



IDC PRO 255

Operator's Manual



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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.

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Contact Information:

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This document contains the original instructions for the unit described.

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Correct Disposal of this Product



RECYCLE

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.

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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 and/or national and local codes before operating this unit.

Recognition

<i>Recognize Safety Alerts</i>
 <i>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.</i>

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.**

IF THE SUPPLY CORD IS DAMAGED, IT MUST BE REPLACED BY THE MANUFACTURER, ITS SERVICE AGENT OR SIMILARLY QUALIFIED PERSONS IN ORDER TO AVOID A HAZARD.

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.

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

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**.

UNIT LOCATION

CAUTION:

The unit is not designed for a wash-down environment and **MUST NOT** be placed in an area where a water jet (pressure washer) could be used.

CAUTION:

This appliance is not intended for use by personnel (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless given supervision or instruction concerning use of the appliance by a person responsible for safety.

THE APPLIANCE HAS TO BE PLACED IN A HORIZONTAL POSITION.

SYSTEM OVERVIEW

The IDC Pro 255 unit solves your ice and beverage service needs in a sanitary, space saving, economical way. It is designed to be manually filled with ice from any remote ice making source. The unit distributes cubes (up to 1-1/4 inch in size), cubelets and compressed (not flaked) ice. Also, the unit includes beverage valves, a cold plate, an internal carbonator tank and an external pump for the carbonator.



CAUTION:

The unit cannot be used with crushed or flaked ice. Use of bagged ice which has frozen into large chunks can void warranty. The unit agitator is not designed to be an ice crusher. Use of large chunks of ice which “jam up” inside the hopper will cause failure of the agitator motor and damage to the hopper. If bagged ice is used, it must be carefully and completely broken into small, cube-sized pieces and left to “temper” or warm up for a minimum of 20 minutes in room temperature before loading into the unit hopper.

FEATURES

- Brand density - 10 brands on each side, 7 chilled, 3 ambient and up to 8 flavor shots (4 per side) for over 320 drink combinations
- Large HD promotional display
- 255 lb. capacity ice cube hopper
- Internal cold carbonation with remote pump
- Total carb/mid-carb flexibility on each brand
- Dispenses cubed or chewable soft ice
- UI Touch screen.

SPECIFICATIONS

Table 1.

Model	IDC Pro 255
Maximum Number of Valves available	36 Total; 20 brands, 8 flavors & 8 water
Built-in Cold Plate	Yes
Voltage	120 V 60 Hz, single phase; 8.5A. of total unit draw 220 -240V 50 - 60Hz, single phase; 5.5A of total unit draw
Height	39-3/16 in. (.955 m) to top of Adapter lid
Depth	32-3/8 in. (0.823 m)
Width	30 in. (0.762 m)
Screen Dimensions	32 in. Diagonally
CO ₂ Operating Pressure	75 psig (5.17 bar) maximum at carbonator pump
Water Pressure	50-60 psi (345-414 Kpa) at pump
Water Volume	Minimum flow rate, 125 gal/hr. (0.473 cubic meters/hr.)
Shipping Weight	545 lb. (247.2 kg)
Counter Weight	440 lb. (199.6 kg)
Ice Storage Weight	255 lbs. (115.7 kg)
Cup Clearance	9-3/4 in. (24.77 cm)
Ambient Operating Temperature	65 to 95° F (18.3 to 35° C)

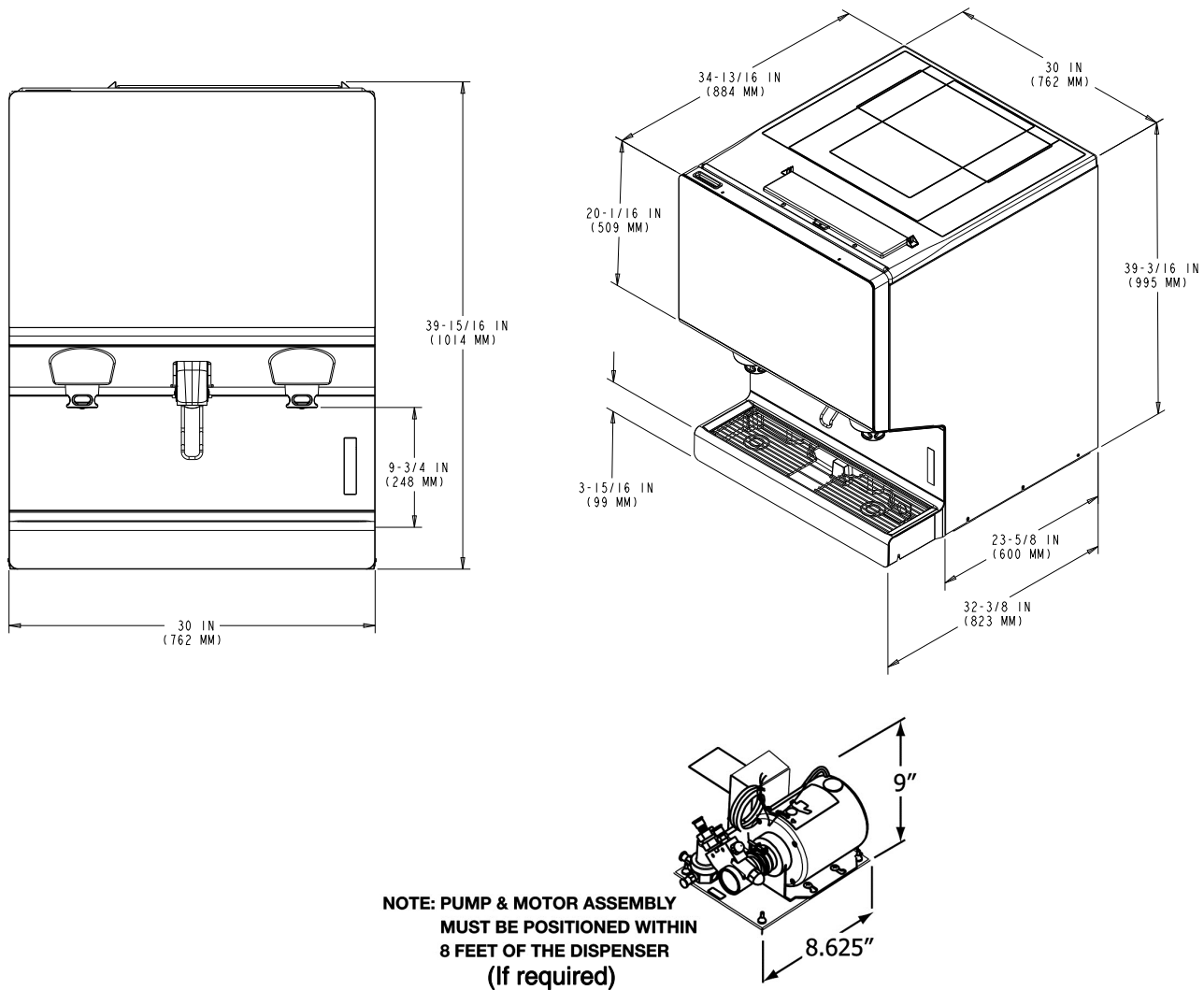


Figure 1.

OPERATION

**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.

STARTING THE UNIT

Fill the hopper with ice or allow the ice maker to fill. Dispense several large cups of ice (approximately 20 to 30 seconds total dispensing time) to allow ice to fill the cold plate cabinet. Add ice to the hopper as necessary to refill, then replace the lid for manual ice units. Allow 10 to 15 minutes for the cold plate to cool down. Repeat this procedure whenever the unit has run out of ice. Contact your local syrup distributor for complete information on the beverage syrups.

**CAUTION:**

Do not allow the unit to be stored or operated in conditions below 32° F (0° C). This could cause damage to the unit.

In normal operation, pushing the ice dispenser mechanism causes ice to flow from the ice chute. Ice flow continues until the dispenser mechanism is released. Dispensing from any valve provides a beverage of the appropriate flavor.

**WARNING:**

Use caution to avoid spilling ice when filling the unit. Clean up immediately any spilled ice from filling or operating the unit. To prevent contamination of ice, the lid must be installed on the unit at all times. Failure to clean up spills could result in serious injury or death.

If the unit fails to dispense ice or beverage, refer to the troubleshooting section in the Installation Manual part number 621058578INS.

Initial Power Up

The first time the unit is powered up, the power must be plugged into the proper wall outlet (120 V 60 Hz, single phase). The unit must be connected to a protected 15A. outlet.

ADA KEYPAD OPERATION

The ADA keypad is located on the lower right side of the splash panel. The ADA keypad, shown in Figure 2. illuminates when the ADA activation button is selected.

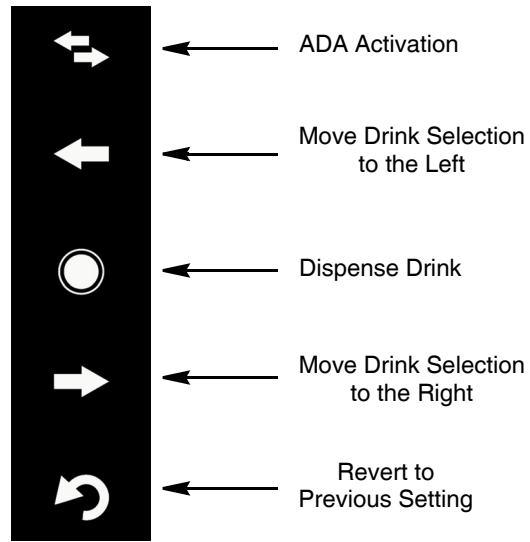


Figure 2.

CLEANING AND MAINTENANCE

**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, agitator disc 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) potable water.

Sanitizing Solution - Dissolve 1 packet [1 oz. (29.5 ml)] of KAY-5 into 2-1/2 gallons (9.5 l) of warm 80 - 100° F (26.7 - 37.8° C) potable water to ensure 100 ppm of chlorine.

DAILY CLEANING AND MAINTENANCE

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

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

To perform a daily cleaning of the unit, perform the procedure in Table 2.

Table 2.

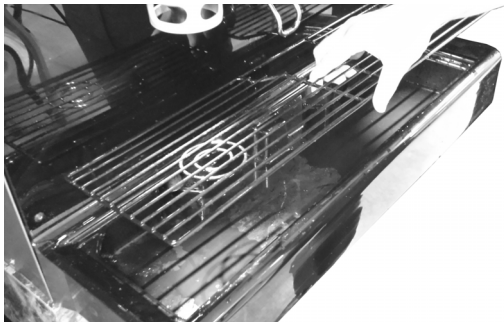
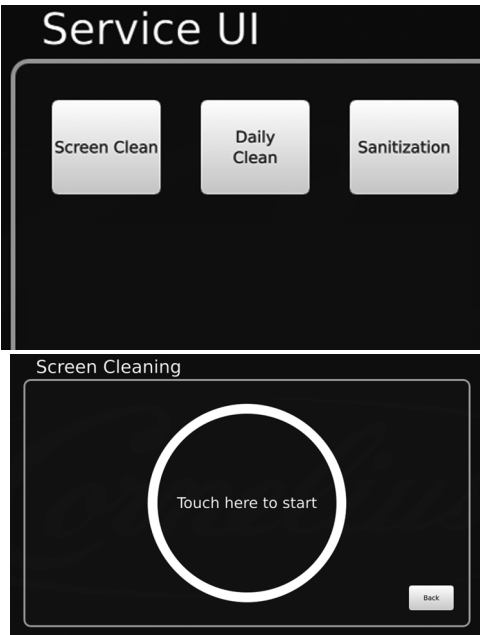
Step	Action	
1	Remove the cup rest from the drip tray and clean it with warm soapy water, rinse it with clean water and allow it to air dry.	
2	Display the keypad screen by tapping each corner of the video screen starting in the upper right corner and continuing to tap each corner in a counterclockwise direction, in the form of a "C". NOTE: As each corner is touched, a small confirmation rectangle momentarily appears to confirm the touch	
3	Select the Screen Clean button to display the Screen Cleaning Screen, as shown. Touch the screen to start the countdown for cleaning. This function disables the display so that drinks are not dispensed during the screen cleaning process.	
4	Wipe down the display screen while the countdown timer is disabling the display.	
5	When the display screen is clean, touch the Back button in the lower right corner of the screen.	
6	Wipe down the rest of the exterior of the unit with warm soapy water, rinse it with clean water and allow it to air dry.	

Table 2.

Step	Action	
7	Remove the nozzles and diffusers and wash them in warm soapy water. Clean with nylon bristle brush provided, if required. Rinse the nozzles and diffusers in clean water and allow them to air dry.	 
8	Clean the interior of the ice chute using the brush provided with the unit. Use warm soapy water, rinse with clear water and allow to air dry.	

Table 2.

Step	Action	
9	Spray the ice chute inside and out with sanitizer and allow it to air dry.	
10	Pour warm soapy water down the drain to keep it clean and flowing properly.	
11	Spray the nozzles and diffusers inside and outside with approved sanitizing solution, reinstall them on the valves and allow them to air dry.	
12	Reinstall the cup rest into the drip tray.	
13	Pour all the remaining sanitizer solution down the drain to help keep the drain clear.	

WEEKLY CLEANING AND MAINTENANCE

Perform the daily cleaning procedure in addition to the weekly cleaning procedures in the following sections.

The weekly cleaning procedures are:

- Daily Cleaning and Maintenance
- Cleaning the Splash Panels and Drip Tray Cover

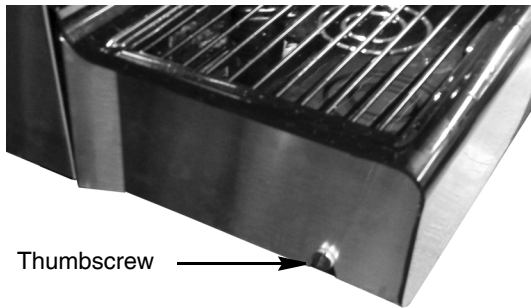
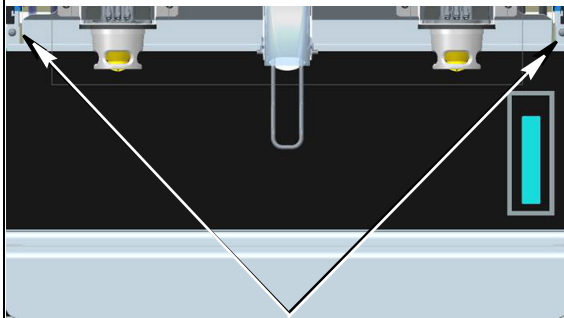
Cleaning the Splash Panels and the Drip Tray Cover

To clean the splash panels and the drip tray cover, perform the procedure in Table 3.

Table 3.

Step	Action	
1	Remove the cup holder from the unit.	

Table 3.

Step	Action	
2	Loosen the thumbscrews on both sides of the drip tray cover.	 Thumbscrew
3	Remove the drip tray cover from the unit.	
4	Wipe down the cup holder and drip tray cover with warm soapy water, rinse them with clear water and allow them to air dry.	
5	Open the display panel and remove the thumb-screw holding the upper splash panel and pull the panel forward and down to remove it.	
6	Remove the two screws from the top two corners of the splash panel, slide the panel upward to disengage the two bottom tabs and pull the splash panel forward to remove it.	 Mounting Screws
7	Wipe down the splash panels with warm soapy water, rinse them with clear water and allow them to air dry.	
8	Replace the splash panels, the drip tray cover and the cup holder onto the unit.	

MONTHLY CLEANING AND MAINTENANCE

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

The monthly cleaning procedures are:

- Daily Cleaning and Maintenance

- Weekly Cleaning and Maintenance
- Syrup Line Cleaning and Sanitizing
- Cleaning the Hopper

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 in Table 4.

Table 4.

Step	Action
1	Remove all the quick disconnects from all the BIB containers.
2	Fill a suitable bucket with a soap solution.
3	Submerge all disconnects (gas and liquid) in the soap solution and then clean them using a nylon bristle brush. (Do not use a wire brush.) Rinse with clean, potable water.
4	Using a plastic pail, prepare approximately 5 gallons (18.93 l) of sanitizing solution.
5	Rinse the BIB disconnects in the sanitizing solution.
6	Sanitizing fittings must be attached to each BIB disconnect. If the fittings are not available, the fittings from empty BIB bags can be cut from the bags and used. These fittings open the disconnects so the sanitizing solution can be drawn through the disconnect.
7	Place all the BIB disconnects into the pail of sanitizing solution. Open the valves and allow them to flow until sanitizer is flowing from the valves. Allow the sanitizer to remain in the tubing lines for 15 minutes.
8	Remove all the nozzles and syrup diffusers and clean them in a mild soap solution, rinse them with clean water and reassemble the nozzles and syrup diffusers onto the valves.
9	Remove the sanitizing fittings from the BIB disconnects and connect the disconnects to the appropriate BIB container.
10	Open the valves and let sanitizer flow until all the sanitizer has been flushed from the system and only syrup is flowing.

To clean the hopper, perform the procedure in

Table 5.

Step	Action
1	Remove all the ice from the hopper. Clean and sanitize the hopper. See "Cleaning Interior Surfaces" section on page 28.
2	While cleaning the hopper, use the brush provided with the unit to clean the cold plate surface. To accomplish this, the brush needs to be extended through the opening in the bottom of the hopper.

Cleaning and Sanitizing the Hopper

As part of the monthly cleaning procedures, clean the hopper by performing the procedure in Table 6.



CAUTION:

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.

Table 6.

Step	Action	
1	Remove the top cover from the hopper or open the manual fill door on the ice maker (if equipped).	
2	Remove the agitator assembly by unscrewing the thumbscrew and lifting the agitator assembly out of the hopper.	
3	Using a cloth 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.	
4	Reassemble agitator assembly. Take special care to ensure that the thumbscrew is tight.	
5	Using a mechanical spray bottle filled with sanitizing solution, spray the entire interior and the agitator assembly. Allow them to air dry.	
6	Replace the hopper cover or close the manual fill door on the ice maker (if equipped).	

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:

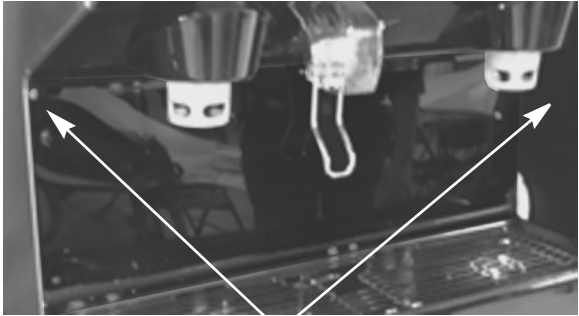
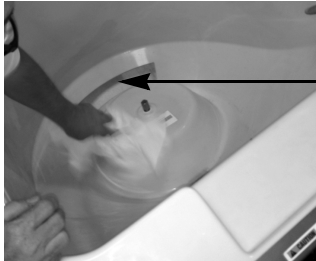
- Daily Cleaning and Maintenance

- Weekly Cleaning and Maintenance
- Monthly Cleaning and Maintenance
- Cleaning and Sanitizing the Cold Plate

Cleaning and Sanitizing the Cold Plate

To clean the cold plate, perform the procedure in Table 7.

Table 7.

Step	Action	
1	Remove power from the unit.	
2	Open the unit display.	
3	Remove the splash panel and the cold plate covers to expose the bottom of the cold plate.	 Mounting Screws
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.	 Cold Plate Access
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 mechanical 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 covers on the bottom of the cold plate.	
11	Reinstall the splash panel.	
12	Rinse the cold plate surface by pouring any left over sanitizing solution through the hopper opening.	

ANNUAL CLEANING AND MAINTENANCE

Perform all of the annual procedures below in addition to the daily, weekly, monthly and quarterly procedures.

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 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.

MAINTENANCE PROCEDURES

GENERAL



CAUTION:

Operators must not make any adjustments to the equipment without approval from a supervisor.

UNIT OPERATION



WARNING:

This unit must be grounded to avoid possible electrical shock to the operator. The unit power cord is equipped with a three pronged plug. If a three pronged (grounded) outlet is not available use an appropriate method to ground the unit.

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

To initially start up the unit for operation, perform the procedure in Table 8.

Table 8.

Step	Action
1	Connect electrical power to the unit.
2	Locate the switch on the junction box of the carbonator pump and turn it ON. The water pump will start and fill the carbonator tank with carbonated water. The water pump stops when the carbonator tank is full.
3	Check for water and CO ₂ leaks, and tighten any loose connections.
4	Dispense several drinks until the carbonator pump cycles on. The refill time for the carbonator should be about 5-7 seconds.
5	If the carbonator pump appears to be short-cycling (meaning a refill time of 1-2 seconds), call service.

UNIT SHUTDOWN/RESTART

The unit can only be shut down or restarted by a service technician. To shut down or restart the unit, perform the procedure in Table 9.

Table 9.

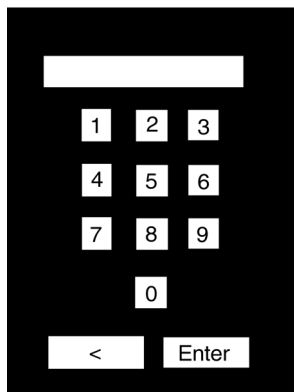
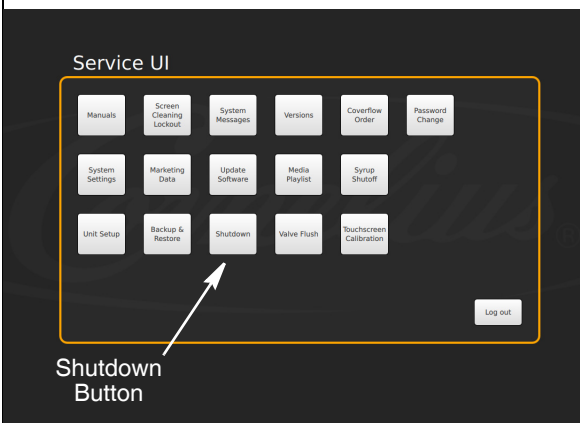
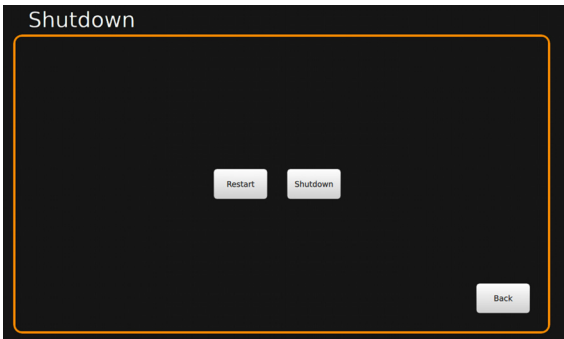
Step	Action	
1	Display the service screen by tapping each corner of the video screen starting in the upper right corner and continuing to each corner in a counter-clockwise direction, in the form of a "C". NOTE: As each corner is touched, a small confirmation rectangle momentarily appears to confirm the touch.	
2	Input the proper password for your access level (technician) and press Enter. The Service UI screen is displayed.	
3	Select the Shutdown button to display the Shutdown/Restart Screen, as shown.	

Table 9.

Step	Action	
4	Press the Shutdown button to start the shutdown process or press the Restart button to restart the unit.	

CHANGING TO A DIFFERENT BRAND OR FLAVOR

When replacing or changing the BIB containers, clean and sanitize the syrup system, as described in “Syrup Line Cleaning & Sanitizing” section on page 12.

Mapping Brands

To map the valves to the available brands, perform the procedure in Table 10.

Table 10.

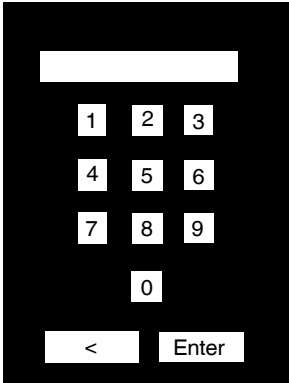
Step	Action	
1	Display the keypad screen by tapping each corner of the video screen starting in the upper right corner and continuing to tap each corner in a counterclockwise direction, in the form of a “C”. NOTE: As each corner is touched, a small confirmation rectangle momentarily appears to confirm the touch.	
2	Input the proper password for your access level (technician) and press Enter.	

Table 10.

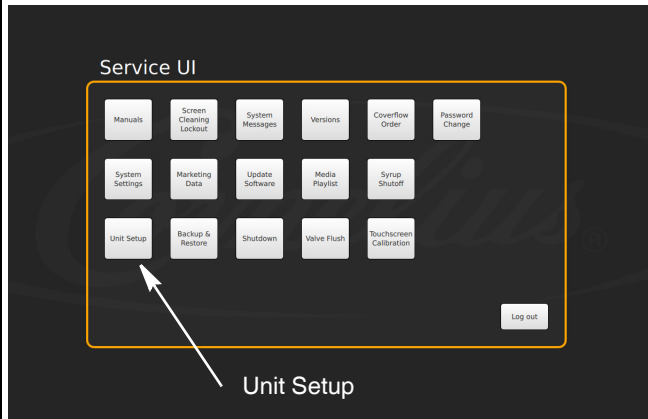
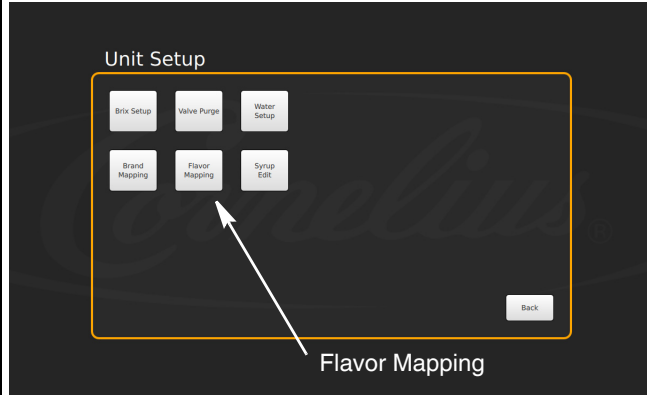
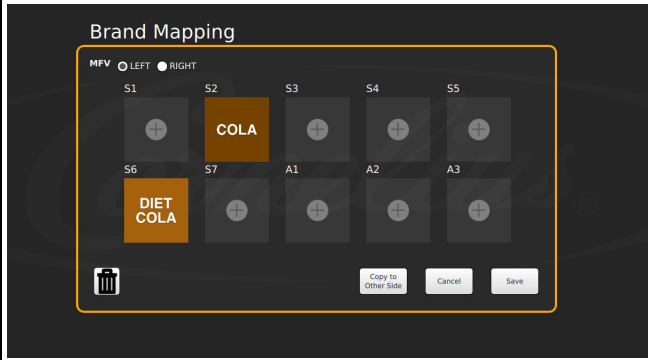
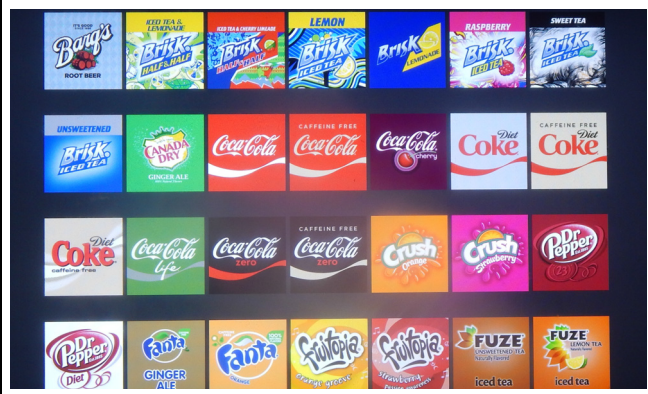
Step	Action	
3	The Service UI screen is displayed.	
4	Press the Unit Setup button to display the Unit Setup screen.	
5	Press the Brand Mapping button to open the Brand Mapping screen.	
6	Press the Brand or Flavor icon that is to be remapped.	
7	The Brand Selection screen opens and you can select the brand to be mapped to the valve location.	

Table 10.

Step	Action
8	Repeat Steps 4 & 5 for each location desired.
9	When all the flavors on the right, press the left button and repeat Steps 4 and 5 for the left side Or, if the setup will be identical on the LH and RH side, press the copy to other side button and confirm when prompted.
10	When all the flavors are mapped as desired, press the Save button to save the settings.

REPLENISHING THE CO₂ SUPPLY



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**.

When indicator on the 1800 psi gauge is in the shaded ("change CO₂ cylinder") portion of the dial, CO₂ cylinder is almost empty and should be changed.

To replenish the CO₂ supply, perform the procedure in Table 11.

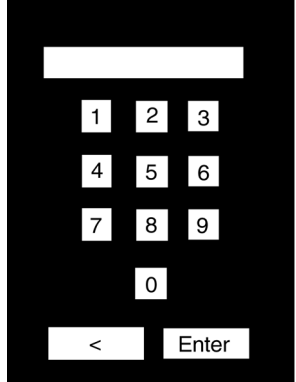
Table 11.

Step	Action
1	Fully close (clockwise) the CO ₂ bulk cylinder valve.
2	Slowly loosen the CO ₂ regulator assembly coupling nut, allowing CO ₂ pressure to escape.
3	Then remove the regulator assembly from the empty CO ₂ cylinder.
4	Unfasten the safety chain and remove the empty CO ₂ cylinder.
5	Position the full CO ₂ cylinder and secure the cylinder with the safety chain.
6	Make sure the gasket is seated properly inside the CO ₂ regulator assembly coupling nut, then install the regulator assembly on the CO ₂ cylinder.
7	Open (counterclockwise) the CO ₂ cylinder valve slightly to allow the lines to slowly fill with gas, then open the valve fully to back-seat the it (back-seating the valve prevents gas leakage around the valve shaft).
8	Check CO ₂ connections for leaks. Tighten any loose connections.

SERVICE MODE

The service mode is used for a wide variety of service and maintenance functions. To enter the service mode, perform the procedure in Table 12.

Table 12.

Step	Action	
1	Display the keypad screen by tapping each corner of the video screen starting in the upper right corner and continuing to tap each corner in a counterclockwise direction, in the form of a "C". NOTE: As each corner is touched, a small confirmation rectangle momentarily appears to confirm the touch.	
2	Input the proper password for your access level (operator, manager or technician) and press Enter. The Service UI screen is displayed, as shown in Figure 3., Figure 4. or , depending on your access level.	

NOTE: The password for each access level is different.

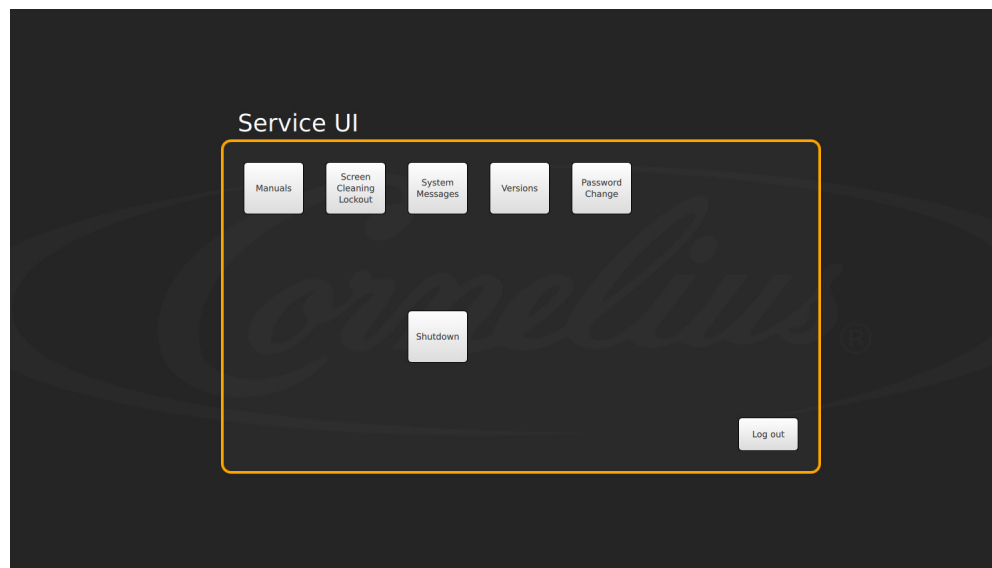


Figure 3.

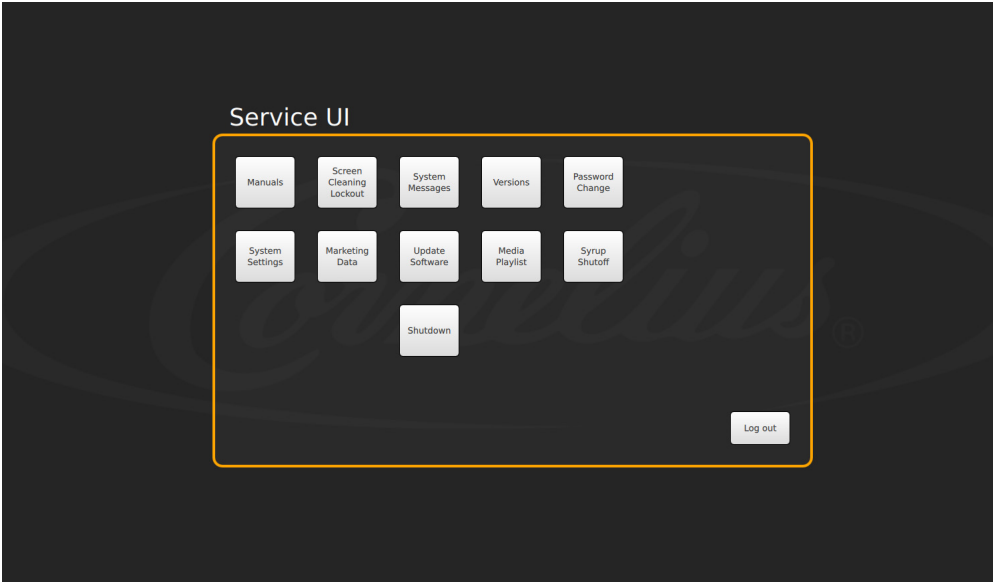


Figure 4.

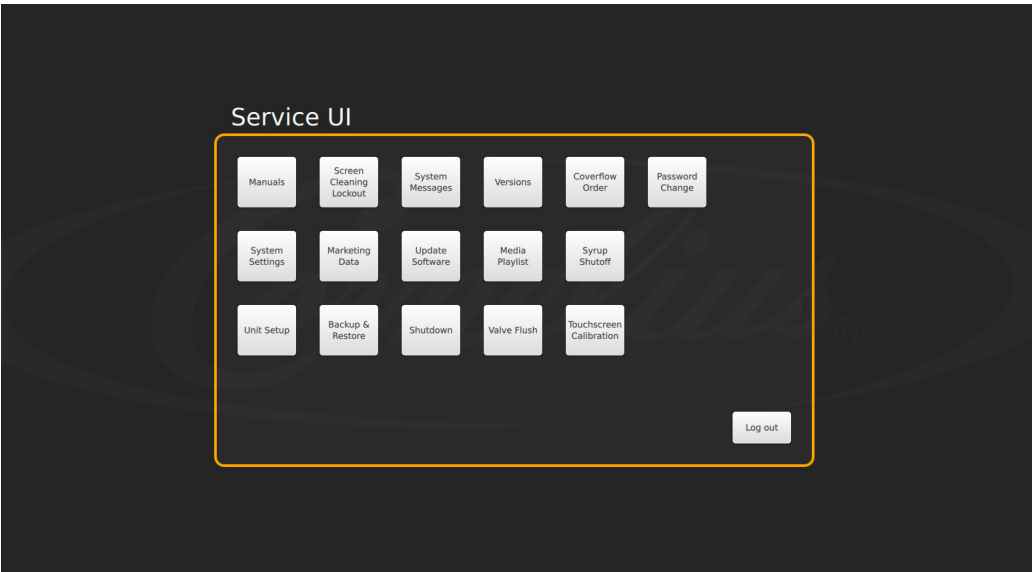


Figure 5.

Purging the Syrup Lines

The purge process is performed as part of the “Syrup Line Cleaning & Sanitizing” section on page 24. If a BIB container is replaced, the syrup lines need to be purged and sanitized. To purge the lines, perform the procedure in Table 13.

Table 13.

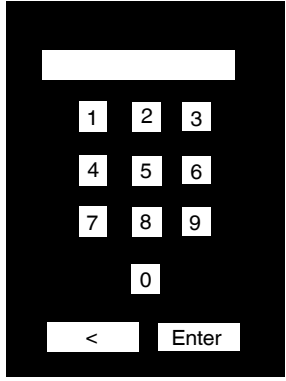
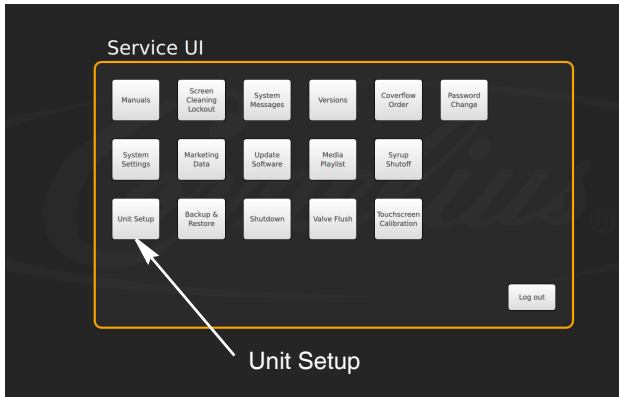
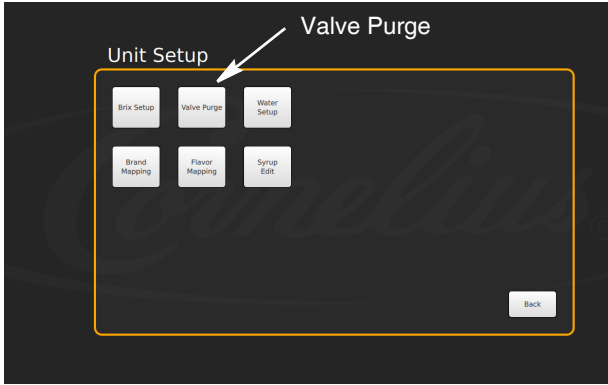
Step	Action	
1	Ensure that the water and CO ₂ are turned on. (initial setup only)	
2	Display the keypad screen by tapping each corner of the video screen starting in the upper right corner and continuing to tap each corner in a counterclockwise direction, in the form of a “C”. NOTE: As each corner is touched, a small confirmation rectangle momentarily appears to confirm the touch.	
3	Input the proper password for your access level (technician) and press Enter.	
4	The Service UI screen is displayed.	
5	Press the Unit Setup button.	

Table 13.

Step	Action	
6	The Unit Setup screen is displayed. Press the Valve Purge button.	
7	The Valve Purge screen is displayed. Select up to 4 syrup and 2 water at a time, per side, to purge.	
8	When the syrup flows and lines are purged, press the same again to turn off, or simply select the next valve needed and the first valve selected will stop pouring.	
9	Repeat Step 7 until all lines are purged. When doing carbonated water, make sure carbonator is purged.	
10	When all lines are purged, press the Back button to display the Service User Interface screen and select the Log Out button.	

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 in Table 14.

Table 14.

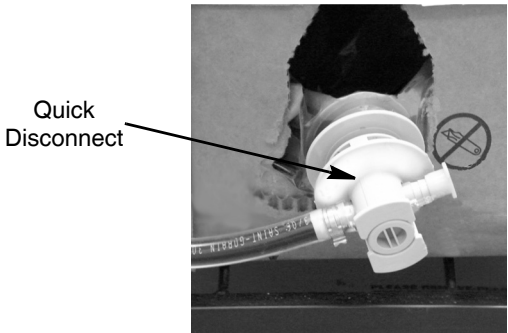
Step	Action	
1	Remove all the quick disconnects from all the BIB containers.	
2	Fill a suitable bucket with a soap solution.	

Table 14.

Step	Action	
3	Submerge all disconnects (gas and liquid) in the soap solution and then clean them using a nylon bristle brush. (Do not use a wire brush.) Rinse with clean, potable water.	
4	Using a plastic pail, prepare approximately 5 gallons (18.93 l) of sanitizing solution.	
5	Sanitizing fittings must be attached to each BIB disconnect. If the fittings are not available, the fittings from empty BIB bags can be cut from the bags and used. These fittings open the disconnects so the sanitizing solution can be drawn through the disconnect.	
6	Place all the BIB disconnects with the sanitizing fittings in place into the pail of sanitizing solution. Use the "Purging the Syrup Lines" section on page 23 to purge the lines. Allow the sanitizer to remain in the lines for 15 minutes.	
7	While the lines are soaking, remove the nozzles and syrup diffusers and clean them in a mild soap solution, rinse them with clean water.	
8	Use a mechanical sprayer filled with sanitizing solution to spray the nozzles and diffusers and allow them to air dry.	
9	Reassemble the nozzles and syrup diffusers and replace them on the valves.	
10	Remove the sanitizing fittings from the BIB disconnects and connect the disconnects to the appropriate BIB container.	
11	Use the "Purging the Syrup Lines" section on page 23 to purge the lines. Continue until all the sanitizer has been flushed from the system and only syrup is flowing.	

Adjusting the Water to Syrup Ratio (BRIX)

NOTE: During the BRIXing process, agitate the ice in the hopper occasionally to ensure that the cold plate is at the proper operating temperature.

Water and syrup MUST be cold before checking BRIX.

To BRIX the unit, perform the procedure in Table 15.

Table 15.

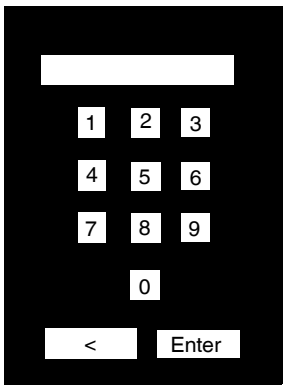
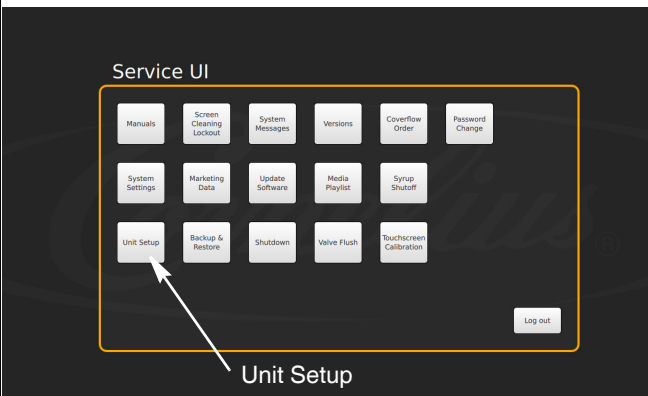
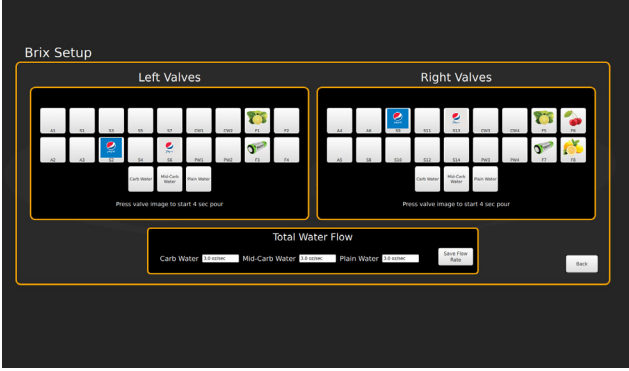
Step		Action
1	Display the keypad screen by tapping each corner of the video screen starting in the upper right corner and continuing to tap each corner in a counterclockwise direction, in the form of a "C". NOTE: As each corner is touched, a small confirmation rectangle momentarily appears to confirm the touch.	
2	Input the proper password for your access level (technician) and press Enter.	
3	Press the Unit Setup button.	
4	Select the Brix setup screen.	

Table 15.

Step	Action
5	All instructions and volumes below are based on the pour rate of 3oz/sec 
6	Place a graduated cylinder under the valve.
7	Select the CW1 button and press Pour to dispense 10.0 fl oz (300 ml).
8	If the flow rate is not correct, adjust the proper valve to the desired flow. Refer to Figure 6. for valve locations.
9	Turn the flow adjustment valve a 1/4 of a turn at a time and recheck the flow. To increase the flow, turn the knob clockwise.
10	Test the valve and adjust until a consistent ratio is delivered two consecutive times.
11	Select CW2 and press Pour to dispense 2.0 oz (60 ml.)
12	Perform Steps 8 through 10 for the CW2 valve.
13	Select PW1 and press Pour to dispense 7.0 oz (210 ml.).
14	Perform Steps 8 through 10 for the PW1 valve.
15	Select PW2 and press Pour to dispense 3.0 oz (90 ml.)
16	Perform Steps 8 through 10 for the PW2 valve.
17	Select CW3 and Pour to dispense 7.0 oz (210 ml.).
18	Perform Steps 8 through 10 for the CW3 valve.
19	Select CW4 and press Pour to dispense 3.0 oz (90 ml.)
20	Perform Steps 8 through 10 for the CW4 valve.
21	Select PW3 and press Pour to dispense 7.0 oz (210 ml.).
22	Perform Steps 8 through 10 for the PW3 valve.
23	Select PW4 and press Pour to dispense 3.0 oz (90 ml.)
24	Perform Steps 8 through 10 for the PW4 valve.
25	Place a graduated cylinder under the valve.
26	Select S1 and press Pour to dispense 2.0 oz (60 ml.).
27	If the rate is not correct, perform Steps 8 through 10 for the S1 valve.
28	Repeat Steps 26 and 27 for S2 through S7 and A1 through A3.
29	Repeat Steps 26 through 27 for S8 through S14 and A4 through A6.
30	When the flow rate process is complete, select the Back button to return to the Unit Setup screen.
31	Press the Back button on the Unit Setup screen to return to the Service UI screen.
32	Press the Log Out button to return to normal operation.

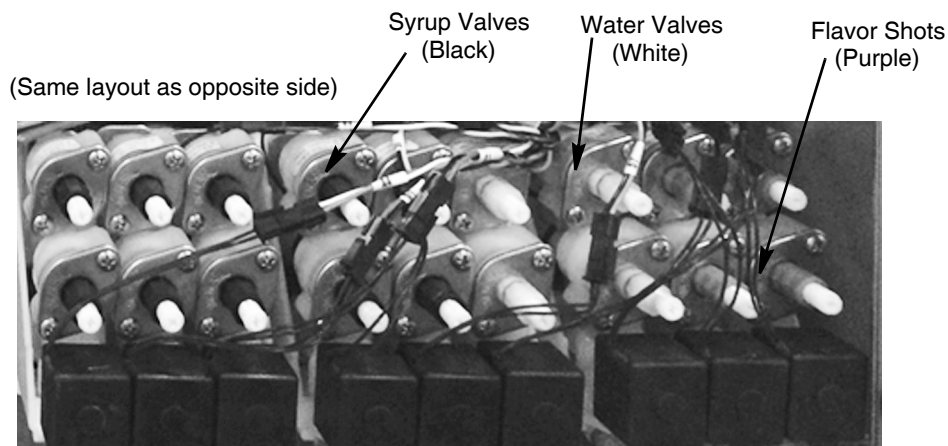


Figure 6.

Cleaning Interior Surfaces

As part of the monthly cleaning and sanitizing the hopper, perform the procedure in Table 16.



CAUTION:

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.

Table 16.

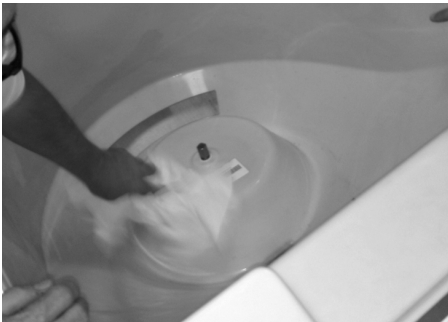
Step	Action	
1	Remove the agitator assembly by unscrewing the thumbscrew and lifting the agitator assembly out of the hopper.	
2	Using a nylon bristle brush or sponge, clean the interior of the hopper, top cover and agitator assembly with soap solution. Thoroughly rinse the hopper, cover and agitator surfaces with clean potable water.	

Table 16.

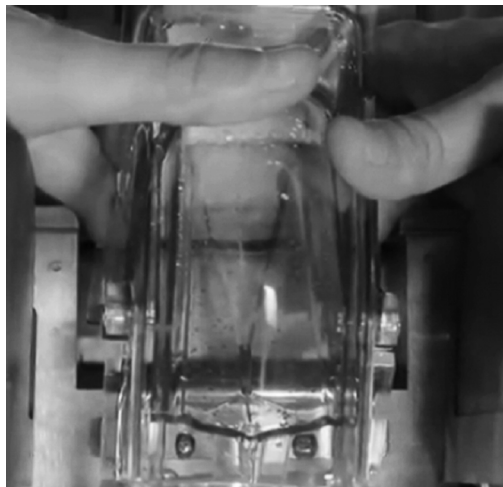
Step	Action	
3	Reassemble agitator assembly. Take special care to ensure that the thumbscrew is tight.	
4	Using a mechanical spray bottle filled with sanitizing solution, spray the entire interior and the agitator assembly. Allow them to air dry.	
5	Open the display panel and remove the ice chute cover from the unit.	

Table 16.

Step	Action	
6	With a nylon bristle brush or sponge, clean the inside of the ice chute, gasket, and cover with soap solution and rinse thoroughly to remove all traces of detergent.	
7	Reassemble the ice chute assembly.	
8	Using a mechanical spray bottle filled with sanitizing solution, spray the inside of the ice chute. Allow it to air dry.	
9	Close the display panel.	

UPDATING SOFTWARE REVISIONS

The unit can be updated as new versions of software become available, they may be installed on the unit by performing the procedure in Table 17.

Table 17.

Step	Action	
1	Enter Service mode, as described in "Service Mode" section on page 21.	
2	Open the display panel.	

Table 17.

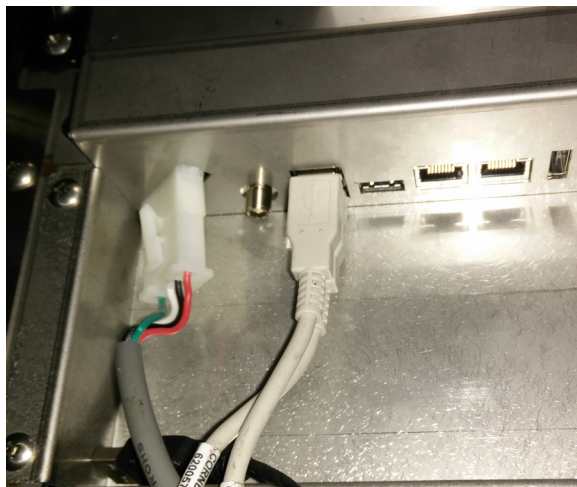
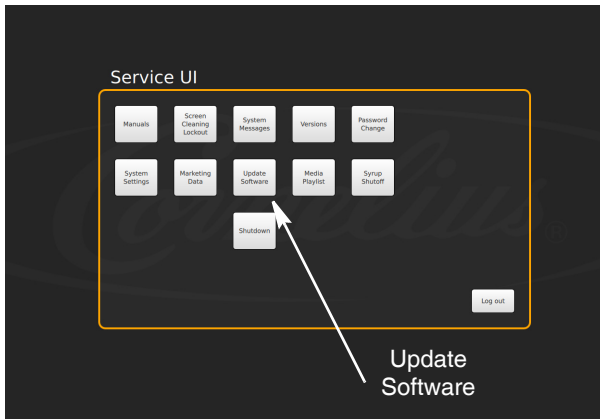
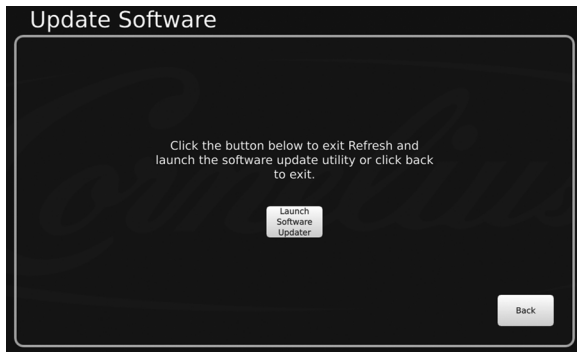
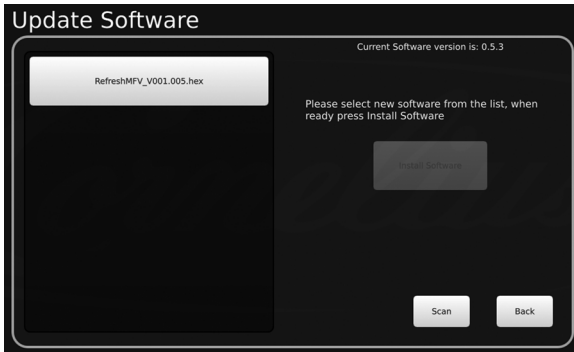
Step	Action	
3	On the back of the display, unplug the USB connection to the ADA panel and plug in the USB stick with the software update loaded on it.	
4	Press the Update Software button.	
5	The Update Software screen is displayed. Press the Launch Software Updater button.	

Table 17.

Step	Action	
6	The Software Updater screen is displayed. Press the Update Software button.	 The Software Updater screen is displayed. It features a dark background with the title 'Software Updater' at the top. Below the title, there are two buttons: 'Update Software' and 'Advanced Options'. At the bottom right, there is a button labeled 'Restart Refresh'.
7	The second Update Software screen is displayed.	 The second Update Software screen is displayed. It shows the current software version as 0.5.3. On the left, there is a list of software updates, with 'RefreshMFV_V001.005.hex' highlighted. On the right, there is a button labeled 'Install Software'. At the bottom, there are 'Scan' and 'Back' buttons.
8	Select the software version to be installed by selecting from the list on the left side of the screen. If the list on the left side of the screen is empty, press the Scan button. This reads the software updates contained on the USB stick. When the proper version is highlighted, press the Install Software button on the right side of the screen.	
9	When the update is complete, press the Back button to revert to the previous screen, then press the Restart/Refresh button to restart the unit.	
10	Unplug the USB stick from the connector and reinstall the ADA cable.	

EDITING THE MEDIA PLAYLIST

The unit is capable of changing the display video on a pre-programed schedule. This allows the user to set a specific time and duration for playing a specific media for breakfast, lunch, dinner or any special media required.

To set the media playlist schedule, perform the procedure in Table 18.

Table 18.

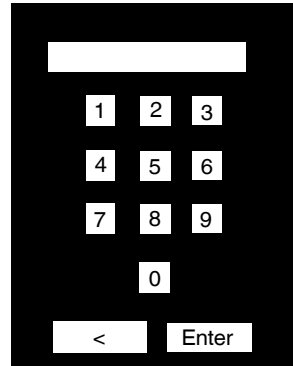
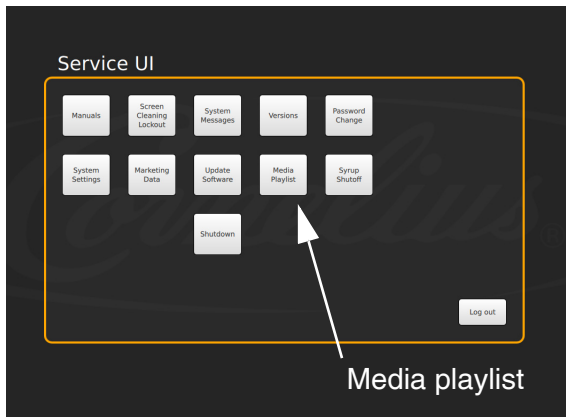
Step	Action	
1	First, enter the Service Screen at either manager or technician level permissions.	
2	Tap each corner of the video screen starting in the upper right corner and continuing to each corner in a counterclockwise direction, in the form of a "C". NOTE: As each corner is touched, a small confirmation rectangle momentarily appears to confirm the touch.	
3	Input the proper password for your access level and press Enter. This will take you to the Service UI screen.	
4	This is where you can access the videos (Media Playlist) and sales information (Marketing Data). To start with changing the playlist, select the "Media Playlist" button. This brings you to this screen (only the default playlist appears initially).	 Media playlist

Table 18.

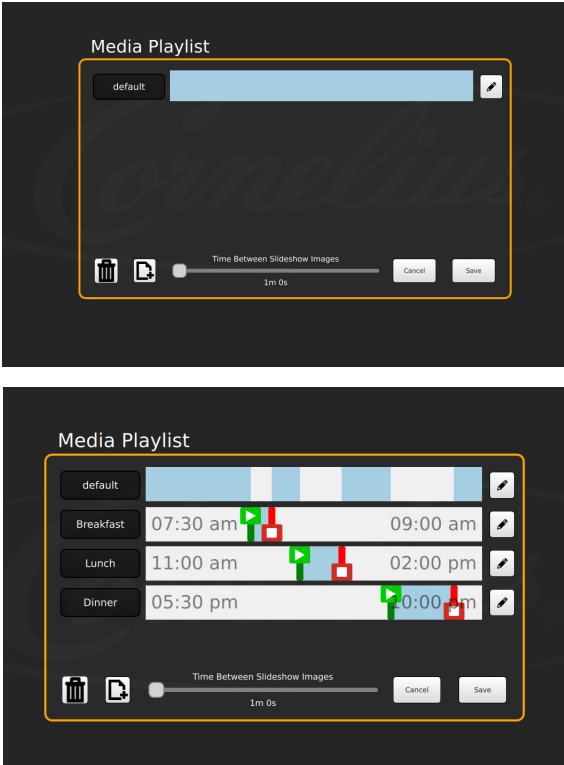
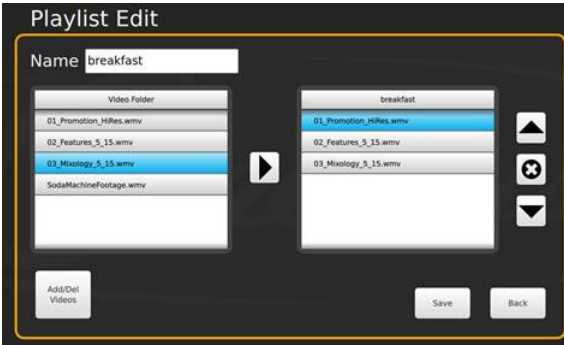
Step	Action	
5	First, to manipulate the playlist and their schedule. A new playlist can be added by selecting the second button on the bottom left (with the + symbol). This will add a new playlist in addition to the default playlist. The times when it starts playing and finishes can be adjusted by dragging the play and stop handles left and right. The corresponding times appear in the bar shown. So, the “breakfast” playlist above plays from 7:30 to 9:00am. The default playlist will fill in the gaps and plays unless any other playlist is set at that time. Now, to modify what's actually in these playlist (or their names), select the pencil on the RH side of the playlist. The next screen will appear:	
6	At the top is the name, click on the white box and a keyboard will appear to allow you to change the name. Below this are two lists of videos. On the RH side is the playlist that you are editing. The videos will play, starting at the top, and repeat, throughout its specified time. To remove a video from the playlist, select it from the list and press the 'X' on the right side. To add a video that is on the machine to the playlist, select it from the list on the left and press the arrow in the center. The position of this video can be changed by using the 'up' and 'down' arrows on the right. Static image option: you can add JPEG and PNG file to the playlist and adjust their duration with the slider on the media playlist menu. To add a video from a USB drive, select the “Add/Del Videos” button in the bottom left. Next screen will pop up:	

Table 18.

Step	Action	
7	All the videos or images currently on the machine are shown on the right. A USB stick that is connected to any of the (3) available ports will be displayed on the left. Click on the name of the drive and, subsequently, through any folders to find the videos to be added.	
8	These videos can be transferred to the machine by selecting them and pressing the arrow button in the center. Any videos that were added are now available to the playlist by pressing the 'Back' button. File can also be copied from the machine to USB drive by selecting the files on the RH side and pressing the left facing arrow.	
9	Important Note: Please press save on the Playlist Edit screen and again on the Media Playlist screen when making any changes.	

REPORTING SALES DATA

Sales data can be transferred to a USB flash drive for external analysis. To transfer sales data to a USB flash drive, perform the procedure in Table 19.

Table 19.

Step	Action	
1	Open the dispenser door.	
2	Unplug the black USB cable from the rear of the door, replace it with a USB flash drive.	ADA USB Connector
3	Enter Service mode, as described in "Service Mode" section on page 21.	

Table 19.

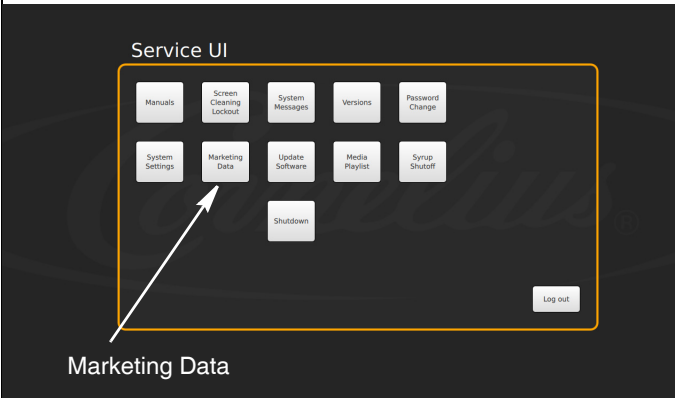
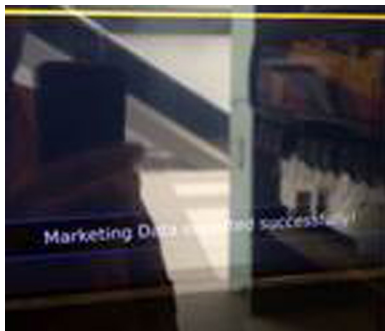
Step	Action	
4	Select Marketing Data from the Service UI screen.	
5	Select Export Data from the Marketing Data screen, this opens the Media Device screen.	
6	Select the USB flash drive on the left side of the Media Devices screen.	
7	Select Export Data.	

Table 19.

Step	Action	
8	A confirmation message appears when the transfer is complete.	

TROUBLESHOOTING



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.



WARNING:

If repairs are to be made to a product system, remove quick disconnects from the applicable product tank, then relieve the system pressure before proceeding. If repairs are to be made to the CO₂ system, stop dispensing, shut off the CO₂ supply, then relieve the system pressure before proceeding. If repairs are to be made to the refrigeration system, make sure electrical power is disconnected from the unit.

Should your unit fail to operate properly, check that there is power to the unit and that the hopper contains ice. If the unit does not dispense, check the following chart under the appropriate symptoms to aid in locating the defect.

UNIT TROUBLESHOOTING

Table 20.

Symptom	Cause	Remedy
Blown fuse or circuit breaker	A. Short circuit in electrical wiring B. Inoperable agitator motor (shorted motor)	A. Repair wiring B. Replace gear motor
Agitator does not turn	A. No power B. Improperly installed upper ice chute assembly (Reed switch is not being activated) C. Inoperable reed switch D. Electrical board driver circuit is defective E. Gear motor has open circuit F. Reed switch is not activated, improper assembly of upper ice chute to lower chute G. Broken wire in the 2-wire harness leading to the reed switch H. Bad connection at main control board.	A. Restore power or plug in unit B. Check the upper ice chute assembly for proper assembly and operation C. Replace reed switch D. Replace main control board E. Replace gear motor F. Check to make sure tongue of upper chute engages into the back of the lower chute, ensure upper chute engages outside the lower chute, and snap front of chute into place G. Repair or replace 2-wire harness H. Repair connection or replace 2-wire harness
Ice dispenses continuously	A. Ice gate mechanism is stuck in open position B. Stuck or bent ice lever (does not allow gate to close and open reed switch)	A. Inspect gasket for proper position. Examine gate plate to see if it slides freely behind the lower ice chute. B. Examine ice dispense lever to see if it is bent.
Slushy ice or water in hopper	A. Blocked drains in cold plate B. Poor ice quality due to water quality or ice maker problems	A. Remove access covers in cold plate cover & inspect/clean drains B. Correct water quality or repair ice maker
Beverage does not dispense	A. No 24VAC to valves B. No CO ₂ pressure	A. Restore 24 VAC to valves B. Restore CO ₂ pressure
Beverage is too sweet	A. Valve BRIX requires adjustment B. Carbonator is not operating C. No CO ₂ in carbonator D. City water pressure supply low or inconsistent	A. Adjust valve BRIX B. Repair carbonator C. Restore CO ₂ pressure in carbonator D. Booster pump must be used if dynamic water pressure drops below 40 psig.

Table 20.

Symptom	Cause	Remedy
Unit will not dispense carbonated drinks. Dispenses syrup only.	A. CO ₂ pressure in carbonator tank is too high. B. Water valve will not open	A. Check CO ₂ pressure regulator setting. 75 psig recommended. Relieve pressure from carbonator tank. B. Check electrical connection to water valve. Check resistance of coil (should be 9 ohms). Check for voltage at coil when brand button is depressed.
Unit will not dispense carbonated drinks. Spurts CO ₂ and syrup only.	A. Carbonator tank is empty, because tank was emptied while power was applied to unit. 5 minute time-out of carbonator pump/motor occurred and carbonator pump is locked off. B. Note that this can occur while the water filter system is serviced or water supply is shutoff. If drinks are drawn from the unit while water pressure is shutoff, the carbonator pump starts and runs continuously, then shuts off on the 5 minute timeout.	A. Unplug the unit and reconnect the unit. Main control board will reset, ice agitation will occur, and carbonator tank will refill to normal level. B. 1) low water pressure switch deactivates carbonator pump, 2) after 5 minutes reset and retry carbonator pump. If water supply is restored, the 5 minute timeout will not occur. Repeat reset a second time, but on a third time, then lockout carbonator pump, which will generate a service call.
Carbonated drinks are flat (low on carbonation)	A. Unit is out of CO ₂ B. Carbonator tank is 100% filled because the city water pressure exceeds the carbonator tank CO ₂ pressure regulator setting.	A. Replace CO ₂ cylinder B. CO ₂ setting for the carbonator tank is 75 psig, max water pressure is 60 psig. If necessary, install a water pressure regulating valve.
Low water pressure	A. Could be caused by excessively long runs (over 40 ft.) of 3/8" water supply line. B. Low water pressure C. Plugged water filter D. Water booster bladder has burst	A. Increase line size to 1/2" B. Add water pressure booster pump C. Change water filter D. Replace water booster tank/bladder

CARBONATOR TROUBLESHOOTING

Table 21.

Symptom	Cause	Remedy
Carbonator pump does not start to fill tank	A. Power cord for the carbonator pump motor is not connected	A. Carbonator pump is powered off the main control board inside the electrical box of the unit. Check that the umbilical cord is connected from the unit to the pump motor terminal box.
Power cord is connected but carbonator pump does not run	A. Carbonator pump motor is disabled B. Probes were dry, unit was powered up, water was not turned on, and carbonator did not fill C. Water service was interrupted for more than 5 minutes	A. Check the enable/disable switch on the carbonator pump terminal box and enable it, if necessary. B. This results in a 5 minute timeout. Unplugging the unit and plugging it in will reset the unit and start the carbonator pump C. Unplugging the unit and plugging it in will reset the unit and start the carbonator pump
Carbonator pump is short cycling with every drink drawn	A. Lower liquid level probe reads "dry" while upper probe reads "wet"	A. Check color of leads going to probes. Black should go to bottom probe and white to top probe. Reverse if incorrect.

Table 21.

Symptom	Cause	Remedy
Carbonator tank overfills, overflows through relief valve, and pump shuts off after 5 minutes.	A. Poor electrical connections between carbonator tank and main control board. B. Broken wires between carbonator tank and main control board. C. Defective liquid level probes.	A. Check connections at carbonator tank and at connector J4 on the main control board B. Replace wire harness. C. Replace both liquid level probes.

NOTE: Contact your local syrup or beverage equipment distributor for additional information and troubleshooting of beverage system.

Cornelius Inc.
www.cornelius-usa.com