occur:

- The beater motor runs continuously.
- The beater motor does not run until the draw valve is raised more than 3/8 of an inch (.95 cm.).

# Air/Syrup Delivery System

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## Syrup Component Functions

The spinner provides the automatic blending of any one of three flavors into the neutral shake as it is dispensed. Each flavor has a separate system which requires regular cleaning and the correct type of syrup. An air compressor supplies air pressure to the pressure regulator.

The system for each flavor is composed of the following components:

- pressure regulator
- pressure line assembly
- sealed type stainless steel syrup tank
- syrup line (to solenoid valve)
- solenoid valve
- syrup line (from solenoid valve)
- flavor selector switch

The **pressure regulator** controls the air pressure to obtain the desired syrup flow. The air pressure is produced by a single, central air compressor.

The **pressure line** assembly delivers the regulated air pressure to the syrup tank.

The **syrup tank** provides syrup storage and may be removed for cleaning by disconnecting the air and syrup line quick disconnects.

The **syrup line assembly** delivers the metered syrup to the solenoid valve.

The **solenoid valve** is an electrical valve and opens only when the rocker switch is turned to either the WASH or the AUTO position, the desired flavor button is pressed, and the draw handle is raised. It will continue to stay open until one of the following switches have been moved.

- Press the **vanilla** flavor button (4th button from the left).
- Turn the rocker switch to the OFF position.
- Lower the draw handle.

The **second syrup line** delivers syrup to the spinner housing from the solenoid valve. Syrup is delivered from this line only when the solenoid valve is energized.

The **flavor selector switch** consists of 4 flavor buttons. The left button is the No. 1 tank and lines. The second button from the left is the No. 2 tank and lines. The third button from the left is the No. 3 tank and lines. The right selector button is in the OFF position and may be used to dispense the unflavored product as a vanilla shake.

## Calibrating Syrup Flow

It is vital that the correct amount of syrup be incorporated into the mix to obtain a quality shake. Overly thin shakes are often caused by too much syrup. Overly thick shakes are often caused by too little syrup.

To determine the rate of syrup flow, use a calibrating cup which indicates the ounces of liquid. Generally the proper rate of syrup flow is 1 ounce (29.6 ml.) of syrup in 6 seconds. Once this rate is set, the correct amount of syrup will be blended with the shake base regardless of the size of shake being served.

Press the **vanilla** button (far right button) on the selector switch assembly. This button is used to stop the syrup flow (OFF) and to draw a vanilla shake.

Rest the draw arm on top of the draw valve bracket. Place the rocker switch in the WASH position.

Hold an empty cup under the spinner housing. Press the first flavor button on the left and purge this syrup line until pure syrup begins to flow steadily.

**Note:** It is very important to remove any sanitizing solution or air from the syrup lines.

When the syrup is flowing steadily from the spinner housing, press the far right button to stop the syrup flow.

Position the large section of the calibrating cup under the spinner housing.

With a timing device, press the first flavor button, catching the syrup in the calibrating cup. When the timing device reaches 6 seconds, press the far right button to stop the syrup flow. If the amount of syrup received is one ounce, the syrup is properly calibrated.

## Adjusting the Syrup Pressure

If the amount of syrup received is less than 1 ounce (29.6 ml.), the syrup pressure must be increased. If the amount received is more than 1 ounce (29.6 ml.), the pressure must be decreased.

### Model 60

Inside the syrup compartment is an air pressure manifold with individual regulators to control the amount of pressure to each tank and syrup line. The left regulator is used for syrup line number one and so on.

### Model 62

To make these pressure adjustments, use the pressure regulators supplied with your freezer. The left regulator is used for syrup line number one and so on.

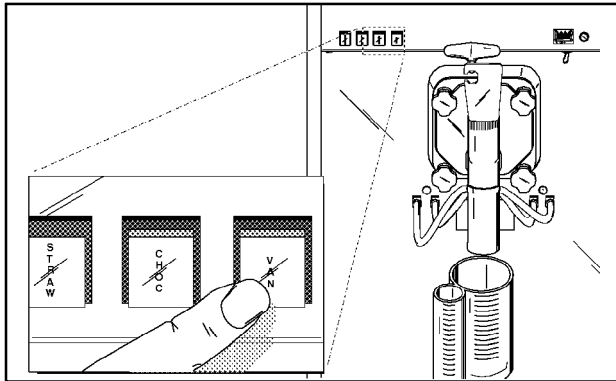


Figure 5.

If less than 1 ounce (29.6 ml.) is received, the pressure must be increased. Loosen the lock nut. Using a flatblade screwdriver, turn the adjusting screw **CLOCKWISE**.

Recheck the syrup calibration. Tighten the lock nut after the correct calibration is achieved.

If more than 1 ounce (29.6 ml.) of syrup is received, the pressure must be decreased. Loosen the lock nut and turn the adjusting screw **COUNTERCLOCKWISE** to zero. Remove the air line to the syrup tank to allow the pressure in the tank to escape. Reconnect the air line. Adjust the regulator to the new pressure setting and recheck the syrup calibration. Tighten the lock nut.

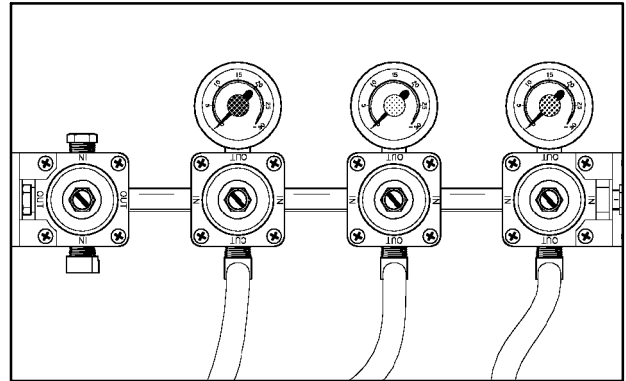


Figure 6.

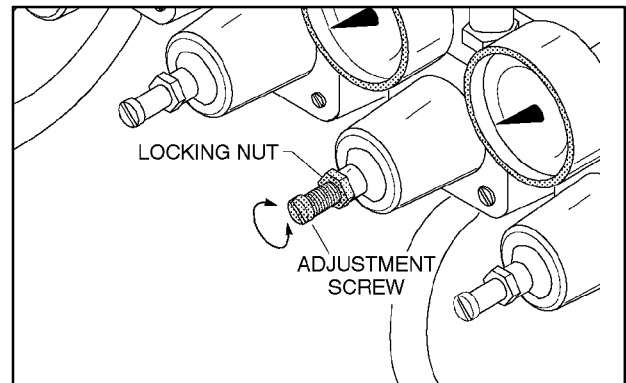


Figure 7.

Repeat the calibration procedures for each additional syrup line.

## Air System Components

**Air Compressor:** 230 volts, 60 cycle.

**Check Valve:** The check valve is a brass fitting which is screwed into the discharge port of the air compressor. When the compressor stops, the check valve allows the pressure to be maintained in the air storage assembly and the pressure at the discharge of the compressor is allowed to dissipate.

**Pressure Switch:** The pressure switch is located next to the air compressor. It automatically starts and stops the compressor by measuring air pressure in the primary line. This switch has been preset at the factory to cycle on at 45 PSI and cycle off at 60 PSI.



**WE DO NOT RECOMMEND ADJUSTING THIS SWITCH WITHOUT THE USE OF A PRESSURE GAUGE.**

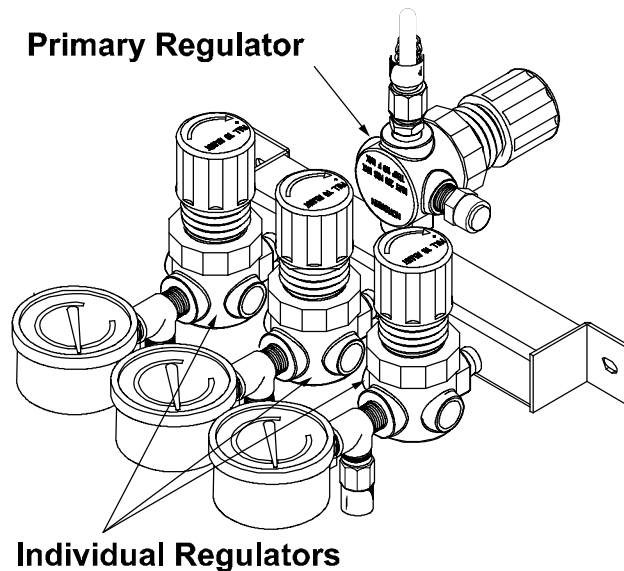
**Air Storage Assembly:** The air storage assembly stores and delivers from 45 - 60 PSI (310 - 414 kPa) of air to the primary air regulator. It has the ability to hold enough air to deliver 10 to 16 flavored shakes before the air compressor must cycle on.

**Primary Regulator:** The primary regulator is used to deliver 40 PSI (276 kPa) to the individual regulators. For the model 62, the regulator has been locked into position with a wire fastener. The model 60 has a locking nut to secure the setting.

**Individual Regulator:** The individual regulators must be adjusted to deliver enough pressure to achieve an adequate syrup flow. Once the desired flow of syrup has been achieved, the appropriate locking device should be used to secure the regulator.

**Individual Regulator Gauge:** This gauge reflects the Individual Regulator setting. The gauge should not read more than 40 PSI (276 kPa). It will, however, indicate a lower or no reading at all, when the following situations occur:

1. Tank or tanks have been disconnected for cleaning or refilling and then connected back to the system. If the machine is on, this will be momentary until the air compressor has replaced the amount of air used to pressurize the tanks.
2. The machine has been turned off for a period of time, such as overnight.
3. There is a restriction in the primary air storage line between the primary regulator and the compressor.
4. There is an air leak in the primary air storage line between the primary regulator and the compressor.
5. There is an air or syrup leak somewhere in the entire system.  
Example:
  - loose hose fittings
  - poor connection at the disconnects
  - poor seal at the syrup tank cover
  - holes in the braided tubing
6. There is a restriction at the suction port of the air compressor.
7. The filters on the air compressor are dirty.
8. The air compressor is not operating properly.
9. The pressure switch is not operating properly.



*Notes:*

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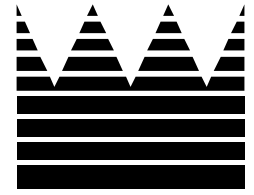
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## **Section 3: Troubleshooting**

- **General Troubleshooting**
- **Electrical Troubleshooting**

# General Troubleshooting Guide

PROBLEM	PROBABLE CAUSE	REMEDY
<p>1. No product is being dispensed.</p>	<ul style="list-style-type: none"> <li>a. There is inadequate mix in the mix hopper.</li> <li>b. The control switch is in the OFF position.</li> <li>c. There is a freeze-up in the mix inlet tube.</li> <li>d. The beater motor is out on reset.</li> <li>e. Incorrect beater rotation.</li> <li>f. The beater motor will not activate with the draw arm in the raised position.</li> <li>g. Frozen clumps of product are restricting the flow of mix to the freezing cylinder.</li> <li>h. The draw arm is not engaged in the draw valve.</li> </ul>	<ul style="list-style-type: none"> <li>a. Fill the mix hopper.</li> <li>b. Place the control switch in the AUTO position.</li> <li>c. Adjust the mix hopper temperature.</li> <li>d. Reset the freezer.</li> <li>e. Correct beater rotation. See Installation Instructions.</li> <li>f. Check wiring against the diagram.</li> <li>g. Improper handling of rerun. Rerun must be thawed completely and foam must be skimmed off. Always mix 50% fresh mix with 50% rerun.</li> <li>h. Center the draw valve on the draw arm.</li> </ul>
<p>2. Product is too stiff.</p>	<ul style="list-style-type: none"> <li>a. Improper lubrication of the torque rotor o-rings.</li> <li>b. Improper consistency control adjustment.</li> <li>c. The torque rotor is binding.</li> <li>d. Not enough syrup is being blended with product.</li> <li>e. The torque arm is not installed properly.</li> <li>f. Faulty compressor relay.</li> <li>g. Faulty torque switch.</li> </ul>	<ul style="list-style-type: none"> <li>a. Lubricate the o-rings properly.</li> <li>b. Product, with no syrup blended, should be dispensed at 26 to 28 °F (-3.3 to -2.2 °C). Adjust the control accordingly.</li> <li>c. Before installing the torque arm, check to see if the torque rotor can be rotated freely without binding.</li> <li>d. Calibrate the syrup system. Syrup delivery should be 1 oz. (29.6 ml.) in 6 seconds.</li> <li>e. Install the torque arm properly.</li> <li>f. Replace the relay.</li> <li>g. Repair or replace the switch.</li> </ul>
<p>3. The product is too soft.</p>	<ul style="list-style-type: none"> <li>a. Improper consistency control adjustment.</li> <li>b. The torque rotor is binding.</li> <li>c. Improper lubrication of the torque rotor o-rings.</li> <li>d. Lubrication of the torque rotor guide bearing.</li> </ul>	<ul style="list-style-type: none"> <li>a. Product, with no syrup blended, should be dispensed at 26 to 28 °F (-3.3 to -2.2 °C).</li> <li>b. Before installing the torque arm, check to see if the torque rotor can be rotated freely without binding.</li> <li>c. Lubricate o-rings properly.</li> <li>d. Do not lubricate the guide bearing.</li> </ul>

PROBLEM	PROBABLE CAUSE	REMEDY
3. The product is too soft (Continued).	<ul style="list-style-type: none"> <li>e. Too much syrup is being blended with product.</li> <li>f. Bad scraper blades.</li> <li>g. Dirty condenser.</li> <li>h. Faulty torque switch.</li> <li>i. Faulty cycle timer.</li> <li>j. Faulty compressor relay.</li> </ul>	<ul style="list-style-type: none"> <li>e. Calibrate the syrup system. Syrup delivery should be 1 oz. (29.6 ml.) in 6 seconds.</li> <li>f. Replace the scraper blades.</li> <li>g. Brush the condenser clean every 30 days.</li> <li>h. Repair or replace the switch.</li> <li>i. Repair or replace the timer.</li> <li>j. Repair or replace the relay.</li> </ul>
4. Large pressure adjustments are necessary to receive 1 oz. (29.6 ml.) in 6 seconds.	<ul style="list-style-type: none"> <li>a. Hardened syrup in syrup line.</li> <li>b. The syrup line and the air line are not matched properly to the syrup tank.</li> </ul>	<ul style="list-style-type: none"> <li>a. Sanitize the syrup lines once a week.</li> <li>b. Match the syrup and air lines to the syrup tank.</li> </ul>
5. The mix hopper is too warm.	<ul style="list-style-type: none"> <li>a. The product is too warm when placed in the hopper.</li> <li>b. The control switch is in the OFF position.</li> <li>c. Temperature adjustment.</li> </ul>	<ul style="list-style-type: none"> <li>a. Check the temperature in the storage cooler.</li> <li>b. Place the switch in the AUTO position.</li> <li>c. Adjust the temperature.</li> </ul>
6. The mix hopper is too cold.	<ul style="list-style-type: none"> <li>a. Temperature adjustment.</li> </ul>	<ul style="list-style-type: none"> <li>a. Adjust the temperature.</li> </ul>
7. The machine is short cycling (rapid on and off cycles).	<ul style="list-style-type: none"> <li>a. Dirty air cooled condenser.</li> <li>b. Inadequate water supply on water cooled unit.</li> <li>c. Defective condenser fan.</li> <li>d. Inadequate air space surrounding the unit.</li> </ul>	<ul style="list-style-type: none"> <li>a. Brush clean every 30 days.</li> <li>b. Check water supply.</li> <li>c. Replace condenser fan.</li> <li>d. See minimum air clearance requirements on pages 3 and 4.</li> </ul>
8. The freezing cylinder walls are scored.	<ul style="list-style-type: none"> <li>a. The gear box is out of alignment.</li> <li>b. The beater assembly is bent.</li> <li>c. The front bearing is missing.</li> <li>d. The beater pins are broken.</li> </ul>	<ul style="list-style-type: none"> <li>a. Realign the gear box.</li> <li>b. Repair or replace the beater assembly.</li> <li>c. Replace the front bearing.</li> <li>d. Replace the pins.</li> </ul>
9. The drive shaft is stuck in the gear box coupling.	<ul style="list-style-type: none"> <li>a. Lubrication is on the hex end of the shaft.</li> <li>b. Rounded corners of the hex end of the drive shaft.</li> <li>c. Rounded coupling corners on the gear box.</li> </ul>	<ul style="list-style-type: none"> <li>a. Do not lubricate the hex end of the drive shaft.</li> <li>b. Replace defective drive shaft.</li> <li>c. Replace the gear box.</li> </ul>
10. There is excessive leakage of mix in the rear drip pan.	<ul style="list-style-type: none"> <li>a. Worn or missing seal on the drive shaft.</li> <li>b. Inadequate lubrication of the drive shaft.</li> <li>c. Faulty rear shell bearing.</li> </ul>	<ul style="list-style-type: none"> <li>a. Replace every 3 months.</li> <li>b. Follow lubrication procedures in the Operator's Manual.</li> <li>c. Replace the rear shell bearing.</li> </ul>

<b>PROBLEM</b>	<b>PROBABLE CAUSE</b>	<b>REMEDY</b>
11. The machine will not operate when the control switch is in the AUTO position.	<ul style="list-style-type: none"> <li>a. The draw arm is not raised.</li> <li>b. The beater motor is out on reset.</li> <li>c. The circuit breaker is off.</li> <li>d. The water is turned off (water cooled units).</li> <li>e. The power cord is unplugged.</li> </ul>	<ul style="list-style-type: none"> <li>a. Raise the draw arm momentarily to activate the system.</li> <li>b. Reset the freezer.</li> <li>c. Turn the breaker on.</li> <li>d. Re-establish the water supply.</li> <li>e. Plug the power cord into the wall receptacle.</li> </ul>
12. The water continues to flow through the spinner housing.	<ul style="list-style-type: none"> <li>a. The rinse solenoid is stuck open.</li> </ul>	<ul style="list-style-type: none"> <li>a. Repair or replace the solenoid.</li> </ul>
13. The lift motor continues to raise the draw valve after a draw of product has been made.	<ul style="list-style-type: none"> <li>a. The micro switch needs adjustment.</li> </ul>	<ul style="list-style-type: none"> <li>a. Repair or replace the micro switch.</li> </ul>
14. The air compressor runs too often for normal usage.	<ul style="list-style-type: none"> <li>a. There is an air leak in the system.</li> </ul>	<ul style="list-style-type: none"> <li>a. Use a soap solution to locate the leak.</li> </ul>
15. The spinner shaft will not rotate to blend syrup into the product.	<ul style="list-style-type: none"> <li>a. The flexible cable is broken.</li> <li>b. A pin is missing in the female quick disconnect.</li> <li>c. The spinner motor is out on thermal overload.</li> </ul>	<ul style="list-style-type: none"> <li>a. Replace the cable.</li> <li>b. Replace the disconnect.</li> <li>c. Inadequate lubrication of the spinner shaft. Lubricate the entire length of the shaft.</li> </ul>
16. Excessive dripping of product from the spinner housing.	<ul style="list-style-type: none"> <li>a. Worn o-rings on the draw valve.</li> <li>b. Incorrect o-rings on the draw valve.</li> <li>c. Inadequate lubrication of the spinner shaft.</li> </ul>	<ul style="list-style-type: none"> <li>a. Replace o-rings every 3 months.</li> <li>b. Check the o-ring size.</li> <li>c. Follow lubrication procedures in the Operator's Manual.</li> </ul>
17. Head pressure is too high.	<ul style="list-style-type: none"> <li>a. Refrigerant overcharge.</li> <li>b. There is air in the system.</li> <li>c. The condenser is dirty or there is a water loss.</li> <li>d. The location is too warm.</li> <li>e. The blower is not operating.</li> <li>f. Insufficient clearance around the freezer.</li> </ul>	<ul style="list-style-type: none"> <li>a. Correct the refrigerant charge.</li> <li>b. Purge and recharge the system.</li> <li>c. Clean the condenser. Check the water supply.</li> <li>d. Change to a cooler location.</li> <li>e. Repair or replace the blower.</li> <li>f. See minimum air clearance requirements on pages 3 and 4.</li> </ul>
18. Head pressure is too low.	<ul style="list-style-type: none"> <li>a. Shortage of refrigerant.</li> </ul>	<ul style="list-style-type: none"> <li>a. Repair the leak and recharge the system.</li> </ul>
19. The liquid line is hot.	<ul style="list-style-type: none"> <li>a. Shortage of refrigerant.</li> </ul>	<ul style="list-style-type: none"> <li>a. Repair the leak and recharge the system.</li> </ul>
20. The liquid line is frosted.	<ul style="list-style-type: none"> <li>a. There is a restriction in the liquid line.</li> </ul>	<ul style="list-style-type: none"> <li>a. Replace the line or remove the restrictions.</li> </ul>

# Electrical Troubleshooting

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The following information provides a sequential list of electrical components that L-1 power travels through to initiate various operations.

**Wash mode of operation:** When the coil of the beater motor contactor is supplied with L-1 power, the contactor closes and the beater motor runs.

The path L-1 power travels to reach the coil of the contactor is listed as:

Beater motor overload switch, compressor high pressure switch and control (rocker) switch.

**Auto mode of operation:** When the control (rocker) switch is placed into the AUTO position, the draw lever must be raised to activate the refrigeration system.

The sequence of events are as follows:

When the control (rocker) switch is in AUTO and the draw lever is raised, the coil of the compressor time delay relay is energized. The path that L-1 power travels to reach the coil of the compressor time delay relay is as follows: Beater motor overload switch, compressor high pressure switch, control (rocker) switch (terminals 2 & 1), draw switch, control (rocker) switch (terminals 5 & 4) and torque switch.

With the coil of the time delay relay energized, the switch points of the relay close and energize the coil of the compressor contactor. The path that L-1 power travels to reach the coil of the compressor contactor is as follows:

Beater motor overload switch, compressor high pressure switch, control (rocker) switch (terminals 2 & 1), draw switch, control (rocker) switch (terminals 5 & 4), time delay relay (terminals 8 & 5), and the mix level control switch (LC1).

Once the compressor contactor has closed to operate the compressor, the draw lever can be released and the coil of the time delay relay will remain energized to “latch” the circuitry into “AUTO” operation. The path L-1 travels to the coil of the time delay relay is as follows:

Beater motor overload switch, compressor high pressure switch, control (rocker) switch (terminals 2 & 1), compressor contactor auxiliary switch, and the torque switch.

With the draw lever released and the time delay relay coil “latched” in operation, the coil of the compressor contactor is also “latched” into operation. The path L-1 power travels to reach the coil of the compressor contactor is as follows:

Beater motor overload switch, compressor high pressure switch, control (rocker) switch (terminals 2 & 1), compressor contactor auxiliary switch, time delay relay terminals ( 8 & 5) and the mix level control switch (LC1).

*Notes:*

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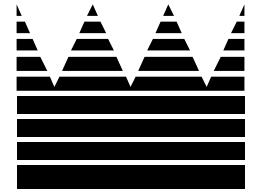
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## **Section 4: Parts**

- **Warranty Explanation**
- **Exploded Views**
- **Complete Parts List**
- **Wiring Diagrams**

# Warranty Explanation

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- Class 103 Parts:** The warranty for new equipment parts is one year from the original date of unit installation, with a replacement parts warranty of three months.
- Class 212 Parts:** The warranty for new equipment parts is two years from the original date of unit installation, with a replacement parts warranty of twelve months.
- Class 512 Parts:** The warranty for new equipment parts is five years from the original date of unit installation, with a replacement parts warranty of twelve months.
- Class 000 Parts:** Wear Items - no warranty.

**CAUTION:** Warranty is valid only if required service work is provided by an Authorized Taylor Service Technician.

**NOTE:** Taylor reserves the right to deny warranty claims on equipment or parts if a non-approved refrigerant was installed in the machine, system modifications were performed beyond factory recommendations, or it is determined that the failure was caused by neglect or abuse.

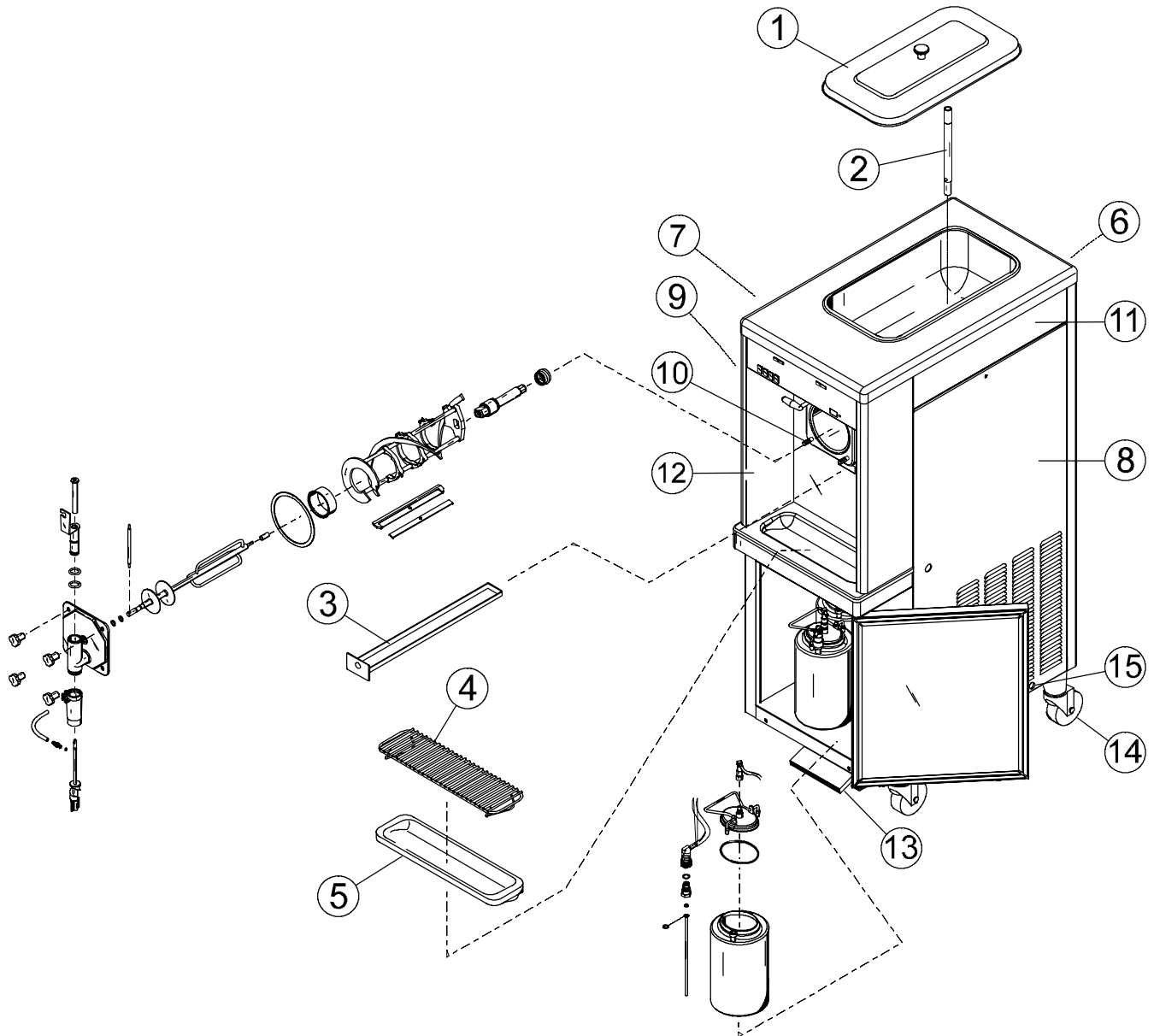
## Compressor Warranty Disclaimer

The refrigeration compressor on this machine is 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 plate 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 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. Be prepared to provide the Model/Serial Number of the freezer in question.

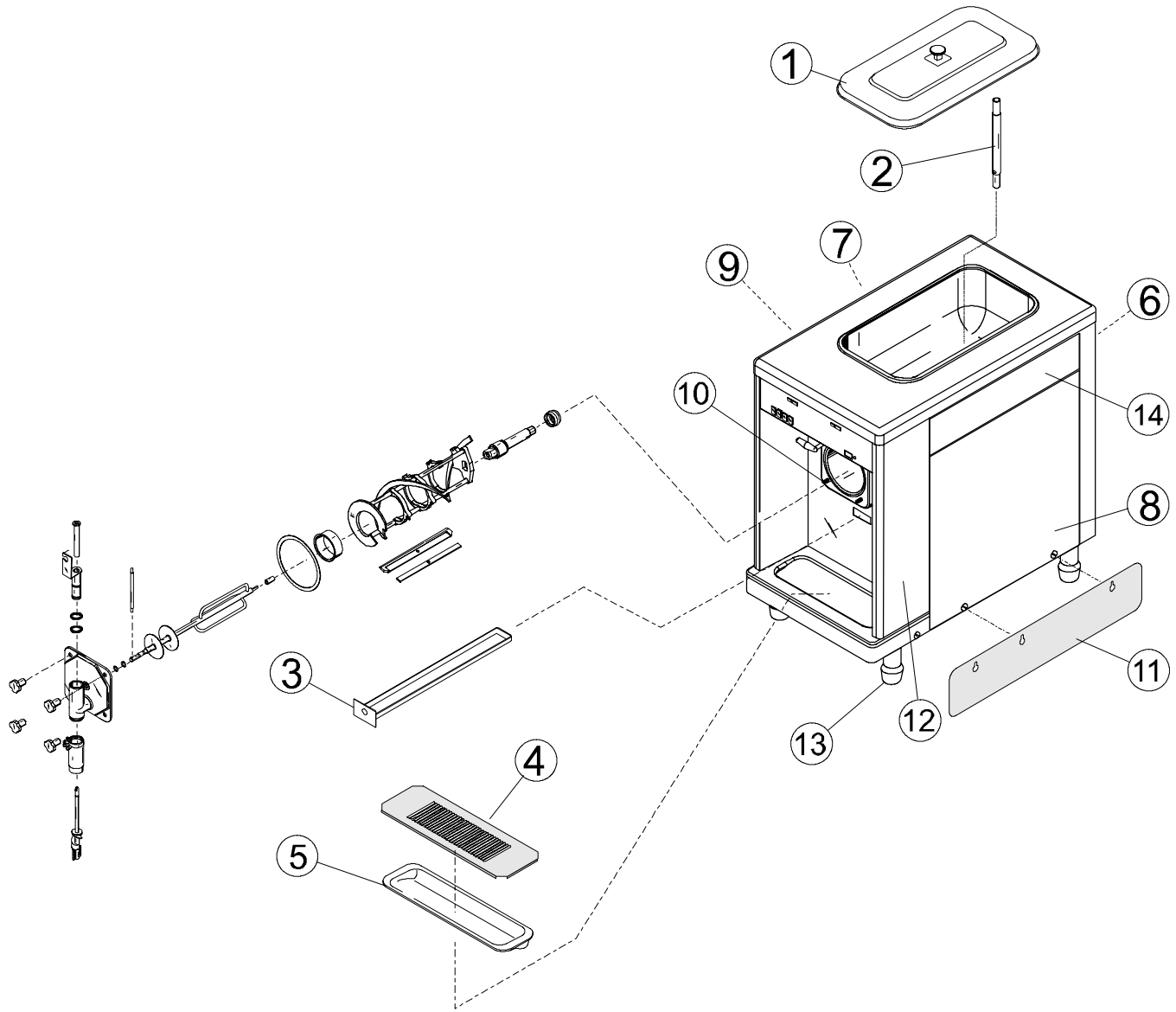
# Model 60 Operator Parts



Item	Description	Part No.
1	Cover A.-Hopper-Std.	X38458
2	Tube-Feed-1/4 Hole	015176-5
3	Pan-Drip 19-1/2 Long	035034
4	Shield-Splash-Wire 13-11/16 L	046177
5	Tray-Drip 14.8	046275
6	Panel-Rear w/Louvers	026980-SP
7	Louver-Side Left	013631
8	Panel A.-Side Lower Right	X48286

Item	Description	Part No.
9	Panel A.-Side L	X48285
10	Stud-Nose Cone 5/16-18 x 3/8-1	011390
11	Panel-Side Upper Right	042317
12	Panel A.-Front	X46634
13	Pedal A.-Foot	X48826
14	Caster-Swv 5/8 Stem 4" Wheel	018794
15	Screw-1/4-20 x 3/8 RHM-Stnls	011694

# Model 62 Operator Parts

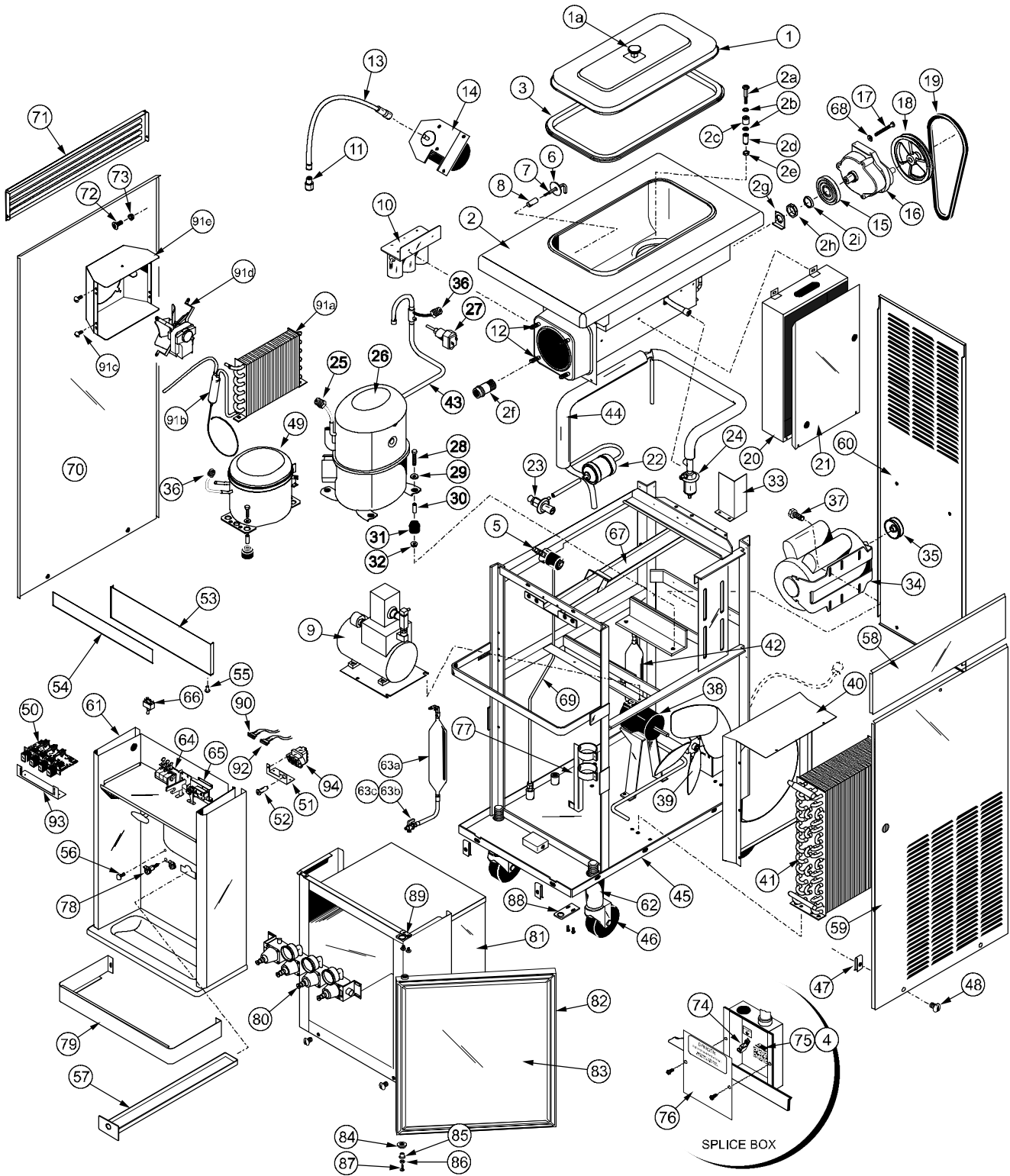


Item	Description	Part No.
1	Cover A.-Hopper-Std.	X38458
*1a	Knob-Mix Cover	025429
2	Feed Tube	015176-5
3	Pan-Drip 19-1/2 Long	035034
4	Shield-Splash	022765
5	Tray-Drip 16-7/8 L x 5-1/8	020157
6	Panel-Rear	039021
7	Louver-Side-Left	013631

Item	Description	Part No.
8	Panel-Side-Lower Right	050024
9	Panel A.-Side Left	X50023
10	Stud-Nose Cone 5/16-18 x 3/8-1	011390
11	Skirt-Air Flow	049069
12	Panel A.-Front	X49996
13	Leg-4" SS w/O-ring	013458
14	Panel-Side-Right-Upper	042317

\*Not Identified

# Model 60 Exploded View



## Model 60 Exploded View Parts Identification

Item	Description	Part No.
1	COVER A.-HOPPER-STD	X38458
1a	KNOB-MIX COVER	025429
2	SHELL	X50892
2a	PROBE A.-MIX OUT-SQUARE	X41348
2b	O-RING-1/2OD X .070W	024278
2c	SPACER-PROBE-SQUARE	041346
2d	SPACER-PROBE-ROUND	041347
2e	NUT-10-32 HEX	005598
2f	BEARING-REAR SHELL *NICK.	031324
2g	WASHER-BEARING LOCK	012864
2h	NUT-BRASS BEARING	028991
2i	GUIDE-DRIP SEAL	028992
3	GASKET-HOPPER COVER	038375
4	SCREW-8 X 1-1/4 RD HD	039420
5	VALVE A.-SOLENOID-RINSE	X46657-27
6	PROBE A.-MIX LOW-HT	X42077
7	DISC-PROBE SQUARE HOLE	030965
8	SPACER-PROBE SQUARE	030966
9	COMPRESSOR A.-AIR	X47283-27G
10	VALVE A.-SOLENOID-3	X48910-27
11	COUPLING A.-DRIVE-SPINNER	X17106
12	STUD-NOSE CONE 5/16-18X3/8	011390
13	SHAFT-DRIVE-FLEXIBLE	016787
14	MOTOR-1/12 HP 3450 RPM	016005-27
15	SHIELD-MIX GEAR REDUCER	013356
16	GEAR A.-REDUCER	012235
17	SCREW-5/16-18 X 2-3/4 HEX	004191
18	PULLEY-AK64-5/8	007538
19	BELT-V-4L370	004227
20	CONTROL A.	X48805-
21	COVER-CONTROL BOX	047558
22	DRYER-FILTER-HP62-3/8	048901
23	VALVE-EXP-AUTO-1/4S X1/4	046365
24	VALVE-EPR 1/4S	022665
25	VALVE-ACCESS 1/4FL X 3/8	044455
26	COMPRESSOR AHA7513ZXD	047520-
27	SWITCH-PRESSURE 440 PSI	048230
28	SCREW-5/16-18 X 1-3/4 HEX	019691
29	WASHER-5/16-FLAT ZP STEEL	000651
30	SLEEVE-MOUNTING-COMP.	039924

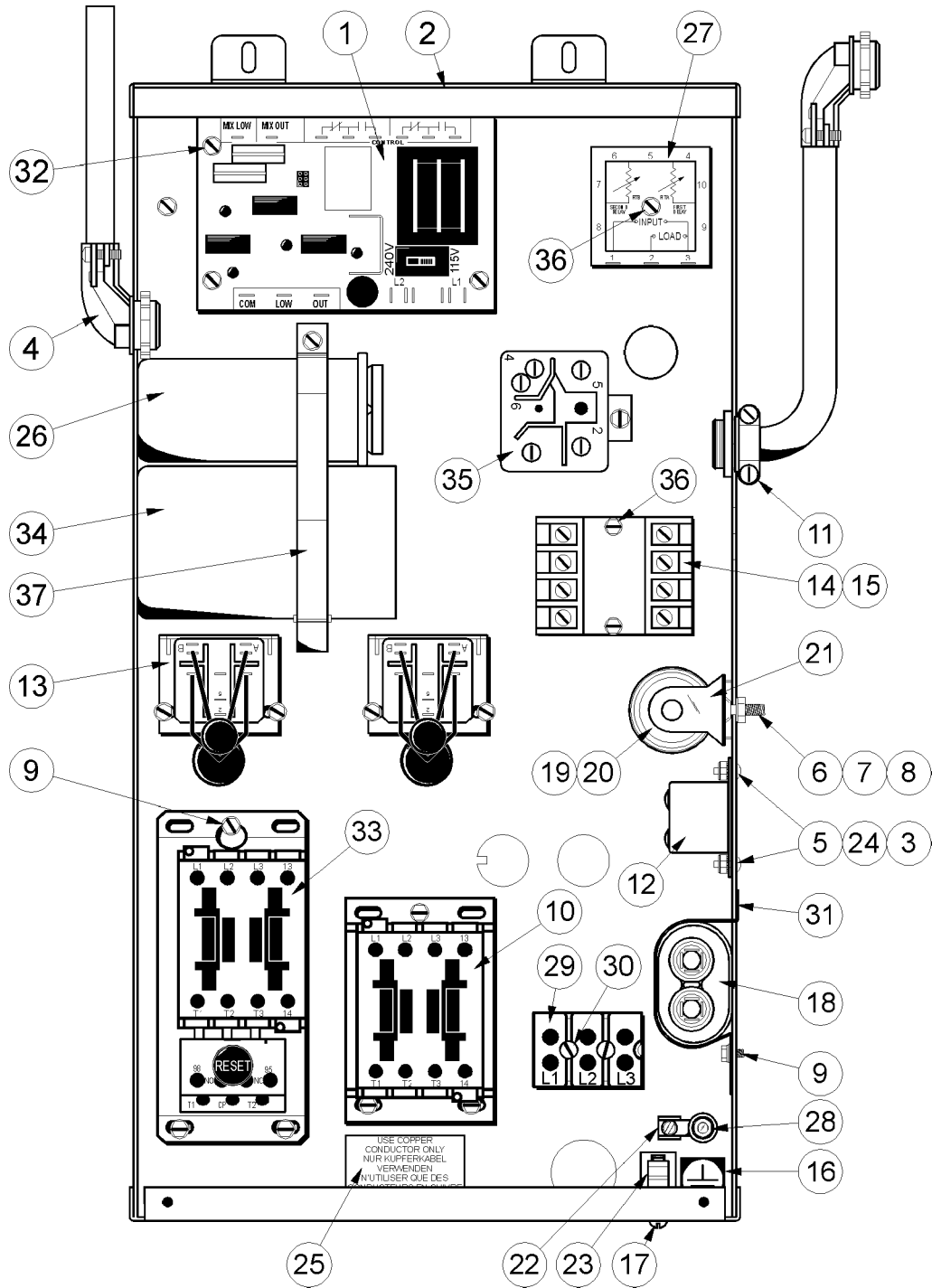
Item	Description	Part No.
31	GROMMET-COMPRESSOR MT	039923
32	NUT-5/16-18 MF LOCK	017327
33	GUARD-BELT	013576
34	MOTOR-1.0 HP	013102-
35	PULLEY-AK25-5/8	019153
36	VALVE-ACCESS-1/4 MFLX1/4	047016
37	SCREW-5/16-18 X 5/8	017326
38	MOTOR-FAN 120 WATT	041401-27
39	FAN-5 BLADE 12" PUSH 26DEG	029771
40	SHROUD-CONDENSER	041728
41	CONDENSER-AC-12LX18HX4.3	019558
42	RECEIVER A.-REFRIG *060*AC	X48812
43	LINE A.-DISCHARGE *H60*AC	X47903
44	EXCHANGER A.-HEAT *H60*	X47902
45	FRAME A. *060*AC	X48791
46	CASTER-SWV 5/8 STEM 4IN	018794
47	FASTENER-CLIP 1/4-20 U-TYPE	045865
48	SCREW-1/4-20X3/8 RHM	011694
49	COMPRESSOR TL3G-R134A	047701-27
50	SWITCH-PUSHBUTTON- 4 SEL.	016982
51	BRACKET-ROCKER SWITCH	020820
52	LIGHT-GREEN-ROUND-250V	032985-27
53	PLATE-DEC	048825
54	DECAL-DEC-TAYLOR	021872
55	SCREW-6-32X3/8 BINDER HD	002201
56	BOLT-CARRIAGE 1/4-20	012347
57	PAN-DRIP 19-1/2 LONG	035034
58	PANEL-SIDE *5472 HT* UPPER	042317
59	PANEL A.-SIDE *H60*R	X48286
60	PANEL-REAR W/LOUVERS	026980-SP
61	PANEL A.-FRONT	X46634
62	ADAPTOR A.-CASTER	X18915
63	ACCUMULATOR A.-AIR *060*	X48899
63a	ACCUMULATOR A.-PARTIAL	X48950
63b	ADAPTOR-1/8FP X 1/4 BARB	024535
63c	VALVE-DRAIN COCK 1/8 MPT	024537
64	SWITCH A.-DRAW*060*	X48896
65	SWITCH A.-TORQUE	X29869
66	SWITCH-TOGGLE-DPST-3A-12	016250
67	GUIDE A.-DRIP PAN *H60*	X47900

Item	Description	Part No.
68	WASHER-5/16 SAE FLAT	017660
69	LINE A.-WATER RINSE	X47133
70	PANEL A.-SIDE *H60*L	X48285
71	LOUVER-SIDE	013631
72	SCREW-10-32X3/8 RHM-ZP	002742
73	WASHER-PLASTIC PIVOT	013808
74	LUG-GROUNDING	020928
75	BLOCK-TERMINAL 2P-L1,L2	039422
75a	SCREW	039420
76	COVER-SPLICE BOX	028224
77	BRACKET A.-ACCUMULATOR	X29782
78	FITTING-QD FEMALE PANEL	036295
79	TRIM A.-SHELF	X45334
80	MANIFOLD A.-REGULATOR	X47285
81	CABINET A.-SYRUP	X45769
82	GASKET-SYRUP DOOR	045326
83	DOOR A.-SYRUP CABINET	X45325
84	BUSHING-SYRUP CAB. DOOR	045340
85	BEARING-SYRUP CAB. DOOR	045339

Item	Description	Part No.
86	WASHER-3/16 FLAT STEEL	005194
87	SCREW-10-32X3/8 TRUSS HD -	024298
88	PLATE-HINGE LOWER	045338
89	PLATE-HINGE UPPER	045337
90	LIGHT A.-MIX OUT-RED	X47219-27
91	MOTOR A.-CONDENSER FAN	X48815-27
91a	CONDENSER-AC-7X6X1.25	027155
91b	DRYER-CAPIL. TUBE .026 ID	047699
91c	SCREW-8 X 3/8 RD HD TYPE B	013234
91d	MOTOR-FAN 105CFM 3000	027309-27
91e	SHROUD-DANFOSS	048818
92	LIGHT A.-MIX ADD-AMBER WITH TERMINALS	X47218-27
92a	LIGHT-AMBER RECT. 250 VAC	047141-27
93	BRACKET-SWITCH	017047
94	SWITCH - ROCKER 4PDT	020824
*94a	CARD-WASH/OFF/AUTO	014091
*95	ACCESS VALVE-HS AUX	044404

\*Not Identified

# Model 60 Control Assembly (X48805-27A) 230-60-1



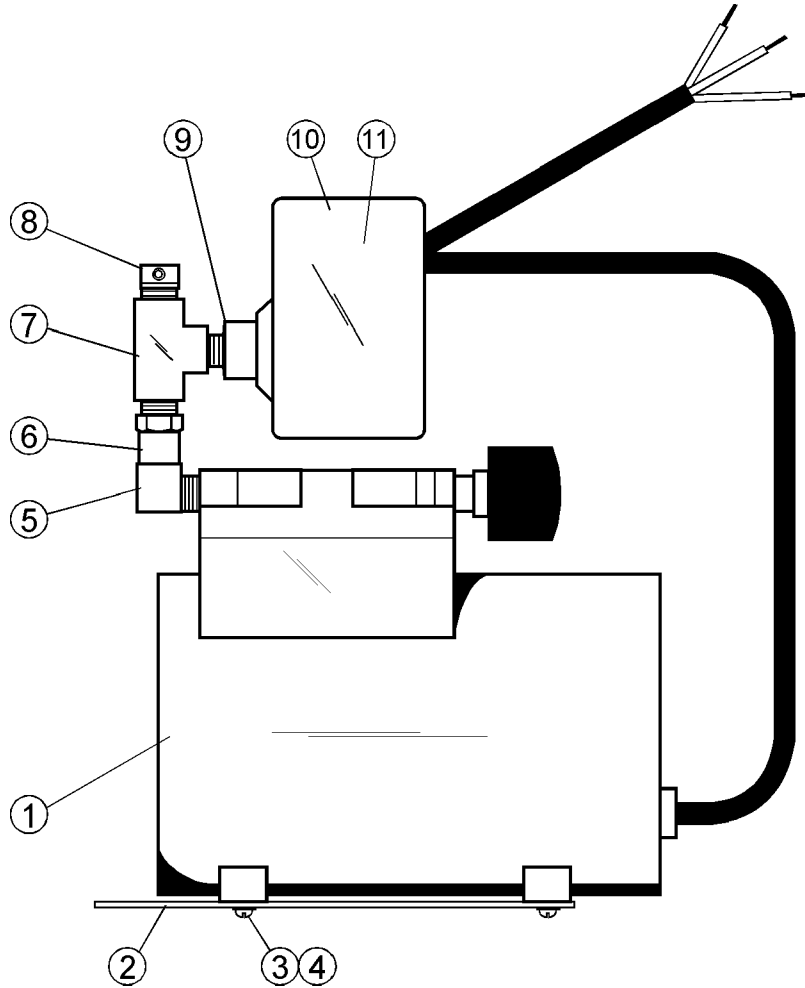


## Model 60 Control Assembly Parts Identification w/Electrics of 230-60-1

Item	Description	Part No.
1	PCB A.-DUAL MIX LVL/CONT.	X41420-SER
2	BOX A.-CONTROL *060*	X48806
3	NUT-6-32 HEX	000927
4	CONNECTOR-BX 3/8 90D	001793
5	SCREW-6-32X3/8 BIN.HD SLOT	002201
6	WASHER-#10 SHAKEPROOF	002681
7	SCREW-10-32 x 1/2 FLAT HD	003053
8	NUT-10-32 HEX	005598
9	SCREW-8X1/4 SL HEX HD B	009894
10	RELAY-3 POLE-20A-208/240	012725-33
11	CONNECTOR-BX 3/8 STR W/2	014569
12	RELAY-SPIN. MOTOR- 1/2 HP	016006-27
13	TIMER-DELAY 5 SEC. DELAY	016822-27
14	SOCKET-RELAY-8A-125VAC	017082
15	RELAY-PLUG IN -10A- 240V	017146-27
16	LABEL-GROUNDING SYMBOL	017669
17	SCREW-8 X 1/2PAN HD TYP-A	017986
18	CAPACITOR-RUN- 4UF-370V	019624
19	CAPACITOR-START	020246

Item	Description	Part No.
20	CAP-CAPACITOR 1-7/16D TOP	020247
21	BRACKET-CAPACITOR 203/4 L	020248
22	LUG-GROUNDING 260 W/GR. SCREW	020928
23	BLOCK-TERMINAL- 7 POLE	024156
24	WASHER-#6 SHAKEPROOF	024541
25	LABEL-USE COPPER COND	025948
26	CAPACITOR-RUN- 35UF/370V	029439
27	TIMER-CYCLE 5 SEC ON, 120 SEC OFF	037188-27
28	SCREW-10-32x5/8 TAPTITE HEX	039382
29	BLOCK-TERMINAL 2P-L1,L2	039422
30	SCREW-8 X 1-1/4 RD HD B	039420
31	STRAP-CAPACITOR	041350
32	SCREW-6-32x5/8 TAPTITE HEX	041363
33	STARTER-1 PHASE-4.5 TO 7 A	041950-27K
34	CAPACITOR-START-124-149 UF	048134
35	RELAY-START-COMPRESSOR	048150
36	SCREW-6X1 SL HEX HD B	048712
37	STRAP-CAPACITOR-9- 1/8 L	048808

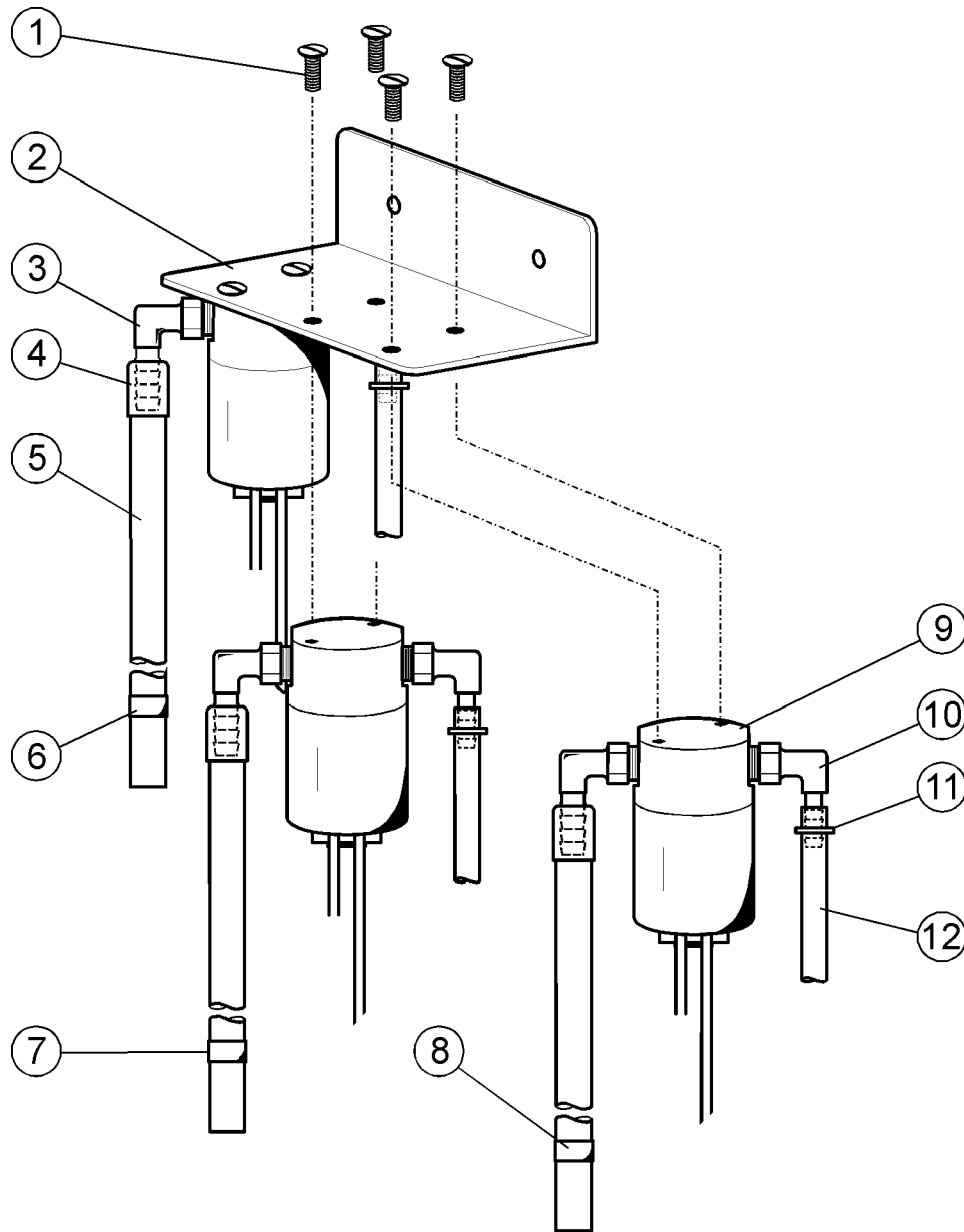
# Model 60 - Compressor A.-Air (X47283-27G)



Item	Description	Part No.
1	COMPRESSOR-AIR	032129-27
2	BRACKET-AIR COMPRESSOR	046663
3	SCREW-8-32X3/8 RD HD STEEL	007544
4	WASHER-#8 SHAKEPROOF	000964
5	ELBOW-1/4PT-STREET-BRASS	012429
6	VALVE-CHECK 1/4MP	020959

Item	Description	Part No.
7	TEE-1/4 FP BRASS	024772
8	FITTING 1/4 X .170 90 DEGREE	075946
9	NIPPLE-1/4IPT X 7/8LONG	026496
10	PLUG-HOLE 7/8 DIA.	010077
11	SWITCH-PRESSURE	016308

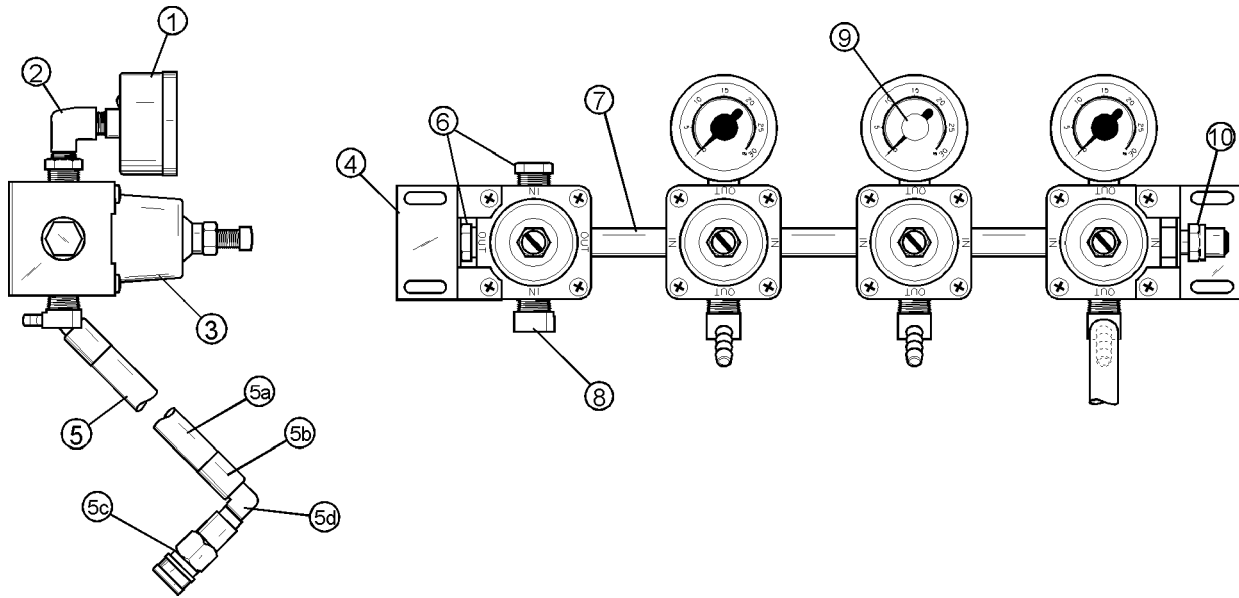
# Model 60 Valve A.-Solenoid (X48910-27)



Item	Description	Part No.
1	SCREW-10-32X3/8 RHM-ZP	002742
2	BRACKET-SOLENOID	046640
3	ELBOW-1/4MPX1/4 BARB	016614
4	FERRULE-.475 ID NP BRASS	021082
5	TUBE-NYLOBRADE 1/4ID	020568-44
6	LABEL-BROWN	022710

Item	Description	Part No.
7	LABEL-RED	022707
8	LABEL-DARK BLUE	022708
9	VALVE-SOLENOID 3/16 ORIFICE	041589-27
10	ELBOW-1/4MPX3/16 BARB	016615
11	CLAMP-HOSE 5/16 ID	017051
12	TUBE-VINYL 3/16X1/16 WALL	020940-15

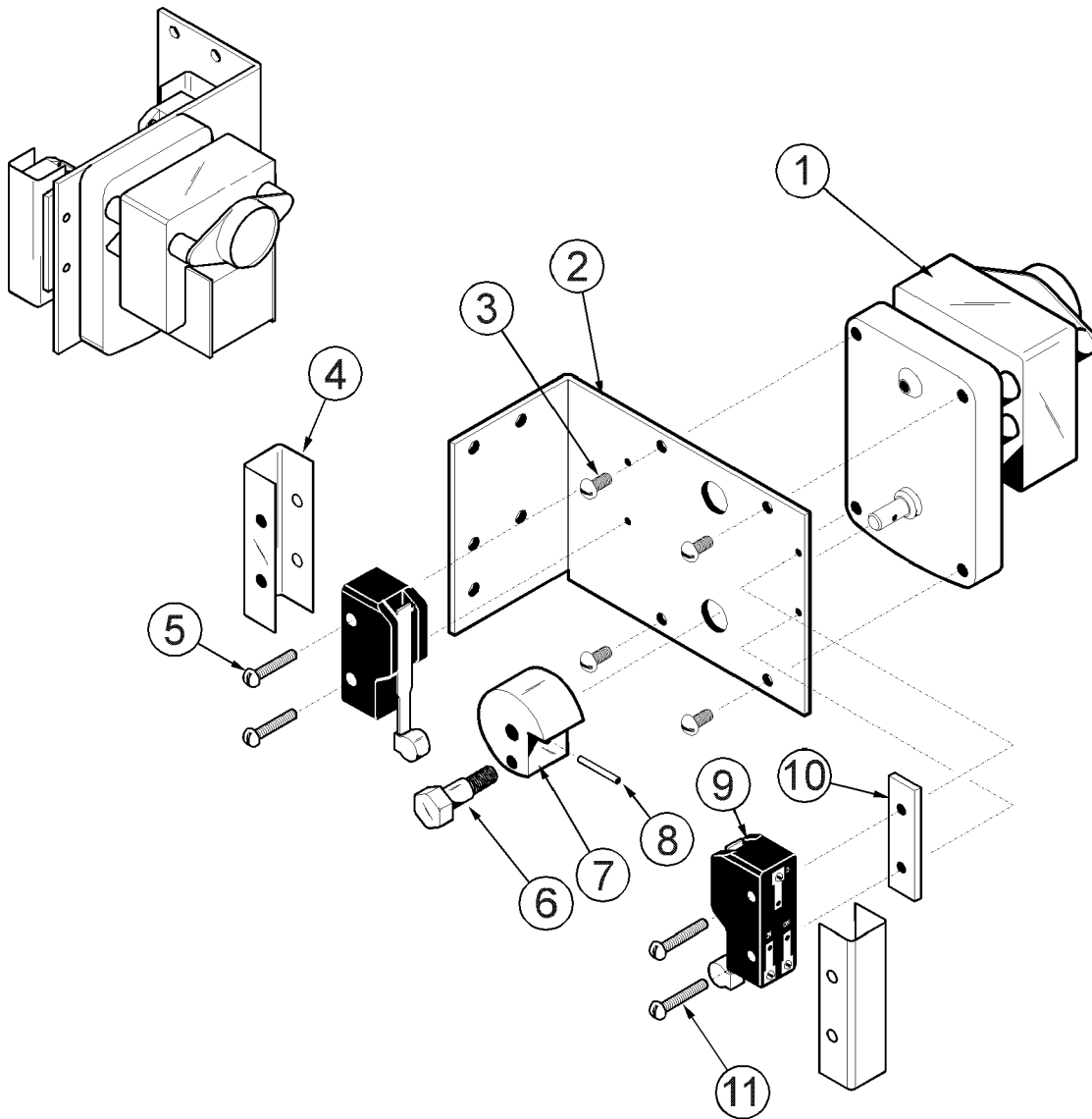
# Model 60 Manifold A.-Regulator (X47285)



Item	Description	Part No.
1	GAUGE-PRESSURE 0-60 PSI	027875
2	ELBOW-1/4MPT X 1/8FPT	047063
3	REGULATOR-PRESSURE-CO2	027744
4	SUPPORT-REGULATOR	027952
5	LINE A.-AIR 45 DEG BARB	X47043-12
5a	TUBE-NYLOBRADE 1/4ID	020568-12
5b	FERRULE-.475 ID NP BRASS	021082

Item	Description	Part No.
5c	SOCKET-Q.D. CO2 90DEG	021524
5d	ELBOW-1/4MPT X 1/4BARB-45	046925
6	PLUG-1/4MP BRASS	027747
7	NIPPLE-1/4 MPT X 2 BRASS	075940
8	FITTING 1/4 X .170 90 DEGREE	075946
9	DECAL-FLAVOR COLOR SET 4	022105
10	VALVE-PRESSURE RELIEF	047252

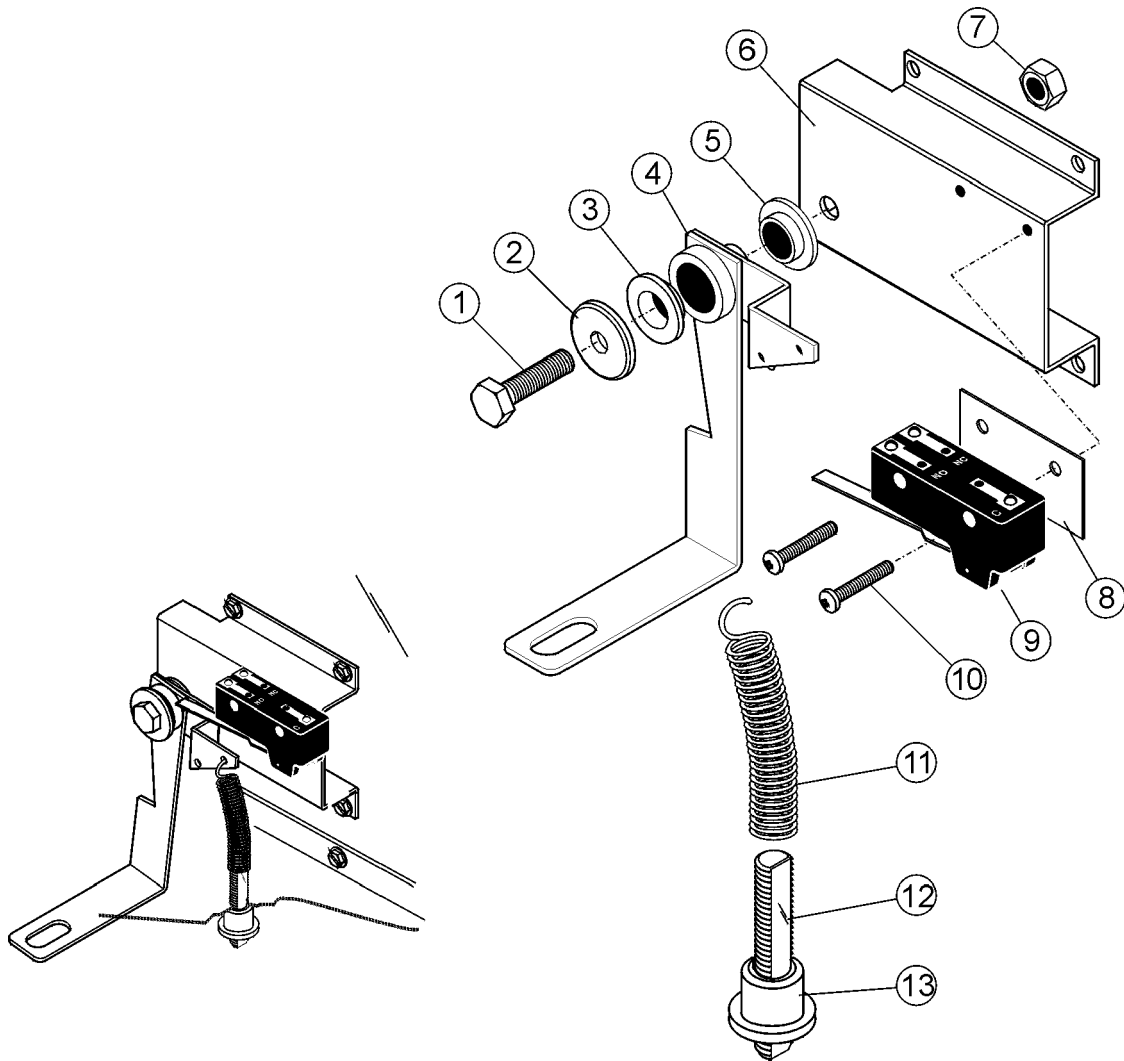
# Model 60 Motor A.-Lift (X48897-27)



Item	Description	Part No.
1	MOTOR-AUTO LIFT-GEAR	016985-27
2	BRACKET-MOTOR *452*	017040
3	SCREW-8-32 X 3/8 RD HD	015500
4	INSULATOR-ARMITE-4 HOLE	017309
5	SCREW-6-32X7/8 RHM	007017
6	SCREW-SHOULDER	017589

Item	Description	Part No.
7	CAM-LIFT *452*	017039
8	PIN-ROLL-.094 D X .750 L	017163
9	SWITCH-20A-250V,1/2 HP	016999
10	SPACER-SWITCH	017332
11	SCREW-6-32X1 RHM	017056

# Models 60/62 Torque Switch A. (X29869-SER)

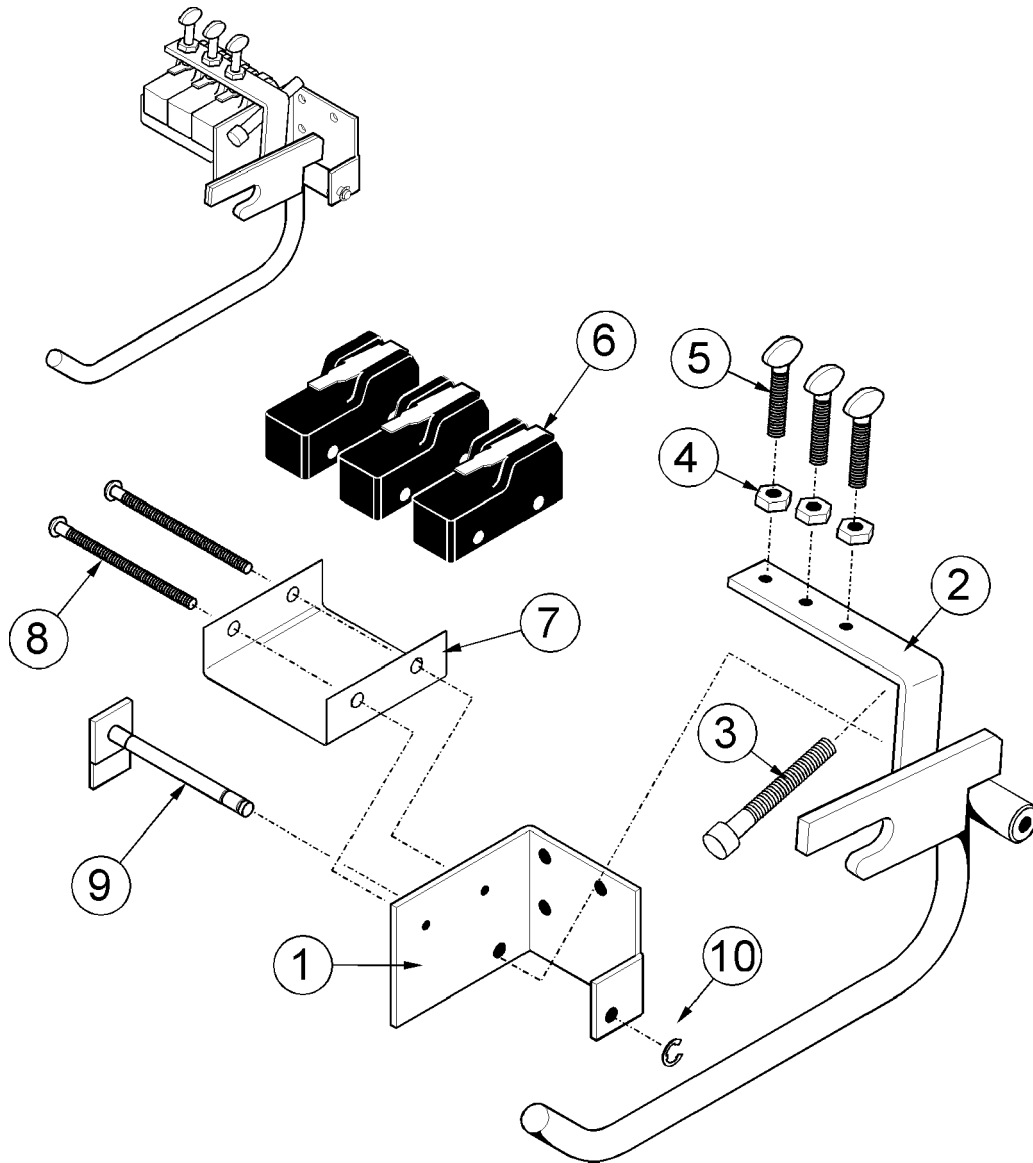


Item	Description	Part No.
1	SCREW-1/4-20X1 HEX HD CAP	017254
2	WASHER-1/4-FLAT ZP STEEL	000655
3	BUSHING-HUB	017035
4	HUB A.-ARM	X17033
5	BUSHING *452*	037904
6	BRACKET-CONTROL	015526
7	NUT-1/4-20 HEX	000707

Item	Description	Part No.
8	INSULATOR-ARMITE-4 HOLE	012992
9	SWITCH-SNAP-SPDT-20A/125	014472
10	SCREW-6-32X7/8 TAPTITE RD	042514
*11	SPRING-TORQUE*BLACK*	015007
*12	SCREW-ADJUSTMENT	014498
*13	KNOB-ADJUSTMENT	014499

\*SEPARATE ITEMS

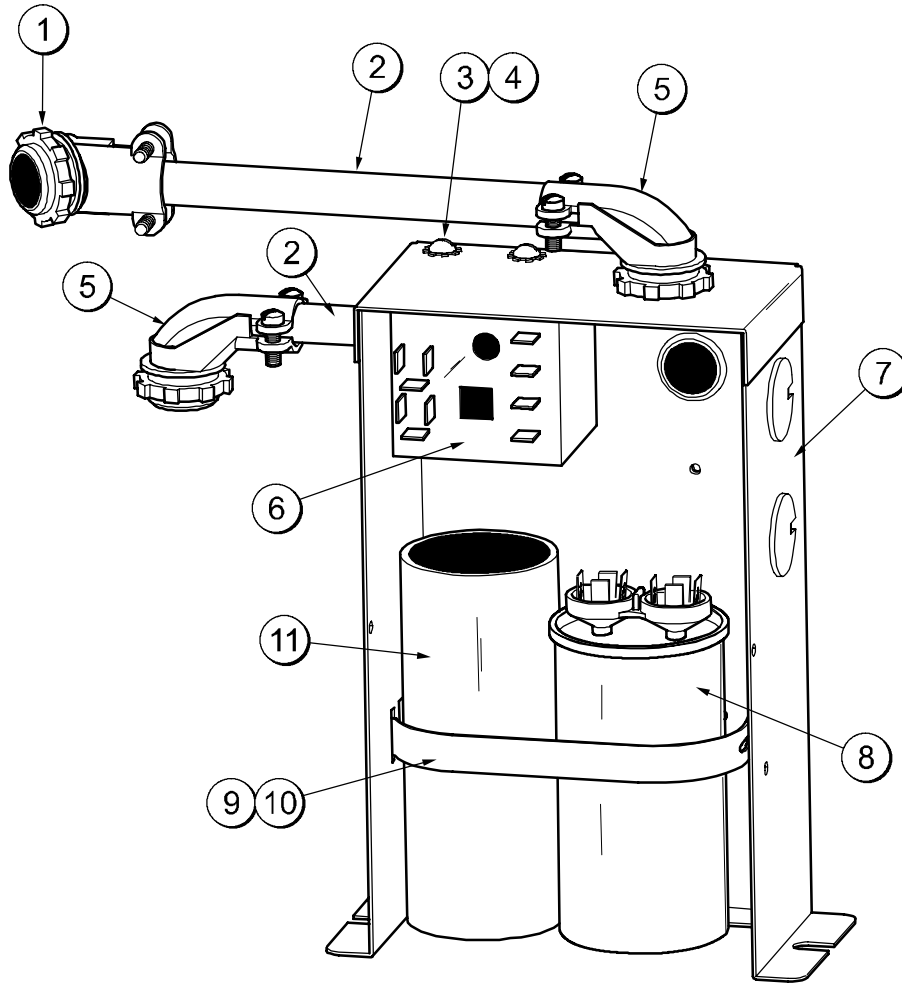
# Models 60/62 Draw Switch Assembly (X48896)



Item	Description	Part No.
1	BRACKET-DRAW ARM *452*	017037
2	ARM A.-DRAW *452*	X17041
3	SCREW-1/4-20X1-3/4	023742
4	NUT-10-32 HEX	005598
5	SCREW-10-32X1 THUMB-ZP	017028

Item	Description	Part No.
6	SWITCH-LEVER-SPDT-15A	009367
7	INSULATOR-ARMITE-5 HOLE	015864
8	SCREW-6-32X2-1/4 RHM	015863
9	PIN A.-PIVOT *452*	X17092
10	E-RING 3/16 0.335 OD	049178

# Model 62 Box A.-Cap & Relay (X49934-27) 230-60-1



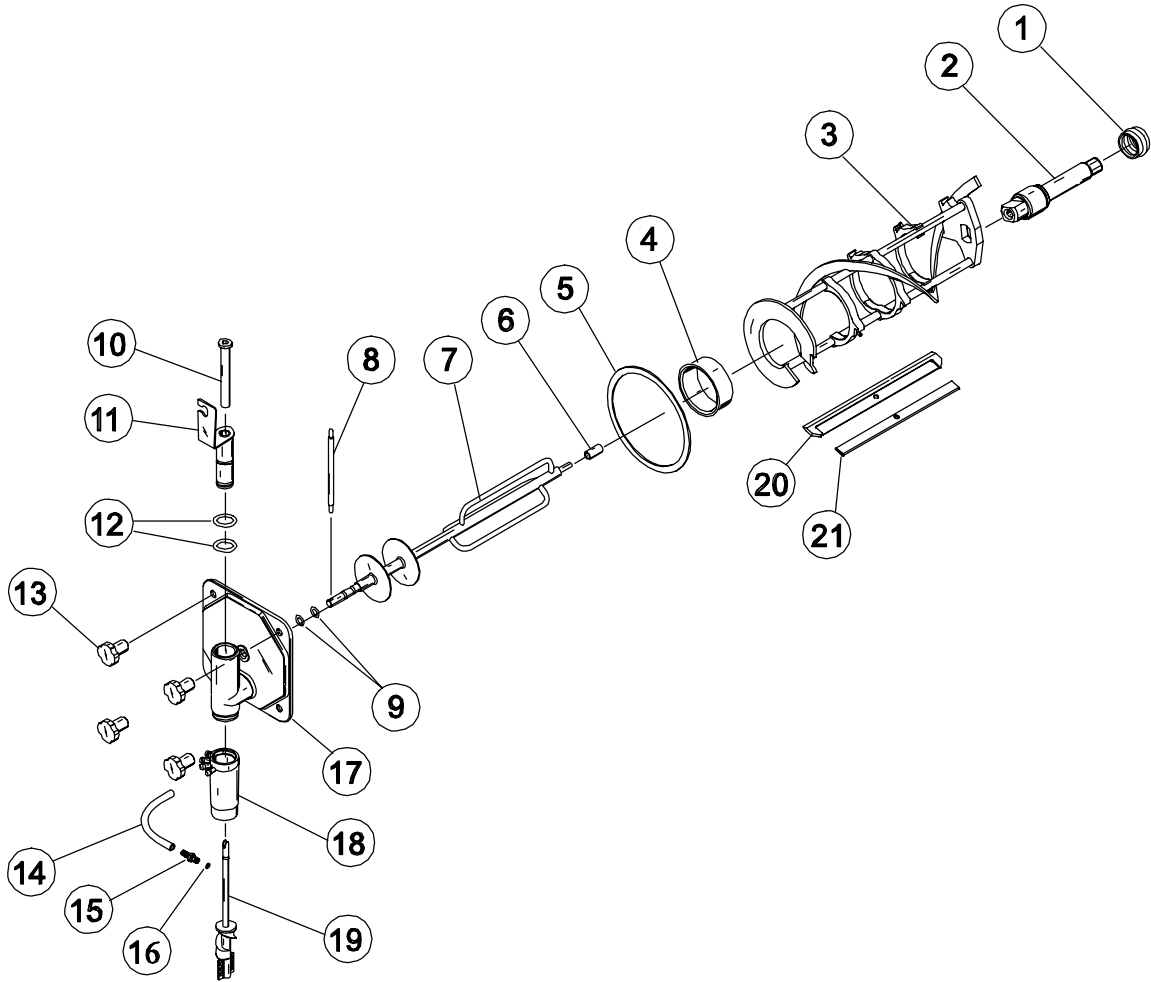
Item	Description	Part No.
1	CONNECTOR-BX 3/8 45D	010687
2	SLEEVE-WIRE 7/16 ID	020919-40
3	SCREW-8-32 X 1/4 RHM	000953
4	WASHER-#8 SHAKEPROOF	000964
5	CONNECTOR-BX 3/8 90D	001793
6	RELAY-START-COMPRESSOR	037430
7	BOX-CAPACITOR RELAY	046642

Item	Description	Part No.
8	CAPACITOR-RUN- 25 UF/440V	037431
9	STRAP-CAPACITOR 5-5/8 IN.	030258
10	SCREW-10 X 3/8 TYPE B - HEX	015582
11	CAPACITOR-START-161-193UF	031790
*	LABEL-WIRING SINGLE PH.	036880-2
*	COVER-CAP.RELAY BOX	046643

\*Not Shown



# Models 60/62 Beater Assembly



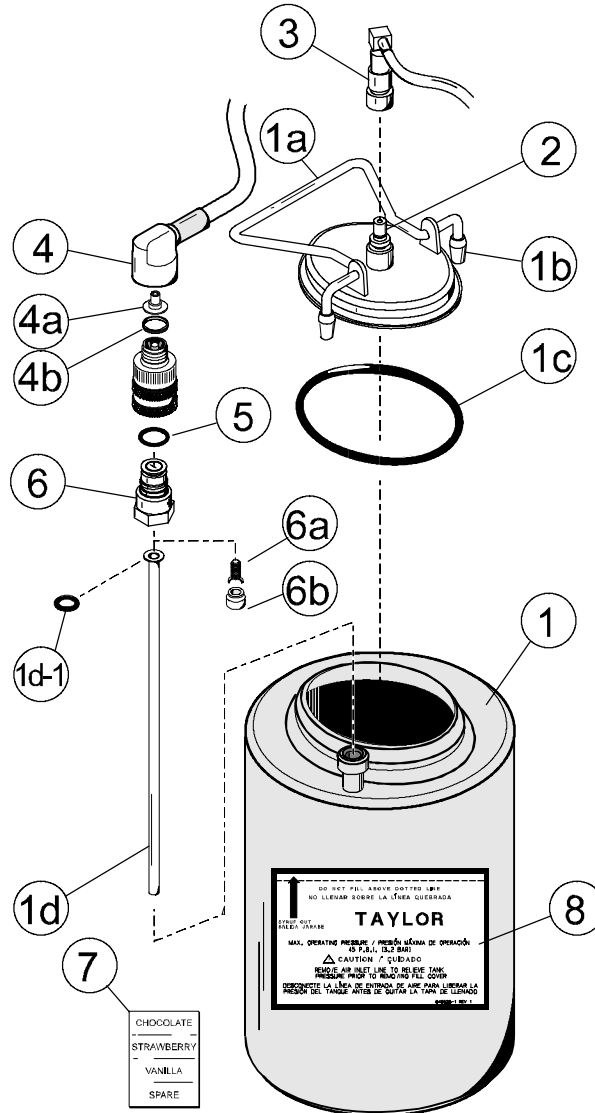
Item	Description	Part No.
1	Seal-Drift Shaft	032560
2	Drive Shaft	035527
3	Beater Assembly	X46233
4	Front Bearing	013116
5	Door Gasket	016672
6	Bearing Guide	014496
7	Torque Shaft Assembly	X17381
8	Torque Arm	014500
9	O-Ring-Torque Shaft	018550
10	Spinner Bearing	017032
11	Draw Valve Assembly	X46671

Item	Description	Part No.
12	O-Ring-Draw Valve	013029
13	Stud Nut	021508
14*	Tube-Vinyl (M 60 Only))	020940-6 020940-8
15	Fitting-QD Male Insert (M 60 Only)	036296
16	O-Ring (M 60 Only)	016272
17	Freezer Door Assembly	X17373
18	Spinner Housing	017269
19	Blade Assembly-Spinner	X35570
20	Scraper Blade	046237
21	Clip-Scraper Blade	046238
22**	Female Fitting (M 60 Only)	036295

\* Bulk Part Number is R30314

\*\*Not Shown

# Models 60/62 Syrup Tank

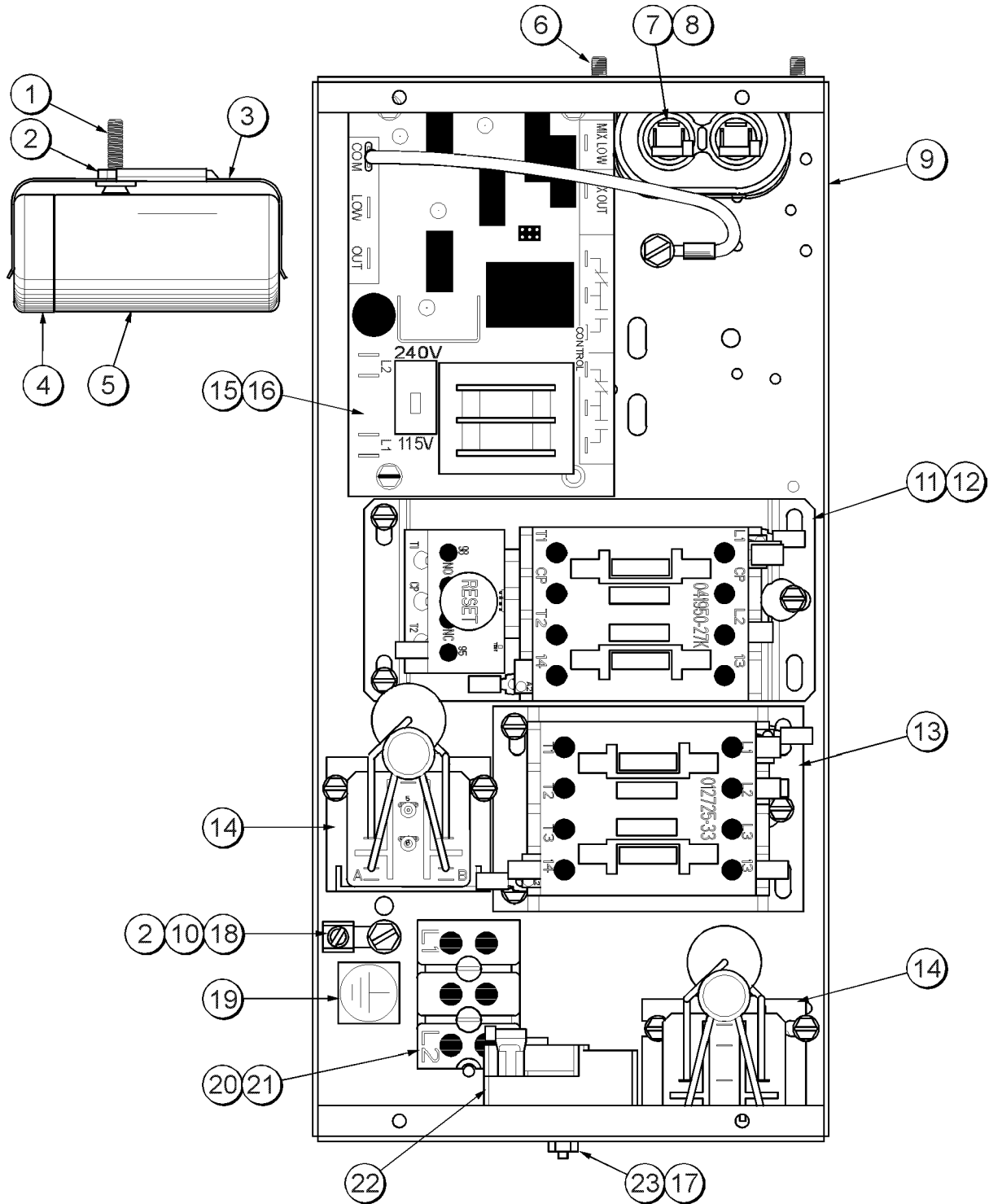


Item	Description	Part No.
1	Tank-Syr-4 Qt.	045533
1a	Cover-Tank 8 Qt. w/Inlet Ftg.	035759-1
1b*	Tip-Nylon-White Translucent (Lg.)	042747
	Tip-Nylon-Gray (Small)	024261
1c	O-Ring-3.437 ID x .275 W	016037
1d	Tube-Dip-2 Gal. Syr. Tank w/O-ring	020577-4
1d-1	O-Ring-.291 ID x .080 W	018550
2	Plug-Q.D. CO2 1/8 MP	021077
3	Socket-Q.D. CO2 90° 1/4 Barb	021524
4	Socket-Q.D. Liq.- 90° 1/4 Barb	021026

Item	Description	Part No.
4a**	Restrictor-Syrup-Black	030917
4b	Gasket-Rubber	023551
5	O-Ring-5/8 OD x .103 W	016030
6	Plug-Q.D. Liq. 3/4-18 FP	021081
6a	Valve A.-Q.D. Plug	021081-2
6b	Insert	021081-1
7	Decal-Set 4 Syrup Flavor	021523
8	Decal-Syrup Tank Instruction	045533-1

\* Dual supplier - order as needed  
 \*\*Not used on chocolate

# Model 62 Control Assembly (X49995-27A) 230-60-1

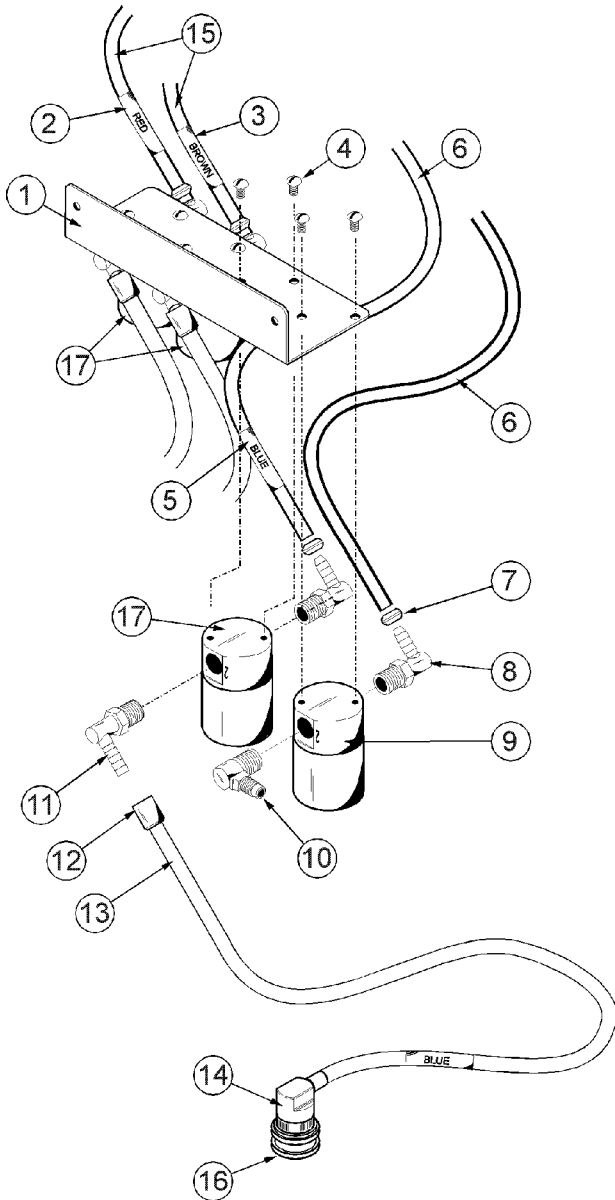


## Model 62 Control Assembly Parts Identification

Item	Description	Part No.
1	SCREW-10-32X3/4 SLOT - SS	028641
2	NUT-10-32 MF LOCK	020983
3	BRACKET-CAPACITOR	020248
4	CAP-CAPACITOR 1-7/16 D	023022
5	CAPACITOR-START- 21- 25UF	020246
6	SCREW-8-32 X 3/8 HEX	041951
7	CAPACITOR-RUN- 4UF-370V	019624
8	BRACKET-CAPACITOR	031205
9	BOX-CONTROL	023015
10	LUG-GROUNDING 260	020928
11	STARTER-1 PHASE-4.5 TO 7 A	041950-27K
12	SCREW-8X1/4 SL HEX HD	009894

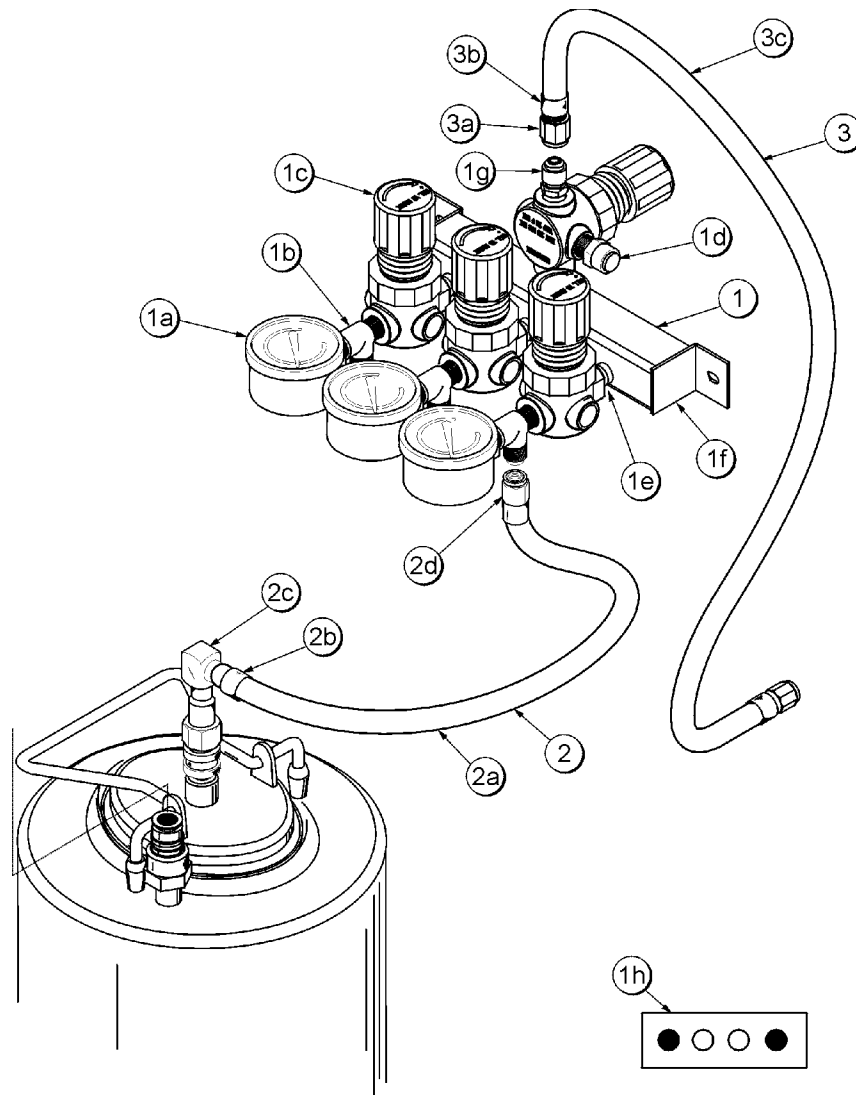
Item	Description	Part No.
13	RELAY-3 POLE-20A-208/240	012725-33
14	TIMER-DELAY 5 SEC. DELAY	016822-27
15	PCB A.-DUAL MIX LVL/CONT.	X41420-SER
16	SCREW-6-32x5/8 TAPTITE HEX	041363
17	NUT-6-32 HEX	000927
18	SCREW-10-32X1/2 MF HEX	020982
19	LABEL-GROUNDING SYMBOL	017669
20	BLOCK-TERMINAL 2P-L1,L2	039422
21	SCREW-8 X 1-1/4 RD HD	039420
22	RELAY-SPINNER MOTOR- 1/2	016006-27
23	SCREW-6-32x3/8 BIN. HD SLOT	002201

# Model 62 - Valve Assembly-Solenoid (X49930-27)



Item	Description	Part No.
1	BRACKET-SOLENOID	049931
2	LABEL-1/4 X 1-1/2 LONG-RED	022707
3	LABEL-1/4 X 1-1/2 LG-BROWN	022710
4	SCREW-10-32X3/8 RHM-ZP	002742
5	LABEL-1/4 X 1-1/2 LONG-DK BL	022708
6	TUBE-VINYL 3/16ID X 1/16 WAL	020940-24
7	CLAMP-HOSE 5/16 OD	017051
8	ELBOW-1/4MP X 3/16 BARB	016615
9	VALVE-SOLENOID-3/32 ORIF.	041599-27
10	ELBOW-1/4MFL X 1/4 MPT	001486
11	ELBOW-1/4MP X 1/4 BARB	016614
12	FERRULE-.475 ID NP BRASS	021082
13	TUBE-NYLOBRADE 1/4 ID	020568-161
14	SOCKET-Q.D. LIQ.-90DEG-1/4	021026
15	TUBE-VINYL 3/16ID X 1/16 W	020940-20
16	RESTRICTOR-SYRUP- BLACK	030917
17	VALVE-SOLENOID-3/16	041589-27

# Model 62 Regulator A.-Remote (X23969)



Item	Description	Part No.
1	MANIFOLD A.-REGULATOR	X23994
1a	GAUGE-60PSI-1/8 MPT	021029
1b	TEE-1/8MPT X 1/8FPT X 1/4	028245
1c	REGULATOR-PRESSURE	020514
1d	VALVE-PRESS.RELIEF-45#	021148
1e	NIPPLE-1/8 MPT CLOSE	020519
1f	MANIFOLD A. *5454-5-8657*	X25293
1g	RESTRICTOR A.-AIR	X21161
1h	DECAL-FLAVOR COLOR SET 4	022105
2	LINE A.-AIR *18 INCH	X23997
	LINE A.-AIR *30 INCH	X24018
	LINE A.-AIR *24 INCH	X24309

Item	Description	Part No.
2a	TUBE-NYLOBRADE 1/4 ID	020568-
2b	FERRULE-.475 ID NP BRASS	021082
2c	SOCKET-Q.D. CO2 90 DEG	021524
2d	ADAPTOR-SWV 1/4 F 1/4 BARB	016715
3	LINE A.-AIR	X24382-96
3a	ADAPTOR-SWV 1/4F 1/4 BARB	016715
3b	FERRULE-.475 ID NP BRASS	021082
3c	TUBE-NYLOBRADE 1/4 ID	020568-96
4*	WASHER-FLARE - 1/4 NYLON	018595

\*NOT SHOWN

# Parts List

DESCRIPTION	PART NUMBER	60 QTY.	62 QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
ACCUMULATOR A.-PARTIAL *060*	X48950	1		103	AIR	
+ADAPTOR-1/8FP X 1/4 BARB BRASS	024535	1		103		
+FERRULE-.475 ID NP BRASS	021082	2				
+FITTING A.-AIR ACCUM INLET	X48548	1		103		
+TUBE-NYLOBRADE 1/4ID X 7/16OD	020568-12	1			BULK UNDER P/N R30317	
+VALVE-DRAIN COCK 1/8 MPT BRASS	024537	1		103		
ACCUMULATOR-COPPER 2"DIA 10"LG	047062	1	1	103		
ADAPTOR A.-CASTER	X18915	4		103		
ARM-TORQUE	014500	1	1	103		
BEARING-FRONT	013116	1	1			
BEARING-GUIDE	014496	1	1			
BEARING-REAR SHELL *NICK.PLATE	031324	1	1			
+GUIDE-DRIP SEAL	028992	1	1			
+NUT-BRASS BEARING	028991	1	1			
+O-RING-1/2OD X .070W	024278	2	2			
+WASHER-BEARING LOCK	012864	1	1			
BEATER A.-7QT-1 PIN-SUPPORT	X46233	1	1	103		
+BLADE-SCRAPER-PLASTIC 9-13/16L	046237	2	2			
+CLIP-SCRAPER BLADE	046238	2	2	103		
BELT-V-4L370	004227	1				
BELT-V-4L450	010311		1			
BLADE A.-SPINNER *8 3/8 INCH*	X35570	1	1	103		
BLOCK-TERMINAL 2P	039422	2	1	103	SINGLE PHASE	
+SCREW 8 X 1 1/14 RD HD TYP B ZP	039420	4	2			
BLOCK-TERMINAL 3P	039423	2	1	103	THREE PHASE	
+SCREW 8 X 1 1/14 RD HD TYP B ZP	039420	4	2			
BLOCK-TERMINAL 7P	024156	1		103	THREE PHASE	
BRUSH-DOUBLE ENDED-PUMP & FEED TUBE	013072	1	1			
BRUSH-DRAW VALVE 1-1/2"OD X 3"	014753	1	1			
BRUSH-END-DOOR-SPOUT-SS-HT	039719	1				

+ Available Separately

DESCRIPTION	PART NUMBER	60 QTY.	62 QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
BRUSH-MIX PUMP BODY-3"X7"WHITE	023316	1	1			
BRUSH-REAR BRG 1IN.DX2IN.LGX14	013071	1	1			
CABINET A.-SYRUP *5472*	X45769	1		103		
CAPACITOR-RUN- 4UF-370V	019624	1	1	103	FAN MOTOR (AIR COOLED ONLY)	
CAPACITOR-START- 21-25UF/220V	020246	1	1	103	SPINNER MOTOR	
CASTER-SWV 5/8 STEM 4IN WHEEL	018794	4		103		
COMPRESSOR AH7513Z-AH245ET	047520-	1		512	MAIN COMPRESSOR-TECUMSEH	
+CAPACITOR-RUN- 35UF/370V	029439	1		103	230-60-1	
+CAPACITOR-START-124-149UF/330V	048134	1		103	230-60-1	
+RELAY-START-COMPRESSOR	048150	1		103	230-60-1	
COMPRESSOR-M65B163BBCA	048258-27		1	512	MAIN COMPRESSOR-BRISTOL	
+CAPACITOR-RUN- 25 UF/440V	037431		1	103		
+CAPACITOR-START-161-193UF/250V	031790		1	103		
+RELAY-START-COMPRESSOR	037430		1	103		
COMPRESSOR TL3G-R134A	047701-27	1	1	512	HOPPER REFRIGERATION (DANFOSS)	
+CAPACITOR-START-60UF-220/275V	047703	1	1	103		
+COVER-TERMINAL-COMPRESSOR	047739	1	1			
+KIT-MOUNTING-COMPRESSOR	047704	1	1	103		
+RELAY-START-COMPRESSOR-TL3G	047702-27	1	1	103		
COMPRESSOR-AIR	032129-27	1		103		
+FITTING 1/4 X .170 90 DEGREE	075946	1				
+NIPPLE- 1/4IPT X 7/8LONG BRASS	026496	1				
+SWITCH-PRESSURE	016308	1		103		
+VALVE-CHECK 1/4AMP	020959	1		103		
CONDENSER-AC-12LX18HX4.3-5ROW	019558	1		103	MAIN REFRIGERATION	
CONDENSER-AC-15LX14HX2.59T-3RW	046558		1	103	MAIN REFRIGERATION	
CONDENSER-AC-7X6X1.25-2 ROW	027155	1	1	103	SHR	
CONTROL-TEMPERATURE	027505	1		103	SHR - MODEL 60 - PRIOR TO J7040000	116
CONTROL-TEMPERATURE	028914	1	1	103	SHR - MODEL 60 - J7040000/JP	116
COVER A.-HOPPER	X38458-SER	1		103	J7040000/JP (REPLACES X42628) 043934 PINS REMOVED FROM HOOD	116

+ Available Separately



DESCRIPTION	PART NUMBER	60 QTY.	62 QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
+GASKET-MIX HOPPER	038375	1		000		115
KNOB-MIX COVER	025429	1		103		
COVER A.-HOPPER	X38458-SER		1	103	J6080000/UP (REPLACES X43523)	108
+GASKET-MIX HOPPER	038375		1	000		
KNOB-MIX COVER	025429		1	103		
COUPLING A.-DRIVE-SPINNER	X17106	1	1	103		
PIN-ROLL-.094D X.562L	015971	1	1			
CUP-DIVIDED SYRUP	017203	1	1			
DECAL-CLEAN INST.-HOPPER	019029	1	1			
DECAL-DEC-TAYLOR	021872	1	1			
DECAL-MIX REF. ON-OFF	021665	1				
DECAL-OVERLOAD SETTING	045384	1				
DECAL-SET 4 SYRUP FLAVOR	021523	1	1			
DECAL-SYRUP FLAVOR INSTRUCTION	020997	1	1			
DIAGRAM-WIRING *060*	048900-	1	1			
DOOR A.-PARTIAL-1 SPT *452	X17373	1	1	103		
+BEARING-SPINNER *452*	017032	1	1			
+GASKET-DOOR 5.177ID X 5.938OD	016672	1	1			
+VALVE A.-DRAW *H60*	X46671	1	1	103		
+O-RING-1-1/16 OD X .139W	013029	2	2			
DOOR A.-SYRUP CABINET *5472*	X45325	1		103		
+BEARING-SYRUP CAB. DOOR *5472*	045339	2				
+BUSHING-SYRUP CAB. DOOR *5472*	045340	2				
+GASKET-SYRUP DOOR	045326	1				
+PLATE-HINGE *5472*LOWER	045338	1		103		
+PLATE-HINGE *5472*UPPER	045337	1		103		
DRYER-CAP. TUBE-HP62/R134A	047699	1	1		HOPPER REFRIGERATION (DANFOSS)	
DRYER-FILTER-HP62-3/8 X 1/4S	047521	1			MAIN REFRIGERATION	
DRYER-FILTER-HP62-3/8 X 1/4S	048901		1		MAIN REFRIGERATION	
FASTNER-CLIP 1/4-20 U TYPE	045865	4	4		PANEL FASTNER	

+ Available Separately

DESCRIPTION	PART NUMBER	60 QTY.	62 QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
+SCREW-8-36X3/8 SLOT HEX WASHER	046137	4	4			
FITTING-QD FEMALE PANEL MOUNT	036295	4		103	FRONT PANEL (3 SYRUP 1 RINSE)	
FITTING-QD MALE INSERT	036296	4		103	FRONT PANEL (3 SYRUP 1 RINSE)	
GEAR A.*REDUCER	012235	1	1	212		
GUIDE A.- DRIP PAN *H60*	X47900	1		103		
GUIDE A.- DRIP PAN*062*	X49919		1	103		
HOUSING-SPINNER *4 SPIGOT*452*	017269	1	1	103		
KIT A.-TUNE UP	X34615	1	1			
BEARING-FRONT	013116	1	1		FREEZER DOOR	
BEARING-GUIDE	014496	1	1		TORQUE ROTOR	
GASKET-DOOR 5.177ID X 5.938OD	016672	1	1			
O-RING-.291 ID X .080W	018550	5	5		TORQUE ROTOR	
O-RING-.643 OD X .077W	018572	2	2		FEED TUBE	
O-RING-1-1/16 OD X .139W	013029	2	2		DRAW VALVE	
O-RING-5/16 OD X .070W	016272	4	4		MALE QD FITTING	
O-RING-5/8 OD X .103W	016030	3	3		FEMALE QD FITTING (SYRUP)	
SEAL-DRIVE SHAFT	032560	1	1			
TOOL- O-RING REMOVAL	048260-WHT	1	1			
KNOB-ADJUSTMENT	014499	1	1	103	CONSISTENCY CONTROL	
+SCREW-ADJUSTMENT	014498	1	1	103		
KNOB-DRAW VALVE	013635	1	1	103		
+NUT-LOCK KNOB	013649	1	1	103		
LABEL-FLAVOR SELECT*7*	017164	1				
LABEL-MIX COOLING ADJ.	020217	1	1			
LABEL-MOVING PARTS WARNING	024315	3	3			
LEG-4" SS-W/ORING	013458		4	103		
LIGHT-ADD MIX-AMBER-RECTANGULR	047141-27	1	1	103		
LIGHT-INDICATOR-GREEN-ROUND	032985-27	1	1	103		
LIGHT-MIX OUT-RED-RECTANGULAR	047142-27	1	1	103		
LIP-DRIP-NOSE CONE	036435	1	1			

+ Available Separately

DESCRIPTION	PART NUMBER	60 QTY.	62 QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
LOUVER-SIDE	013631	1	1	103	UPPER LEFT	
LUBRICANT-TAYLOR HI PERF-4 OZ TUBE	047518	1	1			
MANUAL-OPER 452/453	028762-M	1				
MANIFOLD A.-REGULATOR *H60*	X47285	1		103		
DECAL-FLAVOR COLOR SET '4'	022105	1				
FITTING 1/4 X .170 90 DEGREE	075946	1				
GAUGE-PRESSURE 0-60 PSI 1/8MPT	027875	3		103		
LINE A.-AIR 45 DEG BARB	X47043-12	3		103		
FERRULE-.475 ID NP BRASS	021082	6				
SOCKET-Q.D. CO2 90DEG 1/4BARB	021524	3		103		
TUBE-NYLOBRADE 1/4ID X 7/16OD	020568-12	3			BULK UNDER P/N R30317	
PLUG-1/4MP BRASS	027747	2				
REGULATOR-PRESSURE-CO2	027744	4		103		
VALVE-PRESSURE RELIEF-45#	047252	1		103		
MOTOR A.-LIFT *060*	X48897-	1		103		
CAM-LIFT *452*	017039	1		103		
MOTOR-AUTO LIFT-GEAR DRIVE	016985-	1		103		
PIN-ROLL-.094D X.750L	017163	1		103		
SWITCH-ROLLER TAB	016999	2		103		
MOTOR-1.0 HP	013102-	1	1	212	BEATER	
MOTOR-1/12 HP 3450 RPM	016005-	1	1	103	SPINNER	
MOTOR-FAN 105CFM 3000RPM	027309-27	1	1	103	HOPPER REFRIGERATION (DANFOSS)	
+BLADE-FAN BLACK-PRESS	033499	1	1	103		93
MOTOR-FAN 120 W 208/230V 60HZ	041401-27	1	1	103		
+FAN-4 BLADE 12" PUSH 26DEG CW	029771	1		103		
+FAN-5 BLADE 12" PUSH 32DEG CCW	047279		1	103		
NUT-STUD *GENERAL USAGE*	021508	4	4	103	HANDSCREWS	
NYLON-SPIRAL WRAP-BLUE-2"	041582-4	1			BULK UNDER P/N R40336	
NYLON-SPIRAL WRAP-BROWN-2"	041582-1	1			BULK UNDER P/N R40338	
NYLON-SPIRAL WRAP-RED-2"	041582-2	1			BULK UNDER P/N R40337	

+ Available Separately

DESCRIPTION	PART NUMBER	60 QTY.	62 QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
PAIL-MIX 10 QT.	013163	1				
PAIL-MIX 6 QT.	023348		1			
PAN-DRIP 19-1/2 LONG	035034	1	1	103		
PANEL A.-FRONT	X49996		1	103		
PANEL A.-FRONT	X46634	1		103		
PANEL A.-SIDE-LEFT	X48285	1		103	LEFT	
PANEL A.-SIDE-LEFT	X50023		1	103	LEFT	
PANEL A.-SIDE-RIGHT	X48286	1		103	LOWER RIGHT	
PANEL-REAR	039021		1	103		
PANEL-REAR W/LOUVERS *5472*	026980-SP	1		103		
PANEL-SIDE-RIGHT	042317	1	1	103	UPPER RIGHT	
PANEL-SIDE-RIGHT	050024		1	103	LOWER RIGHT	
PCB A.-DUAL MIX LVL/CONT. FILL	X41420-SER	1	1	103		
PEDAL A.-FOOT *060*	X48826	1		103		
BRACKET A.-PEDAL *452*	X17598	1		103		
COLLAR-HOLDING *452*	017606	2		103		
NUT 1/4-20	017523	2		000		
PEDAL A.-FOOT -PARTIAL *060*	X48827	1		103		
SCREW 1/4-20 X 3/4	001147	2		000		
SPRING-RETURN-11/16ODX2-1/2OA	017140	2		103		
PLATE-DEC *060*	048825	1		103		
PLATE-DEC- *062*	049999		1	103		
PLUG-Q.D. CO2 1/8 MP	021077	3	3	103		
PLUG-Q.D. LIQ. 3/4-18 FP	021081	3	3	103		
PROBE A.-MIX LOW-HT	X42077	1	1	103		
+DISC-PROBE *SQ HOLE*	030965	1	1	103		
+SPACER-PROBE *SQ HOLE*	030966	1	1	103		
PROBE A.-MIX OUT-SQUARE HOLE	X41348	1	1	103		
+SPACER-PROBE-SQUARE HOLE-7/8	041346	1	1	103		
+SPACER-PROBE-ROUND HOLE-5/8DIA	041347	1	1	103		

+ Available Separately

DESCRIPTION	PART NUMBER	60 QTY.	62 QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
PULLEY-AK25-5/8	019153	1	1	103	MOTOR	
PULLEY-AK64-5/8	007538	1	1	103	GEAR	
REGULATOR A.-REMOTE	X23969		1	103		
MANIFOLD A.-REGULATOR *454-657	X23994		1	103		
DECAL-FLAVOR COLOR SET '4'	022105		1			
GAUGE-PRESSURE 0-60 LBS 1/8MPT	021029		3	103		
MANIFOLD A. *5454-5-8657*	X25293		1	103		
NIPPLE-1/8 MPT CLOSE BRASS	020519		4			
REGULATOR-PRESSURE	020514		4	103		
RESTRICTOR A.-AIR *347-454-5-6	X21161		1	103		
TEE-1/8MPT X 1/8FPT X 1/4MFL	028245		3			
VALVE-PRESS.RELIEF-45# 1/8MP	021148		1	103		
LINE A.-AIR	X24382-96		1	103		
ADAPTOR-SWV 1/4F 1/4BARB*SS*	016715		2	103		
FERRULE-.475 ID NP BRASS	021082		2			
TUBE-NYLOBRADE 1/4ID X 7/16OD	020568-96		1		BULK UNDER P/N R30317	
LINE A.-AIR *18 INCH	X23997		1	103		
ADAPTOR-SWV 1/4F 1/4BARB*SS*	016715		1	103		
FERRULE-.475 ID NP BRASS	021082		2			
SOCKET-Q.D. CO2 90DEG 1/4BARB	021524		1	103		
TUBE-NYLOBRADE 1/4ID X 7/16OD	020568-18		1		BULK UNDER P/N R30317	
LINE A.-AIR *30 INCH	X24018		1	103		
ADAPTOR-SWV 1/4F 1/4BARB*SS*	016715		1	103		
FERRULE-.475 ID NP BRASS	021082		2			
SOCKET-Q.D. CO2 90DEG 1/4BARB	021524		1	103		
TUBE-NYLOBRADE 1/4ID X 7/16OD	020568-30		1		BULK UNDER P/N R30317	
LINE A.-AIR *24 INCH	X24309		1	103		
ADAPTOR-SWV 1/4F 1/4BARB*SS*	016715		1	103		
FERRULE-.475 ID NP BRASS	021082		2			
SOCKET-Q.D. CO2 90DEG 1/4BARB	021524		1	103		
TUBE-NYLOBRADE 1/4ID X 7/16OD	020568-30		1		BULK UNDER P/N R30317	
LINE A.-AIR *24 INCH	X24309		1	103		
ADAPTOR-SWV 1/4F 1/4BARB*SS*	016715		1	103		
FERRULE-.475 ID NP BRASS	021082		2			
SOCKET-Q.D. CO2 90DEG 1/4BARB	021524		1	103		

+ Available Separately

DESCRIPTION	PART NUMBER	60 QTY.	62 QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
TUBE-NYLOGRADE 1/4ID X 7/16OD	020568-24		1		BULK UNDER P/N R30317	
NYLON-SPIRAL WRAP-BROWN-5"	022362-2		1		BULK UNDER P/N R40338	
NYLON-SPIRAL WRAP-RED-5"	022362-1		1		BULK UNDER P/N R40337	
NYLON-SPIRAL WRAP-WHITE-5"	022362		1		BULK UNDER P/N R40320	
WASHER-1/4 FLARE-NYLON	018595		4			
RELAY-3 POLE-20A-208/240 50/60	012725-33	1	1	103	MAIN COMPRESSOR	
RELAY-PLUG IN DPDT-10A	017146-	1		103	AUTO LIFT MOTOR	
RELAY-SPINNER MOTOR-1/2HP-230V	016006-27	1	1	103	SPINNER MOTOR	
RESTRICTOR-SYRUP	030917	2				
SANITIZER KAY-5 125 PACKETS	041082	1	1			
SHAFT-BEATER	035527	1	1	103		
+SEAL-DRIVE SHAFT	032560	1	1			
SHAFT-DRIVE-FLEXIBLE	016787	1	1	103		
+SCREW-8-32 X 3/16 ALLEN SET	006812	2	2		SPINNER SHAFT	
+SHAFT-EXTENSION *452-453*	034693	1		103		
SHELL A.-INSULATED *060*	X50892	1		512	J7040000 (REPLACES X48800) X50892 100% INTERCHANGEABLE - MUST USE 028914	116
SHELL A.-INSULATED *062*	X50003		1	512		
+STUD-NOSE CONE 5/16-18X3/8-16	011390	4	4	103		
SHIELD-MIX-GEAR REDUCER 3-3/8"	013356	1	1	103		
SHIELD-SPLASH-WIRE 13-11/16L	046177	1		103		
SHIELD-SPLASH *5454-8-752-336*	022765		1	103		
SKIRT-AIR FLOW *062*340*AC	049069		1	103		
SOCKET-Q.D. LIQ.-90DEG-1/4BARB	021026	3		103		
SPRING-TORQUE*BLACK*	015007	1	1	103		
STARTER-1 PHASE-4.5 TO 7 A	041950-27K	1	1	103	SINGLE PHASE	
STARTER-3 PHASE-3 TO 5 A	041950-33J	1	1	103	THREE PHASE	
SWITCH A.-FOOT PEDAL *060*	X48809	1		103		
PLATE-FOOT SWITCH MOUNT *060*	048810	1		103		
SEAL-SWITCH	017460	1				

+ Available Separately

DESCRIPTION	PART NUMBER	60 QTY.	62 QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
SWITCH-SNAP-SPDT-15A-125/480V	016339	1		103		
SWITCH A.-TORQUE *452-453*	X29869	1	1	103		
HUB A.-ARM	X17033	1	1	103		
SWITCH-SNAP-SPDT-20A/125-250V	014472	1	1	103		
SWITCH A.-DRAW*060*	X48896	1	1	103		
ARM A.-DRAW *452*	X17041	1	1	103		
BRACKET-DRAW ARM *452*	017037	1	1	103		
CLIP-HAIRPIN .026 WIRE 37/64L	014051	1	1			
PIN A.-PIVOT *452*	X17092	1	1	103		
SWITCH-LEVER-SPDT-15A-125-480V	009367	3	3	103		
SWITCH-PRESSURE 440 PSI-SOLDER	048230	1	1	103		
+BOOT-PRESSURE SWITCH	034682	1				
SWITCH-PUSHBUTTON-4 SELECTOR	016982	1	1	103		
SWITCH-ROCKER-4 PDT	020824	1	1	103		
+BRACKET-ROCKER SWITCH	020820	1	1	103	ROCKER SWITCH	
+CARD-WASH-OFF-AUTO	014091	1	1			
SWITCH-TOGGLE-DPST-3A-125/250V	016250	1	1	103	POWER SWITCH	
TANK-SYR-4 QT	045533	3	3	103	COVER ONLY - 035739-1	
+DECAL-SYRUP TANK INSTRUCTION	045533-1	3	3			
+TIP-NYLON-WHITE	042747	6	6			
+GASKET	016037	3	3		FOR COVER	
+TUBE-DIP	015441-7	3	3	103		
+O-RING	018550	3	3		FOR DIP TUBE	
TEE-ACCESS-5/16 HOSE W/5344COR	047587	1				
TIMER-CYCLE-4 MIN. 9 SEC. CAM	024955-	1		103		
TIMER-DELAY 5 SEC. DELAY OFF	016822-	2	2	103		
TIMER-CYCLE 5SEC ON/120SEC OFF	037188-27	1	1	103		
TORQUE A. *452-453*	X17381	1	1	103		
+O-RING-.291 ID X .080W	018550	2	2			
TRAY-DRIP 14.8	046275	1		103		

+ Available Separately

DESCRIPTION	PART NUMBER	60 QTY.	62 QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
TRAY-DRIP 16-7/8L X 5-1/8	020157		1	103		
TRIM A.-SHELF	X45334	1		103		
TRIM-FRONT DRIP TRAY *453*	039347		1	103		
TRIM-REAR CORNER *H60*	046668	2		103		
TRIM-REAR CORNER	013811		2	103		
TUBE-.170 ID X .250 OD	075885-14	1			BULK UNDER P/N R40302	
TUBE-.170 ID X .250 OD	075885-18	1			BULK UNDER P/N R40302	
TUBE-FEED-1/4 HOLE	015176-5	1	1	103		
TUBE-VINYL 3/16ID X 1/16 WALL	020940-6	2			BULK UNDER P/N R30314 (SYRUP LINES)	
TUBE-VINYL 3/16ID X 1/16 WALL	020940-8	2			BULK UNDER P/N R30314 (SYRUP LINES)	
VALVE A.-SOLENOID-3 FLAVOR*060	X48910-	1		103	3 FLAVOR SYRUP	
BRACKET-SOLENOID *H60*	046640	1		103		
ELBOW-1/4MP X 1/4BARB-PLASTIC	016614	3		103		
ELBOW-1/4MP X 3/16BARB-PLASTIC	016615	3		103		
FERRULE-.475 ID NP BRASS	021082	3				
LABEL-1/4 X 1-1/2 LONG-BROWN	022710	1				
LABEL-1/4 X 1-1/2 LONG-DK BLUE	022708	1				
LABEL-1/4 X 1-1/2 LONG-RED	022707	1				
TUBE-NYLOBRADE 1/4ID X 7/16OD	020568-44	3			BULK UNDER P/N R30317	
TUBE-VINYL 3/16ID X 1/16 WALL	020940-15	3			BULK UNDER P/N R30314	
VALVE-SOLENOID-3/16"ORIFICE-SS	041589-27	3		103		
VALVE A.-SOLENOID-3 FLAV/RINSE	X49930-27		1	103	3 FLAVOR SYRUP & RINSE	
BRACKET-SOLENOID *062*	049931		1	103		
ELBOW-1/4MFL X 1/4MPT -BRASS	001486		1	103		
ELBOW-1/4MP X 1/4BARB-PLASTIC	016614		3	103		
ELBOW-1/4MP X 3/16BARB-PLASTIC	016615		4	103		
FERRULE-.475 ID NP BRASS	021082		6			
LABEL-1/4 X 1-1/2 LONG-BROWN	022710		2			
LABEL-1/4 X 1-1/2 LONG-DK BLUE	022708		2			

+ Available Separately



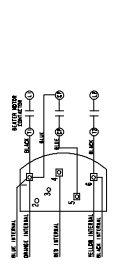
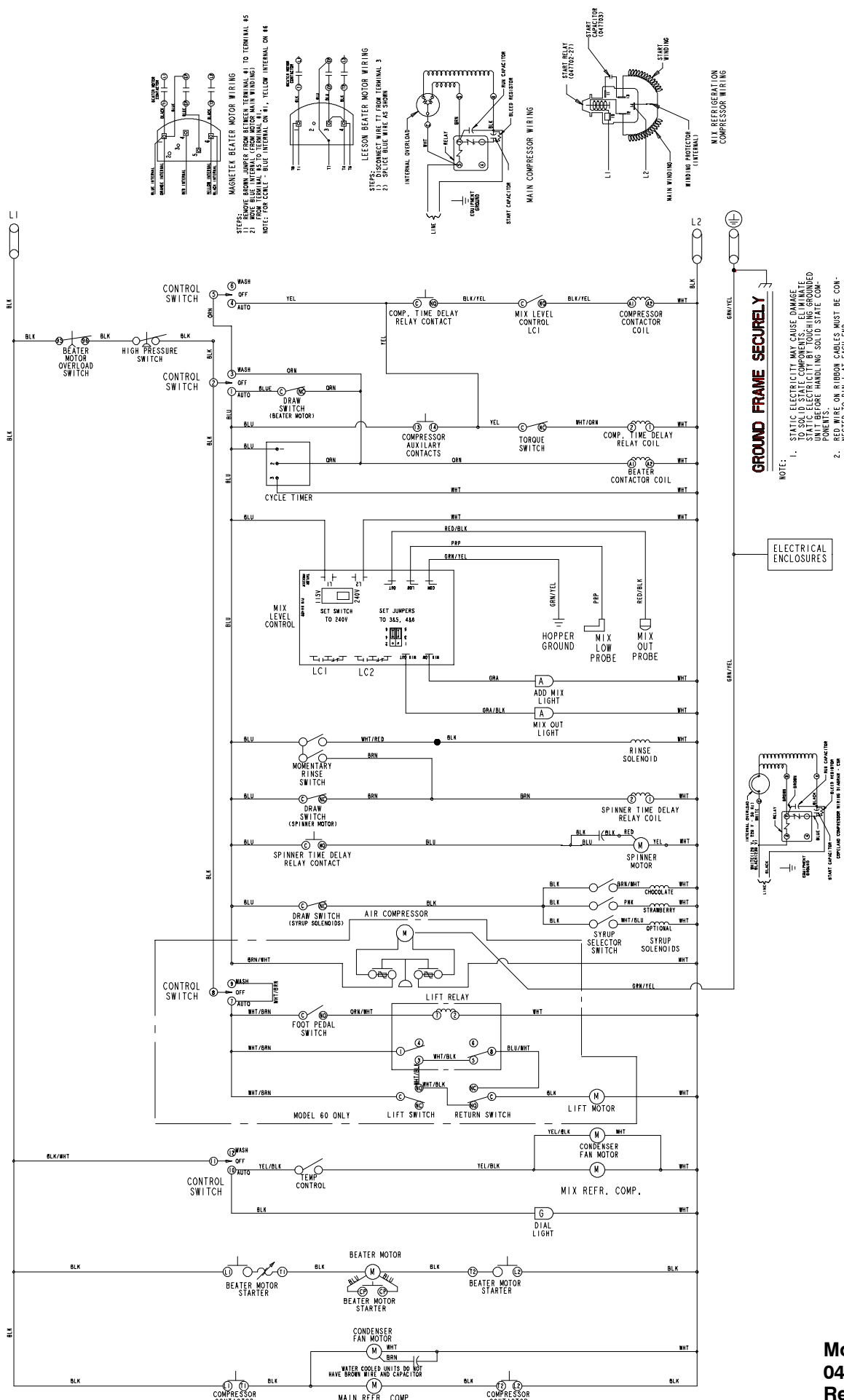
DESCRIPTION	PART NUMBER	60 QTY.	62 QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
LABEL-1/4 X 1-1/2 LONG-RED	022707		2			
RESTRICTOR-SYRUP 452 BLACK	030917		2			
SCREW-10-32X3/8 RHM-ZP	002742		9			
SOCKET-Q.D. LIQ.-90DEG-1/4BARB	021026		3	103		
TUBE-NYLOBRAD 1/4ID X 7/16OD	020568-161		3		BULK UNDER P/N R30317	
TUBE-VINYL 3/16ID X 1/16 WALL	020940-20		2		BULK UNDER P/N R30314	
TUBE-VINYL 3/16ID X 1/16 WALL	020940-24		2		BULK UNDER P/N R30314	
VALVE-SOLENOID-3/16"ORIFICE-SS	041589-27		3	103	SYRUP	
VALVE-SOLENOID-3/32"ORIFICE-SS	041599-27		1	103	RINSE	
VALVE A.-SOLENOID-RINSE *H60*	X46657-	1		103	RINSE	
ELBOW-1/4AMP X 3/16BARB-PLASTIC	016615	1		103		
TUBE-VINYL 3/16ID X 1/16 WALL	020940-11	1			BULK UNDER P/N R30314	
VALVE-SOLENOID-3/32"ORIFICE-SS	041599-27	1		103		
VALVE-ACCESS 1/4FL X 3/8SDR-90	044455	1	1	103		
VALVE-ACCESS 1/4 X 3/8 SOLDER	029406		1	103		
VALVE-ACCESS 1/4FL X 1/4SOLDER	044404		1	103		
VALVE-ACCESS-1/4 MFLX1/4 S-90	047016		1	103		
VALVE-EPR 1/4S	022665	1	1	103		
VALVE-EXP-AUTO-1/4S X1/4 FPT	046365	1	1	103		
+BOOT-EXPANSION VALVE	050900	1	1			
VIDEO-TRAIN FILM-SHAKE-3 FLV	048180-V	1	1			

+ Available Separately

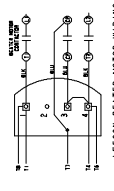
DESCRIPTION	PART NUMBER	60 QTY.	62 QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
WATER COOLED						
BLOWER-100 CFM	012796-27	1		103		
CONDENSER-W/C -COAX	047540	1		103		
CONDENSER-W/C -SPIRAL	049309		1	103		
FAN-5 BLADE 10" PUSH	013043		1	103		
GUARD-BLOWER	022505	1		103		
MOTOR-FAN-25W	015184-27		1	103		
SWITCH-PRESSURE 350 PSI	046431	1	1	103		
TEE-ACCESS 1/2" W/5344 CORE	026688	1		103		
VALVE-WATER 3/8 REG HEAD	046686	1	1	103		

DESCRIPTION	PART NUMBER	60 QTY.	62 QTY.	WARR. CLASS	REMARKS	PARTS UPDATE
50Hz						
BELT - V-4L380	007098	1				
BLOCK - TERMINAL 2 POLE 115V	039421		1	103	230-50-1	
BLOCK - TERMINAL-7 POLE GREEN	024156		1	103	230-50-1	
CAPACITOR-RUN - 30 UF/370V	035734		1	103	MAIN COMPRESSOR-BRISTOL	
CAPACITOR-RUN - 35UF/370V	029439	1		103	MAIN COMPRESSOR-TECUMSEH	
CAPACITOR-START-124-149UF/330V	048134	1		103	MAIN COMPRESSOR-TECUMSEH	
MOTOR-FAN 100W 220-240V 50HZ	047178-34	1		103		
PULLEY-AK30 X 5/8	033559	1	1	103		
RELAY-START-COMPRESSOR	048764		1	103	MAIN COMPRESSOR-BRISTOL	
RELAY-START-COMPRESSOR	048133	1		103	MAIN COMPRESSOR-TECUMSEH	
VIDEO-TRAIN FILM-SHAKE-3 FLY	048180-PAL	1	1			

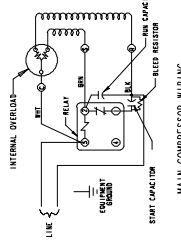
+ Available Separately



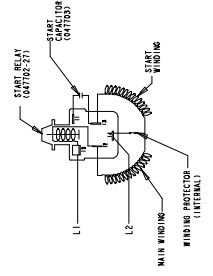
**MAGNETEK BEATER MOTOR WIRING**  
 STEPS:  
 1. REMOVE BROWN WIRE FROM BETWEEN TERMINAL #1  
 2. CONNECT BROWN WIRE FROM BETWEEN TERMINAL #1  
 FROM TERMINAL #5 TO TERMINAL #11, YELLOW INTERNAL ON #4  
 NOTE: FOR CABLE - BLUE INTERNAL ON #1, YELLOW INTERNAL ON #4



**LEESON BEATER MOTOR WIRING**  
 STEPS:  
 1. DISCONNECT WIRE #11 FROM TERMINAL 3  
 2. SPLICE BLUE WIRE AS SHOWN



**INTERNAL OVERLOAD**



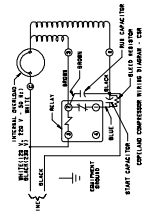
**MAIN COMPRESSOR WIRING**

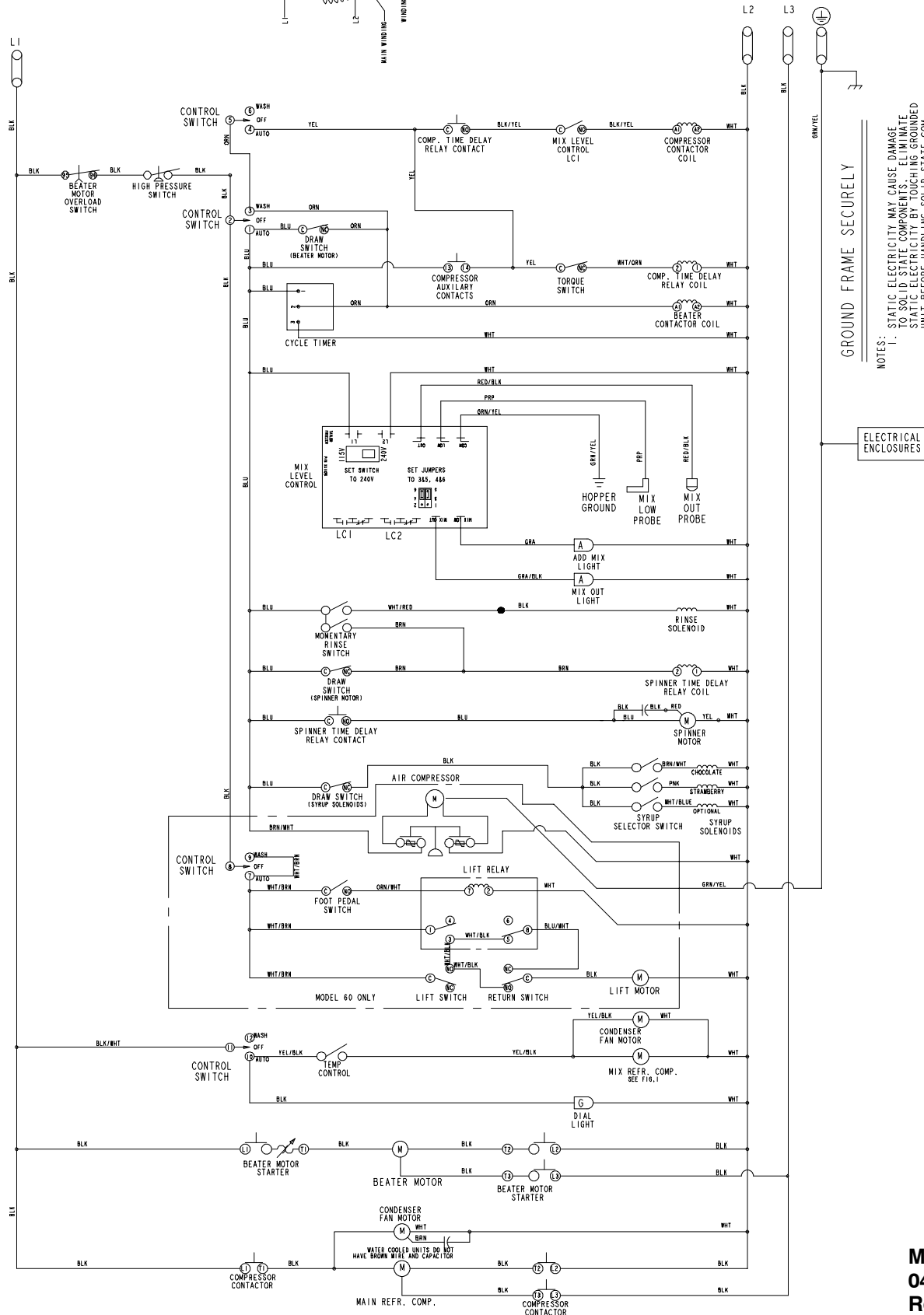
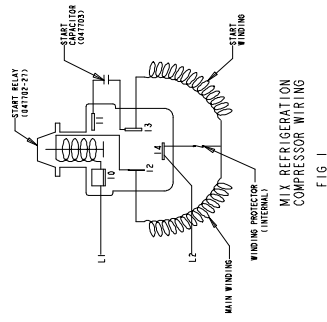
**MIX REFRIGERATION COMPRESSOR WIRING**

**GROUND FRAME SECURELY**

NOTE:  
 1. STATIC ELECTRICITY MAY CAUSE DAMAGE TO THE COMPRESSOR. DISCHARGE STATIC ELECTRICITY BY TOUCHING GROUNDED POINTS ON RIBBON CABLES. MUST BE CONNECTED TO PIN 1 AT EACH END.

ELECTRICAL ENCLOSURES

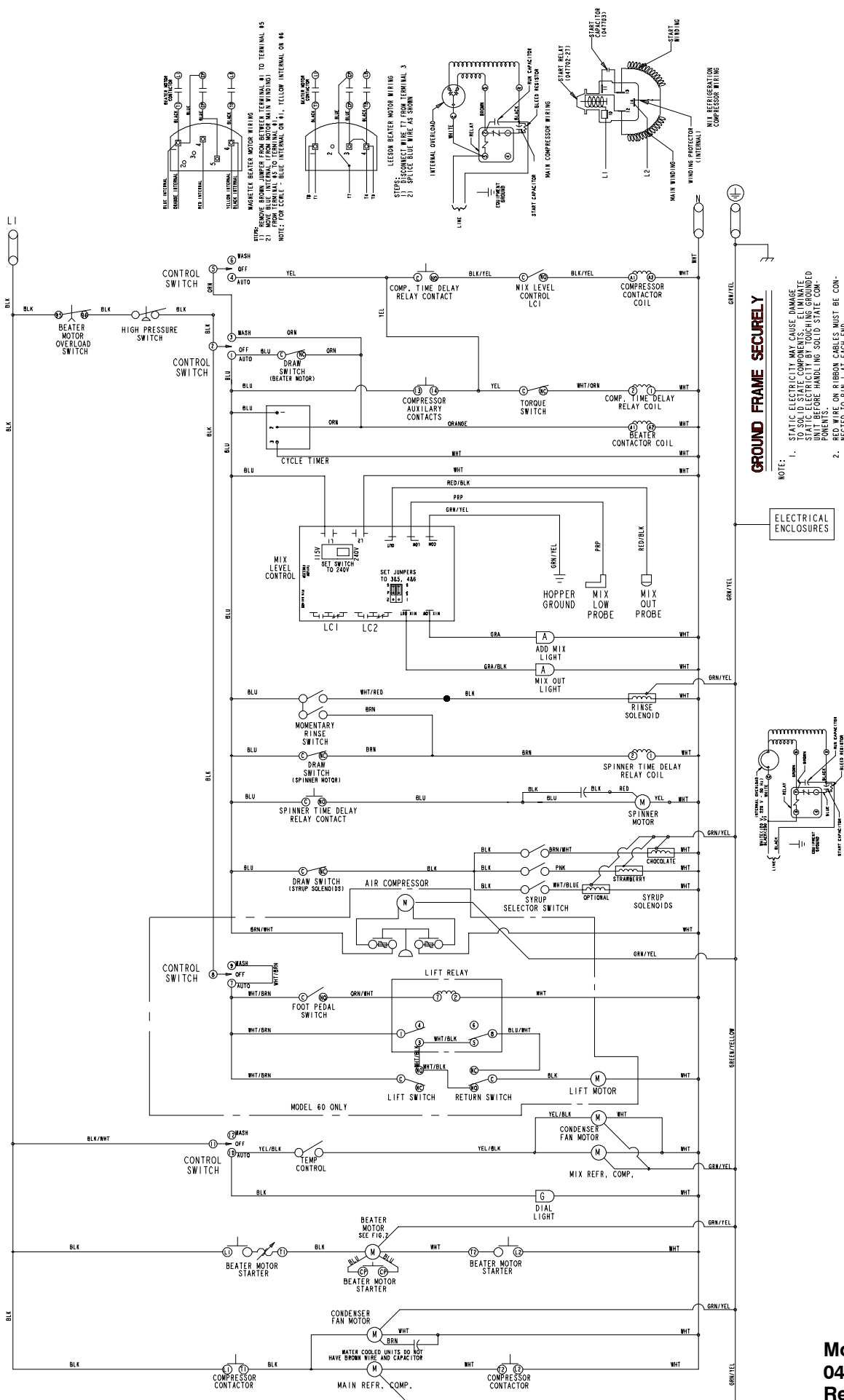




GROUND FRAME SECURELY

NOTES:  
 1. STATIC ELECTRICITY MAY CAUSE DAMAGE TO SOLID STATE COMPONENTS. ELIMINATE STATIC ELECTRICITY BY TOUCHING GROUNDED UNIT BEFORE HANDLING SOLID STATE COMPONENTS.  
 2. RIBBON CABLES MUST BE CONNECTED TO PIN 1 AT EACH END.

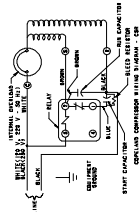
ELECTRICAL ENCLOSURES



**GROUND FRAME SECURELY**

- NOTE:
1. STATIC ELECTRICITY MAY CAUSE DAMAGE TO THE UNIT. TO PREVENT THIS, THE UNIT SHOULD BE GROUNDING STATIC ELECTRICITY BY TOUCHING GROUNDED METAL PARTS OF THE UNIT BEFORE HANDLING SOLID STATE COMPONENTS. THE GROUNDING SHOULD BE ON RIBBON CABLES MUST BE CONNECTED TO PIN 1 AT EACH END.

ELECTRICAL ENCLOSURES



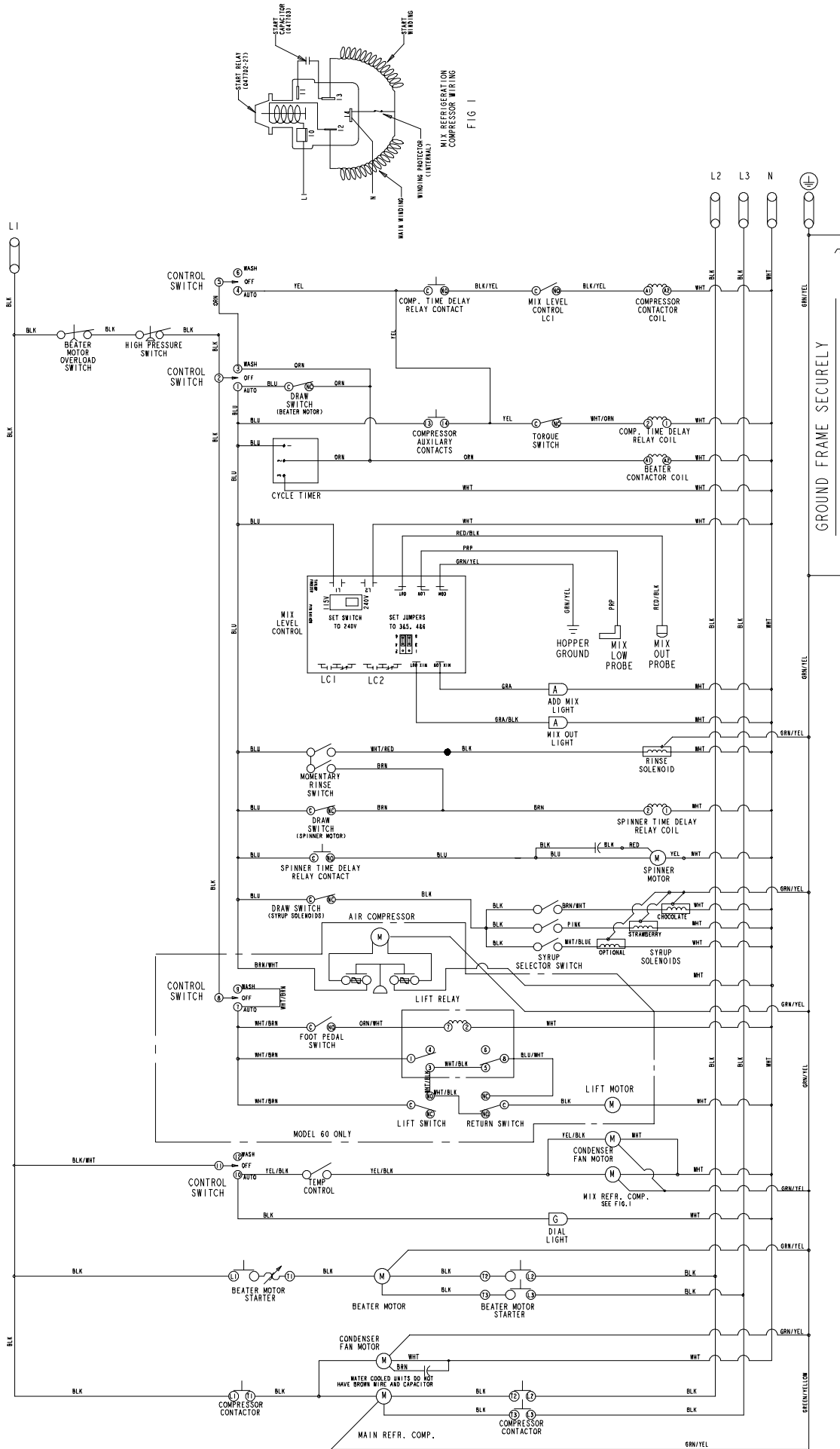


FIG 1

GROUND FRAME SECURELY

ELECTRICAL ENCLOSURES

- NOTES:
1. STATIC ELECTRICITY MAY CAUSE DAMAGE TO SOLID STATE COMPONENTS. ELIMINATE STATIC ELECTRICITY BY TOUCHING GROUND COMPONENTS BEFORE HANDLING SOLID STATE COMPONENTS.
  2. RED WIRE ON RIBBON CABLES MUST BE CONNECTED TO PIN 1 AT EACH END.

**Models 60 & 62**  
**048900-58**  
**Rev. 3/05**