



ACSD Operator's Manual



Release Date: March 8, 2024
Publication Number: 621058798OPR
Revision Date: March 8, 2024
Revision: 1



Marmon Foodservice
Technologies

A Berkshire Hathaway Company

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The products, technical information, and instructions contained in this manual are subject to change without notice. These instructions are not intended to cover all details or variations of the equipment, nor to provide for every possible contingency in the installation, operation or maintenance of this equipment. This manual assumes that the person(s) working on the equipment have been trained and are skilled in working with electrical, plumbing, pneumatic, and mechanical equipment. It is assumed that appropriate safety precautions are taken and that all local safety and construction requirements are being met, in addition to the information contained in this manual.

This Product is warranted only as provided in Cornelius' Commercial Warranty applicable to this Product and is subject to all of the restrictions and limitations contained in the Commercial Warranty.

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Contact Information:

To inquire about current revisions of this and other documentation or for assistance with any Cornelius product contact:

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800-238-3600

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This document contains the original instructions for the unit described.

MARMON FOODSERVICE TECHNOLOGIES INC

355 Kehoe Blvd

Carol Stream, IL

Tel: + 1 800-238-3600

Printed in the U.S.A.



Recycle

Correct Disposal of this Product:

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

EQUIPMENT REGISTRATION



Thank you for purchasing your equipment from the Marmon Foodservice Technologies family of brands. From technical support to warranty dispatch to replacement parts sales, Marmon Link provides your entire after-sales support for Cornelius, Prince Castle, Silver King, and Angelo Po America equipment.

Registering your equipment will help us keep you up to date on equipment information, preventative maintenance resources, and other topics. Your equipment's warranty will not be affected if you choose to not fill out this form.

To expedite the process, we ask that you have the following:

- The serial numbers of the equipment you purchased.
- The name and email address for a designed store contact.
- The general store information, including address location number.

REGISTER YOUR EQUIPMENT

To Maximize Your Benefits

- Comprehensive after-sales service
- Over the phone technicians
- Quick-ship parts

Complete with:

- Serial Number
- Equipment location details



Your equipment serial number will be validated against our database of existing serial numbers. If you are having difficulties entering a valid number, please contact Marmon Link at **1-866-275-6392**.



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SAFETY INSTRUCTIONS

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

Safety Overview

- Read and follow **ALL SAFETY INSTRUCTIONS** in this manual and any warning/caution labels on the unit (decals, labels or laminated cards).
- Read and understand ALL applicable OSHA (Occupational Safety and Health Administration) safety regulations before operating this unit.

Recognition

Recognize Safety Alerts

This is the safety alert symbol. When you see it in this manual or on the unit, be alert to the potential of personal injury or damage to the unit.



DIFFERENT TYPES OF ALERTS



DANGER:

Indicates an immediate hazardous situation which if not avoided **WILL** result in serious injury, death or equipment damage.



WARNING:

Indicates a potentially hazardous situation which, if not avoided, **COULD** result in serious injury, death, or equipment damage.



CAUTION:

Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury or equipment damage.

SAFETY TIPS

- Carefully read and follow all safety messages in this manual and safety signs on the unit
- Keep safety signs in good condition and replace missing or damaged items.
- Learn how to operate the unit and how to use the controls properly.
- **Do not** let anyone operate the unit without proper training. This appliance is not intended for use by very young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance.
- Keep your unit in proper working condition and do not allow unauthorized modifications to the unit.

QUALIFIED SERVICE PERSONNEL



WARNING:

Only trained and certified electrical, plumbing and refrigeration technicians should service this unit. **ALL WIRING AND PLUMBING MUST CONFORM TO NATIONAL AND LOCAL CODES. FAILURE TO COMPLY COULD RESULT IN SERIOUS INJURY, DEATH OR EQUIPMENT DAMAGE.**

SAFETY Precautions

This unit has been specifically designed to provide protection against personal injury. To ensure continued protection observe the following:



WARNING:

Disconnect power to the unit before servicing following all lock out/tag out procedures established by the user. Verify all of the power is off to the unit before any work is performed.



CAUTION:

Always be sure to keep area around the unit clean and free of clutter. Failure to keep this area clean may result in injury or equipment damage.

SHIPPING AND STORAGE



CAUTION:

Before shipping, storing, or relocating the unit, the unit must be sanitized and all sanitizing solution must be drained from the system. A freezing ambient environment will cause residual sanitizing solution or water remaining inside the unit to freeze resulting in damage to internal components.

CO₂ (CARBON DIOXIDE) WARNING



DANGER:

CO₂ displaces oxygen. Strict attention **MUST** be observed in the prevention of CO₂ gas leaks in the entire CO₂ and soft drink system. If a CO₂ gas leak is suspected, particularly in a small area, **IMMEDIATELY** ventilate the contaminated area before attempting to repair the leak. Personnel exposed to high concentrations of CO₂ gas experience tremors which are followed rapidly by loss of consciousness and **DEATH**.



SYSTEM OVERVIEW

The ACSD is designed for drive-through area installation or locations accessible only by employees. When a beverage is ordered from the P.O.S. register, the ACSD automatically drops a cup, fills it with ice and dispenses the correct amount and type of any syrup based beverage. The finished drink is then moved by the carousel to the pick up location and the drink description is displayed on the User Interface Screen.

Operation of the ACSD is restricted to employees and service personnel that have been trained and certified in proper operation, service and maintenance of equipment.

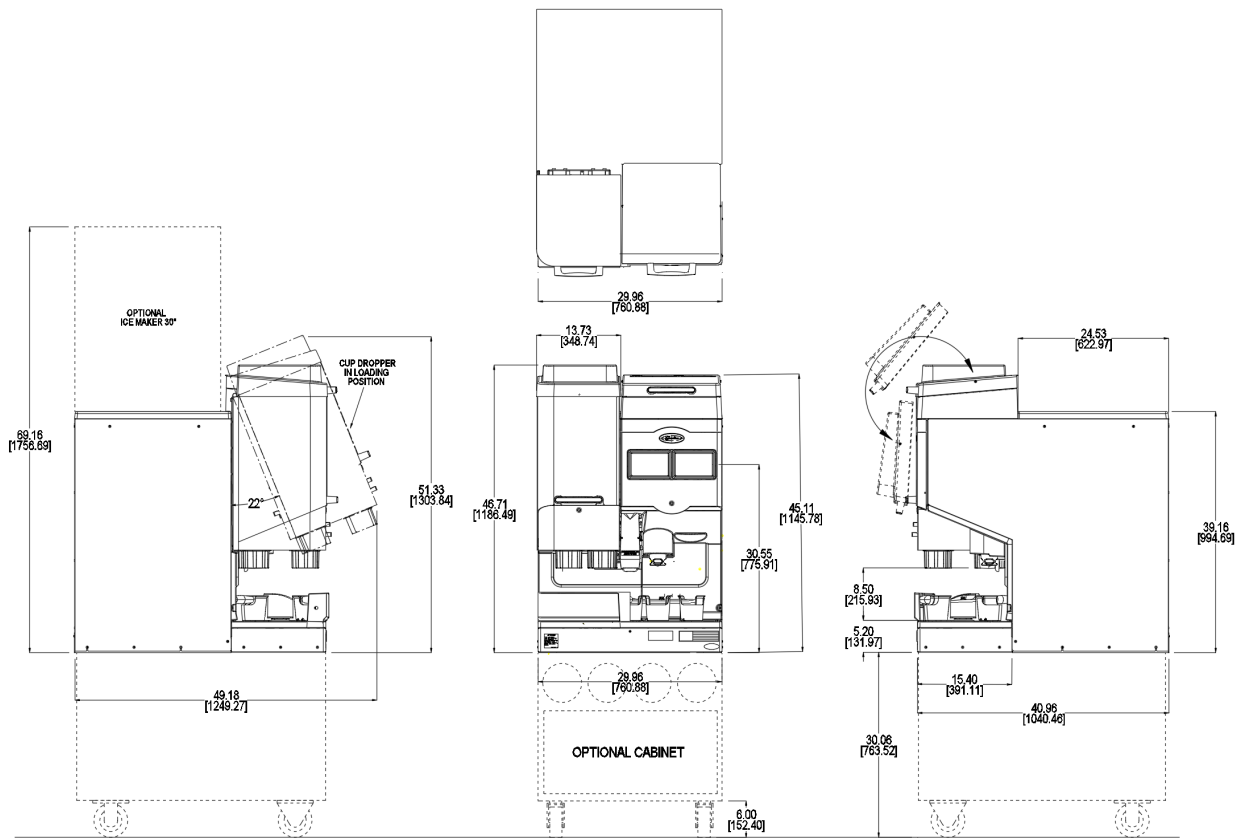
SPECIFICATIONS

Unit Dimensions	Length	40.96 inch (1040.50 mm)
	Width	29.96 inch (760.80 mm)
	Height	39.16 inch (994.69 mm)
Unit Weight	Dry Weight	480 lbs. (218 kg)
	Operational Weight (With ice, water, etc.)	800 lbs. (363 kg)
Cooling Method	Cold Plate	Ice
Ice Storage Capacity	Hopper ice capacity	200 lbs. (91kg)
Electrical	Line Voltage and current	115VAC, 60 HZ 1PH, 3A 230VAC 50/60HZ 1PH, 3A
	Connection method	IEC-NEMA C13
Supply Pressure	Water	90±15 psi (0.55±10 MPa)
	Syrup	65±15 psi (0.48±10 MPa)
	CO ₂ /Air	90±10 psi (.55 ±.07 MPa)
Temperature	Water & Syrup	Max 35°F (1.7°C) Water & 38°F (3.3°C) Syrup
	Operating Ambient	65°F (18°C) to 95°F (35°C)
Clearance Requirements	Top	No ice Maker: 1905mm [75 inch] + 304.8 mm [12 inch] refill area = 2209.8 mm [87 inch] With ice Maker: 2501.9 mm [98.5 inch]

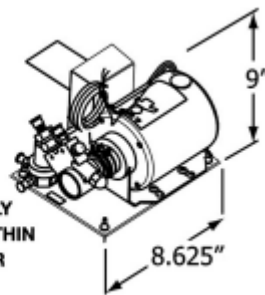
**FEATURES**

Mounting type	Optional 4 legs or Cart with casters/Leg
UI interface type and size	Two 177.8 mm [7 inch] Touch screen display
Number of Brands	12
Number of Flavors	4 (Optional Ambient)
Cup storage	4 cup dispenser
Lid Storage	4 Lid compartments on optional cart
Ice dispensing	1 portion-controlled ice dispenser
Product dispensing	Cornelius Multi Flavor Valve
No of stage drinks	4

UNIT FOOTPRINT DRAWING



**NOTE: PUMP & MOTOR ASSEMBLY
MUST BE POSITIONED WITHIN
8 FEET OF THE DISPENSER**



PREPARING FOR OPERATION

DISPENSER VALVE OPERATING PRESSURE

The Recommended operating pressure for the brand is 65-75 PSI (4.5-5.2 bar) and water is 50-60psi (3.4-4.2bar).

CONNECTING PRODUCT TO THE DISPENSER

Valve must have a supply connected to each inlet. Refer to the plumbing diagram for details of the hook-up.

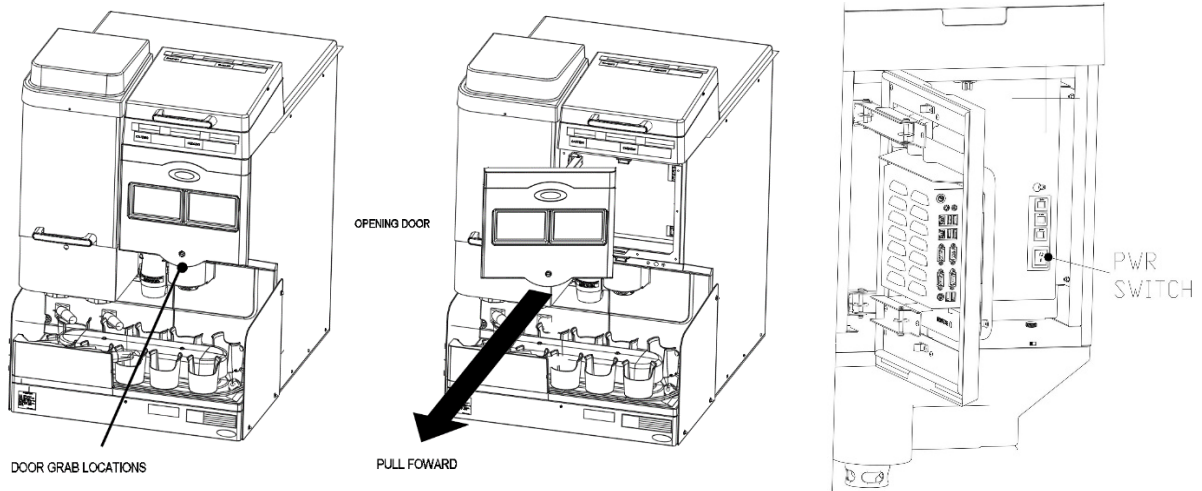
NOTE: All inlet connections are clearly marked with a label adjacent to the inlet connections. Always leak check all connections.

WATER & SYRUP LINE CONNECTIONS (Refer Plumbing diagram in Appendix)

- (2) Water Valves / (4) water valves for Mid carb option.
- (12) Syrup Valves
- (4) Ambient Syrup/ Flavor Valves (OPTIONAL)

DISPENSER POWER ON

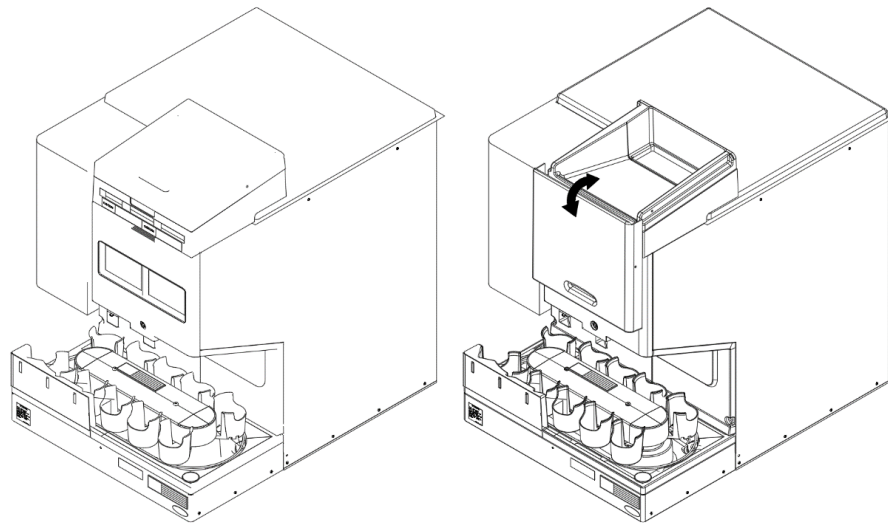
1. To open the door and access PWR on switch, position hands at the bottom of door and pull forward.
2. Swing door until it locks in open position.
3. With the door open, turn on PWR switch.



ICE FILLING

If the ACSD is installed with an ice maker, turn on the ice maker (see the procedure in ice maker's user manual). Keep the unit idle until ice is filled – do not operate until the hopper is 50% full.

If the ACSD does not have an ice maker or additional ice is required, the unit can be filled manually by opening the manual fill door located on top of the unit.



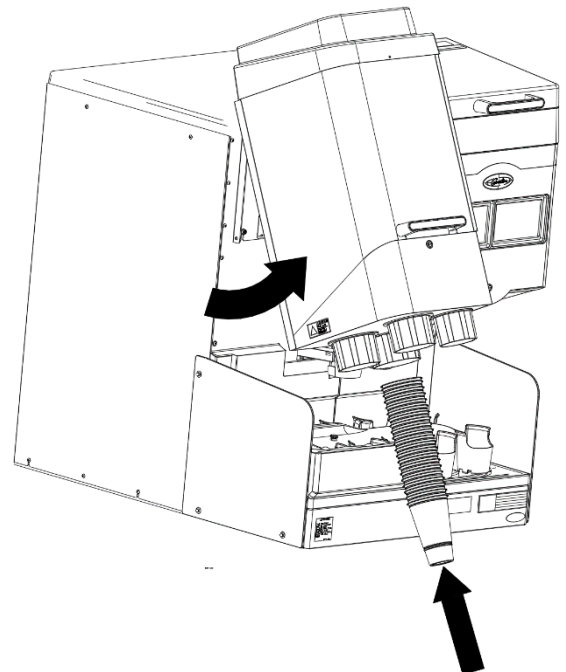
LOADING CUPS

1. Pull on handle to swing open Cup Dispenser.
2. Locate the size to be loaded and push cups in tubes until there is no resistance.
3. Push the handle to close and lock cup dropper.

⚠ CAUTION: Use only approved cups in dispenser. Cups not approved could jam cup dispenser mechanism.

⚠ CAUTION: Do not load damaged cups into the dispenser. If the cup lip is damaged such that a lid would not fit, the unit will not properly dispense the cup.

⚠ CAUTION: Do not load previously used cups into the dispenser. Moisture can cause the cups to stick together and will not dispense properly from the unit.



BASIC OPERATION



USER INTERFACE

Under normal usage the dispenser will receive orders from the **Point Of Sale (POS)** system in the restaurant. When the POS is being used, the UI will display the orders and location of the order of staging on conveyor. If the POS is not available, or if orders need to be corrected, orders can be manually entered via the right screen.

1. **Service Menu:** This button is used to enter the setup and diagnostic menu of the dispenser.
2. **Order Queue:** This button allows the operator to monitor the next beverage loaded in the queue.
3. **Conveyor status:** This section will show the cup and its contents in the staging location of the carousel.
4. **Cup Size:** Used to select the desired cup size for non-POS orders.
5. **Ice Volume:** Used to select the desired ice portion size for non-POS orders.
6. **Mapped Brand Selection:** Used to select the desired brand for non-POS orders.
7. **Flavor Shots:** If installed, this section allows this operator to select the desired flavor for non-POS orders.
8. **Water Selection:** Used to select the between Soda water and plain water for non-POS orders.
9. **ENTER Button:** Selecting the cup, ice and brand press enter to execute non-POS orders order.
10. **Error alert:** Displays error alerts that require attention.
11. **Automatic / Manual Mode:** Allows the operator to switch to Manual Mode operation for service events (if any portion of the cup dispense or conveyor systems are inoperable).

OPERATIONAL MODES

The ACSD can be toggled between two modes of operation: **Automatic** and **Manual** modes.

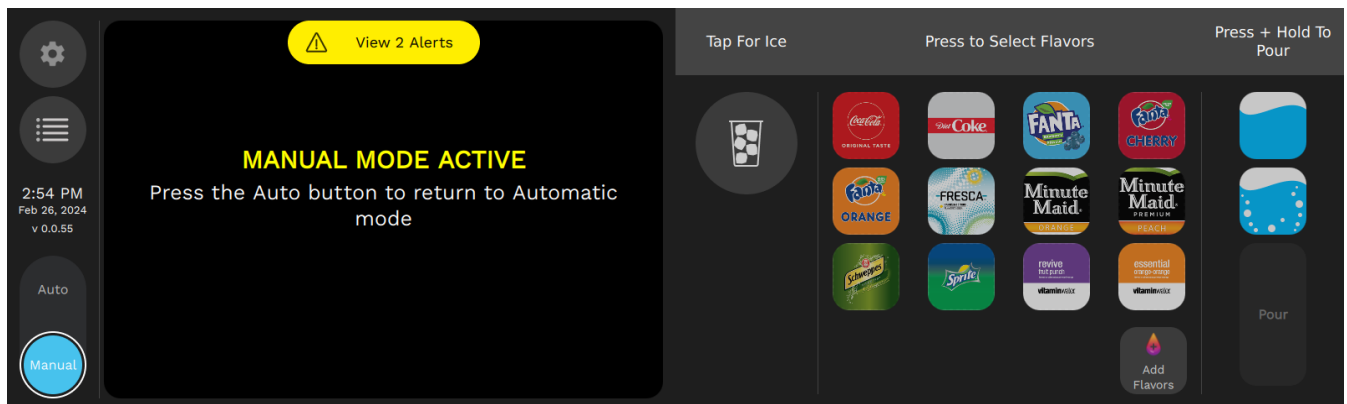
Automatic Mode

To be used for normal operation when all automated systems on the unit are fully functional.

- **POS Auto:** When the unit is POS-connected, the user does not need to touch the screen to process drink orders. The order will be processed from the POS, the system will dispense a cup into the conveyor, proceed to dispense ice, proceed to dispense beverage, and proceed to the staging positions where the drink can be lidded and removed.
- **Non- POS Auto:** If the POS connection is lost or if a non-POS drink order must be entered, the user can enter the requested drink from the options on the right screen while in Auto mode. The system will put this drink at the top of the order queue and proceed to dispense the cup, ice, and beverage just like a POS order.

Manual Mode

To be used for service events if the cup dispenses or conveyor systems are inoperable. Manual Mode operates like a traditional beverage dispenser with on-screen tap for ice dispense and push-and-hold pouring. The system will not dispense cups and the conveyor will not move, so the user must hold the cup for ice and beverage dispense. The conveyor should be removed from the unit during Manual Mode for easy access to the ice chute and beverage nozzle.



CLEANING AND MAINTENANCE INSTRUCTIONS

Failure to comply could result in serious injury, death, or damage to the equipment.



WARNING: Disconnect power to the unit before servicing. Follow all lock out/tag out procedures established by the user. Verify all power is off to the unit before performing any work.

Failure to comply could result in serious injury, death, or damage to the equipment.



CAUTION: Do not use metal scrapers, sharp objects or abrasives on the ice storage hopper, top cover or exterior surfaces as damage to the unit may result. Do not use solvents or other cleaning agents as they may attack the material resulting in damage to the unit.

Soap solution – Use a mixture of mild detergent and warm [100° F(37.8°C)] potable water.

Sanitizing Solution – Dissolve a chlorine based cleaner/sanitizer in warm [80 – 100° F(26.7-37.8°C)] potable water as per the manufacturer's direction to ensure 100 ppm of chlorine. The type and concentration of sanitizing agent must comply with 40CFR 180.940.

EQUIPMENT REQUIRED

- 5Gal Containers
- Mild Detergent
- Spray Bottle
- Microfiber Towels
- Nylon Bristle Brush
- Sanitizer

DAILY CLEANING AND MAINTENANCE

For proper operation of the unit, it must be inspected and cleaned daily.

DAILY INSPECTION

1. Check the CO₂ and water supply valves.
2. Visually check the beverage/syrup lines for leaks. If leaks are noted, call a service technician.
3. Check the temperature, smell, and taste of the product.
4. Check the carbonation of the drinks.
5. Check the level of the CO₂ supply in the backroom.
6. Check the dates on all the BIBs for expiration.
7. Remove foreign material from vending area drip tray to prevent drain blockage.
8. Clean vending area, Check for proper water drainage from the drip tray.


Checking the CO₂ Supply

Make sure the bulk CO₂ cylinder regulator gage indicator is not in the shaded (“change CO₂ cylinder”) portion of the dial. If the gage indicator is in the shaded area, the cylinder is almost empty and must be replaced.

Checking for CO₂ and Water Leaks



Check the unit for co₂ and water leaks. If any are found, call a qualified service technician to repair them, as needed.





DAILY CLEANING PREPARATION


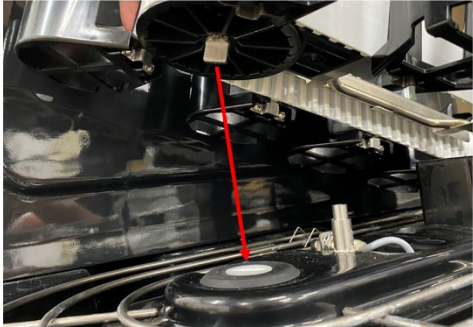

Step	Action	Figure
1.	Prepare soap solution in a clean container.	
2.	Prepare sanitizer solution in a clean container minimum 2Gal and fill up a clean spray bottle.	

DAILY CLEANING PROCEDURE




Perform the Splash Zone cleaning and Nozzle cleaning procedures in the following sections.

Step	Action	Figure
1.	Loosen the two thumbscrews on the conveyor cover and carefully raise it off the drip tray.	
2.	Remove the carousel assembly by lifting it upwards. Note: Avoid carrying the carousel by cup holder.	

<p>3.</p>	<p>Remove drain guard and grill from the drip tray.</p>	 
<p>4.</p>	<p>Clean the carousel assembly using soap solution. Note: Do not place in dishwasher</p>	
<p>5.</p>	<p>Wipe stains of the grill and the drain guard using soap solution</p>	
<p>6.</p>	<p>Wipe conveyor cover with soap solution using a clean cloth.</p>	
<p>7.</p>	<p>Clean the carousel assembly, grill and drain guard with plain water and wipe down any soap residue using a cloth</p>	
<p>8.</p>	<p>Spray sanitizer solution onto the carousel assembly and let air dry.</p>	
<p>9.</p>	<p>Ensure the water deflector is installed; this will help prevent motor failures. Note: Order replacement if deflector is missing.</p>	

10.	Pour ½ gallon of soap solution into the drip tray drain.	
11.	Using the soap solution and clean cloth wipe the drip-tray, and splash panel.	
12.	Pour 1 gallon of warm water into the drip-tray drain.	
13.	Wipe down the drip tray and splash panel with a clean cloth to remove any soapy residue	
14.	Spray the sanitizing solution all around drip tray and splash panels. Let air dry.	
15.	Perform the Nozzle cleaning and sanitizing in pg. 20.	
16.	<p>Reinstall the drain guard and grill. Align the notches in the drip-tray.</p> <p>Note: Cup positioning bracket must be on back side.</p>	
17.	Align the drive shaft to motor coupler on the left side and reinstall the carousel.	
18.	Reinstall the carousel cover and tighten the two thumb screws to secure in place. Ensure the cover is properly oriented per the side indication marked inside.	
19.	Daily cleaning procedure is now complete	

NOZZLE CLEANING AND SANITIZING

1.	Prepare sanitizer solution in a clean container and fill up a clean spray bottle	
2.	Remove outer nozzle housing by rotating it in the clockwise position.	
3.	Remove the diffuser by pulling it vertically downward.	
4.	Immerse the nozzle and diffuser into the sanitizing solution, allow soak if needed.	
5.	<p>Clean the nozzle and diffuser using valve brush in the sanitizer solution and soak them back again in the sanitizer solution for a minimum of 2 minutes.</p> <p>Allow them to Air dry for 5 minutes.</p> <p>Note: Do not use a wire brush.</p>	

<p>6.</p>	<p>Spray the sanitizing solution upwards into the underside nozzle housing ensuring that all surfaces are saturated, Clean the region using the valve brush.</p> <p>Note: Do not use a wire brush</p>	
<p>7.</p>	<p>Spray the sanitizer solution to the underside of the nozzle again. Allow valves to air dry for 5 minutes</p>	
<p>8.</p>	<p>Wash Hands or use new gloves and reinstall the diffuser by pushing it upward and aligning the diffuser tabs in place</p>	
<p>9.</p>	<p>Reinstall the outer housing of the unit by rotating it right. Tabs must be aligned and apply upward force while twisting to avoid cross-threading. Check if the nozzle is level after installation.</p>	

WEEKLY CLEANING AND MAINTENANCE

Perform the weekly cleaning procedures in the following sections.

- Daily cleaning
- Exterior Cleaning

EXTERIOR CLEANING

Step	Actions	Figure
1.	Enter "SERVICE MODE" then type in Passcode. '9876". Enter dashboard and "Screen Cleaning Lockout"	
2.	Cleaning Lockout: The "CLEANING LOCKOUT" screen allows the technician to turn off the touch portion of the screen to avoid inputs when cleaning the screen. The lockout will automatically time out after 30 seconds and revert to an active screen.	
3.	Clean and wipe the touch screen bezel. Gently wipe touch screens with a clean, moistened cloth if needed. Caution: Do not wipe displays with solvents or cleaning agents	
4.	Wipe dirt and dust from all exterior surfaces with All-purpose cleaner solution and wipe dry with a soft, sanitized cloth. wipe the cup dropper door, backsplash, side wall, and exterior panels. Caution: Do not wipe displays with solvents or cleaning agents	

MONTHLY CLEANING AND MAINTENANCE

Perform the monthly cleaning procedures in the following sections.



- Splash Zone cleaning.
- Exterior Cleaning
- Syrup Line Cleaning and Sanitizing
- Ice chute and Hopper Cleaning and Sanitizing

SYRUP LINE CLEANING & SANITIZING


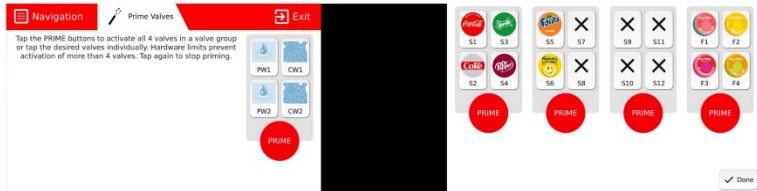


CAUTION:

Only trained and qualified persons should perform these cleaning and sanitizing procedures. To sanitize the tubing and BIB connectors, perform the procedure Below.

Step	Actions	Figure
1.	Prepare soap solution in a clean container.	
2.	Remove the BIB connectors from the BIB's (Bag-in-Box syrup).	
3.	<p>Submerge all disconnects in the soap solution and then clean them using a nylon bristle brush. Rinse with potable water.</p> <p>Note: Do not use a wire brush.</p>	

<p>4.</p>	<p>Prepare soap solution in a clean bucket.</p>	
<p>5.</p>	<p>Attach sanitizing adapters to each BIB connector. If these adapters are not available, Cut the Valve fitting from empty BIB bags and attach to the BIB disconnects. These fittings open the BIB disconnects so the solution can be drawn through the disconnect.</p>	
<p>6.</p>	<p>Follow Valve purge procedure to get syrup valve purging menu.</p>	
<p>7.</p>	<p>Submerge all the BIB disconnects into the soap solution and Flush through every product line until syrup is no longer dispensed. (Dispense a minimum of 32Oz)</p> <p>Repeat the on all product lines by selecting each brand using toggle flow on/off in the selection screen, up to 4 at one time.</p>	
<p>8.</p>	<p>Prepare a clean tank with warm potable water.</p>	
<p>9.</p>	<p>Submerge all the BIB disconnects into the warm water and Flush through every product line until soap solution is no longer dispensed. (Dispense a minimum of 32Oz)</p>	

	Repeat this on all product line by selecting each brand using toggle flow on/off in the selection screen, up to 4 at one time.	
10.	Prepare sanitizer solution, fill up a clean container, Bucket, and a spray bottle.	
11.	Submerge all the BIB disconnects into the sanitizer solution for 1 minute.	
12.	<p>Flush through every product line until clean water is no longer dispensed. (Dispense a minimum of 32Oz)</p> <p>Repeat the on all product line by selecting each brand using toggle flow on/off in the selection screen, up to 4 at one time.</p>	
13.	Allow sanitizer solution to remain in product lines for ten (10) minutes.	
14.	Follow Nozzle cleaning and sanitizing instructions. See pg. 20	
15.	Remove the sanitizing adapters from the BIB connectors.	
16.	Reconnect the BIB connectors to Syrup BIB's	
17.	Operate the valves until all sanitizer solution has been flushed from the line.	





CLEANING AND SANITIZING THE ICE CHUTE AND HOPPER.




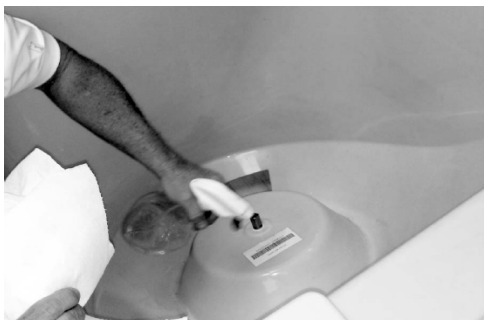
As part of the monthly cleaning procedures, clean the Ice chute and hopper by performing the procedure in Below



WARNING:

When pouring liquid into the hopper, do not exceed the rate of 1/2 gallon per minute. Pouring liquid into the hopper faster than the recommended rate could result in an overflow situation which may result in personal injury or damage to the equipment.

Steps	Action	Figure
1.	Remove the ice chute cover from the unit. NOTE: Collect ice in a separate tray to avoid the ice from falling into the drip-tray.	
2.	Clean the inside of the ice chute and ice chute cover with a soap solution using nylon brush. Note: Do not use a wire brush.	
3.	Using a spray bottle filled with sanitizing solution, spray the inside of the ice chute. Allow it to air dry.	
4.	Carefully insert ice chute cover and slide down to fully engage. NOTE: Make sure cover side latches mate flush with ice chute base before sliding down.	

<p>5.</p>	<p>Remove the agitator assembly by unscrewing the thumbscrew and lifting the agitator assembly out of the hopper as shown.</p>	
<p>6.</p>	<p>Using a nylon bristle brush or sponge, clean the interior of the hopper, top cover and agitator assembly with soap solution. Thoroughly rinse the hopper, cover and agitator surfaces with clean potable water.</p>	
<p>7.</p>	<p>Reassemble agitator assembly. Take special care to ensure that the thumbscrew is tight.</p>	
<p>8.</p>	<p>Using a spray bottle filled with sanitizing solution, spray the entire interior and the agitator assembly. Allow them to air dry.</p>	

QUARTERLY CLEANING AND MAINTENANCE


Perform the daily, weekly, and monthly cleaning procedures in addition to the quarterly cleaning procedures in the following sections.

The quarterly procedures are:

- Splash Zone cleaning.
- Exterior Cleaning
- Syrup Line Cleaning and Sanitizing
- Ice chute and Hopper Cleaning and Sanitizing
- Cleaning and Sanitizing the Cold Plate
- Cleaning the Ice Loader.

CLEANING AND SANITIZING THE COLD PLATE



As part of the Quarterly cleaning procedures, clean the cold plate by performing the procedure in Below





Steps	Action	Figure
1.	Switch off and remove power to the unit.	
2.	Open the unit Display door.	
3.	Remove the splash panel and the cold plate covers to expose the bottom of the cold plate.	
4.	Locate and remove any debris from the drain trough. Check that the cold plate drain holes are not plugged.	
5.	Pour a small amount of warm soapy water through the upper cold plate openings in the hopper.	
6.	Using a clean, soft cloth, wash down the surfaces of the cold plate from the top and bottom with warm soapy water.	
7.	For manual ice units, wipe down the hopper cover with warm soapy water.	

8.	Rinse the cold plate with warm potable water. For manual ice units, also rinse the hopper cover with warm potable water.
9.	Using a spray bottle filled with sanitizing solution, spray the upper and lower cold plate access areas and let the unit air dry.
10.	Reinstall and position the access cover on the bottom of the cold plate.
11.	Reinstall the splash panel and close the Display Door.
12.	Rinse the cold plate surface by pouring any leftover sanitizing solution through the hopper opening.

CLEANING THE ICE LOADER

As part of the Quarterly cleaning procedures, clean the Ice Loader by performing the procedure below:

Step	Action	Figure
1.	Fill soap solution into a clean spray bottle.	
2.	Remove the Ice Loader from the unit by sliding it up from the attachment bracket and place it on a table, (no tools required). Note: Do not use in the dishwasher.	
3.	Fully open the Ice Loader Lid and Spray all inside surfaces with the soap solution.	

<p>4.</p>	<p>Clean all inside surfaces using a nylon brush. Note: Do not use a wire brush</p>	
<p>5.</p>	<p>Close the lid and Spray all outside surfaces with the soap solution.</p>	
<p>6.</p>	<p>Rotate the Ice Loader and spray all bottom surfaces.</p>	
<p>7.</p>	<p>Clean all outside surfaces using a nylon brush. Make sure to clean inside all the grooves and ribs. Note: Do not use a wire brush</p>	

<p>8.</p>	<p>Rinse all surfaces with potable water and dry with a clean towel.</p>	
<p>9.</p>	<p>Using the spray bottle filled with sanitizer solution, spray all the inside and outside surfaces.</p>	
<p>10.</p>	<p>Install the ice loader back onto the unit and allow it to air dry.</p>	

ANNUAL INSPECTION

Inspect and clean the water pump and check valve. This must be done by a qualified service technician. Also, have the CO₂ gas check valve inspected and cleaned by a qualified service technician. Remove the unit's splash and cold plate cover to clean and sanitize the cold plate surface. (See the cleaning of the cold plate section shown later in this manual).

WATER PUMP MAINTENANCE

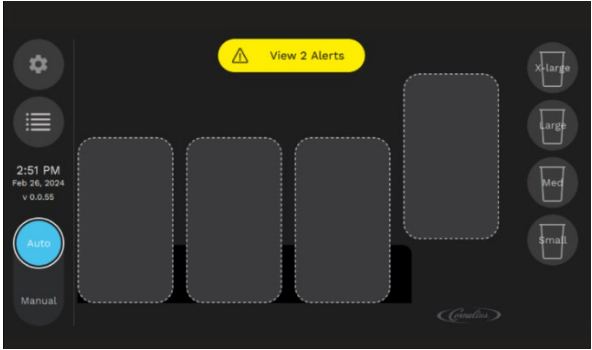
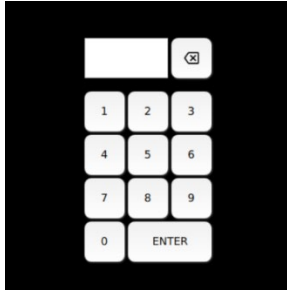
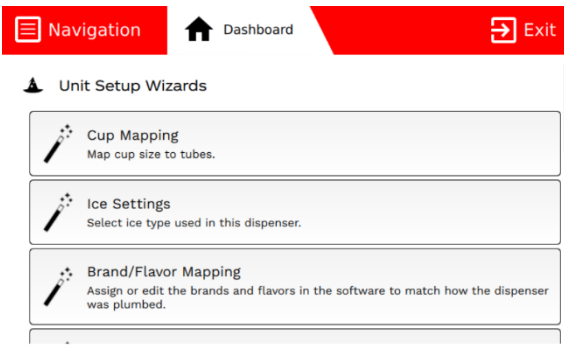
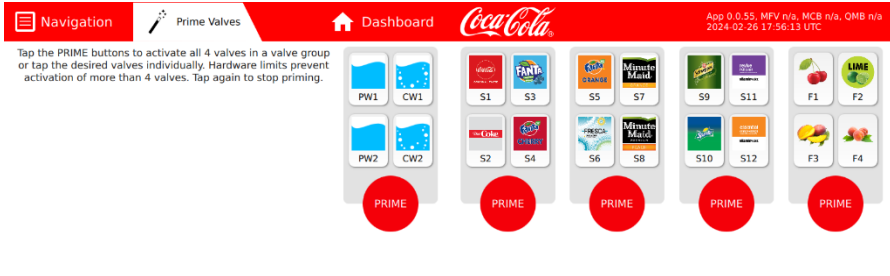
The water pump water strainer screen and the liquid dual check valve must be inspected and cleaned at least once a year under normal circumstances and after any water system disruption (plumbing work, etc.). call a qualified service technician to inspect and clean the strainer screen and the liquid dual check valve.

CLEANING THE CO₂ GAS CHECK VALVE

The CO₂ gas check valve, located on the carbonated water tank, must be inspected and serviced at least once a year under normal conditions and after any CO₂ system servicing disruption. Call a qualified service technician to inspect and clean the CO₂ gas check valve.

VALVE PRIME

Follow the procedure to purge water and syrup valve.

Step	Actions	Figure
1.	Select the Settings in the top left top corner shown.	
2.	Enter the pass code then select enter	
3.	Scroll down under "Unit Set Up Wizards" and select "Prime Valves".	
4.	The prime valves wizard allows any valve in use to be primed by holding down the red button marked "PRIME".	
5.	While in this mode, press and hold "PRIME" under the PW and CW icons, as well as all syrup brand icons in use until all air is purged from the tubing. In this mode the valve will remain open as long as the "PRIME" button is pressed. All air must be purged from the tubing before proceeding.	

REPLENISHING CO₂ SUPPLY (AS REQUIRED)

NOTE: When indicator on the 1800-psi gage is in the shaded (“change CO₂ cylinder”) portion of the dial, CO₂ cylinder is almost empty and should be changed



DANGER: CO₂ displaces oxygen. Strict attention **MUST** be observed in the prevention of CO₂ gas leaks in the entire CO₂ and soft drink system. If a CO₂ gas leak is suspected, particularly in a small area, **IMMEDIATELY** ventilate the contaminated area before attempting to repair the leak. Personnel exposed to high concentrations of CO₂ gas experience tremors which are followed rapidly by loss of consciousness and **DEATH**.

1. Fully close (clockwise) the CO₂ cylinder valve.
2. Slowly loosen the CO₂ regulator assembly coupling nut allowing CO₂ pressure to escape, then remove the regulator assembly from the empty CO₂ cylinder.
3. Unfasten the safety chain and remove the empty CO₂ cylinder.



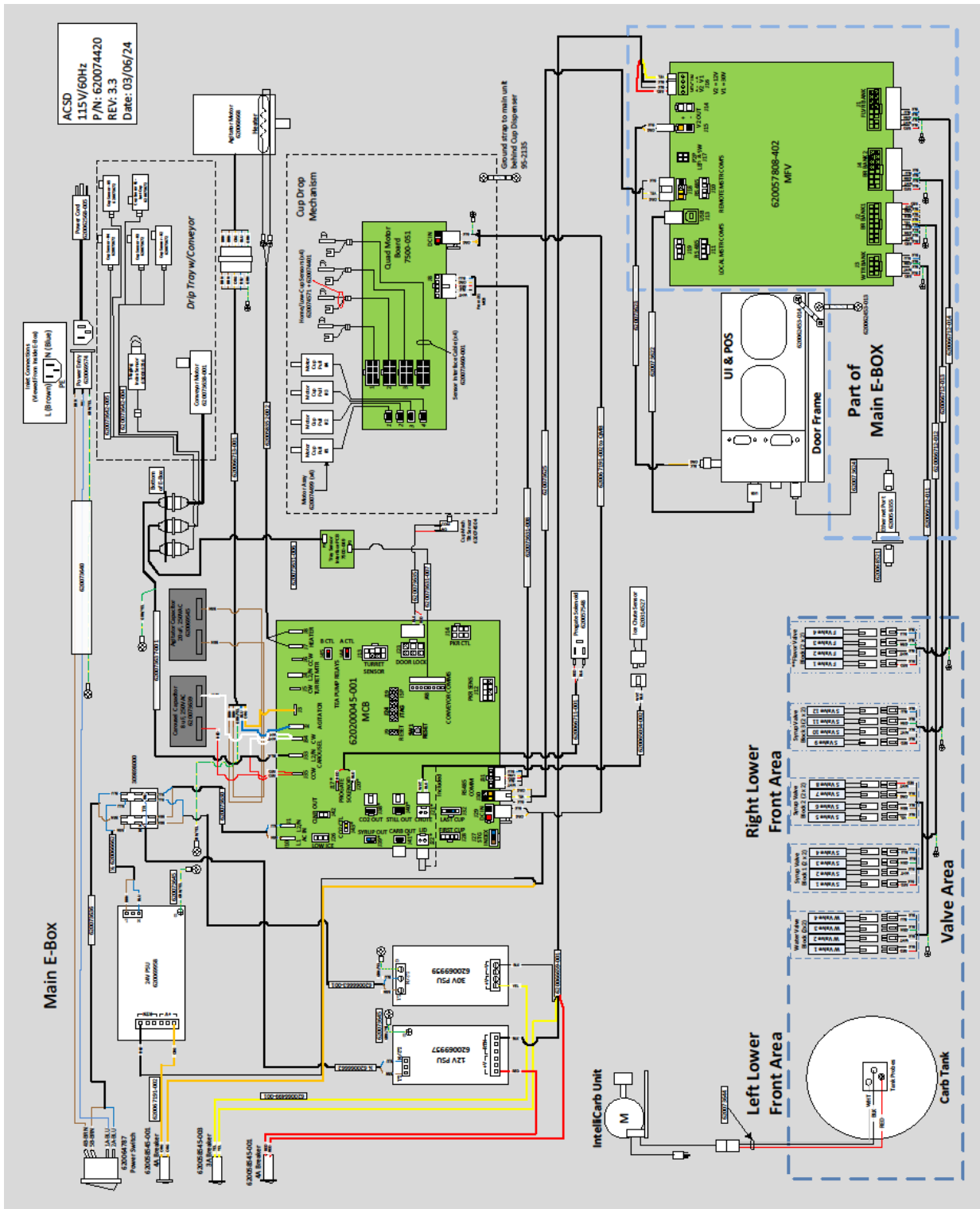
WARNING: To avoid personnel injury and/or property damage, always secure the CO₂ cylinder with a safety chain to prevent it from falling over. Should the valve become accidentally damaged or broken off, a CO₂ regulator can cause serious personnel injury or death.

4. Position the full CO₂ cylinder and secure with a safety chain.
5. Make sure gasket is in place inside the CO₂ regulator assembly coupling nut, then install the regulator assembly on the CO₂ cylinder.
6. Open (counterclockwise) the CO₂ cylinder valve slightly to allow the lines to slowly fill with gas, then open the valve fully to back-seat the valve (back-seating the valve prevents gas leakage around the valve shaft).
7. Check CO₂ connections for leaks. Tighten any loose connections.

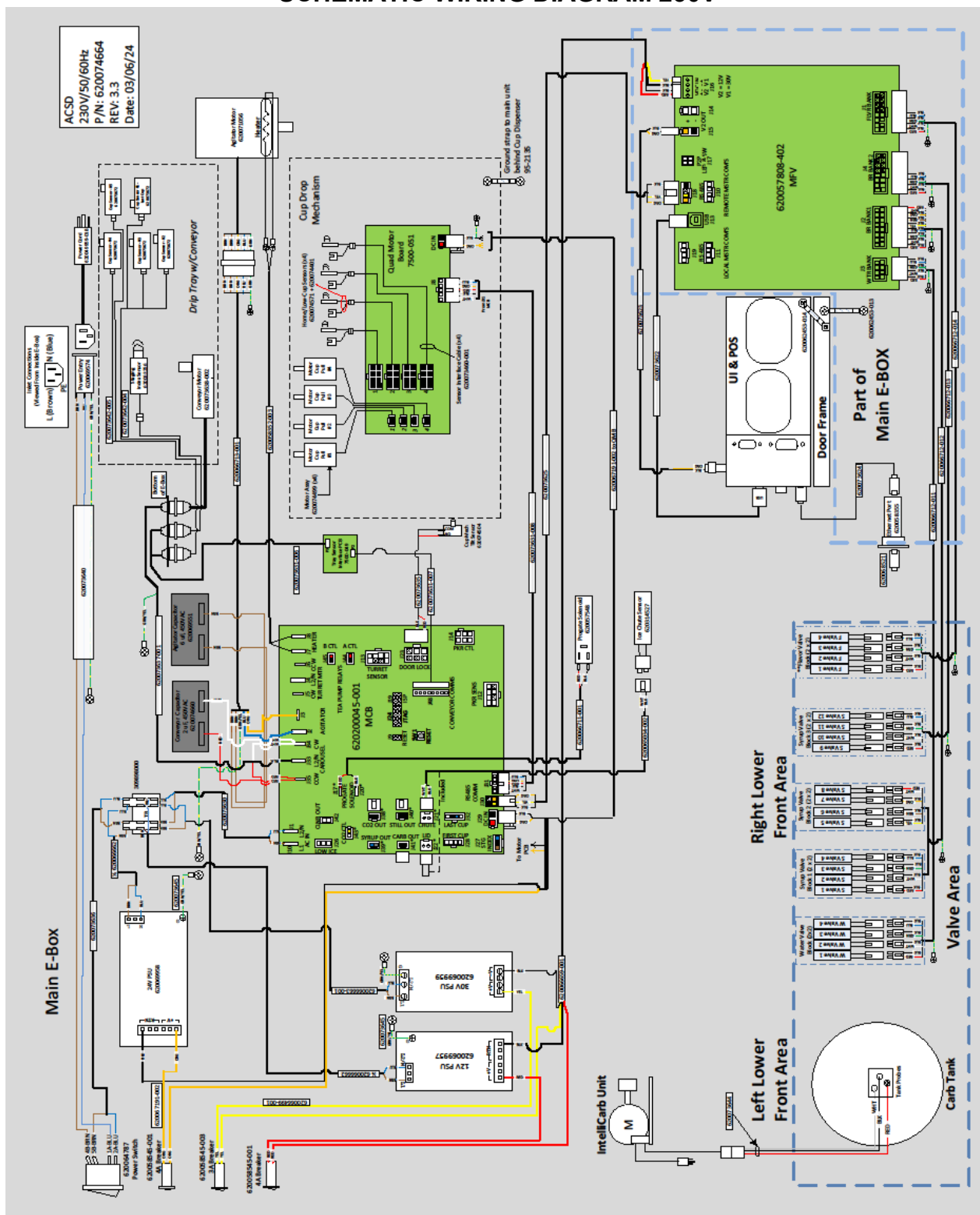


APPENDIX

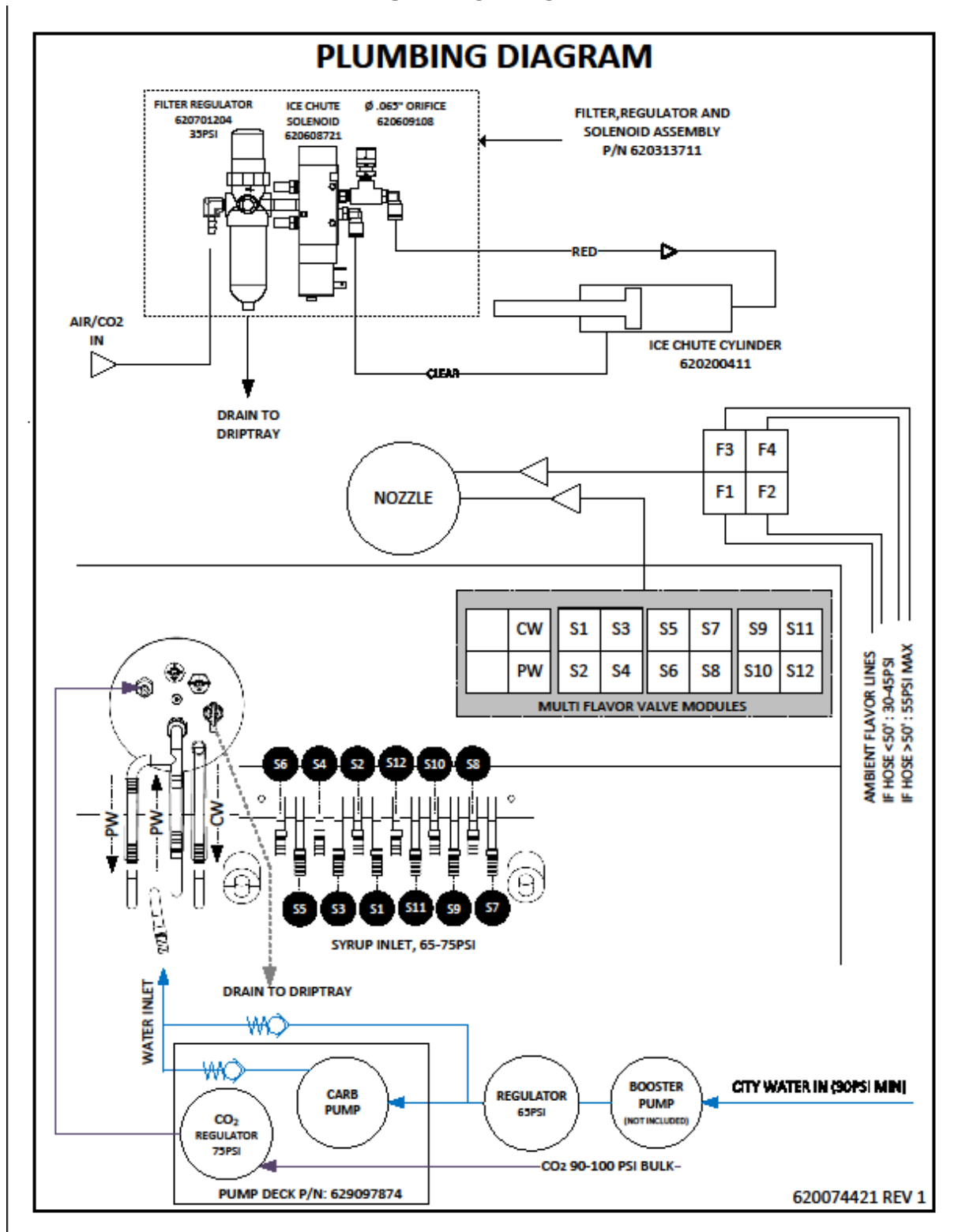
SCHEMATIC WIRING DIAGRAM 115V

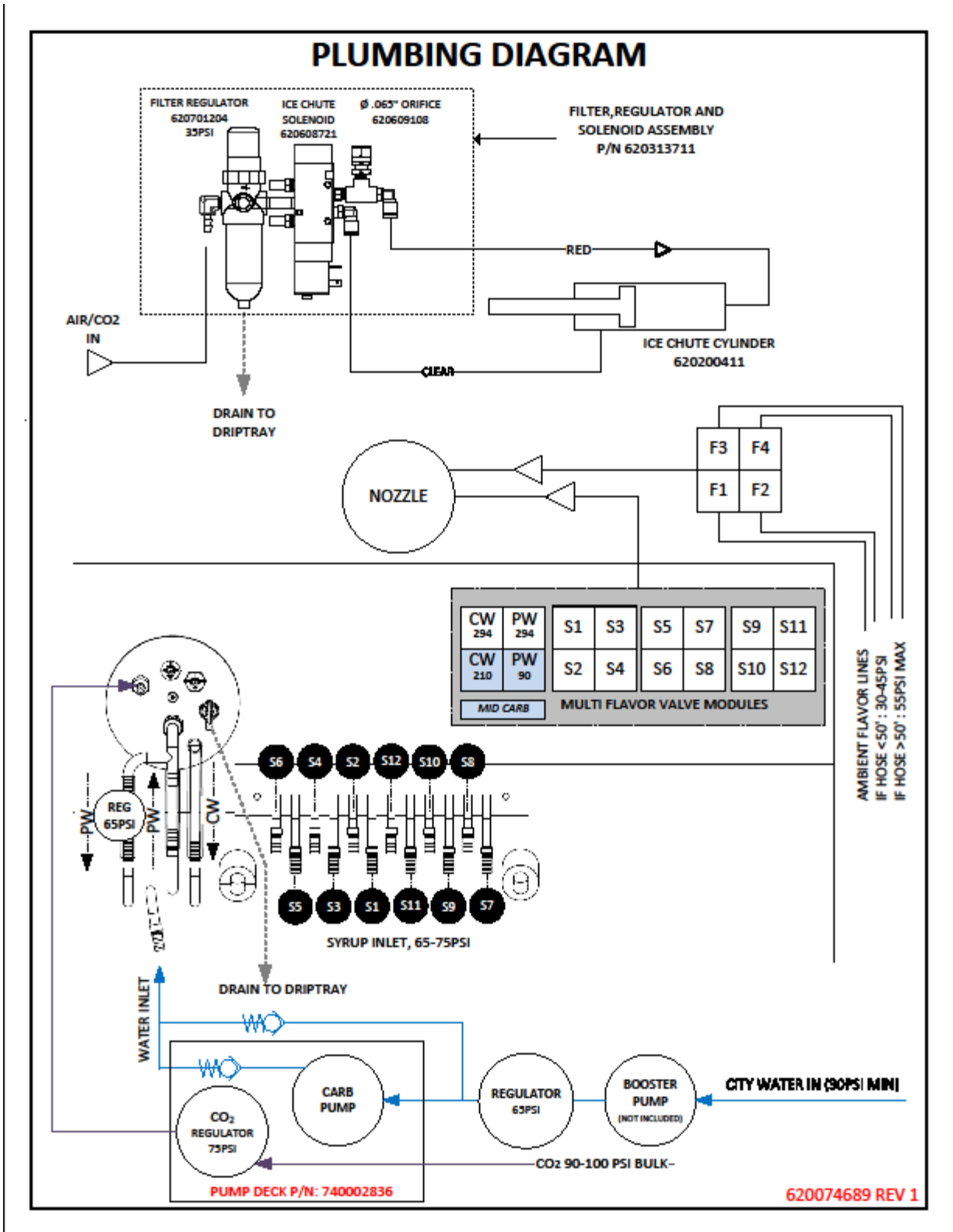


SCHEMATIC WIRING DIAGRAM 230V



PLUMBING DIAGRAM



PLUMBING DIAGRAM FOR MID CARB ONLY


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