

SPIRE 4.1 Operator's Manual



Release Date: September 13, 2017
Publication Number: 620066826OPR

Revision: A

Notice

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.

Cornelius will not be responsible for any repair, replacement or other service required by or loss or damage resulting from any of the following occurrences, including but not limited to, (1) other than normal and proper use and normal service conditions with respect to the Product, (2) improper voltage, (3) inadequate wiring, (4) abuse, (5) accident, (6) alteration, (7) misuse, (8) neglect, (9) unauthorized repair or the failure to utilize suitably qualified and trained persons to perform service and/or repair of the Product, (10) improper cleaning, (11) failure to follow installation, operating, cleaning or maintenance instructions, (12) use of "non-authorized" parts (i.e., parts that are not 100% compatible with the Product) which use voids the entire warranty, (13) Product parts in contact with water or the product dispensed which are adversely impacted by changes in liquid scale or chemical composition.

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.

Trademarks and Copyrights

This document contains proprietary information and it may not be reproduced in any way without permission from Cornelius. This document contains the original instructions for the unit described.

CORNELIUS INC 101 Regency Drive Glendale Heights, IL Tel: + 1 800-238-3600

Printed in U.S.

Contact Information

To inquire about current revisions of any documentation or assistance with any Cornelius product, contact:

www.cornelius.com 800-238-3600

TABLE OF CONTENTS

SAFETY INSTRUCTIONS	4
Safety Overview	4
Safety Alert symbol	4
Types of Alerts	4
Safety Tips	
Qualified Service Personnel	4
Safety Precautions	5
Shipping And Storage	5
CO ₂ (Carbon Dioxide) Warning	5
Mounting in or on a Counter	5
Unit Location	5
Machine Usage	5
SPIRE 4.1 SYSTEM OVERVIEW	ε
Spire 4.1: Description	6
Spire 4.1: Specifications	6
Spire 4.1: Physical Dimensions	7
START-UP & OPERATING INSTRUCTIONS	8
Spire Ice Drink Dispenser Installation	8
Dispenser Power Up	8
ADA Keypad	10
ADA Keypad Operation	11
Filling the Ice Bin	12
CLEANING AND MAINTENANCE INSTRUCTIONS	13
Soap and Sanitizing Solutions	13
Daily Cleaning	13
Weekly Maintenance	15
Monthly Cleaning	16
Sanitizing syrup lines, BIB Systems (Monthly) - Product Tubing	16
Cleaning and Sanitizing Interior Surfaces (Monthly)	17
Yearly Maintenance	20
Cleaning the Cold Plate (Yearly)	20
Replenishing CO2 Supply (As Required)	22
Removing the Enclave (as Required)	23
Replacing the Enclave (as Required)	24



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.

SAFETY ALERT SYMBOL



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

Types of Alerts

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

- Keep safety signs in good condition and replace missing or damaged items.
- Learn how to operate the unit and how to use the controls.
- **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



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:



Disconnect power to the unit before servicing following all lock out/tag out procedures established by the user. Verify all 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.



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



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.

The unit should be stored in a climate controlled area if long term storage is needed. Long term exposure to cold/hot conditions can permanently damage critical system components such as the computer and touchscreen.

CO₂ (Carbon Dioxide) Warning



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, **IMME-DIATELY** 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.**

Mounting in or on a Counter



WARNING

While installing the unit in or on a counter top, the counter must be able to support a weight in excess of 1,000 lbs. to insure adequate support for the unit.

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

Unit Location



- This unit is not designed for use in outdoor locations.
- The appliance must be placed in a horizontal position.
- The appliance is not suitable for installation in an area where a water jet would be used.

Machine Usage



- This appliance is not intended for use by persons (including children) with reduced physical, sensory
 or mental capabilities, or lack of experience and knowledge, unless they have been given
 supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.



SPIRE 4.1 SYSTEM OVERVIEW

SPIRE 4.1: DESCRIPTION

Spire 4.1 solves your ice and beverage service needs in a sanitary, space saving, economical way. It is designed to manually fill with ice from any remote ice-making source. The unit includes the following components:

- Single, multi-brand dispensing valve
- Cold plate
- Internal carbonator tank
- External pump for carbonator

This dispenser dispenses cubes (up to 1-1/4 inch in size), cube-lets, and compressed (not flaked) ice and supplies beverages direct from syrup tanks with no additional cooling. Figure 1. shows the dimensions of the Spire 4.1 unit.

SPIRE 4.1: SPECIFICATIONS

Model name	Spire 4.1
Total unit weight (empty)	Approximately 335 lb. (151.9 kg)
Ice storage	255 lb. (115.7 kg)
CO2 operating pressure	75 psig (0.52 MPa) max
Ambient operational temperature	65 to 95° F (18 to 35° C)
Maximum Storage Temperatures Note: Damage to components may occur if storage conditions exceed temperature limits.	-4°F (-20°C) to 122°F (50°C)
Maximum number of brands/flavors available	14/6
Electrical	120 V/1-phase/60 Hz 220 - 240 V/1-phase/50 Hz 15 A dedicated, protected circuit
Dimensions	42-9/16 in. (1.08 m) tall, to top of lid (Manual Fill Unit) 31-7/8 in. (0.81 m) wide 35-9/16 in. (0.90 m) deep
Noise Level	The unit emits acoustical noise with an A-weighted sound pressure level no greater than 75 dB, as measured in accordance with EN 60335-2-75



SPIRE 4.1: PHYSICAL DIMENSIONS

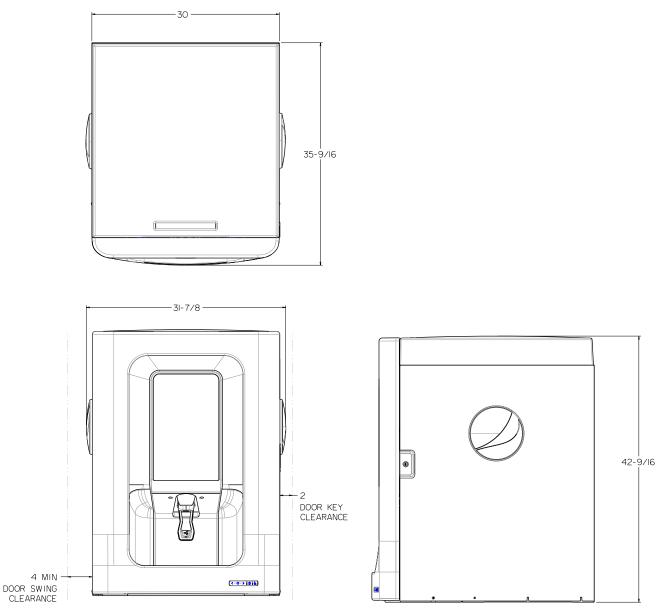


Figure 1. Spire 4.1 Physical Dimensions



START-UP & OPERATING INSTRUCTIONS

SPIRE ICE DRINK DISPENSER INSTALLATION

Before start-up and operation, the Spire dispenser must be installed by qualified personnel following instructions given in the Spire 4.1 Installation manual (620066826INS).

DISPENSER POWER UP

Perform the following steps to power up the Spire unit and dispense a drink:

1. Open the display door.



Figure 2

2. Press the Power On/Off button located inside the display door.



Figure 3

3. Close the display door.

Result: The display screen shows the **TOUCH TO START icon**.

4. Tap the TOUCH TO START icon.

Result: The Drink Selection screen is displayed.



Figure 4

Select a **Drink icon** from the Drink Selection screen.
 Note: To select a drink, tap on one of the **Drink icons**.
 Result: the Flavor Shot Screen is displayed.



Figure 5



6. Optional: Use a **Flavor Shot Icon** to select up to 3 flavors.
Note: To select flavor shots, tap on one of the flavor shot icons.
Repeat this process to select up to 3 flavor shots.

Figure 6

7. Press and Hold the **Pour Icon** to dispense the drink.

Figure 7

Note: The screen defaults back to the drink selection screen after 10 seconds. To manually return to the drink selection screen, press the **Home icon** in the upper left corner of the screen.



ADA KEYPAD

The Spire 3.1 unit features touch-sensitive buttons located on the front of the unit (lower right-hand area) of the unit. These buttons provide an alternative method to navigate the item selection and dispense screens.



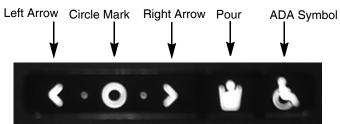


Figure 8 Keypad Operation

Table 1: Keypad

Left Arrow	Use the Left Arrow button to move the screen display selection highlight to the left.
Right Arrow	Use the Right Arrow button to move the screen display selection highlight to the right.
Circle Mark	Use the Circle Mark button to selects a highlighted item from the Drink Selection screen and Flavor Selection screen.
	Note: From the Drink Selection screen, when you highlight an item and press the Circle Mark button, the Flavor Shot screen displays. Flavor Shot selection is optional. Up to 3 flavor shots can be selected.
Pour	Use the Pour button to dispense a drink.
	Note: The Pour Button is active after a drink selection is made; selection of Flavor Shot items (up to 3 can be selected) is optional.



ADA KEYPAD OPERATION

Perform the following steps to use the Keypad to dispense a drink:

1. Select a **Drink Selection icon** from the Drink Selection screen.

Note: To select a drink using the ADA Keypad, press the Left and Right arrow buttons on the keypad (lower front) to highlight a **Drink Selection icon**, then press the **Circle Mark button** to select the item.

Result: The Flavor Shot screen is displayed.



Figure 9

2. **Optional**: From the Flavor Shot screen, select Up to 3 flavors.

Note: To select a flavor shot using the ADA keypad, press the Left and Right arrow buttons on the keypad (lower front) to highlight a **flavor shot icon** then press the **Circle Mark button** to select the item. Repeat this process to select up to 3 flavor shots.



Figure 10

3. Press the **Pour button** to dispense the drink.

Result: The drink is dispensed as long as you hold the Pour button, then, after releasing the Pour button, the screen defaults back to the Drink Selection screen.



Figure 11



FILLING THE ICE BIN

Review the following before filling the ice bin.

WARNING	Use caution to avoid spilling ice when filling the dispenser. Immediately clean up 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.
CAUTION	The dispenser cannot be used with crushed or flaked ice. Use of bagged ice which has frozen into large chunks can void the warranty. The dispenser agitator is not designed to be an ice crusher. Use of large chunks of ice which jam up inside the bin will cause failure of the agitator motor and damage to the bin. 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 at room temperature before loading it into the ice bin.
IMPORTANT	 After loading the ice into the bin, wait 30 minutes to allow the cold plate to chill the syrups to operating temperature. Do not overfill the ice bin hopper.

Perform the following steps to fill the ice bin.

1. Open the display door and remove the ice bin cover See Figure 12

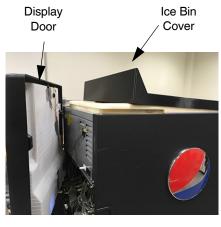


Figure 12

2. Fill the bin with ice. (225 lb. MAX).



Important: Do not over-fill the ice bin.

3. Replace the ice bin cover and close the display door.

To do this, slide the ice bin cover over the ice bin, then close the display door.



CLEANING AND MAINTENANCE INSTRUCTIONS

The following cleaning and maintenance instructions apply to the Spire dispenser.



- •) 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.
- •) 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.
- •) Use the Soap solution and Sanitizing Solution identified in this manual.

SOAP AND SANITIZING SOLUTIONS

Use the following soap and sanitizing solutions when cleaning the Spire dispenser.

- •) Soap Solution Use a mixture of mild detergent and warm (100° F) potable water.
- •) Sanitizing Solution: Use Stera Sheen Green Label: Dissolve 1 packet [2 oz (59.0ml)] of Stera Sheen Green Label into 2 gallons of tap water [75-95F (23.9-35C)] to achieve 100ppm of chlorine. Or, use Kay-5 Sanitizer/ Cleaner: Dissolve 1 packet [1 oz (29.6ml)] of Kay-5 Sanitizer/Cleaner into 2.5 gallons of tap water [75-95F (23.9-35C)] to achieve 100ppm of chlorine.

DAILY CLEANING

Perform the following steps on a daily basis during low traffic times:

1. Remove the ice slide (see Figure 13) and clean it with a warm soap solution, rinse it with clean water, then allow it to air dry.



Figure 13

- 2 Wipe down the Enclave (see Figure 13) and the exterior of the unit using a soft cloth and warm soap solution. Rinse them with clean water and wipe them dry with a clean soft cloth.
- 3. Locate the valve nozzle components (valve nozzle housing and valve nozzle) and diffuser.

Valve Nozzle and Diffuser Components



Figure 14



4. Remove the valve nozzle components (valve nozzle housing and valve nozzle) and diffuser.

To remove the **valve nozzle housing**, place your hand on the valve nozzle housing lever and turn the component clockwise (to the right) about a 1/4 turn, then pull it down.

Result: The valve nozzle housing is removed from the unit and the **valve nozzle** covering the diffuser is exposed.

Note: If the valve nozzle becomes detached inside the valve nozzle housing, you can skip the next step to remove the valve nozzle.



Figure 15

5. Next, remove the valve nozzle from the unit. To do this, grasp it firmly and pull it down.

Result: The valve nozzle is removed from the unit, as shown in Figure 16.

Note that the top of the valve nozzle is notched to line-up with the valve nozzle housing tabs (shown in Figure 15) when these components are placed back into the unit.



Figure 16

6. Next, remove the Diffuser.

To do this, grasp the diffuser firmly and pull it straight down away from the nozzle base (which is secured to the unit).

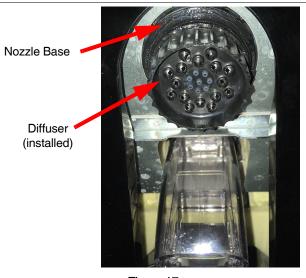


Figure 17

7. Once the **valve nozzle housing**, the **valve nozzle** and the **diffuser** are removed from the unit, clean these components using a nylon bristle brush and a warm soap solution. After cleaning, let them air dry.



8. Clean the interior of the ice chute, using the brush provided with the Clean the interior of the ice chute using the brush provided with the unit or a nylon bristle brush with a warm soap solution. Once clean, rinse with clean water and wipe it to air dry.

Note: Pour any remaining warm soap solution down the drain to help keep the drain clean and flowing smoothly.



Figure 18

- 9. Then, spray the inside and outside of the ice chute with sanitizer and allow it to air dry.
- 10. Gather the clean valve nozzle components (valve nozzle housing, valve nozzle and diffuser) and spray them with a sanitizing solution (see "Soap and Sanitizing Solutions" on page 13). Then, replace these components back into the unit.

To replace these components back into the unit, do the following:

- •) First, make sure the **diffuser gasket** is seated properly and is in the correct position on top of the **diffuser** as shown in Figure 19. Then, push the diffuser on to the nozzle base so that the diffuser gasket is against the nozzle base. See Figure 17.
- •) With the diffuser in place, place the valve nozzle in the valve nozzle housing so that the notches in the valve nozzle line up with the tabs of the housing. See Figure 15 and Figure 16, above.
- •) Finally, place the valve nozzle housing (with the valve nozzle inside) over nozzle base (shown in Figure 17) and turn the housing approximately 1/4 turn (counter-clockwise) to secure the housing to the nozzle base.

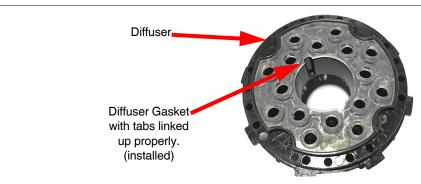


Figure 19

- 11. Reinstall the ice slide.
- 12. Pour all the remaining sanitizer solution down the drain to help keep the drain clear.

WEEKLY MAINTENANCE

Check the following items weekly to maintain the unit in proper condition.

-) Temperature, smell and taste of the product.
- •) Water pressure [60 65 psi, (0.45 MPa)], coming to the unit using the pressure gauge on the back room package.
-) Carbonation of the drink.
- •) Level of the CO2 cylinder in the back room supplying the unit.
- •) Date on all of the BIBs in the back room package.



MONTHLY CLEANING

The following cleaning activities are to be performed monthly.

- •) Conduct all daily cleaning activities. See "Daily Cleaning" on page 13.
- •) Flush and sanitize all syrup lines, as well as all of the syrup connectors. See "Sanitizing syrup lines, BIB Systems (Monthly) Product Tubing" on page 16.
- •) Remove ice from the hopper. Clean and sanitize the hopper. See "Cleaning and Sanitizing Interior Surfaces (Monthly)" on page 17.

Sanitizing syrup lines, BIB Systems (Monthly) - Product Tubing

Sanitizing the syrup lines and BIB system should be done monthly.



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.

Perform the following steps to sanitize the syrup lines for BIB systems:

1. Remove all the quick disconnects from all the BIB containers in the back room.



Figure 20

- 2. Fill a suitable pail or bucket with warm water and a soap solution.
- 3. Submerge all the disconnects (gas and liquid) in the soap solution and then clean them using a nylon bristle brush.



Do not use a wire brush.

IMPORTANT

- 4. Rinse them thoroughly with clean, potable water.
- 5. Using a large plastic pail, prepare approximately five (5) gallons of sanitizing solution. See "Soap and Sanitizing Solutions" on page 13.
- 6. Soak the BIB disconnects in the sanitizing solution for a minimum of fifteen (15) minutes.
- 7. Sanitizing fittings must be attached to each BIB disconnect. If these fittings are not available, the fittings from empty BIB bags can be cut from the bags and used. These fittings open the disconnect so the sanitizing solution can be drawn through the disconnect



Figure 21

8. Place all the BIB disconnects into the pail of sanitizing solution. Operate all the valves until the sanitizing solution is flowing from the valve. Allow sanitizer to remain in the lines for fifteen (15) minutes.



Cleaning and Sanitizing Interior Surfaces (Monthly)



While pouring liquid into the ice bin, do not exceed the rate of 1/2 gallon per minute. Pouring more liquid into the bin could result in an overflow situation that may result in personal injury or damage to the equipment.

Perform the following steps to clean the interior surfaces of the ice bin:

1. Open the display door and remove the cover from the ice bin.

Avoid damage to the ice bin cover by putting it in a safe place.

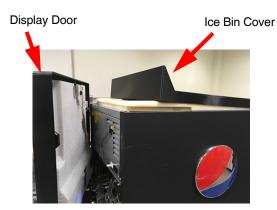


Figure 22

2. Remove the agitator retaining screw and agitator cover.

To do this, turn the agitator retaining screw counter-clockwise, then, lift the agitator cover off the 2-piece agitator assembly.

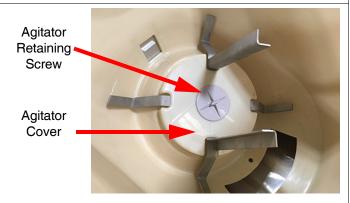


Figure 23

3. Remove the 2-piece agitator assembly from the bin shown Figure 24.

To do this, lift the first (top) piece of the 2piece agitator assembly from the bin, then lift the second (bottom) piece out of the bin.

Result: See Figure 25.

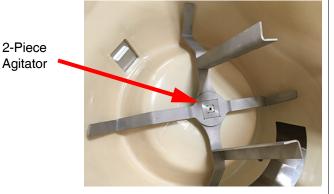


Figure 24



4. With the 2-piece agitator removed from the bin, clean the interior of the bin, the top cover and the agitator assembly.

Note: Use a soap solution with a nylon bristle brush, sponge or cloth to clean the interior of the bin, top cover and agitator assembly.

Then, thoroughly rinse the bin, cover and agitator surfaces with clean potable water.



Figure 25

5. Place the bottom agitator over the spindle as shown Figure 26.



Figure 26

6. Then, place the top agitator in place over the bottom agitator making sure the two agitator components are seated properly as shown in Figure 27.

Top and Bottom Agitator Assembly

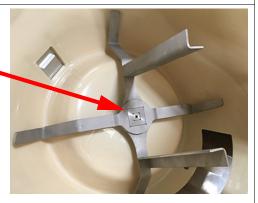


Figure 27

 With the 2-piece agitator assembly seated properly, place the agitator cover over the 2-piece agitator assembly and secure it with the agitator retaining screw.
 Make sure the agitator retaining screw is

tight as shown in Figure 28.

Agitator Retaining Screw Agitator Cover

Figure 28



8. Clean the exposed cold plate surface by extending the brush through the opening in the bottom of the hopper.

IMPORTANT: Make sure you do not scratch or damage the cold plate.

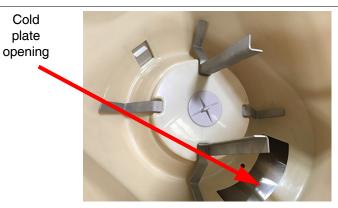


Figure 29

- 9. Using a mechanical spray bottle filled with sanitizing solution, spray the entire interior and agitator assembly and allow it to air dry.
- 10. Open the display door and remove the ice chute cover from the unit.
- 11. With a nylon bristle brush or sponge, clean the inside of the ice chute, gasket and cover with soap solution and rinse them thoroughly to remove all traces of detergent.
- 12. Reassemble the ice chute assembly.
- 13. Using a mechanical spray bottle filled with sanitizing solution, spray the inside of the ice chute. Allow the ice chute to air dry

page 23.



YEARLY MAINTENANCE

Perform the following activities annually to maintain the unit:

- 1. Have the water pump and check valve inspected and cleaned, if necessary, by a qualified service technician.
- 2. Have the CO2 gas check valve inspected and cleaned, if necessary, by a qualified service technician.
- 3. Remove the splash panel and cold plate cover to clean and sanitize the cold plate surface. (See "Cleaning the Cold Plate (Yearly)" on page 20).

Cleaning the Cold Plate (Yearly)

Perform the following steps to clean the cold plate:

Remove the Enclave from the unit.
 To do this, see "Removing the Enclave (as Required)" on



Figure 30

2. With the Enclave removed, check that the drain holes (feeding the drain pan) are not clogged and remove any debris from the drain trough to ensure proper drainage.

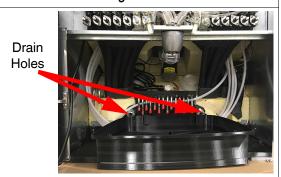


Figure 31

3. Locate the Cold Plate Access Covers.

On the Spire 4.1 unit, the cold plate access covers are white plastic caps located on either side of the agitator motor. See Figure 32.

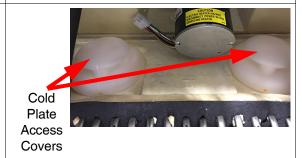


Figure 32

4. Open the Cold Plate Access Covers.

To open the cold plate access covers, grab the top of the cap and lift the cap from the unit. See Figure 33.



Figure 33



5. Pour a small amount of soap solution through the cold plate openings in the bin.

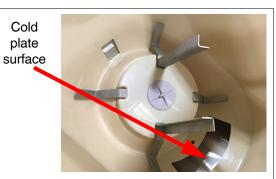


Figure 34

- 6. Using a cloth and soap solution, clean the surface of the cold plate through the cold plate access opening shown in Figure 33, then rinse the cold plate thoroughly.
 - IMPORTANT: Make sure you do not scratch or damage the cold plate.
- 7. Close the cold plate access openings by re-positioning the cold plate access covers over the openings. **IMPORTANT:** Make sure the access covers are seated properly.
- Reinstall the Enclave.
 To do this, see "Replacing the Enclave (as Required)" on page 24.
- 9. Rinse the cold plate surface by pouring potable water through openings in the ice bin. See



REPLENISHING CO₂ SUPPLY (AS REQUIRED)

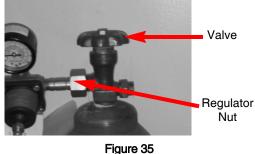
NOTE: When the indicator on the 1800-psi gage is in the shaded ("change CO2 cylinder") portion of the dial, CO2 cylinder is almost empty and should be changed.



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, IMME-DIATELY 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.

Perform the following steps to change the CO2 cylinder:

1. Fully close (clockwise) the CO2 cylinder valve.



- 2. Slowly loosen the CO2 regulator assembly coupling nut, allowing CO2 pressure to escape.
- 3. Remove the regulator assembly from the empty CO2 cylinder.
- 4. Unfasten the safety chain and remove the empty CO2 cylin-



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 could occur.



Figure 36

- 5. Position the full CO2 cylinder in its proper location and secure it with a safety chain.
- 6. Make sure the gasket is inside the CO2 regulator assembly coupling nut and is properly seated.



Figure 37

- 7. Install the regulator assembly on the CO₂ cylinder.
- 8. Open (counterclockwise) the CO2 cylinder valve slightly to allow the lines to slowly fill with gas.
- 9. Open the valve fully to back-seat the valve to prevent gas leakage around the valve shaft).
- 10. Check all CO2 connections for leaks and tighten any loose connections.



REMOVING THE ENCLAVE (AS REQUIRED)

The Enclave provides access to service lines to support installing and servicing water, CO₂, syrup and drain lines. Read all steps first, then, perform the following steps to remove and replace the Enclave.

1. Open the display door.

Note: The Enclave is a 3-sided component surrounding the bottom, inside of the dispenser. Before removing the Enclave, **remove the ice lever and cup locater tray**.

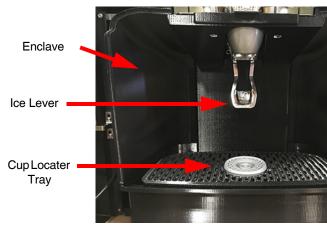


Figure 38

2. Locate the three (3) Enclave tabs securing the Enclave to the three (3) tab holders on the unit.

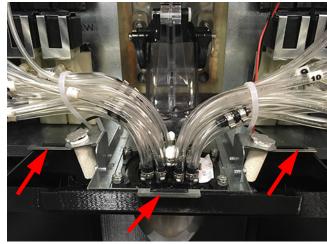
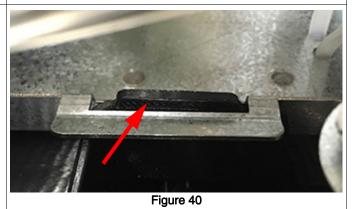


Figure 39

 Release the Enclave tabs from the tab holders.
 To do this, press down on each Enclave tab, move it forward away from the metal tab holder.
 Do this so that all three (3) tabs are released from the tab holders.

Result: Each Enclave tab is released from its tab holder to provide removal of the Enclave from the unit.





 With each Enclave tab released from a tab holders, guide the Enclave forward and out of the unit. Place it in a safe place.

Result: The Enclave is removed from the unit and the service lines are exposed to support installation and service activities.



Figure 41

REPLACING THE ENCLAVE (AS REQUIRED)

Note: Do not replace the Enclave until lines and drains are connected. Read all steps first, then, perform the following steps to replace the Enclave.

1. To replace the Enclave, the drain pan must be in position. Position the drain pan into the unit as shown in Figure 42.

The drain pan is installed in the unit.

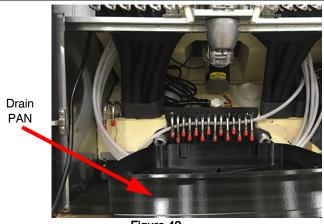


Figure 42

 With the drain pan in place, tilt top of the Enclave unit toward the inside of the unit and position the left and right sides of the Enclave on top of the left and right sides drain pan, respectively.

Then, press the top of the Enclave tabs down and back toward the tab holders until the tabs click into place.

Result: The Enclave is installed in the unit.

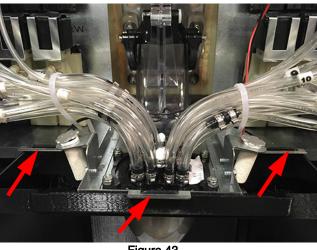


Figure 43



