# LANCER.

# Bridge Tower LANCER INSTALLATION GUIDE



**FOR QUALIFIED INSTALLER ONLY.** This basic Installation Sheet is an initial release. If a complete Operations Manual (for the unit being installed) is required or needed, please refer to the Lancer web site (lancercorp.com) for immediate access, or for your convenience, scan this QR code with a mobile device (app required) for immediate access Contact Lancer Customer Service for assistance as required.

#### **ABOUT THIS MANUAL**

This booklet is an integral and essential part of the product and should be handed over to the operator after the installation and preserved for any further consultation that may be necessary. Please read carefully 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.

#### **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.

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.

# **IMPORTANT SAFETY INSTRUCTIONS**

## 🛆 Intended Use -

The dispenser is for indoor use only. This appliance is to be installed in a location where its use can be overseen by trained personnel. This unit is not a toy. Children should be supervised not to play with appliance. It 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. Cleaning and user maintenance shall not be performed by children without supervision. 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. Service, cleaning and sanitizing should be accomplished only by trained personnel. Applicable safety precautions must be observed. Instruction warnings on the product being used must be followed.



LANCER PN: 28-2852/04 Revision: January 2018





## · 🕭 Electrical Warning

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 name plate label agrees with local current available. Follow all local electrical codes when making connections. 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. The keyswitch does not disable the line voltage to the transformer primary. 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. Make sure that all water lines are tight and units are dry before making any electrical connections!

## $\triangle$ Carbon Dioxide (CO<sub>2</sub>) –

- WARNING: Carbon Dioxide (CO<sub>2</sub>) is a colorless, noncombustible gas with a light pungent odor. High percentages of CO<sub>2</sub> may displace oxygen in the blood.
- WARNING: Prolonged exposure to CO<sub>2</sub> can be harmful. Personnel exposed to high concentrations of CO<sub>2</sub> gas will experience tremors which are followed by a loss of consciousness and suffocation.
- WARNING: If a CO<sub>2</sub> 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 CO<sub>2</sub> gas leaks in the entire CO<sub>2</sub> and soft drink system.

#### 🛆 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 laws. The water supply line must be at least a 3/8 inches (9.525 mm) 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) with the provided pressure regulator. 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. The water supply must be protected by means of an air gap, a backflow prevention device 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. Ensure the backflow prevention device complies with ASSE and local standards. It is the responsibility of the installer to ensure compliance.

## **SPECIFICATIONS**

#### DIMENSIONS

#### ELECTRICAL

FLOW RATE

*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)

#### 1.5 - 2.0 ounces per second

#### PLAIN WATER SUPPLY

24 VDC / 2.0 Amps

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

This unit emits a sound pressure level below 70 dB

## CARBON DIOXIDE (CO,) 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  $CO_2$  Inlet: 9.5 mm (3/8 inch) barb Drain Fitting: 15.9 mm (5/8 inch) barb

#### **READ THIS MANUAL**

This manual was developed by the Lancer Corporation as a reference for the owner/operator and installer of this dispenser. Please read this guide before installation and operation of this dispenser. If service is required please call your Lancer Service Agent or Lancer Customer Service. Always have your model and serial number available when you call.

Your Service Agent:_	
Service Agent Teleph	ione Number:
Serial Number:	
Model Number:	

#### **Unpack 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 Counter Location

#### NOTE —

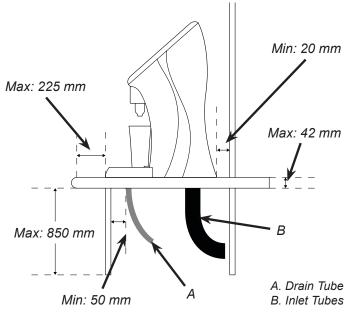
The dispenser should only be installed in a location where it can be overseen by trained personnel

 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 2.

#### 

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.



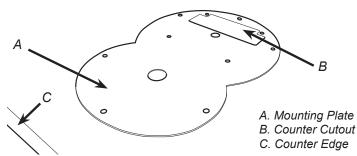
- 3. Select a location for the remote chiller system or carbonator (if necessary), syrup pumps, CO<sub>2</sub> tank, product containers, and water filter (recommended).
- 4. Using Counter Cutout Template provided, cut out required opening for the drip tray and tower installation in the designated dispenser 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**

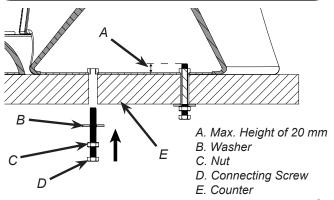
- 1. Carefully lift unit and using a screwdriver, separate the mounting plate from the tower and drip tray.
- 2. Remove the drain fitting from the drip tray. First, unscrew the lower section then press firmly from the bottom to remove the upper portion of the drain fitting.
- 3. Using the six (6) mounting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

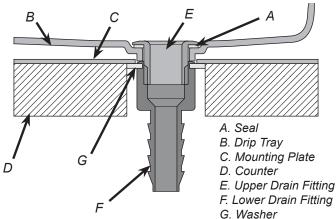
When attaching the tower to the mounting plate, make sure the screws do not extend more than 20 mm (0.78 inches) from the top of the mounting plate. These could damage the valves when installing the dispenser.



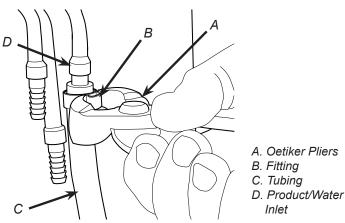
#### NOTE

#### 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.

#### A 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 the instructions for plumbing the remote chiller system to the tower.

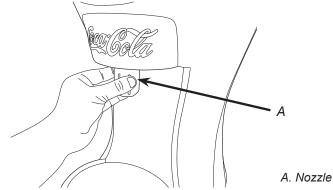
- 12. Route appropriate tubing from the syrup pump location to the syrup inlets at the remote chiller. Repeat for all syrup connections.
- 13. Route appropriate tubing from the water source to the water inlet at the remote chiller and only connect tubing to the water source.
- 14. Turn on the water and flush the water line thoroughly.
- 15. Turn off the water and connect water line to the plain water inlet at the remote chiller.

#### - 🖄 ATTENTION -

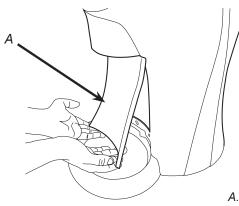
The minimum flowing pressure to the valve must be 20 PSI (0.137 MPA). A booster pump may be required for proper operation of the valve.

#### **Dispenser Setup**

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

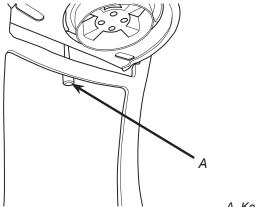


3. Remove the splash plate by placing both hands at the bottom of the plate. Simultaneously lift up and pull out on the splash plate until it 'pops' off of the front panel.



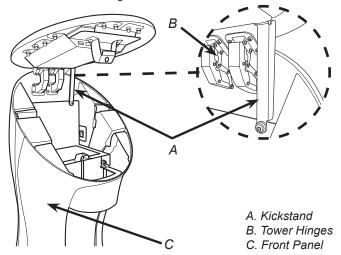
A. Splash Plate

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



A. Key-Lock Rod

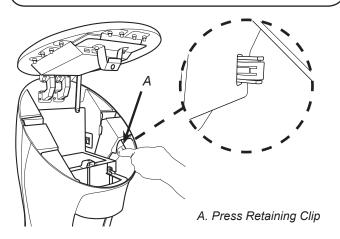
5. Once unlocked, lift the head of the tower all the way then lock the head of the tower in place by using the kick stand next to the tower hinges.



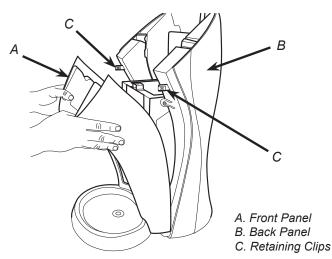
6. Press one of the top retaining clips, located on the inside of the front panel, and simultaneously pull forward on the panel to unhook from the retaining clip. Repeat for remaining three front retaining clips.

#### · \land ATTENTION -

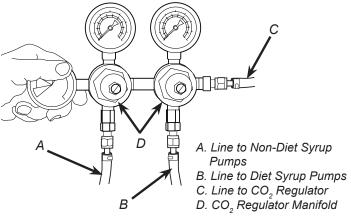
Make sure, when removing the front panel, to pull straight out. DO NOT bend plastic when removing the panel, this could damage the retaining clips.



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



8. Route tubing from the CO<sub>2</sub> inlet at the remote chiller and normal, non-diet syrup pumps and connect both lines to one of the low pressure CO<sub>2</sub> regulator manifold outlets.



- 9. Connect tubing routed from the diet syrup pumps to the second outlet of the low pressure CO<sub>2</sub> regulator manifold.
- 10. Turn on the water supply.
- 11. 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.
- 13. Connect power cord to grounded electrical outlet.

#### - \land 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.

- 14. Turn on the power to the dispenser by flipping the power switch, located underneath kickstand. (See previous page)
- 15. Unhook the kickstand and lower the head of the tower to access the touchscreen.
- 16. Once the screen has booted up, access the service menu by placing your finger at the top, right corner of the screen.
- 17. 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 Customer Service for the units' designated pin number.

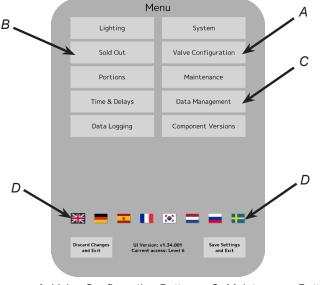
#### - NOTE ·

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 12) and portions control screen.

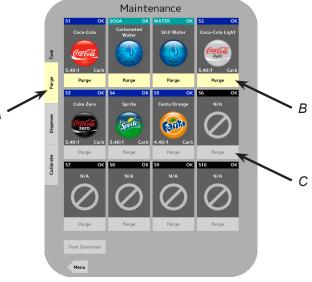
#### - NOTE -

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 ButtonC. Maintenance ButtonB. Sold Out ButtonD. 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

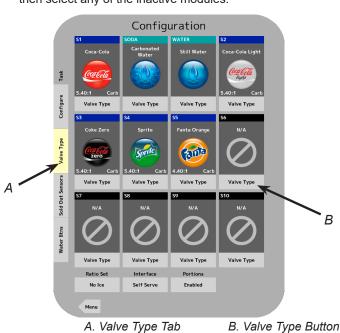
#### NOTE

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.

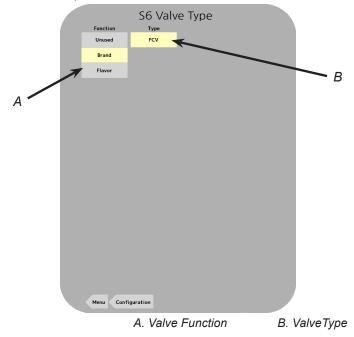
- 23. Once a steady flow of water is achieved, press the Purge button again to deactivate the modules.
- Ensure that the pump deck at the remote chiller is turned off before turning on the CO<sub>2</sub>.
- 25. Turn on CO<sub>2</sub> at the source then, using a screwdriver, adjust the high pressure regulator at the source to 75 PSI (0.517 MPA) then tighten locknut with wrench.
- 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

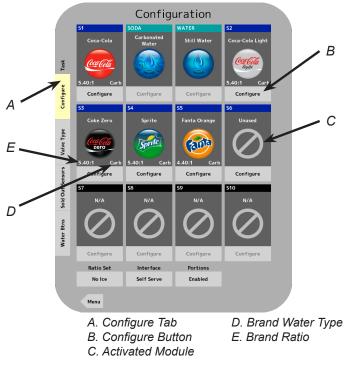
- 1. In order to add a new brand or flavor module, the module must first be activated.
- 2. From the Service menu, press the Configuration button.
- 3. Press the Valve Type tab on the far left side of the screen, then select any of the inactive modules.



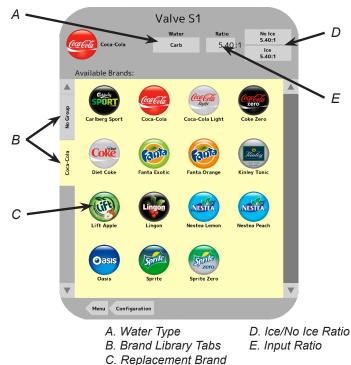
4. From here, choose the desired function and valve type for the incorporated valve module.



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



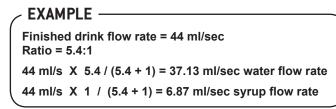
9. Select a new brand from the available Brands Library tabs on the left side of the screen.



## **CALIBRATION AND MAINTENANCE**

#### Calibrating Carbonated/Plain Water Modules

- 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 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.

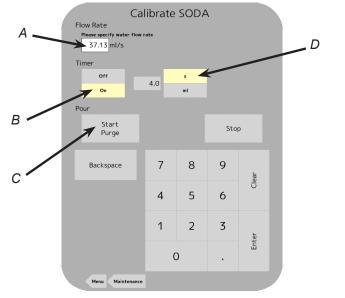


- 4. Set the Timer to the ON position and select milliliters (ml) as the desired unit of measurement.
- 5. Using the keypad, enter a specific volume to be dispensed based on the size of the graduated cylinder being used to calibrate the carbonated water module. The larger the volume dispensed, the more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

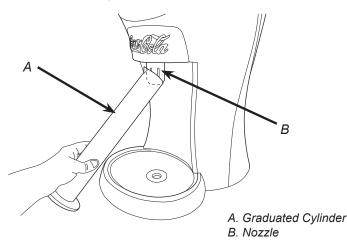
#### - NOTE

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).

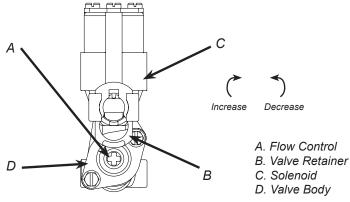
- 10. Once a brand/flavor has been selected to a corresponding module, press the Configuration button to return to the Configuration Screen.
- 11. Repeat steps 8 and 9 for any other desired brand or flavor modules.
- 12. Press the Menu button to return to the Service menu.
- 13. From the Service Menu, press the Maintenance button.
- 14. Press the Purge tab on the far left side of the screen.
- 15. Purge any new brand or flavor module until there is a steady flow of product. (See page 6)
- 16. Press the Menu button to return to the Service Menu.



A. Enter Flow Rate C. Start Purge Button B. Timer Icon D. Unit Icon 6. 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.



7. 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.



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

#### **Calibrating Brand Syrup Modules**

#### NOTE

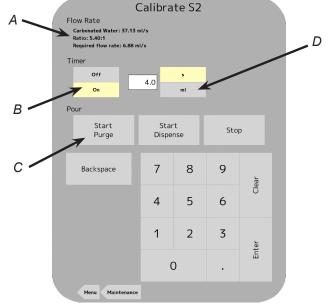
There are two ways that the valves can be calibrated on this unit. Either by setting the desired flow rates and adjusting each valve with the help of a graduated cylinder, or by using a syrup separator and ratio cup with a target flow rate of 44 ml/sec. Both processes are outlined below:

#### 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 ( $4.4^{\circ}$ C) when flow rates are set. This is best done after the remote chiller has already made an ice bank.

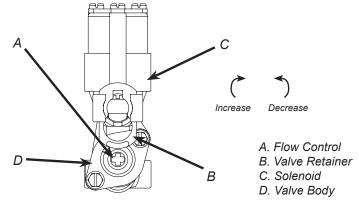
#### **Graduated Cylinder:**

- 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 7, *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.
- 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.
- 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.



- 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.

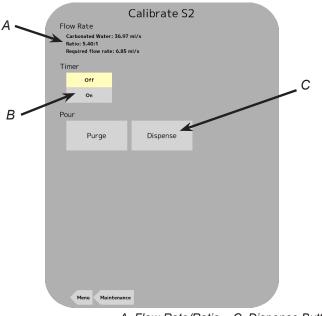
### **Ratio Settings Table:**

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):

	5 (				,						
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

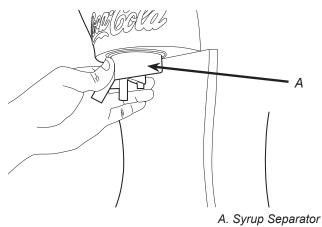
#### **Ratio Cup:**

- 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 page 7, *Adding New Brand/Flavor Module*)



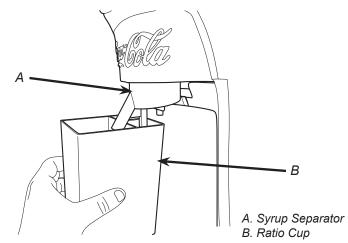
A. Flow Rate/Ratio C. Dispense Button B. Timer Icon

- 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.

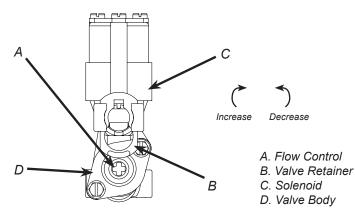


. Syrup Separator in Place of Nozzle

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.



8. 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.



- 9. Repeat steps 7 and 8 if any more brand syrup flow adjustment is necessary.
- 10. Repeat steps 2-9 for the remaining brand syrup modules.
- 11. 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**

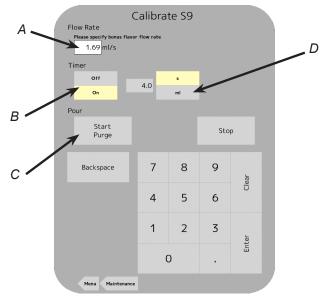
- 1. From the Maintenance menu, press the Calibrate tab on the far left side of the screen and press the Calibrate button for any designated flavor module.
- Enter the flow rate in milliliters per second (ml/sec). This number is based on the target drink flow rate of 1.5 oz/sec and a designated flavor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

#### EXAMPLE -

Finished drink flow rate = 44 ml/sec Ratio = 25:1

44 ml/sec X 1 / (25 + 1) =

1.69 ml/s bonus flavor flow rate



A. Enter Flow RateC. Start Purge ButtonB. Timer IconD. Unit Icon

- 3. Set the Timer to the ON position and select milliliters (ml) as the desired unit of measurement.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. Repeat steps 6 and 7 if any more water flow adjustment is necessary.
- 8. Repeat steps 2-8 for the plain water module.

As Needed	Keep exterior surfaces of unit clean using a clean, damp cloth.
Daily	<ul> <li>Remove outer nozzle and rinse well in warm water. <i>DO NOT</i> use soap or detergent. This will cause foaming and off taste in finished product.</li> <li>Using the brush provided and cleaning solution, clean the nozzle injectors. See Cleaning and Sanitizing Nozzle section on page 14 for reference.</li> <li>Remove cup rest and wash in cleaning solution.</li> <li>Pour warm cleaning solution into the drip tray and wipe with a clean cloth.</li> <li>With a clean cloth and cleaning solution, wipe off all of the unit's exterior surfaces and splash areas. <i>DO NOT USE ABRASIVE SOAPS OR STRONG DETERGENTS DO NOT USE AMMONIA BASED PRODUCTS WHEN CLEANING THE SCREEN OR SURROUNDING PLASTICS.</i></li> <li>Replace the cup rest and nozzle.</li> </ul>
Monthly	<ul> <li>Clean and sanitize the unit using the appropriate procedures outlined in the Cleaning and Sanitizing section of this manual.</li> </ul>
Every Six Months	<ul><li>Clean remote chiller according to manufacturer's instructions (if necessary).</li><li>Clean the entire exterior of the unit.</li></ul>

#### **Scheduled Maintenance**

#### System Settings

- 1. From the Service menu, press the System button.
- 2. 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)

<u>Larger Water Buttons</u> - Enables/Disables larger water buttons for Main Menu.

<u>Portions</u> - Enables/Disables portion control pour function.

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

<u>Volume Unit</u> - Changes the units on display between metric and imperial.

<u>Disabled Dispense Message</u> - Disabled dispense function with unique disabled dispense message to fit specific need (See step 6 in next section).

#### 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.

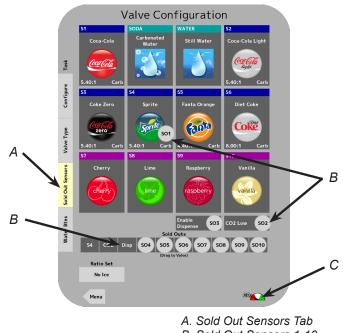


- 3. From the Service Menu, press the Valve Configuration button.
- 4. To add the Auto Sold Out feature to a specific brand, press and hold one of the Sold Out Sensors and drag them to a corresponding brand.

#### 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  $CO_2$  low section (see image below), then the  $CO_2$  Low Pressure Indicator will appear whenever the unit or a valve is not recieving enough  $CO_2$ .
- 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.
- 7. Press the Menu button to return to the Service Menu.



B. Sold Out Sensors 1-10

C. CO<sub>2</sub> Low Pressure Indicator

#### - NOTE

For more information on other Bridge Tower features such as Lighting, Portion Control, and Water Buttons, refer to the unit Operations Manual (Lancer PN: 28-0941/02) located on the Lancer Corp website (lancercorp.com) or for more immediate access, scan the QR code located on the first page of this Installation Guide.

#### **Brand/Flavor Import**

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

#### **IMPORTANT** -

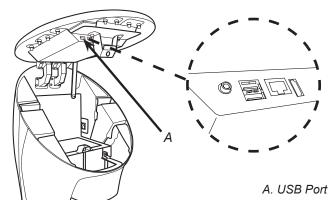
Any data imported to the Bridge Tower will completely replace all existing content. For example: If the user wishes to add new brands to the existing brands library, the user must upload both the existing brand file as well as the new brand file(s).

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.

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	bridge.brand	BRAND File	12,581 KB		
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1 item	·				

3. Plug the USB into the Bridge Tower port located underneath the head of the tower.



- 4. From the Service Menu, 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. 5. 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 2-5.

#### Video/Screen Saver Import

1. 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.

2. 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.

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3. 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.

4. From the Service Menu, 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.

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

## **CLEANING AND 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.

#### - \land 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 140° F (60° C). This can damage the dispenser.
- DO NOT spill sanitizing solution on any circuit boards. Insure all sanitizing solution is removed from the system.

#### **Cleaning Solution**

Mix a mild, non-abrasive detergent (e.g. Sodium Laureth Sulfate, dish soap) with clean, potable water at a temperature of 90°F to 110°F (32°C to 43°C). 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.

#### **Sanitizing Solution**

Prepare the sanitizing solution in accordance with the manufacturer's written recommendations and safety guidelines. The type and concentration of sanitizing agent recommended in the instructions by the manufacturer shall comply with 40 CFR §180.940. The solution must provide 100 parts per million (PPM) chlorine (e.g. Sodium Hypochlorite or bleach) and a minimum of five gallons of sanitizing solution should be prepared.

## - riangle Caution -

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

#### **Cleaning and Sanitizing Product Lines**

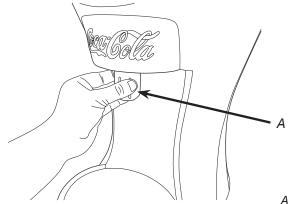
- 1. Disconnect product lines from BIB's or other product supply.
- 2. Place product lines, with BIB connectors, in a bucket of warm water.
- 3. Activate each valve to fill the lines with warm water and flush out product remaining in the lines.
- 4. Prepare Cleaning Solution described above.
- 5. Place 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.

#### A 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.

A. Nozzle

14

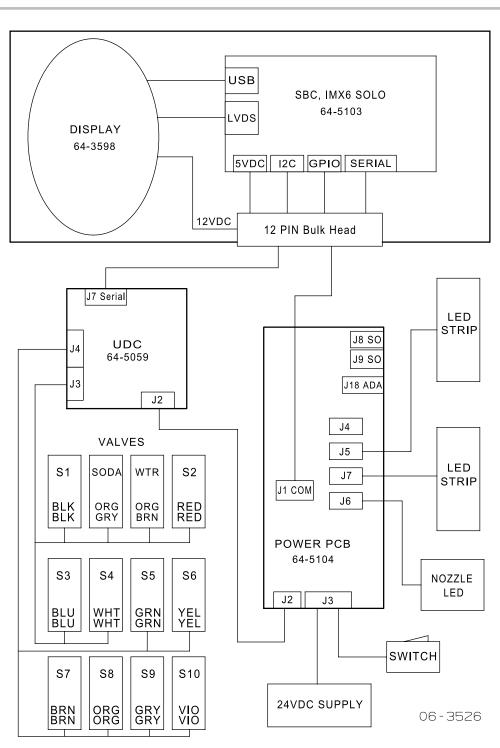
- 4. Wash nozzle with cleaning solution then immerse in sanitizing solution and let sit for fifteen (15) minutes.
- 5. Set nozzle aside and let air dry. *DO NOT* rinse with water after sanitizing.
- 6. Using a soft, clean cloth and cleaning solution, clean the nozzle injectors.
- 7. Using a soft, clean cloth sanitize the nozzle injectors and let air dry.
- 8. Reconnect nozzle.

## WIRING DIAGRAM

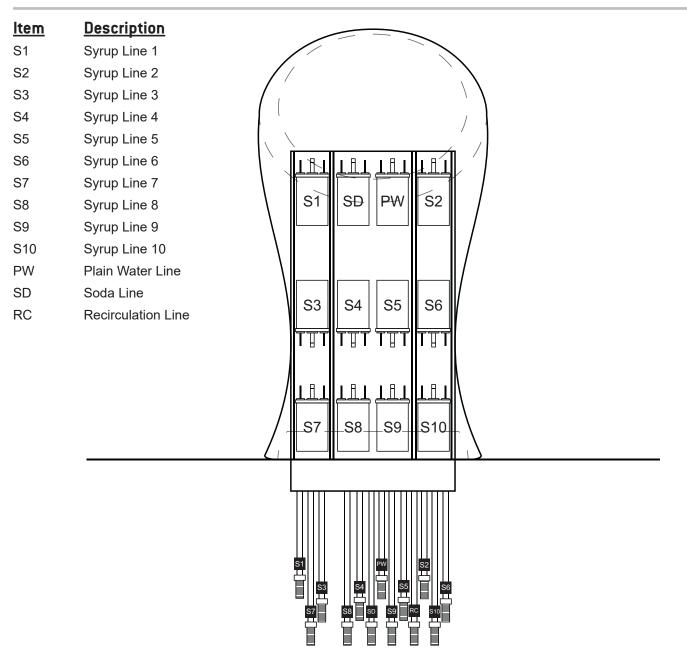
- 9. Connect power.
- 10. Taste the drink to verify that there is no off-taste. If off-taste is found, sanitize the nozzle and nozzle injectors again.

A 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.



## PLUMBING DIAGRAM



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