

# Spartan Ice

## LANCER INSTALLATION/OPERATION MANUAL





Please refer to the Lancer Corp website (lancercorp.com) for information relating to Lancer Installation/Operation Manuals, Installation Guides, Instruction Sheets, and Technical Bulletins or for your convenience, scan this QR code with a mobile device (app required) for immediate access to other Technical Documents and alternative translations pertaining to this unit.



LANCER PN: 28-0954/03

#### **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 unit is not a toy. Children should not 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 35°F to 75°F (1.67°C to 24°C). 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.







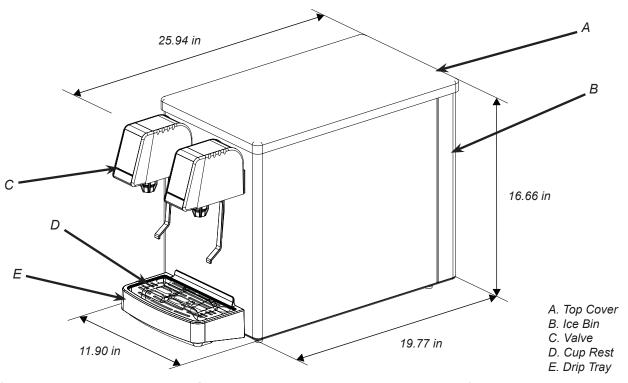
# **△** Carbon Dioxide (CO<sub>3</sub>) -

- 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, gas leaks in the entire CO, and soft drink system.

## **⚠** Water Notice -

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 25 PSI (0.172 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 & FEATURES



#### **DIMENSIONS**

Width: 11.90 in (302.26 mm)

Depth w/out valves: 19.77 in (502. mm)

Depth w/valves: 25.94 in (658.88 mm)

Height: 16.66 in (423.16 mm)

## WEIGHT

Shipping: 55 lbs (24.95 kg) Empty: 50 lbs (22.68 kg)

#### **FITTINGS AT UNIT**

Plain/Carb Water Inlet: 1/4" barb Brand Syrup Inlets: 1/4" barb

#### PLAIN WATER SUPPLY

Min Flowing Pressure: 75 PSIG (0.516 MPA)

# **CARBONATED WATER SUPPLY**

Min Flowing Pressure: 25 PSI (0.172 MPA) Max Static Pressure: 50 PSI (0.345 MPA)

This unit emits a sound pressure level below 70 dB

# **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 Telepho	one Number:		
Serial Number:			
Madal Number			

# INSTALLATION

# **Unpack the Dispenser**

1. Cut band and remove.

#### NOTE ———

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

- Remove unit, with plywood shipping base, from packaging.
- 3. Remove plywood shipping base from unit.

#### NOTE

If unit is to be transported, it is advisable to leave the unit secured to the plywood shipping base.

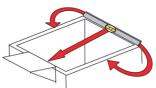
4. If leg kit has been provided, assembly legs to unit by tilting unit to one side.

# **Drain Spider:**

The drain spider is located to the left side near the front of the bin. The coldplate has a cavity designed to hold the drain spider. During shipment or installation, the drain spider may become dislodged from its original position. Prior to installing the dispenser, ensure the drain spider is in the correct position. This will prevent drain clog issues. Inspect the lower bin area to ensure the drain spider is secure in the coldplate cutout. If the drain spider is not in place, locate the drain spider and reinstall in the cavity where drain line exists.

#### Leveling the Dispenser:

In order to facilitate proper dispenser drainage, ensure that the dispenser is level, front to back and side to side. Place a level on the top of the rear edge of the dispenser. The bubble must settle between the level lines. Repeat this procedure for the remaining three sides. Level unit if necessary. For optimum performance place the unit at a 0° tilt.



# **Selecting/Preparing Counter Location**

- Connecting lines can be run through the front of the unit and can extend down through a counter cutout.
- Select a level, well ventilated, accessible location away from direct sunlight (avoid) or overhead lighting, within five (5) feet (1.5 m) of a drain, and a water supply that meets the requirements shown in the Specifications section found on previous page.
- Select a location for the syrup pumps, CO<sub>2</sub> tank, syrup containers, and water filter (recommended).
- The selected location should be able to support the weight of the unit with the ice after counter cut out is made (if applicable).

#### Installation of Unit

#### NOTE -

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

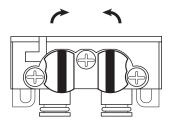
 The dispenser is designed to be installed either permanently to counter or placed on a counter using the four (4) inch legs (included in the Lancer kit, PN 82-1704)

#### NOTE

NSF listed units must be sealed to the counter or have four (4) inch legs installed.

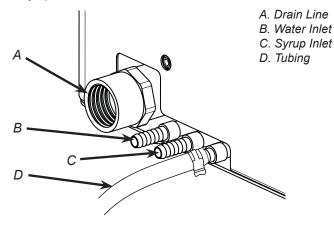
- 2. Remove Top Cover.
- 3. Remove the two (2) valves from ice bin.
- Install valves onto mounting blocks at front of dispenser.
   Push wire retainer down. This will lock valve to mounting block.

Turn both white stems on mounting block to the open position. Top of the stem will lock wire retainer in position.



Open Position

 Route appropriate tubing from the syrup pump location to the syrup inlets located in the front of the unit. Connect tubing to inlets using the oetiker pliers and fittings. Repeat for second syrup connection.



- Route appropriate tubing from water source and Plain/Carb water inlet located at the front of the unit. Connect tubing to water source and flush line thoroughly.
- 8. Connect tubing to inlet at unit.
- Install the ice bin drain hose; connect the 90° elbow or straight fitting underneath the unit's base. The ice bin drain is located towards the front of the bin and slightly to the left.
- 10. Connect the hose. Extend the hose to an open type drain.

#### **⚠** CAUTION -

Drain line must be insulated with a closed cell insulation. Insulation must cover the entire length of the drain hose, including fittings. The drain should be installed in such a manner that water does not collect in sags or other low points, as condensation will form.

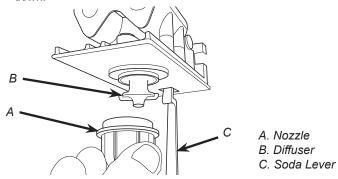
11. Fill unit with ice and Install Top Cover and Drip Tray.

#### **⚠** CAUTION

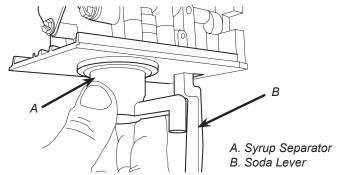
The ice used in this unit may not be potable and should not be ingested. Do not eat, chew, suck, swallow, or put into drinks. The ice used in this unit is intended solely for the refrigeration purposes of the product.

# Adjust Syrup/Water Ratio

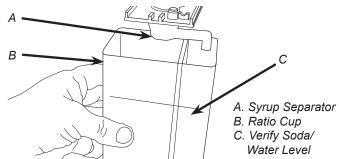
- Slide up I.D. panel until flow control adjustments are exposed.
- Remove nozzle by twisting counter clockwise and pulling down



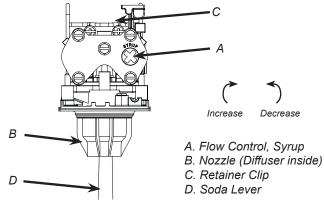
- 3. Remove diffuser by pulling down.
- Install *LANCER* syrup separator (yellow) (PN 54-0031 for Model 100 valves) in place of the nozzle.



- 5. Activate valve to purge syrup until steady flow is achieved.
- Using a Lancer ratio cup, activate the valve and capture a sample. Verify that the syrup level is even with the water level.



7. Use a screwdriver to adjust syrup flow rate if needed.



8. Slide down I.D. panel and repeat process for second valve.

# **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.

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 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.

# **Daily Cleaning**

- Using the cleaning solution, clean Top Cover and all exterior stainless steel surfaces.
- Clean exterior of dispensing valves.
- 3. Remove Drip Tray by lifting to release its mounting holes from the mounting screws.
- 4. Dump any water and product, and wash the Drip Tray and Splash Plate with cleaning solution.
- Lift the Drip Tray to hook the mounting holes on the mounting screws, and set Splash Plate on the Drip Tray.
- Wipe clean all splash areas using a damp cloth soaked in cleaning solution.

# Ice Bin Cleaning - Monthly

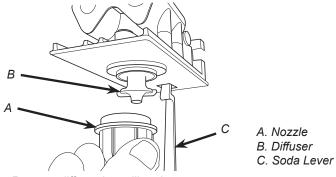
- 1. Remove Top Cover.
- Remove Drip Tray by lifting it up and out from the dispenser face
- 3. Using cleaning solution, described in Section 3.2, and a clean cloth or soft brush, clean all sides of Ice Bin and surface of aluminum casting.
- 4. Repeat Step 3 for all exterior surfaces of the unit.
- Using hot water, thoroughly rinse away the cleaning solution.
- 6. Fill Unit with ice and replace Top Cover.

# **⚠** 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 & Sanitizing Nozzles**

 Remove nozzle by twisting counter clockwise and pulling down.



- 2. Remove diffuser by pulling down.
- 3. Rinse nozzle and diffuser with warm water.
- Wash nozzle and diffuser with cleaning solution then immerse in sanitizing solution and let sit for fifteen (15) minutes.
- Set nozzle and diffuser aside and let air dry. DO NOT rinse with water after sanitizing.
- 6. Reconnect diffuser and nozzle.
- 7. Taste the drink to verify that there is no off-taste. If off-taste is found, flush syrup 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 & Sanitizing Syrup Lines**

- 1. Disconnect syrup lines from BIB's
- Place syrup lines, with BIB connectors, in a bucket of warm water
- 3. Activate each valve to fill the lines with warm water and flush out syrup remaining in the lines.
- 4. Prepare Cleaning Solution described above.
- Place syrup lines, with BIB connectors, into cleaning solution.
- Activate each valve until lines are filled with cleaning solution then let stand for ten (10) minutes.
- Flush out cleaning solution from the syrup lines using clean, warm water.
- 8. Prepare Sanitizing Solution described on previous page.
- Place syrup lines into sanitizing solution and activate each valve to fill lines with sanitizer. Let sit for ten (10) minutes.
- 10. Reconnect syrup 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 syrup system again.

# **⚠** CAUTION

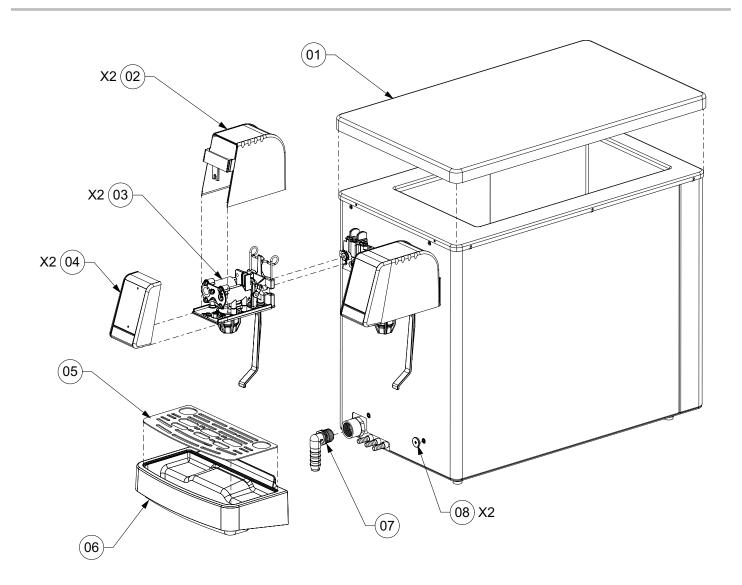
Following sanitization, rinse with end-use product until there is no aftertaste. Do not use a fresh water rinse. This is a NSF requirement. Residual sanitizing solution left in the system creates a health hazard.

# **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>ltem</u>	Part No.	<u>Description</u>
01	30-11833	Metal Lid
02	05-3240/01	Valve Cover, EcoPour
03	19-71110	EcoPour Self-Serve Valve, 1.5 oz.
04	05-3241/01	ID Panel, EcoPour
05	30-11859	Cup Rest
06	05-3266	Drip Tray
07	01-2992	Elbow, 90 Deg., PVC, 1/2"
80	04-1682	Screw, M4-0.7X4.5, 4.5 Shoulder, FHD, PH, SS

