

LANCER®

Bridge Tower



Operation Manual

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ABOUT THIS MANUAL

This booklet is an integral and essential part of the product. Please carefully read the guidelines and warnings contained herein as they are intended to provide the user with essential information for the continued safe use and maintenance of the product. In addition, it provides **GUIDANCE ONLY** to the user on the correct services and site location of the unit.

The installation and relocation, if necessary, of this product must be carried out by qualified personnel with up-to-date safety and hygiene knowledge and practical experience, in accordance with current regulations.

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BEFORE GETTING STARTED

Each unit is tested under operating conditions and is thoroughly inspected before shipment. At the time of shipment, the carrier accepts responsibility for the unit. Upon receiving the unit, carefully inspect the carton for visible damage. If damage exists, have the carrier note the damage on the freight bill and file a claim with carrier. Responsibility for damage to the dispenser lies with the carrier.

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SAFETY NOTICES

READ ALL SAFETY INSTRUCTIONS BEFORE USING THIS UNIT.

This manual contains important safety information and all applicable safety precautions must be observed. To reduce the risk of fire, electric shock, damage to the equipment or personal injury when using this unit all instuctions/warnings on the product being used must be followed:

WARNING

Text following the Warning signal indicates a hazardous situation, which if not avoided, will result in death or serious injury. Be sure to read all Warning statements before proceeding with the installation.

ATTENTION

Text following the Attention signal addresses a situation that if not followed could potentially damage the equipment. Be sure to read the Attention statements before proceeding

CAUTION

Text following the Caution signal indicates a hazardous situation, which if not avoided, could result in death or serious injury. Be sure to read the Caution statements before proceeding with the installation

NOTE

Text following the Note signal provides you with information that may help you more effectively perform the installation procedures within this manual. Disregarding information will not cause damage or injury, however it may limit the performance of the dispenser.

IMPORTANT SAFETY INSTRUCTIONS

Intended Use

- The dispenser is for indoor use only
- This appliance is intended to be used in commercial applications such as restaurants or similar.
- This appliance is to be installed in a location where its use can be overseen by trained personnel.
- This appliance should not be used by children or infirm persons without supervision.
- 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.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Cleaning and user maintenance shall not be performed by children without supervision.
- This unit is not a toy and children should be advised not to play with the appliance.
- The min/max ambient operating temperature for the dispenser is 4°C to 32°C (40°F to 90°F).
- Do not operate unit below minimum ambient operation conditions.
- Should freezing occur, cease operation of the unit and contact authorized service technician.
- The maximum tilt for safe operation is 5°.
- This appliance must be installed and serviced by a professional.

Carbon Dioxide (CO₂)

- **WARNING:** Carbon Dioxide (CO₂) is a colorless, noncombustible gas with a light pungent odor. High percentages of CO₂ may displace oxygen in the blood.
- **WARNING:** Prolonged exposure to CO₂ can be harmful. Personnel exposed to high concentrations of CO₂ gas will experience tremors which are followed by a loss of consciousness and suffocation.
- **WARNING:** If a CO₂ gas leak is suspected, immediately ventilate the contaminated area before attempting to repair the leak.
- **WARNING:** Strict attention must be observed in the prevention of CO₂ gas leaks in the entire CO₂ and soft drink system.

Power

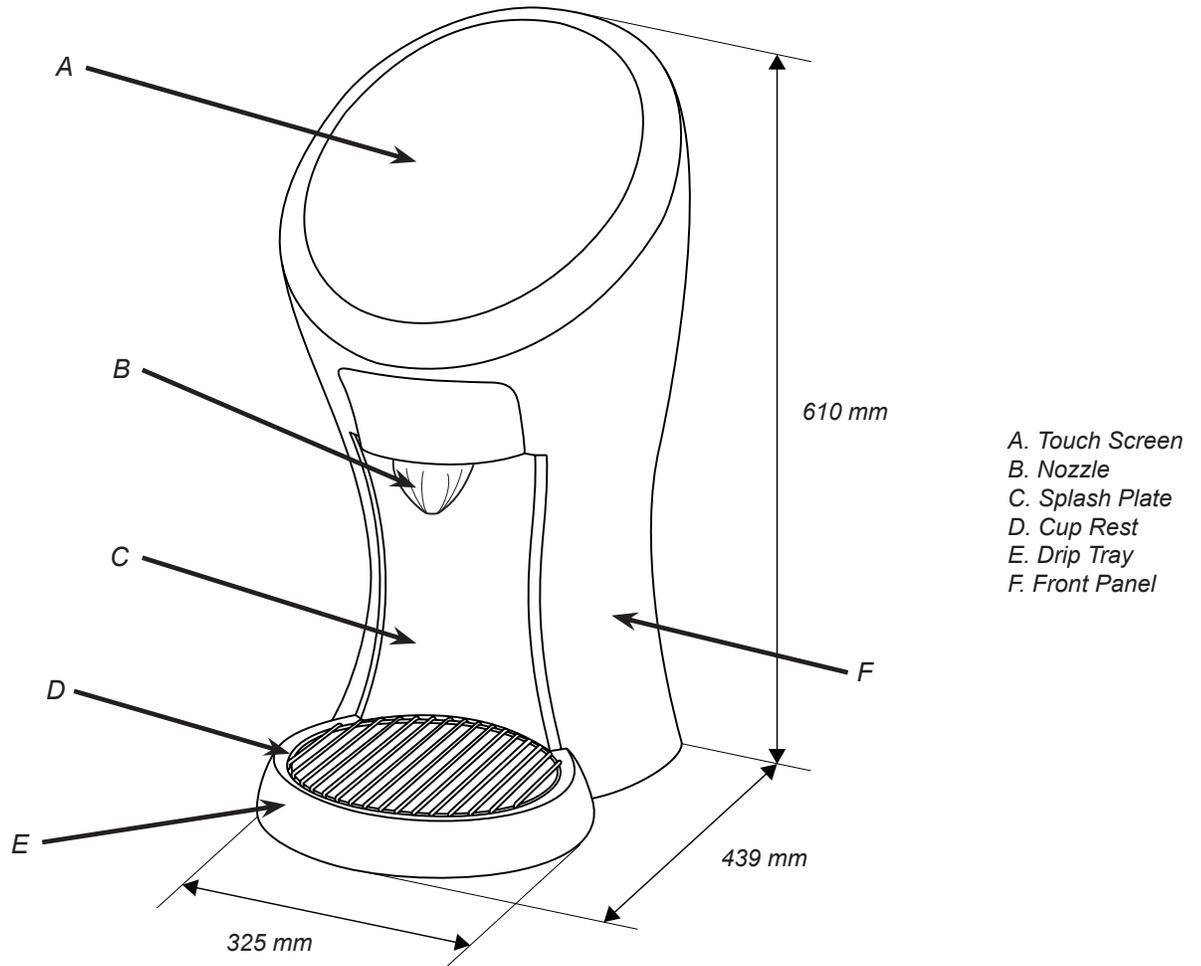
- Follow all local electrical codes when making connections.
- Appliance must be supplied by 24 VDC.
- Check dispenser name plate label located, underneath the head of the tower, for the correct electrical requirements of unit. **DO NOT** plug into a wall, electrical outlet unless the current shown on the serial number agrees with local current available.
- Each dispenser must have a separate electrical circuit.
- **DO NOT** use extension cords with this unit.
- **DO NOT** 'gang' together with other electrical devices on the same outlet.
- **WARNING:** Always disconnect electrical power to the unit to prevent personal injury before attempting any internal maintenance.
- The resettable breaker switch should not be used as a substitute for unplugging the dispenser from the power source to service the unit.
- Only qualified personnel should service internal components of electrical control housing.
- **WARNING:** Make sure that all water lines are tight and units are dry before making any electrical connections
- If this dispenser is installed in an area that is susceptible to ±10% variation of the nominal line voltage, consider installing a surge protector or similar protection device.

Water Notice

- Appliance is not suitable for installation where a water jet could be used.
- Provide an adequate, potable water supply. Water pipe connections and fixtures directly connected to a potable water supply must be sized, installed, and maintained according to federal, state, and local codes.
- The water supply line must be at least a 9.525 mm (3/8 inches) pipe with a minimum of 20 PSI (0.137 MPA) line pressure, but not exceeding a maximum of 50 PSI (0.345 MPA). Water pressure exceeding 50 PSI (0.345 MPA) must be reduced to 50 PSI (0.345 MPA).
- Use a filter in the water line to avoid equipment damage and beverage off-taste. Check the water filter periodically, as required by local conditions.
- **CAUTION:** The water supply must be protected by means of an air gap, a backflow prevention device (located upstream of the CO₂ injection system) or another approved method to comply with NSF standards. A leaking inlet water check valve will allow carbonated water to flow back through the pump when it is shut off and contaminate the water supply.
- **CAUTION:** Ensure the backflow prevention device complies with ASSE and local standards. It is the responsibility of the installer to ensure compliance.

PRE-INSTALLATION

Specification & Features



DIMENSIONS

Width: 325 mm (12.8 inches)
Depth: 439 mm (17.3 inches)
Height: 610 mm (24 inches)

WEIGHT

Shipping: 18.1 kg (40 lbs)
Operating: 14.5 kg (32 lbs)

ELECTRICAL

24 VDC / 2.0 Amps

FLOW RATE

1.5 - 2.0 ounces per second

PLAIN WATER SUPPLY

Min Flowing Pressure: 20 PSIG (0.137 MPA)
Max Static Pressure: 50 PSI (0.345 MPA)

CARBON DIOXIDE (CO₂) SUPPLY

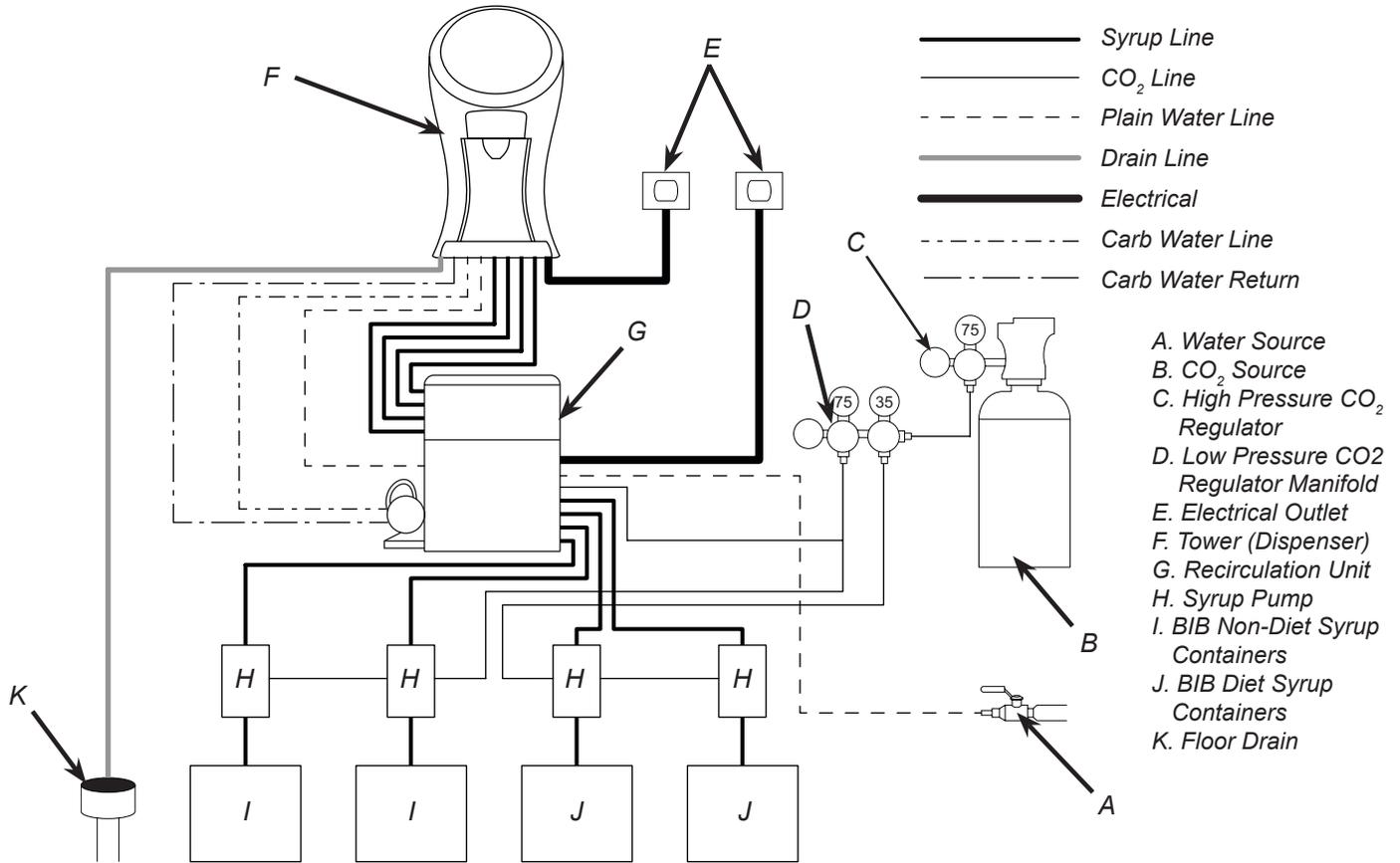
Min Pressure: 70 PSIG (0.483 MPA)
Max Pressure: 80 PSIG (0.552 MPA)

FITTINGS

Carb Water Inlet: 9.5 mm (3/8 inch) barb
Carb Water Outlet: 9.5 mm (3/8 inch) barb
Plain Water Inlet: 9.5 mm (3/8 inch) barb
Brand Syrup Inlets: 9.5 mm (3/8 inch) barb
Drain Fitting: 15.9 mm (5/8 inch) barb

This unit emits a sound pressure level below 70 dB

General System Overview



Pre-Installation Checklist

TOOLS REQUIRED:

- Oetiker Pliers
- Tubing Cutters
- Wrench
- Slotted Screwdriver
- Phillips Screwdriver
- Drill

BIB SYSTEM:

- BIB Rack
- BIB Syrup Boxes
- BIB Regulator Set
- BIB Connectors

POST MIX ACCESSORIES:

- High Pressure CO₂ Regulator
- Low Pressure CO₂ Regulator Manifold
- CO₂ Supply
- Chain for CO₂ Tank
- Beverage Dispenser
- Beverage Tubing
- Oetiker Clamp Fittings

CONSIDER THE FOLLOWING BEFORE INSTALLATION:

- Location of Water Supply Lines
- Location of Drain
- Location of Electrical Outlet
- Location of Heating and Air Conditioning Ducts
- Do you have enough space to install the dispenser?
- Is countertop level?
- Can the countertop support the weight of the dispenser?
- Is dispenser located away from direct sunlight or overhead lighting?

INSTALLATION

Read This Manual

This manual was developed by Lancer Corporation as a reference guide for the owner/operator and installer of this dispenser. Read this manual before installation and operation of this dispenser. Please see pages 24-26 for troubleshooting or service assistance. If the service cannot be corrected please call your Service Agent or Lancer Customer Service. Always have your model and serial number available when you call.

Unpacking the Dispenser

1. Cut package banding straps and remove.
2. Open the box and remove the accessory kit and loose parts.
3. Carefully remove the dispenser from the corrugated shipping carton and place on a flat surface taking care to not scratch the plastic covers.

NOTE

Inspect unit for concealed damage. If evident, notify delivering carrier and file a claim against the same.

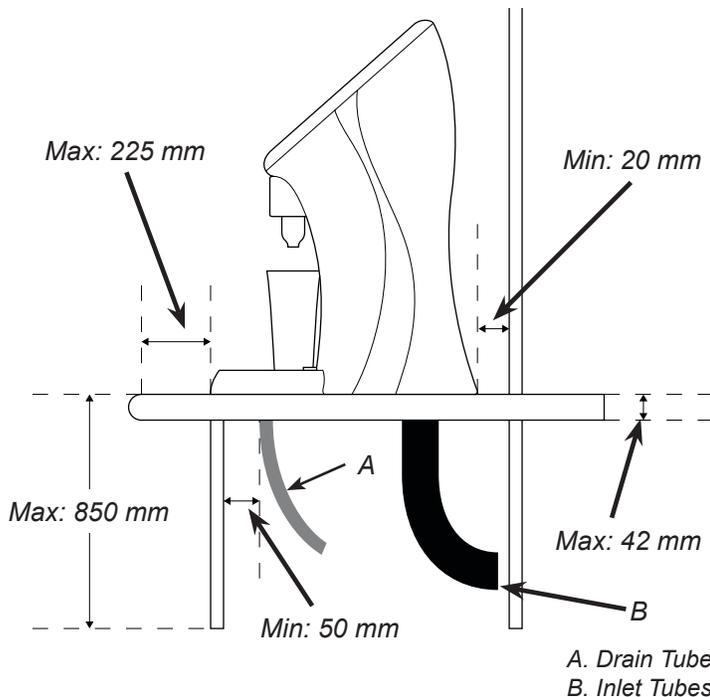
Selecting/Preparing a Counter Location

1. Select a location that is in close proximity to a properly grounded electrical outlet, within 1.5 m (5 ft) of a drain, and a water supply that meets the requirements shown in the Specifications section found on page 4.

⚠ ATTENTION

Inspect the counter location where the unit is to be installed. Verify the selected counter is strong enough to safely support the weight of the installed unit, after the cutout for the unit is made. The ideal counter for installation should measure at least 25 mm (1 inch) thick.

2. Select a location that utilizes the clearances/space required for installation.



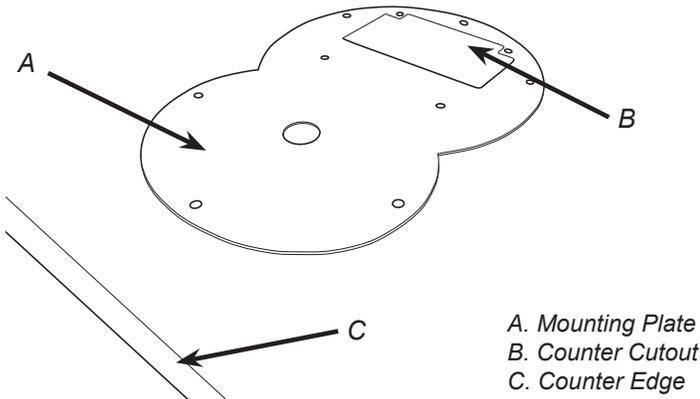
3. Select a location for the remote chiller system or carbonator (if necessary), syrup pumps, CO₂ tank, product containers, and water filter (recommended).
4. Using Counter Cutout Template provided, cut out required opening for the drip tray and tower installation in the designated dispenser location.

NOTE

To assure that beverage service is accessible to all customers, Lancer recommends that counter height and equipment selection be planned carefully. The 2010 ADA Standards for Accessible Design states that the maximum reach height from the floor should be no more than 1.2 meters (48 inches) if touch point is less than 254 mm (10 inches) from the front of the counter, or a maximum of 1.17 meters (46 inches) if the touch point is more than 254 mm (10 inches) and less than 685 mm (27 inches) from the front of the counter. For more information about the customer's legal requirements for the accessibility of installed equipment, refer to 2010 ADA Standards for Accessible Design - <http://www.ada.gov>.

Dispenser/Chiller Installation

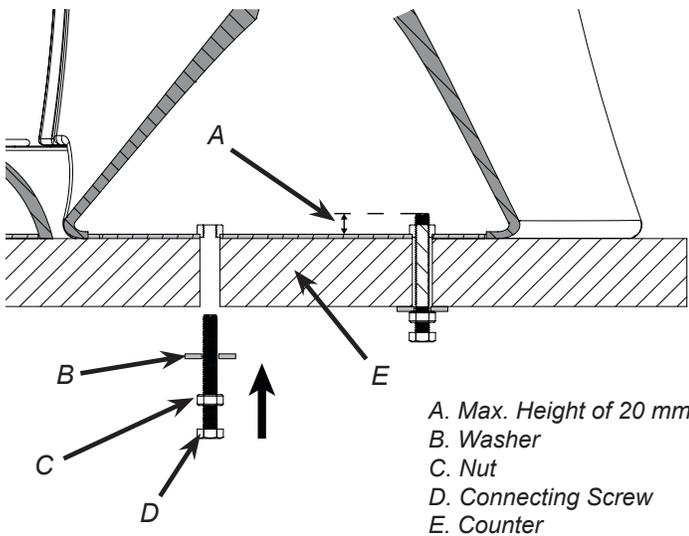
1. Carefully lift unit and using a screwdriver, separate the mounting plate from the tower and drip tray.
2. Remove the drain fitting from the drip tray. First, unscrew the lower section then press firmly from the bottom to remove the upper portion of the drain fitting.
3. Using the six (6) mounting screws provided, secure the mounting plate to the counter top.



4. Using proper lifting techniques, lift the tower over the counter top and slide the unit inlets and power cord through the opening in the mounting plate/counter top.
5. Using the four (4) screws provided, connect/tighten tower to mounting plate/counter top.

⚠ ATTENTION

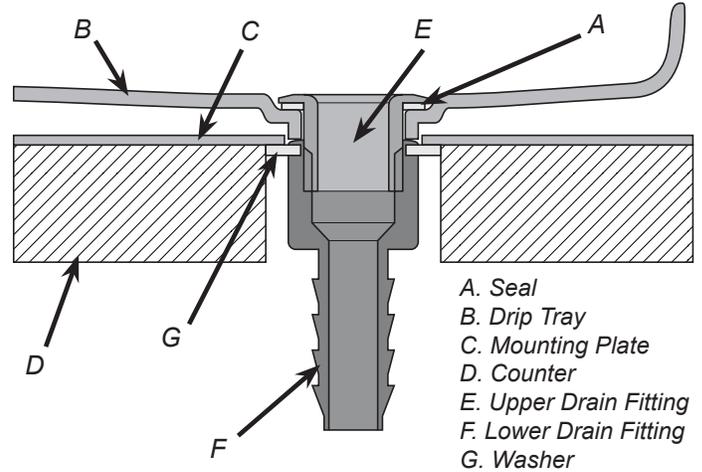
When attaching the tower to the mounting plate, make sure the screws do not extend more than 20 mm (0.78 inches) from the top of the mounting plate. These could damage the valves when installing the dispenser.



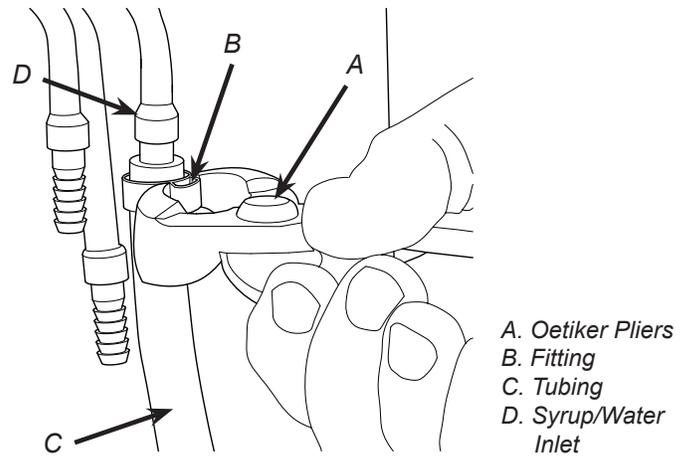
NOTE

NSF listed units must be sealed to the counter.

6. Place gasket at the bottom of the drain then re-attach drain fitting to drip tray, removed in Step 2.



7. Install cup rest to drip tray.
8. Route appropriate tubing from the recirculation chiller syrup outlets to the syrup inlets on the tower. Connect tubing to inlets using the oetiker pliers and fittings. Repeat for all syrup connections.
9. Route appropriate tubing from the recirculation chiller water outlets to the carbonated/plain water inlets then connect tubing to inlet. Repeat for all water connections including the return inlet.



10. Route drain line from the designated floor drain to the drip tray and connect drain line to drain nut installed in step 6.
11. Plug in power cord to power supply then route power supply cord to the designated grounded electrical outlet.

⚠ WARNING

DO NOT PLUG UNIT INTO GROUNDED ELECTRICAL OUTLET AT THIS TIME. Make sure that all water lines are tight and unit is dry before making any electrical connections

NOTE

Unit is designed to be supported by a remote chiller system or remote ice cooled system. Please see the manufacturer's specifications and instructions for installation. The following are instructions for plumbing the remote chiller system.

12. Route appropriate tubing from the syrup pump location to the syrup inlets at the remote chiller. Repeat for all syrup connections.

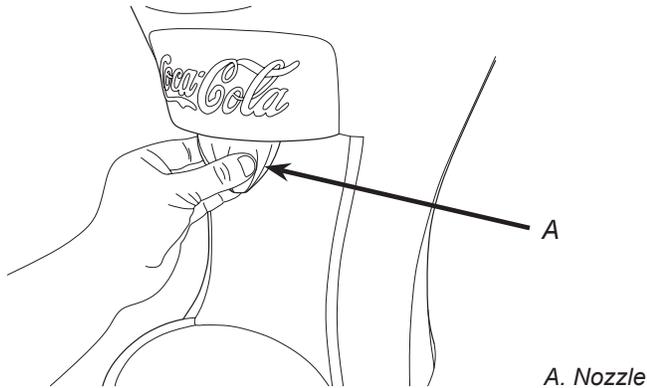
13. Route appropriate tubing from the water source to the water inlet at the remote chiller and only connect tubing to the water source.
14. Turn on the water and flush the water line thoroughly.
15. Turn off the water and connect water line to the plain water inlet at the remote chiller.

⚠ ATTENTION

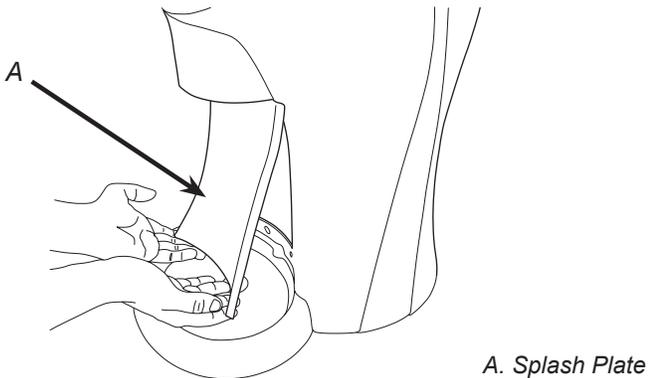
The minimum flowing pressure to the valve must be 20 PSI (0.137 MPA). A booster pump may be required for proper operation of the valve.

Dispenser Setup

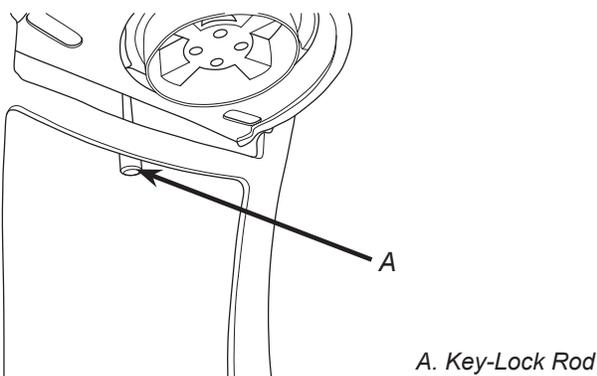
1. Remove the cup rest from drip tray.
2. Remove the nozzle by twisting clockwise and pulling down.



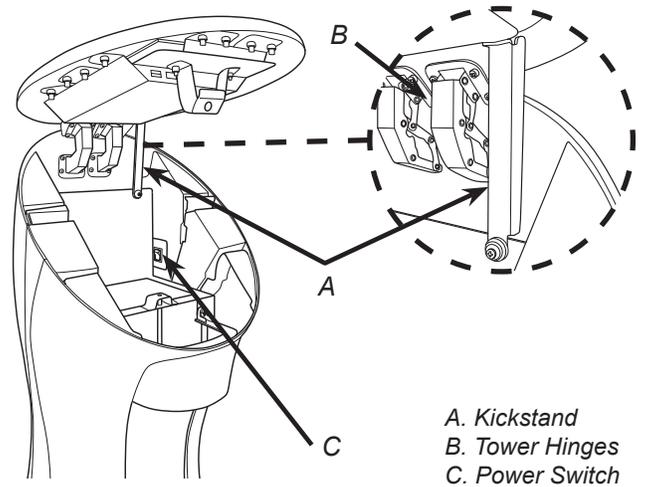
3. Remove the splash plate by placing both hands at the bottom of the plate. Simultaneously lift up and pull out on the splash plate until it 'pops' off of the front panel.



4. Twist the key-lock rod, located behind the splash plate, to unlock the head of the tower.



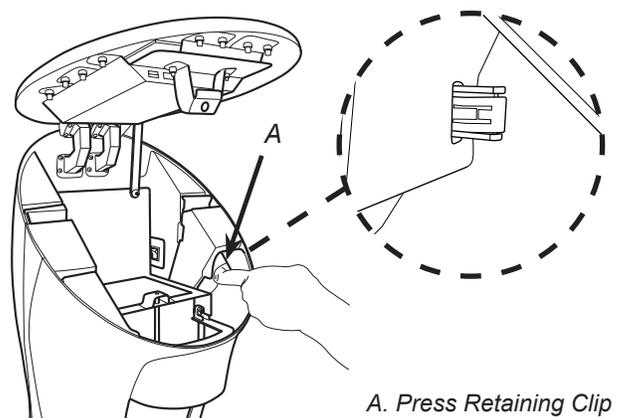
5. Once unlocked, lift the head of the tower all the way then lock the head of the tower in place by using the kick stand next to the tower hinges.



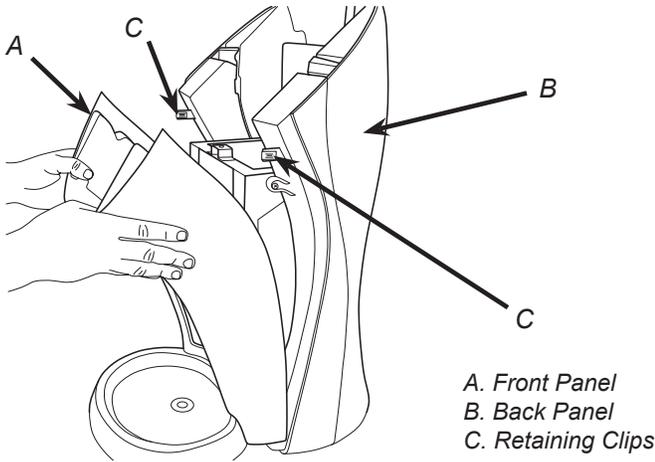
6. Press one of the top retaining clips, located on the inside of the front panel, and simultaneously pull forward on the panel to unhook from the retaining clip. Repeat for remaining three front retaining clips.

⚠ ATTENTION

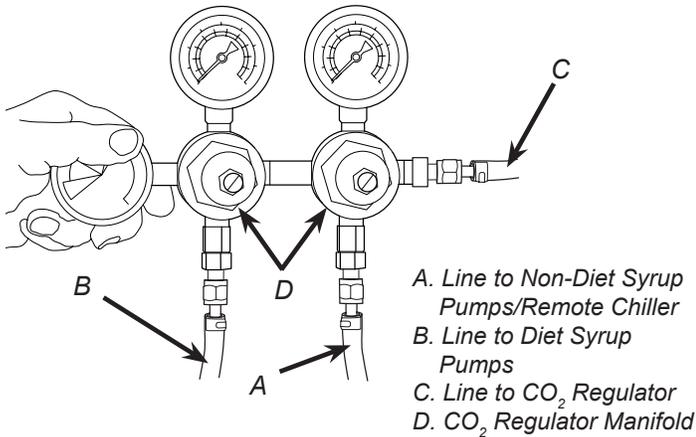
Make sure, when removing the front panel, to pull straight out. DO NOT bend plastic when removing the panel, this could damage the retaining clips.



- Slide the front panel off of the dispenser by leaning the top of the panel forward then slide off of the dispenser.



- Route tubing from the CO₂ inlet at the remote chiller and normal, non-diet syrup pumps and connect both lines to one of the low pressure CO₂ regulator manifold outlets.



- Connect tubing routed from the diet syrup pumps to the second outlet of the low pressure CO₂ regulator manifold.
- Turn on the water supply.
- Verify all Bag-in-Box contain syrup and check for leaks.
- Open the pressure relief valve located on the remote chiller system by flipping up on the valve cap lever. Hold open until water flows from the relief valve then close (flip down) relief valve.
- Connect power cord to grounded electrical outlet.

⚠ WARNING

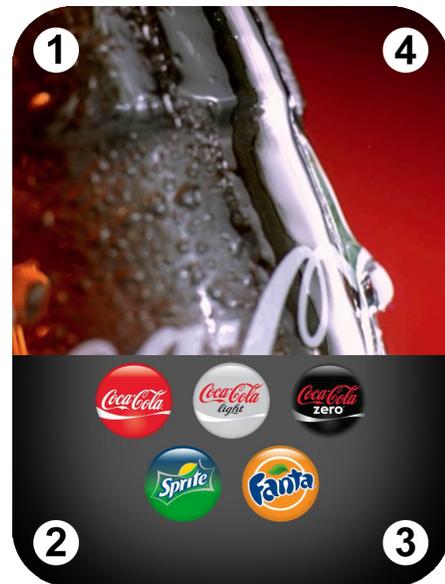
The dispenser must be properly electrically grounded to avoid serious injury or fatal electrical shock. The power cord has a three-prong grounded plug. If a three-hole grounded electrical outlet is not available, use an approved method to ground the unit. Follow all local electrical codes when making connections. Each dispenser must have a separate electrical circuit. Do not use extension cords. Do not connect multiple electrical devices on the same outlet.

- Turn on the power to the dispenser by flipping the power switch, located underneath kickstand. (See previous page)
- Unhook the kickstand and lower the head of the tower to access the touchscreen.
- Once the screen has booted up, access the service menu by placing your finger at the top, right corner of the screen.
- In one swift, fluid motion slide your finger along the top of the screen to the left till you reach the upper left corner of the screen, then hold your finger to the screen for a minimum of two (2) seconds.



- Slide Finger to Left and Hold

- After you have held your finger to the upper left corner for a minimum of two (2) seconds, tap all four corners of the screen in any order.



- Tap Four Corners of Screen

19. A keypad will appear, enter the designated pin number to access the service menu.

NOTE

Contact Lancer Technical Support for the units' designated pin number.

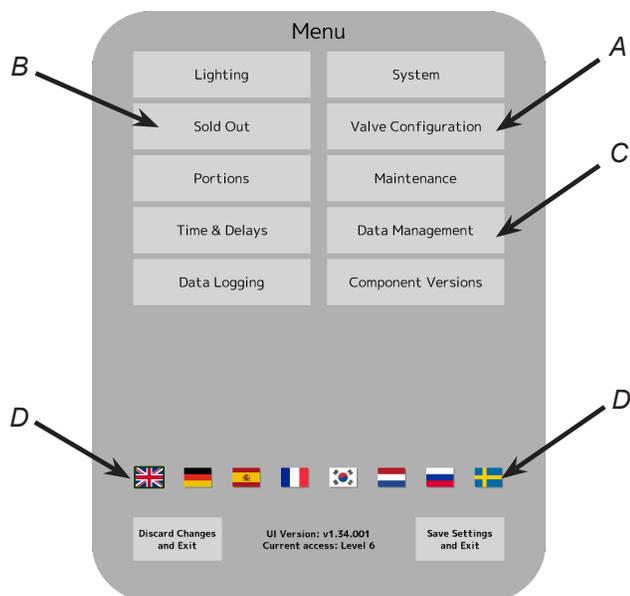
NOTE

For manager's access to the service menu, press and hold the upper right corner of the screen for five (5) seconds then enter pin number (6655). The manager's access to the service menu allows access to both the sold out screen (See page 19) and portions control screen (See page 18).

NOTE

To put the dispenser in "sleep" mode or to lock the dispenser, press and hold the upper right corner of the screen for five (5) seconds then enter your "lock code" (3.14) To lock the dispenser. This mode prevents users from dispensing drinks and acts as a power saving tool while the unit is not in use.

20. From the service menu press the maintenance button.



A. Valve Configuration Button C. Maintenance Button
 B. Sold Out Button D. Locale Change

21. Press the purge tab on the far left side of the screen.

22. Press the Purge buttons for both the plain water and the carbonated water modules.



A. Purge Tab
 B. Up to 4 Purge Buttons Selected
 C. 'Greyed Out' Purge Button

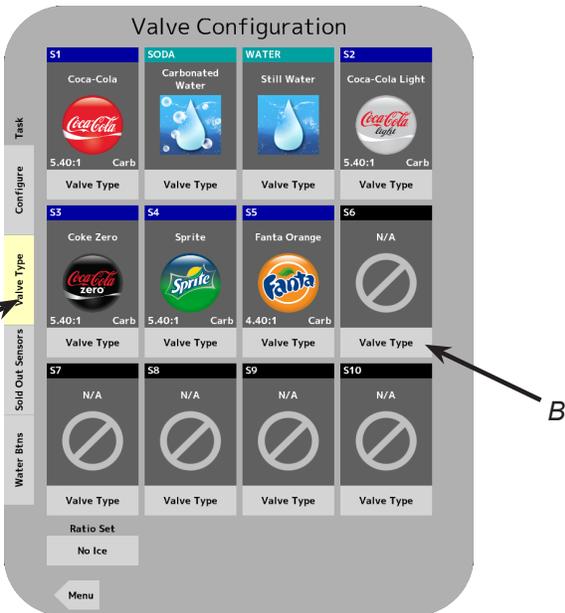
NOTE

Once the purge is activated, it will continue to dispense product until it is deactivated. To deactivate the purge, simply press the Purge button again. Up to four modules can be purged at one time. Once four modules are selected, all other modules are greyed out and cannot be selected.

23. Once a steady flow of water is achieved, press the Purge button again to deactivate the modules.
24. Ensure that the pump deck at the remote chiller is turned off before turning on the CO₂.
25. Turn on CO₂ at the source then, using a screwdriver, adjust the high pressure regulator at the source to 75 PSI (0.517 MPA) then tighten locknut with wrench.
26. Adjust the low pressure regulator routed from the normal, non-diet syrup pumps and remote chiller to 75 PSI (0.517 MPA).
27. Adjust the second low pressure regulator routed from the diet syrup pumps to 35 PSI (0.241 MPA).
28. Purge the carbonated water module until gas-out.
29. Reactivate the pump deck at the remote chiller.
30. Purge the carbonated water module again until a steady flow of carbonated water is achieved.
31. Purge each syrup and flavor module until a steady flow of syrup is achieved.

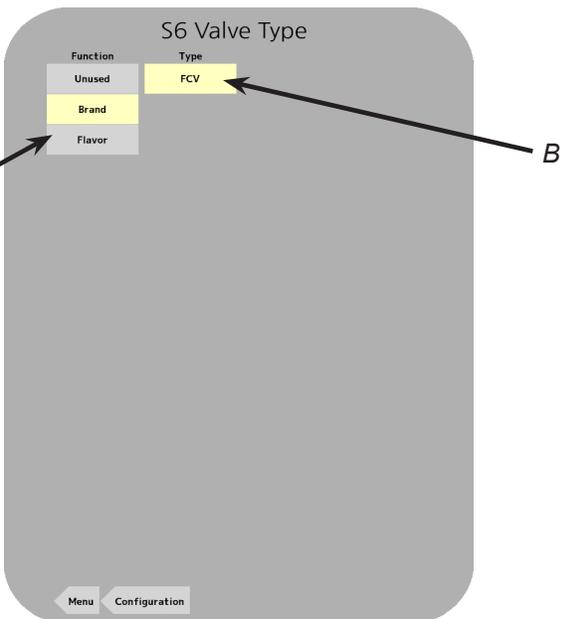
Adding New Brand/Flavor Module

1. In order to add a new brand or flavor module, the module must first be activated.
2. From the Service menu, press the Valve Configuration button.
3. Press the Valve Type tab on the far left side of the screen, then select any of the inactive modules.



A. Valve Type Tab B. Valve Type Button

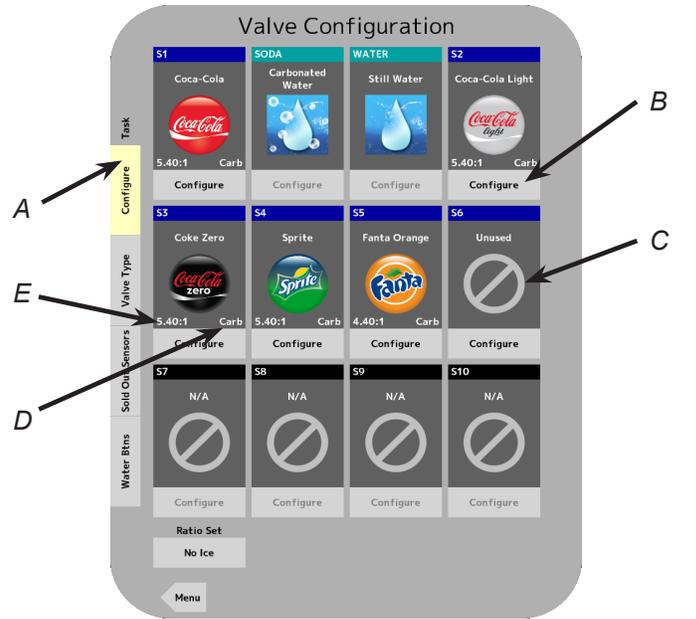
4. From here, choose the desired function and valve type for the incorporated valve module.



A. Valve Function B. Valve Type

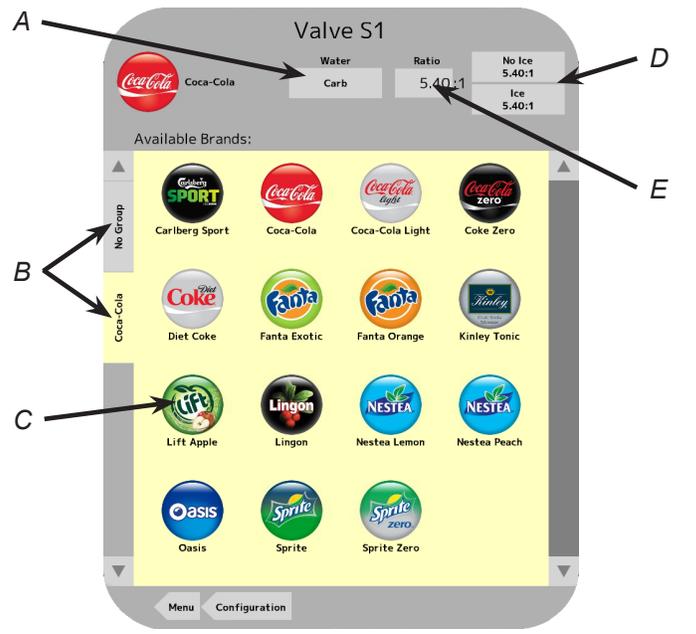
5. Press the Configuration button to return to the Valve Configuration menu.
6. Repeat steps 3 and 4 for any other desired brand or flavor modules.

7. From the Valve Configuration menu, press the Configure tab on the far left side of the screen.
8. Press the Configure button under any of the activated brand or flavor modules to open its Valve Configuration Page.



A. Configure Tab B. Configure Button C. Activated Module D. Brand Ratio E. Brand Water Type

9. Select a new brand from the available Brands Library tabs on the left side of the screen.



A. Water Type B. Brand Library Tabs C. Replacement Brand D. Ice/No Ice Ratio E. Input Ratio

5. Press the Configuration button to return to the Valve Configuration menu.
6. Repeat steps 3 and 4 for any other desired brand or flavor modules.

NOTE

Each brand has a default water type and ratio already set when they are selected. The water type and ratio can be adjusted if necessary, adjust the ratio by selecting the “Ice” or “No Ice” ratio using the buttons in the upper right corner of the screen, or by tapping the number and entering the new value on the keypad. However adjusting the ratio here is purely representational. Each valve must still be manually adjusted in order for the ratio to be set, (see next section).

- Once a brand/ flavor has been selected to a corresponding module, press the Configuration button to return to the Configuration Screen.
- Repeat steps 8 and 9 for any other desired brand or flavor modules.
- Press the Menu button to return to the Service menu.
- From the Service Menu, press the Maintenance button.
- Press the Purge tab on the far left side of the screen.
- Purge any new brand or flavor module until there is a steady flow of product. (See page 11)
- Press the Menu button to return to the Service Menu.

CALIBRATION & MAINTENANCE

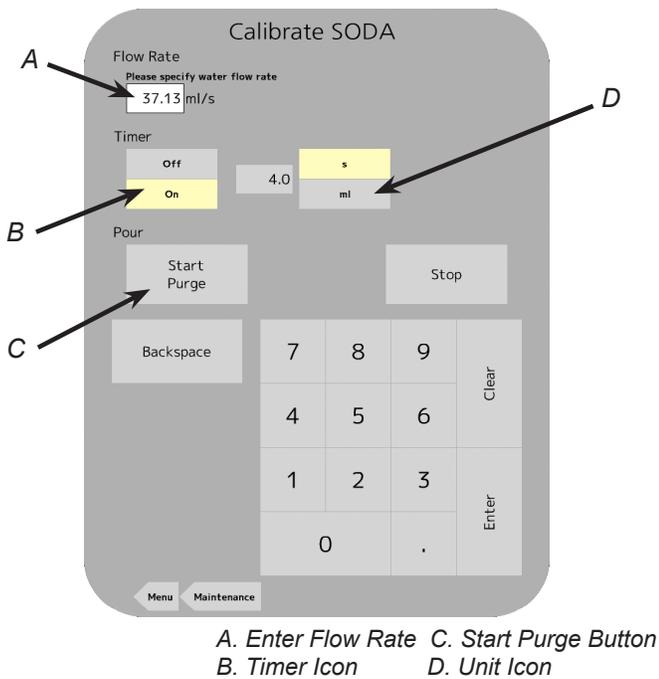
Calibrating Carbonated/Plain Water Modules

- From the Service menu, press the Maintenance button.
- Press the Calibrate tab on the far left side of the screen and press the Calibrate button for the carbonated water module.
- Enter the desired flow rate in milliliters per second (ml/sec). This number is based on the target finished drink flow rate of 44 ml/sec and the desired drink ratio.

EXAMPLE

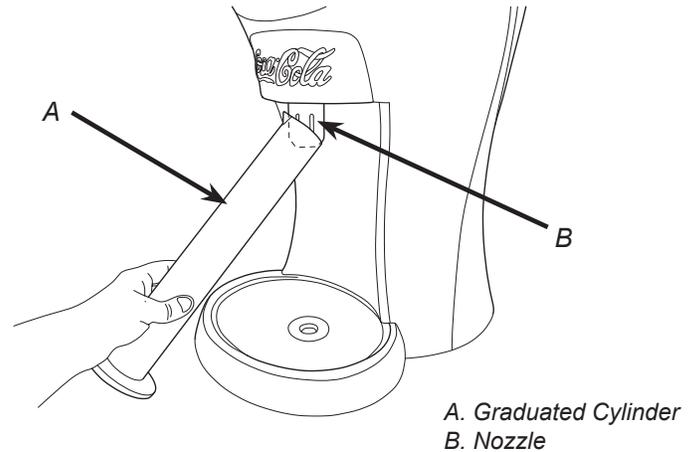
Finished drink flow rate = 44 ml/sec
Ratio = 5.4:1

$44 \text{ ml/s} \times 5.4 / (5.4 + 1) = 37.13 \text{ ml/sec}$ water flow rate
 $44 \text{ ml/s} \times 1 / (5.4 + 1) = 6.87 \text{ ml/sec}$ syrup flow rate

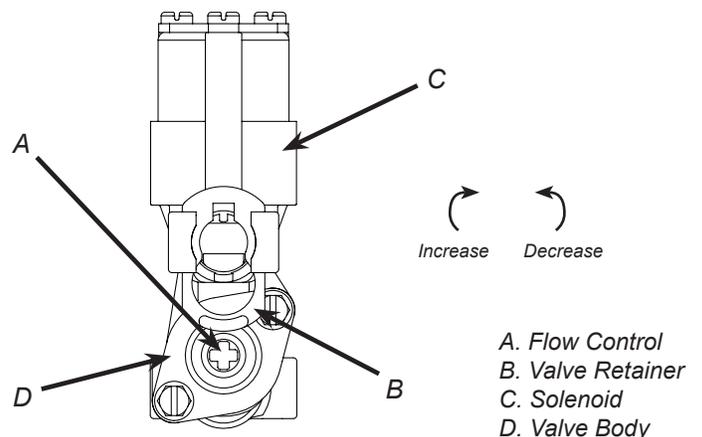


- Set the Timer to the ON position and select milliliters (ml) as the desired unit of measurement.
- Using the keypad, enter a specific volume to be dispensed based on the size of the graduated cylinder being used to calibrate the carbonated water module. The larger the volume dispensed, the more accurate the results. Use the example 150 ml.

- With the graduated cylinder placed in a position below the nozzle, press the Start Purge button. The unit will dispense the volume designated in the previous step.



- Examine the dispensed volume in the graduated cylinder. If the dispensed volume does not match the value (150 ml) entered on the screen in step 5, remove the protective cap for the corresponding valve and use a screwdriver to adjust the carbonated water flow control. (See Plumbing Diagram on page 30 for reference).



- Repeat steps 6 and 7 until the designated volume of 150 ml in step 5 is achieved.
- Repeat steps 2-8 for the plain water module, if present.

Calibrating Brand Syrup Modules

NOTE

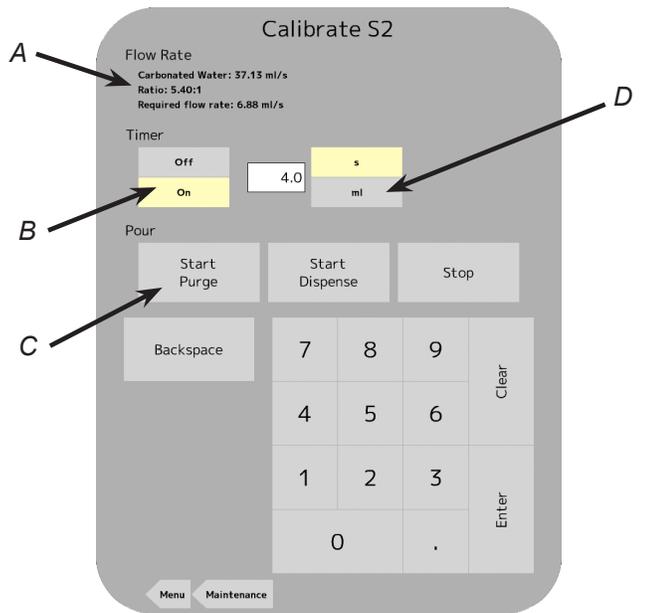
There are two ways that the syrup modules can be calibrated on this unit. Either by using a timed pour and adjusting each valve with the help of a graduated cylinder, or by using a syrup separator and ratio cup with a target flow rate of 44 ml/sec. Both processes are outlined below:

NOTE

The refrigeration unit should have been running for at least one (1) hour before attempting to set flow rates on valves. The drink temperature should be no higher than 40°F (4.4°C) when flow rates are set. This is best done after the remote chiller has already made an ice bank.

Graduated Cylinder:

1. From the Service menu, press the Maintenance button.
2. Press the calibrate tab on the far left side of the screen and press the Calibrate button for the first brand syrup module.
3. The water flow rate should be set from the calibration of the carbonated/plain water modules in the previous section and the ratio should be determined from when the brand was configured. (See page 11, *Adding New Brand/Flavor Module*)



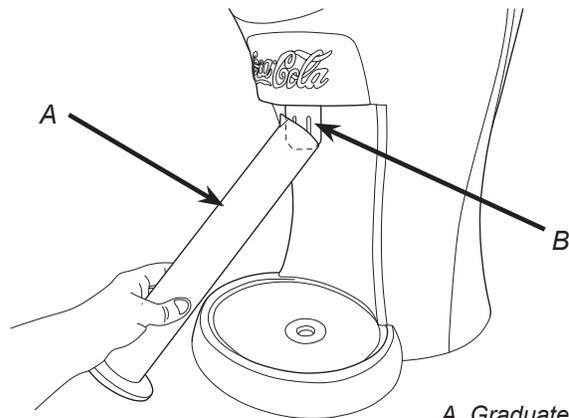
A. Flow Rate/Ratio C. Start Purge Button
B. Timer Icon D. Unit Icon

4. Set the Timer to the ON position and select seconds (s) as the desired unit of measurement.
5. Using the keypad, enter in a time of 4 seconds as the preset dispensing time.

NOTE

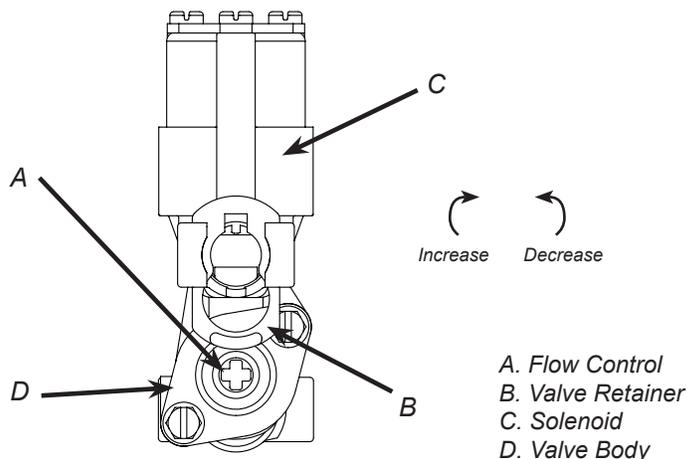
The finished drink flow rate was set to 44 ml/sec, which makes the finished syrup flow rate 6.87 ml/s. In 4 seconds, the volume of syrup that should be dispensed is 27.48 ml.

6. With the graduated cylinder placed in a position below the nozzle, press the Start Purge button. The unit will dispense the designated syrup for 4 seconds.



A. Graduated Cylinder
B. Nozzle

7. Examine the dispensed volume in the graduated cylinder. If the dispensed volume does not match the value of 27.48 ml, remove the protective cap for the corresponding valve and use a screwdriver to adjust the brand syrup flow control. (See Plumbing Diagram on page 30 for reference).



A. Flow Control
B. Valve Retainer
C. Solenoid
D. Valve Body

8. Repeat steps 6 and 7 until the designated volume of 27.48 ml is achieved.
9. Repeat steps 2-8 for the remaining brand syrup modules.
10. Press the Maintenance button to return to the Maintenance screen and then press the Menu button to return to the Service menu.

Ratio Settings Table:

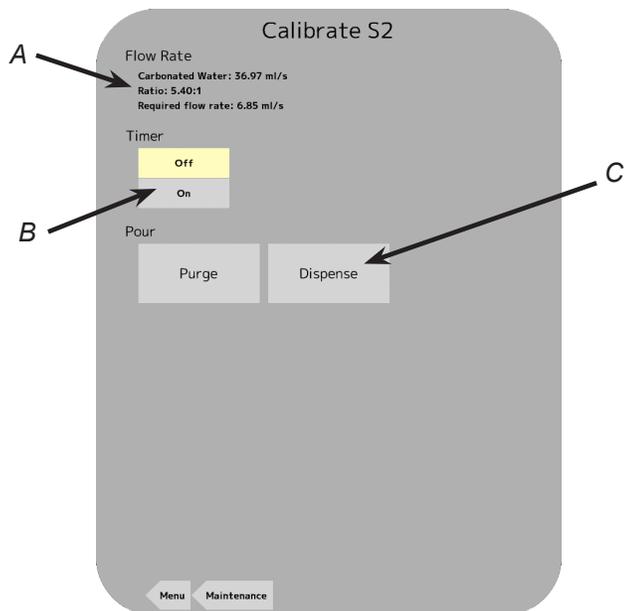
The table below shows the flow rate for the carbonated/plain water modules and the volume of syrup dispensed after a 4 second pour, for different ratio settings (All at a finished drink flow rate of 44 ml/sec):

Ratio	4	4.2	4.4	4.6	4.8	5	5.2	5.4	5.6	5.8	6
Carbonated/ Plain Water Flow Rate (ml/s)	35.2	35.54	35.85	36.14	36.41	36.67	36.9	37.13	37.33	37.53	37.71
Volume of Syrup (4 sec.) (ml)	35.2	33.85	32.59	31.43	30.45	29.33	28.39	27.5	26.67	25.88	25.14

Ratio	6.2	6.4	6.6	6.8	7	7.2	7.4	7.5	7.6	7.8	8
Carbonated/ Plain Water Flow Rate	37.89	38.05	38.21	38.36	38.5	38.63	38.76	38.82	38.88	39	39.11
Volume of Syrup (4 sec.)	24.44	23.78	23.16	22.57	22	21.46	20.95	20.71	20.47	20	19.56

Ratio Cup:

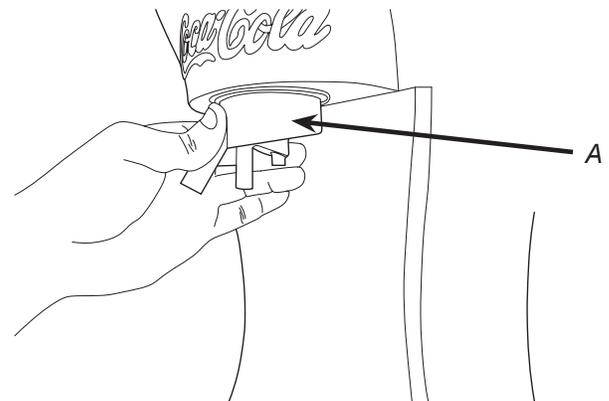
1. From the Service menu, press the Maintenance button.
2. Press the calibrate tab on the far left side of the screen and press the Calibrate button for the first brand syrup module.
3. The water flow rate should be set from the calibration of the carbonated/plain water modules in the previous section and the ratio should be determined from when the brand was configured. (See pages 11, *Adding New Brand/Flavor Module*)



A. Flow Rate/Ratio
B. Timer Icon
C. Dispense Button

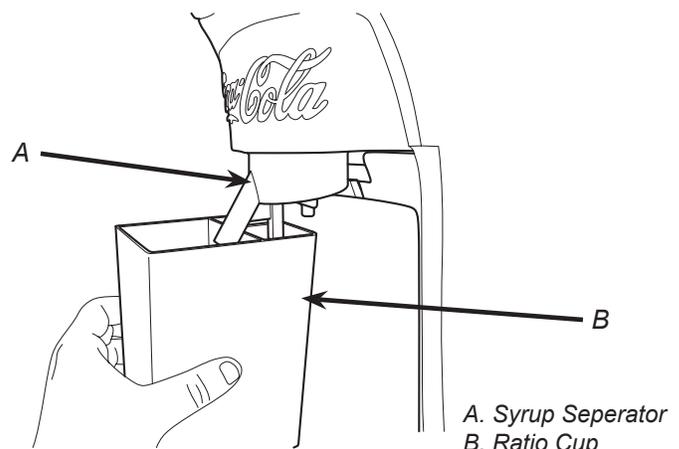
4. Set the Timer Icon to the OFF position.
5. Remove the nozzle by twisting counter clockwise and pulling down.

6. Install Lancer syrup separator (PN 05-3383) in place of nozzle.



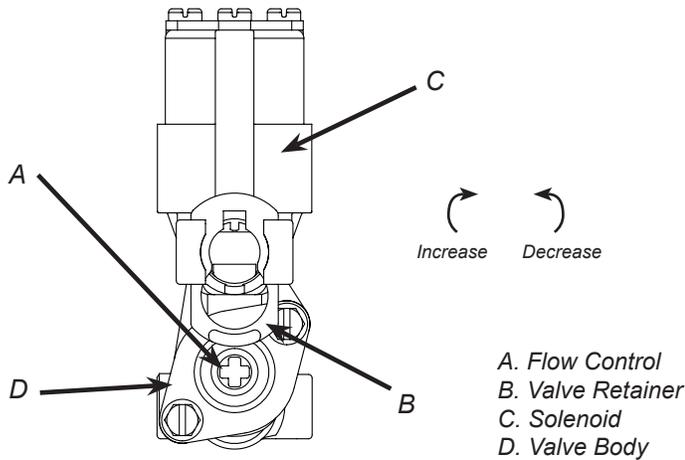
A. Syrup Separator
in Place of Nozzle

7. Using a Lancer ratio cup, activate the brand syrup module by pressing and holding the Dispense button. Release the button to deactivate the module and capture a sample.



A. Syrup Separator
B. Ratio Cup

- Verify that the syrup level is even with the water level in the ratio cup. If the dispensed syrup and water levels are not level, remove the protective cap from the corresponding valve and use a screwdriver to adjust the brand syrup flow control. (See Plumbing Diagram on page 30 for reference).



- Repeat steps 7 and 8 if any more brand syrup flow adjustment that is necessary.
- Repeat steps 2-9 for the remaining brand syrup modules.
- Press the Maintenance button to return to the Maintenance screen and then press the Menu button to return to the Service menu.

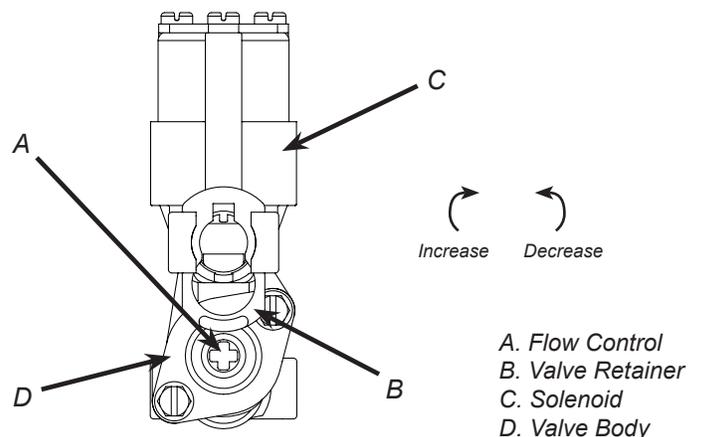
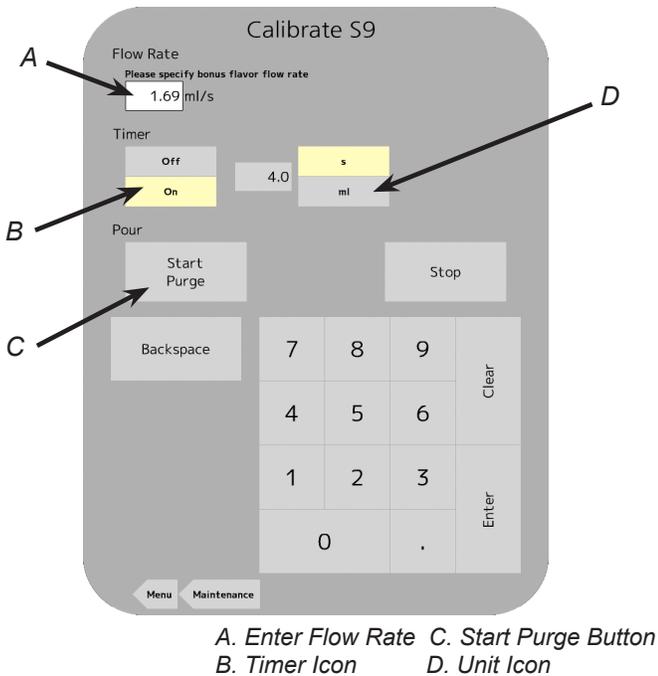
Calibrating Flavor Modules

- From the Maintenance menu, press the Calibrate tab on the far left side of the screen and press the Calibrate button for any designated flavor module.
- Enter the flow rate in milliliters per second (ml/sec). This number is based on the target drink flow rate of 1.5 oz/sec and a designated flavor ratio. (See product container for designated ratio)

EXAMPLE

Finished drink flow rate = 44 ml/sec
Ratio = 25:1
 $44 \text{ ml/sec} \times 1 / (25 + 1) =$
1.69 ml/s bonus flavor flow rate

- Set the Timer to the ON position and select milliliters (ml) as the desired unit of measurement.
- Using the keypad, enter a specific volume to be dispensed based on the size of the graduated cylinder being used to calibrate the flavor module.
- With the graduated cylinder placed in a position below the nozzle, press the Start Purge button. The unit will dispense the volume designated in the previous step.
- Examine the dispensed volume in the graduated cylinder. If the dispensed volume does not match the value entered on the screen in step 5, remove the protective cap for the corresponding valve and use a screwdriver to adjust the carbonated water flow control. (See Plumbing Diagram on page 30 for reference).



- Repeat steps 6 and 7 if any more bonus flavor flow adjustment is necessary.
- Repeat steps 2-8 for any remaining bonus flavor module.

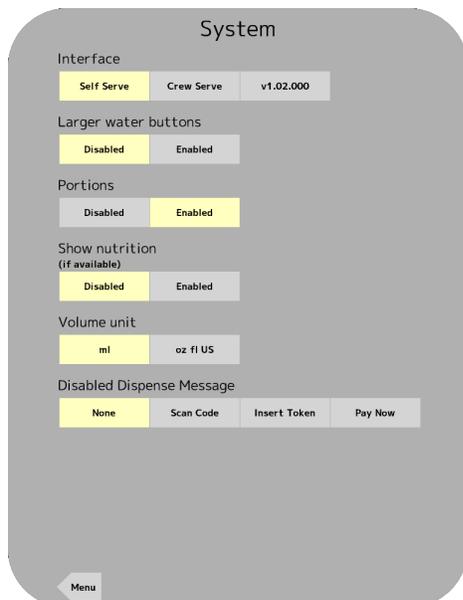
Scheduled Maintenance

As Needed	<ul style="list-style-type: none"> Keep exterior surfaces of dispenser (include drip tray and cup rest) clean using a clean, damp cloth.
Daily	<ul style="list-style-type: none"> Remove outer nozzle and rinse well in warm water. DO NOT use soap or detergent. This will cause foaming and off taste in finished product. Using a clean cloth and cleaning solution, clean the nozzle injectors. See Cleaning and Sanitizing Nozzle section on page 23 for reference. Remove cup rest and wash in cleaning solution. Pour warm cleaning solution into the drip tray and wipe with a clean cloth. With a clean cloth and cleaning solution, wipe off all of the unit's exterior surfaces and splash areas. DO NOT USE ABRASIVE SOAPS OR STRONG DETERGENTS. DO NOT USE AMMONIA BASED PRODUCTS WHEN CLEANING THE SCREEN OR SURROUNDING PLASTICS. Replace the cup rest and nozzle.
Weekly	<ul style="list-style-type: none"> Taste each product for off tastes. If off taste occurs clean and sanitize the unit using the appropriate procedures outlined in the Cleaning and Sanitizing section of this manual. Check the water level in the water bath for the remote chiller (if necessary). Replenish as required.
Monthly	<ul style="list-style-type: none"> Clean and sanitize the unit using the appropriate procedures outlined in the Cleaning and Sanitizing section of this manual.
Every Six Months	<ul style="list-style-type: none"> Clean remote chiller according to manufacturer's instructions (if necessary). Clean the entire exterior of the unit.

FEATURES OF THE BRIDGE TOWER

System Settings

- From the Service menu, press the System button.
- Enable/Disable different system features on the Bridge Tower.



NOTE

Interface - switches between different UI layouts: Self Serve, Crew Serve, and Legacy Radial Design (v1.02.000)

Larger Water Buttons - Enables/Disables larger water buttons for Main Menu (see page 17).

Portions - Enables/Disables portion control pour function (see page 18).

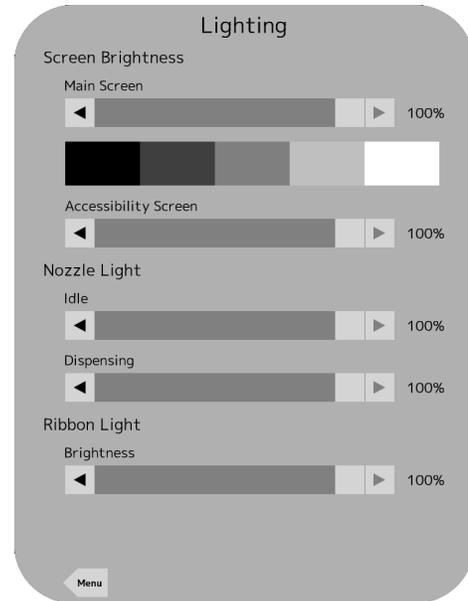
Show Nutrition - Enables/Disables nutrition information display on brand pour screen (if available).

Volume Unit - Changes the units on display between metric and imperial.

Disabled Dispense Message - Enables disabled dispense function with unique disabled dispense message to fit specific need (see page 19).

Lighting Features

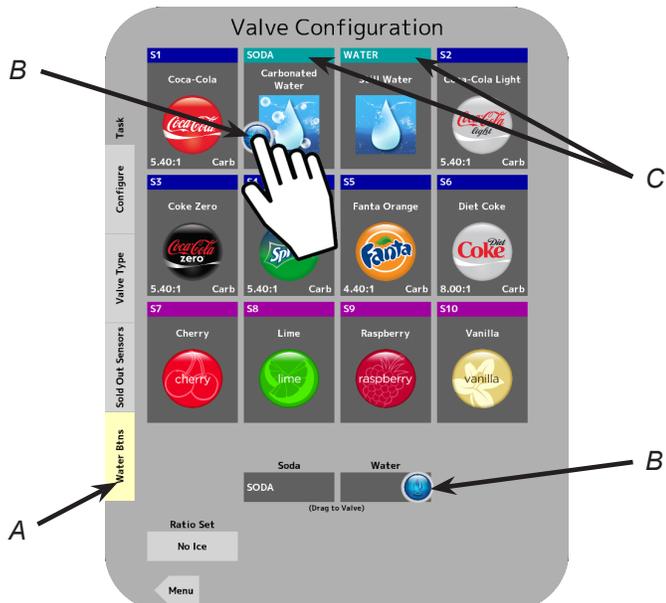
1. From the Service Menu, press the Lighting button to access the Lighting Menu.
2. Adjust the screen brightness for the Main Screen as well as the Accessibility Screen (if available).
3. Adjust the brightness of the nozzle light when the dispenser is idle or dispensing.
4. Adjust the brightness of the ribbon light on the side of the unit.



Water Buttons

1. In order to access the plain and/or carbonated water modules from the Main Menu, press the Valve Configuration button from the Service Menu.
2. Press the “Water Btns” tab on the far left side of the screen.
3. From here, the water buttons (carbonated and plain) can be dragged and placed onto their designated water modules.

4. Once a water button has been dragged and placed over its designated water module, a button will appear on the Main Menu.



A. Water Buttons Tab
 B. Plain/Carb Water Button
 C. Plain/Carb Water Module

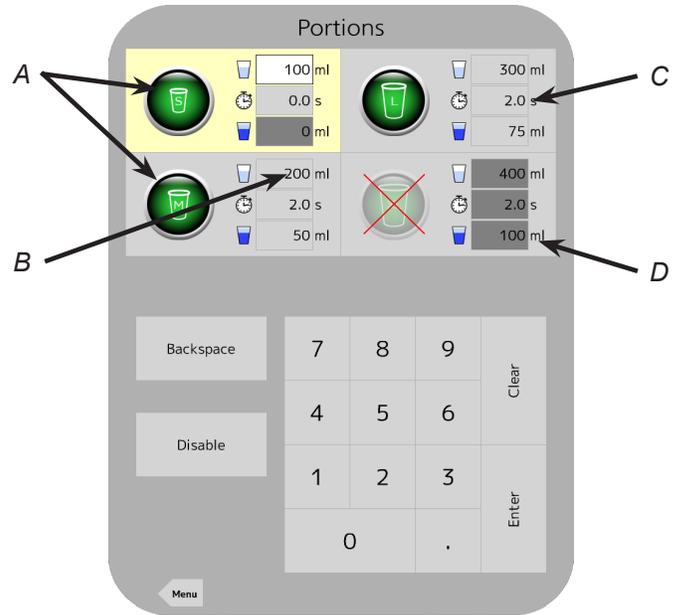


- Plain/Carb Water Buttons on Main Menu

NOTE
 The water buttons on the Main Menu give the consumer/customer the ability to pour plain or carbonated water without any syrup.

Portion Control Feature

1. From the Service Menu, press the Portions button.
2. Adjust the initial pour amount, wait time, and top-off pour amount for any of the four drink sizes by entering the amount on the keypad.
3. Any size can be disabled by selecting the size, then pressing the Disable button next to the keypad. To enable, select the size again.
4. Press Menu to return to the Service menu. In order to enable the Portion Control feature on the brand's Pour Screen, enter the System menu by pressing the System button (see page 16).
5. Enable the Portion Control feature by pressing "Enable" next to the "Portions" heading.



A. Drink Sizes C. Wait Time (sec)
B. Pour Amount (ml) D. Top-Off Amount (ml)

Time & Delay Features

1. From the Service Menu, press the Time & Delays button to access the Time & Delays Menu.
2. Enable or Disable any of the four (4) time & delay functions by tapping underneath their designated function names: Brand Timeout, Screen Saver, Sleep, and Dispense Timeout.

NOTE

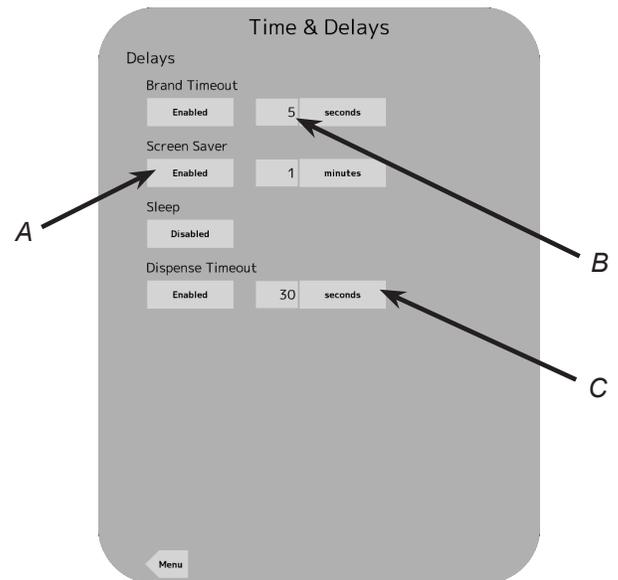
Brand Timeout - the amount of time for a selected brand on the Pour Screen to be unselected after inactivity

Screen Saver - the amount of time for the screen saver to be initiated after inactivity, (crew serve only)

Sleep - the amount of time for the unit to enter Sleep Mode after inactivity.

Dispense Timeout - the amount of time a valve will pour before automatic shutoff.

3. Adjust the Frequency and Units of Time by selecting their corresponding fields.



A. Enable/Disable
B. Frequency
C. Units of Time

Sold-Out Feature

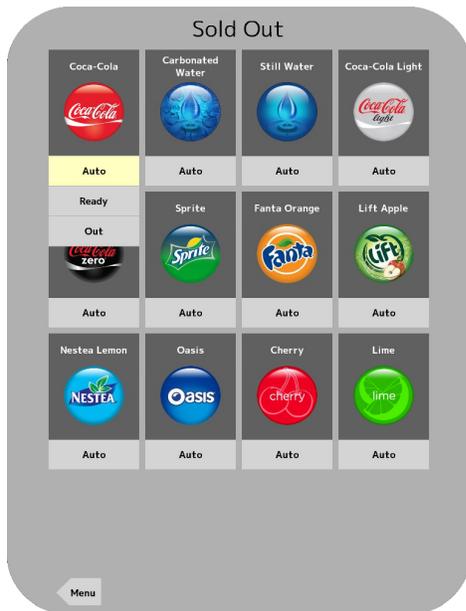
1. From the Service Menu, press the Sold Out button.
2. Manually adjust specific brands to read Ready, Out, or Auto

NOTE

Ready - signifies there is available product and the valve will dispense when activated

Out - signifies there is no available product or there is a problem with the specified brand and will dispense when activated.

Auto - signifies that the configured Sold Out Sensor controls whether the brand can be dispensed. This feature requires an optional sold out sensor kit, does not come standard, and is available for up to ten (10) brands at one time. The following is a set of instructions on how to set up this feature. If no sold out sensor is assigned then the Auto feature acts the same as the Ready feature.



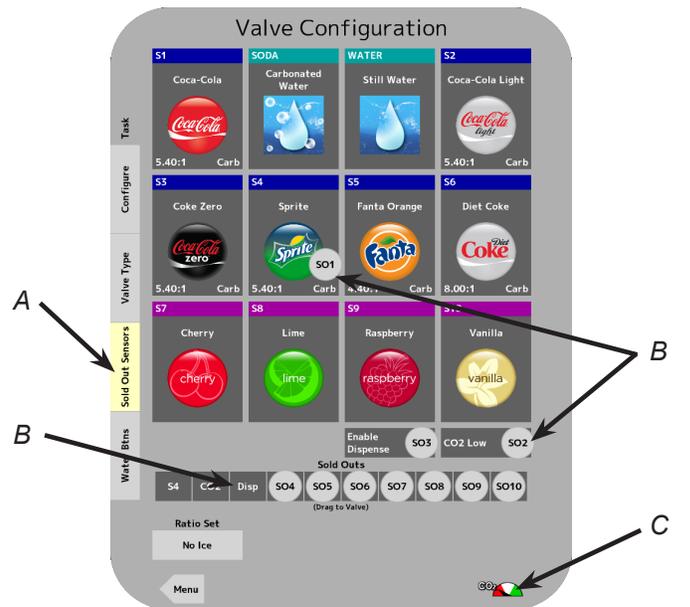
3. From the Service Menu, press the Valve Configuration button.

4. To add the Auto Sold Out feature to a specific brand, press and hold one of the Sold Out Sensors and drag them to a corresponding brand.

NOTE

This feature will automatically disable the button for that specific brand when there is no product to be dispensed. This feature only comes into effect when the corresponding brand is changed to "Auto" in the Sold-Out menu.

5. If a Sold Out Sensor is utilized for the CO₂ low section (see image below), then the CO₂ Low Pressure Indicator will appear whenever the unit or a valve is not receiving enough CO₂.
6. If a Sold Out Sensor is utilized for the Disable Dispense section (see image below), then the Disable Dispense Message will be activated and the pour button will be disabled (see page 16).
7. Press the Menu button to return to the Service Menu.

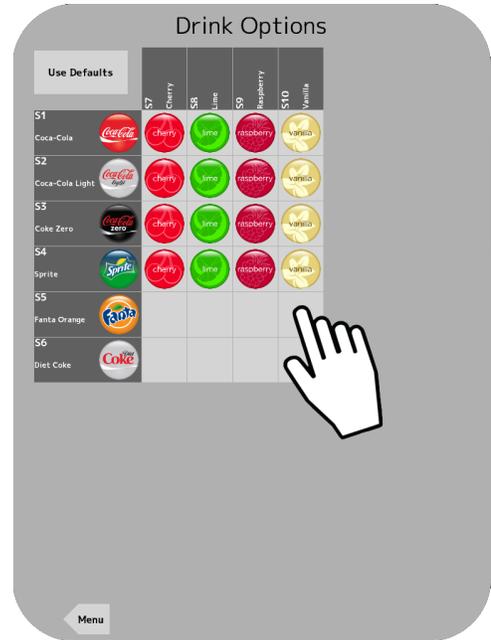


- A. Sold Out Sensors Tab
- B. Sold Out Sensors 1-10
- C. CO₂ Low Pressure Indicator

Drink Options Menu

1. From the Service Menu, press the Drink Options button to access the Drink Options Menu.
2. Tap next to any of the configured brands or water valves to enable or disable the use of any one of the configured flavor valves.

NOTE
When disabled, the designated flavor will not be selectable for that specific brand.



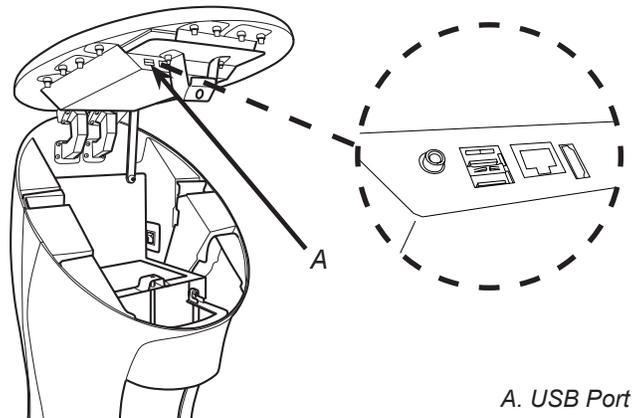
DATA MANAGEMENT

Brand/Flavor Import

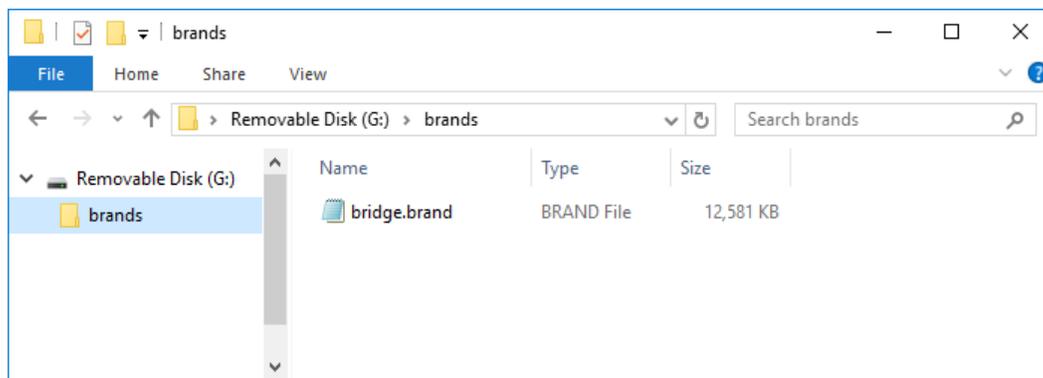
1. Using the *Tower Brand Management Software*, create the necessary *.brand* file, complete with new brand name and images.

IMPORTANT
Any data imported to the Bridge Tower will completely replace all existing content. For example: If the user wishes to add new brands to the existing brands library, the user must upload both the existing brand file as well as the new brand file(s).
For information on the Tower Brand Management Software visit lancercorp.com, contact your Lancer Customer Service Rep, or scan the code above to access the Tower Brand Management Software Instruction Sheet (Lancer Part Number: 28-2855).

2. Create a USB drive with the created *.brand* file in a folder named "brands" as shown in the image below.
3. Plug the USB into the Bridge Tower port located underneath the head of the tower.



A. USB Port



- From the Service Menu, press the *Data Management* button.
- In the “Update from USB” section, press the *Brands* button.

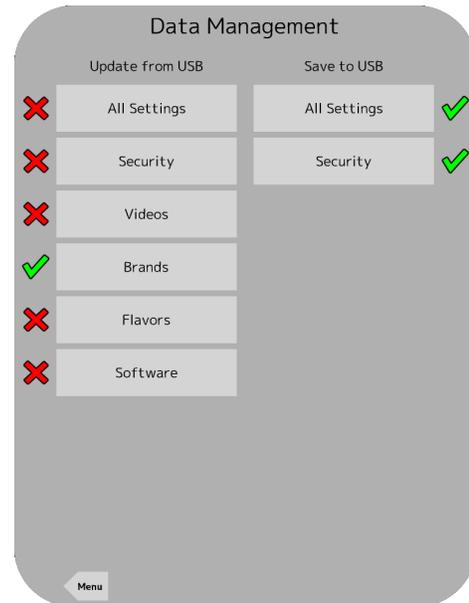
NOTE

There will be a check mark next to the **Brands** button if the USB drive has the brand files in the correct place.

- Once the Brands button turns green then the updated brands will be available.

NOTE

To upload new flavors to the Bridge Tower User Interface, create the flavor *.brand* file and put into a folder named “flavors”, then repeat steps 2-6.



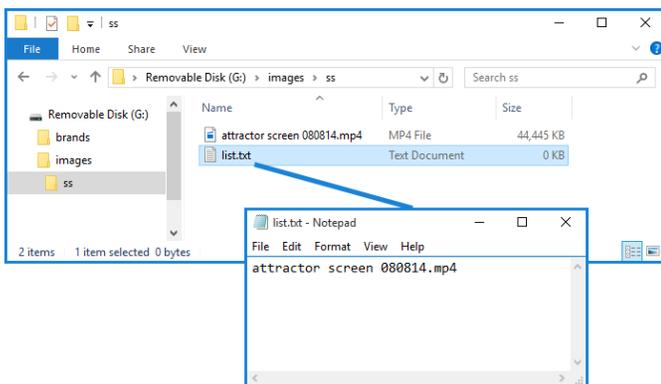
Video/Screen Saver Import

- Create a USB Drive with the new video file in a folder structure named “images\ss”.

NOTE

The video file must be in a *.mp4* format and the dimensions of the video must be 768 px x 600 px for “Self-Serve mode” and 768 px x 768 px for “Crew Serve” mode.

- Create a *.txt* file in any editor software (ex: Notepad on Windows machines) that contains the name of the video file and is named “list.txt” as shown in the image below.



- Once both the video file and list.txt file are in the “ss” folder on the USB Drive, plug in the drive into the Bridge Tower port located underneath the head of the tower.

NOTE

Multiple videos can be uploaded at one time, just add the name of each video to the “list.txt” file, one filename per line.

- From the Service Menu, press the *Data Management* button.
- In the “Update from USB” section, press the *Videos* button.

NOTE

There will be a check mark next to the **Videos** button if the USB drive has the video and text files in the correct place.

- Once the *Videos* button turns green, cycle the power to the Bridge Tower then the updated videos will be available.

Export Tower Settings

NOTE

The following highlights the steps necessary in order to copy a tower’s brand configuration settings from one Bridge Tower dispenser to another.

- Plug an empty USB Drive into the Bridge Tower port located underneath the head of the tower.
- From the Service Menu, press the *Data Management* button.

- In the “Save to USB” section, press the *All Settings* button.

NOTE

There will be a check mark next to the **All Settings** button if an empty USB drive is inserted.

- Once the *All Settings* button turns green, remove the USB and plug into a different Bridge Tower.
- Access the Service Menu and under the Update from USB section, press the *All Settings* button.

CLEANING & SANITIZING

General Information

- Lancer equipment (new or reconditioned) is shipped from the factory cleaned and sanitized in accordance with NSF guidelines. The operator of the equipment must provide continuous maintenance as required by this manual and/or state and local health department guidelines to ensure proper operation and sanitation requirements are maintained.

NOTE

The cleaning procedures provided herein pertain to the Lancer equipment identified by this manual. If other equipment is being cleaned, follow the guidelines established by the manufacturer for that equipment.

- Cleaning should be accomplished only by trained personnel. Sanitary gloves are to be used during cleaning operations. Applicable safety precautions must be observed. Instruction warnings on the product being used must be followed.

⚠ ATTENTION

- Use sanitary gloves when cleaning the unit and observe all applicable safety precautions.
- **DO NOT** use a water jet to clean or sanitize the unit.
- **DO NOT** disconnect water lines when cleaning and sanitizing syrup lines, to avoid contamination.
- **DO NOT** use strong bleaches or detergents; These can discolor and corrode various materials.
- **DO NOT** use metal scrapers, sharp objects, steel wool, scouring pads, abrasives, or solvents on the dispenser.
- **DO NOT** use hot water above 60° C (140° F). This can damage the dispenser.
- **DO NOT** spill sanitizing solution on any circuit boards. Insure all sanitizing solution is removed from the system.

Cleaning and Sanitizing Solutions

Cleaning Solution

Mix a mild, non-abrasive detergent (e.g. Sodium Laureth Sulfate, dish soap) with clean, potable water at a temperature of 32°C to 43°C (90°F to 110°F). The mixture ratio is one ounce of cleaner to two gallons of water. Prepare a minimum of five gallons of cleaning solution. Do not use abrasive cleaners or solvents because they can cause permanent damage to the unit. Ensure rinsing is thorough, using clean, potable water at a temperature of 90°F to 110°F. Extended lengths of product lines may require additional cleaning solution.

⚠ CAUTION

If a powder sanitizer is used, dissolve it thoroughly with hot water prior to adding to the product system. Ensure sanitizing solution is removed from the dispenser as instructed.

Sanitizing Solution

Prepare sanitizing solutions in accordance with the manufacturer's written recommendations and safety guidelines. The solution must provide 100 parts per million (PPM) chlorine (e.g. Sodium Hypochlorite or bleach). A minimum of five gallons of sanitizing solution should be prepared. Any sanitizing solution may be used as long as it is prepared in accordance with the manufacturer's written recommendations and safety guidelines, and provides 100 parts per million (PPM) chlorine.

Cleaning and Sanitizing Product Lines

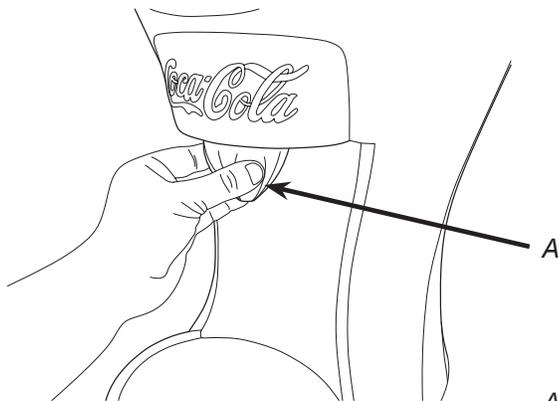
1. Disconnect product lines from BIB's or other product supply.
2. Place product lines, with BIB connectors, in a bucket of warm water.
3. Activate each valve to fill the lines with warm water and flush out product remaining in the lines.
4. Prepare Cleaning Solution described above.
5. Place product lines, with BIB connectors, into cleaning solution.
6. Activate each valve until lines are filled with cleaning solution then let stand for ten (10) minutes.
7. Flush out cleaning solution from the syrup lines using clean, warm water.
8. Prepare Sanitizing Solution described above.
9. Place product lines into sanitizing solution and activate each valve to fill lines with sanitizer. Let sit for ten (10) minutes.
10. Reconnect product lines to BIB's and draw drinks to flush solution from the dispenser.
11. Taste the drink to verify that there is no off-taste. If off-taste is found, flush product system again.

⚠ CAUTION

Following sanitization, rinse with end-use product until there is no aftertaste. Do not use a fresh water rinse. This is a NSF requirement. Residual sanitizing solution left in the system creates a health hazard.

Cleaning and Sanitizing Nozzle

1. Disconnect power, so as to not activate valve while cleaning.
2. Remove outer nozzle by twisting counter clockwise and pulling down.
3. Rinse nozzle with warm water.
4. Wash nozzle with cleaning solution then immerse in sanitizing solution and let sit for fifteen (15) minutes.
5. Set nozzle aside and let air dry. **DO NOT** rinse with water after sanitizing.
6. Using a soft, clean cloth and cleaning solution, clean the nozzle injectors.
7. Using a soft, clean cloth sanitize the nozzle injectors and let air dry.
8. Reconnect nozzle.
9. Connect power.
10. Taste the drink to verify that there is no off-taste. If off-taste is found, sanitize the nozzle and nozzle injectors again.



A. Nozzle

⚠ CAUTION

Following sanitization, rinse with end-use product until there is no aftertaste. Do not use a fresh water rinse. This is a NSF requirement. Residual sanitizing solution left in the system creates a health hazard.

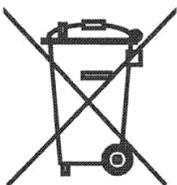
TROUBLESHOOTING

TROUBLE	CAUSE	REMEDY
This icon appears on screen: 	1. Communication with the dispense controller has been lost	1. Check connection between dispense controller and touchscreen
This icon appears on screen: 	1. Connection with touchscreen has been lost	1. Contact Lancer Customer Service for more information
Water leakage around nozzle.	1. O-ring is damaged or missing.	1. Replace o-ring.
Miscellaneous leakage.	1. Gap between parts. 2. Damaged or improperly installed o-rings.	1. Tighten appropriate retaining screws 2. Replace or adjust appropriate o-rings
Insufficient water flow.	1. Insufficient incoming supply water pressure. 2. Shutoff on mounting block not fully open. 3. Foreign debris in water flow control. 4. Foreign debris in water pump strainer	1. Verify incoming supply water pressure is a minimum of 25 PSI (0.172 MPA). 2. Open shutoff fully. 3. Remove water flow control from upper body and clean out any foreign material to ensure smooth free spool movement. 4. Remove water pump strainer and clean.
Insufficient product flow.	1. Insufficient CO ₂ pressure to BIB pumps. 2. Out of CO ₂ . 3. Shutoff on mounting block not fully open. 4. Foreign debris in product flow control. 5. Bad product pump.	1. Adjust CO ₂ pressure to 80 PSI (0.550 MPA) [minimum 70 PSI (0.480 MPA)] for BIB pumps. 2. Replace CO ₂ tank/refill. 3. Open shutoff fully. 4. Remove product flow control form upper body and clean out any foreign material to ensure smooth free spool movement. 5. Replace BIB pump.
Erratic ratio.	1. Incoming water and/or product supply not at minimum flowing pressure. 2. Foreign debris in water and/or product flow controls.	1. Check pressure and adjust 2. Remove flow controls from upper body and clean out any foreign material to ensure smooth free spool movement.
No product dispensed	1. Water and product shutoffs on mounting block not fully open. 2. Electric current not reaching valve. 3. Improper or inadequate water or product supply. 4. Transformer Failure 5. Bad valve solenoid(s)	1. Open shutoff fully. 2. Check electric current supplied to valve. If current is adequate, check solenoid coil and switch, and replace if necessary. 3. Remove valve from mounting block and open shutoffs slightly and check water and syrup flow. If no flow, check dispenser for freeze-up or other problems 4. Reset transformer circuit breaker. If breaker trips again check for pinched wire harness at backblocks 5. Replace Solenoid(s)

TROUBLE	CAUSE	REMEDY
Water only dispensed; no product; or product only dispensed, no water	<ol style="list-style-type: none"> 1. Water or product shutoff on mounting block not fully open. 2. Improper or inadequate water or product flow. 3. BIB supply too far from dispenser. 4. CO₂ pressure too low. 5. Stalled or inoperative BIB pump 6. Kinked line. 	<ol style="list-style-type: none"> 1. Open shutoff fully. 2. Remove valve from mounting block, open shutoffs slightly and check water and syrup flow. If no flow, check dispenser for freeze-up or other problems. Ensure BIB connection is engaged. 3. Check that BIB supply is within six (6) feet of the dispenser. 4. Check the CO₂ pressure to the pump manifold to ensure it is between 70 and 80 PSI (0.483 and 0.552 MPA). 5. Check CO₂ pressure and/or replace pump. 6. Remove kink or replace line.
Syrup only dispensed. No water, but CO ₂ gas dispensed with syrup.	<ol style="list-style-type: none"> 1. Improper water flow to dispenser. 2. Carbonator pump motor has timed out. 	<ol style="list-style-type: none"> 1. Check for water flow to dispenser (see Insufficient Water Flow on previous page). 2. Reset by turning the unit OFF and then ON.
Excessive foaming.	<ol style="list-style-type: none"> 1. Incoming water or syrup temperature too high. 2. CO₂ pressure too high. 3. Water flow rate too high. 4. Nozzle not installed correctly. 5. Nozzle and nozzle injectors not clean. 6. Air in BIB lines. 7. Poor quality ice. 8. High beverage temperature. 	<ol style="list-style-type: none"> 1. Correct prior to dispenser. Consider larger dispenser or pre-cooler. 2. Adjust CO₂ pressure downward, but not less than 70 PSI (0.483 MPA). 3. Re-adjust and reset ratio. Refer to “Adjust Water Flow Rate & Syrup/Water Ratio” Section. 4. Remove and reinstall properly. 5. Remove nozzle and clean injectors. 6. Bleed air from BIB lines. 7. Check quality of ice used in drink. 8. Check refrigeration system.
Warm drinks.	<ol style="list-style-type: none"> 1. Restricted airflow. 2. Dispenser connected to hot water supply. 3. Dispenser capacity exceeded. 	<ol style="list-style-type: none"> 1. Check clearances around sides, top, and inlet of unit. Remove objects blocking airflow through grill. 2. Switch to cold water supply. 3. Add pre-cooler or replace with larger dispenser.
Circuit breaker tripping.	<ol style="list-style-type: none"> 1. Valve wire harness shorted to itself or to faucet plate. 2. PCB is bad. 3. Secondary wire harness is bad. 4. Transformer failure. 	<ol style="list-style-type: none"> 1. Detect short by disconnecting input fastener to keylock and single pin connector. Restore power if breaker doesn't trip. Then valve wire harness is shorted. If OK, reconnect. 2. Detect short by disconnecting J1 connector (24 VAC input) from PCB. Restore power, if breaker doesn't trip. Then replace PCB. If breaker does trip, then PCB is OK. Reconnect J1 connector. 3. If it does not trip, locate short in secondary harness between transformer, PCB, and valve wire harness. 4. Detect short by disconnecting both transformer fasteners and restore power. If breaker does trip, replace transformer.

TROUBLE	CAUSE	REMEDY
BIB pump does not operate when dispensing valve opened.	<ol style="list-style-type: none"> 1. Out of CO₂, CO₂ not turned on, or low CO₂ pressure. 2. Out of syrup. 3. BIB connector not tight. 4. Kinks in syrup or gas lines. 5. Bad BIB Pumps. 	<ol style="list-style-type: none"> 1. Replace CO₂ supply, turn on CO₂ supply, or adjust CO₂ pressure to 70-80 PSI (0.483-0.552 MPA) 2. Replace syrup supply. 3. Fasten connector tightly. 4. Straighten or replace lines. 5. Replace BIB pump.
BIB pump operated, but no flow.	<ol style="list-style-type: none"> 1. Leak in syrup inlet or outlet line. 2. Defective BIB pump check valve. 	<ol style="list-style-type: none"> 1. Replace line. 2. Replace BIB pump
BIB pump continues to operate when bag is empty.	<ol style="list-style-type: none"> 1. Leak in suction line. 2. Leaking o-ring on pump inlet fitting. 	<ol style="list-style-type: none"> 1. Replace line. 2. Replace o-ring.
BIB pump fails to restart after bag replacement.	<ol style="list-style-type: none"> 1. BIB connector not on tight. 2. BIB connector is stopped up. 3. Kinks in syrup line 4. Bad BIB Pumps. 	<ol style="list-style-type: none"> 1. Tighten BIB connector. 2. Clean out or replace BIB connector. 3. Straighten or replace line. 4. Replace BIB pump.
BIB pump fails to restart when dispensing valve is closed.	<ol style="list-style-type: none"> 1. Leak in discharge line or fittings. 2. Empty BIB. 3. Air leak on inlet line or bag connector. 	<ol style="list-style-type: none"> 1. Repair or replace discharge 2. Replace BIB. 3. Repair or replace.
Low or no carbonation.	<ol style="list-style-type: none"> 1. Low or no CO₂. 2. Excessive water pressure. 3. Worn or defective carbonator pump. 	<ol style="list-style-type: none"> 1. Check CO₂ supply. Adjust CO₂ pressure to 70 PSI (0.483 MPA). 2. Water regulator should be set at 50 PSI (0.345 MPA) 3. Replace carbonator pump.

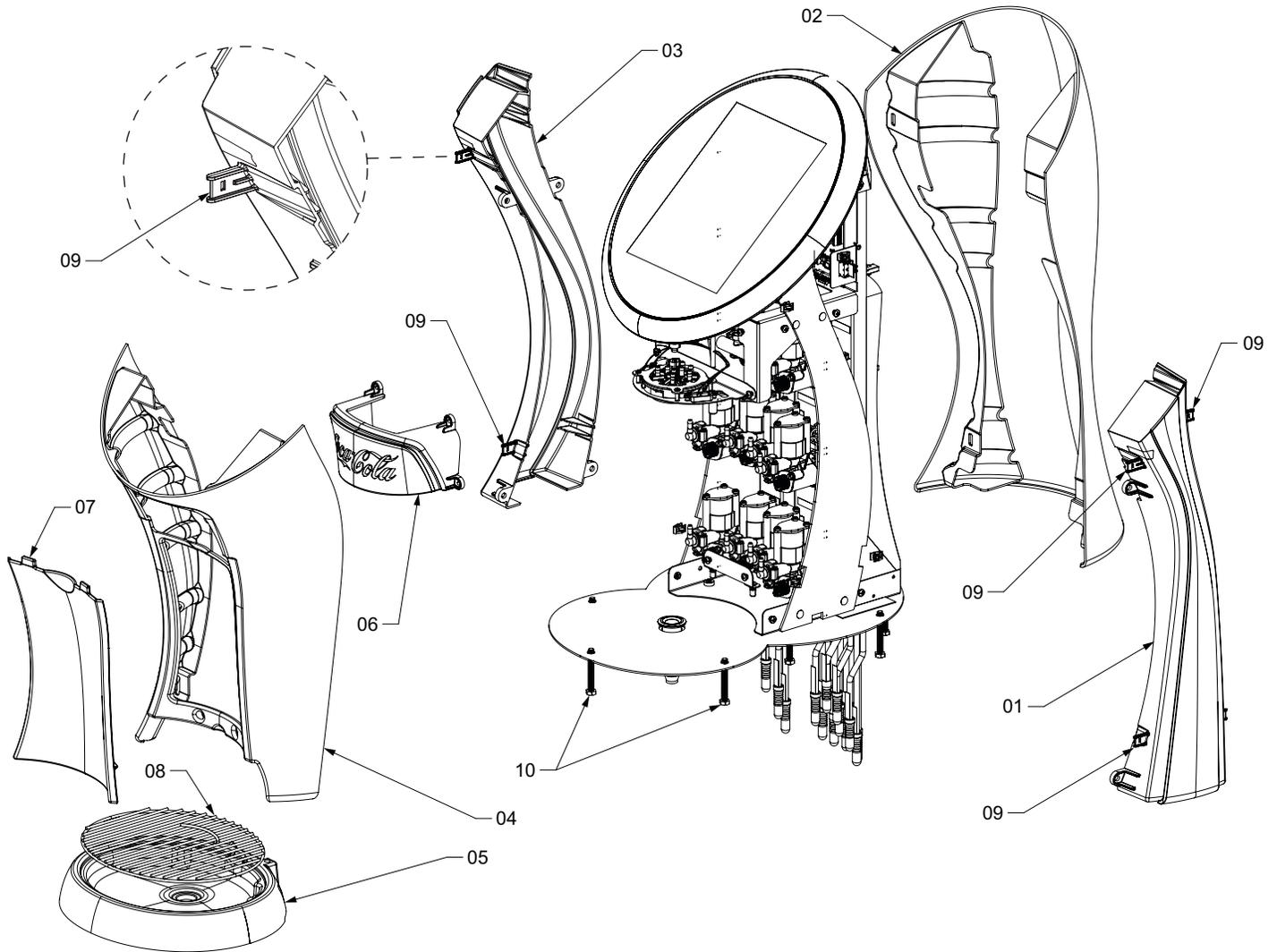
Dispenser Disposal



To prevent possible harm to the environment from improper disposal, recycle the unit by locating an authorized recycler or contact the retailer where the product was purchased. Comply with local regulations regarding disposal of the refrigerant and insulation.

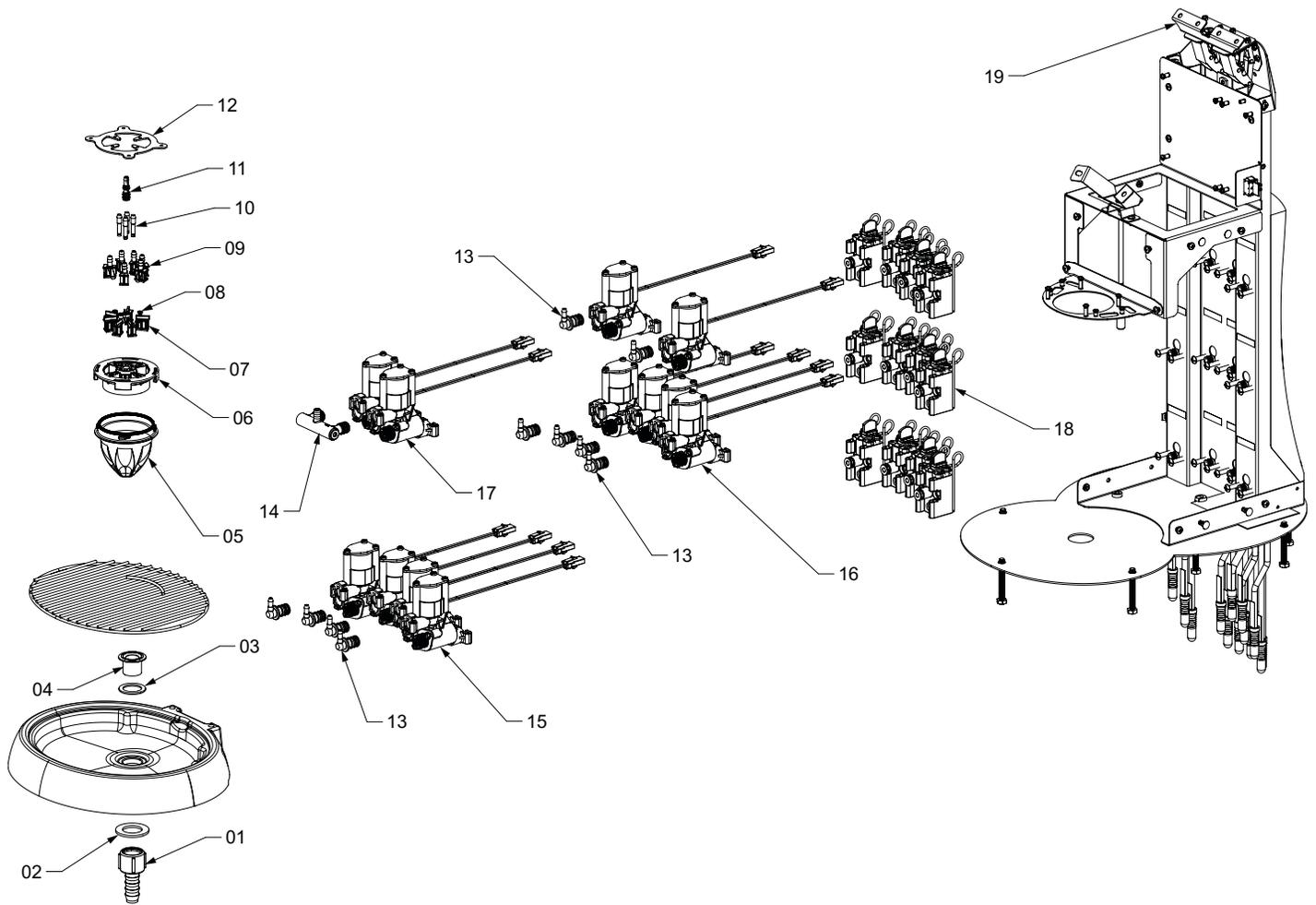
ILLUSTRATIONS & PART LISTINGS

Main Unit Assembly



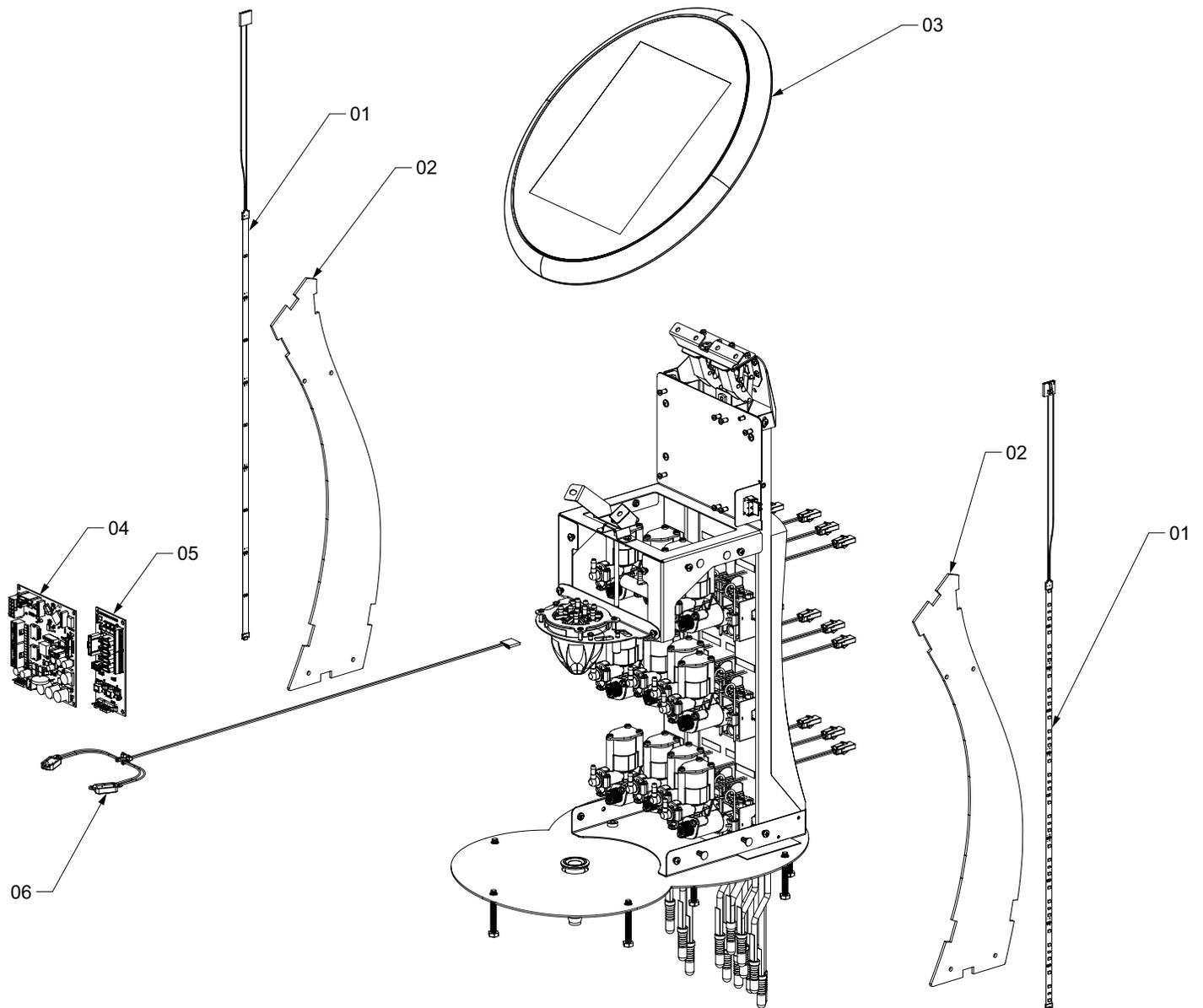
<u>Item</u>	<u>Part No.</u>	<u>Description</u>
01	05-3244	Dynamic Ribbon, Right
-	04-1689	Screw, M4
02	82-4895	Cladding Assy, Back
03	05-3245	Dynamic Ribbon, Left
-	04-1689	Screw, M4
04	82-4896	Cladding Assy, Front
05	05-3253	Drip Tray
06	05-3249	Bezel Front
-	04-1689	Screw, M4
07	05-3252	Splash Plate
08	23-1674	Cup Rest
09	05-3373	Snapfit Panel Fastener, Riblok
10	04-1687	Screw, M6

Plumbing Assembly



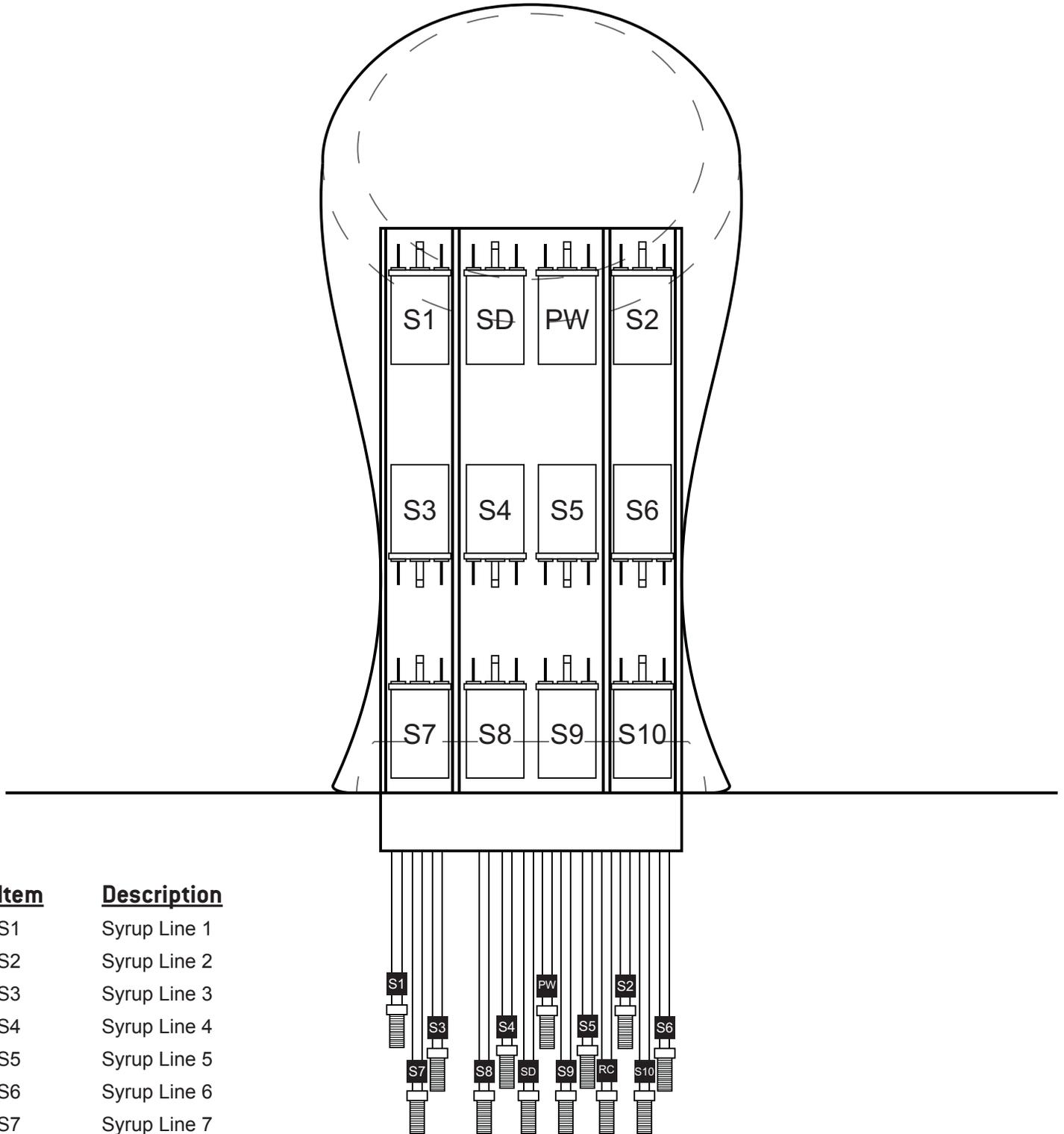
<u>Item</u>	<u>Part No.</u>	<u>Description</u>
01	01-2991	Coupling, Female, 1/2 PVC
02	04-1710	Washer, Flat, SS
03	02-0677	Seal, Washer, Drain
04	01-2994	Fitting, Drain, 1/2 NPT
05	05-3407	Nozzle, Overmold Assy, Low Flow
06	05-3286	Body, Inner, Flex Nozzle
07	05-3391	Injector, Blank, Syrup, Flex Nozzle
08	04-1639	Screw, 4-20 X .250, PH, PH, Plastite
09	05-3393	Injector, Syrup, Low Flow, Flex Nozzle
10	05-3392	Injector, Blank, Bonus Flavor
-	05-3287	Injector, Bonus Flavor
11	05-1612	Fitting, Water, M/F Nozzle
12	30-12139	Plate, Nozzle, 4-Point
-	04-1640	Screw, M3
13	05-1385	Elbow, .5 Dole X .2 Barb
14	54-0473	Outlet Assy, Water
15	19-0262	Valve Assy, LFCV 2.0 Syrup Inj.
16	19-0266	Valve Assy, LFCV 2.0 Syrup Blk.
17	19-0267	Valve Assy, LFCV 4.5 Soda, Gray
18	82-2317	Block, Mounting Assy, SGL
-	04-1089	Screw, 10-32
19	82-4822	Hinge, Non-Mortise, Concealed Spring
-	04-1640	Screw, M3
-	04-1709	Nut, M3

Electronics Assembly



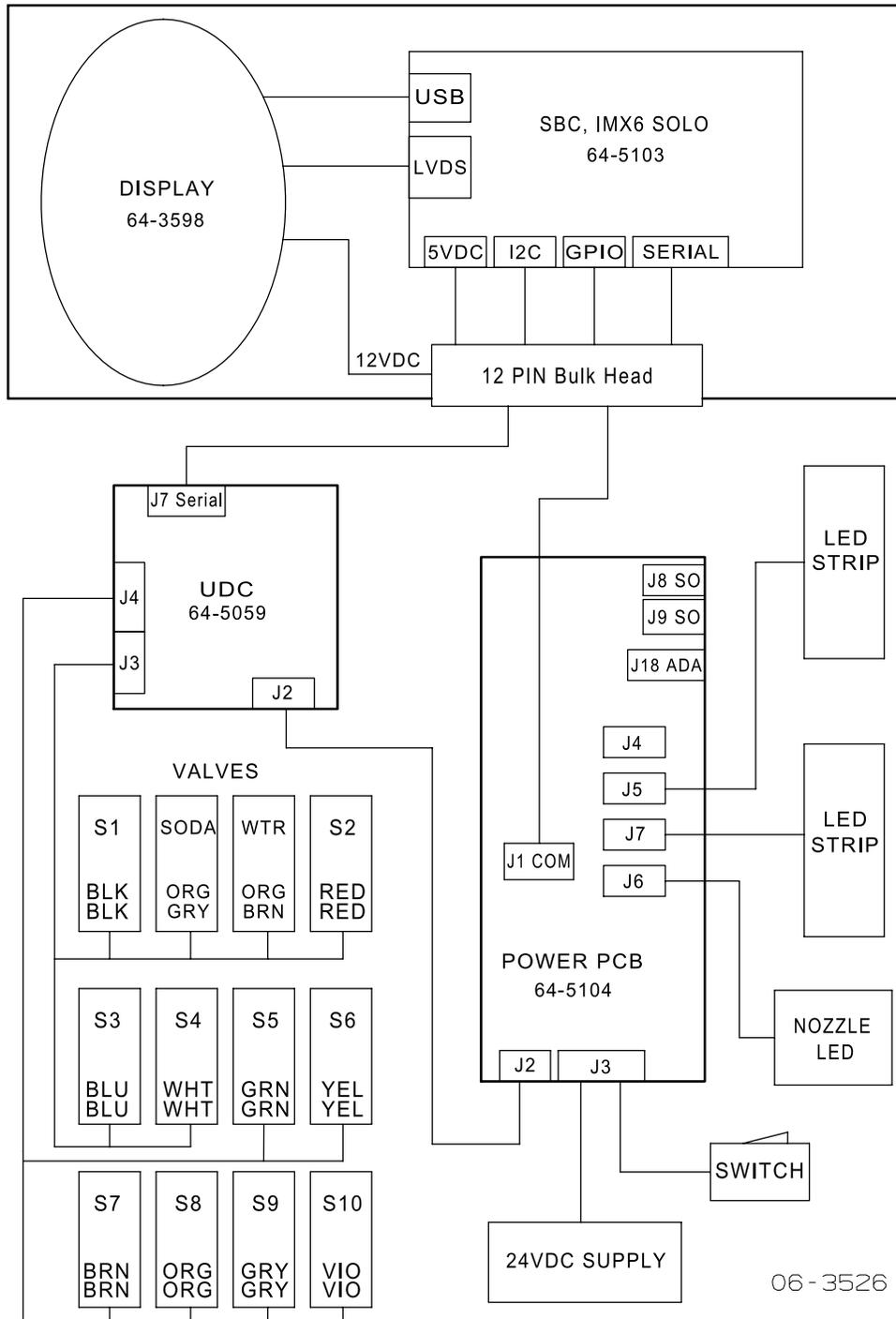
<u>Item</u>	<u>Part No.</u>	<u>Description</u>
01	52-3683	LED Strip Assy, Ribbon Light
02	05-3368	Base, LED Ribbon, Touch Tower
03	82-4863	Screen Assy, Bridge
04	64-5061	PCB Assy, Valve Board
-	04-1640	Screw, M3
05	64-5104	PCB Assy, Pwer Brd, Tower
-	04-1640	Screw, M3
06	52-3661	Drip Tray Dual Light Assy
-	04-1640	Screw, M3

Unit Plumbing Diagram



Item	Description
S1	Syrup Line 1
S2	Syrup Line 2
S3	Syrup Line 3
S4	Syrup Line 4
S5	Syrup Line 5
S6	Syrup Line 6
S7	Syrup Line 7
S8	Syrup Line 8
S9	Syrup Line 9
S10	Syrup Line 10
PW	Plain Water Line
SD	Soda Line
RC	Recirculation Line

Unit Wiring Diagram



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