

Operation Manual



Model 400



Model
400

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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 for future reference. 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.

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

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BEFORE GETTING STARTED

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

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IMPORTANT SAFETY INSTRUCTIONS

READ ALL SAFETY INSTRUCTIONS BEFORE USING THIS UNIT.

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

⚠ WARNING

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

⚠ ATTENTION

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

⚠ CAUTION

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

NOTE

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

Flammable Material Warning Symbol



When used in manual, it is to warn against possible ignition of flammable material if proper care is not taken. In order to reduce flammability hazards, the installation and servicing of this appliance must be only carried out by a suitably qualified person. Disposal requires transfer to authorized recycler for processing to avoid damages to the environment or other hazards.

Symbole d'avertissement de matière inflammable



Lorsqu'il est utilisé dans le manuel, ce symbole sert à mettre en garde contre une éventuelle inflammation d'un matériau inflammable si les précautions nécessaires ne sont pas prises. Afin de réduire les risques d'inflammabilité, l'installation et l'entretien de cet appareil ne doivent être effectués que par une personne qualifiée. L'élimination nécessite le transfert à un recycleur agréé pour le traitement afin d'éviter des dommages à l'environnement ou d'autres dangers.

⚠ R290 Refrigerant Warning

This system uses a flammable refrigerant under pressure. Do not tamper with it. Keep clear of obstruction all ventilation openings in the appliance enclosure. Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer. Do not damage the refrigerating circuit. Contact qualified service personnel before disposal. In order to minimize the risk of possible ignition due to incorrect parts or improper service, only factory authorized personnel should perform service on the appliance and its component parts. Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance. Replace component parts with like components. Only use genuine Lancer parts or parts certified by Lancer.

⚠ Avertissement – Liquide frigorigène

Ce système utilise un liquide frigorigène inflammable sous pression. Ne tentez pas de le réparer. Maintenir dégagées toutes les ouvertures de ventilation dans l'enceinte de l'appareil. Ne pas utiliser de dispositifs mécaniques ou autres moyens pour accélérer le processus de dégivrage, autres que ceux recommandés par le fabricant. Ne pas endommager le circuit du fluide frigorigène. Contactez un technicien d'entretien qualifié avant de mettre au rebut. Seul le personnel autorisé devrait effectuer un entretien de l'appareil et de ses composants afin de minimiser le risque d'un allumage possible dû à des pièces incorrectes ou un entretien inapproprié. N'entrez aucune substance explosive comme des bombes aérosol avec un gaz propulseur inflammable dans cet appareil. Remplacez les pièces par des pièces similaires. Utilisez uniquement des pièces Lancer d'origine ou des pièces certifiées par Lancer.

⚠ Intended Use

The dispenser is for indoor use only. 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 can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Cleaning and user maintenance shall not be performed by children without supervision. The min/max ambient operating temperature for the dispenser is 64°F to 100°F (18°C to 38°C) at a max altitude of 16,400 ft (5,000 m). Do not operate unit outside these 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. During installation, old hose-sets should not be reused to connect the unit to the water mains; new hose-sets should always be used. Applicable safety precautions must be observed. Instruction warnings on the product being used must be followed.

⚠ Utilisation prévue

La distributrice doit être utilisée à l'intérieur uniquement. Cet appareil n'est pas un jouet. Ne laissez pas les enfants jouer avec l'appareil. Cet appareil ne doit pas être utilisé par des enfants ou des personnes handicapées sans supervision. Cet appareil peut être utilisé par des enfants âgés de 8 ans et plus et des personnes ayant des capacités physiques, sensorielles ou mentales réduites ou un manque d'expérience et de connaissances s'ils ont reçu une supervision ou des instructions concernant l'utilisation de l'appareil en toute sécurité et comprennent les risques impliqués. Le nettoyage et l'entretien journalier ne doivent pas être effectués par des enfants sans supervision. La température ambiante de fonctionnement de la distributrice se situe entre 65 °F et 105 °F (18 °C et 40 °C) à une altitude maximale de 16 400 pied (5 000 mètre). Ne faites pas fonctionner l'appareil en dehors de ces conditions. Si l'appareil a gelé, cessez de l'utiliser et contactez un technicien d'entretien autorisé. Le personnel assigné au nettoyage, à la désinfection et à l'entretien de l'appareil doit avoir reçu une formation à cet effet. Lors de l'installation, les ensembles de raccordement de tuyaux usagés ne doivent pas être réutilisés pour être raccordés l'unité au réseau d'alimentation en eau; de nouveaux ensembles de tuyaux doivent toujours être utilisés. Les mesures de sécurité en vigueur doivent être suivies. Observez toutes les étiquettes de sécurité apposées sur l'appareil.

⚠ 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. Do not locate multiple portable socket-outlets or portable power supplies at the rear of the appliance. The key-switch 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!

Avertissement - Électricité

Reportez-vous à l'étiquette d'identification de la distributrice située derrière la plaque antiéclaboussures pour connaître les caractéristiques électriques de l'appareil. Ne branchez pas l'appareil dans une prise électrique murale à moins que le courant disponible corresponde à l'intensité nominale indiquée sur l'étiquette portant le numéro de série. Les raccordements électriques doivent être conformes au code électrique local. Chaque distributrice doit être branchée dans un circuit électrique dédié. Ne raccordez pas cet appareil à l'aide d'une rallonge électrique. Ne branchez pas cet appareil dans une prise électrique multiple partagée par d'autres appareils. Ne placez pas plusieurs prises d'alimentation multiples portables ou alimentations électriques portables à l'arrière de l'appareil. L'interrupteur verrouillable ne désactive pas la tension de ligne au primaire du transformateur. Débranchez toujours l'alimentation électrique de l'appareil avant une intervention d'entretien afin de prévenir des blessures. L'ouverture du disjoncteur à réarmement ne remplace pas le débranchement de la distributrice au moment de procéder à une intervention d'entretien. Seul le personnel qualifié est autorisé à faire l'entretien et la réparation des composants électriques logés dans le boîtier du module de commande. Veillez à ce que les conduites d'eau soient étanches et que l'appareil soit sec avant de procéder à des raccordements électriques.

Carbon Dioxide Warning (CO₂)

- Carbon Dioxide (CO₂) is a colorless, noncombustible gas with a light pungent odor. High percentages of CO₂ may displace oxygen in the blood.
- 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.
- If a CO₂ gas leak is suspected, immediately ventilate the contaminated area before attempting to repair the leak.
- Strict attention must be observed in the prevention of CO₂ gas leaks in the entire CO₂ and soft drink system.

Avertissement de dioxyde de carbone (CO₂)

- Le dioxyde de carbone (CO₂) est un gaz incolore et non combustible qui a une odeur âcre. Un pourcentage élevé de CO₂ réduit la quantité d'oxygène dans le sang.
- L'exposition prolongée au CO₂ est dangereuse pour la santé. Le personnel exposé à un taux élevé de CO₂ souffre de tremblements qui sont suivis par une perte de conscience et la suffocation.
- Si vous suspectez une fuite de CO₂, aérez immédiatement la zone contaminée avant de procéder à la réparation de la fuite.
- Il est impératif de prévenir toute fuite de CO₂ dans le système de distribution de CO₂ et de breuvage.

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 to the carbonator 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 pressure regulator. The water supply to non-carb drinks must be a minimum of 55 psi (0.379 MPa), using a water booster if needed. 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.

Remarque relative à l'eau

Assurez-vous que l'alimentation en eau potable est suffisante. Les branchements et les raccords de tuyauterie d'eau directement reliés à l'alimentation en eau potable doivent avoir la taille appropriée et être installés et entretenus conformément aux codes provincial et local. La conduite d'alimentation en eau doit avoir un diamètre minimum de 3/8 po (9,525 mm) et une pression minimale de 25 psi (0,172 Mpa) sans toutefois excéder 50 psi (0,345 Mpa). Si la pression d'eau excède 50 psi (0,345 Mpa), réglez le régulateur de pression à 50 psi (0,345 Mpa). L'alimentation en eau des boissons sans glucides doit être d'au moins 55 psi (0,379 Mpa), en utilisant un surpresseur si nécessaire. Installez un filtre dans la conduite d'eau pour protéger l'appareil et éliminer tout arrière-goût. Inspectez le filtre à eau régulièrement, selon les conditions du réseau local. Le circuit d'alimentation en eau doit être protégé au moyen d'un clapet antiretour, ou d'un dispositif antirefoulement ou d'une autre méthode conforme aux normes de la NSF. Dans le cas d'une fuite du clapet antiretour de la conduite d'alimentation, l'eau gazéifiée refoule à travers la pompe (lorsqu'elle n'est pas en service) et contamine ainsi l'alimentation en eau. Assurez-vous que le dispositif antirefoulement est conforme aux normes de l'ASSE et aux codes en vigueur localement. Cette tâche est de la responsabilité de l'installateur.

SPECIFICATIONS AND FEATURES

CED 400

DIMENSIONS

Width: 10.83 inches (275 mm)
Depth: 29.75 inches (756 mm)
Height: 32.60 inches (828 mm)

WEIGHT

Shipping: 165 lbs (74.8 kg)
Empty: 127 lbs (57.6 kg)
Operating: 174 lbs (78.9 kg)
Ice Bath: 47 lbs (21.3 kg)

ELECTRICAL

115 VAC, 60 Hz, 9.5 Amps
220-240 VAC, 50 Hz, 6.0 Amps
220-240 VAC, 60 Hz, 6.0 Amps

CARBON DIOXIDE (CO₂) SUPPLY

Min Pressure: 70 psi (0.483 MPa)
Max Pressure: 80 psi (0.552 MPa)

FITTINGS

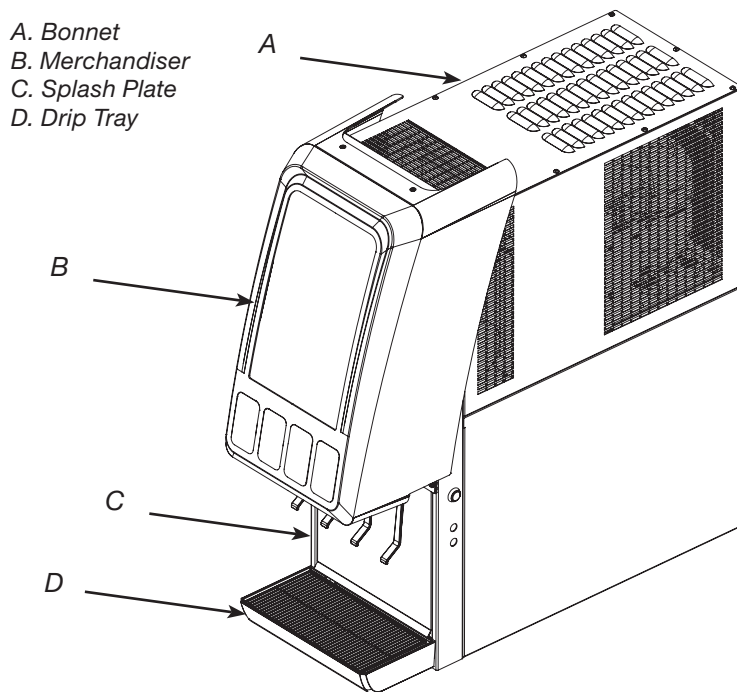
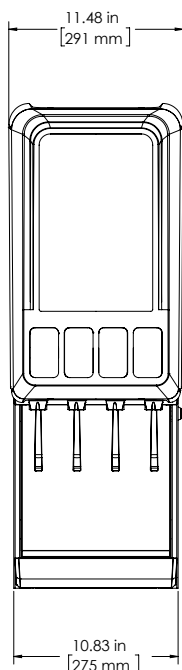
Water for Carb Inlet: 3/8 in. (19 mm) barb
Plain Water Inlet: 3/8 in. (19 mm) barb
Brand Syrup Inlets: 1/4 in. (12.7 mm) barb
CO₂ Inlet: 1/4 in. (12.7 mm) barb

WATER SUPPLY TO CARBONATOR

Min Static Pressure: 25 psi (0.172 MPa)
Max Static Pressure: 50 psi (0.345 MPa)

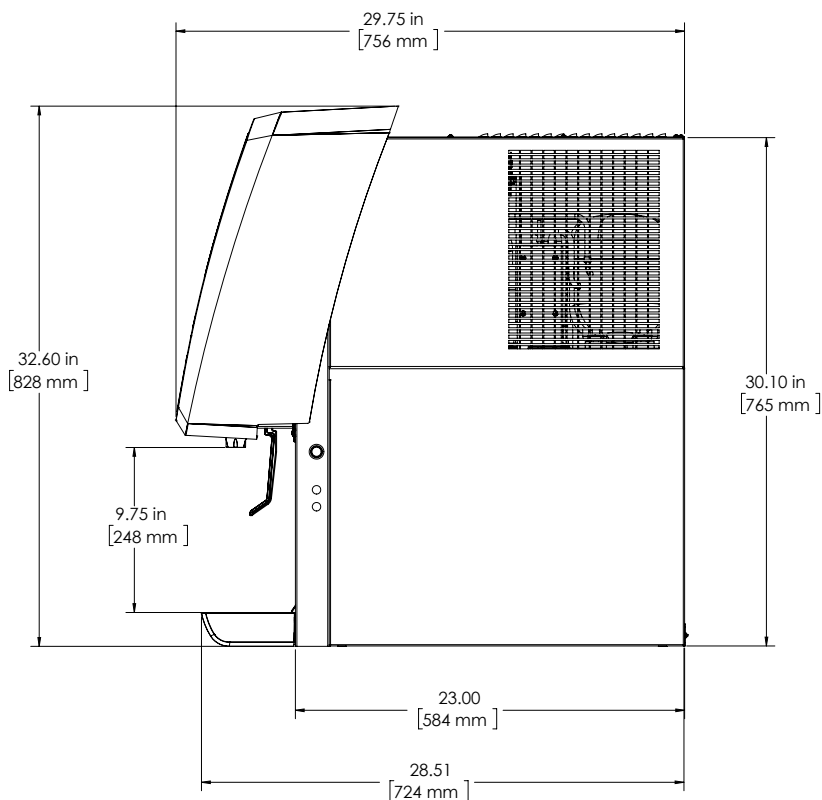
WATER SUPPLY TO NON-CARB DRINKS

Min Static Pressure: 40 psi (0.276 MPa)
Max Static Pressure: 70 psi (0.483 MPa)

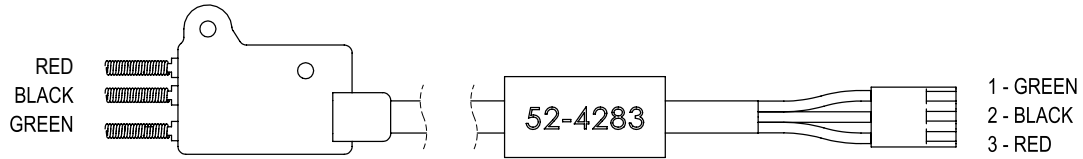


Max Altitude: 16,400 ft (5,000 m)

This unit emits a sound pressure level below 65 dB



Ice Probe



NOTE

The wiring on the probe is reversed and specific only to the CED 400. Do not use any probe other than PN 52-4283 on this unit.

REMARQUE

Le câblage de la sonde est inversé et spécifique uniquement au CED 400. N'utilisez aucune autre sonde que le no de pièce 52-4283 sur cet appareil.

Agitator Motor

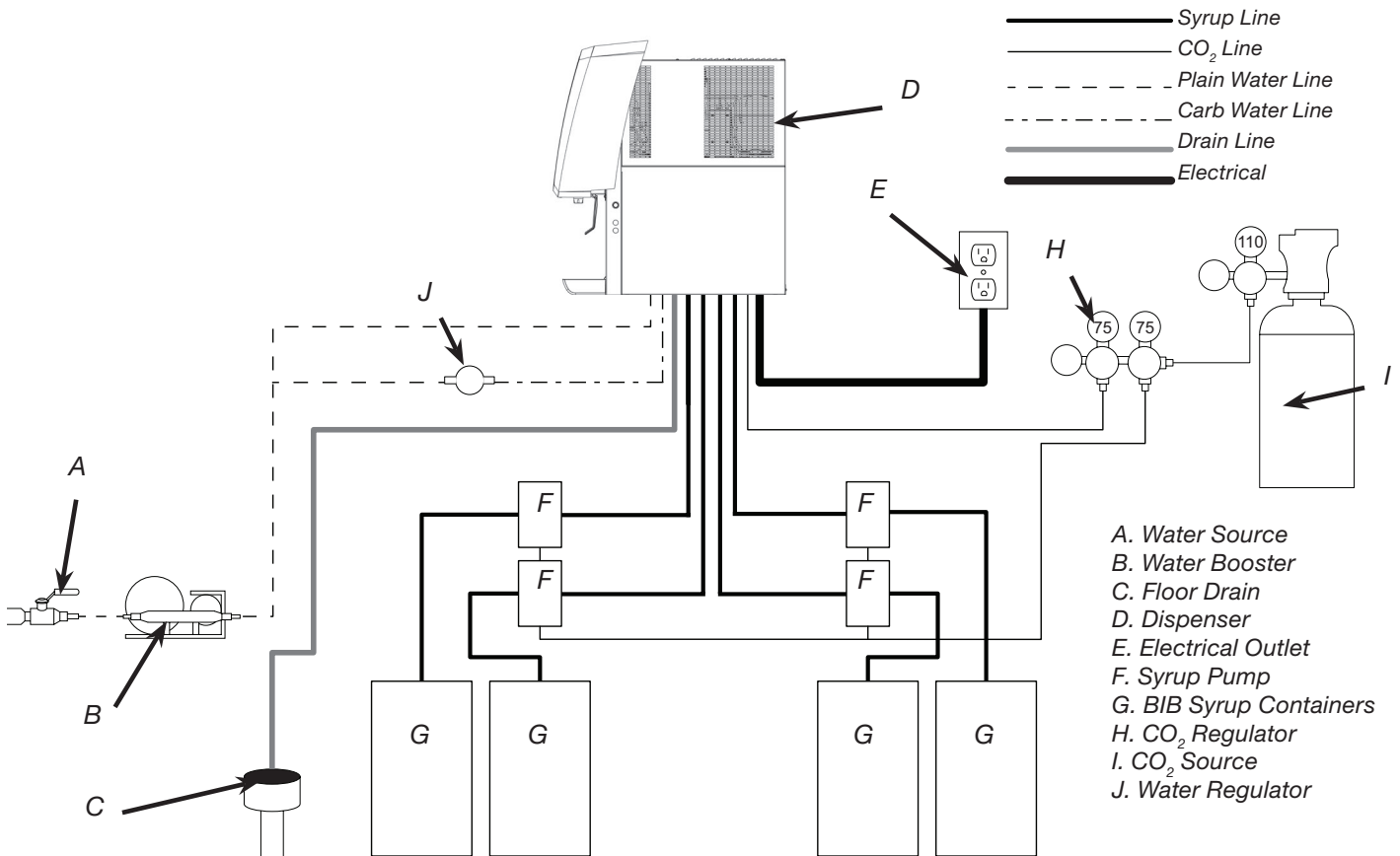
NOTE

To conserve energy, the agitator does not run a 100% duty cycle. The agitator runs when any valve is activated. The agitator will also run when the carbonator pump runs. The agitator will pulse every few minutes during unit idle states. The run time for the agitator motor is approximately 10 seconds.

REMARQUE

Pour économiser l'énergie, l'agitateur ne fonctionne pas à 100%. L'agitateur fonctionne lorsque n'importe quelle vanne est activée. L'agitateur fonctionne lorsque la pompe du carbonateur fonctionne. L'agitateur émet des impulsions toutes les quelques minutes pendant les états d'inactivité de l'unité. Le temps de fonctionnement du moteur de l'agitateur est d'environ 10 secondes.

General System Overview - Remote Syrup Pumps



PRE-INSTALLATION CHECKLIST

TOOLS REQUIRED:

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

BAG-IN-BOX (BIB) SYSTEM:

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

POST MIX ACCESSORIES:

- ☐ High Pressure CO₂ Regulator
- ☐ Low Pressure CO₂ Regulator Manifold
- ☐ CO₂ Supply
- ☐ Chain for CO₂ Tank
- ☐ Beverage Dispenser
- ☐ Beverage Tubing
- ☐ Oetiker Clamp Fittings
- ☐ Water Booster (Lancer PN: MC-163172)
- ☐ Water Regulator

CONSIDER THE FOLLOWING BEFORE INSTALLATION:

- ☐ Location of Water Supply Lines
- ☐ Location of Drain
- ☐ Location of Electrical Outlet
- ☐ Location of Heating and Air Conditioning Ducts
- ☐ Do you have enough space to install the dispenser?
- ☐ Is countertop level?
- ☐ Can the countertop support the weight of the dispenser (include the weight of an ice machine plus weight of ice, if necessary)?
- ☐ Is dispenser located away from direct sunlight or overhead lighting?

Read This Manual

This manual was developed by Lancer Worldwide as a reference guide for the owner/operator and installer of this dispenser. Please read this manual before installation and operation of this dispenser. Please see pages 19-21 for troubleshooting or service assistance. If the service cannot be corrected please call your Service Agent or Lancer Customer Service. Always have your model and serial number available when you call.

INSTALLATION

Unpacking the Dispenser

1. Cut package banding straps and remove.
2. Remove box using the handle cutouts.
3. Remove accessory kit and loose parts.

NOTE

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

REMARQUE

Inspectez l'appareil pour détecter des dommages cachés. Si l'appareil est endommagé, avisez le transporteur et soumettez-lui une réclamation.

⚠ WARNING

Never energize the machine if there is any trace of damage. Contact Lancer Customer Service for assistance.

⚠ AVERTISSEMENT

N'alimentez jamais la machine s'il y a une trace quelconque de dommage. Contactez le service à la clientèle de Lancer pour obtenir de l'aide.

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

NOTE

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

REMARQUE

Si l'appareil doit être transporté, il est conseillé de le laisser fixé sur la base d'expédition en contreplaqué.

⚠ ATTENTION

Do not lay unit on its side or back with refrigeration deck installed. Do not attempt to slide unit while legs are installed, this may damage the bottom plate. Do not handle or lift unit using the wrapper – bottom is not secured to the wrapper and may cause damage or injury.

⚠ ATTENTION

Ne posez pas l'unité sur le côté ou à l'arrière avec une plate-forme de réfrigération installée. N'essayez pas de faire glisser l'unité pendant que les pieds sont installés, cela pourrait endommager la plaque inférieure. Ne manipulez pas ou ne soulevez pas l'appareil à l'aide de l'emballage - le bas n'est pas fixé à l'emballage et peut causer des dommages ou des blessures.

6. Place unit on side.
7. Proceed to install legs by turning clockwise until securely in place.

Selecting/Preparing a Counter Location

NOTE

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

REMARQUE

La distributrice devrait être installée uniquement dans un endroit où elle peut être surveillée par du personnel ayant reçu une formation à cet effet.

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 a water supply that meets the requirements shown in the Specifications section found on page 5.

⚠ WARNING

When positioning the appliance, ensure the supply cord is not trapped or damaged.

⚠ AVERTISSEMENT

Lors du positionnement de l'appareil, assurez-vous que le cordon d'alimentation n'est pas coincé ni endommagé.

2. Select a location for the syrup pumps, CO₂ tank, syrup containers, and water filter (recommended).

3. Condenser air is drawn in from the top front and vents located on the bonnet and discharged out the rear top, sides and back of the bonnet. A minimum of eight (8) inches (203 mm) of clearance must be maintained over the top of the unit to provide for proper air flow and circulation.

⚠ WARNING

Keep ventilation openings in the appliance enclosure or in the built-in structure clear of obstruction. Failure to maintain specified clearance will cause the compressor to overheat and will result in compressor failure.

⚠ AVERTISSEMENT

Gardez les ouvertures de ventilation dans le boîtier de l'appareil ou la structure intégrée, libres de toute obstruction. Le défaut de maintenir le dégagement spécifié entraîne la surchauffe et l'arrêt du compresseur.

4. Cut the necessary holes in the countertop for mounting in the designated dispenser location.

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. Adjust as necessary. For optimum performance place the unit at a 0° tilt. The maximum tilt is 5°.

Mise à niveau de la distributrice

Afin de faciliter une vidange complète, assurez-vous que l'appareil est de niveau sur les axes avant arrière et gauche droit. Placez un niveau sur le bord arrière de la distributrice. La bulle doit se situer entre les deux lignes. Répétez la procédure sur les trois autres côtés. Ajustez le niveau de l'appareil si nécessaire. Pour un résultat maximal, réglez l'inclinaison à 0°. L'inclinaison maximale est de 5°.

Dispenser Installation

NOTE

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

REMARQUE

L'installation ou la réinstallation après un déplacement doit être effectuée par un technicien qualifié conformément aux codes en vigueur.

1. The dispenser is designed to be installed either permanently to a counter or placed on a counter using the legs (included in the Lancer kit, PN 82-6417).

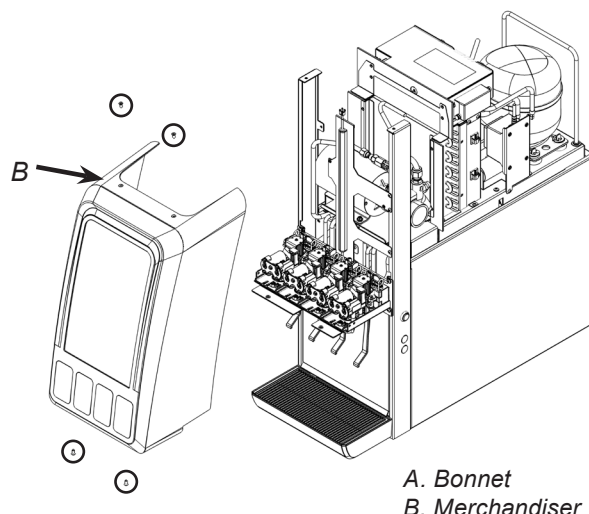
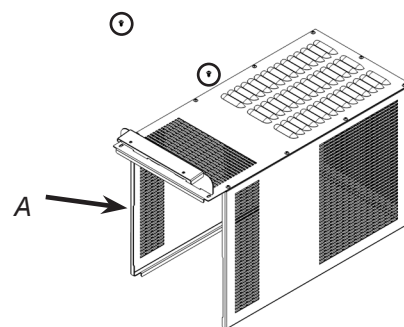
NOTE

NSF listed units must be sealed to the counter or use legs provided.

REMARQUE

Les appareils homologués par la NSF doivent être scellés sur le comptoir ou reposer sur les pieds fournis.

2. When the dispenser is to be permanently bolted to the countertop, the dispenser base must be sealed to the countertop with a bead of silicone caulk or sealant which provides a smooth and easily cleanable bond to the counter.
3. Once the dispenser is installed to the counter or placed on the counter using legs provided, remove the cup rest and splash plate.
4. Remove the merchandiser by removing the two (2) top screws and two (2) bottom screws.
5. Remove the bonnet by removing the two (2) front screws.
6. Route power cord up the front of the unit for connection.



A. Bonnet
B. Merchandiser

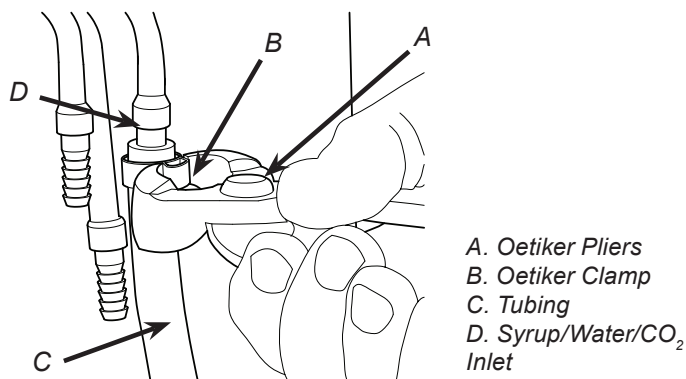
NOTE

A separate, minimum 3/4" (19 mm), drain line is required for the dispenser. The drain line must include an air gap of no less than 2 inches (50.8 mm). Always refer to local Plumbing Codes for any specific requirements.

REMARQUE

Une conduite de vidange séparée d'au moins 3/4 po (19 mm) est requise pour le distributeur. La conduite de vidange doit comprendre un intervalle d'air d'au moins 2 pouces (50,8 mm). Consultez toujours les codes de plomberie locaux pour toute exigence spécifique.

7. Connect drain tube to the drain fitting located on the bottom of the drip tray and secure drain tube with clamp.
8. Route the drain line to designated floor drain.
9. Route appropriate tubing from the syrup pump location to the syrup inlets located behind the splash plate. Connect tubing to inlets using the Oetiker pliers and clamps. Repeat for all syrup connections.



10. Connect plain water tubing to water pump.
11. Route appropriate tubing from the water source to the carbonator pump inlet at the unit. Route up the left side of the unit to ensure space for the keyswitch.
12. Connect the tubing to the water source using Oetiker pliers and clamps.
13. Remove cap from fill hole and insert a funnel into the fill hole.

⚠ ATTENTION

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:

To ensure proper function of the electronic ice bank control a total dissolved solids (TDS) of 100-300 ppm or an E.C. measurement between 156 and 468 $\mu\text{S}/\text{cm}$ is required. Below 100 ppm or 156 $\mu\text{S}/\text{cm}$, the compressor will not work properly and above 300 ppm or 468 $\mu\text{S}/\text{cm}$ could cause the lines to freeze.

The necessary TDS may be achieved using tap water; however, Lancer recommends using a mixture of 5.4 gals. (20 L) of distilled water and 1/8 oz (3.5 g) or 3/4 tsp of baking soda.

⚠ ATTENTION

Veuillez lire attentivement cette directive avant de remplir le réservoir du bain-marie. Pour optimiser le rendement de la distributrice, assurez-vous de SUIVRE la procédure suivante :

Pour assurer le bon fonctionnement du contrôle électronique du banc de glace, un total de solides dissous (TDS) de 100 à 300 ppm ou une mesure E.C. entre 156 et 468 $\mu\text{S}/\text{cm}$ est nécessaire. En dessous de 100 ppm ou 156 $\mu\text{S}/\text{cm}$, le compresseur ne fonctionnera pas correctement et au-dessus de 300 ppm ou 468 $\mu\text{S}/\text{cm}$, les lignes pourraient geler.

Le TDS nécessaire peut être obtenu en utilisant de l'eau du robinet ; cependant, Lancer recommande d'utiliser un mélange de 20 L (5.4 gallons) d'eau distillée et 3.5 g (1/8 oz) ou 3/4 tsp de bicarbonate de soude.

14. Carefully pour water into the water bath tank until water flows out of the overflow tube at the front of the unit, then replace the cap.
15. Unplug carb motor then plug unit power cord into a grounded electrical outlet to power on and begin building an ice bank.

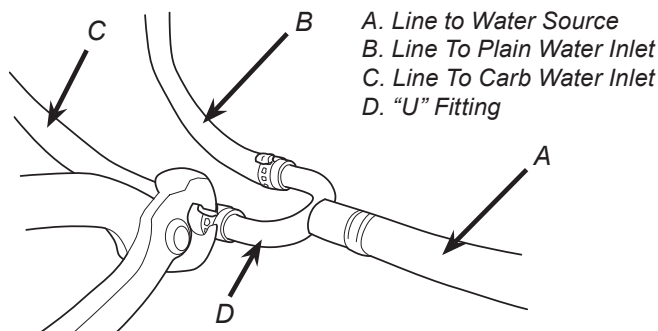
⚠ ATTENTION

The water bath compartment must be filled with water before connecting the unit, otherwise the compressor fan may not operate properly. **DO NOT** use Reverse Osmosis (RO) or purified water.

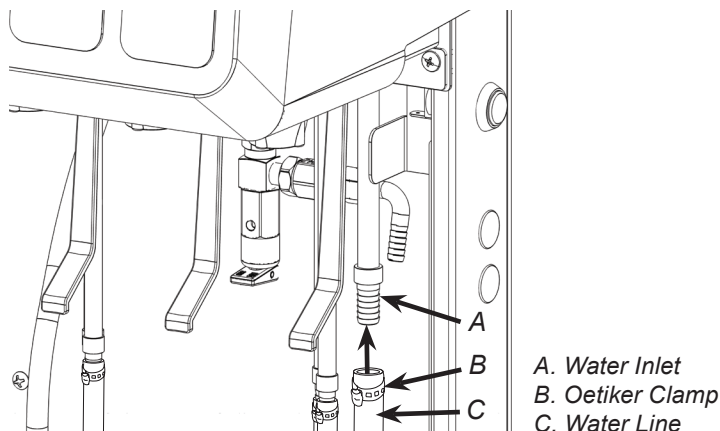
⚠ ATTENTION

Le bain-marie doit être rempli avec de l'eau avant de brancher l'appareil, sinon le ventilateur du compresseur ne fonctionne pas correctement. **N'UTILISEZ PAS** un appareil de filtration à osmose inversée ni de l'eau purifiée.

16. Using tubing cutters, cut water supply line and install "U" fitting (PN 01-2128/01).



17. Route appropriate tubing from the plain water inlet, located at the front of the unit, to one side of the "U" fitting at water supply and connect tubing to inlet.



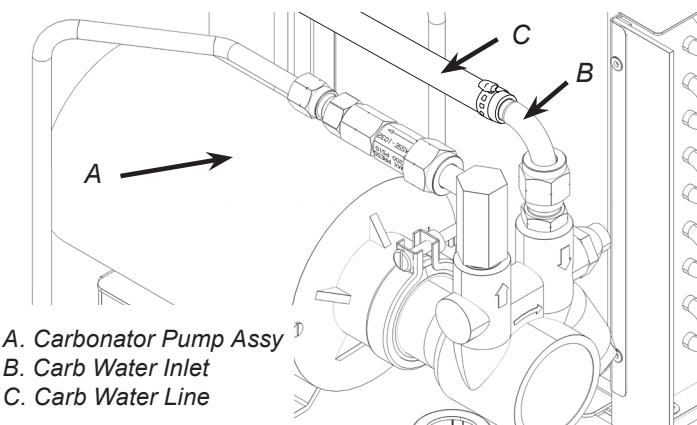
⚠ ATTENTION

Inlet water temperature should be between 45 °F and 95 °F (7 °C and 35 °C). Inlet water pressure should not exceed 50 psi (0.345 MPa).

⚠ ATTENTION

La température de l'eau d'entrée doit être comprise entre 45 °F et 95 °F (7 °C et 35 °C). La pression d'eau d'entrée ne doit pas dépasser 50 psi (0,345 MPa).

18. Route appropriate tubing from the carbonator pump inlet to the open "U" fitting at water supply then connect tubing to carb water inlet using a flare seal washer (PN 05-0017). Use a backup wrench to prevent damage to carbonator pump.



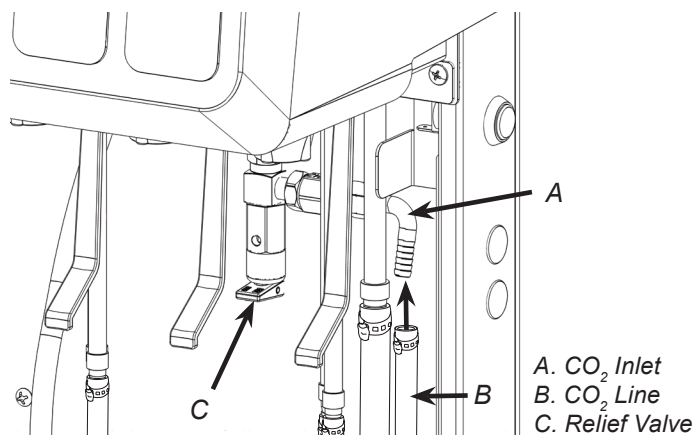
NOTE

If the carbonator water source is above 50 psi (0.345 MPa), cut tubing assembly and install Water Regulator Kit (PN 18-0253/02, sold separately) as shown in kit instruction sheet.

REMARQUE

Si la pression d'arrivée d'eau du carbonateur est supérieure à 50 psi (0,345 Mpa), coupez les conduites et installez un régulateur d'eau (no de pièce 18-0253/02, vendu séparément) comme indiqué dans la notice d'installation accompagnant le produit.

19. Route appropriate tubing from the CO₂ supply to the CO₂ inlet and connect tubing to it.



20. Feed all tubing, power cord, and drain line through the back of the unit. If using 3/8" tubing, place reduction point behind unit.
21. Turn on water supply and check for leaks.
22. Plug in the unit to a grounded electrical outlet to power on and begin building an ice bank.

⚠ WARNING

Never energize the machine if there is any trace of damage. Contact Lancer Customer Service for assistance.

⚠ AVERTISSEMENT

N'alimentez jamais la machine s'il y a une trace quelconque de dommage. Contactez le service à la clientèle de Lancer pour obtenir de l'aide.

⚠ WARNING

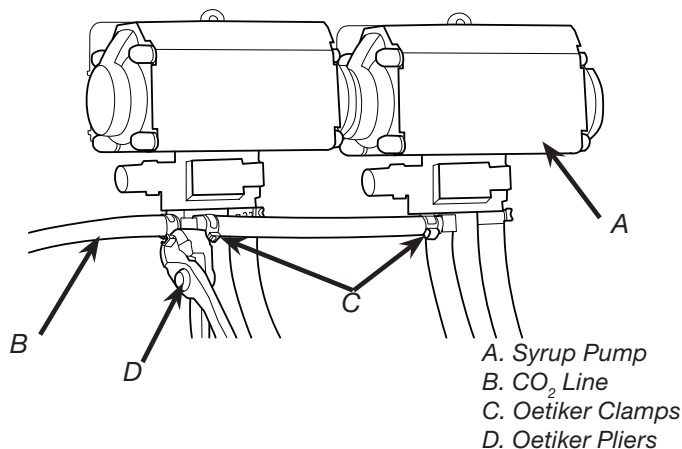
The dispenser must be properly electrically grounded to avoid serious injury or fatal electrical shock. The power cord has a three-prong grounded plug. If a three-hole grounded electrical outlet is not available, use an approved method to ground the unit. Follow all local electrical codes when making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

⚠ AVERTISSEMENT

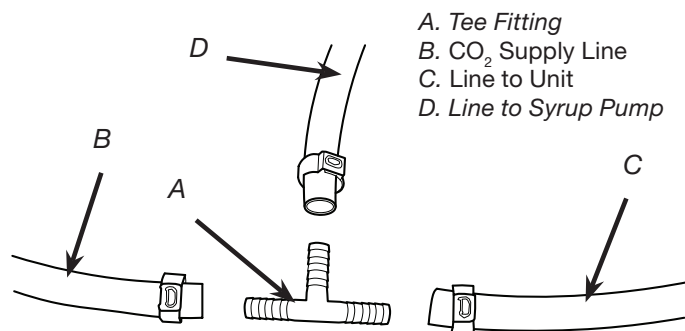
Assurez-vous que la distributrice est reliée à la terre pour éviter des blessures graves ou des décharges électriques. Le cordon d'alimentation comporte une fiche de terre à trois broches. Si une prise électrique à trois trous n'est pas disponible, utilisez une méthode approuvée pour assurer la mise à la terre de l'appareil. Les raccordements électriques doivent être conformes au code électrique local. Chaque distributrice doit être branchée dans un circuit électrique dédié. N'utilisez pas de rallonge électrique. Ne branchez pas plusieurs appareils sur la même prise de courant.

Installing Remote Syrup Pumps - Bag-In-Box (BIB)

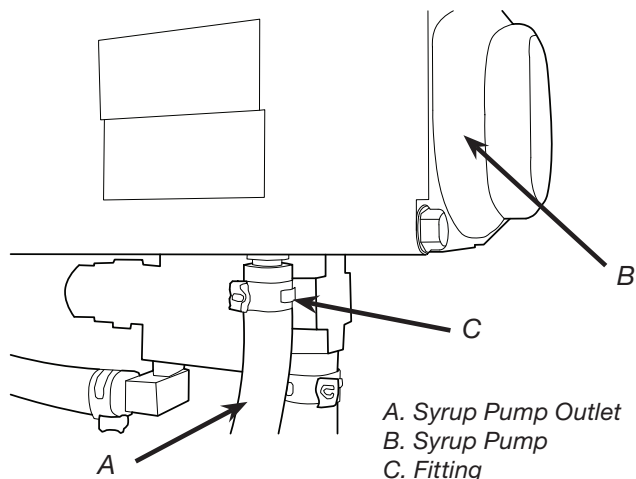
1. Install BIB rack and remote pumps according to manufacturers' instructions.
2. Once pumps and BIB rack are installed, measure and cut tubing to length between the pump CO₂ inlets, then connect tubing to all pumps.



3. Using tubing cutters, cut the CO₂ supply line to the syrup pumps and install tee fitting. Then, route the appropriate tubing from the tee fitting to the syrup pumps and to the unit.



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



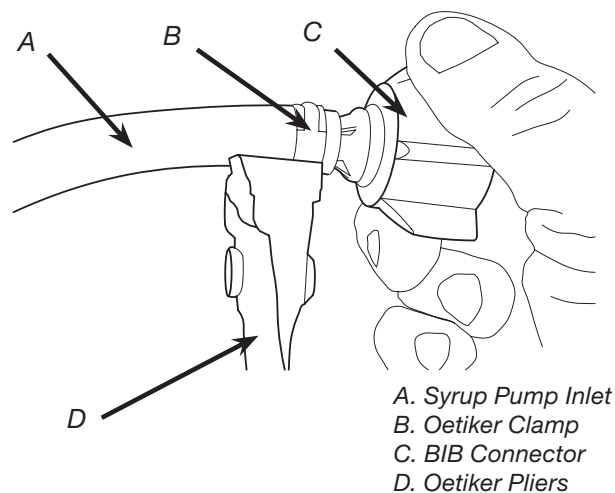
5. Install BIB connectors onto the syrup pump inlet tubing.

⚠ ATTENTION

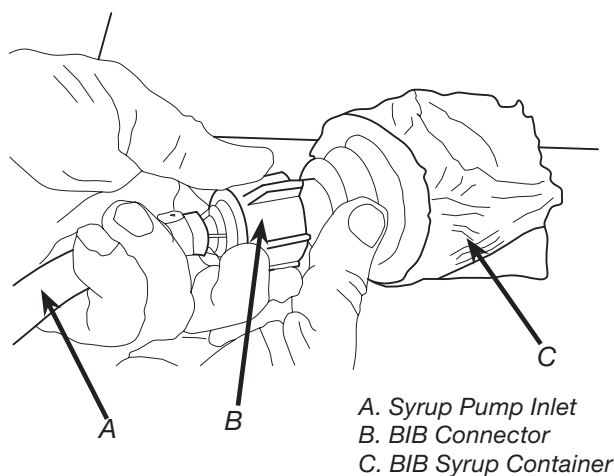
Use proper connector for syrup manufacturer.

⚠ ATTENTION

Utilisez le connecteur approprié spécifique au fabricant de sirop.



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



Installing CO₂ Supply

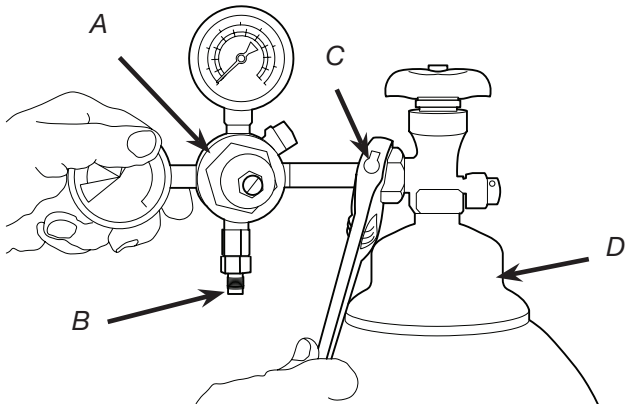
1. Connect high pressure CO₂ regulator assembly to CO₂ cylinder or bulk system.

⚠ ATTENTION

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

⚠ ATTENTION

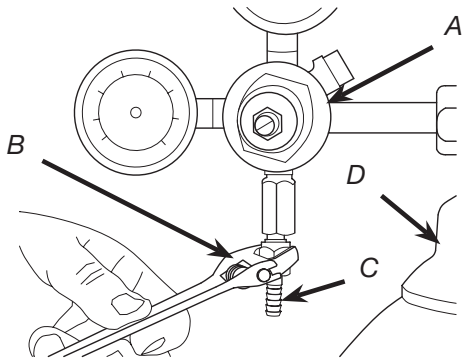
Avant d'installer le régulateur, assurez-vous qu'un joint torique ou une rondelle est en place dans l'écrou d'accouplement du régulateur.



- Thread regulator nut onto tank, then tighten nut with wrench.

A. CO₂ Regulator
B. Outlet
C. Wrench
D. CO₂ Supply

2. Connect a 1/4" nut, 1/4" stem and seal to CO₂ regulator outlet.



A. CO₂ Regulator
B. Wrench
C. 1/4" Stem Nut
D. CO₂ Supply

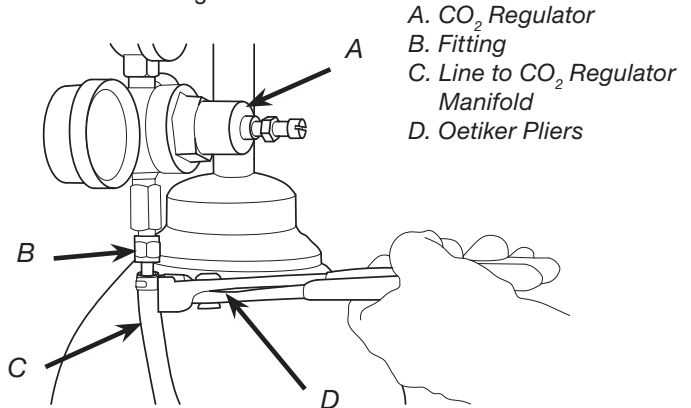
NOTE

A 1/4" nut and 3/8" stem can be used in place of the 1/4" nut and stem.

REMARQUE

Un écrou 1/4" et une tige 3/8" peuvent être utilisés à la place de l'écrou et de la tige 1/4".

3. Route appropriate tubing from the low pressure CO₂ regulator manifold location to the 1/4" nut, 1/4" stem on the high pressure CO₂ regulator attached to source and connect tubing.



A. CO₂ Regulator
B. Fitting
C. Line to CO₂ Regulator Manifold
D. Oetiker Pliers

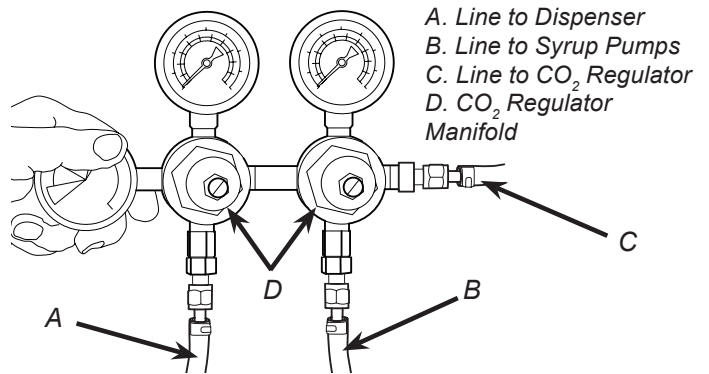
⚠ ATTENTION

A dedicated CO₂ regulator is required to supply the CO₂ inlet at the unit as well as to all remote syrup pumps.

⚠ ATTENTION

Un régulateur de CO₂ spécifique est obligatoire pour alimenter l'arrivée de CO₂ à l'appareil ainsi que toutes les pompes à sirop à distance.

4. Connect tubing routed from the CO₂ inlet at the unit to one of the low pressure CO₂ regulator manifold outlets.
5. Connect tubing routed from the syrup pump location to the second outlet of the low pressure CO₂ regulator manifold.



A. Line to Dispenser
B. Line to Syrup Pumps
C. Line to CO₂ Regulator
D. CO₂ Regulator Manifold

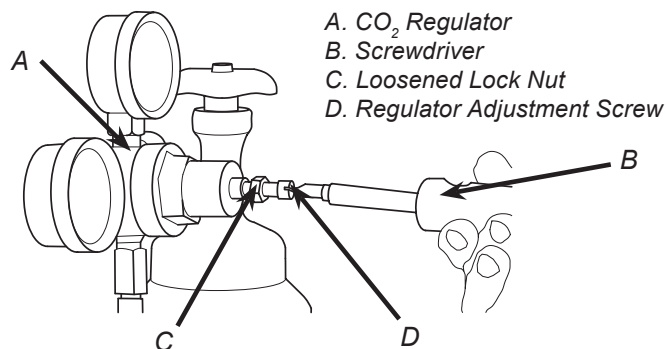
- Using a wrench, loosen lock nut on the regulator adjustment screw of the high pressure CO₂ regulator connected to the source, then using a screwdriver back out lock nut screw all the way.

⚠ WARNING

DO NOT TURN ON CO₂ SUPPLY AT THIS TIME.

⚠ AVERTISSEMENT

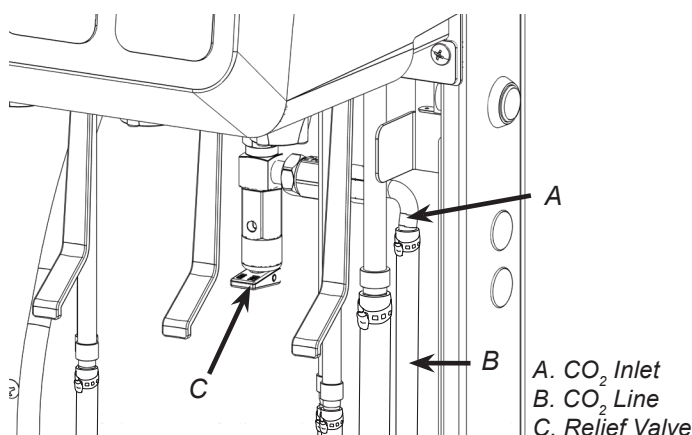
N'OUVREZ PAS L'APPROVISIONNEMENT EN CO₂ MAINTENANT.



- Repeat Step 6 for both low pressure CO₂ regulators on the regulator manifold routed to the unit and the syrup pumps.

Dispenser Setup

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



- Activate each valve until a steady flow of water is achieved.
- Turn power off.
- Unplug the Pump Motor Connector from the control box. Use the wiring diagram either on the unit control box or in the back of this manual for reference.

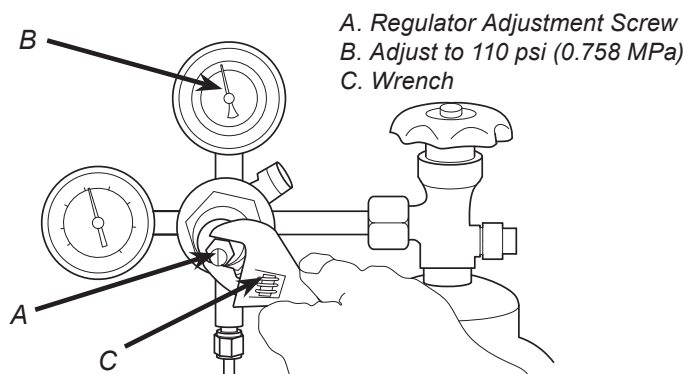
⚠ ATTENTION

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

⚠ ATTENTION

Le fait de ne pas débrancher l'alimentation électrique du moteur endommagera le moteur du carbonateur et la pompe et annulera la couverture de garantie.

- Turn power on.
- Turn on CO₂ at the source. Using a screwdriver, adjust the high pressure regulator at the source to 110 psi (0.758 MPa), then tighten locknut with wrench.



- Adjust both of the low pressure regulators on the regulator manifold to 75 psi (0.517 MPa) then tighten locknut with wrench.
- Turn syrup off at back block.
- Activate each valve until gas-out is achieved.
- Turn power off.
- Plug the Pump Motor Connector back into the control box.
- Turn power on.

NOTE

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

REMARQUE

Le moteur de pompe s'active pendant quelques secondes pour remplir le réservoir du carbonateur.

- Activate each valve until the carbonator pump comes on. Release the button, allow carbonator to fill and stop. Repeat this process until a steady flow of carbonated water is achieved.

Adjust Water Flow Rate & Syrup/Water Ratio

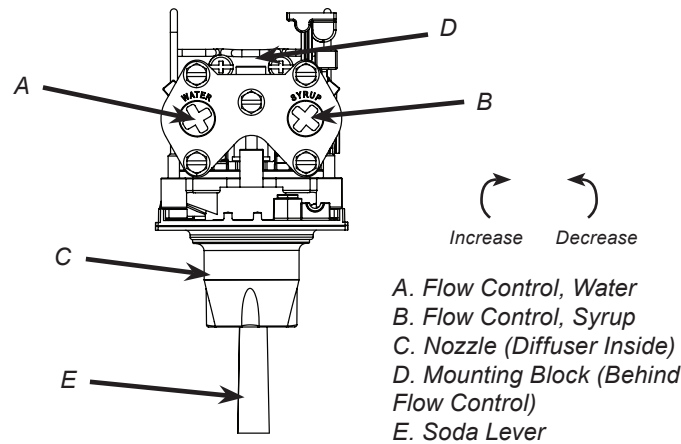
NOTE

Do not set flow rates or dispense from the unit until a complete ice bank is established.

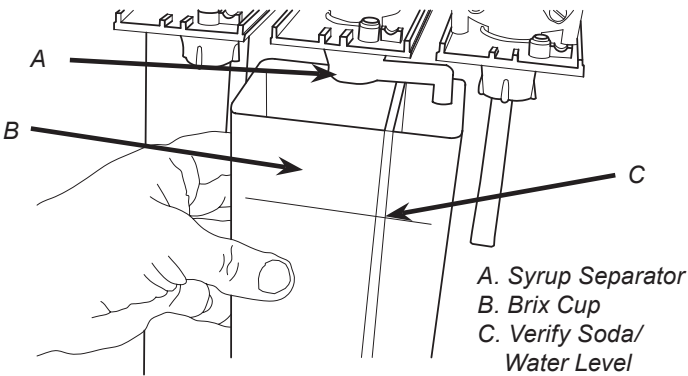
REMARQUE

Ne réglez pas les débits ou ne distribuez pas des boissons jusqu'à l'établissement d'un banc de glace complet.

- 1. Using a Lancer brix cup verify water flow rate (see table below). Use a screwdriver to adjust if needed.



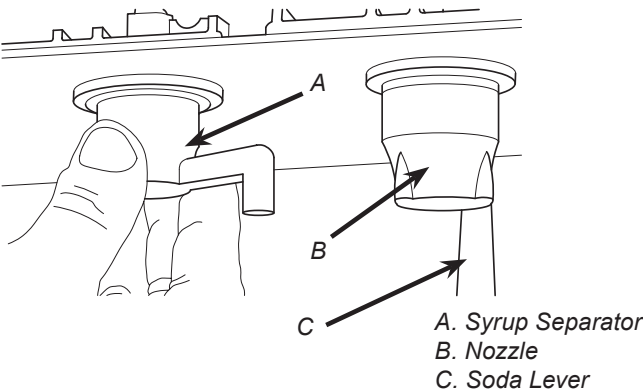
- 4. Reopen syrup shut-off at mounting block.
- 5. Activate valve to purge syrup until steady flow is achieved.
- 6. Using a Lancer brix cup, activate the valve and capture a sample. Verify that the syrup level is even with the water level. Use a screwdriver to adjust if needed.



- 7. Repeat process for each valve.
- 8. Reinstall the merchandiser, splash plate, cup rest, and drip tray, then reattach bonnet using the top bonnet screw.

Time	Volume	Finished Drink
6 sec	10 oz	2 oz/sec
4 sec	10 oz	3 oz/sec

- 2. Remove nozzle by twisting counterclockwise and pulling down, then remove diffuser by pulling down.
- 3. Install Lancer yellow syrup separator (PN 54-0031/04) in place of nozzle.



CLEANING AND SANITIZING

General Information

GENERAL INFORMATION

Lancer equipment is shipped from the factory after being cleaned and sanitized in accordance with the National Sanitation Foundation (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.

INFORMATIONS GÉNÉRALES

Les équipements Lancer sont expédiés depuis l'usine après avoir été nettoyés et aseptisés conformément aux lignes directrices de la National Sanitation Foundation (NSF). Pour assurer le bon fonctionnement de cet équipement et maintenir les exigences sanitaires requises par le ministère de la santé local, l'exploitant doit effectuer l'entretien continu tel que décrit dans ce manuel.

Les procédures de nettoyage fournies ici concernent l'équipement Lancer identifié dans ce manuel. Si vous nettoyez un autre appareil, veuillez suivre les lignes directrices établies par le fabricant de cet équipement.

Le personnel assigné au nettoyage de l'appareil doit avoir reçu une formation à cet effet. L'utilisation de gants sanitaires est obligatoire pendant les interventions de nettoyage. Les mesures de sécurité en vigueur doivent être suivies. Observez toutes les étiquettes de sécurité apposées sur l'appareil.

⚠ ATTENTION

- Use sanitary gloves when cleaning the unit and observe all applicable safety precautions.
- **DO NOT** use a waterjet 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. Ensure all sanitizing solution is removed from the system.
- **DO NOT** use mechanical devices or other means to accelerate the defrosting process; other than those recommended by the manufacturer.

⚠ ATTENTION

- Portez des gants sanitaires pendant le nettoyage de l'appareil et observez toutes les précautions de sécurité applicables.
- **N'UTILISEZ PAS** un nettoyeur à jet d'eau pour nettoyer ou désinfecter l'appareil.
- *Afin d'éviter la contamination, NE DÉBRANCHEZ PAS* les conduites d'eau pendant le nettoyage et la désinfection des conduites de sirop.
- **N'UTILISEZ PAS** d'agents de blanchiment ou des détergents industriels, ils peuvent décolorer et corroder divers matériaux.
- **NE NETTOYEZ PAS** l'appareil avec un objet tranchant, un racleur métallique, de la laine d'acier, un tampon à récurer, un produit abrasif ou du solvant.
- **N'UTILISEZ PAS** d'eau chaude à plus de 60 °C (140 °F). Cela pourrait endommager la distributrice.
- **NE RENVERSEZ PAS** de solution désinfectante sur les circuits intégrés. Assurez-vous d'enlever toute trace de solution désinfectante des organes de l'appareil.
- **N'UTILISEZ PAS** de dispositifs mécaniques ou d'autres moyens pour accélérer le processus de dégivrage, autres que ceux recommandés par le fabricant.

Cleaning and Sanitizing Solutions

Cleaning Solution

Mix a mild, non-abrasive detergent (e.g. Sodium Laureth Sulfate, dish soap) with clean, potable water at a temperature of 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.

Other Supplies Needed:

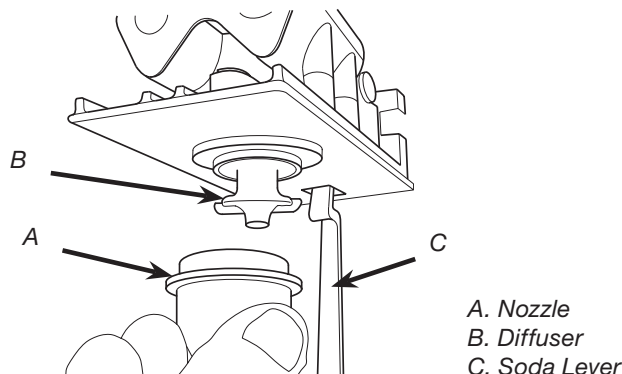
1. Clean cloth towels
2. Bucket
3. Extra nozzle
4. Sanitary gloves
5. Small brush (PN 22-0017)

Scheduled Maintenance & Cleaning

As Needed	• Keep exterior surfaces of dispenser clean (include drip tray and cup rest) using a clean, damp cloth.
Daily	• Remove each nozzle and diffuser 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. • Reinstall the cup rest, diffusers, and valve nozzles.
Weekly	• Taste each product for off-tastes. • Remove the unit's bonnet and check the level of water in the water bath. Replenish as required and reinstall bonnet.
Monthly	• Unplug the dispenser from the power source. • Remove the bonnet and clean the dirt from the condenser air filter using a soft brush. • Reinstall 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 manual.
Yearly	• Clean the water bath interior, including evaporator coils and refrigeration components. • Clean the entire exterior of the unit.

Cleaning and Sanitizing Nozzles

1. Disconnect power so as to not activate valves while cleaning.
2. Remove nozzle by twisting counterclockwise 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. Reinstall 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

Residual sanitizing solution left in the system creates a health hazard. To comply with NSF requirements, following sanitization, do not use a fresh water rinse, instead rinse with end-use product until there is no aftertaste.

⚠ MISE EN GARDE

Les résidus du produit désinfectant présentent un risque pour la santé. Pour se conformer aux exigences de la NSF, après avoir désinfecté la distributrice, n'utilisez pas d'eau de rinçage, plutôt rincez avec le produit final jusqu'à ce qu'il ne subsiste aucun arrière-goût.

Cleaning and Sanitizing Syrup Lines - Bag-in-Box (BIB)

1. Disconnect syrup lines from BIB's.
2. Place syrup lines, with BIB connectors and any adapters, 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 as described in the Cleaning and Sanitizing Solutions section.
5. Place syrup lines, with BIB connectors and any adapters, 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 as described in the Cleaning and Sanitizing Solutions section.
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

Residual sanitizing solution left in the system creates a health hazard. To comply with NSF requirements, following sanitization, do not use a fresh water rinse, instead rinse with end-use product until there is no aftertaste.

⚠ MISE EN GARDE

Les résidus du produit désinfectant présentent un risque pour la santé. Pour se conformer aux exigences de la NSF, après avoir désinfecté la distributrice, n'utilisez pas d'eau de rinçage, plutôt rincez avec le produit final jusqu'à ce qu'il ne subsiste aucun arrière-goût.

TROUBLESHOOTING

TROUBLE	CAUSE	REMEDY
Leakage between upper and lower bodies.	1. Gap between upper and lower valve bodies. 2. Worn or damaged paddle arm assemblies. 3. Cracked valve bodies.	1. Tighten all six (6) retaining screws. 2. Replace paddle arm assemblies. 3. Replace valve body.
Miscellaneous leakage.	1. Gap between parts. 2. Damaged or improperly installed O-rings.	1. Tighten appropriate retaining screws. 2. Replace or adjust appropriate O-rings.
Insufficient water flow.	1. Insufficient incoming supply water pressure. 2. Shutoff on mounting block not fully open. 3. Foreign debris in water flow control. 4. Foreign debris in water pump strainer.	1. Verify incoming water supply pressure to plain and carb inlet is a minimum of 25 psi (0.172 MPa) and 55 psi (0.379 MPa) respectively. 2. Open shutoff fully. 3. Remove water flow control from upper body and clean out any foreign material to ensure smooth-free spool movement. 4. Remove water pump strainer and clean.
Insufficient syrup flow.	1. Insufficient CO₂ pressure to BIB pumps. 2. Out of CO₂. 3. Shutoff on mounting block not fully open. 4. Foreign debris in syrup flow control. 5. Bad syrup pump.	1. Adjust CO₂ pressure to 75 psi (0.517 MPa) [minimum 70 psi (0.480 MPa)] for BIB pumps. 2. Replace CO₂ tank/refill. 3. Open shutoff fully. 4. Remove syrup flow control from upper body and clean out any foreign material to ensure smooth-free spool movement. 5. Replace BIB pump.
Erratic ratio.	1. Incoming water and/or syrup supply not at minimum flowing pressure. 2. Foreign debris in water and/or syrup flow controls.	1. Check pressure and adjust. 2. Remove flow controls from upper body and clean out any foreign material to ensure smooth-free spool movement.
No product dispensed.	1. Water and syrup shutoffs on mounting block not fully open. 2. Cup lever arm or ID panel actuator on electric valve is not actuating the switch. 3. Electric current not reaching valve. 4. Improper or inadequate water or syrup supply. 5. Bad valve solenoid(s).	1. Open shutoff fully. 2. Replace the lever, the ID panel actuator or the switch as needed. 3. Check electric current supplied to valve. If current is adequate, check solenoid coil and switch. Replace if necessary. 4. Remove valve from mounting block and open shutoffs slightly. Check water and syrup flow. If no flow, check dispenser for freeze-up or other problems. 5. Replace solenoid(s).

TROUBLE	CAUSE	REMEDY
Water only dispensed (no syrup); or syrup only dispensed (no water).	1. Water or syrup shutoff on mounting block not fully open. 2. Improper or inadequate water or syrup flow. 3. CO₂ pressure too low. 4. Stalled or inoperative BIB pump. 5. Kinked line.	1. Open shutoff fully. 2. Remove valve from mounting block, open shutoffs slightly and check water and syrup flow. If no flow, check dispenser for freeze-up or other problems. Ensure BIB connection is engaged. 3. Check the CO₂ pressure to the BIB pumps to ensure it is between 70 and 80 psi (0.483 and 0.552 MPa). 4. Check CO₂ pressure and/or replace pump. 5. Remove kink or replace line.
Valve will not shut off.	1. Cup lever may be sticking or binding. 2. Switch not actuating freely. 3. Solenoid armature not returning to bottom position.	1. Correct or replace lever. 2. Check switch for free actuation. 3. Replace defective armature or spring.
Excessive foaming.	1. Incoming water or syrup temperature too high. 2. CO₂ pressure too high. 3. Water flow rate too high. 4. Nozzle and diffuser not installed properly. 5. Nozzle and diffuser not clean. 6. Air in BIB lines. 7. Poor ice quality. 8. High beverage temperature.	1. Correct prior to dispenser. Consider larger dispenser or precooler. 2. Adjust CO₂ pressure downward, but not less than 70 psi (0.483 Mpa). 3. Readjust and reset ratio. Refer to "Adjust Water Flow Rate & Syrup/Water Ratio" Section. 4. Remove and reinstall properly. 5. Remove and clean. 6. Bleed air from BIB lines. 7. Check quality of ice used in drink. 8. Check refrigeration system.
Water continually overflows from water bath into drip tray.	1. Loose water connection(s). 2. Flare seal washer leaks. 3. Faulty water coil.	1. Tighten water connections. 2. Replace flare seal washer. 3. Replace water coil.
Warm drinks.	1. Dispenser was recently installed. 2. Restricted airflow. 3. Dispenser connected to hot water supply. 4. Condenser fan motor not working. 5. Dirty condenser, air vents clogged. 6. Dispenser capacity exceeded.	1. It may take up to 5 hours after install to reach the desired temperature. 2. Check clearances around sides, top, and inlet of unit. Remove objects blocking airflow through grill. 3. Switch to cold water supply. 4. Replace condenser fan motor. 5. Clean condenser and air vents of any blockage. 6. Add precooler or replace with larger dispenser.
Unit will not start.	1. Compressor startup delay. 2. Motor timed out.	1. When starting unit or if current is interrupted, there is a 5 minute delay before the compressor/fan starts. 2. There is a 3 minute protection timer on the carbonator level sensor. If the motor has timed out, check water supply and reset by momentarily disconnecting power.

TROUBLE	CAUSE	REMEDY
BIB pump does not operate when dispensing valve is opened.	1. Out of CO₂, CO₂ not turned on, or low CO₂ pressure. 2. Out of syrup. 3. BIB connector not tight. 4. Kinks in syrup or gas lines.	1. Replace CO₂ supply, turn on CO₂ supply, or adjust CO₂ pressure to 70-80 PSI (0.483-0.552 MPA). 2. Replace syrup supply. 3. Fasten connector tightly. 4. Straighten or replace lines.
BIB pump operating, but no flow.	1. Leak in syrup inlet or outlet line. 2. Defective BIB pump.	1. Replace line. 2. Replace BIB pump.
BIB pump continues to operate when bag is empty.	1. Leak in suction line. 2. Leaking O-ring on pump inlet fitting. 3. Defective syrup BIB pump.	1. Check BIB connector, if still leaking then replace line. 2. Replace O-ring. 3. Replace defective pump.
BIB pump fails to restart after bag replacement.	1. BIB connector not on tightly. 2. BIB connector is stopped up. 3. Kinks in syrup line.	1. Tighten BIB connector. 2. Clean out or replace BIB connector. 3. Straighten or replace line.
BIB pump fails to stop when dispensing valve is closed.	1. Leak in discharge line or fittings. 2. Empty BIB. 3. Air leak on inlet line or bag connector.	1. Repair or replace discharge line. 2. Replace BIB. 3. Repair or replace.
Low or no carbonation.	1. Low or no CO₂. 2. Low water pressure. 3. Worn or defective carbonator pump. 4. Backflow preventer not allowing water to flow. 5. Probe malfunctioning. 6. PCB malfunctioning.	1. Check CO₂ supply. Adjust CO₂ pressure to 70 PSI (0.483 MPA). 2. Need water booster kit. 3. Replace carbonator pump. 4. Replace backflow preventer, noting the flow direction arrow from pump to coil. 5. Replace probe. 6. Replace PCB.

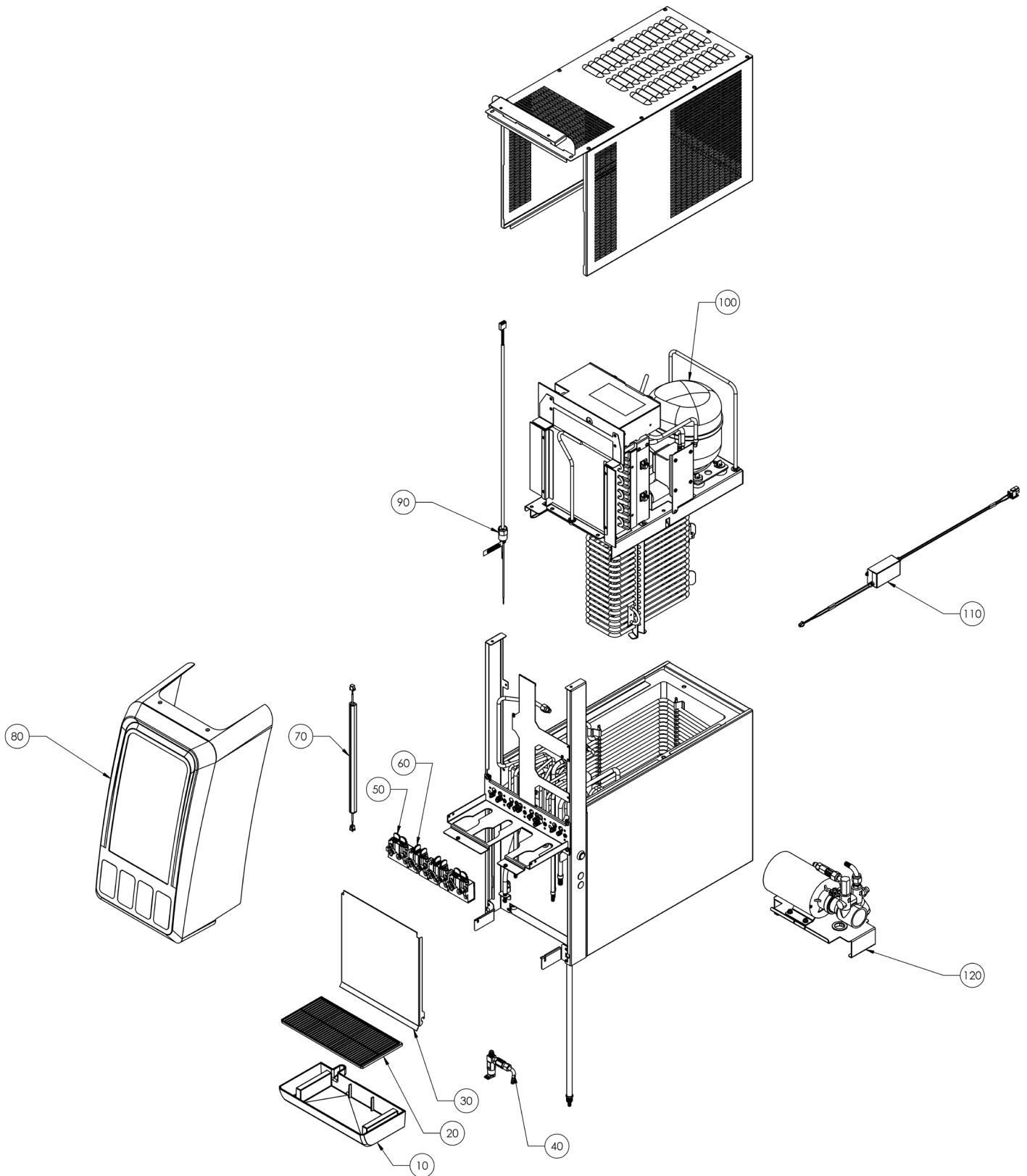
Dispenser Disposal



The unit's R290 refrigerant and foam materials are combustible materials and discarded units should be isolated from fire sources and cannot be burned. 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 AND PART LISTINGS

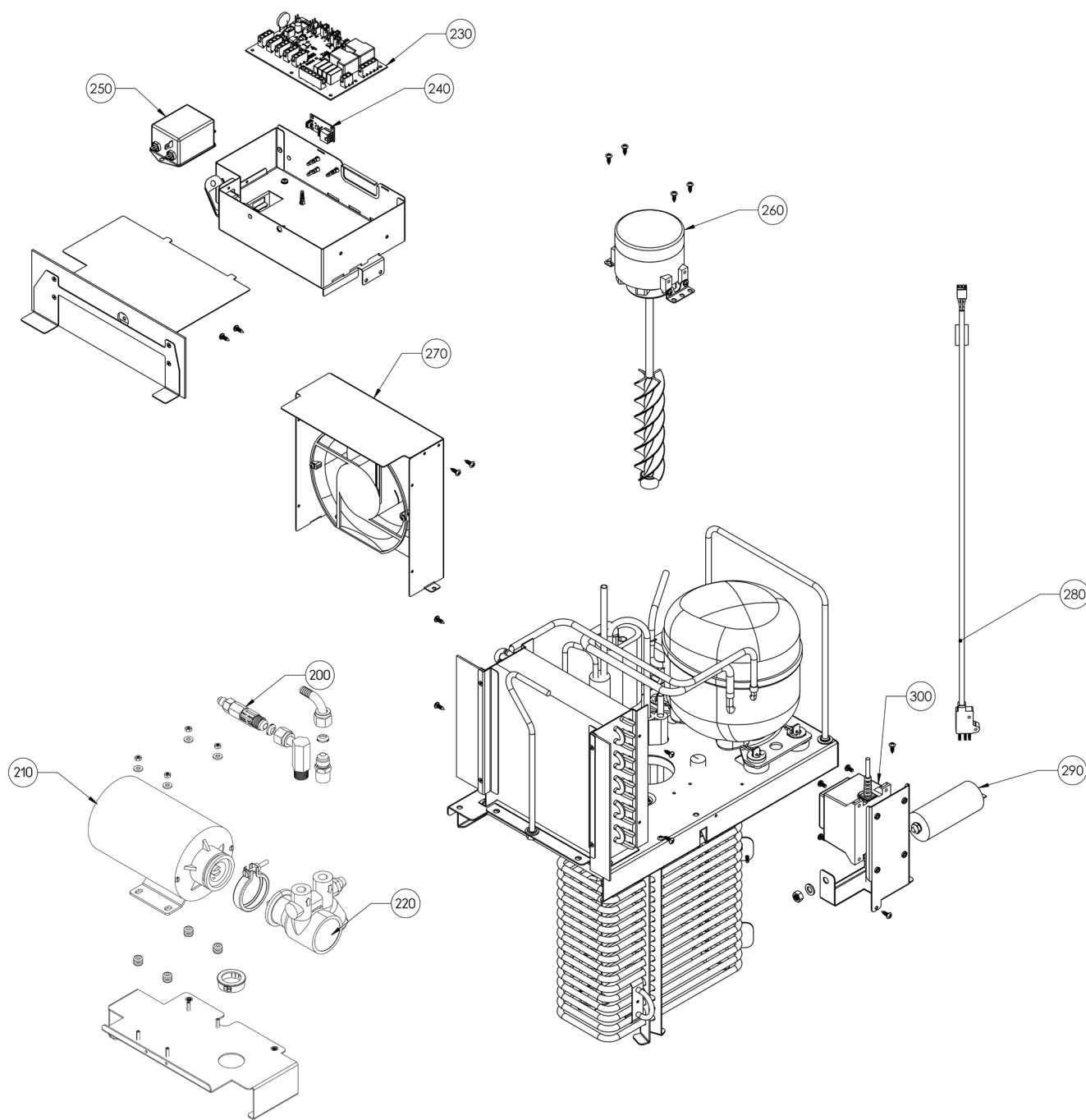
Main Unit Assembly



Main Unit Assembly

Item	Part No.	Description
10	05-4271/01	DRIP TRAY,CED 400
20	05-4270/01	CUP REST,CED 400
30	30-16489	SPLASH PLATE,CED 400
40	17-0469	FITTING ASSEMBLY,CO2 IN,FLARE,CED
50	82-0274	BLOCK,MOUNTING ASSEMBLY,GMV
60	82-2658/01	MOUNTING BLK ASSEMBLY,3-WAY
70	12-0667	LED,LIGHT BAR,12",3W,4000K,24VDC
80	82-6635	MERCHANDISER ASSY,4V,CED 400
-	82-6634	MERCHANDISER ASSY,3V,CED 400
-	82-6570	MERCHANDISER ASSY,2V,CED400
90	52-4322	PROBE,CARB,CED 400
100	82-6790	DECK ASSEMBLY,REFRIG,R290,230V,50HZ,CED 400
-	82-6804	DECK ASSEMBLY,REFRIG,R290,220V,60HZ
-	82-6805	DECK ASSEMBLY,REFRIG,R290,115V,60HZ
110	52-4238	LED DRIVER ASSEMBLY,16W,CED 400
120	82-6789/01	PUMP ASSY,CARB,230V 50/60HZ,CED 400
-	82-6807/01	PUMP ASSY,CARB,115V 60HZ,CED 400

Refrigeration Deck Assembly



Refrigeration Deck Assembly

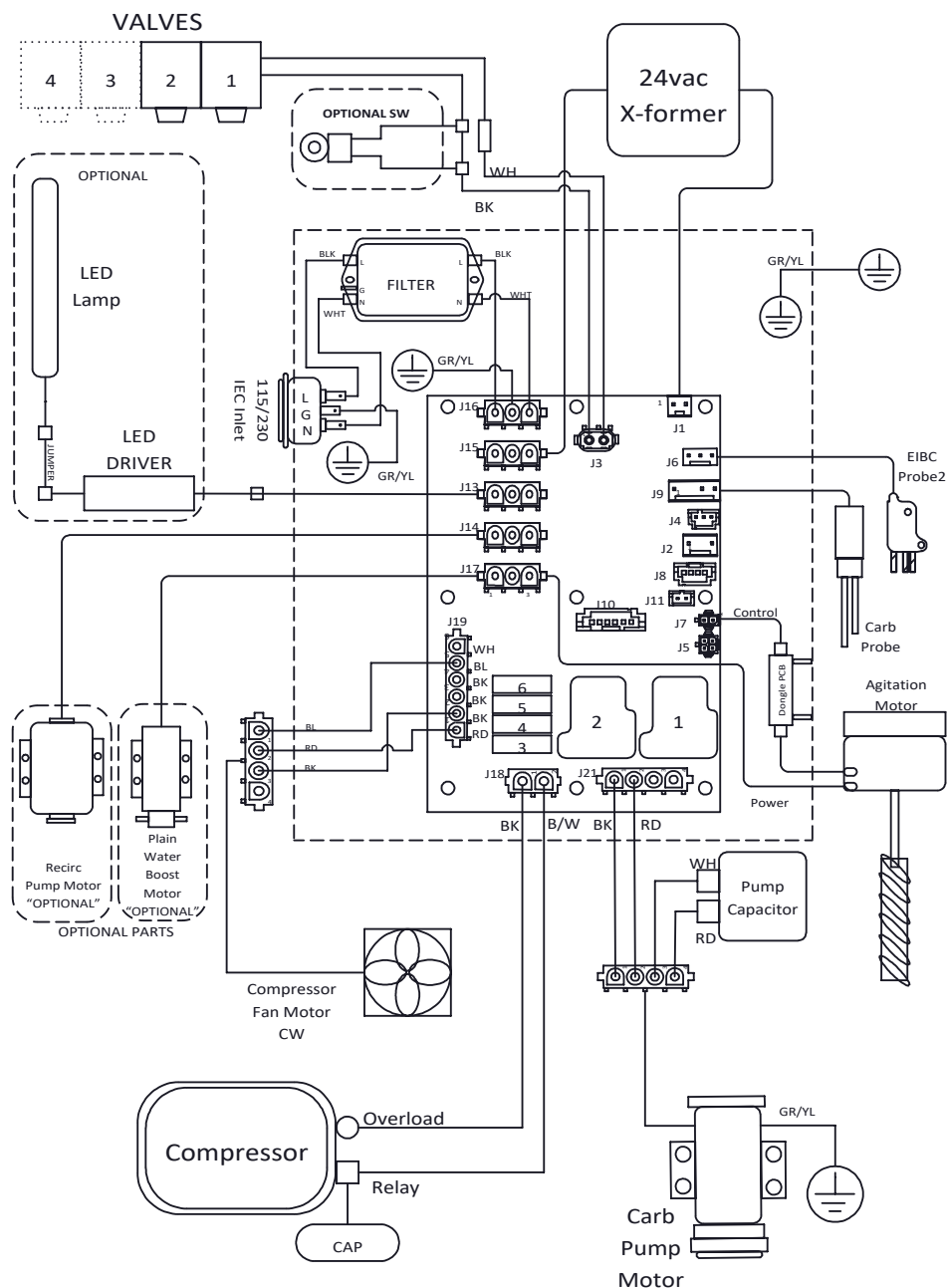
Item	Part No.	Description
200	17-0485	CHECK VALVE ASSEMBLY,DOUBLE,1/4 IN-LINE 1
210	91-0065	MOTOR,AC,PSC,CS 20MFD,BB,230/50-60,1.6A,1/4 HP,1375 CCW,INTM
-	91-0063	MOTOR, CARB,115V
220	86-0084	PUMP,ROTARY VANE,WATER,100 GPH,170 PSI,3/8" NPT,BRASS,PHO
230	64-5132/04-02	PCB ASSEMBLY,R290,REFR CONTROL,CED 400
240	64-6059	PCB ASSEMBLY,AGITATOR SWITCH,DONGLE,CED 400
250	12-1064	FILTER,POWER,EMI,SINGLE STAGE,FN2030
260*	82-6990	AGITATOR ASSEMBLY,EM&S,220-240V,CED 400
-	82-6989/01	AGITATOR ASSEMBLY,115V
270	82-6791	FAN ASSEMBLY,220-240VAC/50HZ,CED 400
-	82-6806	FAN ASSEMBLY,115VAC/60HZ
280*	52-4283	PROBE ASSEMBLY,EIBC,CED 400
290	26-0377/01	CAPACITOR,CARB MTR,20 MFD,370VAC, CED 400 230V
-	26-0374/01	CAPACITOR,CARB MTR, CED 400 115V
300	25-0120	TRANSFORMER,240VAC,230VAC,24VAC,72VA,3A,IP68
-	25-0119	TRANSFORMER,110V,24V
310†	12-1043	RELAY,COMP, CED 400 230V
-	12-1006	RELAY,COMP, CED 400 220V 50/60HZ
-	12-1000	RELAY,COMP, CED 400 115V
-	12-1061	OVERLOAD, CED 400 230V
-	12-1008	OVERLOAD, CED 400 220V 50/60HZ
-	12-1001	OVERLOAD, CED 400 115V
-	12-1042	CAPACITOR,START COMP, CED 400 230V
-	12-1007	CAPACITOR,START COMP, CED 400 220V
-	12-1002	CAPACITOR,START COMP, CED 400 115V

*52-4283 probe assembly & *82-6990/82-6989/01 agitator assemblies are only compatible with the CED 400.

† Not shown

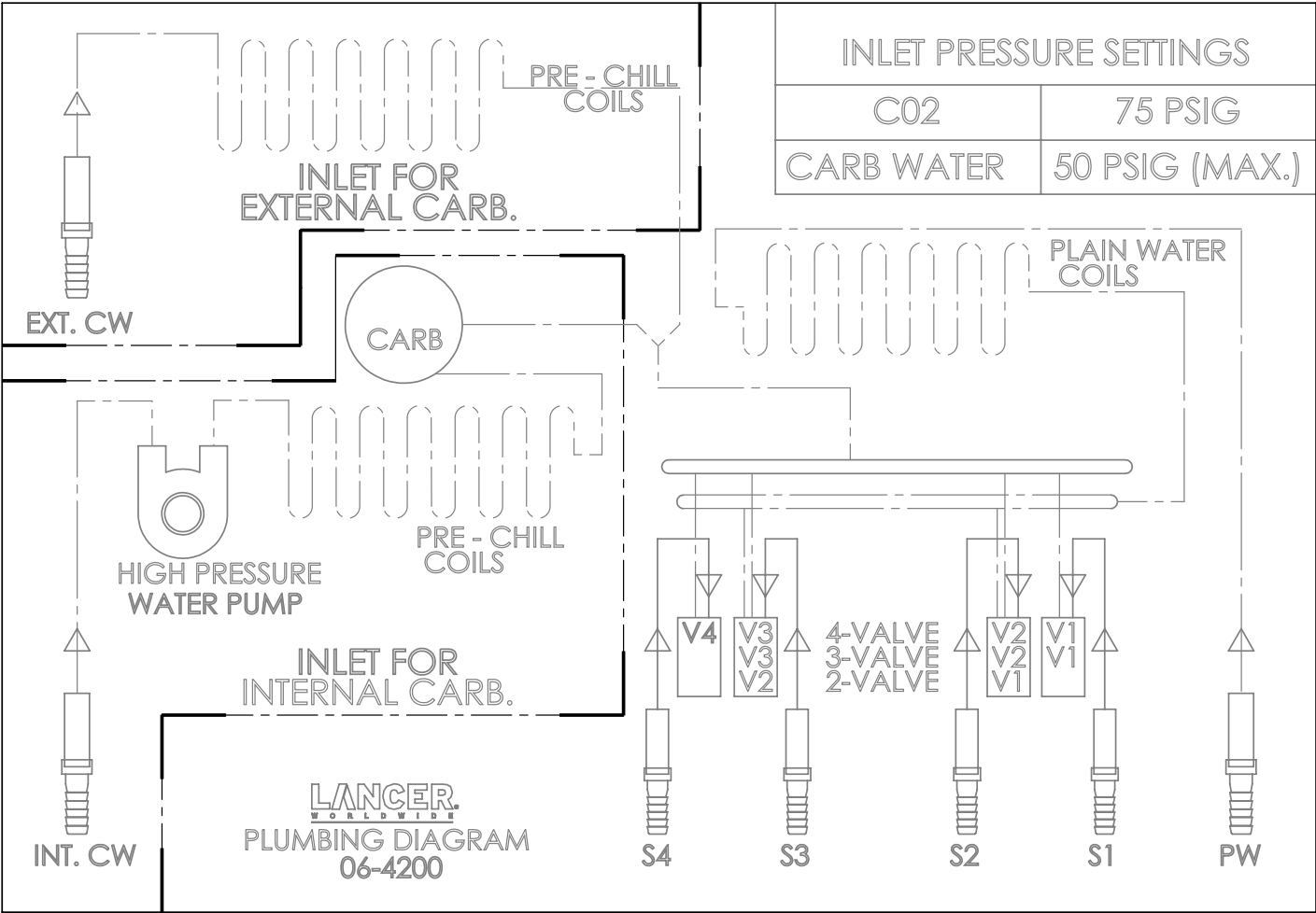
IMPORTANT

1. WHEN STARTING UNIT OR IF CURRENT IS INTERRUPTED THERE IS A 5 MINUTE DELAY BEFORE THE COMPRESSOR/FAN STARTS.
2. THERE IS A 3 MINUTE PROTECTION TIMER ON THE CARBONATOR LEVEL SENSOR. IF THE MOTOR HAS TIMED OUT, CHECK WATER SUPPLY AND RESET BY MOMENTARILY DISCONNECTING POWER.



06-4143/01

Plumbing Diagram





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