

# **SERVICE MANUAL**



## **Model C392, C393, C394 Slush Freezers**

**Original Service Instructions**

**094046-S**

**9/23/23 (Original Publication)  
(Updated 8/27/2025)**

**CAUTION:** Information in this manual is intended to be used by authorized Taylor service technicians only.

**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.*

**(Updated 8/27/2025)**

094046-S

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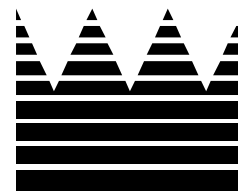
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## **Section 1: Introduction**

- **Safety**
- **Model C393 Specifications**
- **Running Specifications**
- **General Installation Instructions**
- **Environmental Notices**

## Safety

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



**NOTICE!** This manual is intended exclusively for authorized Taylor service personnel.



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



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



**IMPORTANT!** *An equipotential grounding lug is provided with this machine. Some countries require the grounding lug to be properly attached to the rear of the frame by the authorized installer. The installation location is marked by the equipotential bonding symbol (5021 of IEC 60417-1) on both the removable panel and the machine's frame.*



**WARNING!** Avoid injury.

- **DO NOT** operate the machine unless it is properly grounded.

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

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



**WARNING!** Avoid injury.

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

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



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

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



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



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



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



**NOTICE!** Cleaning and sanitizing schedules are governed by your federal, state, or local regulatory agencies and must be followed accordingly. Please refer to the cleaning section of this manual for the proper procedure to clean this machine.



**WARNING! Asphyxiation Hazard!**

If used with CO<sub>2</sub> (Carbon Dioxide) or N<sub>2</sub> (Nitrogen), always make sure the area is well ventilated. Vent exhaust gas to outside atmosphere using a hose. Failure to do so can cause serious injury.

# Model C393 Specifications

## Freezing Cylinder

Two, 7 qt. (6.6 L) capacity.

1

## Beater Motor

Three, 1/6 hp.

## Refrigeration Unit

One, 12,500 BTU/hr compressor (nominal rating) 17,500 BTU/hr (supplier rating) R449A. (Actual BTUs will vary based on application.)

## Electrical

Electrical	Maximum Fuse Size	Minimum Circuit Ampacity
208-230/60/1 Air	25	17
208-230/60/3 Air	15	12

This machine may be manufactured with other electrical characteristics. Refer to the local Taylor distributor for availability. (For exact electrical information, always refer to the data label of the unit.)

This machine is designed and constructed to meet stringent safety and sanitation requirements for NSF and other food service regulatory agencies.

## Air-Cooled

Minimum clearance: 0 in. (0 mm) on both sides 3 in. (76 mm) in rear, and 12 in. (305 mm) on the top of the unit. Minimum air clearances must be met to assure adequate airflow for optimum performance.

## Water Pressure

Must be a minimum of 25 psi (172 kPa).



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

## Dimension

Width: 23-19/64 in. (591.7 mm)

Depth: 35-7/8 in. (910.8 mm)

Height: 40-3/16 in. (1020.5 mm)

Counter clearance: None - machine is designed to rest on a plastic pad directly on a countertop.

## Approximate Weights

Net: 383 lb. (174 kg)

Crated: 449 lb. (204 kg)

Volume: 11.2 cu. ft. (0.32 cu. m)

## C393 Specifications (Continued)

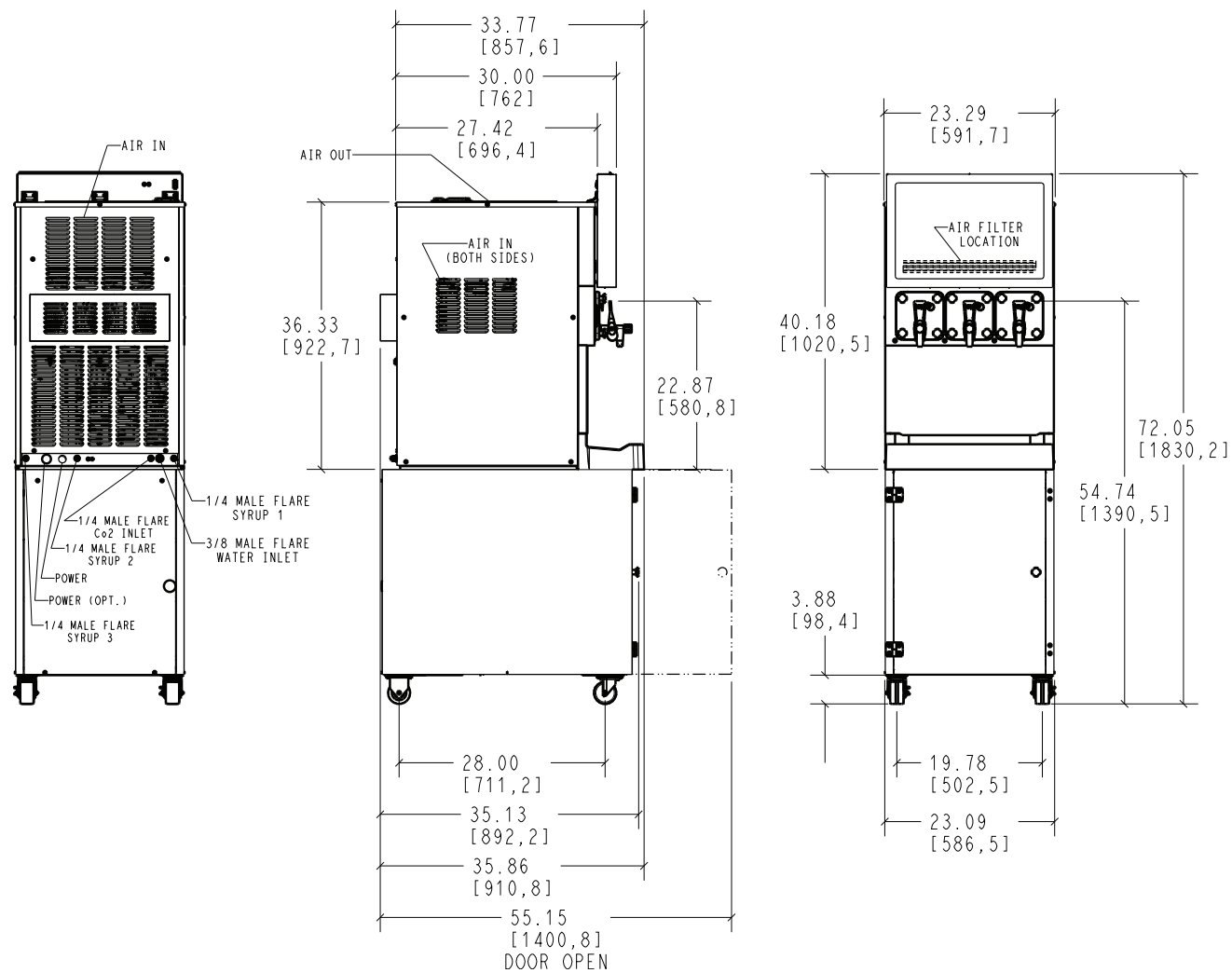


Figure 1-1

# Running Specifications

The following are the refrigerant and CO<sub>2</sub> pressure settings which Taylor recommends for various components within this freezer.

1

## Water Regulator

30 psi (207 kPa) (fixed pressure - internal)

### Primary CO<sub>2</sub> Regulator (located at the supply tank)

80 psi (552 kPa)

### Secondary CO<sub>2</sub> Regulator (located at the supply tank)

80 psi (552 kPa)

## Expansion Valve Adjustments

27 to 28 psi (186 to 193 kPa)

Adjust higher or lower by turning the adjustment knob on the automatic expansion valve. Clockwise adjustments will raise the pressure, and counterclockwise adjustments will lower the pressure.

When adjusting systems with more than one freezing cylinders on one compressor, the expansion valves should be adjusted with one barrel running at a time and set to the exact same pressure.

**Note:** *Make these adjustments with product in the cylinders and the machine in the Auto mode. Allow adequate time for pressure to stabilize.*

## Low-Side (Compressor)

Low-side pressure will equal the expansion valve setting (suction).

## High-Side (Compressor)

R449A:

Air-Cooled: 440 psi (3,034 kPa) cut-out

Pressures vary depending on ambient temperature.

## Refrigerant Charges

R449A: See the data label located on the rear panel of the freezer.

# General Installation Instructions

The following are general installation instructions. For complete installation details, please see the checkout card.

## Site Preparation

Review the area the machine is to be installed in before uncrating the unit. Make sure that all possible hazards to users or equipment have been addressed.



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

## Clearance: Air-Cooled Machines

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

**DO NOT** obstruct air intake and discharge openings. A minimum of 3 in. (76 mm) of air clearance at the rear of the machine is required. Failure to follow this instruction may cause poor machine performance and damage to the machine.

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

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



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



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

Uncrate the machine and inspect for damage. Report any damage to the Taylor factory immediately.

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

## Installer Safety



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

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

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

## INTRODUCTION



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

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

1



**IMPORTANT!** An equipotential grounding lug is provided with this machine. Some countries require the grounding lug to be properly attached to the rear of the frame by the authorized installer. The installation location is marked by the equipotential bonding symbol (5021 of IEC 60417-1) on both the removable panel and the machine's frame.

## Electrical Connections



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

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

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

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



**FOLLOW YOUR LOCAL ELECTRICAL CODES.**



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



**WARNING!** Avoid injury.

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and protect the insulation of the conductors from abrasion.

- If the supply cord is damaged, it must be replaced by an authorized Taylor service technician in order to avoid a hazard.
- Secure supply cord ground lead to machine in a location where if the cord is pulled the main power leads become taught before the ground lead can break loose.

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

## Beater Rotation



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

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

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

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

### The following repairs must be performed by an authorized Taylor service technician:

1. Door assembly, beater, and scraper blades should be installed.
2. Turn on the main power switches.
3. Press the BEATER key. This activates the beater motor and the CO<sub>2</sub> solenoid.
4. Look through the plastic door. The beater should be turning clockwise.
5. Press the OFF key to stop the beater motor.
6. Open the draw handle to relieve CO<sub>2</sub> pressure.



**DANGER!** The main power supply(s) to the machine must be disconnected prior to performing any installation, maintenance, or repairs. **For Cord-Connected Machines:** Only authorized Taylor service technicians or licensed electricians may install a plug or replacement cord on the machine. Failure to follow this instruction may result in personal injury or death from electrical shock or hazardous moving parts, as well as poor performance or damage to the machine.

If rotation is not correct, all rotation corrections must be made at the motor. Follow the manufacturer's instructions listed on the beater motor.

### Compressor Rotation

This section applies to machines which use scroll compressors.

Scroll compressors are directional dependent: i.e., they will compress in one rotational direction only. On single-phase compressors, this is not an issue since they will only start and run in the proper direction. Three-phase scrolls, however, will rotate in either direction depending on the power of the phasing, so there is a 50/50 chance of connected power being **backwards**.

Verification of proper rotation can be made by observing that the suction pressure drops and the discharge pressure rises when the compressor is energized. Additionally, if operated in reverse the compressor is noisier and its current draw is substantially reduced compared to tabulated values.

All three-phase compressors are wired identically internally. Once the correct phasing is determined for a specific system or installation, connecting properly phased power leads to the same.

Perform the following procedure to check compressor rotation:

- Connect a pressure gauge to the low side of the machine.
- Place the operational refrigeration switch in the ON position.
- Verify that the suction pressure drops.
- Place the operational refrigeration switch in the OFF position.
- If the suction pressure does not drop, then compressor rotation must be corrected.
- To correct compressor rotation on three-phase machines, interchange any two incoming power supply lines at the RC35 main terminal block only.

### Refrigerant



**CAUTION!** This equipment contains fluorinated greenhouse gases (F-Gas) to provide refrigeration using a hermetically sealed circuit or within foam insulation. This machine's type of gas, quantity, Global Warming Potential (GWP), and CO<sub>2</sub> tonnes equivalent information is recorded on the machine's data label. The refrigerant used is generally considered

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

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



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



**IMPORTANT!** Refrigerants and their associated lubricants may be extremely moisture absorbent. When opening a refrigeration system, the maximum time the system is open must not exceed 15 minutes. Cap all open tubing to prevent humid air or water from being absorbed by the oil.



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



**IMPORTANT!** Refrigerants and their associated lubricants may be extremely moisture absorbent. When opening a refrigeration system, the maximum time the system is open must not exceed 15 minutes. Cap all open tubing to prevent humid air or water from being absorbed by the oil.

## 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 owners' responsibility to make this fact known to any technicians they employ.

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

Taylor will continue to monitor the industry and test new alternates as they are being developed. Should a new alternate prove, through our testing, that it would be accepted as a drop-in replacement, then the above disclaimer would become null and void. To find out the current status of an alternate refrigerant as it relates to your compressor, call the local Taylor distributor or the Taylor factory. Be prepared to provide the model/serial number of the machine in question.

## Environmental Notices



**CAUTION!** This equipment contains fluorinated greenhouse gases (F-Gas) to provide refrigeration using a hermetically sealed circuit or within foam insulation. This machine's type of gas, quantity, Global Warming Potential (GWP), and CO<sub>2</sub> tonnes equivalent information is recorded on the machine's data label. The refrigerant used is generally considered nontoxic and nonflammable. However, any gas under pressure is potentially hazardous and must be handled with caution.

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



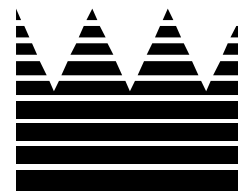
**IMPORTANT!** If the crossed-out wheeled-bin symbol is affixed to this machine, it signifies that this machine is compliant with the EU Directives as well as other similar end-of-life legislation in effect after August 13, 2005. Therefore, it must be collected separately after its use is completed and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

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

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

Notes:

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## **Section 2: Controls**

- **Control Settings**
- **Component Operation**
- **Service Menu**
- **Control Boards**
- **Model C393 Control Overview**
- **Viscosity Control**
- **Brixing Procedures**
- **Product Delivery**
- **Product Delivery**
- **Refrigeration System**
- **Settings and Procedures**
- **Settings and Procedures**

User Interface

2

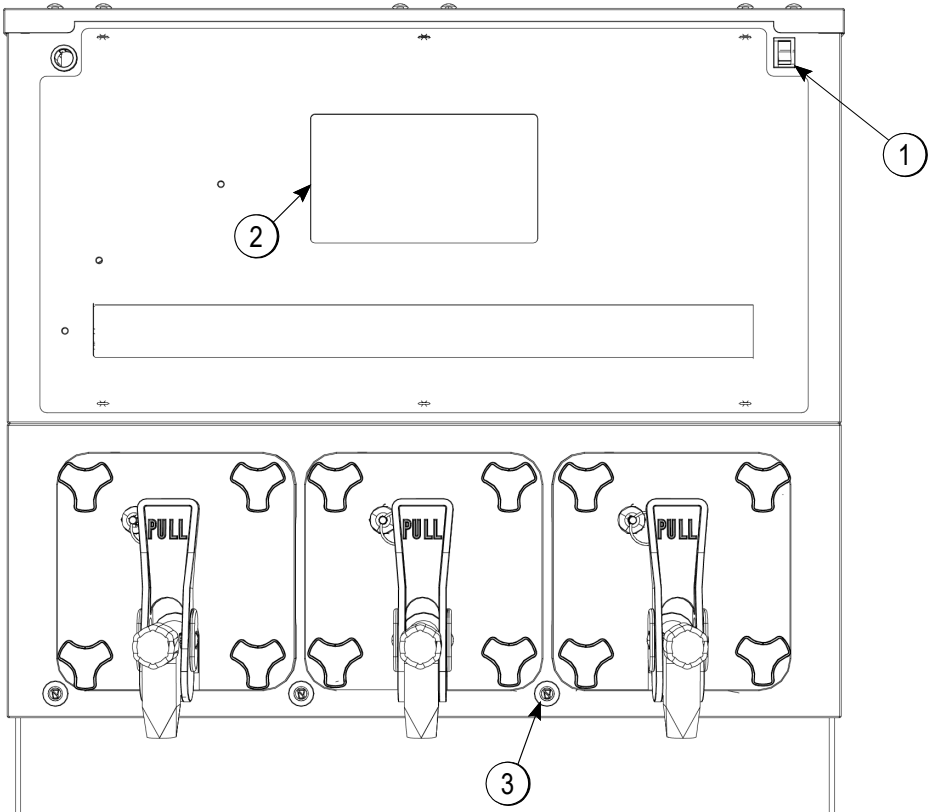


Figure 2-1

Item	Description
1	Control Switch
2	Touchscreen
3	Product Not Ready Light

To identify the freezing cylinders in these units, the barrels are referred to as follows, starting from left to right:

- Barrel 1
- Barrel 2
- Barrel 3 (if applicable)
- Barrel 4 (if applicable)

Control Switch

The control switch is located at the top left corner of the upper front panel, behind the illuminated display. When placed in the ON position, this control switch allows machine operation.

A control switch is also located on the back top left corner of the lighted display. When placed in the ON position, this switch will turn on the LED's in the lighted display.

Touchscreen

There is one touchscreen located on the upper front panel behind the illuminated display.

The touchscreen shows the current operating mode of the freezing cylinders. It also indicates whether there is enough syrup, CO<sub>2</sub>, and water being supplied to the freezer. If an error in the machine operation occurs, a warning tone will sound and a yellow triangle will appear in the bottom right corner.

Product Not Ready Light

The red LED's are on the bottom left side of each barrel. The LED's will flash at 1 second intervals when the barrel enters Auto mode on the initial freeze down, and if respective barrel temperature rises above 32°F (0°C) while in Auto mode. If the respective barrel is in Defrost, Rest, or Beater modes, the LED's will flash at 1/2 second intervals if any faults occur.

# Control Settings

## Home Screen

The following screen is displayed when the machine is powered up for the very first time:

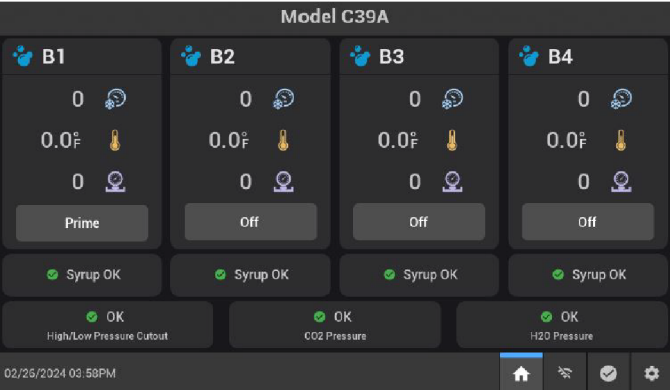


Figure 2-2

The first line on the screen indicates the barrel type for each barrel. Depending on how the barrels are configured, the symbols may vary.

The second line on the display indicates the viscosity of each barrel.

The third line indicates the temperature for each barrel.

The forth line indicates the barrel pressure.

The fifth line displays what state each barrel is in. These selections are also functional inputs that can be used to change the state of a barrel.

The sixth line indicates the level of syrup detected.

The seventh line indicates the status of the high/low pressure control, CO<sub>2</sub> pressure, and H<sub>2</sub>O pressure. If there are issues with these inputs it will show in this line.

## Manager Menu

Pressing the setting icon displays the pass-code screen. Enter code 8309 to enter Manager Menu.

The Manager Menu gives limited access to the setting within the machine. The available functions in the menu pertain to the functions that are not critical to the operation of the machine. The Manager Menu gives access to; Current Conditions, Fault History, System Information, Counters, and Set Clock. To enter one of these modes in the Manager Menu, you must press the corresponding Barrel settings icon to display the different available modes. To exit the Manager Menu, press the home icon on the bottom of the screen.


## Manager Menu Options


- Current Conditions
- Fault History
- System Info
- Counters
- Set Clock

### Current Conditions

This screen allows the operator to see the real time condition of the machine; what mode it is in, temperatures, pressures, and viscosities. In this mode the operator is also able to change the mode of each barrel independently. These modes include Rinse, Sanitize, Defrost, Auto, Prime, Beater, and Off. Important items to note:

- Rinse and Sanitize will activate valves until the cut-out pressure is met and then valves shut off.
- Defrost will thaw product up to 45°F (7°C) and hold for 1 minute. Then, the unit will go back into Auto and freeze the product down. If the product in the barrel is over 45°F (7°C), Defrost will be disregarded and barrel will go back to the previous mode.

- When a barrel's defrost valve is open, this icon  will be next to the B# on the touchscreen.
- When a barrel's refrigeration valve is open,

this icon  will be next to the B# on the touchscreen.

Current condition also displays any faults that the machine is currently seeing by turning the appropriate rectangle red. To exit select the home icon on the bottom of the screen.

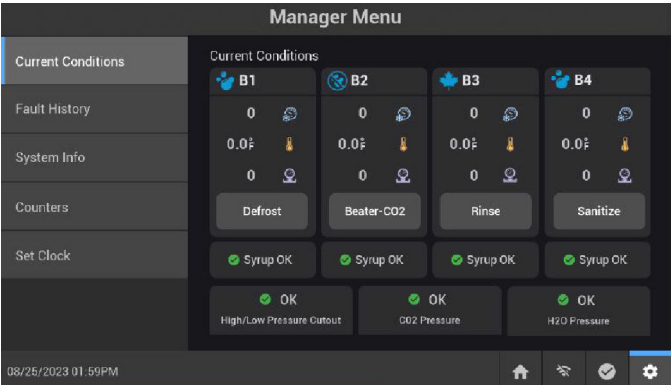


Figure 2-3

Fault History

- High Barrel Pressure
- Beater Overload
- Barrel Thermistor Short/Open
- Syrup Out
- Barrel Over Temperature
- Compressor H/L Press Cut Out
- CO<sub>2</sub> Low
- H<sub>2</sub>O Low
- USB Fault
- Barrel Not Cooling
- Door Off
- System Fault
- Power Fail

This screen shows the history of faults for every barrel, including a count of how many times each fault has occurred. It will give you information on the fault description, date, time the fault occurred.



Figure 2-4

System Info

In this screen, the operator is able to view the details about the machine but cannot change them. The operator will be able to view the Model Number, Control/ BOM, Serial Number, Firmware, Language and WIFI ID. The operator can also turn on and off Power Save Mode, Disable/Enable WIFI, and adjust volume in this menu. To exit select the home icon on the bottom of the screen.

**Note:** Power saver times must be set by service technician.



Figure 2-5

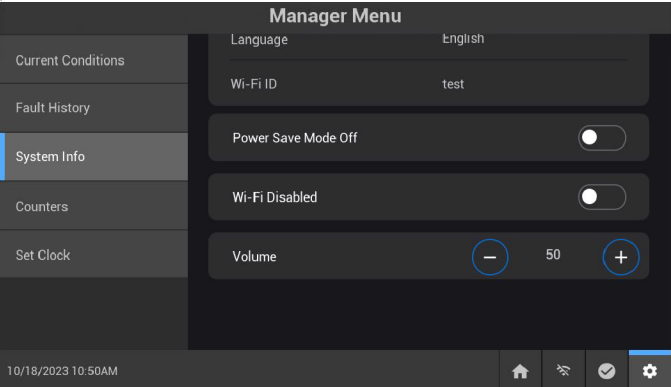


Figure 2-6

Counters

This screen allows the operator to see how many times each barrel has refilled itself. This mode does not show how many dispenses there have been but rather how many times mix has been injected into the barrel. The reset button will clear all counters for every barrel. To exit select the home icon on the bottom of the screen.

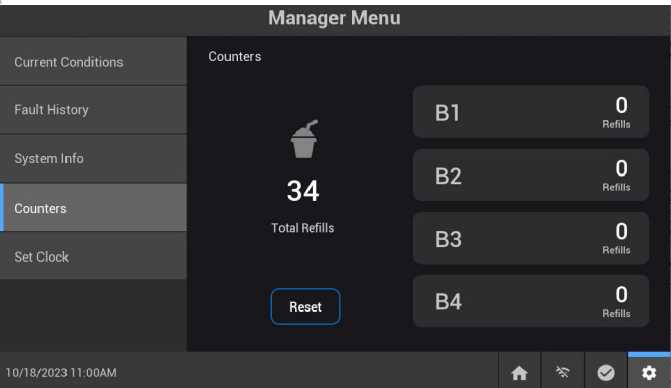


Figure 2-7



Set Clock

This screen allows the operator to program the Date, Date Format, Time, and Time Format. It also compensates for leap year and daylight saving time which can be enabled or disabled. To exit this menu, select the home icon on the bottom of the screen.

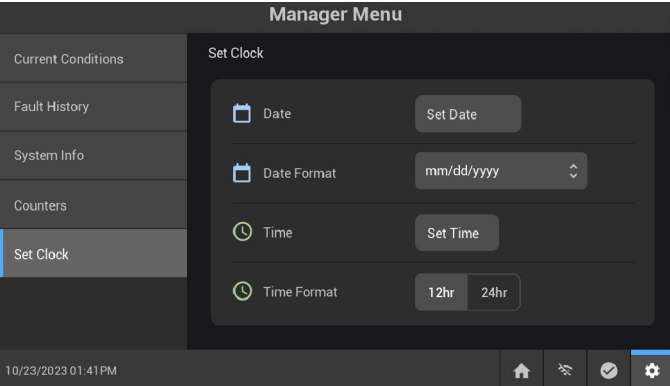


Figure 2-8

Service Menu

Pressing the setting icon displays the pass-code screen. Enter service code, 5231 to display the service menu.

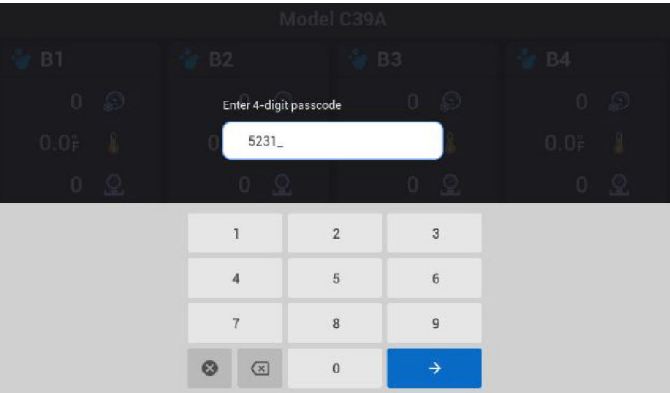


Figure 2-9

This option allows the service technician to access and modify critical operating parameters for the machine.

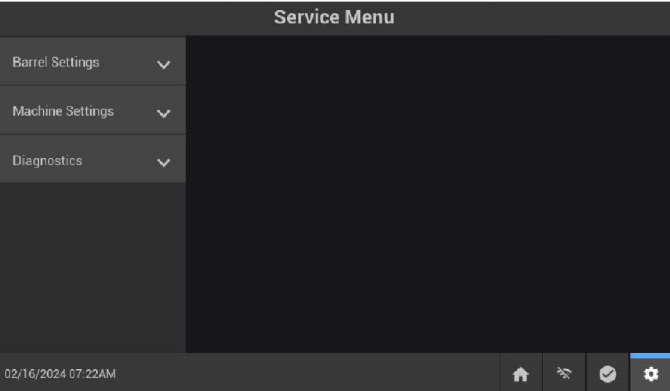


Figure 2-10

Service Menu Options

Barrel Settings

- Viscosity
- Pressure
- Program Defrost
- Barrel Type

Machine Settings

- Configuration
- Temperature Scale
- Compressor
- Fan Hold
- Power Saver
- Control Temp
- Language
- Save/Restore
- Update Firmware

Diagnostics

- Current Status
- Manual Control

Barrel Settings

This option allows the service technician to adjust viscosity, pressures, defrost times, and barrel type for each barrel. Select the desired option by pressing it on the display. To exit, press the Home icon.

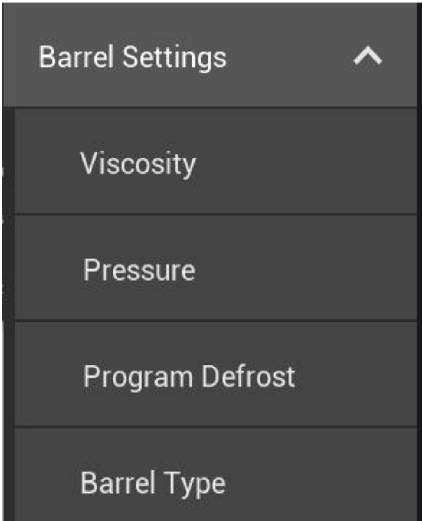


Figure 2-11

Viscosity Settings

The product viscosity's is a TPS which is a factory defined unit of measure. The compressor turns off when the viscosity reaches the Cut Out setting. The Hysteresis is the variance in viscosity until the compressor needs to turn back on to ensure servable product at all times. Both set points are adjustable. Selecting this option displays

the following screen:

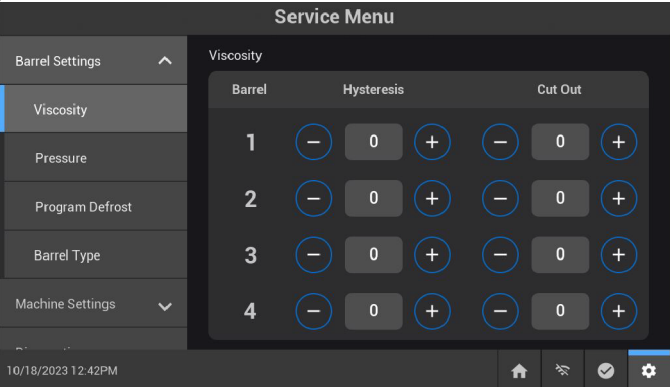


Figure 2-12

Pressure Settings

This option adjusts the pressure in each individual barrel. The Cut Out is the pressure at which the machine stops adding pressure. The Hysteresis is the variance in pressure until the unit needs to add pressure. The machine adds pressure by simultaneously adding syrup, water, and CO<sub>2</sub>. Selecting this option displays the following screen.

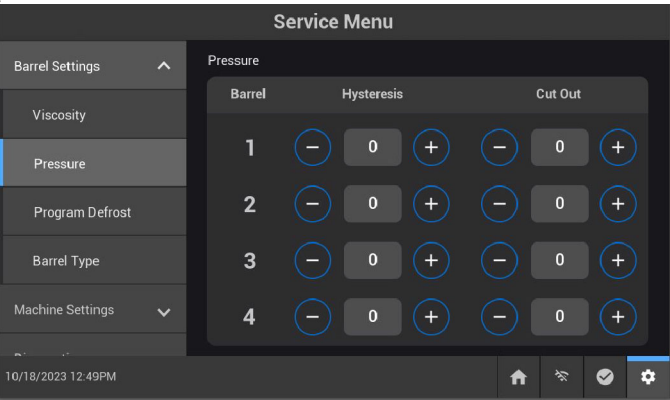


Figure 2-13

Program Defrost Settings

This option allows the technician to set up to eight defrost times for each individual barrel. Selecting this option displays the following screen.

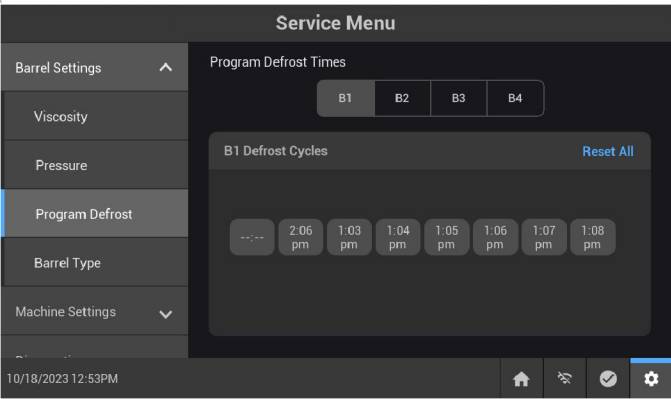


Figure 2-14

Barrel Type Settings

This option allows the technician to customize each barrel operation according to the product being used. The selectable settings are Frozen Carbonated Beverage, Frozen Un-carbonated Beverage, or Canadian:

- FCB- Adds CO<sub>2</sub> into the product
- FUB- Does not add CO<sub>2</sub> into the product
- Canadian- Adds very little CO<sub>2</sub> into the product and has a barrel pressure below 2 psi (13.8 kPa).

Selecting this option displays the following screen.

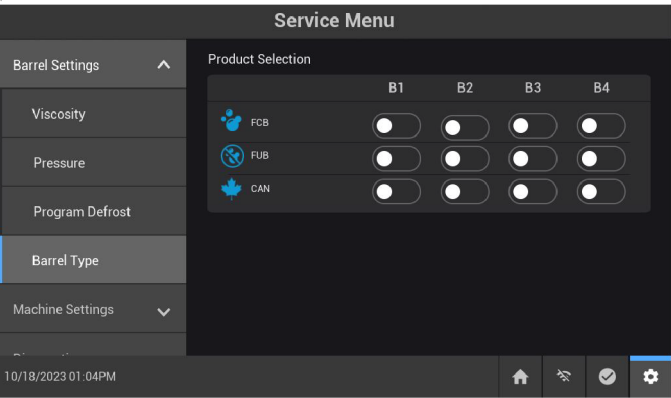


Figure 2-15

Machine Settings

This option allows the technician to input the unit id, set the temperature scale, compressor and fan delays, power saver times, temperature range, language, save/restore settings, and update software.

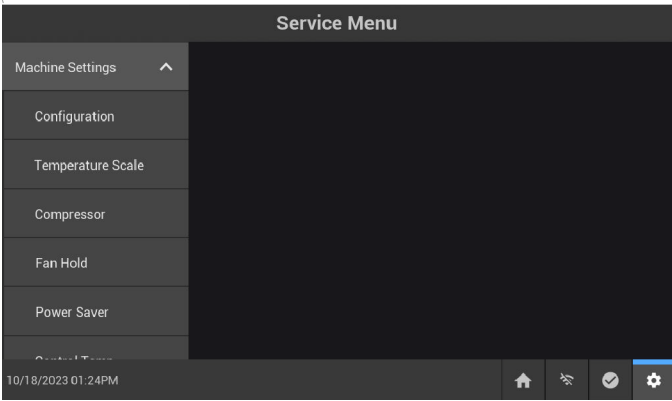


Figure 2-16

**Configuration**

This option allows the technician to set the unit ID. The technician can set the 10 digit BOM, Serial Number, and Store ID. Selecting the option displays the screen below.

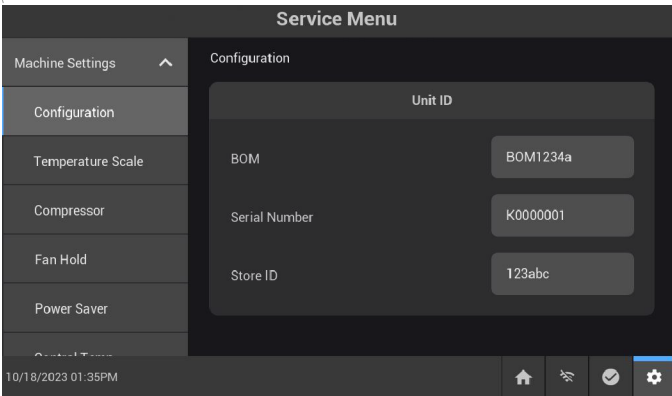


Figure 2-17

**Temperature Scale**

This option allows the technician to set the temperature scale between Fahrenheit and Celsius. Selecting this option displays the screen below.

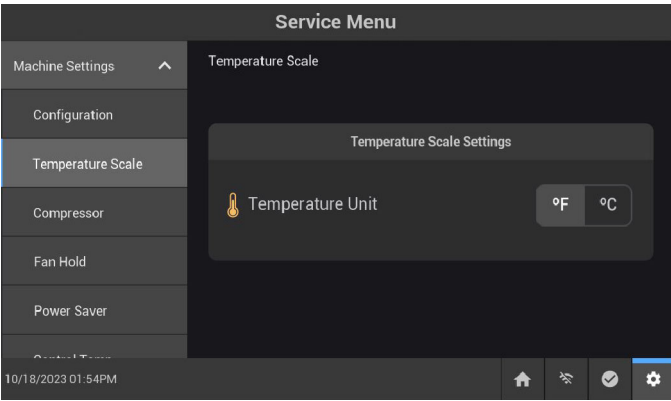


Figure 2-18

**Compressor Setting**

This option allows the technician to set the On Delay Time for the compressor. Programming the On Delay Time will make it where the compressor has to wait a set amount of time before it will start running again. Selecting this option displays the screen below.

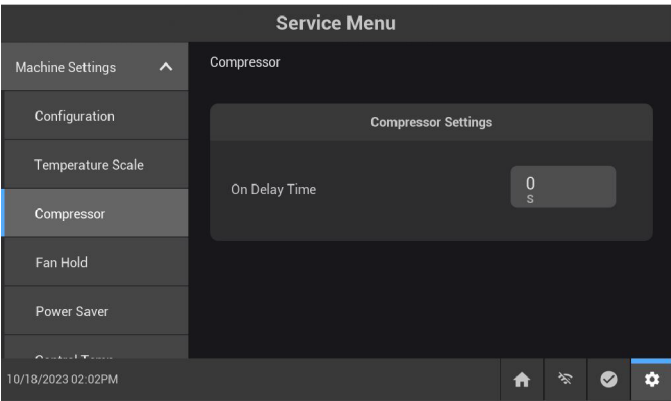


Figure 2-19

## Fan Hold

This option allows the service technician to adjust the delay for turning the fan off after the compressor cycles off. The following screen will be displayed when selecting this option.

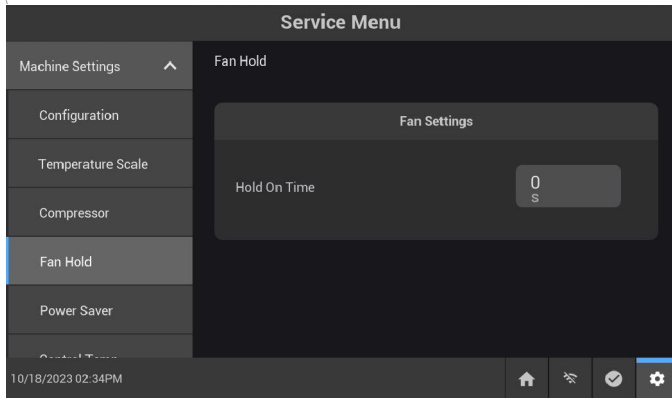


Figure 2-20

## Power Saver

This option allows the machine to be programmed to run in power saver mode. This mode will help lower energy consumption during a low usage period. Selecting this option displays the following screen.

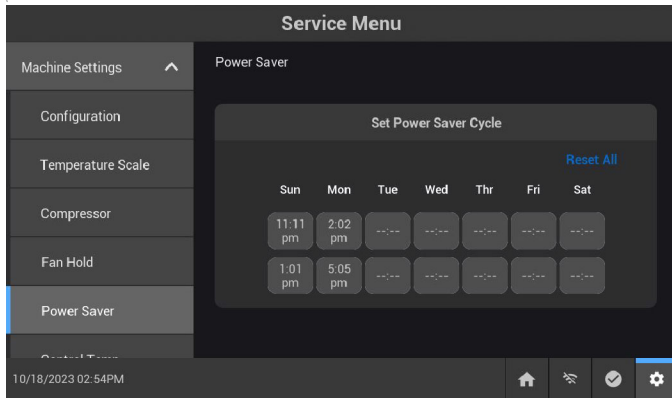


Figure 2-21

## Control Temp

Comp Control Temps allows the technician to adjust the temperatures at which the compressor can turn on and off, regardless of the viscosity setting. (The Cut-in set point is 24°F [-4.4°C], then when the compressor turns off it can't turn back on until the barrel is above 24°F [-4.4°C], even if viscosity is below the turn on set point). If the barrel temperature reaches the Cut-out set point the compressor turns off, even if viscosity has not been reached. This option is available for setting as a menu choice through the Service Menu. Selecting this option displays the following screen.

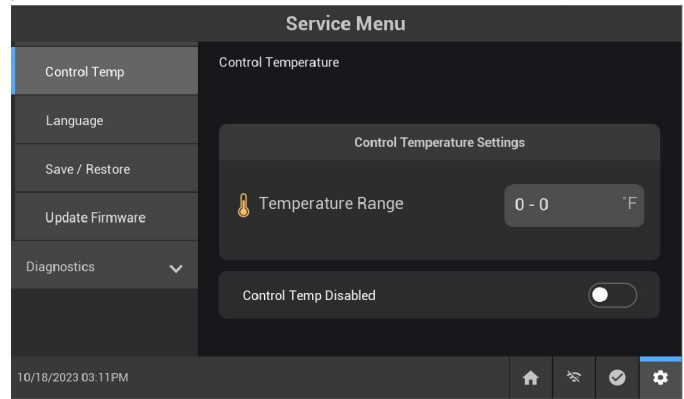


Figure 2-22

## Language

This allows the technician to set the language for the machine. Selection this option displays the following screen.

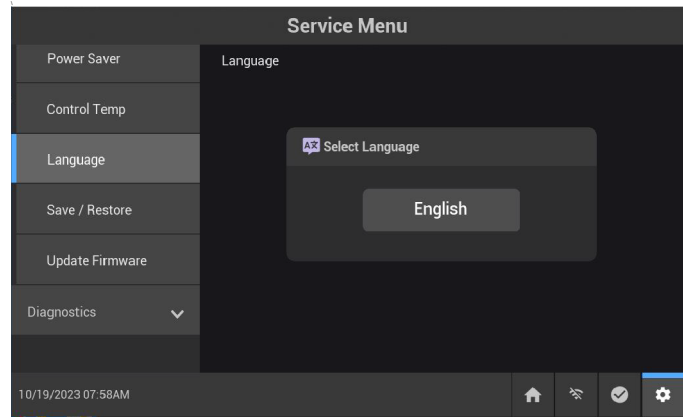


Figure 2-23

## Save/Store Settings

This option allows the technician the option to save settings onto a USB stick and to also download them from a USB stick. In this menu is also where the technician can reset the machine to its default settings. Selecting this option displays the following screen.

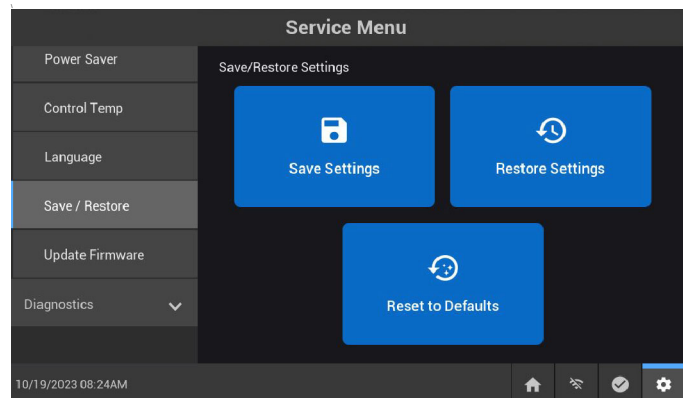


Figure 2-24

## Update Firmware

This option allows the technician to download new firmware/software. From this menu you can update both UVC4 and the UI firmware. To update UVC4 firmware, the USB must be connected to the UVC4 and the UVC4 tab must be selected in this menu. To update the UI firmware, the USB must be connected to the touchscreen and the UI tab must be selected in this menu. Selecting this option displays the following screen.

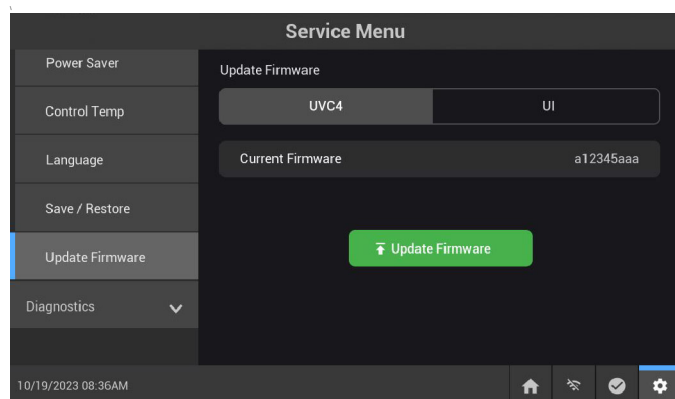


Figure 2-25

## Diagnostics

This option allows the technician to see what inputs are on and allows the technician to turn on individual inputs to help with troubleshooting. Selecting this option displays the screen below.

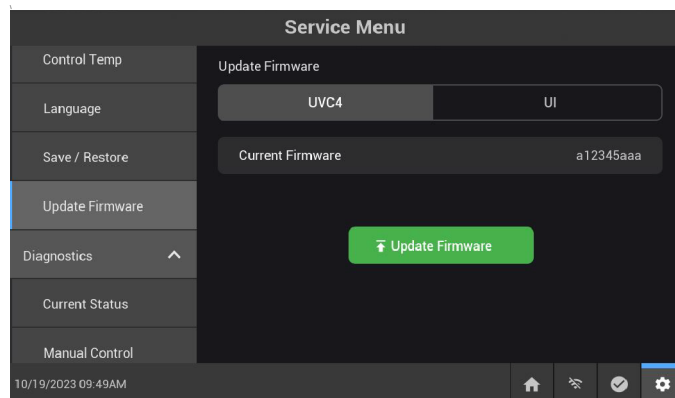


Figure 2-26

## Current Status

This option displays which inputs are currently in operation. Inputs that are active display a green dot. Selecting this option displays the screen below.

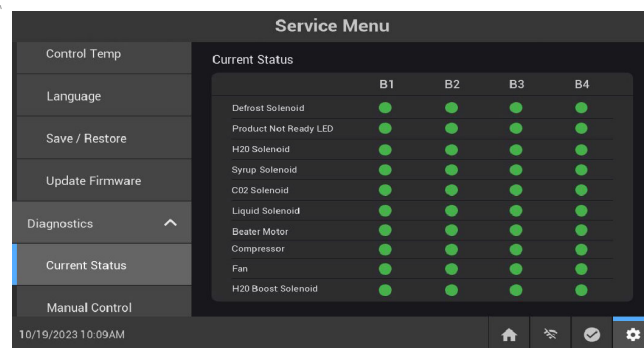


Figure 2-27

## Manual Control

This option allows the technician to turn on specific inputs for each barrel. Only one input can be turned on at a time. Selecting an input will automatically turn off any running inputs. Selecting this option displays the following screen.

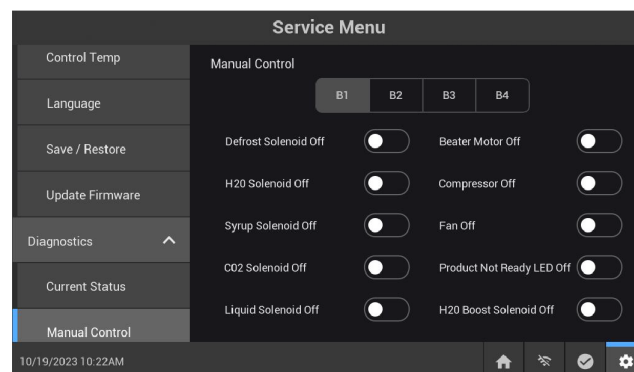


Figure 2-28

**Note:** Short Cycling and Reverse Rotation in Single-Phase Scroll Compressors Single-phase scroll compressors rely on an internal centrifugal start mechanism and proper pressure equalization to start in the correct direction. When the compressor short cycles—meaning it is stopped and restarted in rapid succession—system pressures may not have time to equalize, and the internal start components may not fully reset. This can cause the scroll set to momentarily rotate in reverse. Reverse rotation will result in reduced or no compression, unusual noise, and potential overheating. Repeated instances can damage the scroll elements, lead to premature bearing wear, and shorten compressor life. Ensuring proper off-cycle time and avoiding short cycling helps maintain correct rotation and protect compressor integrity.

# Control Overview

## Modes of Operation

### Off Mode (Power Switch OFF)

This is used for disassembly and brush-cleaning the machine. When the power switch is placed in the OFF position, L1 is removed from all major electrical components. CAUTION! The machine will still have line voltage.

### 2 Off Mode (Power Switch ON)

All controlled outputs are turned off with the exception of the touchscreen, the Product Not Ready LEDs, and the alarm. Off mode is entered when power is first applied to the machine. All barrels will enter this mode from any other mode when the corresponding OFF button is pressed.

### Auto Mode

The Auto mode is used for maintaining and dispensing servable products. It is entered by pressing the OFF button and then pressing AUTO. The AUTO button always places the respective barrel into Auto mode while the other barrels remain in their current mode.

### Prime Mode

The Prime mode is used to fill the barrels for initial freeze-down.

### Beater CO<sub>2</sub> Mode

This mode is used in emptying and sanitizing operations. It allows the beater motor and CO<sub>2</sub> solenoid to operate.

### Rinse Mode

The Rinse mode is used to flush out the freezing cylinder. Enter the 8309 passcode to access the Manager Menu. When Rinse mode is selected, the H<sub>2</sub>O booster solenoid and H<sub>2</sub>O flow valve open (if the door is detected).

### Sanitize Mode

The Sanitize mode is used to sanitize the syrup lines and barrel. Enter the 8309 passcode to access the Manager Menu. When Sanitize mode is selected, the syrup flow valve opens, allowing sanitized water to flow through the syrup lines and into the barrel.

## Control Set Points

### Operator-Accessible Set Points

### Defrost Mode

The Defrost mode is used to heat the product in the barrel to 45°F (7°C), melting large ice crystals that may form after long periods of not serving the product. Defrost is initiated by the Defrost Schedule, Power Saver Mode, or manually (in the Manager's menu). Only one barrel actively defrosts at a time. Others waiting to Defrost will be placed in Hold mode automatically. If Defrost is initiated and the barrel is below 45°F (7°C) and no other barrel is defrosting, the barrel defrosts until it reaches 45°F shuts Off the defrost solenoid, and continue to run the beater motor for one minute to allow the barrel to absorb residual heat, then return to the previous mode (except in Power Save mode).

**Note:** If a programmed or manual Defrost is selected, and the barrel temperature is > 45°F (7°C), the barrel will return to the previous mode or OFF.

### Power Saver (Rest)

The Power Saver mode is used to conserve power and reduce component wear. The machine is automatically placed in an idle state (Rest) for a programmable period of time, after which the machine is returned to the previous mode. The machine can be programmed to enter and exit this mode at any time during the day.

It is entered when the programmed time arrives, and at least one barrel is in Auto mode or Defrost mode except Off. If more than one is in Auto mode, it will place one into Defrost while the others go into Hold mode. When the first to enter Defrost completes the Defrost cycle, it enters Rest, and the next begins defrost. Power Saver (Rest) is entered at the completion of the last barrel's Defrost cycle. At the completion of the Power Saver mode, each barrel returns to the previous mode. If all are Off and the programmed time arrives, the Power Saver mode will be ignored. If any are in any mode, all are placed into Rest. At the completion of the Power Saver mode, each barrel returns to the previous mode. Any change of mode to a barrel will remove that barrel from Power Saver mode, but all other barrels will be unaffected.

### Real-Time Clock

**Range:** Real Time

**Increment:** Hour, Minute, Month, Day, Year

## Service-Accessible Set Points

### Temperature Scale

**Range:** °C or °F

**Increment:** None

**Default:** °F

### Viscosity

**Range:** On/Off = 105-220

**Increments:** On/Off = 1

**Default:** On = 115; OFF = 155

### Pressure

**Range:** On/Off = 100-400

**Increments:** On/Off = 1

**Default:** On = 150; Off = 175

### Auto Defrost Times

**Range:** 24 Hours

**Increment:** Hours, Minutes

### Power Saver Mode

**Range:** 24 Hours

**Increment:** Hours, Minutes

A maximum of seven cycles (1-Sun, 2-Mon, etc.) may be Selected at which the unit will automatically begin a Power Saver mode. This can only occur if barrels are in the Auto or Defrost mode and product temperatures are either at or below 35°F (1.7°C).

### Compressor Hold Off Time

**Range:** 3 to 120 Seconds

**Increment:** Seconds

**Default:** 30 Seconds

### Fan Hold On Time

**Range:** 0 to 300 Seconds

**Increment:** Seconds

**Default:** 60 Seconds

## Programming Jumpers

Jumper block W1 is used to configure the Interface board to the specific application of the machine. The following table shows how each jumper affects the machine.

Installed	Jumper	Removed
Not used	1 and 2	Not Used
Not used	3 and 4	Not Used
Not Used	5 and 6	Not Used
Not used	7 and 8	Not Used
Syrup out auto detect reset	9 and 10	Syrup out manual reset
For service and factory use	11 and 12	Not Used

\* This jumper ignores the syrup out, H<sub>2</sub>O out, and CO<sub>2</sub> out faults (service jumper).

### Service Jumper

A jumper may be installed between pins 11 and 12 at the W1 location of the Interface PCB assembly, which bypasses the CO<sub>2</sub> H<sub>2</sub>O pressure switches and the syrup out pressure transducer. This jumper allows some of the testing procedures to be accomplished without actually having to hook each of these up. This jumper is for factory use only and should not be used during normal operation.

With Jumper Installed (Pins 9 & 10): If a Syrup Out condition is detected while in AUTO and the unit enters HOLD, it will automatically return to AUTO once a new syrup bag is installed and detected.

Without Jumper: When a Syrup Out condition is detected, the system will remain in HOLD after the syrup bag is replaced. The operator must press the FAULT button to manually clear the fault and resume operation.

# Component Operation

## Compressor

### Auto Mode

The compressor will turn on:

- When the barrel enters Auto mode.
- If the product viscosity of the barrel falls below the viscosity cut-in and the temperature is Above the Comp Control Temp cut-in set point.
- When a Syrup Out condition is restored and the Syrup Out pressure transducer is satisfied (if refrigeration is needed), and the fault is cleared.

Once on, the compressor will turn off:

- If the OFF button is pressed for that barrel.
- Once the product viscosity has reached the set point.
- If Syrup Out occurs.
- If any of the following faults occur: High Barrel Pressure, Beater Overload, Barrel Over Temp, Compressor Hi/Low Cut out, Compressor On Too Long.

The compressor has a programmable Hold-Off time that will delay the compressor turn-on anytime after the compressor cycles off.

### Defrost Mode

The compressor will turn on when the selected barrel enters the Defrost mode.

Once on, the compressor will turn Off:

- If the OFF button for that barrel is pressed.
- If the BEATER or PRIME key is pressed on the same barrel that is in Defrost mode.
- High Barrel Pressure, Beater Overload, Barrel over Temp, Compressor Hi/Low Cut out, Compressor On Too Long.

When product in the selected barrel reaches 45°F (7°C), the machine will enter Auto mode and the compressor will run until viscosity is reached. The compressor only runs in Auto, and Defrost modes.

### Condenser Fan

The condenser fan will turn On

- When any barrel enters Auto, or Defrost.

## Compressor Bump Start

Conditions that require a Bump Start:

- If the compressor is off and the barrel's temperature is > 90°F (32°C) when going into Auto mode.
- When a barrel goes into Auto mode for the first time after the machine has been off for more than ~12 hours if continuously powered.
- The first time a barrel is put into Auto mode after machine power is cycled.
- The first time a barrel is put into Auto mode after UVC4 software is updated or reset to default

Bump start sequence is all liquid line valves are opened, 2 seconds after opening, the compressor comes on for 3 seconds and then shuts off. The compressor comes back on after 5 seconds. This is repeated two more times. After the sequence is complete, Auto mode begins.

## Defrost Solenoid

### Defrost Mode

The defrost solenoid will open when the designated barrel enters Defrost mode.

Once open, the defrost solenoid will close:

- If the OFF or PRIME key is pressed.
- If the AUTO or BEATER key is pressed.
- When the selected barrels product temperature reaches 45°F (7°C).
- If any of the following faults occur: High Barrel Pressure, Beater Overload, Barrel over Temp, Compressor Hi/Low Cut out, Compressor On Too Long.

Defrost mode can only be activated on one barrel at a time. Manual Defrost can only be started using the Manager MENU. If one barrel is in Defrost mode and a preset Defrost Time for another barrel occurs, the programmed barrel will wait until Defrost is completed on the original barrel. The barrel that is waiting to defrost will show Beater on the touchscreen. Then, Defrost will begin on the programmed barrel.

- Anytime the compressor cycles on.

Once on, the condenser fan will turn OFF anytime the compressor cycles off after a set time in Auto.



## Product Not Ready (PNR) LED

### LED

These LEDs will flash slowly:

- When any barrel enters Auto mode on the initial freeze-down.
- When respective barrel temperature rises above 32°F (0°C) while in Auto mode.
- If any barrel is in Defrost, rest, or hold modes.

Once flashing, these LEDs will stop flashing:

- After the initial freeze-down, when the product the temperature in the respective barrel is below 32°F (0°C).
- In Auto mode, the first time product viscosity in the respective barrel reaches the Off-set point, and the product temperature is below 32°F (0°C).

These LEDs will flash if any faults occur.

## Liquid Line Solenoid

### Auto Mode

The liquid line solenoid will open:

- Shortly after, the barrel enters Auto mode.
- If the barrel product viscosity falls below the viscosity cut-in set point and the Comp Control Temp is above the Cut In set point.
- If the Syrup Out fault has been cleared.

Once open, the liquid line solenoid will close:

- If OFF PRIME or BEATER-CO<sub>2</sub> is selected.
- When the barrel product viscosity reaches its Off-set point.
- If a SYRUP OUT condition is detected or if any of the following faults occur: BARREL THERMISTOR FAILURE, BARREL TEMP 2 HIGH, BARREL NOT COOLING, BEATER OVERLOAD, H/L PRESSURE CUTOUT, CO<sub>2</sub> PRESSURE LOW, H<sub>2</sub>O PRESSURE LOW.

## H<sub>2</sub>O Solenoid

### Auto Mode

The H<sub>2</sub>O solenoid will open:

- After the initial freeze-down, if syrup is OK and barrel pressure units are below Cut In set point.
- If a SYRUP OUT condition has been cleared, and barrel pressure units are below Cut In set point.

Once open, the H<sub>2</sub>O solenoid will close:

- If the OFF button is pressed.
- If a SYRUP OUT condition is detected.
- When the barrel pressure is satisfied.
- If any of the following faults occur: BARREL THERMISTOR FAILURE, BARREL TEMP 2 HIGH, BARREL NOT COOLING, BEATER OVERLOAD, H/L PRESSURE CUTOUT, CO<sub>2</sub> PRESSURE LOW, H<sub>2</sub>O PRESSURE LOW.

### Prime Mode

The H<sub>2</sub>O solenoid will open when entering Prime mode.

Once open, the H<sub>2</sub>O solenoid will close:

- When pressing either BEATER-CO<sub>2</sub> or OFF.
- When SYRUP OUT is detected.
- When the barrel pressure is satisfied.
- If any of the following faults occur: BARREL TEMP 2 HIGH, BEATER OVERLOAD, H/L PRESSURE CUTOUT, CO<sub>2</sub> PRESSURE LOW, H<sub>2</sub>O PRESSURE LOW.
- 

### Rinse Mode

The H<sub>2</sub>O solenoid will open when the barrel enters Rinse mode.

Once open, the H<sub>2</sub>O solenoid will close:

- When pressing either BEATER-CO<sub>2</sub> or OFF.
- When the barrel pressure is satisfied.
- If any of the following faults occur: BARREL TEMP 2 HIGH, BEATER OVERLOAD, H/L PRESSURE CUTOUT, CO<sub>2</sub> PRESSURE LOW, H<sub>2</sub>O PRESSURE LOW.

### Syrup Solenoid

#### Auto Mode

The syrup solenoid will open after the initial freeze-down if syrup pressure is OK and barrel pressure units are below Cut In set point.

Once open, the syrup solenoid will close:

- When pressing either OFF or BEATER-CO<sub>2</sub>.
- When SYRUP OUT is detected.
- If any of the following faults occur: FAILED BARREL THERMISTOR, BARREL TEMP 2 HIGH, BARREL NOT COOLING, BEATER OVERLOAD, H/L PRESSURE CUTOUT, CO<sub>2</sub> PRESSURE LOW, H<sub>2</sub>O PRESSURE LOW.

#### Prime Mode

The syrup solenoid will open when the barrel enters Prime mode if the barrel pressure units are below 20.

Once open, the syrup solenoid will close:

- When pressing either BEATER key or the OFF key.
- When the barrel pressure is satisfied.
- If any of the following faults occur: BARREL TEMP 2 HIGH, BEATER OVERLOAD, CHK REFRIG SYS PSI, CO<sub>2</sub> PRESSURE LOW, H<sub>2</sub>O PRESSURE LOW.

#### Sanitize Mode

The syrup solenoid will open when the barrel enters the Sanitize mode.

Once open, the syrup solenoid will close:

- When pressing either BEATER key or the OFF key.
- When the barrel pressure is satisfied.
- If any of the following faults occur: BARREL TEMP 2 HIGH, BEATER OVERLOAD, CHK REFRIG SYS PSI, CO<sub>2</sub> PRESSURE LOW, H<sub>2</sub>O PRESSURE LOW.

**Note:** These solenoids will not open in any mode other than Auto, Prime, or Sanitize.

### CO<sub>2</sub> Solenoid

#### Auto Mode

The CO<sub>2</sub> solenoid will open when the barrel product viscosity reaches the viscosity Off set point during the initial freeze-down.

**Note:** The unit will only add CO<sub>2</sub> to barrel for the first 3 minutes after initial freeze-down.

Once open, the left CO<sub>2</sub> solenoid will close:

- When pressing OFF key.
- When the barrel pressure is satisfied.
- If a SYRUP OUT condition is detected.
- If any of the following faults occur: FAILED BARREL THERM, BARREL TEMP 2 HIGH, BEATER OVERLOAD, CHK REFRIG SYS PSI, CO<sub>2</sub> PRESSURE LOW, H<sub>2</sub>O PRESSURE LOW.

#### Prime Mode

The CO<sub>2</sub> solenoid will open when the barrel enters Prime mode.

Once open, the CO<sub>2</sub> solenoid will close:

- When pressing the left OFF key.
- When the barrel pressure is satisfied.
- If any of the following faults occur: BARREL TEMP 2 HIGH, BEATER OVERLOAD, H/L PRESSURE CUTOUT, CO<sub>2</sub> PRESSURE LOW, H<sub>2</sub>O PRESSURE LOW.

#### Beater CO<sub>2</sub> Mode

The CO<sub>2</sub> solenoid will open when a barrel enters Beater-CO<sub>2</sub> mode.

Once open, the CO<sub>2</sub> solenoid will close:

- When pressing either the OFF key or the right PRIME key.
- If any of the following faults occur: BARREL TEMP 2 HIGH, BEATER OVERLOAD, H/L PRESSURE CUTOUT, CO<sub>2</sub> PRESSURE LOW, H<sub>2</sub>O PRESSURE LOW.

#### Beater Motor

The beater motor will turn on:

- When a barrel enters Auto, Beater, or Defrost and will run continuously.

## Beeper

The beeper will sound at second intervals:

- Whenever a fault condition exists within the machine.
- When SYRUP OUT is detected.

Once the beeper sounds, it will turn off:

- When all fault conditions have been corrected.
- If the beeper sounded due to SYRUP OUT and the syrup is restored.

**Note:** The beeper will be silenced if the yellow triangle on the bottom left side of the touchscreen is pressed. If a new fault or fault condition occurs or the system mode changes, the beeper will sound again. If the beeper is silenced for more than 15 minutes without correcting the fault, it will automatically be re-enabled.

## Generation of Fault Messages

### Beater Overload

If the beater motor output is on and the motor startup seconds counter is greater than five and any of the following conditions occur, a beater overload fault is generated, this fault will be stored in fault history, and the barrel will go to OFF mode.

- Viscosity reading is less than the minimum allowed viscosity setting minus 50.
- Motor rotation has not been sensed for at least a second.
- Viscosity reading is greater than 1000 for more than 10 seconds.

### Compressor Hi/Lo Pres Cut out

Compressor contactor contacts 13 & 14 (going to L Interface J19-5&6) are still open ~10 seconds after compressor output is turned on (this is just an informational fault because the actual L1 signal to energize the contactor coil is routed through the high- and low-pressure switches to prevent compressor operation during an over or under pressure condition in the refrigerant system). The high-pressure switch opens at 440 psig and closes at 340 psig. The low-pressure switch opens at 5 psig and closes at 20 psig.

### Thermistor Open/Shorted.

Thermistor Open/Shorted is generated when either an infinite resistance (no continuity) is found at the leads of the respective thermistor or no resistance is found at the leads of the respective thermistor. In Auto or Standby

mode of operation, the failed side(s) of the machine are placed in the Hold mode. This fault will not change Beater, Prime or Rinse modes of operation. When detected, a message is placed into the FAULT DESCRIPTION.

### H<sub>2</sub>O Low

Open is read across L Interface J19-3&4 (no H<sub>2</sub>O fault if service jumper is on). This fault will occur when incoming water pressure drops below 8 psi (55 kPa) and will automatically be cleared when pressure increases to 19 psi (131 kPa).

### CO<sub>2</sub> Low

Open is read across L Interface J19-1&2 (no CO<sub>2</sub> fault if service jumper is on). This fault will occur when incoming CO<sub>2</sub> pressure drops below 55 psi (379 kPa) and will automatically be cleared when pressure increases to 74 psi (510 kPa).

### USB Fault

USB fault (USB not inserted in UVC4 J4 when trying to update UVC4 or hex file missing or other USB-related issue).

### Product Door Off

The product door is off when trying to enter any mode.

### Syrup Out

Incoming syrup line pressure is monitored by a pressure transducer. When the pressure in this line drops below the threshold and does not rise back above the threshold, a fault is generated and stored in the fault history. The barrel will go into Hold mode for 1 hour and then will go to Off if the fault is still present. If the barrel is in Hold mode and the pressure rises above the threshold, the barrel's liquid line solenoid opens and the compressor will come on. Constant flow valves may activate if barrel pressure is below the cut-in, and the barrel temperature is under 32°F (0°C) degrees.

- With Jumper Installed (Pins 9 & 10): If a Syrup Out condition is detected while in AUTO and the unit enters HOLD, it will automatically return to AUTO once a new syrup bag is installed and detected.
- Without Jumper: When a Syrup Out condition is detected, the system will remain in HOLD after the syrup bag is replaced. The operator must press the FAULT button to manually clear the fault and resume operation.

### Barrel Over Temp

Should the barrel temperature ever reach the maximum barrel temperature (internally set to 120°F/49°C), the control will turn all barrels Off and generate the above message for the respective barrel.

### Barrel Not Cooling

If a barrel is in Auto mode and the liquid line solenoid valve remains energized continuously for one hour, a fault is generated. This fault will be stored in fault history, and that barrel will be placed into OFF mode.

2

### Power Fail Fault

This fault occurs when there has been a loss of power to the unit. When power is reestablished, the unit will go into the mode it was in when the power was lost.

## Control Boards

### Universal Board

The universal board is the command center for all control operations and receives direction from control panel input. Once the universal board receives commands, messages are transferred to the interface board.

The universal board also checks for faults in the system. This is accomplished by sending and receiving fault signals. When the board finds a fault, an alarm will sound, the machine will cycle off, and a fault icon will be displayed on the touchscreen. If a system level fault occurs, the control will turn all barrels off. If it is a barrel fault, the control will turn that specific barrel off.

### Interface Board

The interface board carries out commands received from the universal board. These commands include the following functions:

- Monitors TPS (viscosity) by use of proximity probe.
- Monitors high-pressure cut-out situations.
- Monitors the CO<sub>2</sub> supply.
- Monitors the water supply.
- Monitors temperatures in the freezing cylinders by use of thermistor probes.
- Monitors pressure transducers for syrups

### High Voltage Output Board

- Operates H<sub>2</sub>O booster solenoid, defrost solenoids, and liquid line solenoids.
- Operates the compressor.
- Operates the condenser fan.
- Operates the beater motor.

### DC Output Board

- When appropriate, operates the CO<sub>2</sub>, syrup, and water solenoids of the unit.
- When appropriate, illuminates the LEDs on the front of the machine.

### Control Board Installation and Removal

Each board is mounted with locking, plastic standoffs. Once the machine is wired at the factory, no field wiring is necessary. Replacing a board can be accomplished by removing its connectors, unsnapping it from the standoffs, pressing the new board into place.

# Model C393 Control Overview

2

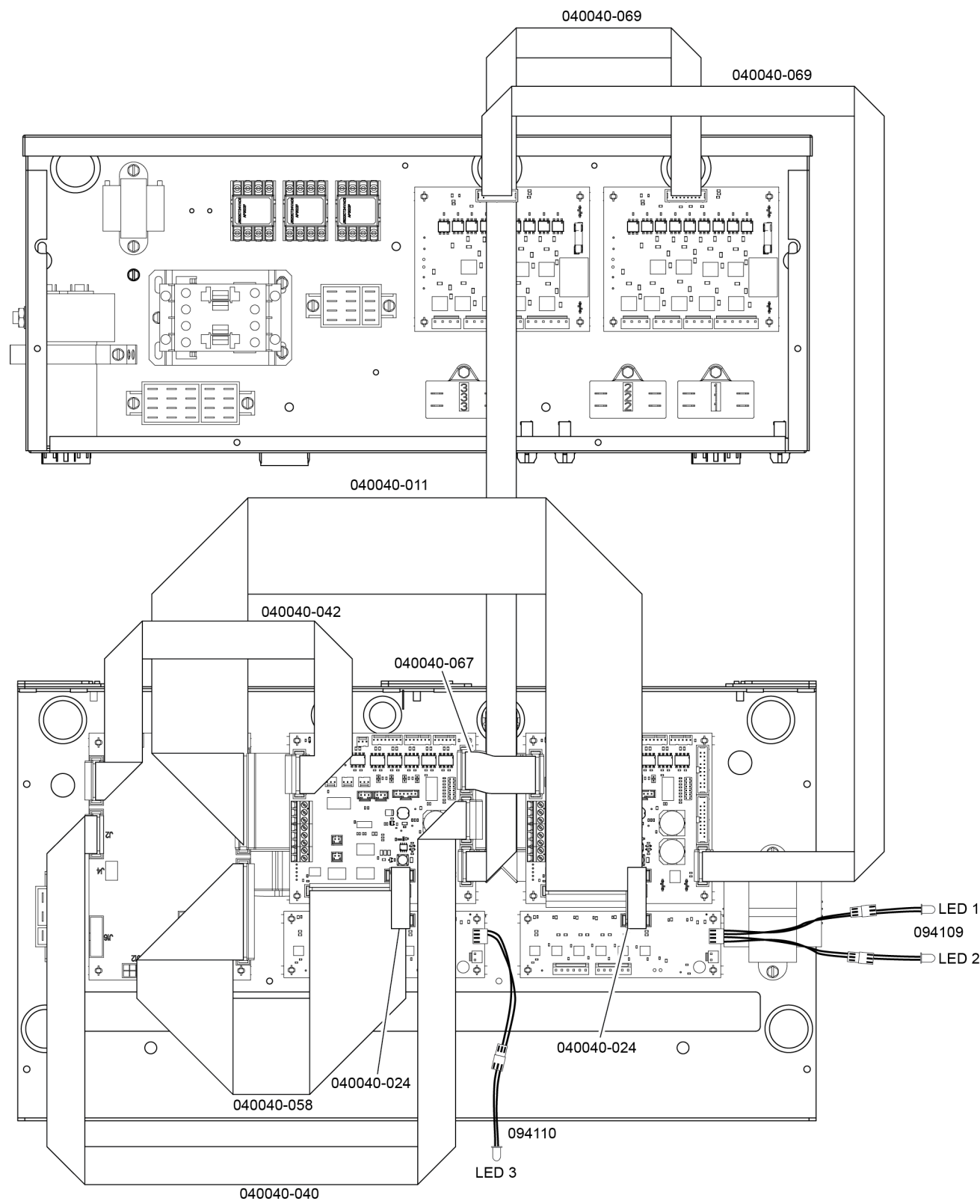


Figure 2-29

## Viscosity Control

Viscosity is controlled using a hall effect sensor and magnet. The sensor (1) is mounted to the rear of the beater motor and the magnet (2) is riveted onto the internal fan that is mounted to the motor drive shaft. The sensor detects the magnet so when the product in the barrel is warmer, the magnet passes by the sensor in less time which results in a lower TPS. As the product in the barrel gets colder, it takes longer for the magnet to pass by the sensor so the TPS is higher. Once the TPS reaches the cut out setting, the liquid line solenoid will close for that barrel.

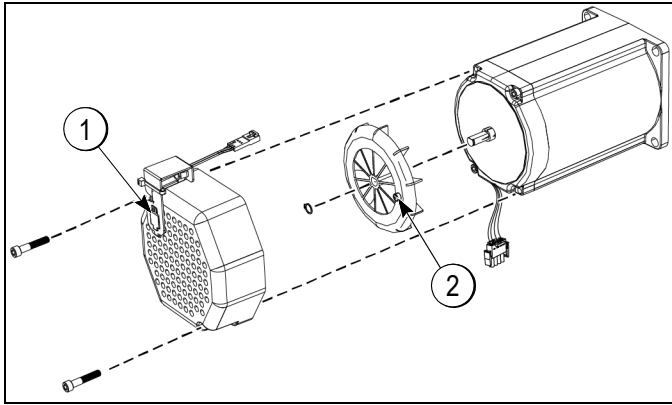


Figure 2-30

## Product Flow System

### Constant Flow Valve

Three Constant Flow Valves are used per barrel.

1. Syrup
2. Water
3. CO<sub>2</sub>

Each Constant Flow Valve has a prefixed orifice in it.

When the pressure in the barrel drops, the valves deliver the correct amount of syrup, water, and CO<sub>2</sub> to the barrel.

The CO<sub>2</sub> is injected after the sample valve.

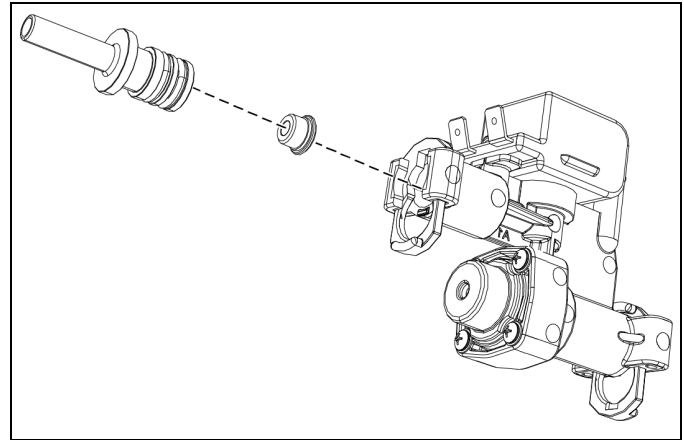


Figure 2-31

## Brixing Procedures

### Definition

Brix is the ratio of syrup to water, which will directly affect the quality and taste of the product. Brixing procedures should be performed before priming the barrel and anytime syrup flavors have been changed. Use a hand refractometer to check the brix. Brix can be increased or decreased by changing the fixed orifice in the water flow valve.

### Brix Reading Instructions

Open the sampling valve. Draw several ounces of product into a cup. Stir the product and allow it to flow over the prism of the refractometer. Place the cover plate over the prism and hold the refractometer toward direct lighting. The brix reading (as read through the window of the refractometer) should register at  $14 \pm 1$ . A reading higher than this indicates excess syrup and will result in a darker, richer product. The refrigeration system will have to run longer than normal to freeze-down the excessive syrup. A reading lower than this indicates excess water and may cause a freeze-up in the barrel.

### Adjusting Brix

Brix can be adjusted by replacing the preset water flow valve orifice with either a larger or smaller orifice. The orifice size is measured in Lohms. Lohms is a measure of fluid resistance and is inversely proportional to flow.

Therefore, the larger the Lohm rating, the smaller the orifice so less water will be added to the product mixture.

Taylor Part No.	Taylor Description	Orifice Lohm Rate $\pm 5\%$
094192-5	Fitting A. - Flow Control - Water	70
094192-4	Fitting A. - Flow Control - CO <sub>2</sub>	3500
094192-3	Fitting A. - Flow Control - Water	90
094192-2	Fitting A. - Flow Control - Syrup	430
094192-1	Fitting A. - Flow Control - CO <sub>2</sub>	3000

pressures. CO<sub>2</sub> also absorbs better in water vs. syrup so a higher brix will need more CO<sub>2</sub>. Adjusting the settings of the unit may solve product quality issues. If changing the settings does not solve the issue, then the prefixed orifice for the CO<sub>2</sub> and/or water may need to be changed for a larger or smaller orifice.

## Product Overrun

### Definition

Overrun is the amount of CO<sub>2</sub> that's incorporated into syrup and water mixture during the freezing process. It is expressed as a percentage of the slush expansion, and can range from 80%-110% for standard FCB product. Overrun can be adjusted by replacing the preset orifice for the CO<sub>2</sub> constant flow valve. The higher the overrun the lighter the product will be and the lower the overrun the heavier the product will be.

### Adjusting Overrun

Overrun can be adjusted by replacing the preset orifice for the CO<sub>2</sub> constant flow valve. Once again the orifice size is measured in Lohms.

## Product Temperature

Product temperature should be between 24 - 28 °F (-4.4 - -2.5 °C). The product temperature can be adjusted entering the Service Menu and increasing or decreasing the TPS under the Viscosity option.

## Product Quality

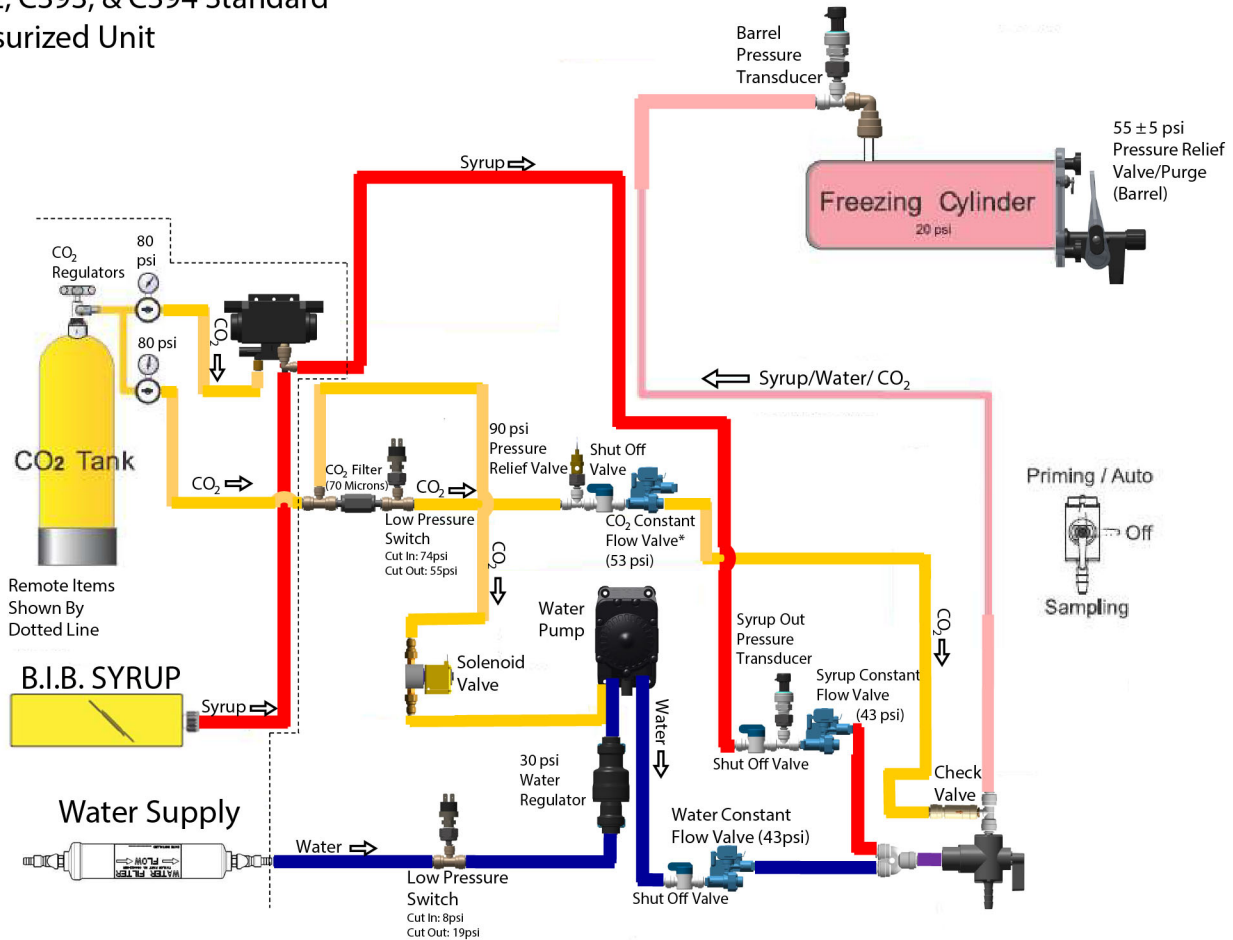
If the product is deflating, this is a sign that there is too much CO<sub>2</sub> in the product. If the product is dense and wet then there is not enough CO<sub>2</sub> in the product. CO<sub>2</sub> is absorbed better at colder temperatures and higher

# Product Delivery

## C393

C392, C393, & C394 Standard  
Pressurized Unit

2



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Figure 2-32



# Refrigeration System

## C393 Refrigeration Diagram

Rev. 0 June 2023

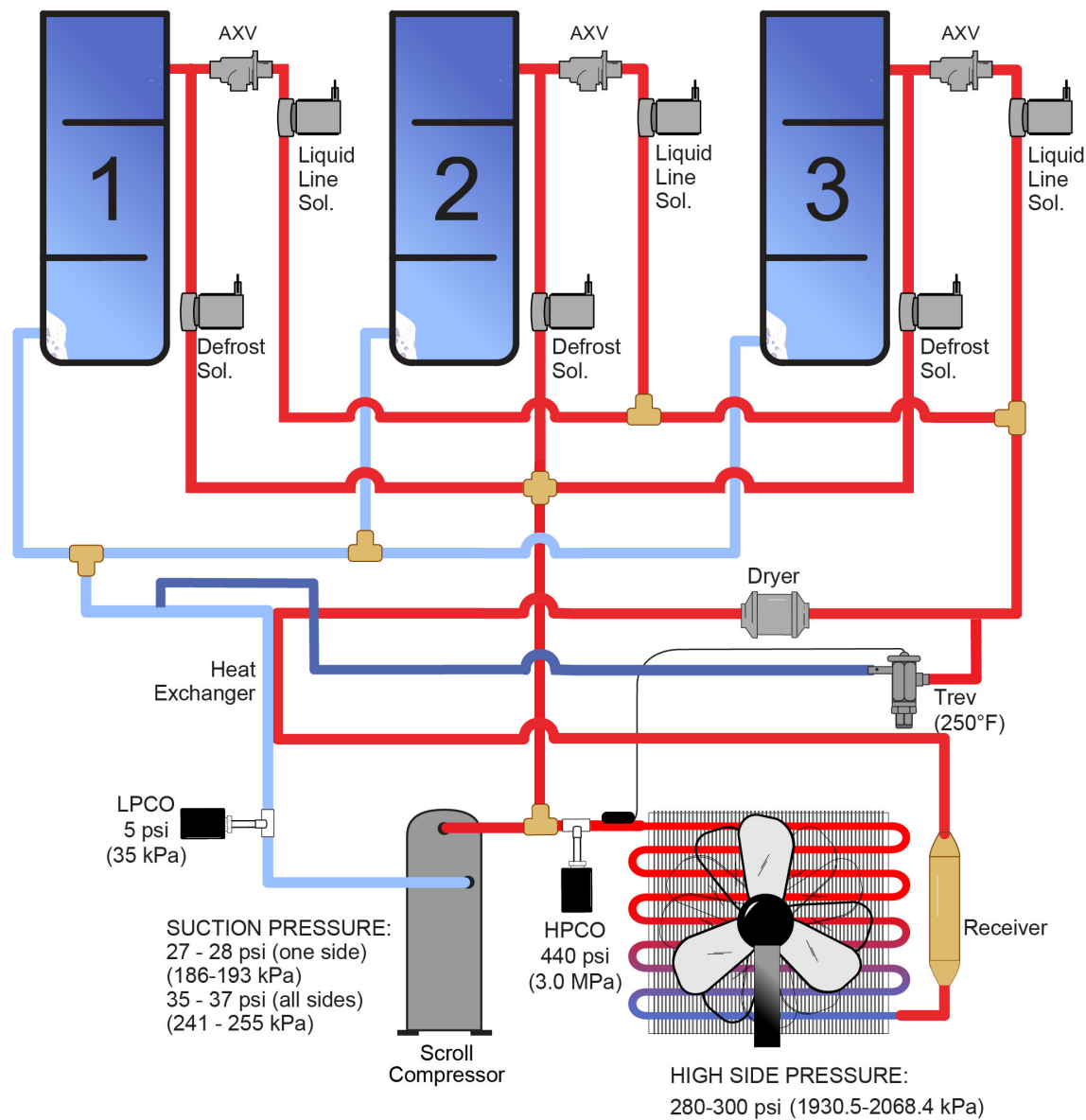


Figure 2-33

2

Refrigeration Components Function

2

Component	Function
Automatic Expansion Valve (AXV)	Controls the refrigerant flow during the cooling of the freezing cylinder.
Condenser (Microchannel)	Utilizes heat transfer to convert high-pressure gas from the compressor into a liquid.
Defrost Solenoid Valve	Directs the hot gas to the freezing cylinder to thaw frozen product.
Dryer	Keeps moisture, dirt, metal, and chips from entering the refrigerant flow control valves.
Heat Exchanger	Allows the liquid refrigerant to be cooled before it reaches the AXV and also warms returning gas to the compressor.
High Pressure Cut Out Switch	Safety pressure switch that monitors the pressure in the refrigeration system and shuts down the system if the pressure exceeds the predetermined threshold.
Liquid Line Solenoid Valve	Directs the refrigerant into the expansion valves when that respective barrel calls for refrigeration.
Low Pressure Cut Out Switch	Monitors the pressure in the refrigeration system and shuts down the system if the pressure goes below the predetermined threshold to save the scroll compressor.
Receiver	A small tank that holds excess refrigerant and helps ensure that only liquid refrigerant goes to the AXV.
Scroll Compressor	Positive displacement compressor that more efficiently compresses gas.
Temperature Response Expansion Valve (TREV)	Opens when discharge temperature exceeds 245 °F (118 °C) to prevent excessive discharge temperatures at the compressor.

# Settings and Procedures

## Regulator Settings

1. Main regulator: 80 psi (552 kPa)
2. CO<sub>2</sub> manifold operating pressure to syrup is 80 psi (552 kPa).

## Sanitizing Instructions

**Important!** If a machine is sanitized and will not be used for an extended period of time, clean water should be used to flush all sanitizer from the lines. Remove the water from all the lines and components prior to storage of the unit. Upon return to service, the unit must be sanitized prior to use.

1. Open the lighted display door. Place the control switch in the ON position.

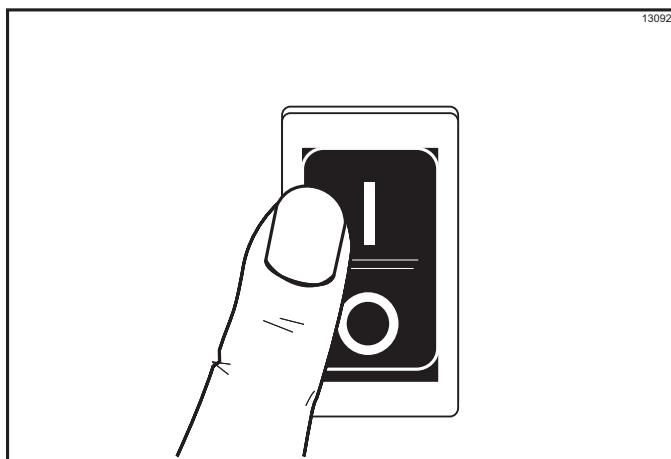


Figure 2-34

2. 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.

**Important!** Make sure the sanitizer is completely dissolved.

3. Using an empty bag of syrup, cut the syrup line connector from the end of the bag.

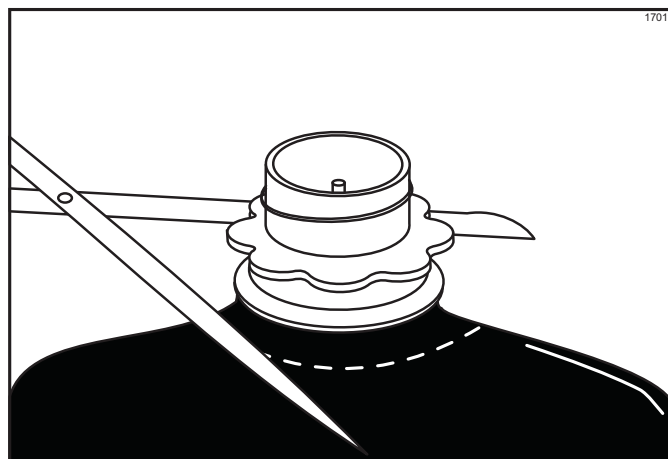


Figure 2-35

4. Connect the syrup line to the syrup line connector that was cut from the syrup bag.

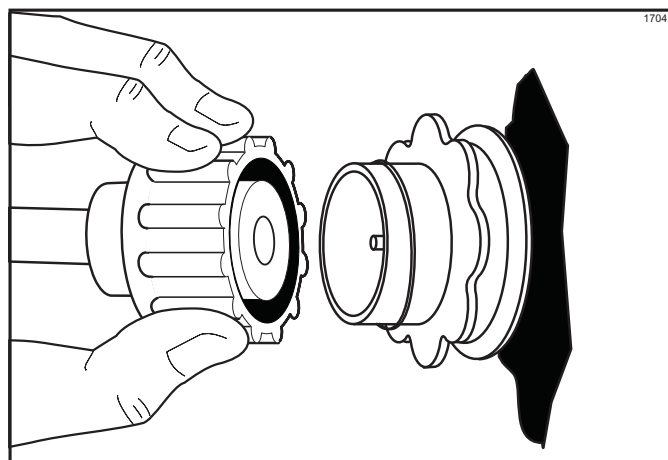


Figure 2-36

5. With the bag connector attached to the syrup line, place the syrup line into the pail of sanitizing solution.

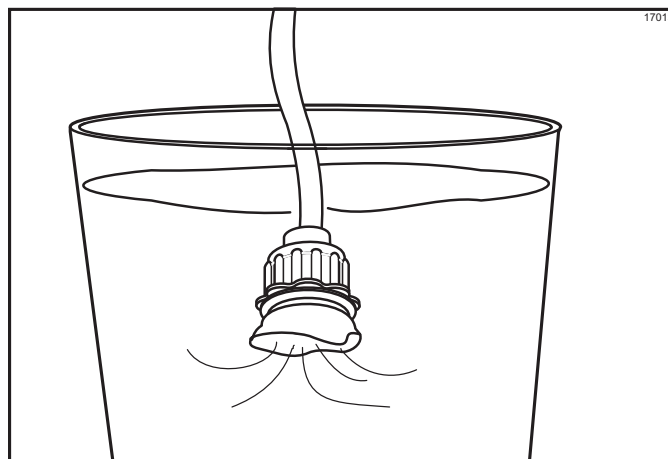


Figure 2-37

- To place a freezing cylinder in the Sanitize mode, press the settings symbol in bottom right corner of touchscreen.

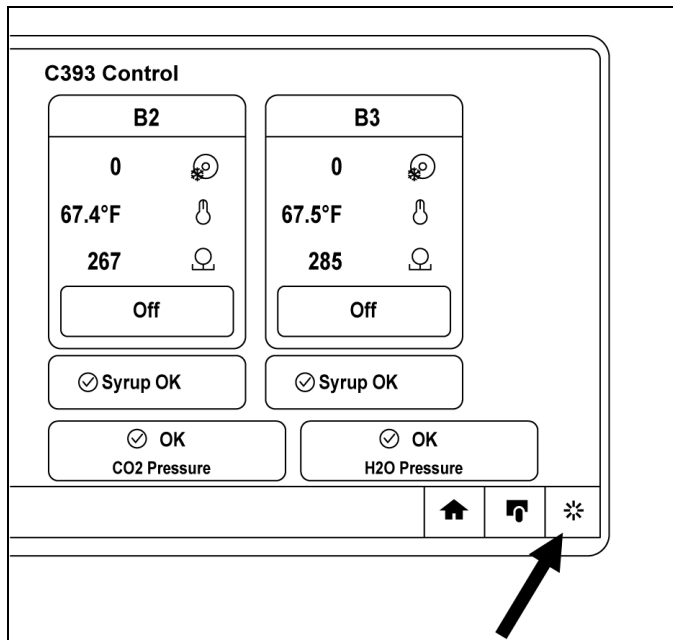


Figure 2-38

- Enter code “8309” to enter Manager Menu.
- Press CURRENT CONDITIONS then OFF button under B1 and select SANITIZE.

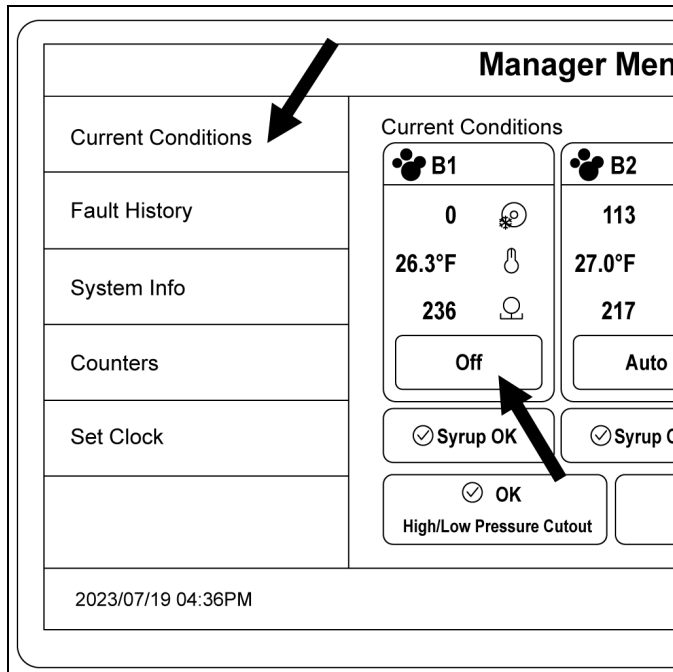


Figure 2-39

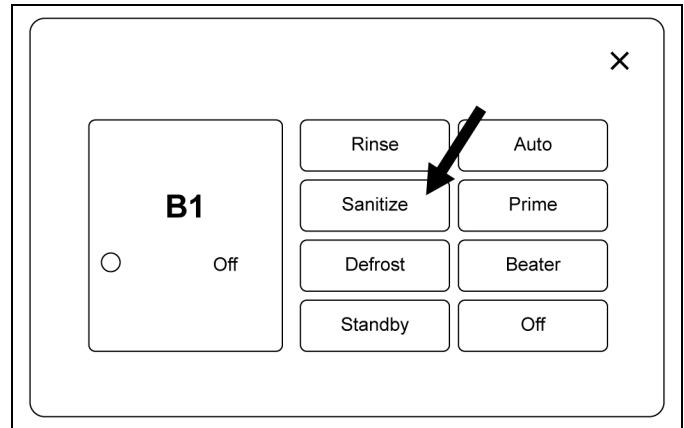


Figure 2-40

- Place an empty pail under the door spout. Relieve pressure by pulling relief valve ring as needed until the sanitizing solution purges out of the relief valve port.
- Press SANITIZE on touchscreen, select BEATER, and let solution agitate for 5 minutes.
- With a pail beneath door spout, open draw valve. Drain all solution from freezing cylinder. Press BEATER and select OFF. Close draw valve.
- Disconnect syrup connector and attach syrup line to Bag-In-Box (BIB) syrup.
- Using touchscreen, place barrel into SANITIZE mode and allow product to enter barrel until syrup is flowing steadily through the lines, and select OFF.
- Loosen but do not remove door to drain the sanitizer and syrup from the barrel. Re-tighten hand screws.
- Using touchscreen, place barrel in RINSE mode.
- Place pail under door spout. Pull relief valve ring as needed to allow freezing cylinder to fill completely. Pull relief valve ring to allow solution to run out of prime port. Press RINSE on touchscreen and select BEATER.
- With a pail beneath door spout, open draw valve. Drain all water from freezing cylinder. Press BEATER on touchscreen and select OFF. Close draw valve.
- Loosen but do not remove door to drain the remainder of the product from the cylinder. Tighten.
- Repeat on other freezing cylinder(s).

## Priming Instructions

1. From the home screen, press OFF button and select PRIME.

**Note:** Valves will only activate if barrel pressure is below 20 BPU.

2. Pull on the relief valve ring (1) to relieve pressure. Valves will automatically restart when pressure drops below 20 BPU. When valves activate, **RELEASE** relief valve ring (1).
3. See Figure 2-41 for approximate liquid level.
4. Valves activate until pressure cut out is met (175 BPU but will overshoot so may range from 175 to 240 BPU depending on liquid level).

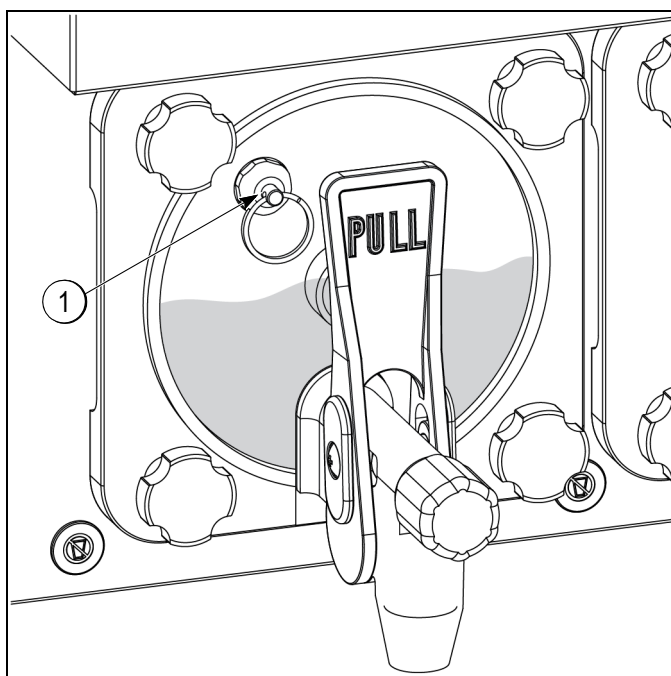


Figure 2-41

5. Valves will shut off again, see figure 2-42 for the approximate liquid level after valves shut off for the second time.
6. Pull on the relief valve ring (1) to relieve pressure. Valves will automatically restart when pressure drops below 20 BPU. When valves activate, **RELEASE** relief valve ring (1).

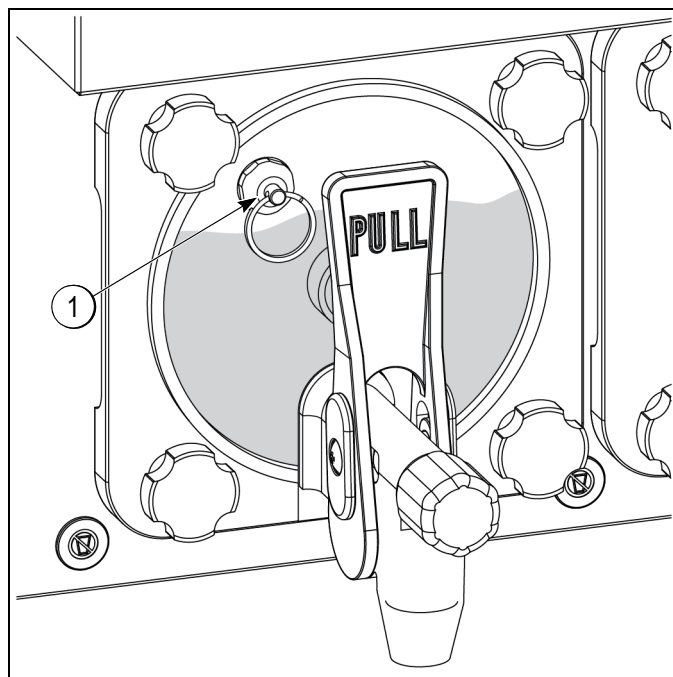


Figure 2-42

7. Once valves shut off for a third time, **DO NOT** relieve pressure again. Select the OFF button.
8. See Figure Important! for approximate liquid level.
9. Select AUTO.
10. Repeat priming process for the remaining barrels, then put them into AUTO.
11. Close lighted display.

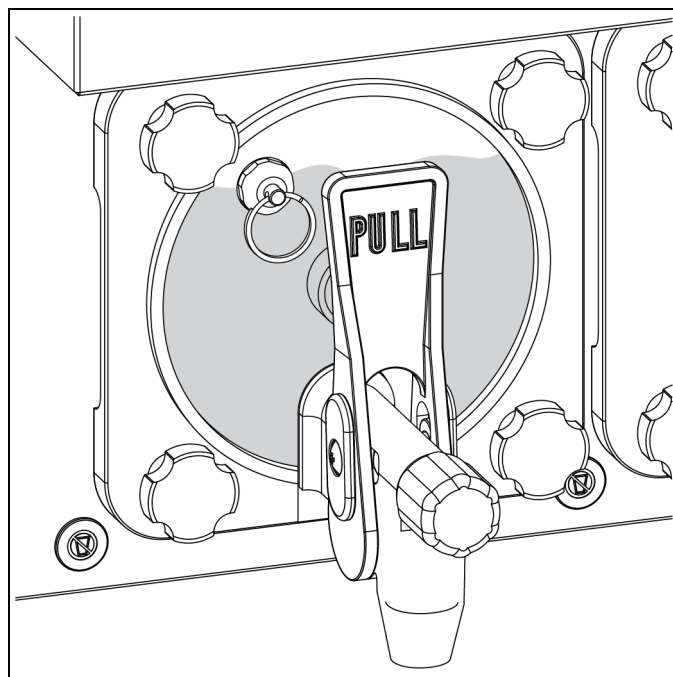


Figure 2-43

## CONTROLS

**Important!** DO NOT DRAW OFF BARREL FOR 3 MINUTES AFTER BARREL FREEZES DOWN. CO<sub>2</sub> IS BEING ADDED TO BARREL

### Cleaning & Disassembly

#### Instructions

1. Lift lighted display on front of machine.
2. If product is not thawed, put barrels into Defrost Mode before proceeding.
3. Using touchscreen, select BEATER. Open draw valve. Drain all product from the freezing cylinder until the product no longer dispenses from the barrel in a consistent manner. Press OFF.
4. Using touchscreen, place barrel in RINSE mode. Allow water to fill barrel completely. Drain rinse water. Repeat until water is clear.
5. Close draw valve. Using touchscreen, press OFF.
6. Repeat process from SANITIZING INSTRUCTIONS section above.
7. Make sure that the control switch is in the OFF position. Open draw valves to make sure all pressure has been relieved.

**Important!** BEFORE ATTEMPTING TO REMOVE FREEZER DOOR FROM FREEZING CYLINDER BE SURE PRESSURE TO EACH BARREL HAS BEEN RELIEVED BY OPENING DRAW VALVES.

8. Remove following parts from freezer and take to sink for brush cleaning:
  - Hand screws
  - Freezer doors
  - Beater assemblies
  - Scraper blades
  - Drive shafts
  - Front drip tray
  - Splash shield
9. Discard all o-rings. Brush clean all parts in an approved cleaning solution as described in the SANITIZING INSTRUCTIONS section. Replace all o-rings with new. Place all cleaned parts on a clean dry surface to air-dry.
10. Return to freezer with small amount of cleaning solution. Using a single service towel, wipe clean rear shell bearing at back of freezing cylinders. Brush clean rear shell bearing with black bristle brush.

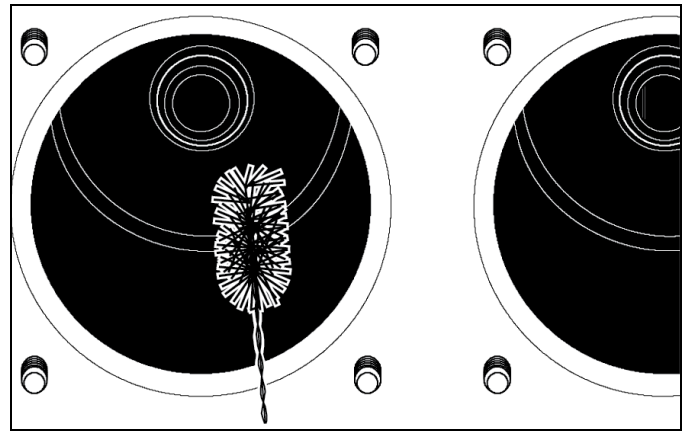


Figure 2-44

11. Wipe clean all exterior surfaces of freezer.

### Assembly Instructions



**WARNING!** Make sure the power switch is in the OFF position. Failure to follow this instruction may result in severe personal injury from hazardous moving parts.

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

1. Before installing the beater drive shaft, Lubricate the drive shaft seal groove, u-cup seal groove, u-cup seal, and the shaft portion that comes in contact with the bearing on the beater drive shaft. **Do not** lubricate the slotted end of the drive shaft.

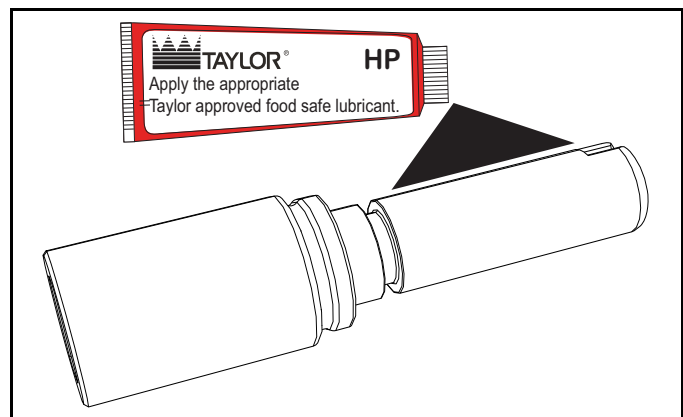


Figure 2-45

**Note:** To ensure that the mix does not leak out of the back of the freezing cylinder, the middle section of the drive shaft seal should be convex or extend out from the seal. If the middle section of the drive shaft seal is concave or extending into the middle of the seal, invert the seal.

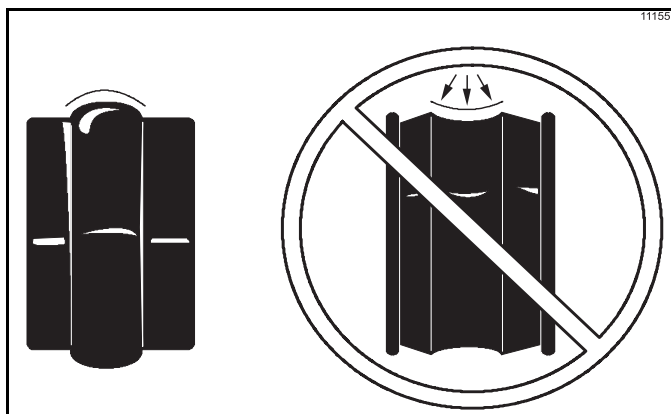


Figure 2-46

2. Install u-cup seal onto drive shaft. Make sure the flared end is facing the groove and that the seal is not twisted after installation.

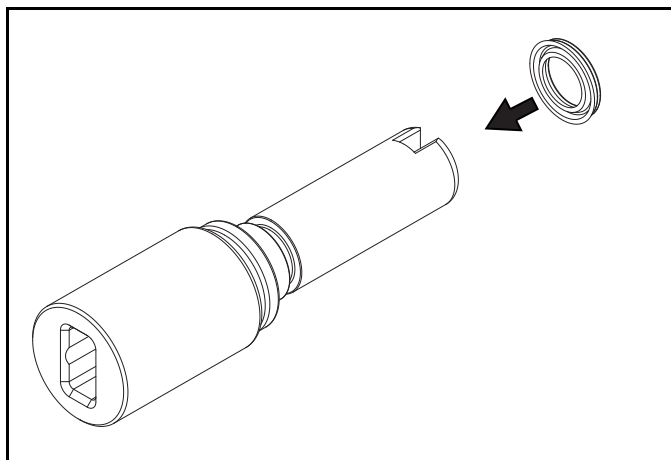


Figure 2-47

3. Lubricate the inside diameter of the drive shaft seal and slide the seal and bushing over the shaft until it snaps into place.

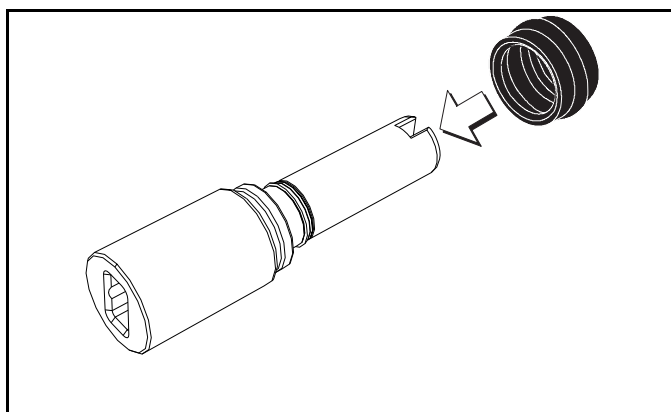


Figure 2-48

4. Fill the inside portion of the seal with 1/4" more lubricant and evenly lubricate the end of the seal that fits onto the rear shell bearing.

5. Insert the beater drive shaft into the freezing cylinder, slotted end first, and into the rear shell bearing until the seal fits securely over the rear shell bearing. Be certain the drive shaft fits into the motor shaft without binding.

**Important!** Remove any excess lubricant from the seal.

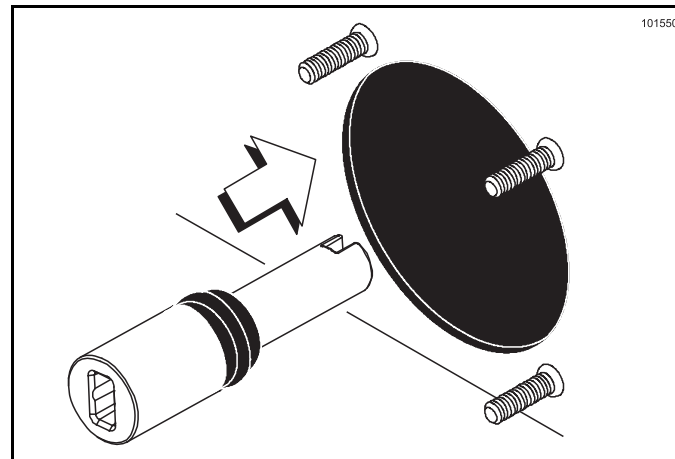


Figure 2-49

6. Before installing the beater assembly, check the scraper blades for any nicks or signs of wear. If any nicks are present or if the blade is worn, replace both blades. If the blades are in good condition, place the scraper blades over the holding pins on the beater.

**Note:** Each hole on the scraper blade must fit securely over each pin.

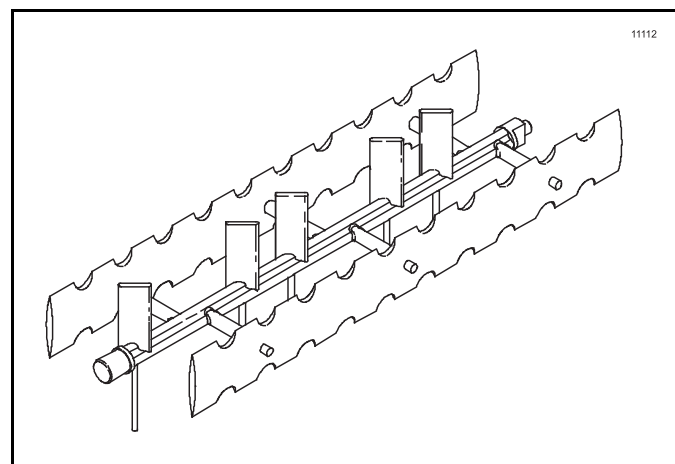


Figure 2-50

## CONTROLS

7. Align the flats on the end of the beater assembly with the drive shaft. Turn the beater slightly to be certain that the beater is properly seated. When in position, the beater will be approximately 3/8" inside the front of the freezing cylinder.

**Important!** Failure to properly seat the beater may cause damage to the beater and the door.

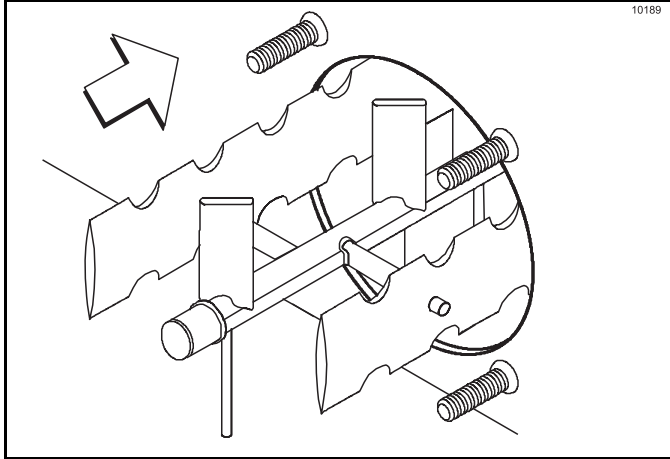


Figure 2-51

**Note:** The scraper blades on the beater assembly should be in the 6 and 12 o'clock positions. This will enable freezer door installation.

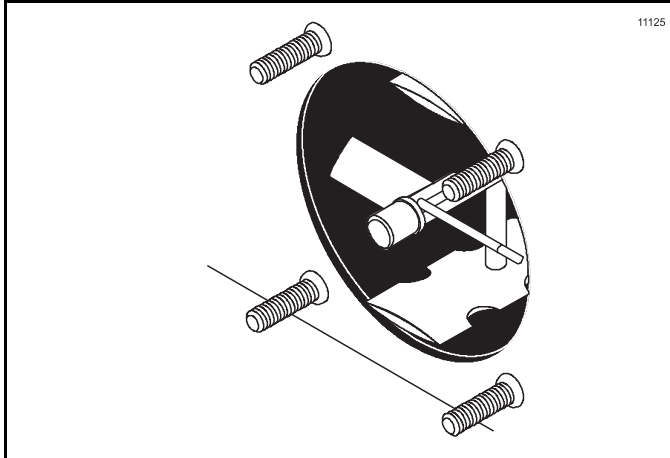


Figure 2-52

8. Before installing the draw valve, slide the two o-rings into the grooves on the draw valve. Lubricate the O-rings and the valve as illustrated below.

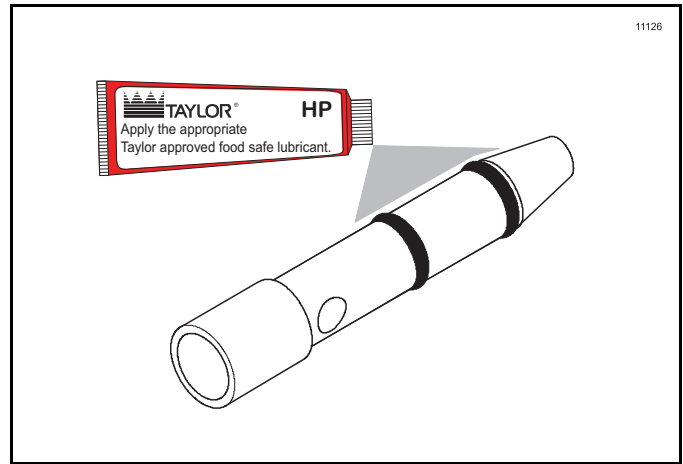


Figure 2-53

9. Insert the draw valve into the freezer door spout from the front of the unit. The valve is properly installed when the hole in the draw valve is visible in the slot of the freezer door spout.

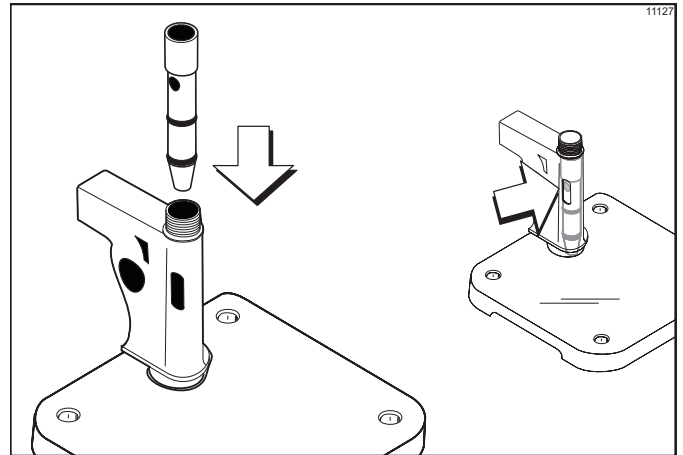


Figure 2-54

10. Snap the draw valve handle onto the door spout. Align the hole in the draw valve with the slot in the draw handle.

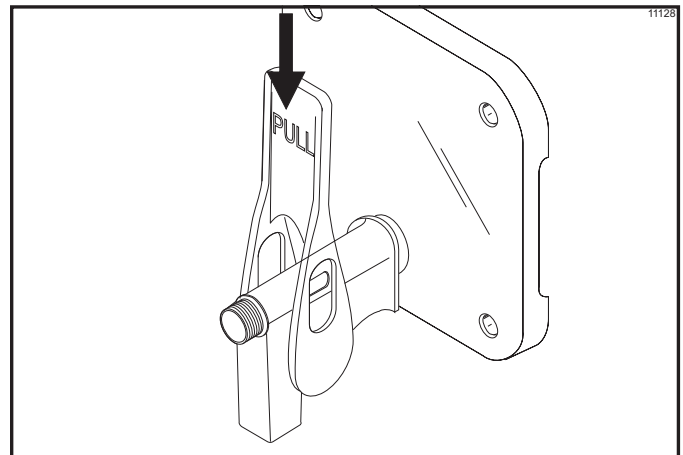


Figure 2-55



11. Slide the pivot pin through the draw handle, the draw valve, and into the door handle slide. Secure the assembly with the 3/8" (9.5 mm) screw.

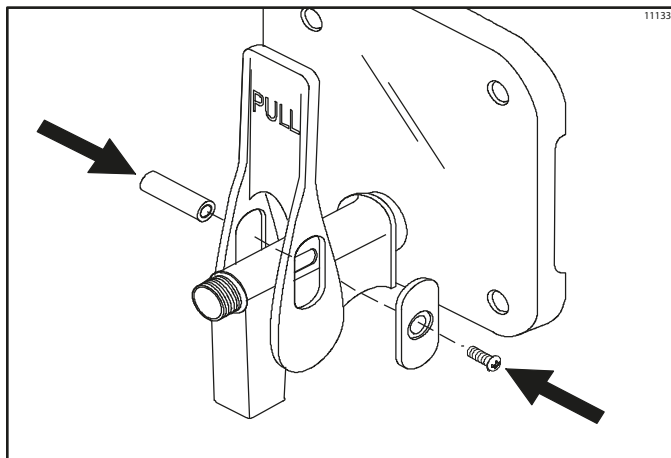


Figure 2-56

12. Secure the door handle slide assembly with the 1" (25 mm) screw.

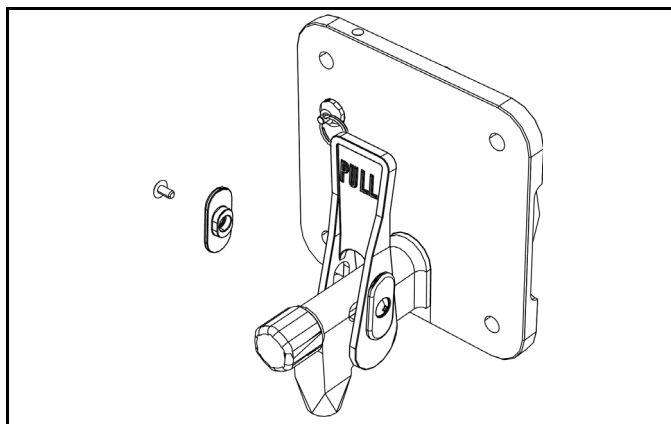


Figure 2-57

13. Insert the spring into the front of the door spout.

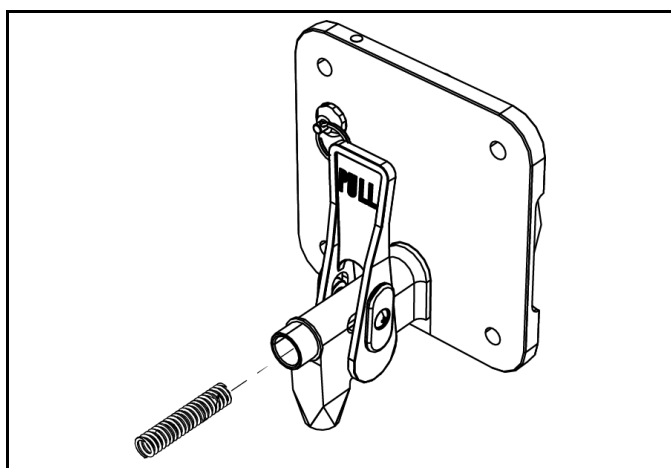


Figure 2-58

14. Place the threaded cap on the end of the draw valve cavity. Turn the cap clockwise until it is secure.

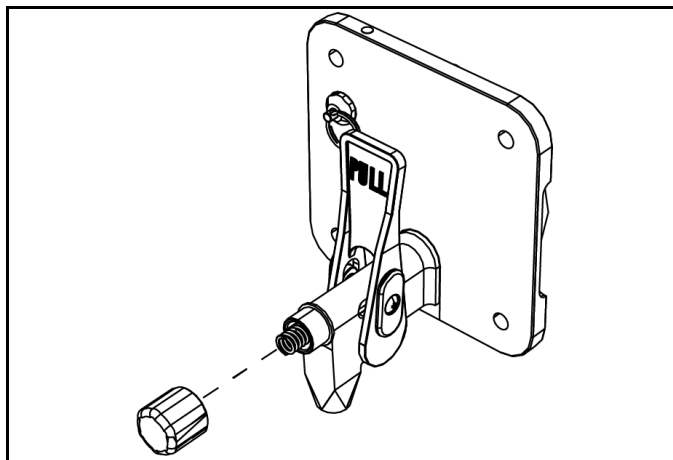


Figure 2-59

15. Place the large O-ring into the door groove and lightly lubricate.

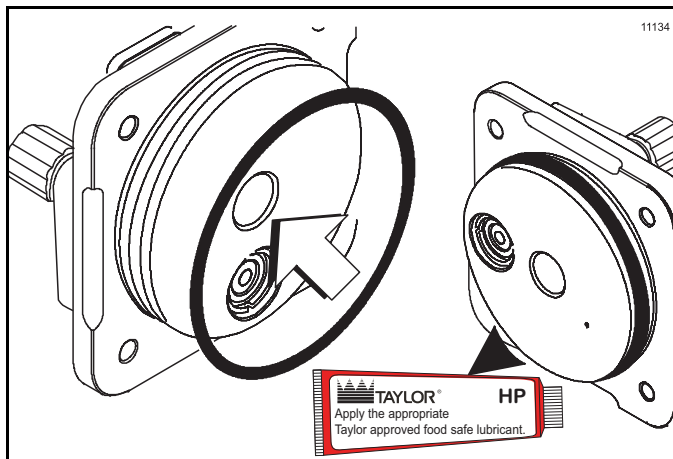


Figure 2-60

**Note:** Every six months or less, discard the O-rings and install new O-rings.

16. Install the front bearing. **Do not** lubricate the front bearing.

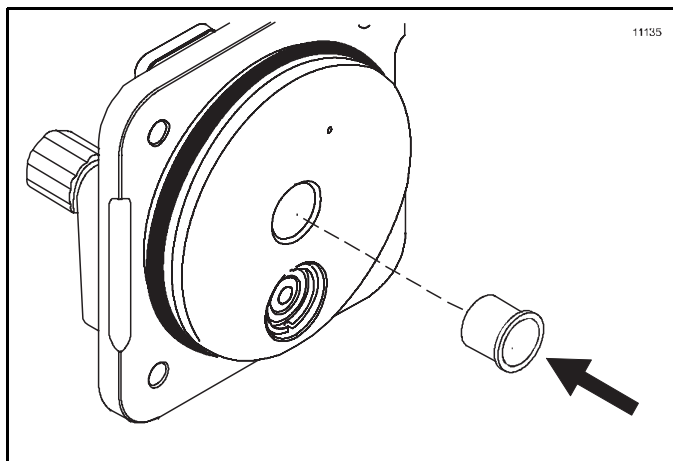


Figure 2-61

17. Install the freezer door. Position the door on the four studs on the front of the freezing cylinder. Firmly push the door into place. Install the four handscrews on the studs and finger-tighten them equally in a crisscross pattern to ensure that the door is snug. **Do not** overtighten the handscrews.

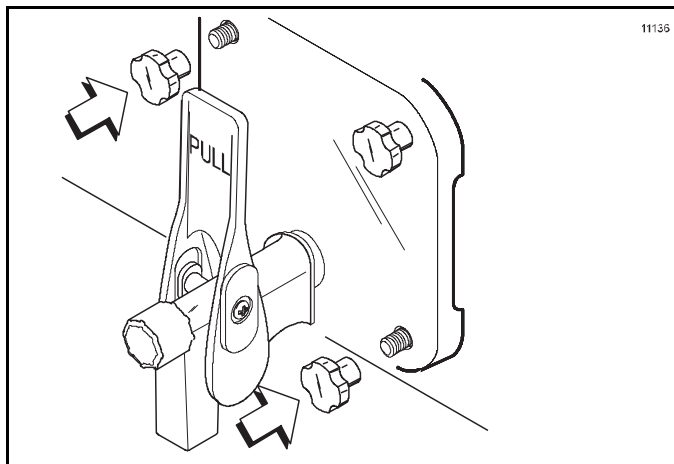
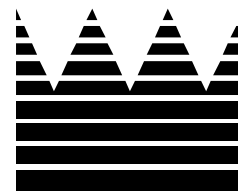


Figure 2-62

18. Repeat step 1 through step 17 for the other freezing cylinders.



## **Section 3: Troubleshooting**

- **General Troubleshooting Guide**
- **Electrical Troubleshooting Guide**
- **Control Troubleshooting Guide**

# General Troubleshooting Guide

Table 3-1

Problem	Probable Cause	Remedy
1. Product is too stiff.	a. Improper brix adjustment (too much water). b. Consistency control needs adjustment. c. Not enough CO <sub>2</sub> is being supplied to propel syrup. d. Incorrect beater rotation.	a. Adjust brix accordingly. b. Decrease TPS (see the Control Programming Section). c. Check the regulator on the CO <sub>2</sub> main tank; 80 psi (28.2 kPa) is needed to propel syrup. d. Rewire the beater motor according to instructions indicated on the motor.
2. Product is too soft.	a. Improper brix adjustment (too much syrup). b. Consistency control needs adjustment. c. The water supply is restricted. d. No syrup is being supplied to the freezer. e. The freezer is in a defrost cycle.	a. Adjust brix accordingly. b. Increase TPS (see the Control Programming Section). c. Check that water is on and that there are no leaks or kinks in the water lines. d. Check product level in syrup bag. e. Wait for the defrost cycle to end.
3. No product is being dispensed.	a. A freeze-up condition exists in the freezing cylinder. b. Loss of CO <sub>2</sub> pressure in the freezing cylinder(s).	a. See problem No. 1. b. Barrel overfilled. Drain some product and add CO <sub>2</sub> using Beater-CO <sub>2</sub>
4. The freezer will not operate in the Beater or Auto mode.	a. The unit is unplugged. b. The fuse is blown or the circuit breaker is off.	a. Check the plug at the wall receptacle. b. Replace the fuse or turn the breaker on.
5. No compressor operation in the Auto mode.	a. The beater motor is out on overload. Check the FAULT DESCRIPTION screen. b. No syrup is being supplied to the freezer. c. The condenser is dirty. d. No CO <sub>2</sub> is being supplied to the freezer. e. The water supply is off.	a. Press the OFF key. Allow the motor to cool, and press the AUTO key. b. Replace the syrup bag. c. Clean the condenser. d. Check the CO <sub>2</sub> supply. Replace the CO <sub>2</sub> tank. e. Turn the water on.
6. Unable to remove driveshaft from rear shell bearing.	a. Rounded corners of hex end of driveshaft.	a. Replace the driveshaft.
7. Excessive loss of CO <sub>2</sub> .	a. There is a leak in the CO <sub>2</sub> system.	a. Use a soap solution to locate the leak, and repair.
8. There is leakage from the rear drip pan.	a. The seal or O-ring on the driveshaft is worn, missing, or incorrectly installed. b. The rear shell bearing is worn.	a. Replace or install correctly on driveshaft. b. Replace the rear shell bearing.

Problem	Probable Cause	Remedy
9. There is excessive mix leakage from the door spout.	<ul style="list-style-type: none"> <li>a. Inadequate lubrication of draw valve O-rings.</li> <li>b. Wrong type of lubricant was used on the draw valve O-rings.</li> <li>c. Draw valve O-rings are worn or missing.</li> </ul>	<ul style="list-style-type: none"> <li>a. Lubricate properly.</li> <li>b. Use food grade lubricant (example: Taylor Lube).</li> <li>c. Replace or install O-rings on the draw valve.</li> </ul>
10. An inadequate amount of syrup is being supplied to the machine.	<ul style="list-style-type: none"> <li>a. The syrup lines are clogged or kinked.</li> <li>b. Loss of CO<sub>2</sub> to propel syrup.</li> <li>c. The CO<sub>2</sub> pressure is set too low.</li> </ul>	<ul style="list-style-type: none"> <li>a. Sanitize the syrup lines regularly. If they are kinked, repair or replace.</li> <li>b. Check for CO<sub>2</sub> leaks. Use a soap solution to locate the leak, and repair.</li> <li>c. 80 psi (552 kPa) is needed to propel the syrups.</li> </ul>

# Electrical Troubleshooting Guide

The following are electrical power paths for each pertinent component:

Interface Board	L1 -10amp fuse- Power Switch - Filter - 16V Transformer - 16VAC on the Interface Board
Universal Board	L1 -10 amp fuse- Power Switch - Filter - 16V Transformer - 16VAC on the Interface Board -J4 5V&GND - J1 Universal Board
High Voltage Output Boards	L1 - 10amp fuse- Power Switch- 24v DC Power Supply- J3 High Voltage Board
Control Output Line Voltage Boards	L1 - 10amp fuse- Power Switch - SL1 Output line Voltage Board
Beater Motor B1	B2, B1 Control Output Line Voltage Board - J5 - Door Interlock Relay #1 terminal 5 & B1 capacitor
Beater Motor B2	B2, B1 Control Output Line Voltage Board - J6 - Door Interlock Relay #2 terminal 5 & B2 capacitor
Beater Motor B3	B4, B3 Control Output Line Voltage Board - J5 - Door Interlock Relay #3 terminal 5 & B3 capacitor
Beater Motor B4	B3 Control Output Line Voltage Board - J6 - Door Interlock Relay #4 terminal 5 & B4 capacitor
Barrel #1 CO <sub>2</sub> Solenoid	B1, B2 Control Output DC Voltage board J5- Pin 1&2
Barrel #2 CO <sub>2</sub> Solenoid	B1, B2 Control Output DC Voltage board J1- Pin 1&2
Barrel #3 CO <sub>2</sub> Solenoid	B3, B4 Control Output DC Voltage board J5- Pin 1&2
Barrel #4 CO <sub>2</sub> Solenoid	B3, B4 Control Output DC Voltage board J1- Pin 1&2
Barrel #1 H <sub>2</sub> O Solenoid	B1, B2 Control Output DC Voltage board J5- Pin 3&4
Barrel #2 H <sub>2</sub> O Solenoid	B1, B2 Control Output DC Voltage board J1- Pin 3&4
Barrel #3 H <sub>2</sub> O Solenoid	B3, B4 Control Output DC Voltage board J5- Pin 3&4
Barrel #4 H <sub>2</sub> O Solenoid	B3, B4 Control Output DC Voltage board J1- Pin 3&4
H <sub>2</sub> O Booster Solenoid	B2, B1 Control Output Line Voltage board J2- Pin 5&6
Barrel #1 SYR Solenoid	B2, B1 Control Output DC Voltage board J5- Pin 5&6
Barrel #2 SYR Solenoid	B2, B1 Control Output DC Voltage board J1- Pin 5&6
Barrel #3 SYR Solenoid	B4, B3 Control Output DC Voltage board J5- Pin 5&6
Barrel #4 SYR Solenoid	B4, B3 Control Output DC Voltage board J1- Pin 5&6
Compressor Contactor Coil	B2, B1 Control Output Line Voltage Board J2 pin 1&2, pin 1 to LPCO - HPCO - A1 - A2 - J2 pin 2
Barrel #1 Liquid Line Solenoid	B2, B1 Control Output Line Voltage board J3- Pin 1&2
Barrel #2 Liquid Line Solenoid	B2, B1 Control Output Line Voltage board J4- Pin 1&2
Barrel #3 Liquid Line Solenoid	B4, B3 Control Output Line Voltage board J3- Pin 1&2
Barrel #4 Liquid Line Solenoid	B4, B3 Control Output Line Voltage board J4- Pin 1&2
Barrel #1 Defrost Solenoid	B1, B2 Control Output Line Voltage board J5- Pin 3&4
Barrel #2 Defrost Solenoid	B1, B2 Control Output Line Voltage board J1- Pin 3&4

Barrel #3 Defrost Solenoid	B4, B3 Control Output Line Voltage board J5- Pin 3&4
Barrel #4 Defrost Solenoid	B4, B3 Control Output Line Voltage board J1- Pin 3&4
Condenser Fan	B1, B2 Control Output Line Voltage board J2- Pin 3&4 - L2 - Fan Capacitor
User Interface	L1- 10amp fuse - Power Switch - 24V DC Power Supply -

**Note:** All inputs for J5 and J3 must be satisfied to allow J15 and J12 to operate the freezer.

# Control Troubleshooting Guide

This section of the manual is not intended to apply to the entire unit. Use these guidelines as an aid in determining whether or not any problems exist in the Universal Control itself.

**If it is suspected that the Universal Control is faulty, check the following items:**

**Is the LED on the Universal Control blinking?**

The green LED on the Universal Control is programmed as the “heartbeat” of the processor. Whenever the processor is receiving or executing instructions from memory, this LED will blink. If the LED extinguishes or stays on continuously, the processor is no longer functioning. This will cause the touch-screen to show fault message “Communications with control board failed”.

**Is the display legible? Does it respond to operator input?**

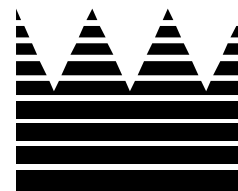
From the time the Universal Control is powered, the display will show the operator enough information to indicate what the unit is doing at any given time. If the display shows characters which are not understandable, or if the display locks up (never changes), this indicates that the processor is no longer “talking” to the display. (The display might be faulty or the connections between the display and the Universal Control might be faulty.)

**If any or all of the above conditions exist, follow the next steps to troubleshoot the board:**

- Disconnect all power to the unit.
- Verify that all connections to the board are intact.
- Check the 5 V power supply at connector J1.
- Repower the unit.

If the above symptoms continue, the universal board should be replaced. Unless serious damage has occurred to the machine, these conditions are rare.





## **Section 4:    Parts**

- **Warranty Explanation**
- **Exploded View**
- **Panel Identification**
- **Beater Door Assembly**
- **Control A. Front**
- **Control A. Rear**
- **Box A.-LED**
- **Plate A.-DEC-Touchscreen**
- **Line Assembly**

# Warranty Explanation

- 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 12 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 12 months.
- Class 000 Parts:** Wear Items—no warranty.

**CAUTION:** 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.

***Note:** Taylor reserves the right to deny warranty claims on equipment or parts if unapproved 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.*

# Exploded View

C392

4

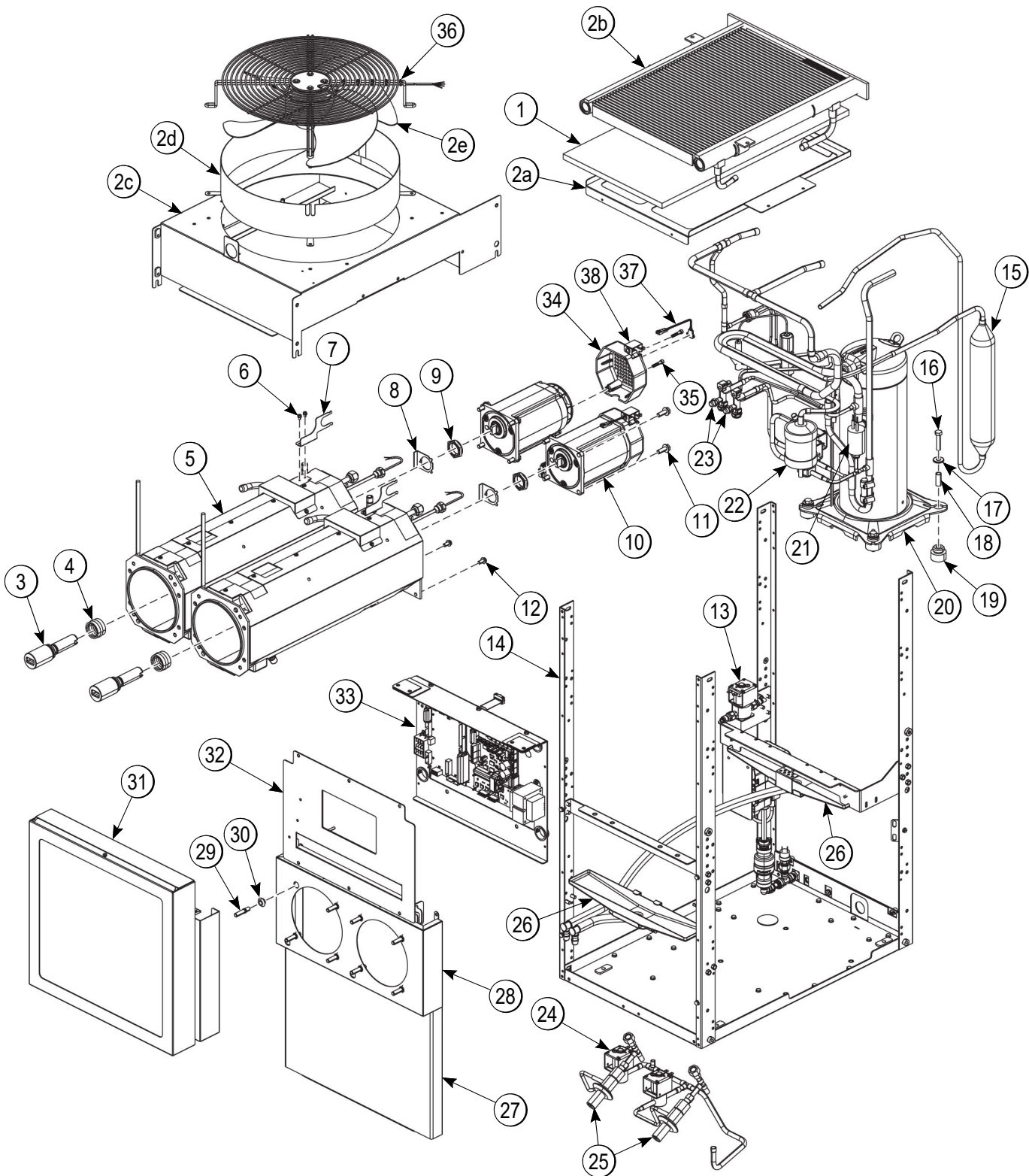


Figure 4-1

## Exploded View Parts Identification C392

Item	Description	Part No.
1	Filter-Air-17.13LX21.00HX.70W	052779-24
2	Condenser A. (Includes Items 2a-2e)	X93672-27
2a	Guide Filter	09365
2b	Condenser AC	093401
2c	Shroud A.-Condenser	X93673
2d	Ring A.-Air Flow Cond.	X93068
2e	Motor A.-Fan 185 Watt 1400RPM	X59572-27
3	Shaft-Beater-Slush-Grooved	083143-SP
4	Seal-Drive Shaft	032560-SP
5	Shell A.-Insulated	X88954
6	Screw-8 X 1/4 SLTD Hex Head	009894
7	Bracket-Pressure Transducer	092590
8	Washer-Bearing Lock	012864
9	Nut, Bearing	028991
10	Motor-Gear-1/6HP-167RPM	087619-27
11	Screw-5/16-18 X 7/8 Serr. HWH	017973
12	Screw-1/4-20 X 1/2 SLT HWH SER	051284
13	Valve-Solenoid 208/240 V	028824-27
14	Frame A.	X96351
15	Receiver A.-Refrigeration	X89010
16	Screw-5/16-18 X 1-1/2 Hex Head	001894
17	Washer-5/16 USS Flat CR3	000651

Item	Description	Part No.
18	Sleeve	039924
19	Bushing-Mounting	037428
20	Compressor-ZS15KAE-PFV	086303-27
21	Switch-Pressure 440 PSI	048230
22	Dryer-Filter 3/8 ODF X 3/8 ODMHP	062158
23	Valve-Access-1/4 MFL X 3/8 ODSDR	053565
24	Valve-Solenoid-7/64 ORF X 1/4 S	062087-27
25	Valve-Exp-Auto-1/4 S X 1/4 FPT	094436
26	Pan-Drip-w/ Drain	093369
27	Panel-Front-Lower	093726-BLA
28	Panel-Front-Shell	093671-BLA
29	Stud-Nose Cone 5/16-18 X 5/16	020445
30	Nut-Stud-Plastic 5/16-18 BLA	087009-1
31	Box A.-LED Complete	X89341
32	Plate A.-DEC Touchscreen	X93701
33	Control A.-Complete	X936762-27
34	Shroud-Rear-Gear Motor	087619-B
35	Screw-10-32 X 1 Socket Head Cap	058385
36	Tie-Cable 0.10 W X 4 Long	033208
37	Sensor-Hall Effect	093217-A
38	Bracket-Mounting	093340

C393

4

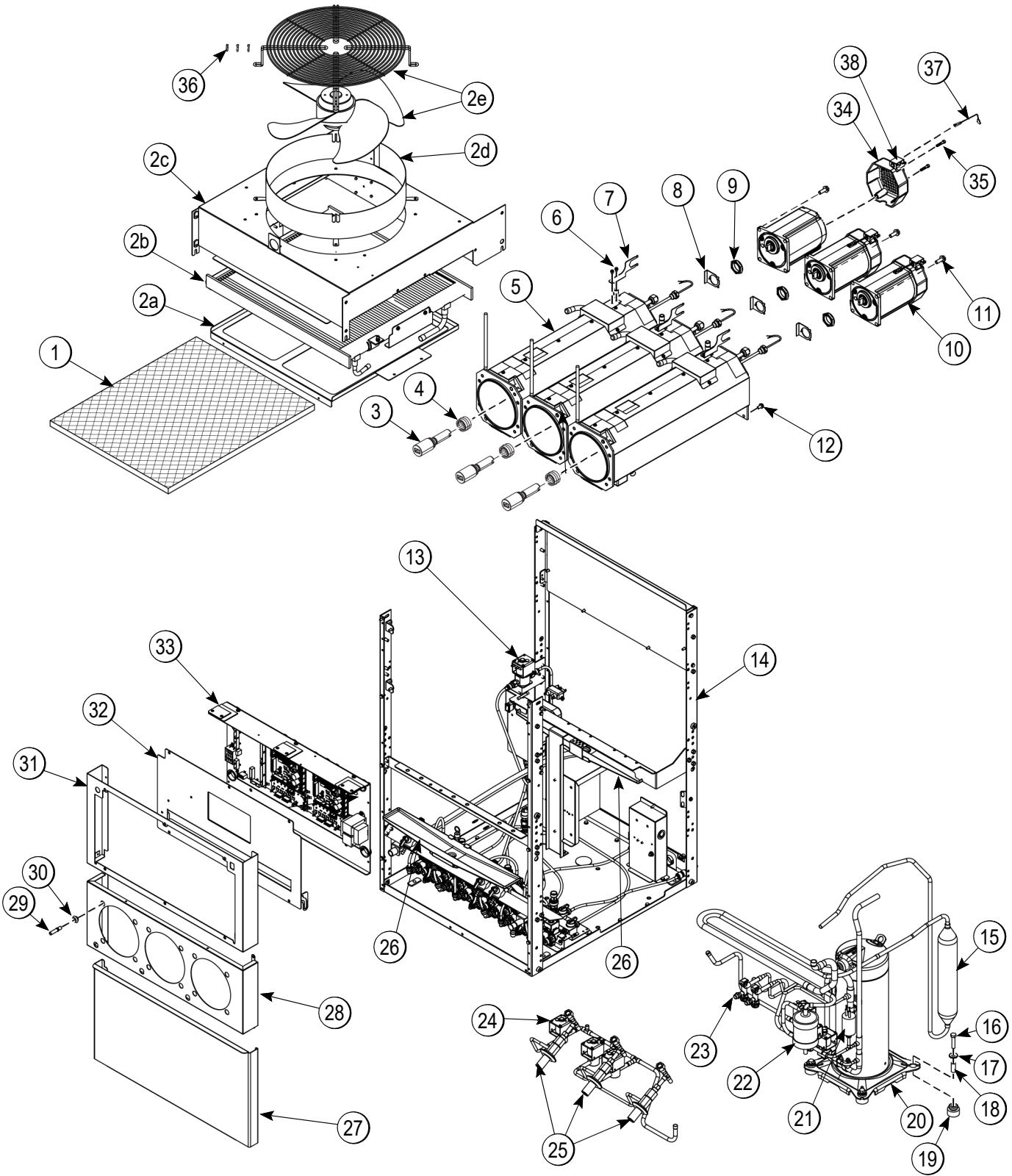


Figure 4-2

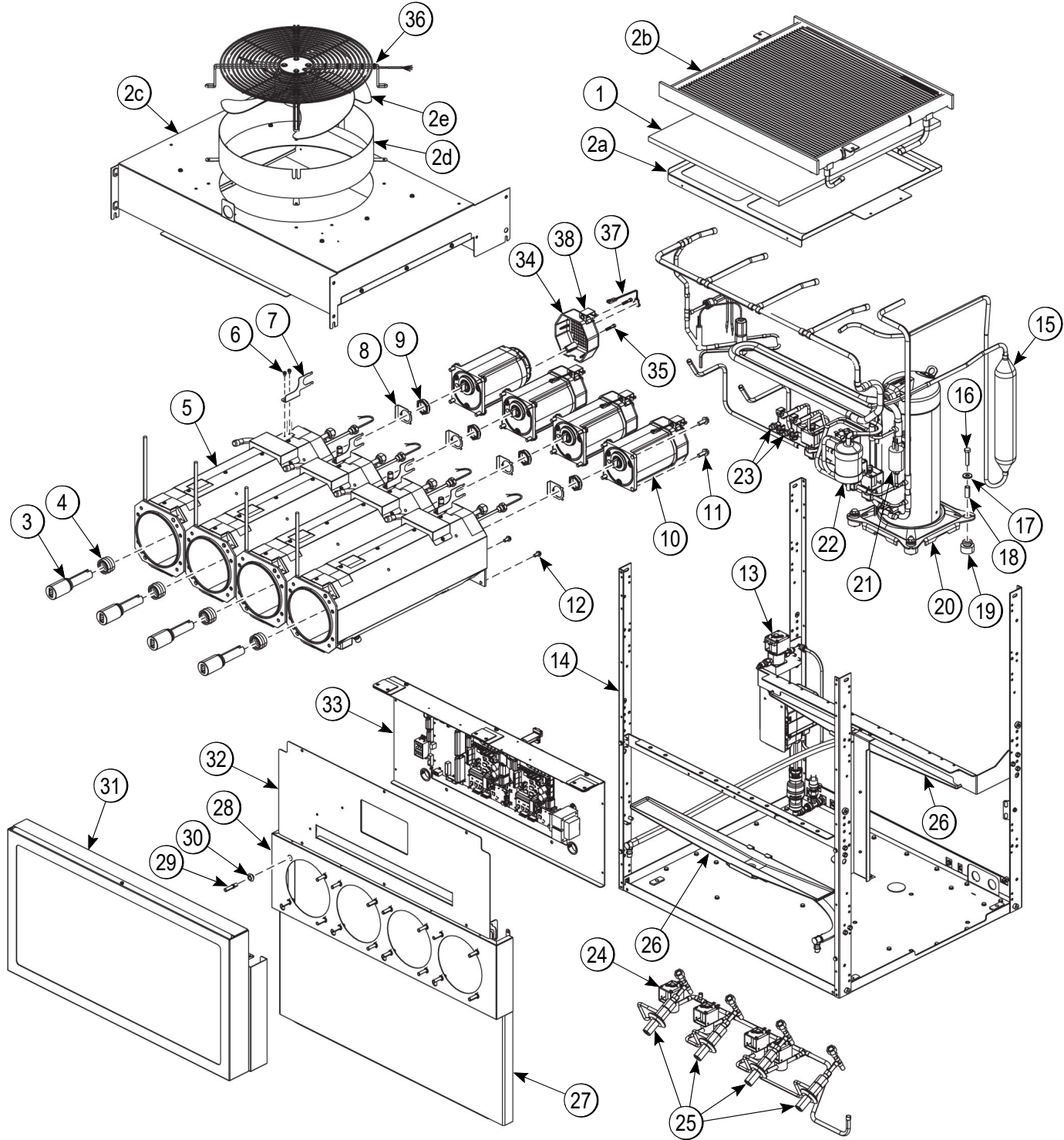
## PARTS

### Exploded View Parts Identification C393

Item	Description	Part No.
1	Filter-Air-21.375 L X 17.375 HX	052779-20
2	Condenser A.-Air Cooled (Includes Items 2a-2e)	X88795-27
2a	Guide Filter	088805
2b	Condenser AC	088730
2c	Shroud A.-Condenser	X88796
2d	Ring A.-Air Flow Cond.	X93068
2e	Motor A.-Fan 185 Watt 1400RPM	X59572-27
3	Shaft-Beater-Slush-Grooved	083143-SP
4	Seal-Drive Shaft	032560-SP
5	Shell A.-Insulated	X88954
6	Screw-8 X 1/4 SLTD Hex Head	009894
7	Bracket-Pressure Transducer	092590
8	Washer-Bearing Lock	012864
9	Nut, Bearing	028991
10	Motor-Gear-1/6HP-167RPM	087619-2
11	Screw-5/16-18 X 7/8 Serr. HWH	017973
12	Screw-1/4-20 X 1/2 SLT HWH SER	051284
13	Valve-Solenoid 208/240 V	028824-27
14	Frame A.	X88782
15	Receiver A.-Refrigeration	X89010
16	Screw-5/16-18 X 1-1/2 Hex Head	001894
17	Washer-5/16 USS Flat CR3	000651
18	Sleeve	039924

Item	Description	Part No.
19	Bushing-Mounting	037428
20	Compressor-ZS19KAE-PFV	088961-27
21	Switch-Pressure 440 PSI	048230
22	Dryer-Filter 3/8 ODF X 3/8 ODMHP	062158
23	Valve-Access-1/4 MFL X 3/8 ODSDR	053565
24	Valve-Solenoid-7/64 ORF X 1/4 S	062087-27
25	Valve-Exp-Auto-1/4 S X 1/4 FPT	094436
26	Pan-Drip-W/Drain	067837
27	Panel-Front-Lower	089015-BLA
28	Panel-Front-Shell	093101-BLA
29	Stud-Nose Cone 5/16-18 X 5/16	020445
30	Nut-Stud-Plastic 5/16-18 BLA	087009-1
31	Box A.-LED Complete	X89326
32	Plate A.-DEC Touchscreen	X89756
33	Control A.-Complete	X92622-27
34	Shroud-Rear-Gear Motor	087619-B
35	Screw-10-32 X 1 Socket Head Cap	058385
36	Tie-Cable 0.10 W X 4 Long	033208
37	Sensor-Hall Effect	093217-A
40	Bracket-Mounting	093340

C394



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Figure 4-3

## PARTS

### Exploded View Parts Identification C394

Item	Description	Part No.
1	Filter-Air-21.375 L X 17.375 HX	052779-20
2	Condenser A. -Air Cooled (Includes Items 2a-2e)	X89071-21
2a	Guide Filter	088805
2b	Condenser AC	088730
2c	Shroud A.-Condenser	X88796
2d	Ring A.-Air Flow Cond.	X93068
2e	Motor A.-Fan 185 Watt 1400 RPM	X59572-27
3	Shaft-Beater-Slush-Grooved	083143-SP
4	Seal-Drive Shaft	032560-SP
5	Shell A.-Insulated	X88954
6	Screw-8 X 1/4 SLTD Hex Head	009894
7	Bracket-Pressure Transducer	092590
8	Washer-Bearing Lock	012864
9	Nut, Bearing	028991
10	Motor-Gear-1/6 HP-167 RPM	087619-27
11	Screw-5/16-18 X 7/8 Serr. HWH	017973
12	Screw-1/4-20 X 1/2 SLT HWH SER	051284
13	Valve-Solenoid 208/240 V	028824-27
14	Frame A.	X89050
15	Receiver A.-Refrigeration	X89094
16	Screw-5/16-18 X 1-1/2 Hex Head	001894
17	Washer-5/16 USS Flat CR3	000651

Item	Description	Part No.
18	Sleeve	039924
19	Bushing-Mounting	037428
20	Compressor-ZS19KAE-PFV	088961-27
21	Switch-Pressure 440 PSI	048230
22	Dryer-Filter 3/8 ODF X 3/8 ODMHP	062158
23	Valve-Access-1/4 MFL X 3/8 ODSDR	053565
24	Valve-Solenoid-7/64 ORF X 1/4 S	062087-27
25	Valve-Exp-Auto-1/4 S X 1/4 FPT	094436
26	Pan-Drip-w/ Drain	068189
27	Panel-Front-Lower	089167-BLA
28	Panel-Front-Shell	093110-BLA
29	Stud-Nose Cone 5/16-18 X 5/16	020445
30	Nut-Stud-Plastic 5/16-18 BLA	087009-1
31	Box A.-LED Complete	X89299
32	Plate A.-DEC-Complete	X89115
33	Control A.-Complete	X89095-27
34	Shroud-Rear-Gear Motor	087619-B
35	Screw-10-32 X 1 Socket Head Cap	058385
36	Tie-Cable 0.10 W X 4 Long	033208
37	Sensor-Hall Effect	093217-A
38	Bracket-Mounting	093340



# Panel Identification

C392

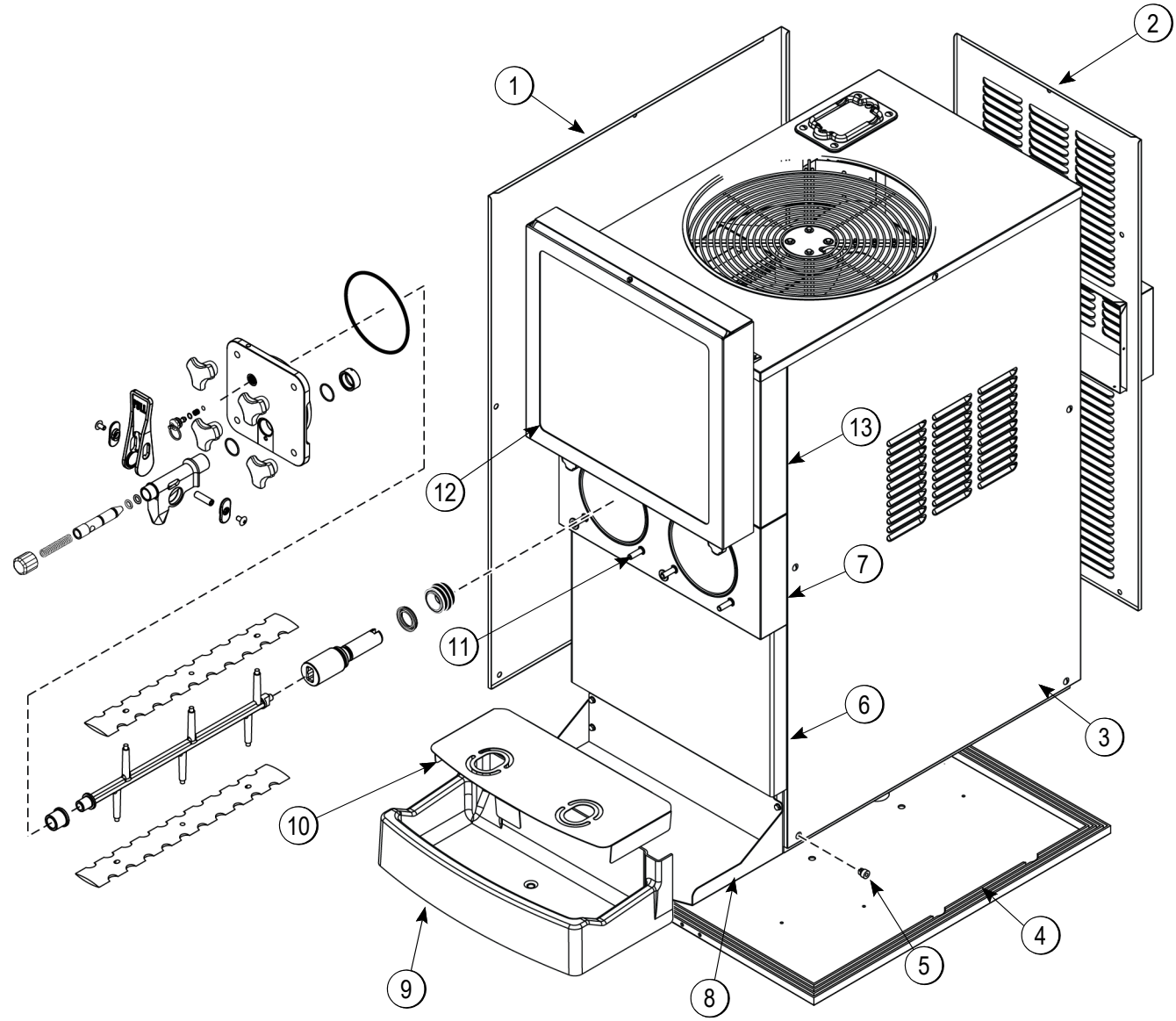


Figure 4-4

Item	Description	Part No.
1	Panel-Side-Left	089020-BLA
2	Panel-Rear	X93728-BLA
3	Panel-Side-Right	089021-BLA
4	Gasket-Base Pan	093656
5	Screw-10-32X1/2 SLTD	062037
6	Panel-Front-Lower	093726-BLA
7	Panel-Front-Shell	093671-BLA

Item	Description	Part No.
8	Shelf-Drip Tray	093732
9	Tray-Drip	057738
10	Shield-Splash	093731
11	Stud-Nose Cone-5/16-18	020445
12	Box A.-LED	X89341
13	Panel-Front-Upper	093700-BLA

C393

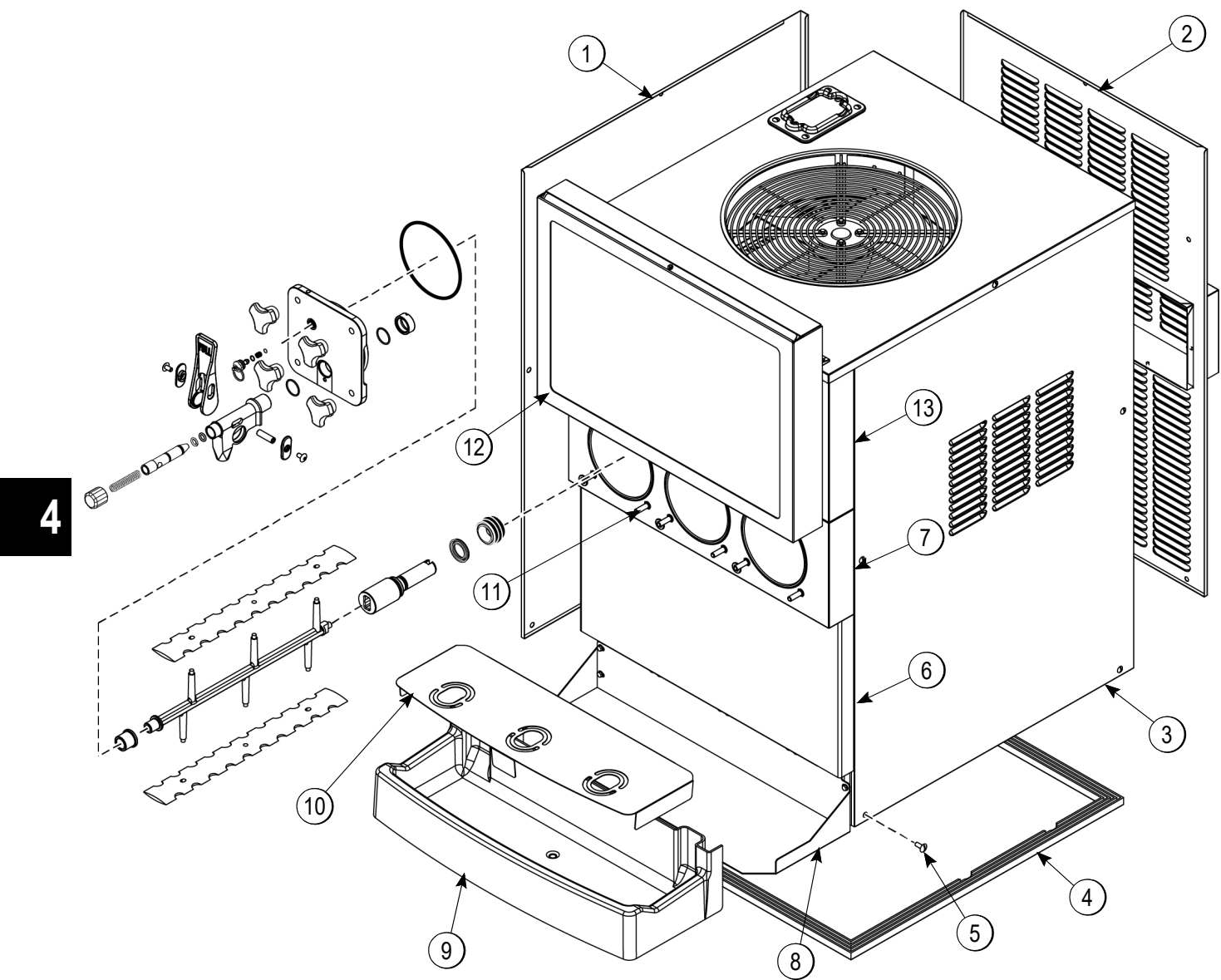


Figure 4-5

Item	Description	Part No.
1	Panel-Side-Left	089020-BLA
2	Panel-Rear	X88934-BLA
3	Panel-Side-Right	089021-BLA
4	Gasket-Base Pan	088784
5	Screw-10-32X1/2 SLTD	062037
6	Panel-Front-Lower	089015-BLA
7	Panel-Front-Shell	093101-BLA

Item	Description	Part No.
8	Shelf-Drip Tray	066677
9	Tray-Drip	066676
10	Shield-Splash	093111
11	Stud-Nose Cone-5/16-18	020445
12	Box A.-LED	X89326
13	Panel-Front-Upper	089031-BLA

C394

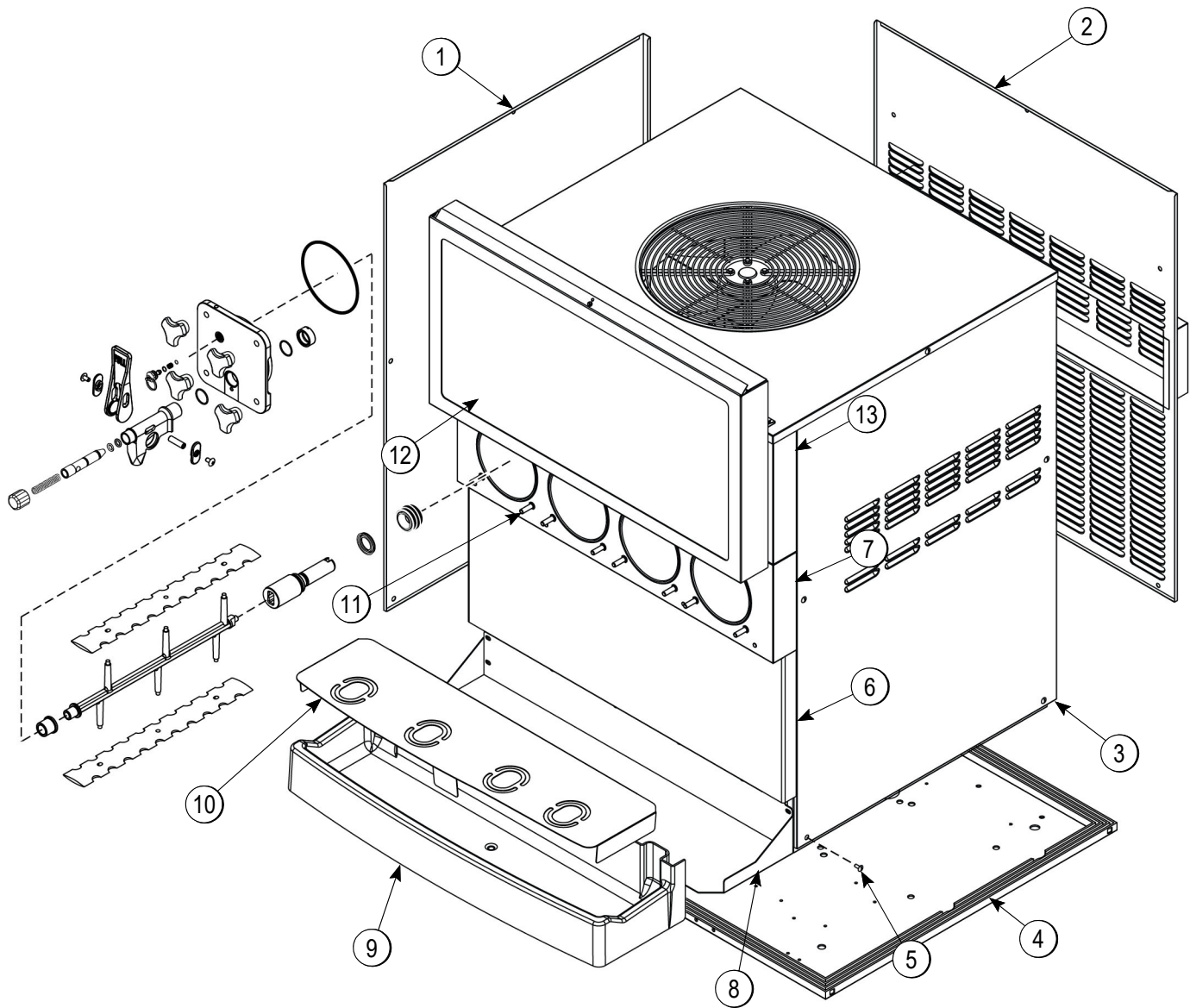


Figure 4-6

Item	Description	Part No.
1	Panel-Side-Left	089020-BLA
2	Panel-Rear	X89188-BLA
3	Panel-Side-Right	089021-BLA
4	Gasket-Base Pan	089063
5	Screw-10-32X1/2 SLTD	062037
6	Panel-Front-Lower	089167-BLA
7	Panel-Front-Shell	093110-BLA

Item	Description	Part No.
8	Shelf-Drip Tray	059653
9	Tray-Drip	059654
10	Shield-Splash	093348
11	Stud-Nose Cone-5/16-18	020445
12	Display-LED *10.5"	X89299
13	Panel-Front-Upper	089114-BLA

# Beater Door Assembly

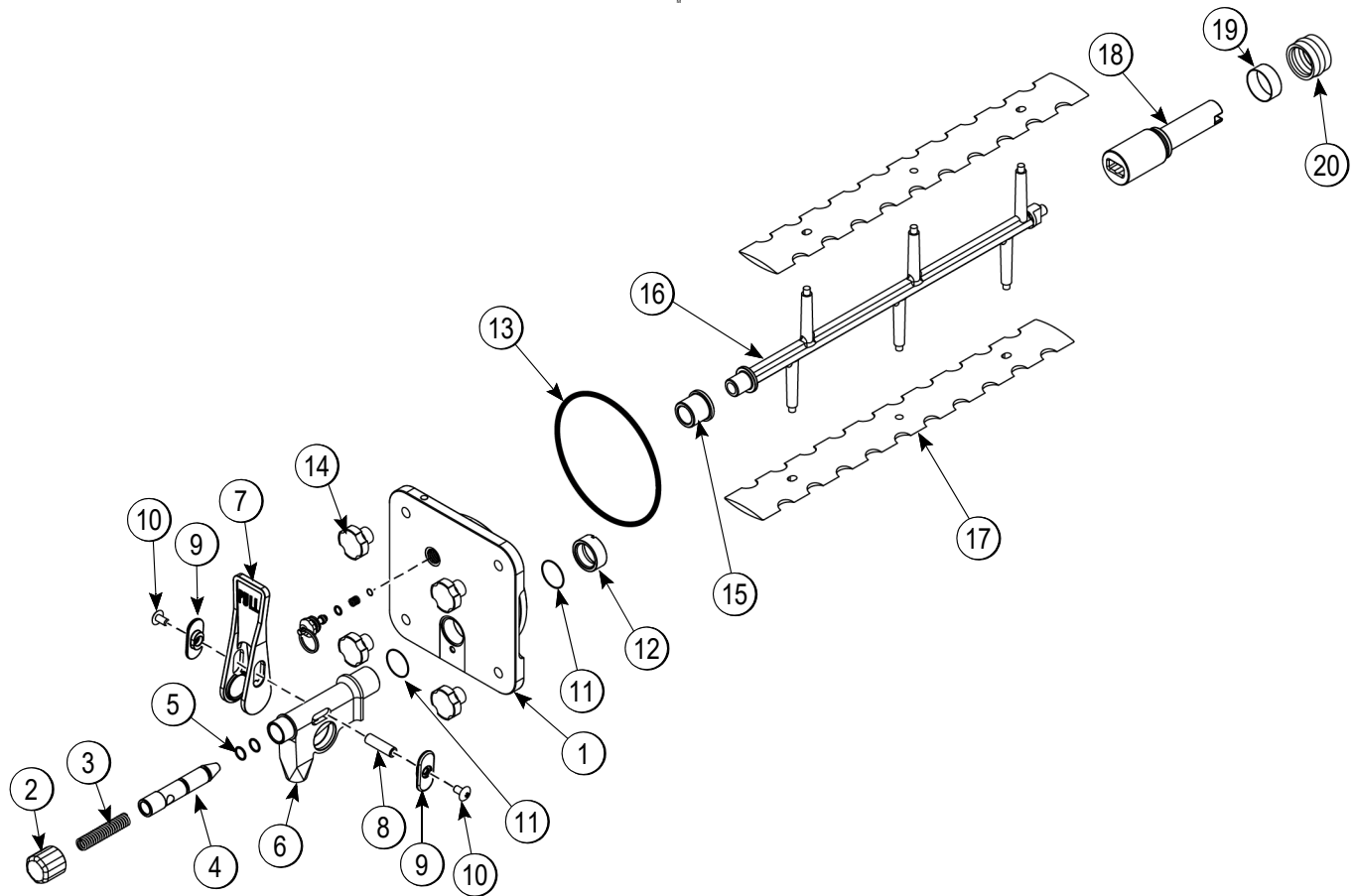


Figure 4-7

Item	Description	Part No.
1	Door A.-Freezer-Slush	X80599
2	Cap-Spout-Door-FCB	046191-BLA
3	Spring-COMP.480X.072X3.0	039320
4	Valve-Draw-Door-Slush	039324
*5	O-ring-9/16 OD X .103W	016369
6	Spout-Door-FCB-Black	046190-BLA
7	Handle-Draw-FCB-Clear	046192-CLR
8	Pin-Pivot-Spout-Door	039321
9	Slide-Handle-Door-FCB	046193-BLA
10	Screw-10-32X3/8 PHIL	053869
*11	O-ring-1.129 ODX.989ID	039219

Item	Description	Part No.
12	Nut-Spout-Door-Slush	039323
*13	O-ring-5-1/4O.D. X .210W	017003-BLA
14	Nut-Stud	043666-SP
15	Bearing-Front-Slush	039349
16	Beater-Plastic-FCB	041182
17	Blade-Scraper-FCB 16L	041103
18	Shaft-Beater-Slush	083143-SP
19	Seal U Cup	093574
20	Seal-Drive Shaft	032560

\*O-rings come 25 to a bag.

# Control A. Front

C392 (X93676-27)

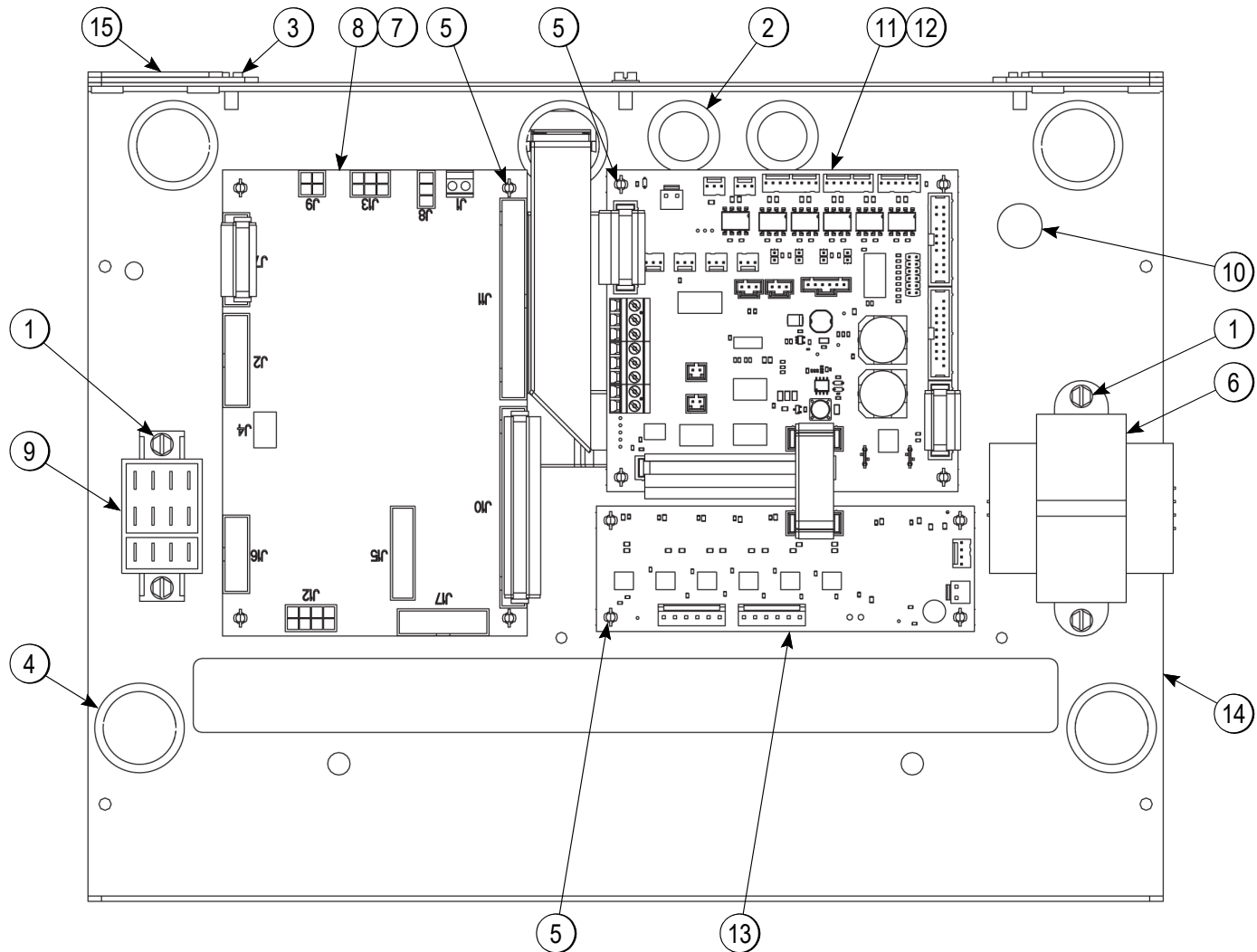


Figure 4-8

Item	Description	Part No.
1	Screw-8 X 1/4 SLTD Hex Head	009894
2	Bushing-Snap 11/16 ID X 7/8 OD	010548
3	Screw-10 X 3/8 Slotted Hex Head	015582
4	Bushing-Snap 15/16 ID X 1-3/32 OD	023396
5	Standoff-Nylon-Snap-1/2 L	053413
6	Trans-Cont-32 VA 120/200/240V	054834
7	Insulator-PCB-UVC111	059708
8	Control-UVC4 Surface Mount-PWM	068114

Item	Description	Part No.
9	Block-Terminal 2P 0.25 Spade	069015
10	Holder-Fuse-15A, 250V	076299
11	Control-Interface *C39X*	089106
12	Insulator-PCB-Interface *C39X*	089151
13	Control-Output-DC Voltage	089844
14	Plate-Control *C392*	093677
15	Cover A.- Control *C392*	X89372

C393 (X92622-27)

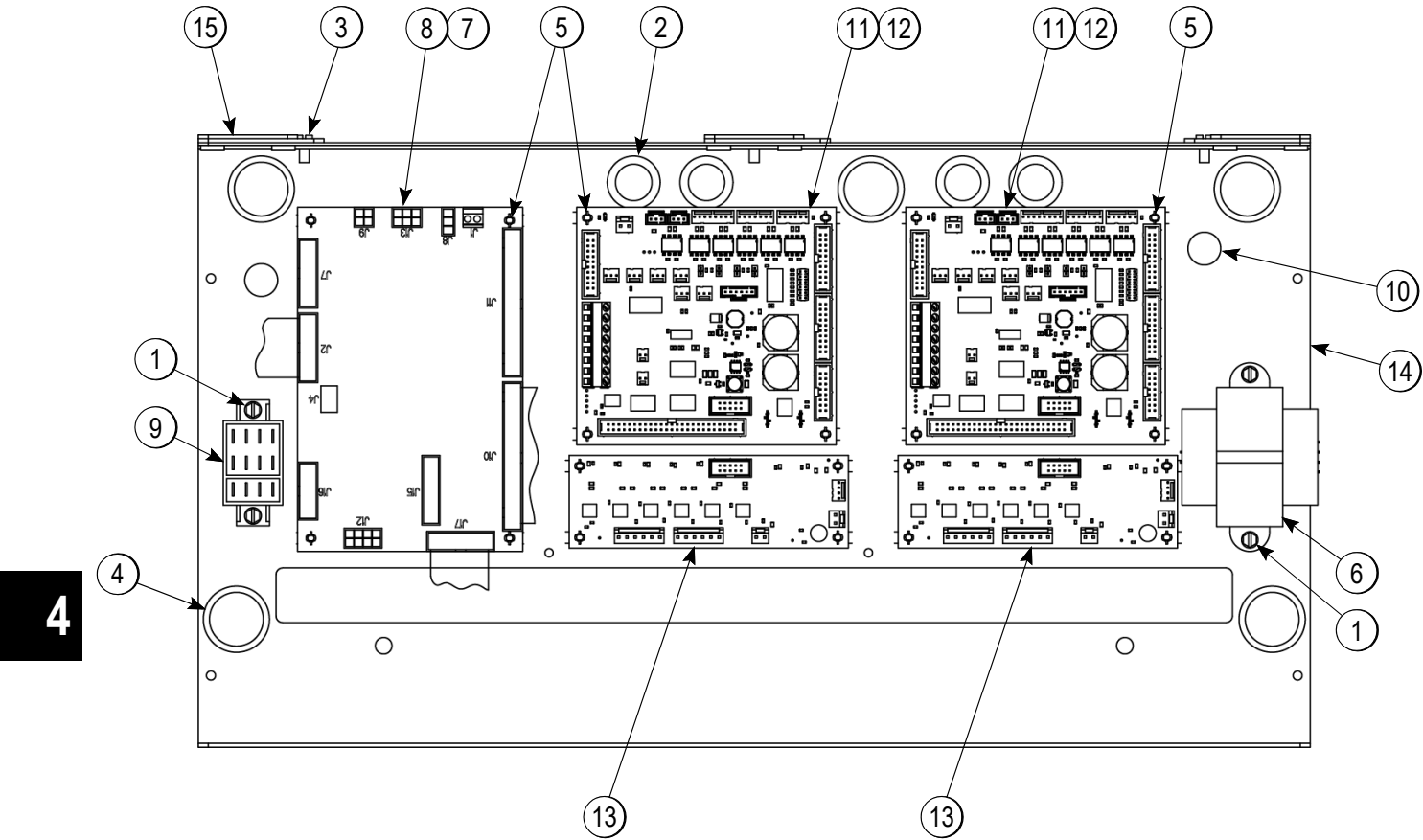


Figure 4-9

Item	Description	Part No.
1	Screw-8 X 1/4 SLTD Hex Head	009894
2	Bushing-Snap 11/16 ID X 7/8 OD	010548
3	Screw-10 X 3/8 Slotted Hex Head	015582
4	Bushing-Snap 15/16 ID X 1-3/32 OD	023396
5	Standoff-Nylon-Snap-1/2 L	053413
6	Trans-Cont-32 VA 120/200/240V	054834
7	Insulator-PCB-UVC111	059708
8	Control-UVC4 Surface Mount-PWM	068114

Item	Description	Part No.
9	Block-Terminal 2P 0.25 Spade	069015
10	Holder-Fuse-15A, 250V	076299
11	Control-Interface*C39X*	089106
12	Insulator-PCB-Interface *C39X*	089151
13	Control-Output-DC Voltage	089844
14	Plate-Control *C393*	092623
15	Cover A. - Control *C393*	X89369

# C394 (X89095-27)

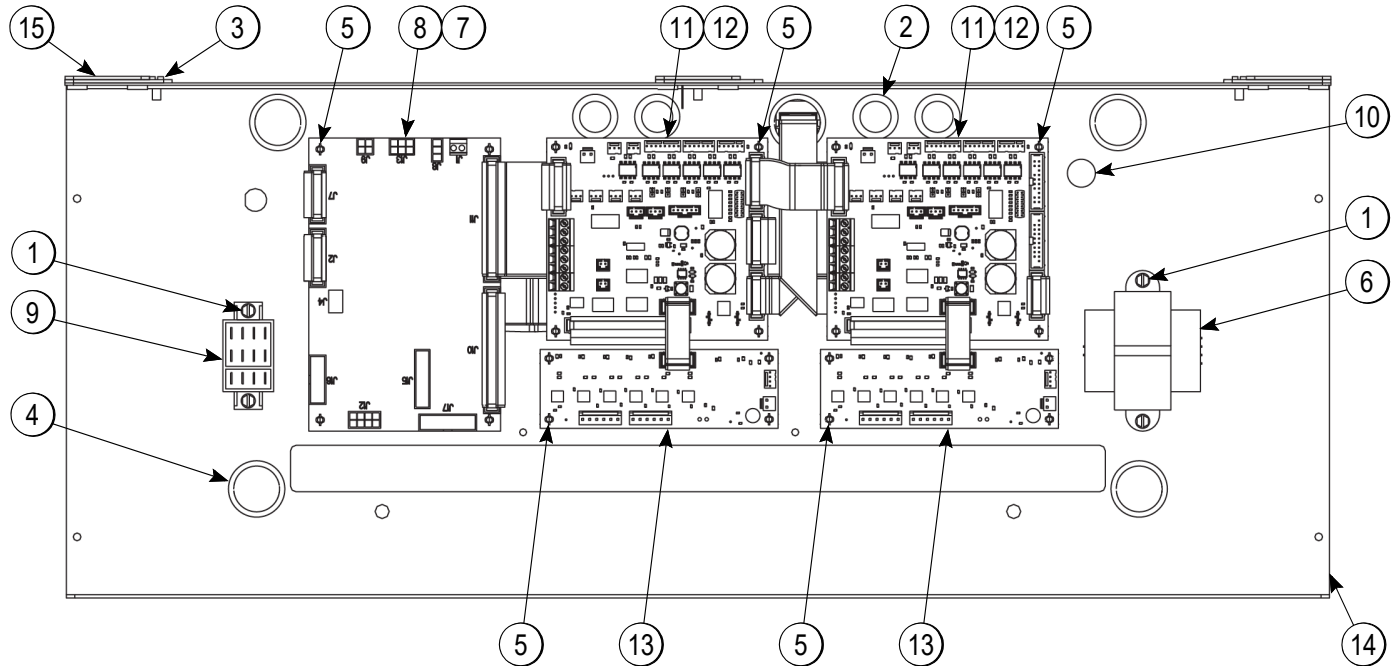


Figure 4-10

Item	Description	Part No.
1	Screw-8 X 1/4 SLTD Hex Head	009894
2	Bushing-Snap 11/16 ID X 7/8 OD	010548
3	Screw-10 X 3/8 Slotted Hex Head	015582
4	Bushing-Snap 15/16 ID X 1-3/32 OD	023396
5	Standoff-Nylon-Snap-1/2 L	053413
6	Trans-Cont-32 VA 120/200/240V	054834
7	Insulator-PCB-UVC111	059708
8	Control-UVC4 Surface Mount-PWM	068114

Item	Description	Part No.
9	Block-Terminal 2P 0.25 Spade	069015
10	Holder-Fuse-15A, 250V	076299
11	Control-Interface *C39X*	089106
12	Insulator-PCB-Interface *C39X*	089151
13	Control-Output-DC Voltage	089844
14	Plate-Control *C394*	089096
15	Cover A.- Control *C394*	X89371



# Control A. Rear

## C392 (X93709-27)

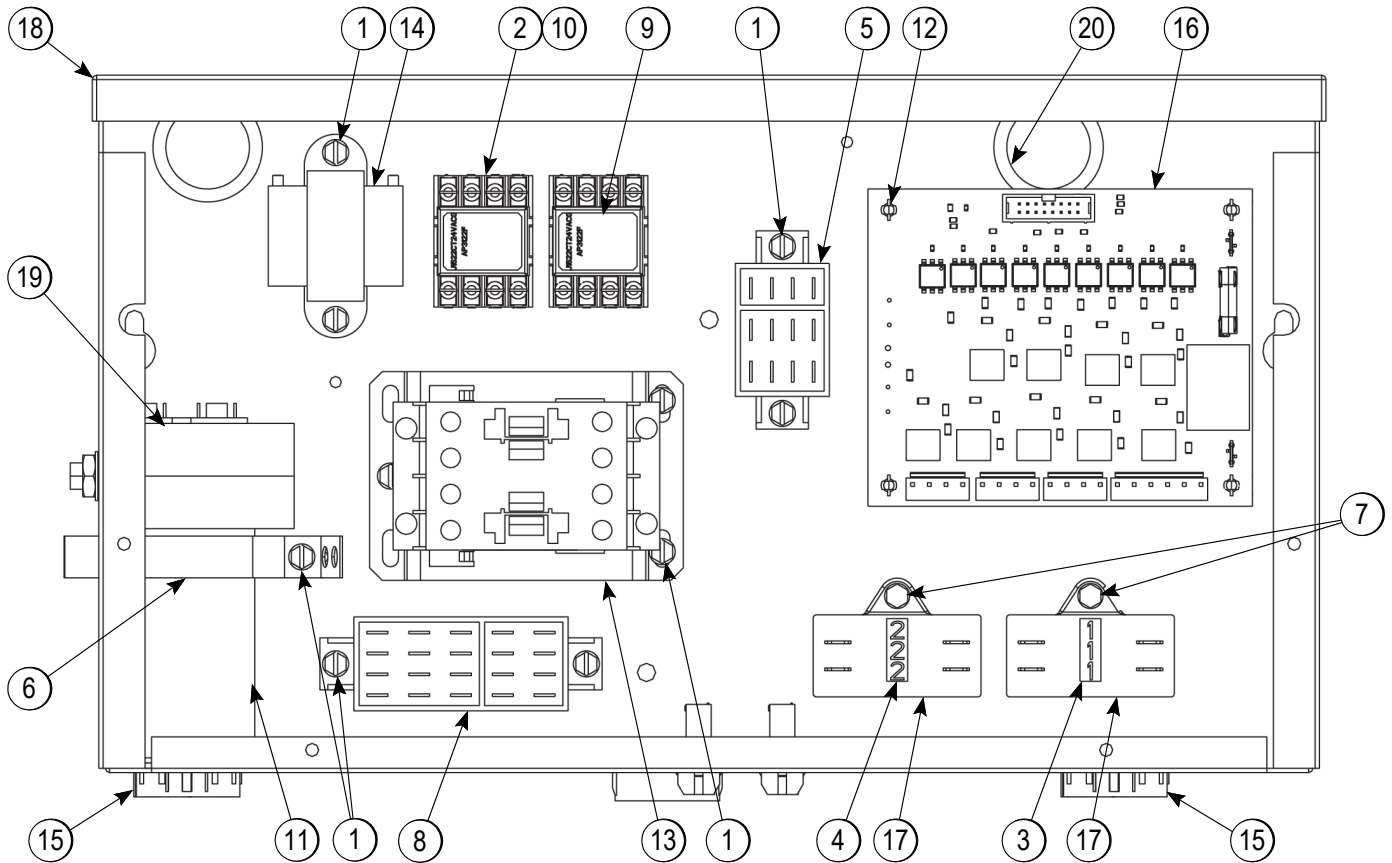


Figure 4-11

Item	Description	Part No.
1	Screw-8 X 1/4 SLTD Hex Head	009894
2	Screw-6 X 5/16 RD HD Type B	013646
3	Marker-Wire #1	018520
4	Marker-Wire #2	018521
5	Block-Terminal 2P 0.25 Spade	069015
6	Strap-Capacitor	041350
7	Screw-8-32 X 3/8 UNSLTD Hex WS	041951
8	Block-Terminal 2P 0.25 Spade	051644
9	Relay-DPDT-1mA to 7A 1/6 HP	052111-03
10	Socket-Relay-For Use w/ 052111	052112

Item	Description	Part No.
11	Capacitor-Run- 45UF/370V <i>*Not equipped on a -33 unit.</i>	052400
12	Standoff-Nylon-Snap-1/2 L	053413
13	Relay-3 Pole-20A-208/240 50/60	066795-33
14	Trans.-120/208/240V PRI 24V SEC	081783-27
15	Bushing-Split 1.17 ID X 1.47 OD	082066
16	Control-Output*C39X*	089107
17	Capacitor-Run 6UF/440VAC	089123
18	Box-Control-Rear *C392*	093710
19	Capacitor-Run-4.0uF/400V	500311
20	Bushing-Snap 1 ID X 1-1/4 OD BL	600288



C393 (X92544-27)

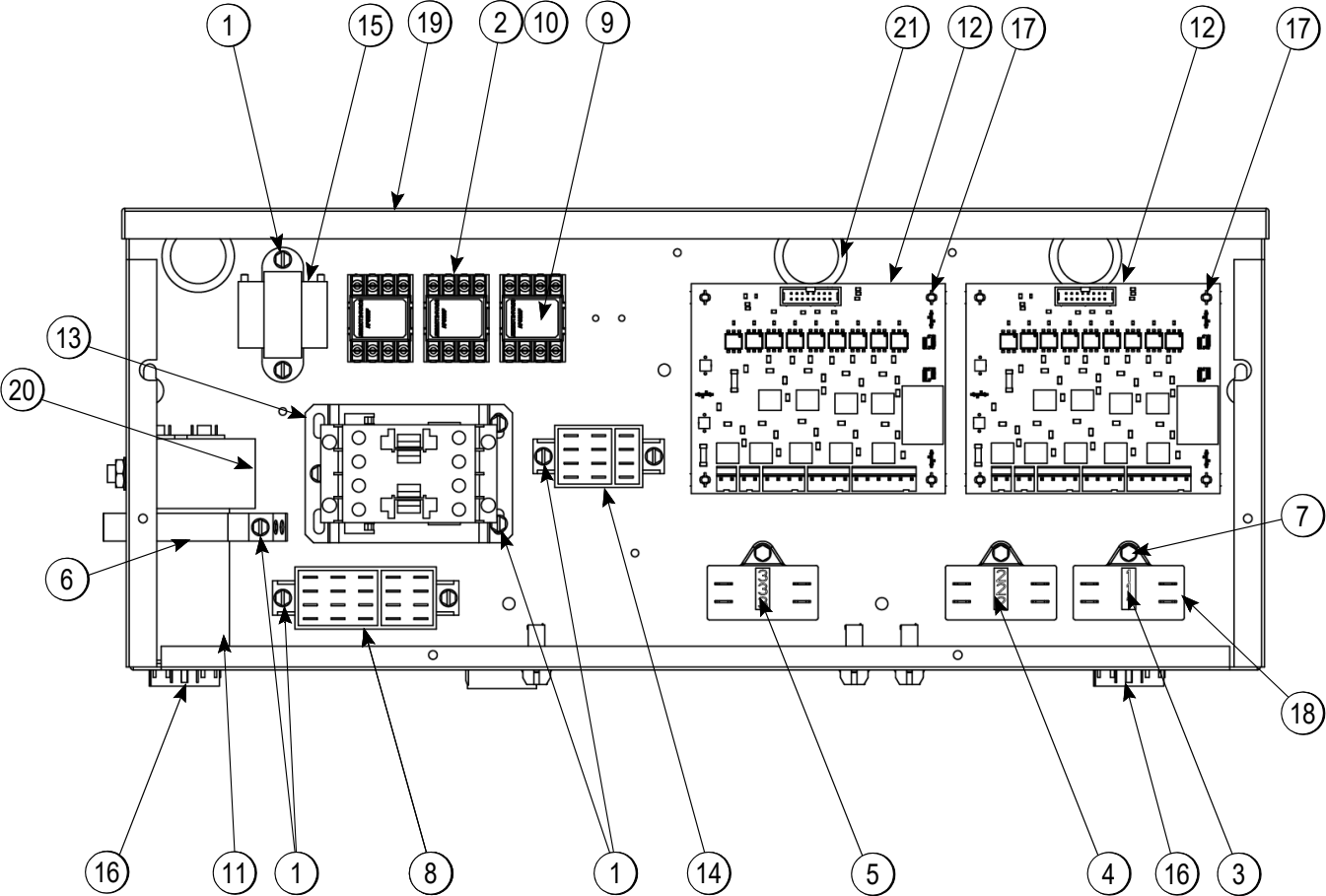


Figure 4-12

Item	Description	Part No.
1	Screw-8 X 1/4 SLTD Hex Head	009894
2	Screw-6 X 5/16 RD HD Type B	013646
3	Marker-Wire #1	018520
4	Marker-Wire #2	018521
5	Marker-Wire #3	018522
6	Strap-Capacitor	041350
7	Screw-8-32 X 3/8 UNSLTD Hex WS	041951
8	Block-Terminal 2P 0.25 Spade	051644
9	Relay-DPDT-1mA to 7A 1/6 HP	052111-03
10	Socket-Relay-For Use w/ 052111	052112
11	Capacitor-Run- 45UF/370V <i>*Not equipped on a -33 unit.</i>	052400

Item	Description	Part No.
12	Standoff-Nylon-Snap-1/2 L	053413
13	Relay-3 Pole-20A-208/240 50/60	066795-33
14	Block-Terminal 2P 0.25 Spade	069015
15	Trans.-120/208/240V PRI 24V SEC	081783-27
16	Bushing-Split 1.17 ID X 1.47 OD	082066
17	Control-Output*C39X*	089107
18	Capacitor-Run 6UF/440VAC	089123
19	Box-Control-Rear *C393*	092545
20	Capacitor-Run-4.0uF/400V	500311
21	Bushing-Snap 1 ID X 1-1/4 OD BL	600288

C394 (X89163-27)

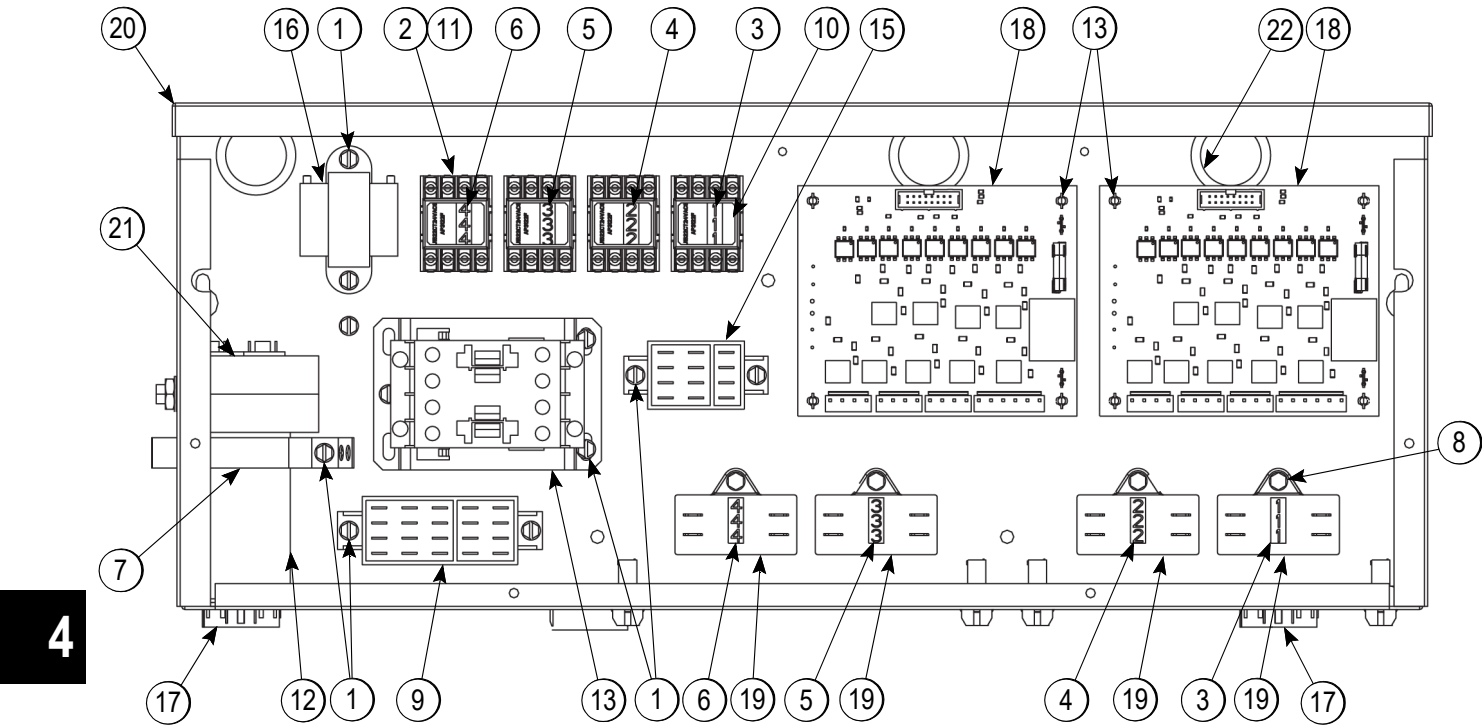


Figure 4-13

Item	Description	Part No.
1	Screw-8 X 1/4 SLTD Hex Head	009894
2	Screw-6 X 5/16 RD HD Type B	013646
3	Marker-Wire #1	018520
4	Marker-Wire #2	018521
5	Marker-Wire #3	018522
6	Marker-Wire #4	018523
7	Strap-Capacitor	041350
8	Screw-8-32 X 3/8 UNSLTD Hex WS	041951
9	Block-Terminal 2P 0.25 Spade	051644
10	Relay-DPDT-1mA to 7A 1/6 HP	052111-03
11	Socket-Relay-For Use w/ 052111	052112

Item	Description	Part No.
12	Capacitor-Run- 45UF/370V <i>*Not equipped on a -33 unit.</i>	052400
13	Standoff-Nylon-Snap-1/2 L	053413
14	Relay-3 Pole-20A-208/240 50/60	066795-33
15	Block-Terminal 2P 0.25 Spade	069015
16	Trans.-120/208/240V PRI 24V SEC	081783-27
17	Bushing-Split 1.17 ID X 1.47 OD	082066
18	Control-Output*C39X*	089107
19	Capacitor-Run 6UF/440VAC	089123
20	Box-Control-Rear *C394*	092545
21	Capacitor-Run-4.0uF/400V	500311
22	Bushing-Snap 1 ID X 1-1/4 OD BL	600288

# Box A.-LED

## C392 (X89341)

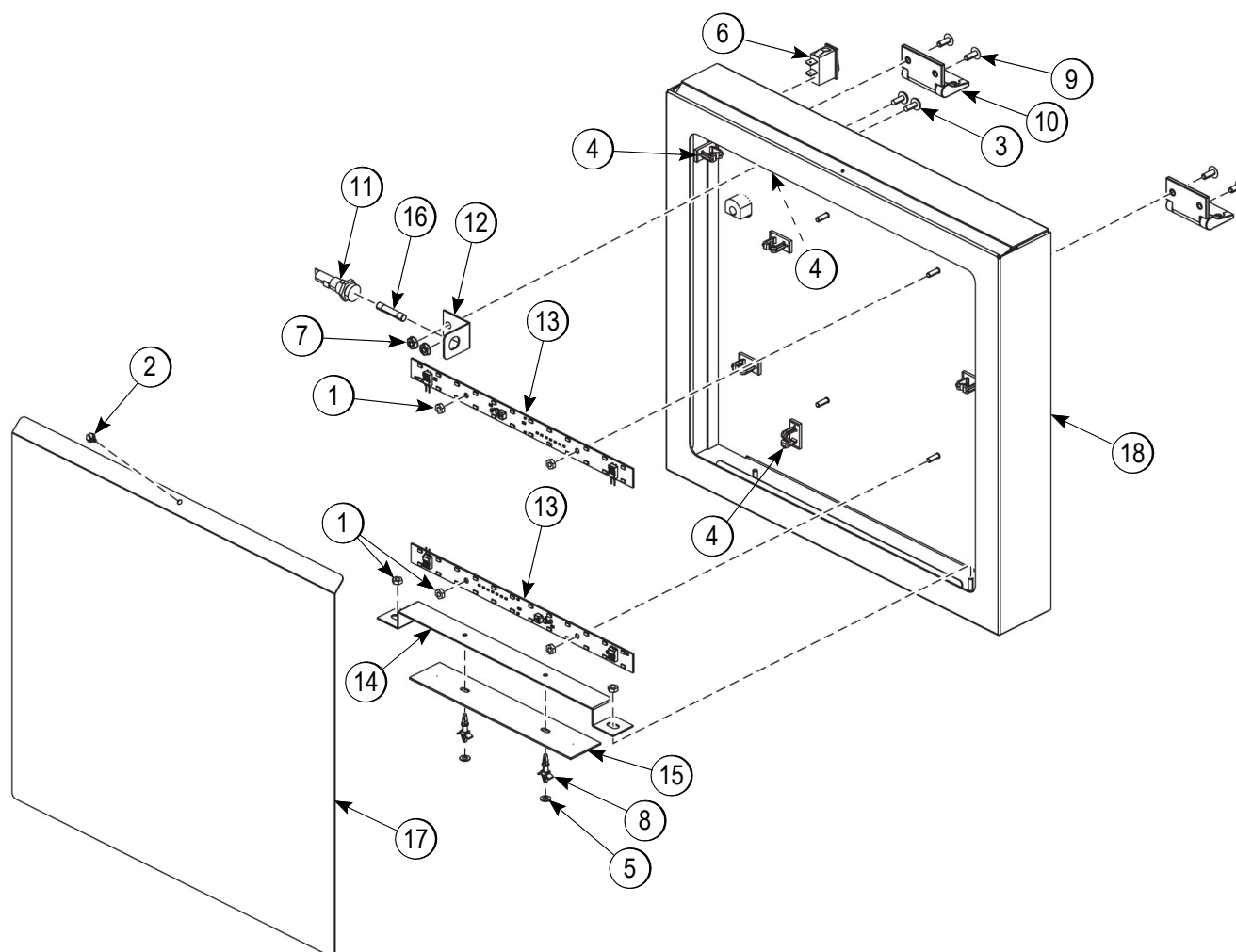


Figure 4-14

Item	Description	Part No.
1	Nut-8-32 Hex	000969
2	Screw-6 X 3/8 SLTD Hex	001825
3	Screw-10-24 X 1/2 Taptite-Torx	002077
4	Saddle-Wire-Adhesive Back	039768
5	Washer-0.193 ID X 0.364 OD X 0.030T-SS	043426
6	Switch-Rocker *370* Power/Light	048093
7	Nut-#10-24 w/ Starlock	051282
8	Standoff-Nylon-Snap-1/2 L	053413
9	Screw-10-32 X 1/2 Truss HD-Black	062037

Item	Description	Part No.
10	Hinge-Display-LED *C303*	066670-1
11	Holder-Fuse-15A, 250V	076299
12	Bracket-Fuse	079867
13	Strip-LED Light 24 LEDs	084344
14	Bracket-Mount	084879
15	Strip-LED Light 3 LEDs	084345
16	Fuse-2 Amp-Buss BK/ABC-2-R	084986
17	Panel-Display *C392*	089348
18	Box A.-Led *C392*	X89342

## C393 (X89326)

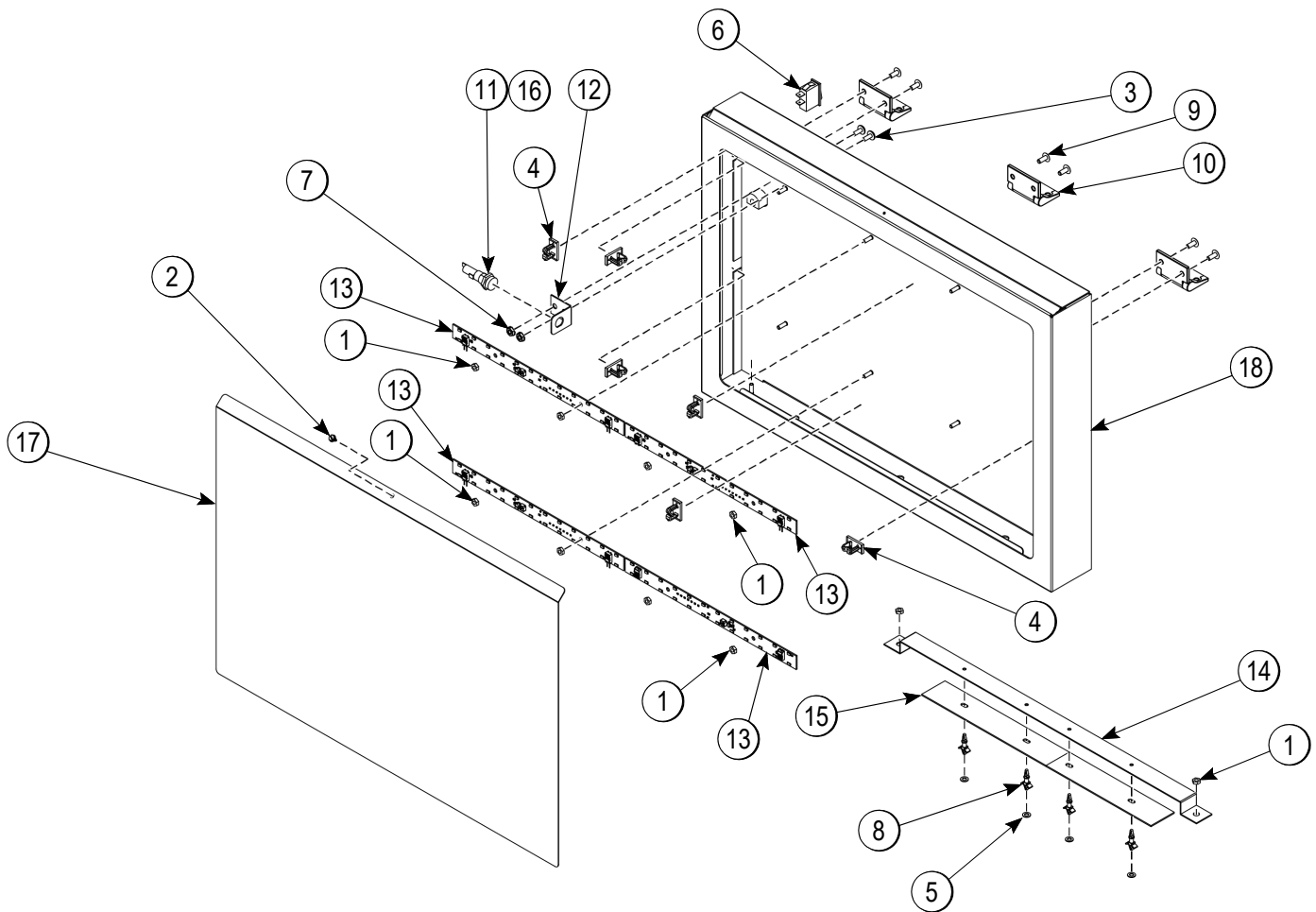
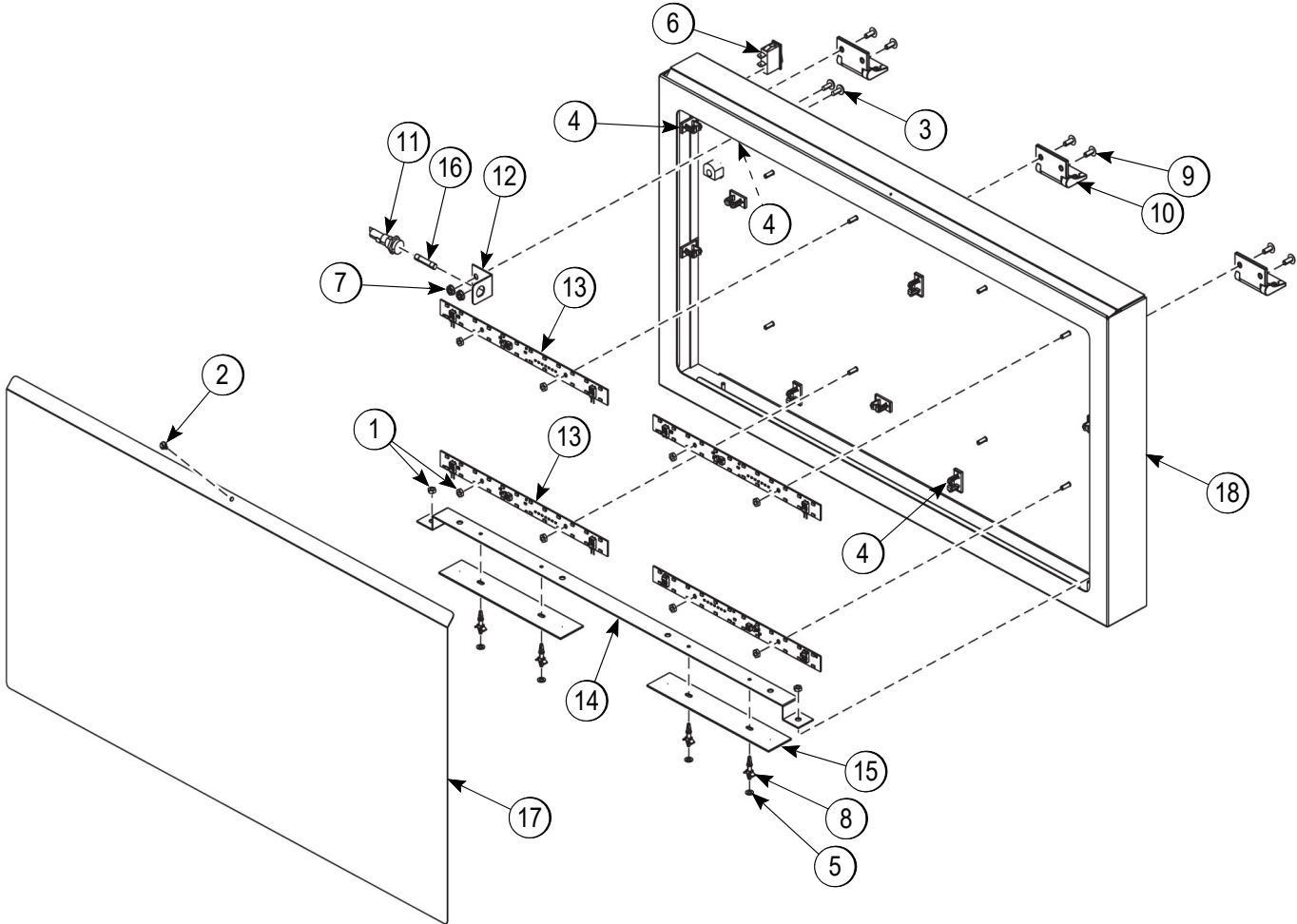


Figure 4-15

Item	Description	Part No.
1	Nut-8-32 Hex	000969
2	Screw-6 X 3/8 SLTD Hex	001825
3	Screw-10-24 X 1/2 Taptite-Torx	002077
4	Saddle-Wire-Adhesive Back	039768
5	Washer-0.193 ID X 0.364 OD X 0.030T-SS	043426
6	Switch-Rocker *370*Power/Light	048093
7	Nut-#10-24 w/Starlock	051282
8	Standoff-Nylon-Snap-1/2 L	053413
9	Screw-10-32 X 1/2 Truss HD-Black	062037

Item	Description	Part No.
10	Hinge-Display-LED *C303*	066670-1
11	Holder-Fuse-15A, 250V	076299
12	Bracket-Fuse	079867
13	Strip-LED Light 24 LEDs	084344
14	Bracket-Mount	084540
15	Strip-LED Light 3 LEDs	084752
16	Fuse-2 Amp-Buss BK/ABC-2-R	084986
17	Panel-Display *C393*	089333
18	Box A.-Led *C393*	X89327

C394 (X89299)



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Figure 4-16

Item	Description	Part No.
1	Nut-8-32 Hex	000969
2	Screw-6 X 3/8 SLTD Hex	001825
3	Screw-10-24 X 1/2 Taptite-Torx	002077
4	Saddle-Wire-Adhesive Back	039768
5	Washer-0.193 ID X 0.364 OD X 0.030T-SS	043426
6	Switch-Rocker *370* Power/Light	048093
7	Nut-#10-24 w/ Starlock	051282
8	Standoff-Nylon-Snap-1/2 L	053413
9	Screw-10-32 X 1/2 Truss HD-Black	062037

Item	Description	Part No.
10	Hinge-Display-LED *C303*	066670-1
11	Holder-Fuse-15A, 250V	076299
12	Bracket-Fuse	079867
13	Strip-LED Light 24 LEDs	084344
14	Bracket-Mount	083877
15	Strip-LED Light 3 LEDs	084345
16	Fuse-2 Amp-Buss BK/ABC-2-R	084986
17	Panel-Display *C394*	093572
18	Box A.-Led *C394*	X89300

Plate A.-DEC-Touchscreen

C392 (X93701)

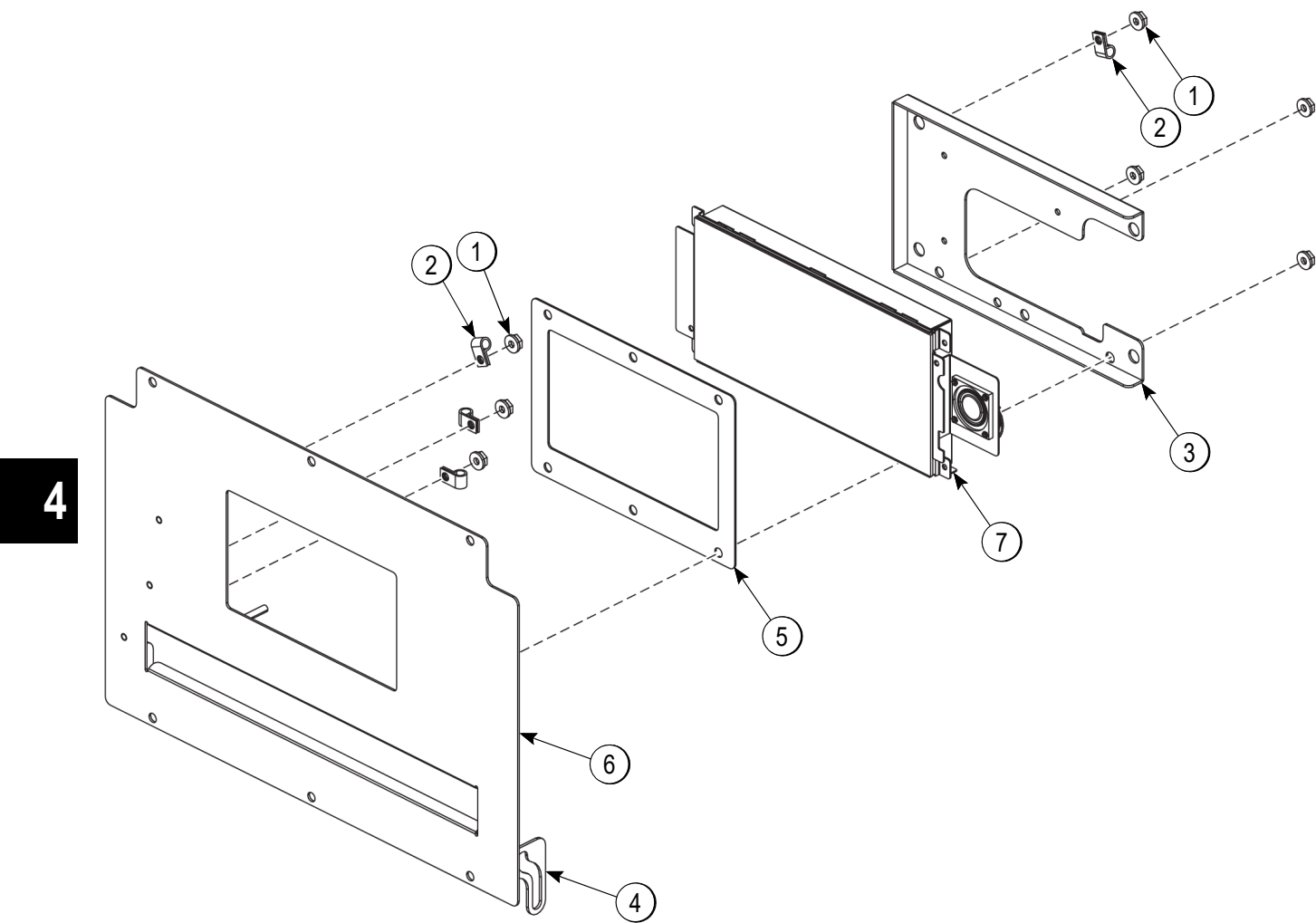
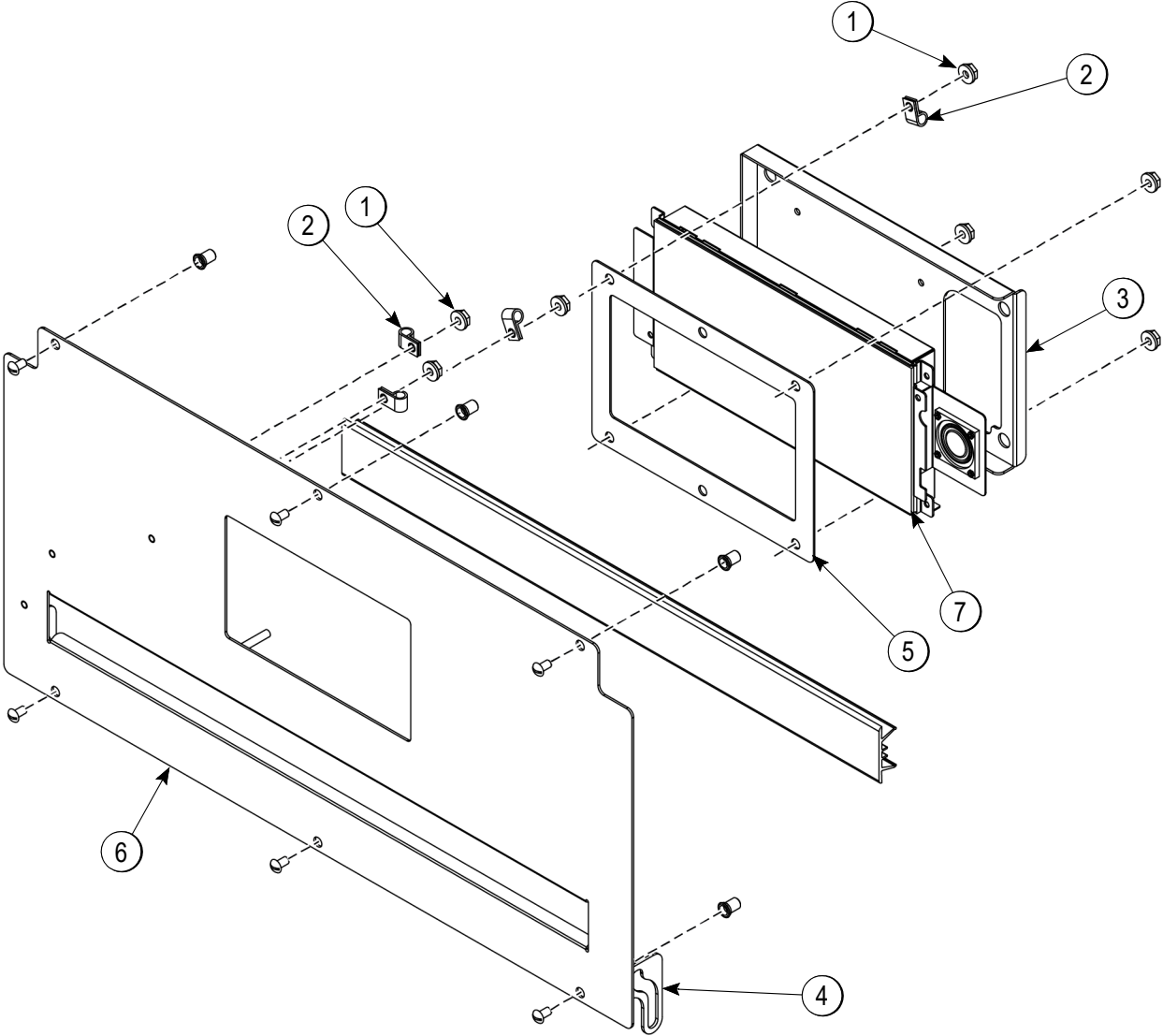


Figure 4-17

Item	Description	Part No.
1	Nut-10-32 Whiz Flange Locknut	020983
2	Clamp-Cable-1/4" Black Nylon	080763
3	Plate-Backing-HLUI *C39X*	089759-SP
4	Bracket-Pivot-DEC Plate *C392*	093704

Item	Description	Part No.
5	Gasket-Touchscreen *C39X*	089760
6	Plate A.-DEC-Stud-Touch Screen	X93702
7	Touchscreen A.-*C39X* HLUI	X93192

C393 (X89756)



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Figure 4-18

Item	Description	Part No.
1	Nut-10-32 Whiz Flange Locknut	020983
2	Clamp-Cable-1/4" Black Nylon	080763
3	Plate-Backing-HLUI *C39X*	089759-SP
4	Bracket-Pivot-DEC Plate *C393*	089029

Item	Description	Part No.
5	Gasket-Touchscreen *C39X*	089760
6	Plate A.-DEC-Stud-Touch Screen	X89757
7	Touchscreen A.-*C39X* HLUI	X93192

C394 (X89115)

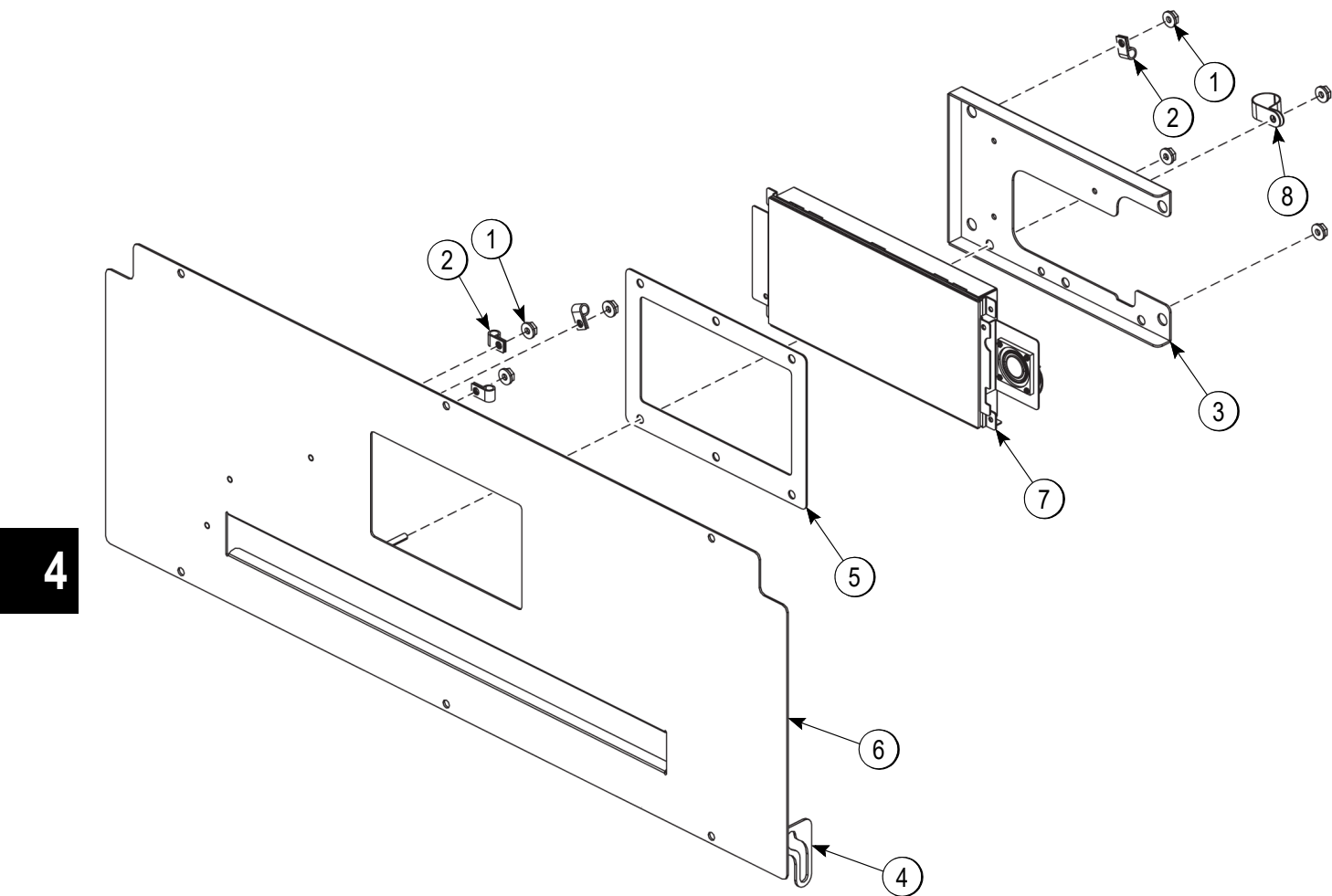


Figure 4-19

Item	Description	Part No.
1	Nut-10-32 Whiz Flange Locknut	020983
2	Clamp-Cable-1/4" Black Nylon	080763
3	Plate-Backing-HLUI *C39X*	089759-SP
4	Bracket-Pivot-DEC Plate *C394*	089118

Item	Description	Part No.
5	Gasket-Touchscreen *C39X*	089760
6	Plate A.-DEC-Stud-Touch Screen	X89116
7	Touchscreen A.-*C39X* HLUI	X93192
8	Clamp-Cable- Black Nylon	036622



# Line Assembly

C392

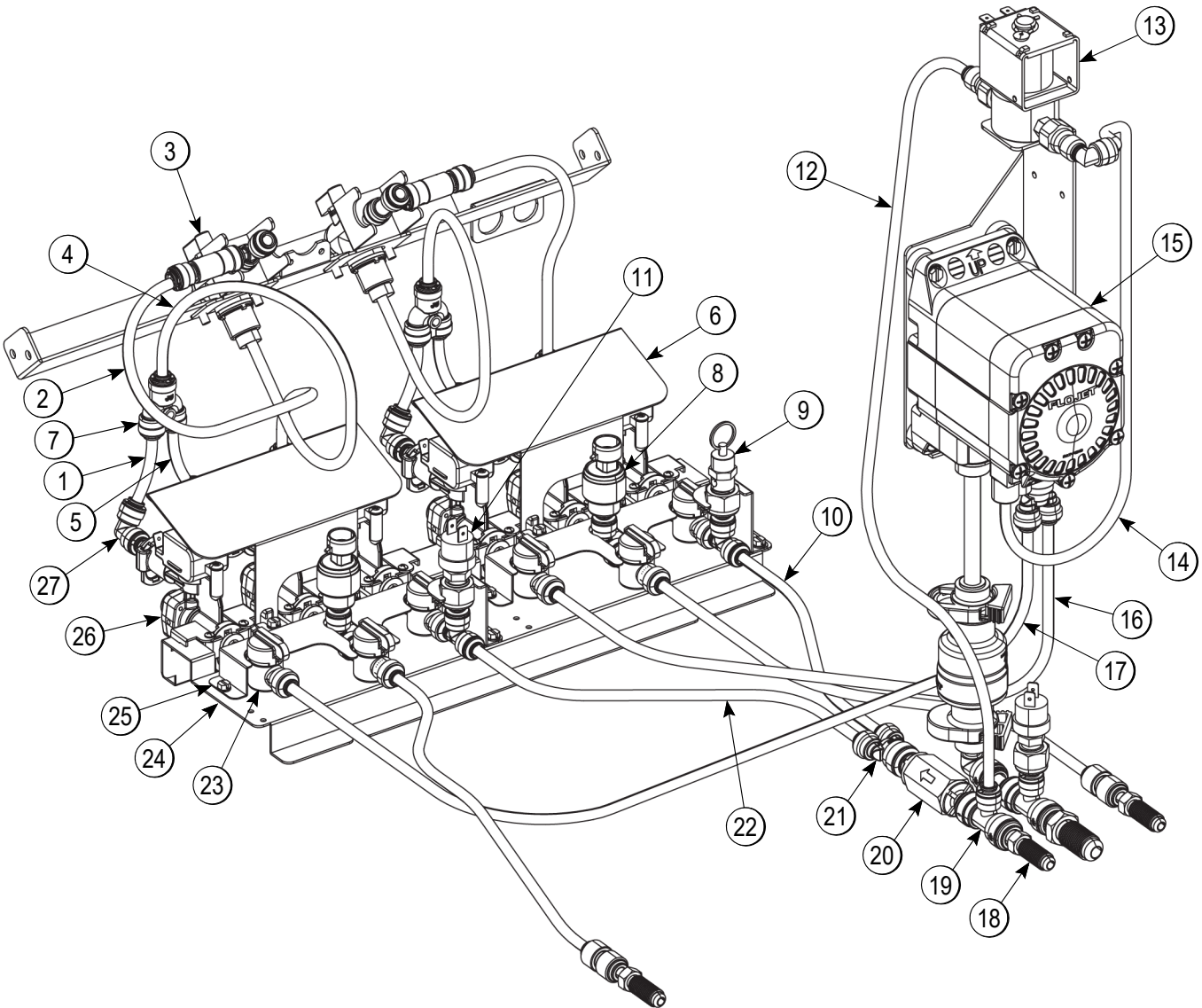


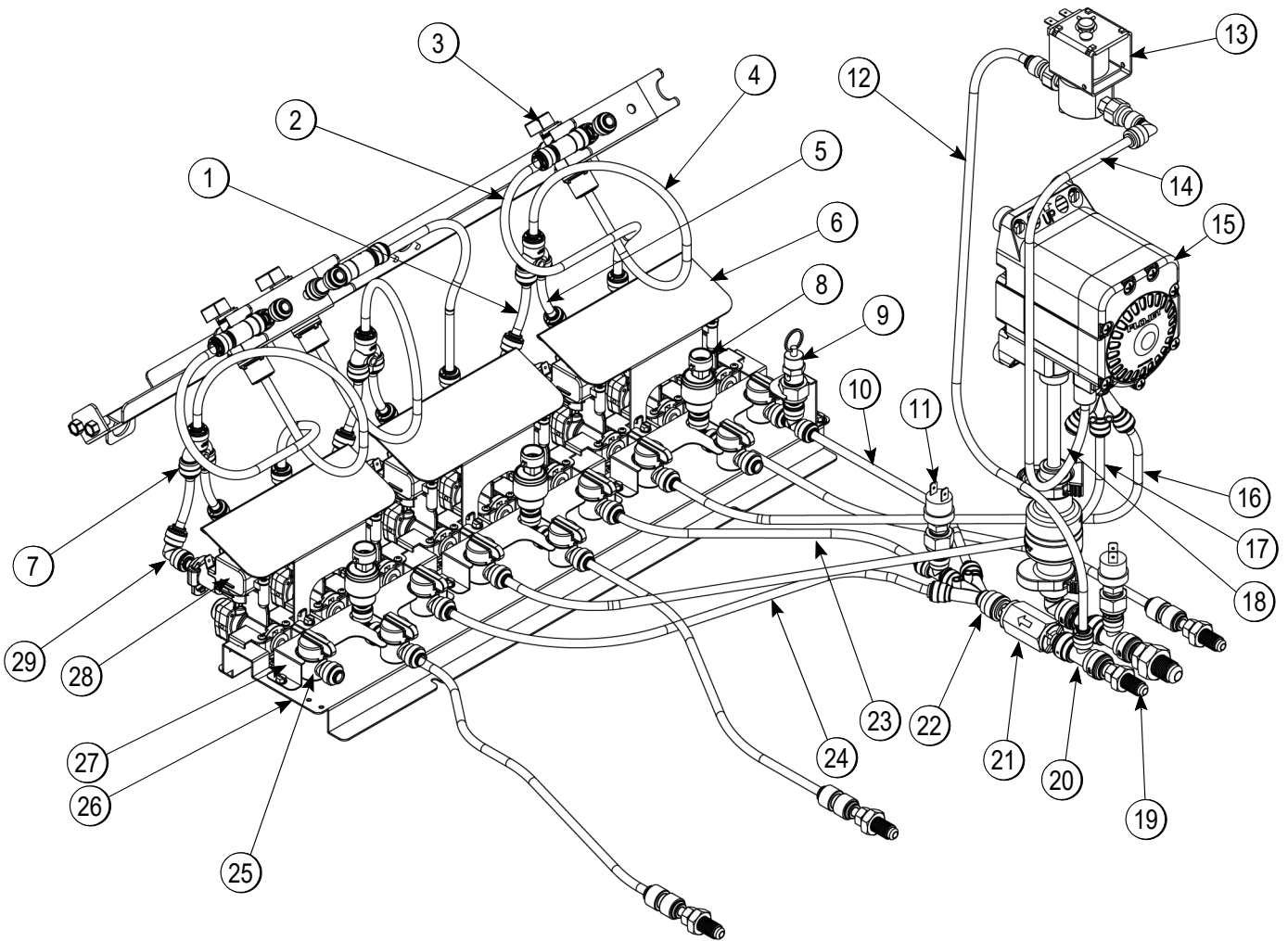
Figure 4-20

## PARTS

Item	Description	Part No.
1	Tube-5/32 ID X 1/4 OD-Blue	093330-3
2	Tube-5/32 ID X 1/4 OD-Yellow	093331
3	Valve-Sample-1/4 X 1/4 OD X 1/4 Barb	092507
4	Tube-5/32 ID X 1/4 OD-Clear	093329-15
5	Tube-5/32 ID X 1/4 OD-Clear	093329-3
6	Cover-Flow Valve	092517
7	Fitting-Y-1/4 OD Tube	088925
8	Transducer-Pressure-0-50 PSI	089976-SP
9	Valve-Relief-90 PSI 1/4NPT	086262
10	Tube-5/32 ID X 1/4 OD-Yellow	093331-11
11	Switch-Pressure 55-74 PSI	088858-B
12	Tube-5/32 ID X 1/4 OD-Yellow	093331-21
13	Valve-Solenoid-7/64 ORF X 1/4 S	028824-27
14	Tube-5/32 ID X 1/4 OD-Yellow	093331-16

Item	Description	Part No.
15	Pump-H2O Boost W/O Fittings	088878
16	Tube-5/32 ID X 1/4 OD-Blue	093330-18
17	Tube-5/32 ID X 1/4 OD-Blue	093330-21
18	Fitting-1/4 MFL X 3/8 Stem Bulkhd	052808-SP
19	Tee-3/8 OD X 3/8 OD X 1/4 OD	089732
20	Filter-Inline-3/8 Stem X 3/8 Stem	089984
21	Fitting-Divider 3/8OD X 1/4 OD	093725
22	Tube-5/32 ID X 1/4 OD-Yellow	093331-10
23	Valve-Shutoff-1/4 OD Tube	088869
24	Bracket-Mounting-Flow Valve	093688
25	Bracket-Positioning-Valve	088919
26	Valve A.-Flow Control- 0.040 ORF	089131-3
27	Elbow-1/4 OD Tube X 1/4 OD Tube	093086

C393



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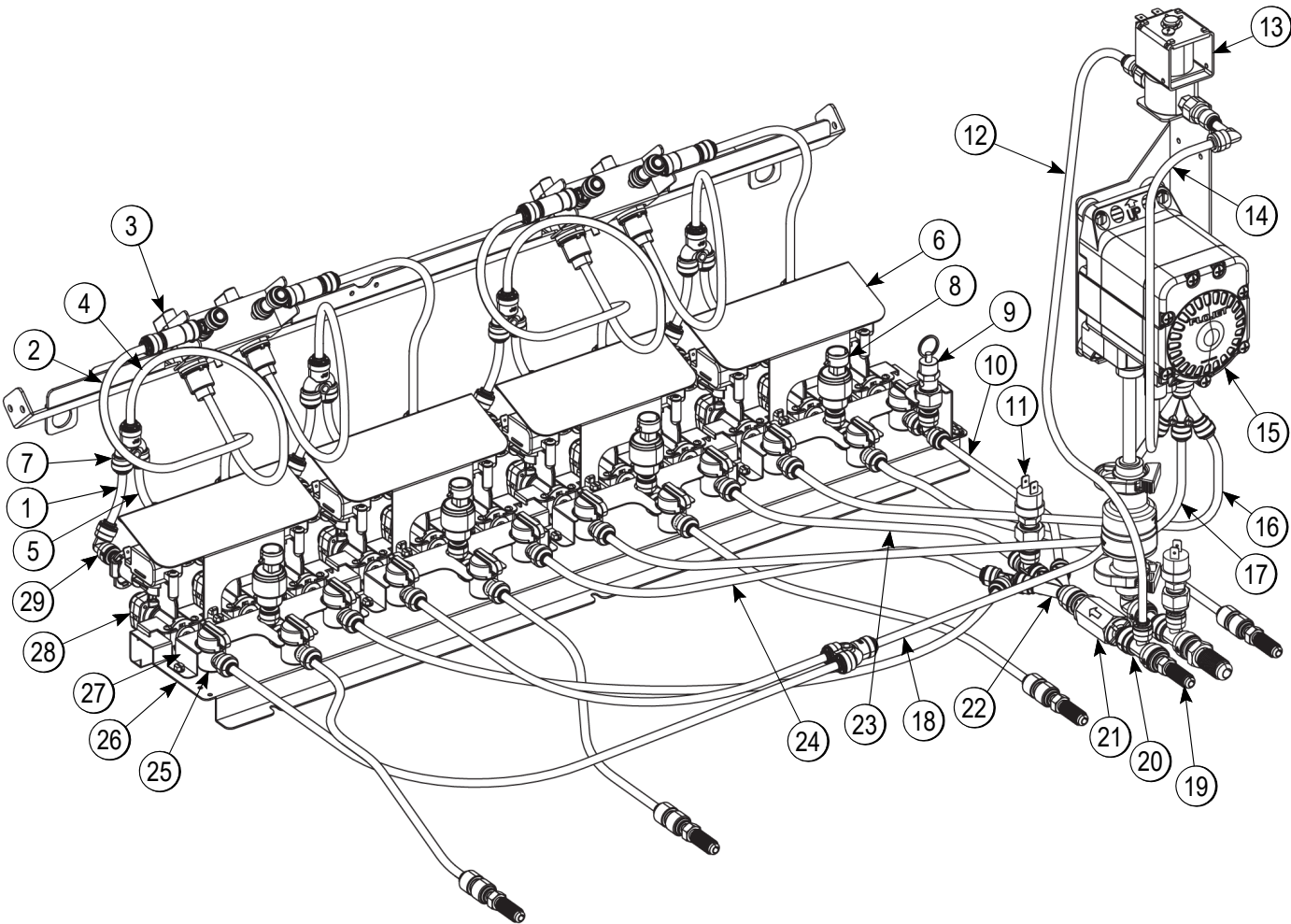
Figure 4-21

## PARTS

Item	Description	Part No.
1	Tube-5/32 ID X 1/4 OD-Blue	093330-3
2	Tube-5/32 ID X 1/4 OD-Yellow	093331
3	Valve-Sample-1/4 X 1/4 OD X 1/4 Barb	092507
4	Tube-5/32 ID X 1/4 OD-Clear	093329-15
5	Tube-5/32 ID X 1/4 OD-Clear	093329-3
6	Cover-Flow Valve	092517
7	Fitting-Y-1/4 OD Tube	088925
8	Transducer-Pressure-0-50 PSI	089976-SP
9	Valve-Relief-90 PSI 1/4 NPT	086262
10	Tube-5/32 ID X 1/4 OD-Yellow	093331-11
11	Switch-Pressure 55-74 PSI	088858-B
12	Tube-5/32 ID X 1/4 OD-Yellow	093331-21
13	Valve-Solenoid-7/64 ORF X 1/4 S	028824-27
14	Tube-5/32 ID X 1/4 OD-Yellow	093331-16
15	Pump-H2O Boost W/O Fittings	088878

Item	Description	Part No.
16	Tube-5/32 ID X 1/4 OD-Blue	093330-18
17	Tube-5/32 ID X 1/4 OD-Blue	093330-21
18	Tube-5/32 ID X 1/4 OD-Blue	093330-30
19	Fitting-1/4 MFLX 3/8 Stem Bulkhd	052808-SP
20	Tee-3/8 OD X 3/8 OD X 1/4 OD	089732
21	Filter-Inline-3/8 STEM X 3/8 STEM	089984
22	Fitting-Divider 3/8 OD X 1/4 OD	088900
23	Tube-5/32 ID X 1/4 OD-Yellow	093331-10
24	TUBE-5/32 ID X 1/4 OD-Yellow	093331-16
25	Valve-Shutoff-1/4 OD Tube	088869
26	Bracket-Mounting-Flow Valve	092516
27	Bracket-Positioning-Valve	088919
28	Valve A.-Flow Control- 0.040 ORF	X89131-040
29	Elbow-1/4 OD Tube X 1/4 OD Tube	093086

C394



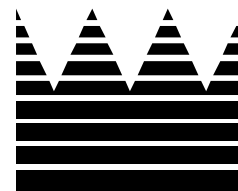
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Figure 4-22

## PARTS

Item	Description	Part No.
1	Tube-5/32 ID X 1/4 OD-Blue	093330-3
2	Tube-5/32 ID X 1/4 OD-Yellow	093331
3	Valve-Sample-1/4 X 1/4 OD X 1/4 Barb	092507
4	Tube-5/32 ID X 1/4 OD-Clear	093329-15
5	Tube-5/32 ID X 1/4 OD-Clear	093329-3
6	Cover-Flow Valve	092517
7	Fitting-Y-1/4 OD Tube	088925
8	Transducer-Pressure-0-50 PSI	089976-SP
9	Valve-Relief-90 PSI 1/4 NPT	086262
10	Tube-5/32 ID X 1/4 OD-Yellow	093331-11
11	Switch-Pressure 55-74 PSI	088858-B
12	Tube-5/32 ID X 1/4 OD-Yellow	093331-21
13	Valve-Solenoid-7/64 ORF X 1/4 S	028824-27
14	Tube-5/32 ID X 1/4 OD-Yellow	093331-16
15	Pump-H2O Boost W/O Fittings	088878

Item	Description	Part No.
16	Tube-5/32 ID X 1/4 OD-Blue	093330-18
17	Tube-5/32 ID X 1/4 OD-Blue	093330-21
18	Tube-5/32 ID X 1/4 OD-Blue	093330-30
19	Fitting-1/4 MFLX 3/8 Stem Bulkhd	052808-SP
20	Tee-3/8 OD X 3/8 OD X 1/4 OD	089732
21	Filter-Inline-3/8 STEM X 3/8 STEM	089984
22	Fitting-Divider 3/8 OD X 1/4 OD	088900
23	Tube-5/32 ID X 1/4 OD-Yellow	093331-10
24	TUBE-5/32 ID X 1/4 OD-Yellow	093331-16
25	Valve-Shutoff-1/4 OD Tube	088869
26	Bracket-Mounting-Flow Valve	089135
27	Bracket-Positioning-Valve	088919
28	Valve A.-Flow Control- 0.040 ORF	X89131-040
29	Elbow-1/4 OD Tube X 1/4 OD Tube	093086



## **Section 5:    Parts List**

- **C392 Standard Machine**
- **C393 Standard Machine**
- **C394 Standard Machine**

## + C392 Standard Machine

Model C39227A000				
Description	Part Number	Qty.	Warr. Class	Comments
ARMAFLEX 1-1/8 ID X 1/2WALL	020900-4	1	107	
ARMAFLEX 3/8 ID X 1/4WALL	020896-2	2	312	
ARMAFLEX 3/8 ID X 1/4WALL	020896-2	2	312	
ARMAFLEX 5/8 ID X 3/8WALL	032650-11	1	312	
ARMAFLEX 5/8 ID X 3/8WALL	032650-4	2	312	
BAG-DESICCANT 16 UNIT	082305	3	313	
BAG-VCI 49 X 34 X 76 2 MIL	031218	1	313	
BASE-CONNECTWARE DOCK	092823	1	110	
BASE-CRATE *C392*	093735	1	104	
BEAD-RUBBER	010613-50	1	107	
BEARING-FRONT-SLUSH-PRESSURE	039349	2	312	
BEATER-PLASTIC-FCB-PRESSURIZ	041182	2	312	
BLADE-SCRAPER-FCB 16L	041103	4	312	
BLOCK-TERMINAL 1P 2 CONTACTS	088453-2	1	110	
BLOCK-TERMINAL 2P-L1,L2	039422	1	101	
BOOT-VALVE-EXPANSION	050900	2	312	
BOX A.-LED *C392* COMPLETE	X89341	1	110	
BOX-SPLICE *C39X*	089124	1	101	
BRACKET-CONTROL A. *C300*	055635	4	107	
BRACKET-PANEL *C300*REAR	055094	2	313	
BRACKET-PRESSURE TRANSDUCER	092590	2	106	

5-2

+ Available Separately

Models C392, C393, C394

Parts List



## Model C39227A000

Description	Part Number	Qty.	Warr. Class	Comments
BRACKET-RECEIVER-LIQUID *C30	055784	1	104	
BUSHING-SNAP .500ID X.625 OD	075747	1	110	
BUSHING-SNAP 11/16 ID X 7/8O	010548	1	101	
BUSHING-SPLIT 1.17ID X 1.47O	082066	1	108	
CAP-VINYL-ROUND .600 X 1 BLA	081397	1	201	
CAP-VINYL-ROUND 3/8 X 1 BLAC	081396	4	201	
CLAMP-HOSE 1.813-2.75" DIA.	074429	1	104	
CLAMP-HOSE-ADJ 11/16 X 1-1/4	024797	2	107	
CLIP-LOCKING 1/4 OD TUBE	052560-4	2	106	
COMPRESSOR-ZS15KAE-PFV	086303-27	1	104	
CONDENSER A.-AIR COOLED *C39	X93672-27	1	107	
CONTROL A.-COMPLETE *C392*	X93676-27	1	101	
CONTROL A.-REAR *C392*	X93709-27	1	101	
CORE-SCHRADER VALVE-TEFLON	037047	2	107	
COUPLING-1/4ODX1/4OD JOHN GS	058302	2	104	
COVER-BOX *C300* SPLICE	054869	1	312	
COVER-CONTROL-REAR *C392*	093711	1	313	
COVER-HOLE-FILTER-SNAP IN C3	093705	1	313	
CRATE-HSC *C392*	093737-1	1	313	
CRATE-TOP PAD *C392*	093737-2	1	313	
CRATE-TOP TRAY *C392*	093737-3	1	313	
DECAL-INST-CLN-FCB-C302	055935	1	313	
DECAL-IOT-OPEN KITCHEN	093600	1	110	
DECAL-TROUBLESHOOT	038374	1	313	
DIAGRAM-WIRING C392	093743-27	1	313	

+ Available Separately

Parts List

Models C392, C393, C394

## Model C39227A000

Description	Part Number	Qty.	Warr. Class	Comments
DOOR A.-SLUSH-PRESSURE-FCB	X89121	2	312	
DRYER-FILTER 3/8ODFX3/8ODMHP	062158	1	105	
ELBOW-1/2BARB-PLASTIC	038399	2	105	
ELBOW-1/2OD TUBE X 1/4OD TUB	089041	2	107	
ELBOW-5/8S-STREET-SHORT RADI	018174	1	104	
EXCHANGER A.-HEAT *C392*	X93663	1	104	
FILTER-AIR-21.375LX11.375HX.	052779-24	1	312	
FILTER-CORCOM 6EH1	040140-001	1	107	
FITTING A.-EVAP INLET *C302*	X59650	2	102	
FITTING-1/4MFLX1/4STEM BULKH	052808-SP1	2	104	
FITTING-REDUCER-3/4MS X 5/8F	041583	1	104	
FRAME A. *C392*	X93651	1	104	
FUSE-10 AMP BK/MDA-10-R	079837-10	1	110	
GASKET-BASE PAN *C392*	093656	1	104	
GASKET-FRONT PANEL *C302*	059596	2	106	
GUIDE A.-DRIP PAN *C392* FRO	X93699	1	105	
GUIDE A.-FILTER-FRONT *C392*	X93681	1	107	
HARNESS-COMPRESSOR-3 WIRE	086304	1	104	
HARNESS-CONNECTWARE DOCK	092896	1	110	
HARNESS-PNR LED B1/B2 *C39X*	094109	1	106	
HOOD *C392*	093727-VNB	1	110	
KIT A.-ACCESSORY *C303*	X89182-1	1	313	
KIT A.-MOUNTING-COMP-PURPLE	X88123	1	104	
LABEL-AIR DISCHARGE-ROMANCE	023848	2	313	
LABEL-ATTN SVC ENG-CANADA	015068-CAN	2	312	

## Model C39227A000

Description	Part Number	Qty.	Warr. Class	Comments
LABEL-CAUTION-GRD-PERM-CANAD	032164-CAN	1	313	
LABEL-CON-BULKHEAD *C392*	093684	1	313	
LABEL-COPPER COND ONLY-ROMAN	025948	1	101	
LABEL-DATA-PERM. CONN.-ENGLI	047612-111	1	313	
LABEL-EQUIPOTENTIAL CONNECTO	076406	1	104	
LABEL-FUSE REPLACEMENT 10A	074978-10	1	110	
LABEL-INSTALLATION-HOOD	053587	1	313	
LABEL-OVERLAY 4-1/4"X1"	066248	3	102	
LABEL-OVERLAY 4-1/4"X1"	066248	1	104	
LABEL-PROTECTIVE EARTH GROUN	017669	1	101	
LABEL-REFRIGERANT-R-449A	087566-04	1	104	
LABEL-REFRIGERANT-R-449A	086955-04A	1	313	
LABEL-REFRIGERANT-R-449A	086955-04B	1	313	
LABEL-SHOCKWATCH-YELLOW	046795	1	313	
LABEL-TIP/TELL WARNING	046978	1	313	
LABEL-WARN-CONDENSER-SHARP	059287	2	107	
LABEL-WARN-COVER-CANADA	051433-CAN	1	312	
LABEL-WARN-COVER-CANADA	051433-CAN	1	312	
LABEL-WARN-COVER-CANADA	051433-CAN	1	313	
LABEL-WARN-ELEC-SGL-SMALL-CA	032717-CAN	1	312	
LABEL-WARN-RELIEVE PRESS	039462	3	312	
LABEL-WARRANTY	089807	1	313	
LABEL-WATER CONN-BACKFLOW PR	059284	1	313	
LINE A.-ACCESS-SUCTION *C393	X89003	1	104	
LINE A.-CO2 *C392* INLET	X93685	1	104	

+ Available Separately

Parts List

Models C392, C393, C394

Model C39227A000				
Description	Part Number	Qty.	Warr. Class	Comments
LINE A.-DISCHARGE *C392*	X93661-27	1	105	
LINE A.-DRAIN *C392*	X93670	1	105	
LINE A.-LIQUID-RIGHT *C392*	X93662-27	1	105	
LINE A.-SUCTION *C392*	X93664	1	106	
LINE A.-TRE VALVE *C393*	X89005	1	105	
LINE A.-WATER *C39X* INLET	X88876	1	104	
LUG-GROUNDING 6-14GA WIRE	020928	1	101	
LUG-GROUNDING 6-14GA WIRE	020928	1	104	
MOTOR A.-GEAR-1/6 HP-W/SENSO	X93217-27	2	102	
MOUNT-REAR CONTROL BOX	093708	1	108	
NUT-10-32 WHIZ FLANGE LOCKNU	020983	1	101	
NUT-10-32 WHIZ FLANGE LOCKNU	020983	1	104	
NUT-5/8 FINISHED HEX JAM	052807	1	104	
NUT-7/16-20 FINISHED HEX JAM	032375	3	104	
NUTSERT-10-32 AVDEL	021106	3	313	
NUTSERT-10-32/.020-.130 GRIP	053431	6	110	
NUTSERT-10-32/.020-.130 GRIP	053431	4	110	
NUTSERT-10-32/.020-.130 GRIP	047597	2	313	
NUT-STUD-PLASTIC 5/16-18 BLA	087009-1	8	312	
PAIL-10 QT.	013163	1	313	
PANEL A.-REAR *C392*	X93728-VNB	1	313	
PANEL-FRONT-LOWER *C392*	093726-VNB	1	312	
PANEL-FRONT-SHELL *C392*	093671-VNB	1	106	
PANEL-SIDE-LEFT *C39X*	089020-VNB	1	313	
PANEL-SIDE-RIGHT *C39X*	089021-VNB	1	313	

## Model C39227A000

Description	Part Number	Qty.	Warr. Class	Comments
PLATE A.-DEC *C392*TOUCHSCRE	X93701	1	110	
PLATE-DATA INTERNAL	037181	2	102	
PLATE-DATA INTERNAL	037181	1	104	
PLUG-HOLE 1-1/2 DIA-BLACK PL	042376	1	313	
PLUG-HOLE 7/8 DIA. BLACK	010077	1	101	
POUCH-DOCUMENT 6-1/4"X9-1/4"	082334	1	313	
PROBE A.-THERMISTOR *C392*	X45708-SP	1	106	
PROBE A.-THERMISTOR *C392*	X45708-SP	1	106	
PUMP A.-WATER BOOSTER C392	X93686-27	1	105	
RECEIVER A.-REFRIGATION *C39	X89010	1	104	
REFRIGERANT-R-449A	086098	52	201	
REGULATOR-CO2 TANK-DOUBLE	051840	1	313	
SCREW-1/4-20X1/2 HEX HEAD TF	048083	6	104	
SCREW-1/4-20X1/2 HEX HEAD TF	048083	4	105	
SCREW-1/4-20X1/2 HEX HEAD TF	048083	4	105	
SCREW-1/4-20X1/2 HEX HEAD TF	048083	10	107	
SCREW-1/4-20X1/2 SLT HWH SER	051284	2	105	
SCREW-1/4-20X1/2 SLT HWH SER	051284	4	106	
SCREW-1/4-20X3/4 HEX HEAD CA	029823	4	106	
SCREW-10-32X1/2 SERRATED HWH	020982	1	101	
SCREW-10-32X1/2 SERRATED HWH	020982	1	104	
SCREW-10-32X1/2 SLTD TRUSS	062037	15	110	
SCREW-10-32X1/2 SLTD TRUSS	062037	4	110	
SCREW-10-32X3/4 SLTD TRUSS	033944	4	110	
SCREW-10-32X3/8 PHIL TRUSS	038871	6	312	

+ Available Separately

Parts List

Models C392, C393, C394

Model C39227A000				
Description	Part Number	Qty.	Warr. Class	Comments
SCREW-10-32X3/8 UNSL HWH SER	039381	2	104	
SCREW-10-32X3/8 UNSL HWH SER	039381	1	104	
SCREW-10-32X3/8 UNSL HWH SER	039381	2	105	
SCREW-10-32X3/8 UNSL HWH SER	039381	4	105	
SCREW-10-32X3/8 UNSL HWH SER	039381	4	106	
SCREW-10-32X3/8 UNSL HWH SER	039381	8	107	
SCREW-10-32X3/8 UNSL HWH SER	039381	4	107	
SCREW-10-32X3/8 UNSL HWH SER	039381	2	108	
SCREW-10-32X3/8 UNSL HWH SER	039381	4	110	
SCREW-10-32X3/8 UNSL HWH SER	039381	4	312	
SCREW-10-32X3/8 UNSL HWH SER	039381	2	312	
SCREW-10-32X3/8 UNSL HWH SER	039381	2	313	
SCREW-10X3/8 SLOTTED HEX HEA	015582	2	105	
SCREW-10X3/8 SLOTTED HEX HEA	015582	4	107	
SCREW-10X3/8 SLOTTED HEX HEA	015582	7	108	
SCREW-10X3/8 SLOTTED HEX HEA	015582	4	108	
SCREW-10X3/8 SLOTTED HEX HEA	015582	4	110	
SCREW-10X3/8 SLOTTED HEX HEA	015582	1	312	
SCREW-10X3/8 SLOTTED HEX HEA	015582	4	313	
SCREW-10X7/16 UNSLTD HWH ZIN	066234	18	104	
SCREW-3/8-16X3 HEX HEAD CAP	017491	4	104	
SCREW-5/16-18X1-1/2 HEX HEAD	001894	4	104	
SCREW-5/16-18X7/8 SERR. HWH	017973	8	104	
SCREW-8-32X3/8 UNSLTD HEX WS	041951	2	106	
SCREW-8X1/4 SLTD HEX HEAD	009894	4	106	

+ Available Separately

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Models C392, C393, C394

Parts List

## Model C39227A000

Description	Part Number	Qty.	Warr. Class	Comments
SCREW-8X1/4 SLTD HEX HEAD	009894	2	107	
SCREW-8X1-1/4 PHLP HD RD SMS	039420	2	101	
SEAL-DRIVE SHAFT *BLACK*	032560	2	312	
SEAL-U-CUP-7/8/OD	093574	2	312	
SHAFT-BEATER-SLUSH-GROOVED	083143-SP	2	312	
SHELF-DRIP TRAY *C392*	093732	1	312	
SHELL A.-INSULATED *C39X*	X88954	2	102	
SHIELD-SPLASH *C392*	093731	1	312	
SLEEVE-HEATSHRINK .375 ID	085241-1	2	106	
SPACER-PANEL MOUNTING-1/4" T	046724	6	312	
SPLICE-END-SMALL	010263	2	108	
STIFFENER-FRAME-REAR *C392*	093706	1	108	
STUD-NOSE CONE-5/16-18X5/16-	020445	8	106	
SUPPLY A.-POWER *C392*	X93739	1	110	
SUPPORT-SHELL FRONT *C392*	093658	1	105	
SUPPORT-SHELL-REAR *C392*	093657	1	104	
SWITCH A.-REED INTERLOCK DOO	X65658	2	102	
SWITCH A.ROCKER *SB*	083331	1	110	
TAG-EX VLV 27-28 PSIG-MULTI	086969	2	312	
TAG-WARRANTY REGSTRN-MULTI	000100	1	313	
TAG-WARRANTY-REFRIGERANT-MUL	047015	1	312	
TAPE-ALUMINUM 2" WIDE X5 MIL	R18152	1	107	
TAPE-INSULATION CORK 1/8INX2	000301	1	312	
TEE-ADAPTOR-1/4TUBE X 1/4STE	088856	2	106	
TERMINAL-FEM.SP.INS.12-10.25	085137	2	108	

Parts List

+ Available Separately

Models C392, C393, C394

## Model C39227A000

Description	Part Number	Qty.	Warr. Class	Comments
TERMINAL-MAL.SP.INS.18-22.25	026962	3	110	
TERMINAL-SPRING SPADE #4 22-	068701	2	108	
TERMINAL-SPRING SPADE #6 14-	045750	2	108	
TERMINAL-SPRING SPADE #6 16-	010261	1	110	
TERMINAL-SPRING SPADE #8 10-	078016	1	110	
TERMINAL-SPRING SPADE #8 14-	045751	1	108	
TIE-CABLE .10W X 4 LONG	033208	3	108	
TIE-CABLE .14WX9-1/2 LONG	051636	4	312	
TRANSDUCER-PRESSURE-0-50 PSI	089976-SP	2	106	
TRAY-DRIP *C300*	057738	1	312	
VALVE A.-FLOW CONSTANT *C392	X93687-05	1	105	
VALVE A.-SAMPLING *C392*	X93659	1	105	
VALVE-EXP-AUTO-1/4S X1/4 FPT	094436	2	102	
WASHER-3/8 USS FLAT CR3	000653	4	104	
WASHER-5/16 USS FLAT CR3	000651	4	104	
WASHER-FREEZER STUD *348-350	036265	8	106	
WIRE A.-#18 GRN/YEL #8 RING	X85697-8	2	102	

+ Available Separately

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Models C392, C393, C394

Parts List



## + C393 Standard Machine

+ Available Separately

C39340A000, Standard Machine				
Description	Part Number	Qty.	Warr. Class	Comments
ARMAFLEX 1-1/8 ID X 1/2WALL	020900-4	1	107	TREV BULB
ARMAFLEX 3/8 ID X 1/4WALL	020896-2	3	312	SHL/DEFIRSTEE
ARMAFLEX 5/8 ID X 3/8WALL	032650-14	1	312	COMPRESSOR SUCT
ARMAFLEX 5/8 ID X 3/8WALL	032650-4	3	312	SHELL REF INLET
BAG-DESICCANT 16 UNIT	082305	3	313	
BAG-VCI 49 X 34 X 76 2 MIL	031218	1	313	
BASE-CONNECTWARE DOCK	092823	1	110	
BASE-CRATE *C303*	066703	1	104	
BEAD-RUBBER	010613-50	1	107	COND SHRD HOOD
BEARING-FRONT-SLUSH-PRESSURE	039349	3	312	
BEATER-PLASTIC-FCB-PRESSURIZ	041182	3	312	
BLADE-SCRAPER-FCB 16L	041103	6	312	
BLOCK-TERMINAL 1P 2 CONTACTS	088453-2	1	110	HPCO & LPCO
BLOCK-TERMINAL 2P-L1,L2	039422	1	104	SPLICE BOX
BOOT-VALVE-EXPANSION	050900	3	312	AXP/EXP VALVE
BOX A.-LED *C393* COMPLETE	X89326	1	110	
BOX-SPLICE *C39X*	089124	1	104	
BRACKET-CONTROL A. *C300*	055635	4	107	
BRACKET-PANEL *C300*REAR	055094	2	313	
BRACKET-PRESSURE TRANSDUCER	092590	3	102	BRRL TRANSDUCER
BRACKET-RECEIVER-LIQUID *C30	055784	1	104	
BUSHING-SNAP .500ID X.625 OD	075747	1	110	FRT UPPER PNL
BUSHING-SNAP 11/16 ID X 7/8O	010548	1	104	SPLICE BOX
CAP-VINYL-ROUND .600 X 1 BLA	081397	1	201	H2O BULKHD FITT

## C39340A000, Standard Machine

Description	Part Number	Qty.	Warr. Class	Comments
CAP-VINYL-ROUND 3/8 X 1 BLAC	081396	4	201	BULKHD FITTINGS
CLAMP-CABLE-FLAT RIBBON	046367	4	108	RIBBON CABLES
CLAMP-CABLE-FLAT RIBBON	046367	2	108	REAR CNTRL BOX
CLAMP-CABLE-NYLON	022847	3	108	MOTOR HARNESSSES
CLAMP-HOSE 1.813-2.75" DIA.	074429	1	104	RECEIVER A.
CLAMP-HOSE-ADJ 11/16 X 1-1/4	024797	2	107	TREV BULB
CLIP-LOCKING 1/4 OD TUBE	052560-4	3	106	TRANSDUCER TEE
COMPRESSOR-ZS19KAE-PFV	088961-27	1	104	
CONDENSER A.-AIR COOLED *C39	X88795-27	1	107	
CONTROL A.-COMPLETE *C393*	X92622-27	1	101	
CONTROL A.-REAR *C393*	X92544-27	1	101	
CORE-SCHRADER VALVE-TEFLON	037047	2	107	ACCESS VALVES
COUPLING-1/4ODX1/4OD JOHN GS	058302	3	104	SYRUP INLET
COVER-BOX *C300* SPLICE	054869	1	312	
COVER-CONTROL-REAR *C393*	092606	1	313	
COVER-HOLE-FILTER-SNAP IN	053801	1	313	
CRATE-HSC *C303*	066707-1	1	313	
CRATE-TOP PAD *C393*	066707-5	1	313	
CRATE-TOP TRAY *C393*	066707-SP2	1	313	
DECAL-INST-CLN-FCB-C302	055935	1	313	RIGHT PANEL
DECAL-IOT-OPEN KITCHEN	093600	1	110	
DECAL-TROUBLESHOOT	038374	1	313	RIGHT PANEL
DIAGRAM-WIRING *C393*	089312-27	1	313	
DOOR A.-SLUSH-PRESSURE-FCB	X89121	3	312	
DRYER-FILTER 3/8ODFX3/8ODMHP	062158	1	105	

+ Available Separately

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Models C392, C393, C394

Parts List

## C39340A000, Standard Machine

Description	Part Number	Qty.	Warr. Class	Comments
ELBOW-1/2BARB-PLASTIC	038399	2	105	DRAIN OUTLETS
ELBOW-1/2OD TUBE X 1/4OD TUB	089041	3	106	BARREL INLET
ELBOW-5/8S-STREET-SHORT RADI	018174	1	104	COMPRESSOR
EXCHANGER A.-HEAT *C393*	X89006	1	104	
FILTER-AIR-21.375LX17.375HX.	052779-20	1	312	
FILTER-CORCOM 6EH1	040140-001	1	107	
FITTING A.-EVAP INLET *C302*	X59650	3	102	
FITTING-1/4MFLX1/4STEM BULKH	052808-SP1	3	104	SYRUP INLET
FITTING-REDUCER-3/4MS X 5/8F	041583	1	104	COMPRESSOR
FRAME A. *C393*	X88782	1	104	
FUSE-10 AMP BK/MDA-10-R	079837-10	1	110	
GASKET-BASE PAN *C393*	088784	1	104	
GASKET-FRONT PANEL *C302*	059596	3	106	
GUIDE A.-DRIP PAN *C39X* FRO	X89102	1	105	
GUIDE A.-FILTER-FRONT *C39X*	X89108	1	107	
HARNESS-COMPRESSOR-3 WIRE	086304	1	104	
HARNESS-CONNECTWARE DOCK	092896	1	110	CONNECTWARE DOC
HARNESS-PNR LED B1/B2 *C39X*	094109	1	106	
HARNESS-PNR LED B3 *C393*	094110	1	106	
HOOD *C393*	089017-VNB	1	110	
KIT A.-ACCESSORY *C393*	X94641-1	1	313	
KIT A.-MOUNTING-COMP-PURPLE	X88123	1	104	COMPRESSOR
LABEL-AIR DISCHARGE-ROMANCE	023848	2	313	TOP SIDE PANELS
LABEL-ATTN SVC ENG-CANADA	015068-CAN	2	312	SHELL HOUSING
LABEL-CAUTION-GRD-PERM-CANAD	032164-CAN	1	313	LEFT PANEL

Parts List

+ Available Separately

Models C392, C393, C394

## C39340A000, Standard Machine

Description	Part Number	Qty.	Warr. Class	Comments
LABEL-CON-BULKHEAD *C393*	088996	1	313	
LABEL-COPPER COND ONLY-ROMAN	025948	1	104	SPLICE BOX
LABEL-DATA-PERM. CONN.-ENGLI	047612-111	1	313	LEFT PANEL
LABEL-EQUIPOTENTIAL CONNECTO	076406	1	104	REAR BULKHEAD
LABEL-FUSE REPLACEMENT 10A	074978-10	1	110	MAINFUSE RTSIDE
LABEL-INSTALLATION-HOOD	053587	1	313	REAR HOOD
LABEL-OVERLAY 4-1/4"X1"	066248	3	102	SHELL HOUSING
LABEL-OVERLAY 4-1/4"X1"	066248	1	104	FRAME
LABEL-PROTECTIVE EARTH GROUN	017669	1	104	PWR SPLICE BOX
LABEL-REFRIGERANT-R-449A	087566-04	1	104	COMPRESSOR
LABEL-REFRIGERANT-R-449A	086955-04A	1	313	CRATE FRONT
LABEL-REFRIGERANT-R-449A	086955-04B	1	313	CRATE SIDE
LABEL-SHOCKWATCH-YELLOW	046795	1	313	CRATE
LABEL-TIP/TELL WARNING	046978	1	313	CRATE
LABEL-WARN-CONDENSER-SHARP	059287	2	107	CONDENSER A.
LABEL-WARN-COVER-CANADA	051433-CAN	1	312	SPLICE BX COVER
LABEL-WARN-COVER-CANADA	051433-CAN	1	313	REAR CNTRL COVR
LABEL-WARN-COVER-CANADA	051433-CAN	2	313	LFT RGHT
LABEL-WARN-ELEC-SGL-SMALL-CA	032717-CAN	1	312	DEC PLATE
LABEL-WARN-RELIEVE PRESS	039462	3	312	DOORS
LABEL-WARRANTY	089807	1	313	
LABEL-WATER CONN-BACKFLOW PR	059284	1	313	WATER INLET
LINE A.-ACCESS-SUCTION *C393	X89003	1	104	
LINE A.-CO2 *C393* INLET	X89983	1	104	
LINE A.-DISCHARGE *C393*	X89002-27	1	105	

+ Available Separately

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Models C392, C393, C394

Parts List

C39340A000, Standard Machine				
Description	Part Number	Qty.	Warr. Class	Comments
LINE A.-DRAIN *C393*	X88991	1	105	
LINE A.-LIQUID-RIGHT *C393*	X89011-27	1	105	
LINE A.-SUCTION *C393*	X89004	1	106	
LINE A.-TRE VALVE *C393*	X89005	1	105	
LINE A.-WATER *C39X* INLET	X88876	1	104	
LUG-GROUNDING 6-14GA WIRE	020928	1	104	PWR SPLICE BOX
LUG-GROUNDING 6-14GA WIRE	020928	1	104	EQUIPOTNIAL GND
MOTOR A.-GEAR-1/6 HP-W/SENSO	X93217-27	3	102	
MOUNT-REAR CONTROL BOX	092591	1	108	
NUT-10-32 WHIZ FLANGE LOCKNU	020983	1	104	SPLICE BOX GRND
NUT-10-32 WHIZ FLANGE LOCKNU	020983	1	104	EQUIPOTNIAL GND
NUT-5/8 FINISHED HEX JAM	052807	1	104	H2O INLET
NUT-7/16-20 FINISHED HEX JAM	032375	4	104	SYRUP/CO2 INLET
NUTSERT-10-32 AVDEL	021106	3	313	TOP OF PANELS
NUTSERT-10-32/.020-.130 GRIP	053431	6	110	UPPR FRNT PANEL
NUTSERT-10-32/.020-.130 GRIP	047597	2	313	REAR PNL BRKT
NUTSERT-10-32/.020-.130 GRIP	053431	4	313	CONNECTWARE DOC
NUT-STUD-PLASTIC 5/16-18 BLA	087009-1	12	312	
PAIL-10 QT.	013163	1	313	
PAN-DRIP-W/DRAIN *C303*	067837	2	312	
PANEL A.-REAR *C393*	X89018-VNB	1	313	
PANEL-FRONT-LOWER *C393*	089015-VNB	1	312	
PANEL-FRONT-SHELL *C393*	093101-VNB	1	106	LED BOX HINGES
PANEL-SIDE-LEFT *C39X*	089020-VNB	1	313	
PANEL-SIDE-RIGHT *C39X*	089021-VNB	1	313	

+ Available Separately  
Parts List

Models C392, C393, C394

## C39340A000, Standard Machine

Description	Part Number	Qty.	Warr. Class	Comments
PLATE A.-DEC *C393*TOUCHSCRE	X89756	1	110	
PLATE-DATA INTERNAL	037181	3	102	SHELL HOUSING
PLATE-DATA INTERNAL	037181	1	104	FRAME
PLUG-HOLE 1 DIA-BLK PLASTIC	027143	1	313	OPTIONAL PWR
PLUG-HOLE 1-1/2 DIA-BLACK PL	042376	2	104	BASE PAN
PLUG-HOLE 7/8 DIA. BLACK	010077	1	104	SPLICE BOX
POUCH-DOCUMENT 6-1/4"X9-1/4"	082334	1	313	RIGHT PANEL
PROBE A.-THERMISTOR *C393*	X66471-SP	1	106	
PUMP A.-WATER BOOSTER *C393	X92536-27	1	105	
RECEIVER A.-REFRIGATION *C39	X89010	1	104	
REFRIGERANT-R-449A	086098	64	201	
REGULATOR-CO2 TANK-DOUBLE	051840	1	313	
SCREW-1/4-20X1/2 HEX HEAD TF	048083	6	104	REAR SHEL SUPRT
SCREW-1/4-20X1/2 HEX HEAD TF	048083	4	105	SAMPL VLV ASMBY
SCREW-1/4-20X1/2 HEX HEAD TF	048083	4	105	FRNT SHELL SUPP
SCREW-1/4-20X1/2 HEX HEAD TF	048083	10	107	CONDENSER A.
SCREW-1/4-20X1/2 SLT HWH SER	051284	2	104	REAR SHEL SUPRT
SCREW-1/4-20X1/2 SLT HWH SER	051284	2	105	ACCESS VALVES
SCREW-1/4-20X1/2 SLT HWH SER	051284	6	106	REAR SHELL MNT
SCREW-1/4-20X3/4 HEX HEAD CA	029823	6	106	FRONT SHELL MNT
SCREW-10-32X1/2 SERRATED HWH	020982	1	104	SPLICE BOX GRND
SCREW-10-32X1/2 SERRATED HWH	020982	1	104	EQUIPOTNIAL GND
SCREW-10-32X1/2 SLTD TRUSS	062037	15	313	5 PER PANEL
SCREW-10-32X1/2 SLTD TRUSS	062037	4	313	CONNECTWARE DOC
SCREW-10-32X3/4 SLTD TRUSS	033944	6	110	LED BOX HINGES

+ Available Separately

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Models C392, C393, C394

Parts List

C39340A000, Standard Machine				
Description	Part Number	Qty.	Warr. Class	Comments
SCREW-10-32X3/8 PHIL TRUSS	038871	6	312	DEC PLATE
SCREW-10-32X3/8 UNSL HWH SER	039381	2	104	SPLICE BOX
SCREW-10-32X3/8 UNSL HWH SER	039381	2	104	REAR SHEL SUPRT
SCREW-10-32X3/8 UNSL HWH SER	039381	1	104	RECEIVER BRCKT
SCREW-10-32X3/8 UNSL HWH SER	039381	2	104	POWER SUPPLY
SCREW-10-32X3/8 UNSL HWH SER	039381	4	105	FLOW VALVE ASSY
SCREW-10-32X3/8 UNSL HWH SER	039381	2	105	REAR DRIP GUIDE
SCREW-10-32X3/8 UNSL HWH SER	039381	4	106	FRNT SHELL PANL
SCREW-10-32X3/8 UNSL HWH SER	039381	8	107	CONTRL BRKTS 4
SCREW-10-32X3/8 UNSL HWH SER	039381	4	107	UPPER CONTRL A.
SCREW-10-32X3/8 UNSL HWH SER	039381	2	108	REAR STIFFENER
SCREW-10-32X3/8 UNSL HWH SER	039381	4	312	DRIP TRAY SHELF
SCREW-10-32X3/8 UNSL HWH SER	039381	2	312	LOWER FRNT PNL
SCREW-10-32X3/8 UNSL HWH SER	039381	2	313	REAR PNL BRKTS
SCREW-10X3/8 SLOTTED HEX HEA	015582	2	105	H2O PUMP ASSY
SCREW-10X3/8 SLOTTED HEX HEA	015582	4	107	FILTER GUIDE
SCREW-10X3/8 SLOTTED HEX HEA	015582	7	108	REAR CNRTRL MNT
SCREW-10X3/8 SLOTTED HEX HEA	015582	5	108	REAR CNTRL BOX
SCREW-10X3/8 SLOTTED HEX HEA	015582	5	110	UPPER FRNT PANL
SCREW-10X3/8 SLOTTED HEX HEA	015582	1	312	SPLICE BX COVER
SCREW-10X3/8 SLOTTED HEX HEA	015582	4	313	REAR CNTRL COVR
SCREW-10X7/16 UNSLTD HWH ZIN	066234	20	104	BASE PAN GASKET
SCREW-3/8-16X3 HEX HEAD CAP	017491	4	104	CRATE BASE
SCREW-5/16-18X1-1/2 HEX HEAD	001894	4	104	COMPRESSOR
SCREW-5/16-18X7/8 SERR. HWH	017973	12	102	MOTOR

+ Available Separately

Parts List

Models C392, C393, C394

## C39340A000, Standard Machine

Description	Part Number	Qty.	Warr. Class	Comments
SCREW-8-32X3/8 UNSLTD HEX WS	041951	3	106	MOTOR GROUNDS
SCREW-8X1/4 SLTD HEX HEAD	009894	2	105	FRNT DRIP GUIDE
SCREW-8X1/4 SLTD HEX HEAD	009894	6	106	BRRL TRANSDUCER
SCREW-8X1/4 SLTD HEX HEAD	009894	2	107	CORCOM FILTER
SCREW-8X1-1/4 PHLP HD RD SMS	039420	2	104	SPLICE BOX TB
SEAL-DRIVE SHAFT *GREEN*	032560-SP	3	312	
SEAL-U-CUP-7/8/OD	093574	3	312	
SHAFT-BEATER-SLUSH-GROOVED	083143-SP	3	312	
SHELF-DRIP TRAY *C303*	066677	1	312	
SHELL A.-INSULATED *C39X*	X88954	3	102	
SHIELD-SPLASH *C393*	093111	1	312	
SLEEVE-HEATSHRINK .375 ID	085241-1	3	106	BRL THERMISTOR
SPACER-PANEL MOUNTING-1/4" T	046724	6	312	PANELS
SPLICE-END-SMALL	010263	2	108	TRANSFORMER
STIFFENER-FRAME-REAR *C393*	089014	1	108	
STUD-NOSE CONE-5/16-18X5/16-	020445	12	106	
SUPPLY A.-POWER *C393*	X88990	1	104	
SUPPORT-REAR SHELL *C393*	088979	1	104	
SUPPORT-SHELL FRONT *C303*	066627	1	105	
SUPPORT-SHELL-REAR *C393*	066619-SP	1	105	
SWITCH A.-REED INTERLOCK DOO	X65658	3	102	
SWITCH A.ROCKER *SB*	083331	1	110	
TAG-EX VLV 27-28 PSIG-MULTI	086969	3	312	
TAG-WARRANTY REGSTRN-MULTI	000100	1	313	
TAG-WARRANTY-REFRIGERANT-MUL	047015	1	312	COMPRESSOR

+ Available Separately

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Models C392, C393, C394

Parts List



## C39340A000, Standard Machine

Description	Part Number	Qty.	Warr. Class	Comments
TAPE-ALUMINUM 2" WIDE X5 MIL	R18152	1	107	TREV BULB
TAPE-INSULATION CORK 1/8INX2	000301	1	312	COMP,AXV
TEE-ADAPTOR-1/4TUBE X 1/4STE	088856	3	106	BARREL INLET
TERMINAL-FEM.SP.INS.12-10.25	085137-L	2	108	COMPRESSOR
TERMINAL-MAL.SP.INS.18-22.25	026962-L	3	110	FAN MOTOR
TERMINAL-SPRING SPADE #4 22-	068701	3	108	REED SWITCH
TERMINAL-SPRING SPADE #6 14-	045750-L	2	108	HPCO
TERMINAL-SPRING SPADE #6 16-	010261-L	1	110	FAN GND MOTOR
TERMINAL-SPRING SPADE #8 10-	078016-L	1	110	COMPRESSOR
TERMINAL-SPRING SPADE #8 14-	045751	1	108	
TIE-CABLE .10W X 4 LONG	033208	3	108	FAN/PW/SWT WIRE
TIE-CABLE .14WX9-1/2 LONG	051636	6	312	AXV BOOTS
TIE-CABLE .14WX9-1/2 LONG	051636	4	312	DRIP TRAYS
TRANSDUCER-PRESSURE-0-50 PSI	089976-SP	3	106	
TRAY-DRIP *C303*	066676	1	312	
VALVE A.-FLOW CONSTANT *C393	X88913-05	1	105	
VALVE A.-SAMPLING *C393*	X92532	1	105	
VALVE-EXP-AUTO-1/4S X1/4 FPT	094436	3	102	
WASHER-3/8 USS FLAT CR3	000653	4	104	CRATE BASE
WASHER-5/16 USS FLAT CR3	000651	4	104	COMPRESSOR
WASHER-FREEZER STUD *348-350	036265	12	106	
WIRE A.-#18 GRN/YEL #8 RING	X85697-8	3	102	MOTORS

+ Available Separately

Parts List

Models C392, C393, C394

## + C394 Standard Machine

C39427A000, Standard Machine				
Description	Part Number	Qty.	Warr. Class	Comments
ARMAFLEX 1-1/8 ID X 1/2WALL	020900-4	1	107	
ARMAFLEX 3/8 ID X 1/4WALL	020896-2	4	312	
ARMAFLEX 5/8 ID X 3/8WALL	032650-14	1	312	
ARMAFLEX 5/8 ID X 3/8WALL	032650-4	4	312	
BAG-DESICCANT 16 UNIT	082305	4	313	
BAG-VC1 49 X 34 X 76 2 MIL	031218	1	313	
BASE-CONNECTWARE DOCK	092823	1	110	
BASE-CRATE *C314*	068503	1	104	
BEAD-RUBBER	010613-50	1	110	
BEARING-FRONT-SLUSH-PRESSURE	039349	4	312	
BEATER-PLASTIC-FCB-PRESSURIZ	041182	4	312	
BLADE-SCRAPER-FCB 16L	041103	8	312	
BLOCK-TERMINAL 1P 2 CONTACTS	088453-2	1	110	
BLOCK-TERMINAL 2P-L1,L2	039422	1	101	
BOOT-VALVE-EXPANSION	050900	4	312	
BOX A.-LED *C394* COMPLETE	X89299	1	110	
BOX-SPLICE *C39X*	089124	1	101	
BRACKET-CONTROL A. *C300*	055635	4	107	
BRACKET-PANEL *C300*REAR	055094	2	313	
BRACKET-PRESSURE TRANSDUCER	092590	4	106	
BRACKET-RECEIVER-LIQUID *C30	055784	1	104	

C39427A000, Standard Machine				
Description	Part Number	Qty.	Warr. Class	Comments
BUSHING-SNAP .500ID X.625 OD	075747	1	110	
BUSHING-SNAP 11/16 ID X 7/8O	010548	1	101	
BUSHING-SPLIT 51/64ID X 1-1/	037491	2	108	
CAP-VINYL-ROUND .600 X 1 BLA	081397	1	201	
CAP-VINYL-ROUND 3/8 X 1 BLAC	081396	5	201	
CLAMP-CABLE-FLAT RIBBON	046367	4	108	
CLAMP-CABLE-FLAT RIBBON	046367	2	108	
CLAMP-CABLE-NYLON	022847	4	108	
CLAMP-HOSE 1.813-2.75" DIA.	074429	1	104	
CLAMP-HOSE-ADJ 11/16 X 1-1/4	024797	2	107	
CLIP-LOCKING 1/4 OD TUBE	052560-4	4	106	
COMPRESSOR-ZS19KAE-PFV	088961-27	1	104	
CONDENSER A.-AIR COOLED *C39	X89071-27	1	107	
CONTROL A.-COMPLETE *C394*	X89095-27	1	101	
CONTROL A.-REAR *C394*	X89163-27	1	101	
CORE-SCHRADER VALVE-TEFLON	037047	2	107	
COUPLING-1/4ODX1/4OD JOHN GS	058302	4	104	
COVER-BOX *C300* SPLICE	054869	1	312	
COVER-CONTROL-REAR *C393*	092606	1	313	
COVER-HOLE-FILTER-SNAP IN	053801	1	313	
CRATE-HSC *C314*	068502-1	1	313	

+ Available Separately

Parts List

Models C392, C393, C394

C39427A000, Standard Machine				
Description	Part Number	Qty.	Warr. Class	Comments
CRATE-TOP PAD *C394*	068502-SP3	1	313	
CRATE-TOP TRAY *C394*	068502-SP2	1	313	
DECAL-INST-CLN-FCB-C302	055935	1	313	
DECAL-IOT-OPEN KITCHEN	093600	1	110	
DECAL-TROUBLESHOOT	038374	1	313	
DIAGRAM-WIRING *C394*	089179-27	1	313	
DOOR A.-SLUSH-PRESSURE-FCB	X89121	4	312	
DRYER-FILTER 3/8ODFX3/8ODMHP	062158	1	105	
ELBOW-1/2BARB-PLASTIC	038399	2	105	
ELBOW-1/2OD TUBE X 1/4OD TUB	089041	4	106	
ELBOW-5/8S-STREET-SHORT RADI	018174	1	104	
EXCHANGER A.-HEAT *C393*	X89006	1	104	
FILTER-AIR-21.375LX17.375HX.	052779-20	1	312	
FILTER-CORCOM 6EH1	040140-001	1	107	
FITTING A.-EVAP INLET *C302*	X59650	4	102	
FITTING-1/4MFLX1/4STEM BULKH	052808-SP1	4	104	
FITTING-REDUCER-3/4MS X 5/8F	041583	1	104	
FRAME A. *C394*	X89050	1	104	
FUSE-10 AMP BK/MDA-10-R	079837-10	1	110	
GASKET-BASE PAN *C394*	089063	1	104	
GASKET-FRONT PANEL *C302*	059596	4	106	

+ Available Separately

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Models C392, C393, C394

Parts List

C39427A000, Standard Machine				
Description	Part Number	Qty.	Warr. Class	Comments
GUIDE A.-DRIP PAN *C39X* FRO	X89102	1	105	
GUIDE A.-FILTER-FRONT *C39X*	X89108	1	107	
HARNESS-COMPRESSOR-3 WIRE	086304	1	104	
HARNESS-CONNECTWARE DOCK	092896	1	110	
HARNESS-PNR LED B1/B2 *C39X*	094109	1	106	
HARNESS-PNR LED B3/B4 *C394*	094111	1	106	
HOOD *C394*	089180-VNB	1	110	
KIT A.-ACCESSORY *C394*	X94641-2	1	313	
KIT A.-MOUNTING-COMP-PURPLE	X88123	1	104	
LABEL-AIR DISCHARGE-ROMANCE	023848	2	313	
LABEL-ATTN SVC ENG-CANADA	015068-CAN	2	312	
LABEL-CAUTION-GRD-PERM-CANAD	032164-CAN	1	313	
LABEL-CON-BULKHEAD *C394*	089097	1	313	
LABEL-COPPER COND ONLY-ROMAN	025948	1	101	
LABEL-COPPER COND ONLY-ROMAN	025948	1	104	
LABEL-DATA-PERM. CONN.-ENGLI	047612-111	1	313	
LABEL-EQUIPOTENTIAL CONNECTO	076406	1	104	
LABEL-FUSE REPLACEMENT 10A	074978-10	1	110	
LABEL-INSTALLATION-HOOD	053587	1	313	
LABEL-OVERLAY 4-1/4"X1"	066248	4	102	
LABEL-OVERLAY 4-1/4"X1"	066248	1	104	

+ Available Separately

Parts List

Models C392, C393, C394

C39427A000, Standard Machine				
Description	Part Number	Qty.	Warr. Class	Comments
LABEL-PROTECTIVE EARTH GROUN	017669	1	101	
LABEL-REFRIGERANT-R-449A	087566-04	1	104	
LABEL-REFRIGERANT-R-449A	086955-04A	1	313	
LABEL-REFRIGERANT-R-449A	086955-04B	1	313	
LABEL-SHOCKWATCH-YELLOW	046795	1	313	
LABEL-TIP/TELL WARNING	046978	1	313	
LABEL-WARN-CONDENSER-SHARP	059287	2	107	
LABEL-WARN-COVER-CANADA	051433-CAN	1	312	
LABEL-WARN-COVER-CANADA	051433-CAN	1	313	
LABEL-WARN-COVER-CANADA	051433-CAN	2	313	
LABEL-WARN-ELEC-SGL-SMALL-CA	032717-CAN	1	312	
LABEL-WARN-RELIEVE PRESS	039462	4	312	
LABEL-WARRANTY	089807	1	313	
LABEL-WATER CONN-BACKFLOW PR	059284	1	313	
LINE A.-ACCESS-SUCTION *C393	X89003	1	104	
LINE A.-C02 *C394* INLET	X89119	1	104	
LINE A.-DISCHARGE *C394*	X89066-27	1	105	
LINE A.-DRAIN *C394*	X89104	1	105	
LINE A.-LIQUID-RIGHT *C394*	X89065-27	1	105	
LINE A.-SUCTION *C394*	X89069	1	106	
LINE A.-TRE VALVE *C393*	X89005	1	105	

+ Available Separately

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Models C392, C393, C394

Parts List

C39427A000, Standard Machine				
Description	Part Number	Qty.	Warr. Class	Comments
LINE A.-WATER *C39X* INLET	X88876	1	104	
LUG-GROUNDING 6-14GA WIRE	020928	1	101	
LUG-GROUNDING 6-14GA WIRE	020928	1	104	
MOTOR A.-GEAR-1/6 HP-W/SENSO	X93217-27	4	102	
MOUNT-REAR CONTROL BOX	089120	1	108	
NUT-10-32 WHIZ FLANGE LOCKNU	020983	1	101	
NUT-10-32 WHIZ FLANGE LOCKNU	020983	1	104	
NUT-5/8 FINISHED HEX JAM	052807	1	104	
NUT-7/16-20 FINISHED HEX JAM	032375	5	104	
NUTSERT-10-32 AVDEL	021106	3	313	
NUTSERT-10-32/.020-.130 GRIP	053431	6	110	
NUTSERT-10-32/.020-.130 GRIP	047597	2	313	
NUTSERT-10-32/.020-.130 GRIP	053431	4	313	
NUT-STUD-PLASTIC 5/16-18 BLA	087009-1	16	312	
PAIL-10 QT.	013163	1	313	
PAN-DRIP-W/DRAIN *C302*	068189	2	312	
PANEL A.-REAR *C394*	X89188-VNB	1	313	
PANEL-FRONT-LOWER *C394*	089167-VNB	1	312	
PANEL-FRONT-SHELL *C394*	093110-VNB	1	106	
PANEL-SIDE-LEFT *C39X*	089020-VNB	1	313	
PANEL-SIDE-RIGHT *C39X*	089021-VNB	1	313	

+ Available Separately

Parts List

Models C392, C393, C394

C39427A000, Standard Machine				
Description	Part Number	Qty.	Warr. Class	Comments
PLATE A.-DEC-COMPLETE *C394*	X89115	1	110	
PLATE-DATA INTERNAL	037181	3	102	
PLATE-DATA INTERNAL	037181	1	104	
PLUG-HOLE 1 DIA-BLK PLASTIC	027143	1	313	
PLUG-HOLE 1-1/2 DIA-BLACK PL	042376	2	104	
PLUG-HOLE 7/8 DIA. BLACK	010077	1	101	
POUCH-DOCUMENT 6-1/4"X9-1/4"	082334	1	313	
PROBE A.-THERMISTOR *C394*	X68534-SP	1	106	
PUMP A.-WATER BOOSTER *C394	X89105-27	1	105	
RECEIVER A.-REFRIGATION *C39	X89094	1	104	
REFRIGERANT-R-449A	086098	70	201	
REGULATOR-CO2 TANK-DOUBLE	051840	1	110	
SCREW-1/4-20X1/2 HEX HEAD TF	048083	6	104	
SCREW-1/4-20X1/2 HEX HEAD TF	048083	4	105	
SCREW-1/4-20X1/2 HEX HEAD TF	048083	4	105	
SCREW-1/4-20X1/2 HEX HEAD TF	048083	10	107	
SCREW-1/4-20X1/2 SLT HWH SER	051284	2	104	
SCREW-1/4-20X1/2 SLT HWH SER	051284	2	105	
SCREW-1/4-20X1/2 SLT HWH SER	051284	8	106	
SCREW-1/4-20X3/4 HEX HEAD CA	029823	8	106	
SCREW-10-32X1/2 SERRATED HWH	020982	1	101	

+ Available Separately



C39427A000, Standard Machine				
Description	Part Number	Qty.	Warr. Class	Comments
SCREW-10-32X1/2 SERRATED HWH	020982	1	104	
SCREW-10-32X1/2 SLTD TRUSS	062037	4	110	
SCREW-10-32X1/2 SLTD TRUSS	062037	15	313	
SCREW-10-32X3/4 SLTD TRUSS	033944	6	110	
SCREW-10-32X3/8 PHIL TRUSS	038871	6	110	
SCREW-10-32X3/8 UNSL HWH SER	039381	2	104	
SCREW-10-32X3/8 UNSL HWH SER	039381	2	104	
SCREW-10-32X3/8 UNSL HWH SER	039381	1	104	
SCREW-10-32X3/8 UNSL HWH SER	039381	2	104	
SCREW-10-32X3/8 UNSL HWH SER	039381	5	105	
SCREW-10-32X3/8 UNSL HWH SER	039381	2	105	
SCREW-10-32X3/8 UNSL HWH SER	039381	2	105	
SCREW-10-32X3/8 UNSL HWH SER	039381	4	106	
SCREW-10-32X3/8 UNSL HWH SER	039381	8	107	
SCREW-10-32X3/8 UNSL HWH SER	039381	4	107	
SCREW-10-32X3/8 UNSL HWH SER	039381	2	108	
SCREW-10-32X3/8 UNSL HWH SER	039381	4	312	
SCREW-10-32X3/8 UNSL HWH SER	039381	2	312	
SCREW-10-32X3/8 UNSL HWH SER	039381	2	312	
SCREW-10-32X3/8 UNSL HWH SER	039381	2	313	
SCREW-10X3/8 SLOTTED HEX HEA	015582	2	105	

C39427A000, Standard Machine				
Description	Part Number	Qty.	Warr. Class	Comments
SCREW-10X3/8 SLOTTED HEX HEA	015582	4	107	
SCREW-10X3/8 SLOTTED HEX HEA	015582	7	108	
SCREW-10X3/8 SLOTTED HEX HEA	015582	5	108	
SCREW-10X3/8 SLOTTED HEX HEA	015582	5	110	
SCREW-10X3/8 SLOTTED HEX HEA	015582	1	312	
SCREW-10X3/8 SLOTTED HEX HEA	015582	4	313	
SCREW-10X7/16 UNSLTD HWH ZIN	066234	24	104	
SCREW-3/8-16X3 HEX HEAD CAP	017491	4	104	
SCREW-5/16-18X1-1/2 HEX HEAD	001894	4	104	
SCREW-5/16-18X7/8 SERR. HWH	017973	16	104	
SCREW-8-32X3/8 UNSLTD HEX WS	041951	4	106	
SCREW-8X1/4 SLTD HEX HEAD	009894	2	105	
SCREW-8X1/4 SLTD HEX HEAD	009894	8	106	
SCREW-8X1/4 SLTD HEX HEAD	009894	2	107	
SCREW-8X1-1/4 PHLP HD RD SMS	039420	2	101	
SEAL-DRIVE SHAFT *GREEN*	032560-SP	4	312	
SEAL-U-CUP-7/8/OD	093574	4	312	
SHAFT-BEATER-SLUSH-GROOVED	083143-SP	4	312	
SHELF-DRIP-TRAY *C302*	059653	1	312	
SHELL A.-INSULATED *C39X*	X88954	4	102	
SHIELD-SPLASH *C394*	093348	1	312	

+ Available Separately

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Models C392, C393, C394

Parts List

C39427A000, Standard Machine				
Description	Part Number	Qty.	Warr. Class	Comments
SLEEVE-HEATSHRINK .375 ID	085241-1	4	106	
SPACER-PANEL MOUNTING-1/4"T	046724	6	312	
SPLICE-END-SMALL	010263	2	108	
STIFFENER-FRAME-REAR *C394*	089168	1	108	
STUD-NOSE CONE-5/16-18X5/16-	020445	16	106	
SUPPLY A.-POWER *C393*	X88990	1	104	
SUPPORT-REAR SHELL *C393*	088979	1	104	
SUPPORT-SHELL-FRONT *C302*	059565	1	105	
SUPPORT-SHELL-REAR *C394*	089068	1	104	
SWITCH A.-REED INTERLOCK DOO	X65658	4	102	
SWITCH A.ROCKER *SB*	083331	1	110	
TAG-EX VLV 27-28 PSIG-MULTI	086969	4	312	
TAG-WARRANTY REGSTRTN-MULTI	000100	1	313	
TAG-WARRANTY-REFRIGERANT-MUL	047015	1	312	
TAPE-ALUMINUM 2" WIDE X5 MIL	R18152	1	107	
TAPE-INSULATION CORK 1/8INX2	000301	1	312	
TEE-ADAPTOR-1/4TUBE X 1/4STE	088856	4	106	
TERMINAL-FEM.SP.INS.12-10.25	085137-L	2	108	
TERMINAL-MAL.SP.INS.18-22.25	026962-L	4	110	
TERMINAL-SPRING SPADE #4 22-	068701	4	108	
TERMINAL-SPRING SPADE #6 14-	045750-L	2	110	

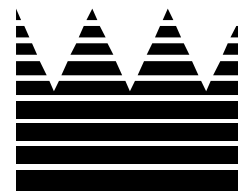
+ Available Separately

Parts List

Models C392, C393, C394

C39427A000, Standard Machine				
Description	Part Number	Qty.	Warr. Class	Comments
TERMINAL-SPRING SPADE #6 16-	010261-L	1	110	
TERMINAL-SPRING SPADE #8 10-	078016-L	1	110	
TERMINAL-SPRING SPADE #8 14-	045751	1	108	
TIE-CABLE .10W X 4 LONG	033208	3	108	
TIE-CABLE .14WX9-1/2 LONG	051636	8	312	
TIE-CABLE .14WX9-1/2 LONG	051636	4	312	
TIE-CABLE .19WX7-1/2 LONG	012005	20	108	
TRANSDUCER-PRESSURE-0-50 PSI	089976-SP	4	106	
TRAY-DRIP *C302*	059654	1	312	
VALVE A.-FLOW-CONSTANT *C394	X89134-05	1	105	
VALVE A.-SAMPLING *C394*	X89133	1	105	
VALVE-EXP-AUTO-1/4S X1/4 FPT	094436	4	102	
WASHER-3/8 USS FLAT CR3	000653	4	104	
WASHER-5/16 USS FLAT CR3	000651	4	104	
WASHER-FREEZER STUD *348-350	036265	16	106	
WIRE A.-#18 GRN/YEL #8 RING	X85697-8	4	102	

+ Available Separately



## **Section 6:    Wiring Diagrams**

- **Diagram 093743-27**
- **Diagram 093743-33**
- **Diagram 089312-27**
- **Diagram 089312-33**
- **Diagram 089179-27**
- **Diagram 089179-33**

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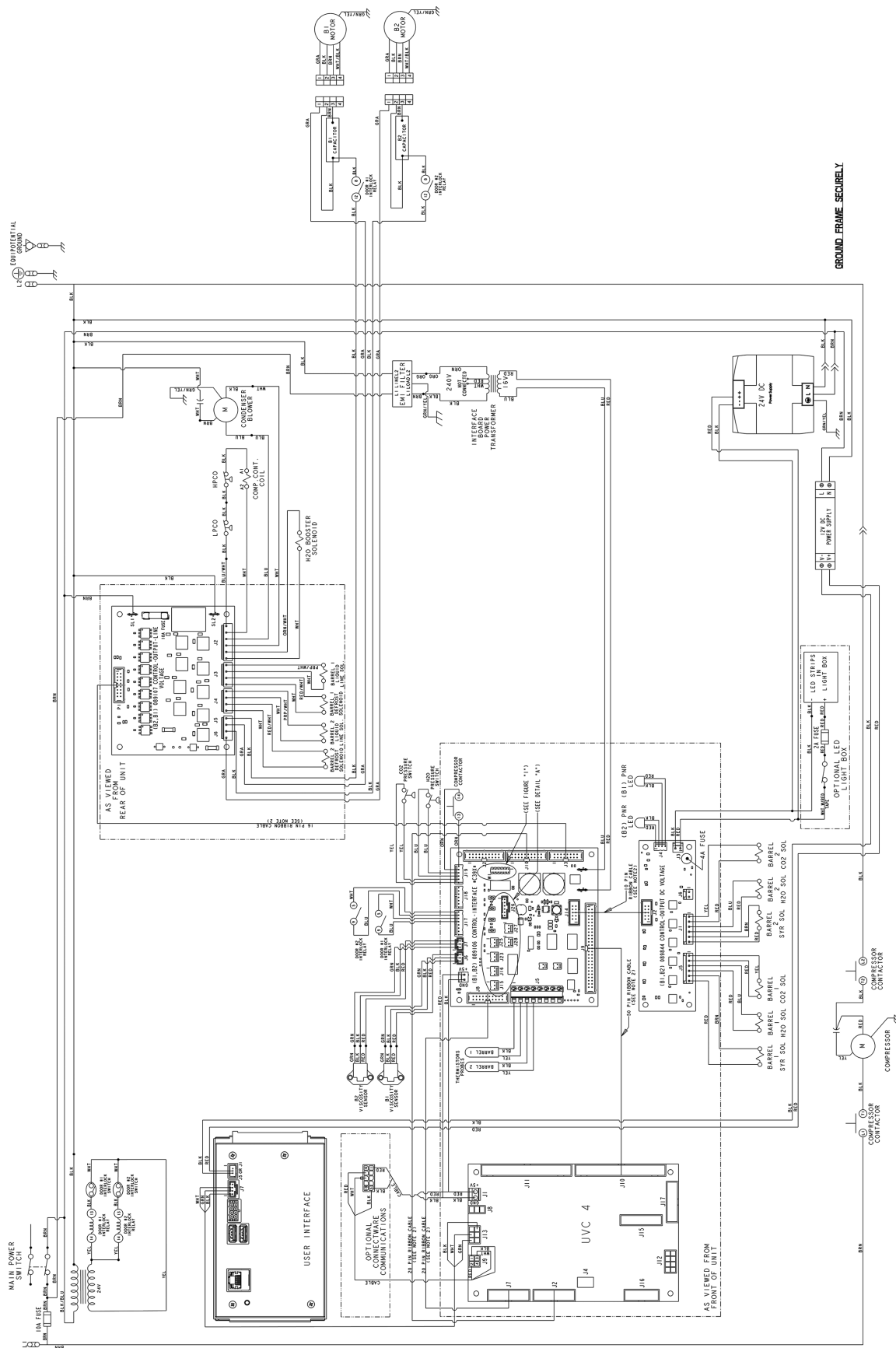


Figure 6-1 Diagram 093743-27

Taylor Company  
Model C392  
093743-27  
08/25



## Wiring Diagrams

**6-3**

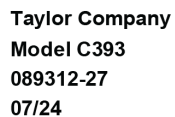
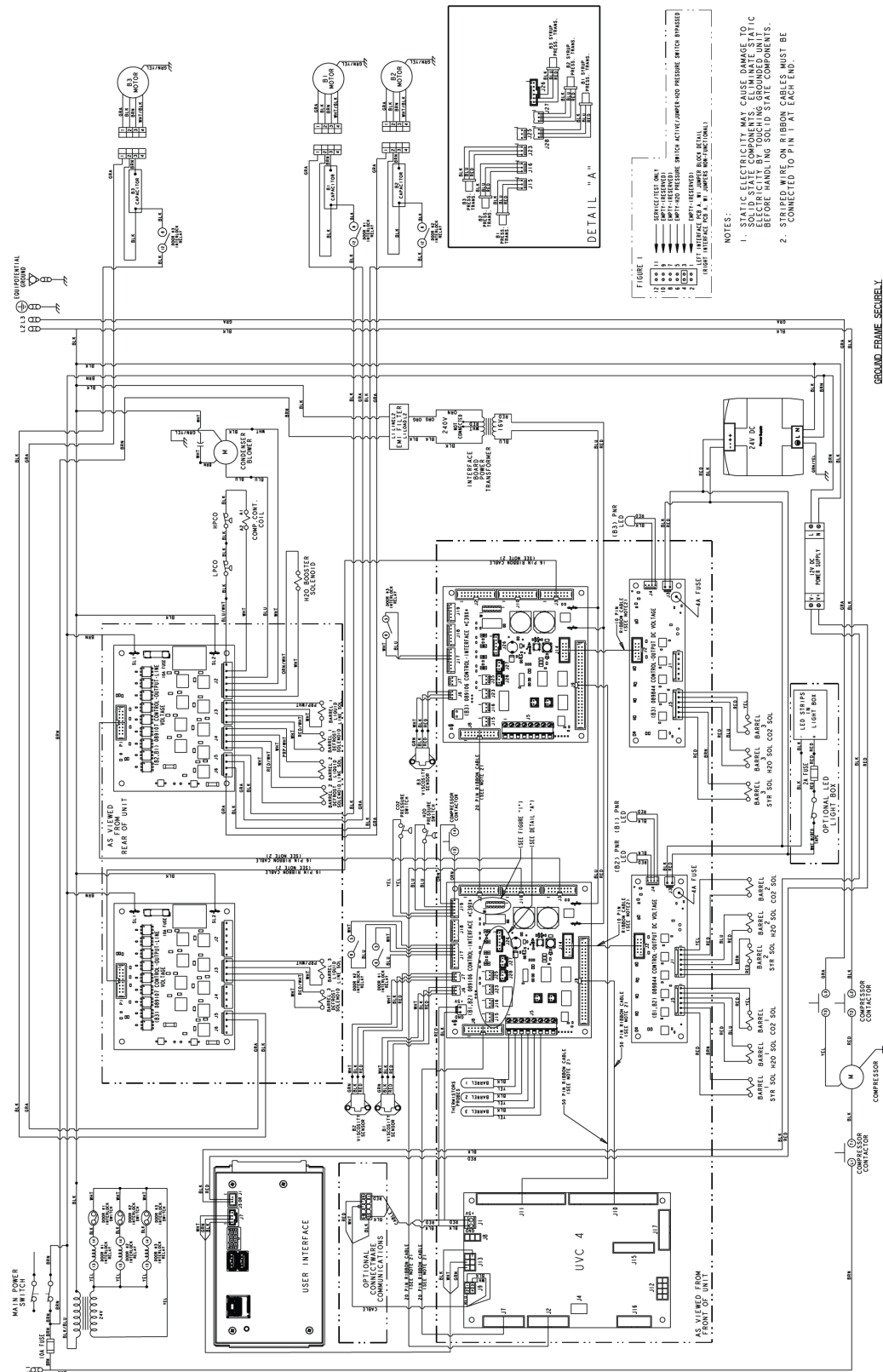


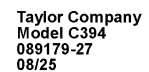
Figure 6-3 Diagram 089312-27





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Figure 6-4 Diagram 089312-33



**6-6**



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Notes:

Lined area for notes.