

LANCER®

SPARTAN DISPENSER

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 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 40°F to 75°F (4°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.

⚠ Uso Previsto

El dispensador sólo debe usarse en interiores. Esta unidad no es un juguete. Los niños deben ser supervisados para no jugar con aparato. No la deben usar niños ni personas discapacitadas sin supervisión. Esta unidad no está destinada al uso por parte de personas (incluso niños) con capacidad física, sensorial o mental reducida, o sin experiencia y conocimientos suficientes, a menos que una persona responsable de su seguridad les haya dado supervisión o capacitación en el uso de la unidad. Limpieza y mantenimiento de usuario no deberá ser realizada por los niños sin supervisión. La temperatura ambiente operativa mínima / máxima para el dispensador es de 40°F a 75°F (4°C a 24°C). No opere la unidad debajo de las condiciones de funcionamiento ambientales mínimos. En caso de congelación se produce, cesar la operación de la unidad y el contacto técnico de servicio autorizado. Servicio de limpieza y desinfección deben llevarse a cabo solamente por personal capacitado. Es necesario tomar medidas de seguridad aplicables. Advertencias de las instrucciones sobre el producto utilizado se deben seguir.

⚠ Utilisation Prévue

Le distributeur est destiné à un usage à l'intérieur seulement. Cet appareil n'est pas un jouet. Les enfants doivent être surveillés afin de ne pas jouer avec l'appareil. Il ne devrait pas être utilisé par des enfants ou des personnes infirmes sans surveillance. Cet appareil n'est pas destiné à un usage par des personnes (y compris les enfants) ayant des capacités physiques, sensorielles ou mentales réduites, ou manquant d'expérience et de connaissances, à moins qu'elles obtiennent de la surveillance ou des instructions au sujet de l'utilisation de l'appareil de la part d'une personne chargée de leur sécurité. Nettoyage et entretien de l'utilisateur ne doivent pas être effectués par des enfants sans surveillance. La température de service ambiante minimum/ maximum pour le distributeur est de 40°F à 75°F (4°C à 24°C). Ne pas utiliser l'appareil dans des conditions de performance environnementale minimale. En cas de gel, cesser l'exploitation de l'unité et contactez un technicien agréé. Nettoyage et désinfection doivent être effectuées uniquement par du personnel qualifié. Vous devez prendre des mesures de sécurité. Avertissements instructions sur le produit utilisé doivent être respectées.



1600

LANCER PN: 28-0937/01

⚠ Electrical Warning

Check the dispenser name plate label, located behind the splash plate, for the correct electrical requirements of unit. Do not plug into a wall electrical outlet unless the current shown on the serial number plate 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!

⚠ Advertencia Eléctrica

Revise la etiqueta de identificación para el dispensador, ubicado detrás de la placa frontal, para los requisitos eléctricos. No enchufe la unidad en un tomacorriente de pared a menos que la corriente indicada en la placa con el número de serie concuerde con la corriente local disponible. Al hacer las conexiones, respete todos los códigos eléctricos locales. Cada dispensador debe tener un circuito eléctrico independiente. No use extensiones con esta unidad. No la conecte junto con otros dispositivos eléctricos al mismo tomacorriente. El interruptor de llave no corta el voltaje de línea al transformador primario desconecte siempre la alimentación eléctrica a la unidad para evitar lesiones personales antes de tratar de realizar tareas de mantenimiento. El disyuntor de sobrecarga reseteable no se debe usar como sustituto para desenchufar el dispensador de la fuente de alimentación para realizar tareas de servicio de la unidad. El servicio de los componentes internos de la caja de control eléctrico debe confiarse exclusivamente a personal calificado. Asegúrese de que todas las líneas de agua estén ajustadas y las unidades estén secas antes de hacer conexiones eléctricas!

⚠ Avertissement Électrique

Vérifiez l'étiquette de notation derrière la face avant, pour les besoins de puissance correctes pour l'unité. Ne le branchez pas à une prise électrique murale à moins que le courant indiqué sur la plaque de numéro de série corresponde au courant local disponible. Respectez tous les codes électriques locaux lorsque vous faites des connexions. Chaque distributrice doit avoir un circuit électrique séparé. N'utilisez pas de cordons prolongateurs avec cet appareil. Ne pas le brancher avec d'autres appareils électriques sur la même prise. L'interrupteur à clé ne coupe pas la tension secteur au transformateur primaire. Débranchez toujours le courant électrique à l'appareil, afin de prévenir des blessures, avant de faire un entretien interne quelconque. Le disjoncteur réarmable ne devrait pas être utilisé au lieu de débrancher le distributeur de la source d'alimentation en électricité pour faire de l'entretien/une réparation de l'appareil. Seul le personnel qualifié devrait faire l'entretien/la réparation des composants internes dans le logement des commandes électriques. Assurez-vous que toutes les conduites d'eau sont étanches et que les appareils sont secs avant de faire des connexions électriques!

⚠ 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.

⚠ El Anhídrido Carbónico (CO₂)

- **ADVERTENCIA:** El anhídrido carbónico (CO₂) es un gas incoloro, no combustible, con un olor pungente ligero. Altos porcentajes de CO₂ en la sangre pueden desplazar el oxígeno en la sangre.
- **ADVERTENCIA:** La exposición prolongada al CO₂ puede ser nociva. El personal expuesto a concentraciones altas de CO₂ sufre temblores seguidos de la pérdida de la consciencia y sofocación.
- **ADVERTENCIA:** Si se sospecha que existe una pérdida de CO₂, ventile el área contaminada antes de tratar de reparar la pérdida.
- **ADVERTENCIA:** Hay que prestar suma atención para evitar pérdidas de CO₂ en todo el sistema de CO₂ y de bebidas gaseosas.

⚠ Dioxyde De Carbone (CO₂)

- **AVERTISSEMENT:** Le dioxyde de carbone (CO₂) est plus lourd que l'air et déplace l'oxygène. Le CO₂ est un gaz incolore et incombustible, ayant une odeur un peu âcre.
- **AVERTISSEMENT:** Des concentrations fortes de CO₂ peuvent déplacer l'oxygène dans le sang. Une exposition prolongée au CO₂ peut être nocive. Le personnel exposé à de fortes concentrations de CO₂ gazeux éprouvera des tremblements, suivis rapidement d'une perte de conscience et de suffocation.
- **AVERTISSEMENT:** On doit faire très attention de prévenir les fuites de CO₂ gazeux dans le système entier de CO₂ et de boisson gazeuse.
- **AVERTISSEMENT:** Si on suspecte qu'il y a une fuite de CO₂ gazeux, aérez le secteur contaminé immédiatement avant d'essayer de réparer la fuite.

⚠ 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.

⚠ Agua Aviso

Proporcione un suministro adecuado de agua potable. La línea de suministro de agua debe ser de una tubería de por lo menos 3/8 pulgadas (9.525 mm) con una presión de línea mínima de 25 PSI (0.172 MPA) , pero sin superar el máximo de 50 PSI (0.345 MPA). La presión de agua que supere los 50 PSI (0.345 MPA) se debe reducir a 50 PSI (0.345 MPA) con un regulador de presión. Use un filtro en la línea de agua para evitar daños al equipo y cierto sabor raro en las bebidas. Verifique periódicamente el filtro de agua de acuerdo con las condiciones imperantes. El suministro de agua debe estar protegido por una separación de aire, un dispositivo de prevención del contraflujo u otro método aprobado para cumplir las normas NSF. Si la válvula de retención de entrada de agua tuviera pérdidas, permitiría el contraflujo del agua carbonatada a través de la bomba cuando se la detiene y contaminaría el suministro de agua. Asegúrese de que el dispositivo de prevención del contraflujo cumpla con las normas locales y de ASSE. Es responsabilidad del instalador cumplir con estos requisitos.

⚠ Préavis De L'eau

Fournissez une alimentation en eau potable adéquate. Les connexions et les dispositifs de conduite d'eau connectés directement à une alimentation en eau potable doivent être calibrés, installés et maintenus selon les lois fédérales, provinciales et locales. La conduite d'alimentation en eau doit être un tuyau d'au moins 3/8 pouces (9.525 millimètres) avec une pression de ligne minimum de 25 LPC (0.172 MPA) , mais ne doit pas dépasser un maximum de 50 LPC (0.345 MPA). Une pression d'eau de plus de 50 LPC (0.345 MPA) doit être réduite à 50 LPC (0.345 MPA) avec le régu- lateur de pression fourni. Utilisez un filtre dans la conduite d'eau pour éviter des dommages à l'équipement et un goût des boissons qui n'est pas juste. Vérifiez le filtre à eau périodiquement, selon les exigences des conditions locales. L'alimentation en eau doit être protégée au moyen d'un intervalle d'air, un disconnecteur hydraulique ou une autre méthode approuvée pour se conformer aux normes de la NSF. Un clapet antiretour pour l'eau entrante qui fuie permettra à l'eau gazeuse de repasser par la pompe quand elle est fermée et de contaminer l'alimentation en eau. Assurez-vous que le disjoncteur hydraulique soit conforme aux normes de l'ASSE et locales. L'installateur est responsable d'assurer la conformité.

SPECIFICATIONS

DIMENSIONS

Width: 15.7 inches (399 mm)
Depth: 28.1 inches (711.2 mm)
Height: 21.6 inches (549 mm)

WEIGHT

Shipping: 110 lbs (49.9 kg)
Empty: 82 lbs (37.2 kg)
Operating: 127 lbs (57.5 kg)

ELECTRICAL

115 VAC / 60 Hz / 6.6 Amps
220-240 VAC / 50-60 Hz / 2.6 Amps

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)

CARBON DIOXIDE (CO₂) SUPPLY

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

FITTINGS

Carbonator Inlet: 1/4 inch barb
Plain Water Inlet: 1/4 inch barb
Brand Syrup Inlets: 1/4 inch barb
CO₂ Inlet: 1/4 inch barb

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 Telephone Number: _____

Serial Number: _____

Model Numer: _____

Installation Date: _____

INSTALLATION

Unpack the Dispenser

1. Cut package banding straps and remove.
2. Open the box and remove the parts tray.
3. Close the lid, then remove using the handle cutouts.
4. Remove accessory kit and loose parts.

NOTE

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

5. Remove plywood shipping base from unit by moving unit so that one side is off the counter top or table allowing access to screws on the bottom of the plywood shipping base.

NOTE

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

6. If leg kit has been provided, assemble legs by tilting unit.

⚠ ATTENTION

DO NOT LAY UNIT ON ITS SIDE OR BACK

⚠ ATENCIÓN

NO COLOQUE LA UNIDAD SOBRE SU PARTE LATERAL O POSTERIOR

⚠ ATTENTION

NE PAS POSER L'APPAREIL SUR LE CÔTÉ OU L'ARRIÈRE

Selecting/Preparing Counter Location

1. Select a location that is in close proximity to a properly grounded electrical outlet, within five (5) feet (1.5 m) of a drain, and the water supply.
2. Select a location for the syrup pumps, CO₂ tank, syrup containers, and water filter (recommended).
3. Condenser air is drawn in from the front and side vents located on the bonnet and discharged out the rear of the bonnet. A minimum of eight (8) inches (203 mm) of clearance must be maintained over the top of the unit and a minimum of four (4) inches (101.6 mm) clearance behind the unit to provide for proper air flow and circulation.

⚠ ATTENTION

Failure to maintain specified clearance will cause the compressor to overheat and will result in compressor failure

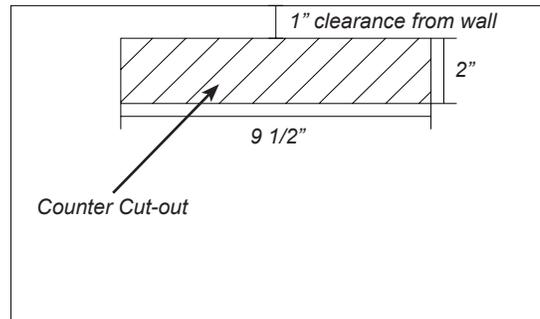
⚠ ATENCIÓN

Falta de mantenimiento de liquidación de aire adecuado hacen que el compresor se sobrecaliente y podrá fallar componente prematuro

⚠ ATTENTION

Non-respect de liquidation de l'air bonne que le compresseur à surchauffer et à entraîner de durer composant

4. Cut a nine and a half (9.5) inch (241.3 mm) by two (2) inch (50.8 mm) rectangular hole, one (1) inch (25.4 mm) from the back wall in the designated dispenser location.



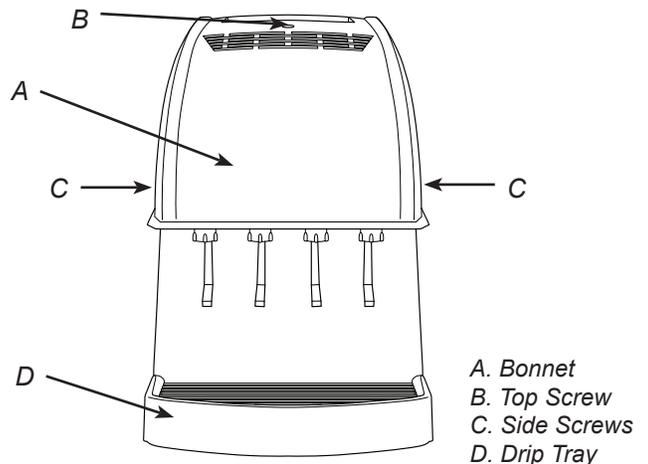
Dispenser Installation

1. Install the unit onto the counter

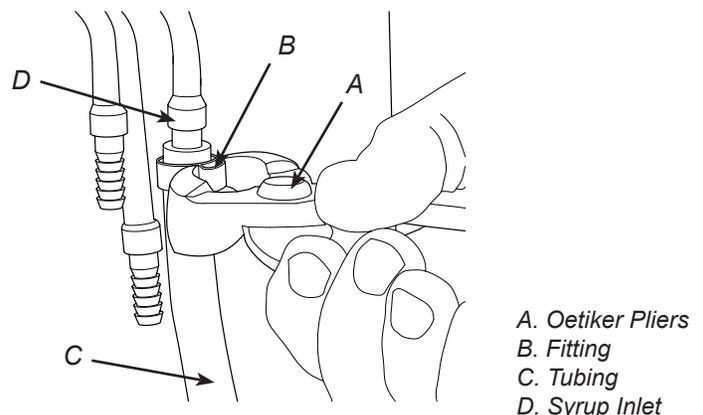
NOTE

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

2. Remove the bonnet by removing the three (3) bonnet screws on the sides and top of the unit.



3. Remove the splash plate, cup rest, and drip tray.
4. Rotate unit to reveal rear inlets access panel. Remove panel by removing two (2) screws toward bottom of the unit.
5. Route appropriate tubing from the syrup pump location to the syrup inlets. Connect tubing to inlets using the oetiker pliers and fittings. Repeat for all syrup connections.



- Route appropriate tubing from the water source to the compressor deck fill hole, identified by the yellow cap, and connect tubing to water source.

⚠ CRITICAL - to maximize performance

Carefully read this before filling the water bath tank. In order to optimize the maximum performance of the dispenser, the following **MUST** be adhered to:

- Insert water line into a large bucket, and fill with approx. 5.4 gallons (20.4 L) of distilled water.
- Add 1/8 oz (4 g) of baking soda to distilled water and stir.

⚠ ATTENTION

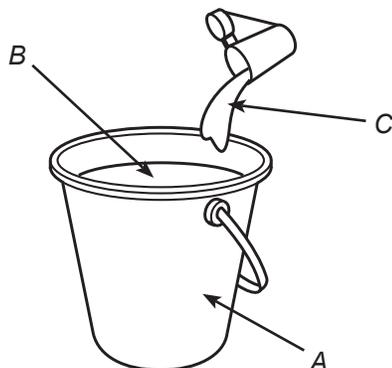
For proper function of the electronic ice bank control the total dissolved solids (TDS) measurements should be 300-500 ppm.

⚠ ATENCIÓN

Para el correcto funcionamiento del control del banco de hielo electrónico, los sólidos totales disueltos (TDS) mediciones deben ser 300 a 500 ppm.

⚠ ATTENTION

Pour le bon fonctionnement de le contrôle banque de glace électronique, les solides totaux dissous (TDS) des mesures devraient être de 300-500 ppm.



A. Bucket
B. Distilled Water (approx. 5.4 gal)
C. Baking Soda (approx. 1/8 oz)

- Using a conductivity meter, measure the electric conductivity of the distilled water mixture.

⚠ ATTENTION

The E.C. measurement of the distilled water mixture must be between 100 and 300 uS/cm. Below 100 uS/cm, the compressor will not work properly and above 300 uS/cm could cause the lines to freeze.

⚠ ATENCIÓN

La medida de la conductividad eléctrica de la mezcla de agua destilada debe estar entre 100 y 300 uS / cm. Por debajo de 100 uS / cm, el compresor no funcionará correctamente y por encima de 300 uS / cm podría causar que las líneas se congelen.

⚠ ATTENTION

Le courant électrique du mélange d'eau distillée doit être comprise entre 100 et 300 uS / cm. En dessous de 100 uS / cm, le compresseur ne fonctionnera pas correctement et plus de 300 uS / cm pourrait provoquer des lignes de geler

- Remove yellow cap from the water bath fill hole and insert and insert a funnel into the fill hole.

- Carefully pour the distilled water mixture into the water bath tank until water flows out of the overflow tube at the front of the unit. (Repeat steps 7-9 if needed)

⚠ ATTENTION

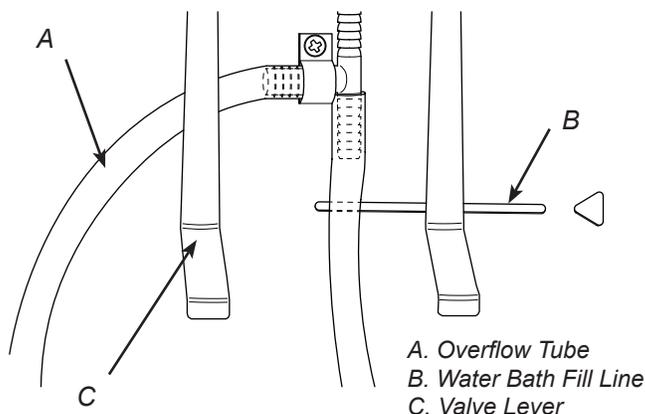
The water bath compartment must be filled with water before plugging in the unit, otherwise the compressor fan may not operate properly.

⚠ ATENCIÓN

El compartimiento de baño de agua deba estar lleno de agua antes de enchufar la unidad pues, de lo contrario, la plataforma del compresor y el ventilador del condensador no funcionarían correctamente.

⚠ ATTENTION

Le compartiment de bain-marie doit être rempli avec de l'eau avant de brancher l'appareil, sinon la plateforme du compresseur et le ventilateur du condensateur peuvent ne pas fonctionner correctement.



A. Overflow Tube
B. Water Bath Fill Line
C. Valve Lever

- Replace yellow cap then connect water line to the water inlet in the back of the unit.
- Route appropriate tubing from the syrup pump location to the CO₂ inlet and connect tubing to CO₂ inlet.
- Rotate the unit so the valves are toward the front then feed drain line through the front opening.
- Plug in power cord to the unit control box.
- Feed all tubing, power cord, and drain line through the counter top cutout.
- Route the drain line to designated floor drain.
- Plug in the unit to a grounded electrical outlet then turn the unit on to begin building an ice bank.

⚠ 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.

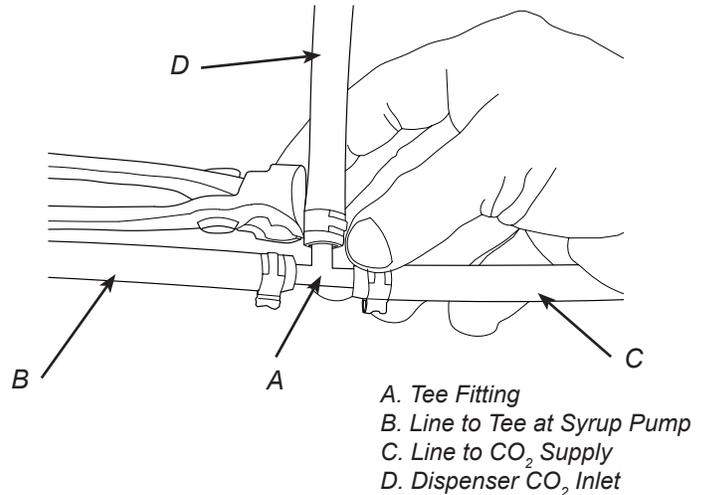
⚠ ADVERTENCIA

Es necesario poner a tierra eléctricamente el dispensador para evitar lesiones graves e incluso electrochoques fatales. El cable de alimentación tiene un enchufe puesto a tierra de 3 clavijas. Si no se dispone de un toma eléctrico conectado a tierra de tres agujeros, use un método aprobado para poner a tierra la unidad. Al hacer las conexiones, respete todos los códigos eléctricos locales. Cada dispensador debe tener un circuito eléctrico independiente. No use cables de extensión. No conecte varios dispositivos eléctricos al mismo tomacorriente.

⚠ AVERTISSEMENT

La distributrice doit être mise à la terre électriquement correctement pour éviter des blessures graves ou une décharge électrique mortelle. Le cordon d'alimentation a une fiche à trois branches mise à la terre. Si aucune prise de Courant électrique à trois trous n'est disponible, utilisez une méthode approuvée pour mettre l'unité à la terre. Respectez tous les codes électriques locaux lorsque vous faites des connexions. Chaque distributrice doit avoir un circuit électrique séparé. N'utilisez pas de cordons prolongateurs. Ne branchez pas plusieurs appareils électriques à la même prise de courant.

4. Cut tubing from CO₂ supply to tee fitting at syrup pumps and install another tee fitting.
5. Attach line from dispenser CO₂ inlet to tee fitting between syrup pumps and CO₂ supply.



6. Connect tubing from dispenser syrup inlet to the syrup pump outlet fitting. Repeat for each syrup line/pump.

Connecting to Syrup Supply - Bag in Box

1. Install BIB (bag in box) connectors onto the syrup pump inlet tubing.

⚠ ATTENTION

Use proper connector for syrup manufacturer

⚠ ATENCIÓN

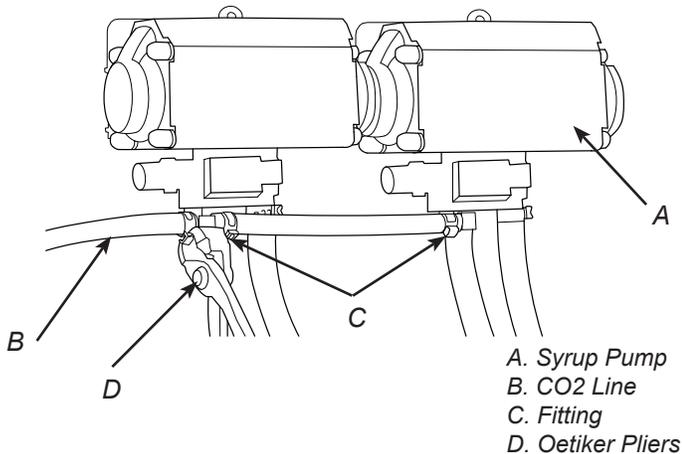
Utilice el conector adecuado para el fabricante de jarabe

⚠ ATTENTION

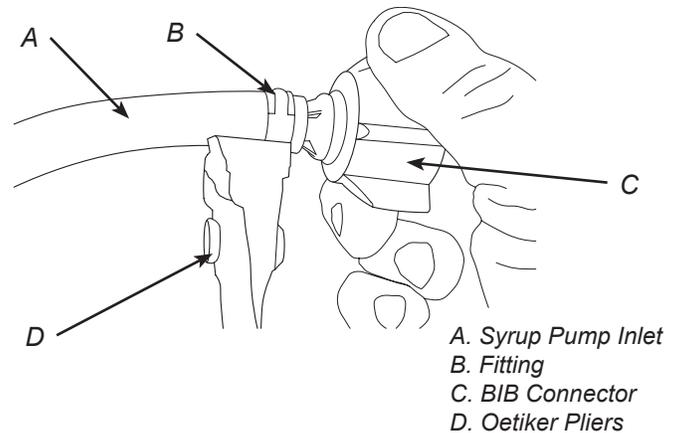
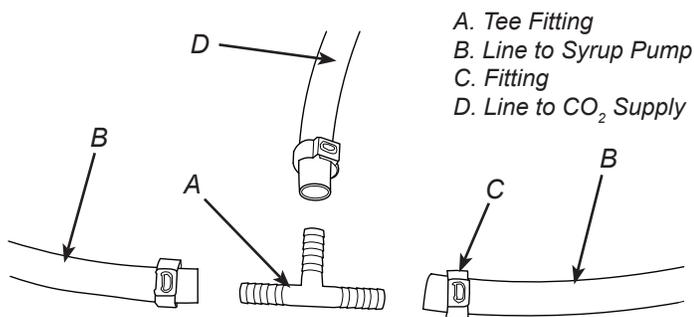
Utilisez connecteur approprié pour fabricant de sirop

Installing Remote Syrup Pumps - Bag in Box

1. Install BIB rack and remote pumps according to manufacturers' instructions.
2. Once pumps and BIB rack are installed, measure and cut tubing to length between the pump CO₂ inlets, then connect tubing to all pumps.



3. Using tubing cutters, cut any pump CO₂ supply line and install tee fitting, then route appropriate tubing from the CO₂ supply to the tee fitting at syrup pumps.



2. Connect syrup BIBs to connectors. Repeat for each syrup line/pump.

Installing CO₂ Supply

1. Connect high pressure CO₂ regulator assembly to CO₂ cylinder or bulk system.

⚠ ATTENTION

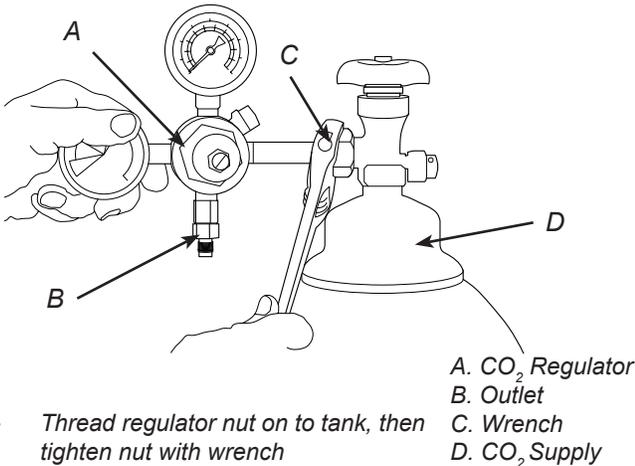
Before installing regulator, assure that a seal (washer or o-ring) is present in regulator attachment nut.

⚠ ATENCIÓN

Antes de instalar el regulador, asegúrese de que un sello (lavadora o la junta tórica) está presente en la tuerca de regulación.

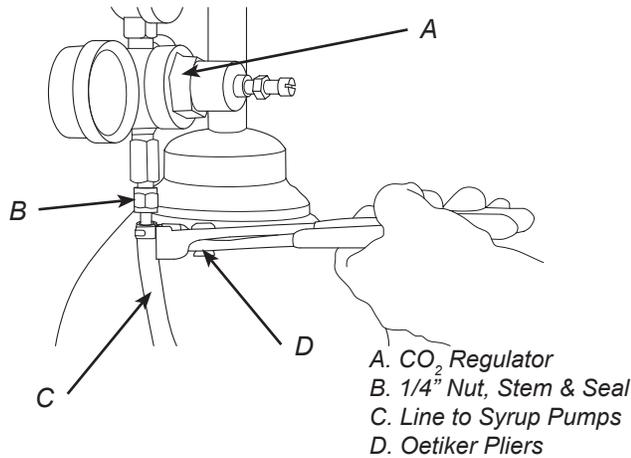
⚠ ATTENTION

Avant d'installer le régulateur, se assurer que l'étanchéité (laveuse ou o-ring) est présent dans l'écrou du régulateur.



- Thread regulator nut on to tank, then tighten nut with wrench

2. Connect a 1/4" nut, stem and seal to CO₂ regulator outlet. Then connect tubing routed from tee at syrup pumps.



3. Using a wrench, loosen lock nut on regulator adjustment screw then using a screwdriver back out lock nut screw all the way.

⚠ WARNING

DO NOT TURN ON CO₂ SUPPLY AT THIS TIME

⚠ ADVERTENCIA

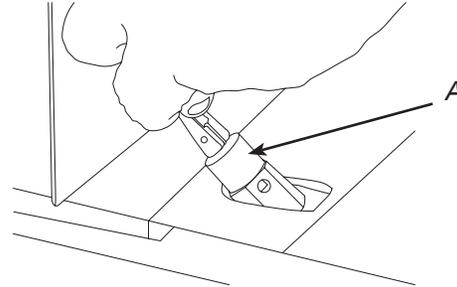
NO CONECTE TODAVÍA LA ALIMENTACIÓN DE CO₂.

⚠ AVERTISSEMENT

N'OUVREZ PAS L'ALIMENTATION EN CO₂ À CE MOMENT.

Carbonated Water Setup

1. Purge water to fill carbonator tank by opening carbonator relief valve. Close relief valve once water comes out.



A. Carbonator Relief Valve

2. Activate each valve until a steady flow of water is achieved.
3. Turn power off.
4. Unplug the Pump Motor Connector from the control box. Use the wiring diagram on the unit control box for reference.

⚠ ATTENTION

Failure to disconnect the motor power supply will damage the carbonator motor, the pump and void the warranty.

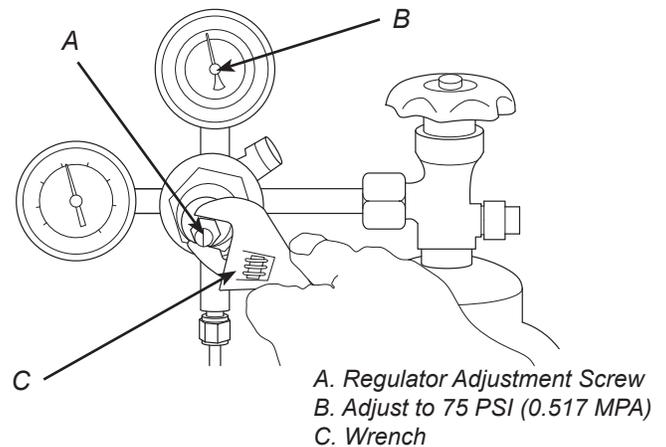
⚠ ATENCIÓN

Si no desconecta la alimentación eléctrica del motor podrían dañarse la bomba y el motor del carbonatado y anular la garantía.

⚠ ATTENTION

Le fait de ne pas maintenir le dégagement spécifié fera surchauffer le compresseur et aura comme conséquence une défaillance du compresseur.

5. Turn on CO₂ and using a screwdriver, adjust regulator to 75 PSI (0.517 MPA) then tighten lock nut with wrench.



6. Activate each valve until gas-out is achieved.
7. Plug the Pump Motor Connector back into the control box.
8. Turn power on.

NOTE

Pump Motor will run for a few seconds to fill carbonator tank

9. Activate each valve until a steady flow of carbonated water is achieved.

Adjust Water Flow Rate & Syrup/Water Ratio

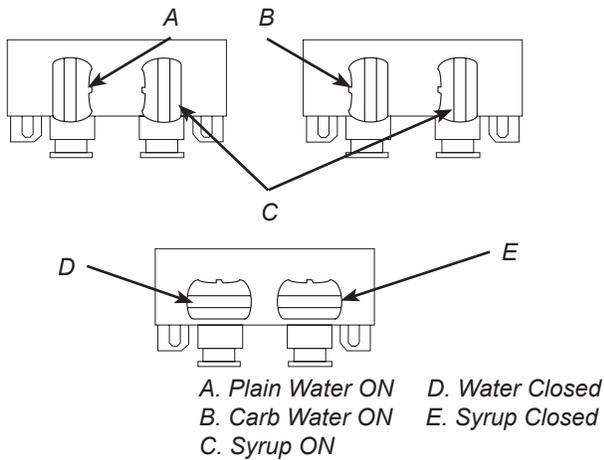
NOTE

The water flow must be adjusted to 1.25 oz/sec (37 ml/sec) on all dispensing valves. Exceeding 2.0 oz/sec (74 ml/sec) may lead to gas-out.

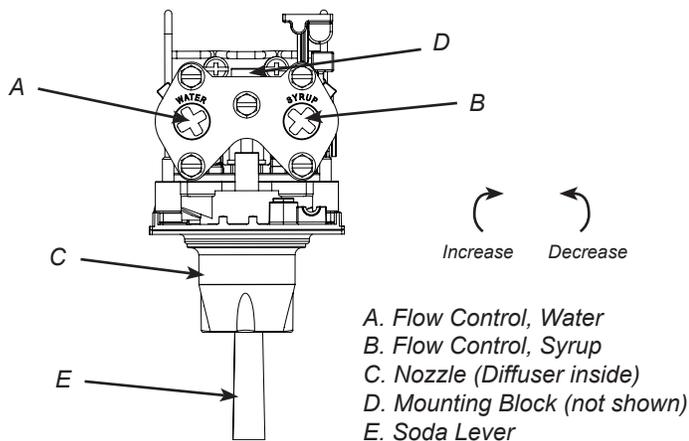
NOTE

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 unit has already made an ice bank.

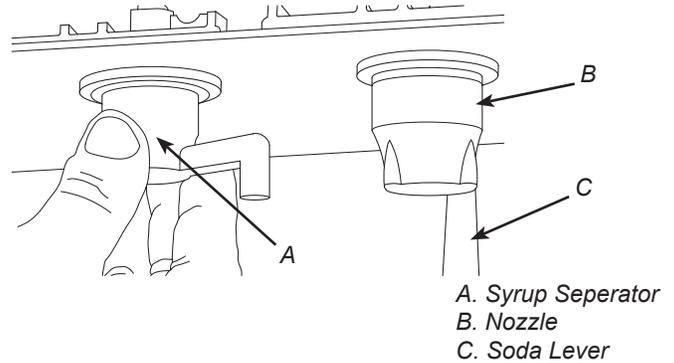
1. Close syrup shut-off at mounting block for first valve



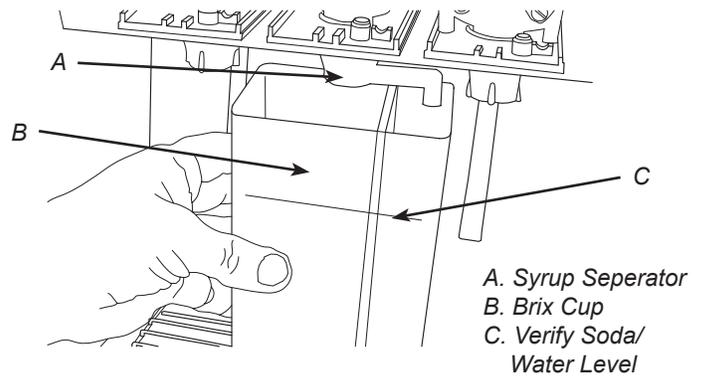
2. Using a Lancer ratio cup verify water flow rate (5 oz. in 4 sec.). Use a screwdriver to adjust if needed.



3. Remove nozzle by twisting counter clockwise and pulling down, then remove diffuser by pulling down.
4. Install Lancer (yellow) syrup separator (PN 54-0031) in place of nozzle.



5. Re-open syrup shut-off at mounting block.
6. Activate valve to purge syrup until steady flow is achieved.
7. Using a Lancer brix cup, activate the valve and capture a sample. Verify that the syrup level is even with the water level. Use a screwdriver to adjust if needed.



8. Repeat process for each valve.
9. Re-install the splash plate, cup rest, and drip tray then reattach bonnet using three bonnet screws.

MAINTENANCE

Scheduled Maintenance

As Needed:

- Keep exterior surfaces of dispenser (include drip tray and cup rest) clean using a clean, damp cloth.

Daily:

- Remove each nozzle and rinse well in warm water. **DO NOT** use soap or detergent. This will cause foaming and off taste in finished product.
- Remove cup rest and wash in warm soapy water.

- Pour warm soapy water into the drip tray and wipe with a clean cloth.
- With a clean cloth and warm water, wipe off all of the unit's exterior surfaces. **DO NOT USE ABRASIVE SOAPS OR STRONG DETERGENTS.**
- Replace the cup rest and nozzles.

Weekly:

- Taste each product for off tastes.
- Remove cup rest and splash plate to view water level tube indicator. Replenish as required, and replace the cup rest and splash plate.

Monthly:

- Unplug the dispenser from the power source.
- Remove the bonnet and clean the dirt from the condenser using a soft brush.
- Replace the bonnet and plug in the unit.

Every Six Months:

- Clean and sanitize the unit using the appropriate procedures outlined in the Cleaning and Sanitizing section of this guide.

Yearly:

- Clean water bath interior, including evaporator coils and refrigeration components.
- Clean the entire exterior of the unit

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.

⚠ 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.

⚠ ATENCIÓN

- Use guantes sanitarios al limpiar la unidad y respete todas las precauciones de seguridad correspondientes.
- **NO** use un chorro de agua a propulsión para limpiar o higienizar la unidad.
- **NO** desconecte los caños de agua al limpiar e higienizar los caños de jarabe para evitar la contaminación.
- **NO** use lavandinas fuertes o detergentes; los mismos pueden decolorar y corroer diferentes materiales.
- **NO** use espátulas de metal, objetos afilados, virulana, estropajo, abrasivos o solventes en la máquina expendedora.
- **NO** use agua caliente por encima de 140° F (60° C). Puede dañar la máquina expendedora.
- **NO** vierta solución desinfectante en ningún tablero de circuitos. Asegúrese de que toda la solución desinfectante sea removida del sistema.

⚠ ATTENTION

- Utilisez des gants sanitaires lors du nettoyage de l'appareil et respectez toutes les précautions de sécurité applicables.
- **NE PAS** utilisez un jet d'eau pour nettoyer ou désinfecter l'appareil.
- **NE PAS** débrancher les conduites d'eau lors du nettoyage et de la désinfection des conduites de sirop, pour éviter la contamination.
- **NE PAS** utilisez des agents de blanchiment ou de détergents forts; ceux-ci peuvent se décolorer et corroder les différent matériaux.
- **NE PAS** utilisez des grattoirs métalliques, des objets tranchants, une laine d'acier, des tampons à récurer, des produits abrasifs ou des solvants sur le distributeur.
- **NE PAS** utilisez de l'eau chaude au-dessus de 140 °F (60 °C). Cela peut endommager le distributeur.
- **NE PAS** renversez de solution désinfectante sur les cartes de circuits imprimés. Assurez-vous que toute la solution désinfectante est retirée du système.

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 sanitizing solutions in accordance with the manufacturer's written recommendations and safety guidelines. The solution must provide 50 to 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 50 to 100 parts per million (PPM) chlorine.

Integrity of Plastic Finish

While caring for your Spartan, please note that there may be some cleaners that may compromise the integrity of the plastic finish. Most common cleaners such as Windex, Dawn, 409, etc. pose no threat to the plastic finish of the unit. However, certain cleaners with high levels of acetic acid, ethylbenzene, isopropylamine, etc., at certain temperatures, could cause aesthetic damage. Please refer to this webpage, <http://www.vita.com.cy/index.php/chemical-resistance-of-ldpe>, to make sure that you are properly caring for your unit.

Cleaning and Sanitizing Syrup Lines

1. Disconnect syrup lines from BIB's
2. 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.
5. Place syrup 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 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.

⚠ PRECAUCIÓN

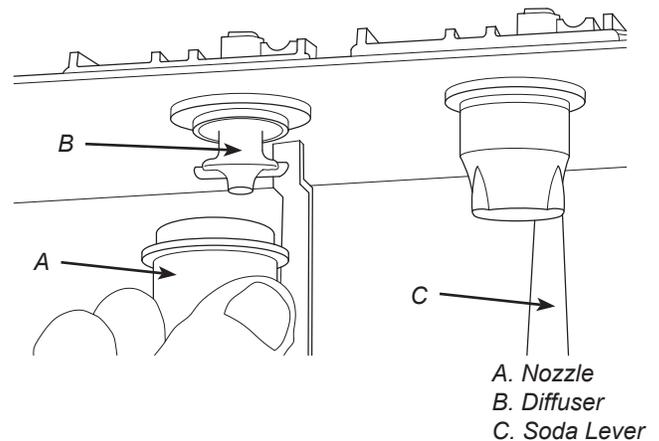
Después de la esterilización, enjuague con el producto final hasta que elimine el sabor que queda. No enjuague con agua fresca. Ésta es una exigencia de NSF. Si queda solución de esterilización en el sistema, genera un peligro para la salud.

⚠ PRUDENCE

Défense de rincer l'outil à l'eau fraîche immédiatement après un traitement septique. En cas de après-goût, ne purger avec le produit final une exigence nsf.

Cleaning and Sanitizing Nozzles

1. Disconnect power, so as to not activate valve while cleaning.
2. Remove nozzle by twisting counter clockwise and pulling down.



3. Remove diffuser by pulling down.
4. Rinse nozzle and diffuser with warm water.
5. Wash nozzle and diffuser with cleaning solution then immerse in sanitizing solution and let sit for fifteen (15) minutes.
6. Set nozzle and diffuser aside and let air dry. **DO NOT** rinse with water after sanitizing.
7. Reconnect diffuser and nozzle.
8. Connect power.
9. 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.

⚠ PRECAUCIÓN

Después de la esterilización, enjuague con el producto final hasta que elimine el sabor que queda. No enjuague con agua fresca. Ésta es una exigencia de NSF. Si queda solución de esterilización en el sistema, genera un peligro para la salud.

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THE ELECTRONIC ICE BANK CONTROL (EIBC)

Checking for Normal PCB Operation

⚠ WARNING

Terminal block has AC line voltage and should be covered with tape. Tape should cover bare electrical connections to prevent electrical shock.

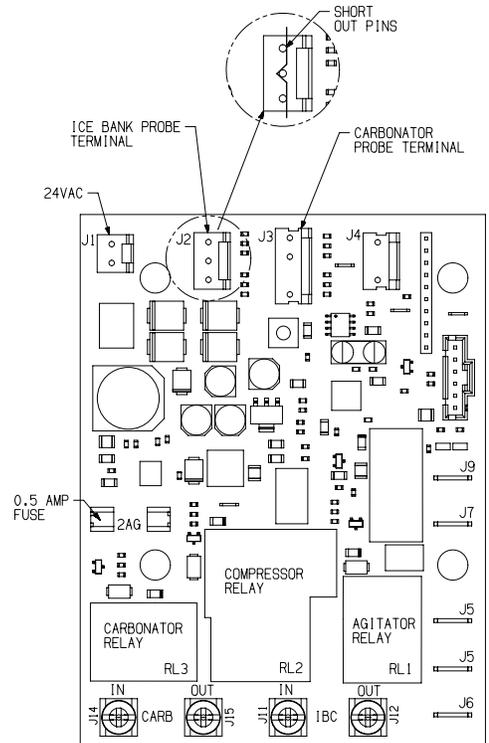
⚠ ADVERTENCIA

El bloque terminal tiene voltaje de línea de ca, por lo que hay que cubrirlo con cinta. La cinta debe cubrir las conexiones eléctricas abiertas para evitar el choque eléctrico.

⚠ AVERTISSEMENT

Le bloc de jonction a une tension de secteur alternative et devrait être couvert de ruban adhésif. Le ruban adhésif devrait couvrir les connexions électriques à nu pour empêcher les décharges électriques.

1. Turn power OFF or insure that power has been disconnected from dispenser
2. Check condition of 0.5 amp fuse at location shown in diagram to the right. If fuse is blown, trace cause of short in valve wire harness and associated 24 VAC lines and replace fuse. If fuse is good, continue with next step.
3. Disconnect leads from the terminal block that connect to the PCB, noting their specific location for reconnection.
4. Disconnect both the Ice Bank probe (J2) and the carbonator probe (J3) (if equipped) connections from board.
5. Use a short copper wire, paper clip, or other means to short the Ice Bank probe terminals (J2) on the PCB by touching all three (3) pins together.
6. Set Ohm test meter to measure continuity.
7. Reconnect power or turn dispenser ON.
8. Observe time and check continuity of the PCB screw lug connections:
 - Terminal 3 to 4 (Carbonator): During the first 2.5 to 3.5 minutes there should be continuity. After 2.5 to 3.5 minutes, there should be NO continuity.
 - Terminal 2 to 1 (Compressor): During first 4 to 6 minutes, there should be NO continuity. After 4 to 6 minutes, there should be continuity. There should be NO continuity from 2 to 1.
 - You should be able to hear a “click” sound of the relay closing when the time delay ends.
9. Turn electrical power OFF for 15 seconds and then back ON again to reset Carbonator timer. Again, measure continuity of the PCB screw lug connections
 - Terminal 3 to 4: There should be continuity. Use a short copper wire, paper clip, or other means to short the Carbonator probe terminals (J3) on the PCB by touching all three (3) pins together. This should be done before the 2.5 to 3.5 minute time limit has elapsed. Measure the continuity again between Terminal 3 to 4: There should be **NO** continuity.
10. If all the above work as noted, then the board is functioning properly. Remove tape and reconnect board. If any non-conformities are found, the PCB must be replaced (PN 52-1423/01).



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