

LANCER®

Model 605 Cold Carbonated Dispenser

Operation Manual

PN: 28-0732/03



Lancer Corp.
6655 Lancer Blvd.
San Antonio, Texas 78219

800-729-1500
Technical Support/Warranty: 800-729-1550
custserv@lancercorp.com
lancercorp.com



Manual PN: 28-0732/03

OCTOBER 20, 2009

FOR QUALIFIED INSTALLER ONLY

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.

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.

TABLE OF CONTENTS

SPECIFICATIONS.....4
PRE-INTALLATION CHECKLIST.....5
WARNINGS/CAUTIONS.....6-9

1. INSTALLATION.....10

- 1.1 UNPACKING.....10
- 1.2 UNPACKING INSTALLATION KITS.....10
- 1.3 SELECTING A COUNER LOCATION.....10
- 1.4 MOUNTING THE DISPENSER.....10
- 1.5 CONNECTING THE DRAIN.....11
- 1.6 FILLING UNIT WITH WATER.....11
- 1.7 CONNECTING TO ELECTRICAL POWER.....11
- 1.8 CONNECTING TO WATER SUPPLY.....12
- 1.9 CONNECTING TO CO2 SUPPLY.....12
- 1.10 CONNECTING TO BAG-IN-BOX (BIB) SYRUP SUPPLY (UNITS WITH BUILT-IN SYRUP PUMPS).....13
- 1.11 CONNECTING TO REMOTE BIB SYRUP PUMPS.....13
- 1.12 CONNECTING TO REMOTE PRESSURIZED SYRUP SUPPLY.....13
- 1.13 PURGING THE CARBONATION SYSTEM.....13
- 1.14 CONNECTION FOR PLAIN WATER PRODUCT.....14
- 1.15 SETTING 3-WAY ADJUSTABLE BACK BLOCKS FOR PLAIN OR CARBONATED WATER.....14
- 1.16 ADJUSTING WATER FLOW (LEV®).....14
- 1.17 ADJUSTING WATER TO SYRUP (RATIO) BRIX (LEV®).....15
- 1.18 VALVE ACCESS (SYRUP MODULE OR SODA MODULE).....15

2. SCHEDULED MAINTANANCE.....15

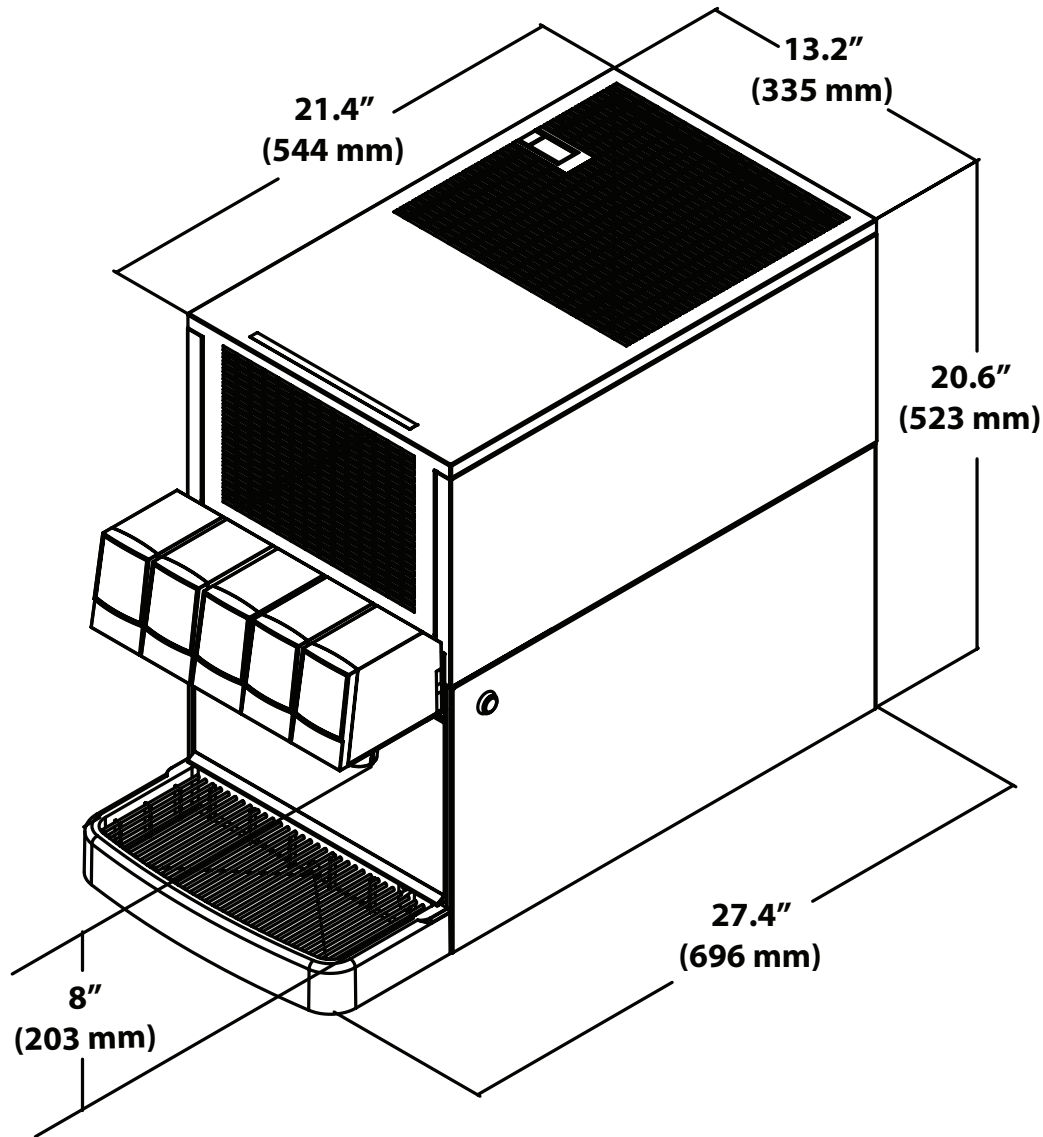
- 2.1 DAILY.....15
- 2.2 WEEKLY.....15
- 2.3 MONTHLY.....15
- 2.4 EVERY SIX MONTHS.....15
- 2.5 YEARLY.....16

3. DISPENSER CLEANING AND SANITIZATION.....16

- 3.1 GENERAL INFORMATION.....16
- 3.2 CLEANING AND SANITIZING SOLUTIONS.....16
- 3.3 AMBIENT PROCESS.....16
- 3.4 VALVE AND SYSTEM SANITIZING.....17
- 3.5 MONTHLY NOZZLE/DIFFUSER SANITIZING17
- 3.6 CLEANING AND SANITIZING BEVERAGE COMPONENTS - BAG-IN-BOX SYSTEMS.....17

4. TROUBLESHOOTING.....	18-24
5. ILLUSTRATIONS, PARTS LISTINGS, AND WIRING DIAGRAMS.....	26
5.1 COMPRESSOR DECK ASSEMBLY.....	26-27
5.2 MINIPUMP ASSEMBLY (FIVE FLAVOR, PN 82-3900).....	28-29
5.3 FOAM TANK/CABINET ASSEMBLY.....	30-31
5.4 CARBONATOR, WATER/SYRUP LINE ASSEMBLIES.....	32-33
5.5 CONTROL HOUSING ASSEMBLY (PN 52-3231).....	34
5.6 WIRING DIAGRAM, PN 06-3058.....	35
6. DISPENSER DISPOSAL.....	35

MODEL 605 SPECIFICATIONS



<p>DIMENSIONS Width: 13.5 in (343 mm) Depth: 27.5 in (698 mm) Height: 21.25 in (539 mm)</p> <p>SPACE REQUIRED Left Side: 1 in (25 mm) Right side: 1 in (25 mm) Back: 1 in (25 mm) Top: 8 in (203.2 mm)</p> <p>ELECTRICAL 230VAC/50Hz/3.5AMPs</p>	<p>WEIGHT Empty: 125 lbs (56.8 kg) Operating: 163 lbs (74.1 kg) Shipping: 140 lbs (63.6 kg)</p> <p>ICE Bank Weight: 11-13 lbs (5-5.9 kg)</p> <p>FITTINGS Soda Inlets: 3/8" barb Brand syrup inlets: 3/8" barb</p>	<p>CARBONATOR WATER SUPPLY Min filtered water pressure: 50 PSIG (0.345 MPA) Min flowing pressure: 25 PSIG (0.175 MPA)</p> <p>Max static pressure: 50 PSIG (0.345 MPA)</p> <p>CARBON DIOXIDE (CO2) Min pressure: 70 PSIG (0.483 MPA) Max pressure: 80 PSIG (0.552 MPA)</p>
--	---	---

PRE-INSTALLATION CHECKLIST

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.

TOOLS REQUIRED	
<input type="checkbox"/> Oetiker Pliers	<input type="checkbox"/> Slotted Screwdriver
<input type="checkbox"/> Tubing Cutters	<input type="checkbox"/> Phillips Screwdriver
<input type="checkbox"/> Wrench	<input type="checkbox"/> Cordless Drill

POST MIX ACCESSORIES	
<input type="checkbox"/> CO2 Regulator Set	<input type="checkbox"/> CO2 Supply
<input type="checkbox"/> Beverage Tubing	<input type="checkbox"/> Oetiker Clamps/Fittings
<input type="checkbox"/> Water Booster	<input type="checkbox"/> Water Regulator
<input type="checkbox"/> Precision Cutters (if removing/replacing carbonator tank)	

BIB SYSTEM	
<input type="checkbox"/> BIB Rack	<input type="checkbox"/> BIB Regulator Set
<input type="checkbox"/> BIB Syrup Boxes	
<input type="checkbox"/> BIB Connectors - ensure you have the correct connectors for syrup lineup.	

CONSIDER LOCATION OF THE FOLLOWING PRIOR TO INSTALL	
<input type="checkbox"/> Water supply lines	<input type="checkbox"/> Drain
<input type="checkbox"/> Is the countertop level?	<input type="checkbox"/> Heating and air conditioning ducts
<input type="checkbox"/> Grounded electrical outlet.	
<input type="checkbox"/> Enough space to install the dispenser. Include space for a top-mounted ice machine, if necessary.	
<input type="checkbox"/> Does the top-mounted ice machine have a minimum clearance on all sides?	
<input type="checkbox"/> Located away from direct sunlight or overhead lighting.	
<input type="checkbox"/> Can the countertop support the weight of the dispenser? Be sure to include the weight of an ice machine (if necessary) plus the weight of the ice.	
<input type="checkbox"/> This unit is not suitable for use in an area where a water jet could be used.	



WARNING/ADVERTENCIA/AVERTISSEMENT



⚠ The dispenser is for indoor use only. This appliance is intended for use in commercial applications such as restaurants, stores or similar. This unit is not a toy. 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. This unit is not designed to dispense dairy products. The minimum/maximum ambient operating temperature for the dispenser is 40°F to 90°F (4°C to 32°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.

⚠ El dispensador sólo debe usarse en interiores. Esta unidad está diseñada para su uso en aplicaciones comerciales tales como restaurantes, tienda o similares. Esta unidad no es un juguete. 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. Esta unidad no ha sido diseñada para suministrar productos lácteos. La temperatura ambiente operativa mínima / máxima para el dispensador es de 40°F a 90°F (4°C a 32°C). No opere la unidad por debajo de las condiciones mínimas de funcionamiento ambiente. En caso de ocurrir congelación, cesar la operación de la unidad y póngase en contacto con el servicio técnico autorizado. Servicio de limpieza y desinfección debe llevarse a cabo solamente por personal especializado. Precauciones de seguridad aplicables deben ser observadas. Advertencias de instrucciones en el producto que se use debe ser seguido.

⚠ Le distributeur est destiné à un usage à l'intérieur seulement. Cet appareil est conçu pour une utilisation dans des applications commerciales telles que les restaurants, les dépanneurs ou similaires. Cet appareil n'est pas un jouet. 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. Cet appareil n'est pas conçu pour distribuer des produits laitiers. La température de service ambiante minimum/maximum pour le distributeur est de 40°F à 90°F (4°C à 32°C). Ne pas faire fonctionner l'appareil ci-dessous les conditions minimales de fonctionnement ambiantes. Faut-gel se produisent, cesser l'exploitation de l'appareil et contactez technicien agréé. Service de nettoyage et de désinfection doivent être effectuées uniquement par du personnel qualifié. Les mesures de sécurité applicables doivent être respectées. Avertissements Instruction sur le produit utilisé doit être suivie.



DISPENSER INSTALLATION HIGHLIGHTS



This unit has been factory sanitized per Lancer specifications.

Listed below are six critical elements which will aid in a successful installation.

1. Fill water bath until water overflows from tank overflow tube.
2. The carbonator pump motor must be disconnected from the power supply (see Section 1.7) prior to connection to water supply for initial build up of ice bank. Failure to do so will result in automatic shut off of carbonator (see item 6 below) or damage to the pump.
3. If this dispenser is installed in an area that is susceptible to $\pm 10\%$ variation of the nominal line voltage, consider installing a surge protector or similar protection device.
4. There is a five (5) minute delay which prevents the compressor and condenser fan from starting until the delay has lapsed. If electrical current is interrupted, there is always a five (5) minute delay before the compressor starts.
5. Supply Water Pressure: Minimum - 25 PSI (0.172 MPA); Maximum - 50 PSI (0.345 MPA); If pressure is over 50 PSIG (0.345 MPA), a water pressure regulator must be used.
6. On units with the built in water regulator, the regulator must be removed if inlet water pressure is less than 25 PSIG. (0.172 MPA)



PUNTOS IMPORTANTES EN LA UNIDAD DISPENSADORA



Esta unidad ha sido saneada en fabrica por las especificaciones de Lancer.

A continuacion se relacionan 6 puntos importantes para una conecta instalacion.

1. Llene el bano-Maria hasta que el agua se desborde sobre el tubo que controla la derrama del tanque.
2. El motor de la bomba del carbonatador debe desconectarse electricamente (Ver Manual - Seccion 1.7) antes de conectar el suministro de agua para la formacion inicial del banco de hielo. De no hacerse esto resultaria en un bloqueo automatico del carbonatador (ver abajo el punto 6) o en danos a la bomba.
3. Si la unidad va a ser instalada en un area en la que puedan darse variaciones de voltage de + 6 - 10% de su valor nominal, se debe considerar la conveniencia de instalar un estabilizador de corriente o sistema de proteccion similar.
4. Hay una demora de 5 minutos que evita que el compresor y el abanico del condensador arranquen hasta pasado ese tiempo. Si hay algun corte en la corriente electrica siempre se producira esa demora de 5 minutos antes de arrancar el compresor.
5. Presión de suministro del agua de red: Minimo 25 PSI (0.172 MPA); Maximo 50 PSI (0.345 MPA). En unidades sin regulador de presión incorporado, si la presión del agua es superior a 50 PSIG (0.345 MPA) se debe usar un regulador de presión.
6. En unidades con regulador de presión incorporado, el regulador debe der eliminado cuando la presión de entrada de agua sea inferior a 25 PSIG (0.172 MPA).



REGLES DE SECURITE POUR L'INSTALLATION DU DISTRIBUTEUR DE SODAS



La proprète da cet ensamble est assuré à l'usine sylvant les spécifications èmis par Lancer .

Il est essentiel de respecter les 6 points suivants pour l'installation de l'appareil:

1. Remplir le bain-Maire jusqu'a ce que l'eau déborde par le tuyau de trop-plein du réservoir.
2. Le moteur de la pompe du carbonateur doit être débranché de l'alimentation électrique (Voir le manuel, Section 1.7) avant l'arrivée de l'eau pour la formation initiale de la glace. Oublier ou négliger cette opération provoquera l'arrêt automatique du carbonateur (voir le point 6 cidessous) ou causera des dommages à la pompe.
3. Si le distributeur es installé dans une zone ou la tension électrique nominale est susceptible de variations de (+) 10%, il est conseillé d'installer un appaeil de protection contre les sautes de courant.
4. Un d'lai de 5 minutes empeche le compresseur et la ventilation du condesateur de se mettre en marche avant que ce lees de temps ne se soit écoulé. Lorsque le courant électrique es interrompu, il y a toujours un délai de 5 minutes avant que le presseur ne se mette en.
5. Pression de l'eau: Minimum 25 PSI (0.172 MPA); Maximo 50 PSI (0.345 MPA). Sur les unités qui n'ont pas de régulateur de pression d'eau incorpré, si la pression d'H2O est supérieure à 50 PSIG (0.345 MPA), un régulateur de pression d'eau doit être utilisé.
6. Sur les unités avec régulateur d'eau incorporé, le régulateur doit être enlevé si la pression d'arrive est inferieure à 25 PSIG (0.172 MPA)



ELECTRICAL WARNING/ADVERTENCIA ELÉCTRICA/ AVERTISSEMENT ÉLECTRIQUE



⚠ Check the dispenser serial number plate for 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!

⚠ Verifique la placa con el número de serie del dispensador, donde encontrará los requisitos eléctricos correctos de la unidad. 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.

⚠ Examinez la plaque de numéro de série du distributeur pour connaître les bonnes exigences en matière d'électricité pour l'appareil. 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!



CO₂/CARBON DIOXIDE /EI ANHÍDRIDO CARBÓNICO/ DIOXYDE DE CARBONE



⚠ 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.

⚠ 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. 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. Si se sospecha que existe una pérdida de CO₂, ventile el área contaminada antes de tratar de reparar la pérdida. Hay que prestar suma atención para evitar pérdidas de CO₂ en todo el sistema de CO₂ y de bebidas gaseosas.

⚠ 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. 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. On doit faire très attention de prévenir les fuites de CO₂ gazeux dans le système entier de CO₂ et de boisson gazeuse. Si on suspecte qu'il y a une fuite de CO₂ gazeux, aérez le secteur contaminé immédiatement avant d'essayer de réparer la fuite.



AUTOMATIC AGITATION/AGITACIÓN AUTOMÁTICA/



⚠ Units are equipped with an automatic agitation system and will activate unexpectedly. Do not place hands or foreign objects in the water bath tank. Unplug the dispenser during servicing, cleaning, and sanitizing. To avoid personal injury, do not attempt to lift the dispenser without assistance. For heavier dispensers, use a mechanical lift.

⚠ Las unidades están equipadas con un sistema automático de agitación, por lo que se pueden activar repentinamente. No ponga las manos ni objetos extraños en el compartimento donde se guarda el hielo. Durante el servicio, la limpieza y la esterilización, desenchufe el dispensador. Para evitar lesiones personales, no trate de levantar el dispensador sin ayuda. Para los dispensadores más pesados, use un elevador mecánico.

⚠ Les appareils sont équipés d'un système d'agitation automatique qui s'activera de manière inattendue. Ne mettez pas les mains ou des corps étrangers dans le compartiment d'entreposage de glace. Débranchez le distributeur pendant l'entretien/la réparation, le nettoyage et l'aseptisation. Pour éviter des blessures, n'essayez pas de soulever le distributeur sans aide. Pour les distributeurs plus lourds, utilisez un chariot élévateur.



WATER NOTICE/AGUA AVISO/ PRÉAVIS DE L'EAU



⚠ 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 (located upstream of the CO₂ injection system) or another approved method to comply with NSF standards. A leaking inlet water check valve will allow carbonated water to flow back through the pump when it is shut off and contaminate the water supply. Ensure the backflow prevention device complies with ASSE and local standards. It is the responsibility of the installer to ensure compliance.

⚠ 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 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 (situado antes del sistema de inyección de CO₂) 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.

⚠ 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 régulateur 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 (situé en amont du système d'injection de CO₂) 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.

1. INSTALLATION

1.1 UNPACKING



WARNING TO AVOID PERSONAL INJURY OR DAMAGE, DO NOT ATTEMPT TO LIFT A UNIT WITHOUT HELP. FOR HEAVIER UNITS, USE OF A MECHANICAL LIFT MAY BE APPROPRIATE. UNITS ARE EQUIPPED WITH AUTOMATIC AGITATION. THE UNIT MAY ACTIVATE UNEXPECTEDLY. DO NOT PLACE HANDS, OR FOREIGN OBJECTS INTO THE ICE STORAGE COMPARTMENT. UNPLUG DISPENSER FROM THE POWER SOURCE, WHEN UNIT IS BEING SERVICED, CLEANED, OR SANITIZED.

ADVERTENCIA EVITE LAS LESIONES PERSONALES, NO TRATE DE LEVANTAR EL DISPENSADOR SIN AYUDA. PARA LOS DISPENSADORES MÁS PESADOS USE UN ELEVADOR MECÁNICO. LAS UNIDADES EQUIPADAS CON AGITACIÓN AUTOMÁTICA SE ACTIVAN REPENTINAMENTE. NO PONGA LAS MANOS NI OBJETOS EXTRANOS EN EL COMPARTIMIENTO DE ALMACENAMIENTO DE HIELO. DESENCHUFE EL DISPENSADOR DURANTE TAREAS DE SERVICIO, LIMPIEZA Y ESTERILIZACIÓN.

AVERTISSEMENT POUR ÉVITER DES BLESSURES OU DES DOMMAGES, N'ESSAYEZ PAS DE SOULEVER UNE UNITÉ SANS AIDE. POUR LES UNITÉS PLUS LOURDES, L'UTILISATION D'UN ASCENSEUR MÉCANIQUE PEUT ÊTRE APPROPRIÉE. LES UNITÉS SONT ÉQUIPÉES D'UNE AGITATION AUTOMATIQUE. L'UNITÉ PEUT S'ACTIVER DEMAINÈRE INATTENDUE. NE PLACEZ PAS LES MAINS, OU DES CORPS ÉTRANGERS DANS LE COMPARTIMENT DE STOCKAGE DE GLACE. DÉBRANCHEZ LE DISTRIBUTEUR DE LA SOURCE D'ALIMENTATION EN ÉLECTRICITÉ QUAND L'UNITÉ EST ENTRETENUE, NETTOYÉE OU ASEPTISÉE.

- A. Cut banding and remove.
- B. Remove top portion of carton by lifting up.
- C. Remove accessory kit and loose parts from top packaging.
- D. Remove side inserts.
- E. Lift unit up by plywood shipping base and remove lower portion of carton.
- F. Inspect unit for concealed damage and if evident notify delivering carrier and file a claim.
- G. 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.

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

- H. If Unit is to be installed with optional legs, assemble legs to unit by tilting unit. **DO NOT LAY UNIT ON ITS SIDE OR BACK.**

1.2 UNPACKING INSTALLATION KITS

- A. Inspect kits for concealed damage and if evident, notify delivering carrier and file a claim.
- B. Each kit contains a list of the parts and a drawing showing the proper assembly of the parts.

1.3 SELECTING A COUNTER LOCATION

- A. Select a location close to a properly grounded electrical outlet and water supply that meets the requirements on the specification page.



WARNING FAILURE TO MAINTAIN SPECIFIED CLEARANCE WILL CAUSE THE COMPRESSOR TO OVERHEAT AND WILL RESULT IN COMPRESSOR FAILURE.

ADVERTENCIA SI NO DEJA EL ESPACIO LIBRE ESPECIFICADO EL COMPRESOR PUEDE RECALENTAR Y FALLAR.

AVERTISSEMENT LE FAIT DE NE PAS MAINTENIR LE DÉGAGEMENT SPÉCIFIÉ FERA SURCHAUFFER LE COMPRESSEUR ET AURA COMME CONSÉQUENCE UNE DÉFAILLANCE DU COMPRESSEUR.

- B. Condenser air is drawn in and discharged out of the top of the unit. A minimum of eight inches (203 mm) clearance must be maintained over the top of the unit.
- C. The dispenser may be susceptible to EMC electrical interference. If this occurs, relocate the dispenser to an alternative location. If interference is still present, contact Lancer Technical Support.

1.4 MOUNTING THE DISPENSER

- A. The dispenser is designed to be permanently mounted and sealed to the counter.

NOTE: NSF-listed units must be 1) sealed to the counter using FDA-approved silicone or 2) elevated above the counter in accordance with NSF directives.

- B. When permanently bolting the dispenser to the countertop, seal the dispenser base to countertop with a bead of clear, FDA-approved, silicone caulk or sealant which provides a smooth and easily-cleaned bond to the counter.

1.5 CONNECTING THE DRAIN

- A. Remove cup rest. Lift splash plate up and pull out and down on the bottom to remove.
- B. Remove the drip tray from the unit and connect the drain tube to the drain fitting located on the back.
- C. Route the drain tube to a suitable drain.
- D. Reinstall the drip tray, splash plate, and cup rest.

1.6 FILLING UNIT WITH WATER

- A. Remove the top cover from the unit.
- B. Locate the fill tube (next to the carbonator relief valve).
- C. Using a funnel or tube, fill the water bath compartment with water until it flows out of the overflow tube into the drip tray.



WARNING THE WATER BATH COMPARTMENT MUST BE FILLED WITH WATER BEFORE PLUGGING IN THE DISPENSER. OTHERWISE, THE COMPRESSOR DECK AND CONDENSER FAN WILL NOT OPERATE.

ADVERTENCIA EL COMPARTIMIENTO DE BAÑO DE AGUA DEBE SER LLENADO CON AGUA ANTES DE CONECTAR EL DISTRIBUIDOR. DE OTRA MANERA, LA CUBIERTA DEL COMPRESOR Y VENTILADOR DEL CONDENSADOR NO FUNCIONAR.

AVERTISSEMENT LE COMPARTIMENT DE BAIN D'EAU DOIT ÊTRE REMPLI D'EAU AVANT BRANCHER LE DISTRIBUTEUR. AUTREMENT, LE COMPRESSEUR ET LE CONDENSEUR PONT VENTILATEUR NE FONCTIONNE.

1.7 CONNECTING TO ELECTRICAL POWER

NOTE: Adhere to the ELECTRICAL Warnings/Cautions, Page 8.



GROUNDING 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, PUESTA A TIERRA 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.

EXIGENCES DE MISE À LA TERRE 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.

- A. If the unit is equipped with a built-in carbonator, disconnect the power supply to the carbonator motor by disconnecting the designated connector located near the top of the electrical control box on the refrigeration deck.
- B. Check the dispenser serial number plate for correct electrical requirements of unit. Do not plug into wall electrical outlet unless the current shown on the serial number plate agrees with local current available.
- C. Route the power supply cord to a grounded electrical outlet of the proper voltage and amperage rating, and plug in the unit. This will turn on the refrigeration system and allow it to start cooling while completing the rest of the installation. The agitator motor will start immediately, but the compressor and fan motor will not start until the five (5) minute delay has elapsed.



CAUTION FAILURE TO DISCONNECT THE MOTOR POWER SUPPLY WILL DAMAGE THE CARBONATOR MOTOR, THE PUMP AND VOID THE WARRANTY.

PRECAUCIÓN 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.

1.8 CONNECTING TO WATER SUPPLY

NOTE: Adhere to the WATER SUPPLY Warnings/Cautions, Page 9.



WARNING IF THE WATER SOURCE EXCEEDS 50 PSIG (0.345 MPA), USE A WATER REGULATOR KIT TO LIMIT WATER PRESSURE TO 50 PSIG (0.345 MPA). FAILURE TO USE A REGULATOR WILL RESULT IN IMPROPER PERFORMANCE OF THE DISPENSER.

ADVERTENCIA SI LA FUENTE DE AGUA SUPERA LOS 50 PSIG (0.345 MPA), UTILICE UN KIT REGULADOR DE AGUA PARA LIMITAR LA PRESIÓN DE AGUA A 50 PSIG (0.345 MPA). NO USAR UN REGULADOR DARÁ LUGAR MALA EJECUCIÓN DEL DISPENSADOR.

AVERTISSEMENT SI LA SOURCE DE L'EAU DÉPASSE 50 PSIG (0.345 MPA), UTILISER UN KIT DE RÉGULATEUR D'EAU POUR LIMITER LA PRESSION EAU A 50 PSIG (0.345 MPA). NE PAS UTILISER UN REGULTEUR ENTRAÎNERA LA MAUVAISE EXÉCUTION DU DISTRIBUTEUR.

- A. Using appropriate tubing and fittings, connect tubing assembly to water source. **DO NOT CONNECT TO DISPENSER AT THIS TIME.**
- B. Flush water supply line thoroughly.

NOTE: If the water source is above 50 PSIG (0.345 MPA), cut tubing assembly and install a water regulator. This unit meets NSF requirements for backflow prevention for internally carbonated beverage dispensers. It is the responsibility of the installer to ensure compliance with any additional federal, state or local codes.

- C. Route tubing through a hole in the counter or through an opening in the rear of the dispenser. Route tubing through the area behind the splash plate to the carbonator area. Connect to water inlet fitting.
- D. Leave 12 inches (304.8 mm) of extra tubing length below the counter for servicing and moving the dispenser.
- E. Turn on water supply. Check for leaks.
- F. Set to 50 PSIG (0.345 MPA) static pressure.

1.9 CONNECTING THE CO2 SUPPLY

- A. Connect the high pressure CO2 regulator assembly to the CO2 cylinder. Use a new CO2 tank washer if the regulator does not have built-in o-ring seal.
- B. Place the CO2 cylinder in service location under counter and secure it with a safety chain.
- C. Using appropriate tubing and fittings, connect tubing assembly to tank mount regulator using a flare seal washer (PN 05-0011). Use a back-up wrench to prevent damage to the regulator assembly.
- D. Route the gas line through a hole in the counter or through the opening in the rear of the dispenser into the area behind the splash plate.
- E. Leave 12 inches (304.8 mm) of extra tubing length below the counter for servicing and moving the dispenser.
- F. Remove the protective cap from the elbow on the back of the CO2 manifold (located on top of minipumps on left side of unit) and connect the CO2 supply line (for units with internal syrup pumps).



WARNING DO NOT TURN ON THE CO2 SUPPLY AT THIS TIME.

ADVERTENCIA NO CONECTE TODAVÍA LA ALIMENTACIÓN DE CO2.

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

- G. If the dispenser does not have internal syrup pumps, remove the cap from the CO2 barb on the carbonator relief valve and connect to tubing.

1.10 CONNECTING TO BAG-IN-BOX (BIB) SYRUP SUPPLY (UNITS WITH BUILT-IN SYRUP PUMPS)

NOTE: Cut the syrup inlet tubing shipped with the installation kit into pieces eight feet (2.4M) long. These lines can be extended up to a maximum of 12 feet (3.7 M). The maximum height of the pumps above the lowest BIB package should not exceed eight feet (2.4M). If either the height of the pumps or the length of the inlet line limitations are exceeded, use remote syrup pumps or pressurized syrup containers.

- A. Remove the protective caps from the syrup pump inlets and connect syrup inlet tube assemblies furnished in the installation kit to the syrup pumps. Lubricate o-rings before installation using an FDA-approved lubricant or water. Be careful not to cut o-rings when installing in pump.
- B. Mark syrup tube assemblies at BIB hose connector end with product ID tape.
- C. Route the syrup supply tubes from the unit through hole in counter or through opening in the rear of the dispenser to the BIB syrup supply.
- D. Dip the hose connectors in a cup of warm water.
- E. Attach the BIB hose connectors to the appropriate syrup flavor.

1.11 CONNECTING TO REMOTE BIB SYRUP PUMPS

- A. Locate the remote BIB syrup supply and pumps.
- B. Attach the syrup supply tubes to the dispenser's syrup inlet fittings (located behind the splash plate) using a 1/4" oetiker clamp for each syrup flavor.
- C. Route the syrup supply tubes to the remote syrup pumps.
- D. Complete installation of the remote syrup pump system following the manufacturer's instructions.

1.12 CONNECTING TO REMOTE PRESSURIZED SYRUP SUPPLY

- A. Connect the high pressure CO2 regulator assembly to the CO2 cylinder. Use a new CO2 tank washer if the regulator does not have built-in o-ring seal.
- B. Place the CO2 cylinder in an easily-accessed location (for example, under the counter) and secure the CO2 cylinder with a safety chain.
- C. Using tubing and fittings from the installation kit, connect the tubing assembly to the tank mount regulator using a flare seal washer (PN [05-0011](#)). Use a back-up wrench to prevent damage to the regulator assembly.
- D. Locate the five gallon (figal) syrup containers and the CO2 cylinder and regulator set.
- E. Attach the syrup supply tube assembly to the dispenser's syrup inlet fittings (located behind the splash plate) using a 21/32 inch ([17.0](#) mm) oetiker clamp for each syrup flavor.
- F. Route the syrup supply tubes to the figal syrup containers and attach to the appropriate syrup flavor.
- G. Attach a CO2 supply line from each of the figal syrup containers to the low pressure regulator and pressurize the containers.

1.13 PURGING THE CARBONATION SYSTEM

- A. The relief valve for the built-in carbonator is located under the top cover behind the faucet plate on the right side of the dispenser. Lift the yellow lever on the top of the relief valve until water flows from the holes in the relief valve. Release the relief valve. If supply pressure is low, it may be necessary to reconnect power to the pump and unplug the carbonator probe from the board until water flows from the relief valve.
- B. Reconnect the power supply to the carbonator pump.
- C. Decrease the CO2 regulator pressure adjusting screw all the way. Open the CO2 cylinder handle slowly. Turn the CO2 pressure regulator up slowly to 75 PSIG (0.517 MPA).
- D. Open a dispensing valve until water and syrup are flowing steadily from the valve.
- E. Repeat Step "D" for each flavor.
- F. Check all of the unit's syrup, water and CO2 connections for leaks. Repair if necessary.

NOTE: To check for CO2 leaks, close the valve on the CO2 cylinder and observe if the pressure to the system drops with the cylinder valve closed for five minutes. Open the cylinder valve after check.

- G. Replace the unit's top cover, splash plate and cup rest.

1.14 CONNECTION FOR PLAIN WATER PRODUCT

If a plain water product is desired, make sure the center water module is connected to the center plug (marked "WATER") on the PCB. Then follow the procedure which follows:

1.15 SETTING 3-WAY ADJUSTABLE BACK BLOCKS FOR PLAIN OR CARBONATED WATER

- For a five-valve unit, valve 3 can be set to deliver either plain or carbonated water. Refer to Figure 1.
- The shut-off stem on the left side of the back block controls the flow of plain or carbonated water. The stem has a straight side and a double curved side when looking down at the back block. To set the adjustable back block to deliver plain water, turn the shut-off stem to where the straight side of the stem is facing to the left. To set the back block to deliver carbonated water, turn the shut-off stem to where the straight side faces to the right. When the shut-off stem is at its midpoint, with the straight side facing forward, the flow of either plain or carbonated water is shut off.
- Ensure the shut-off stem is fully turned to the desired position or the flow of water will be restricted.
- Remove valve cover from valve 3.
- Connect the 1/4" fast-on from the water booster harness to the black side terminal on the valve coil .

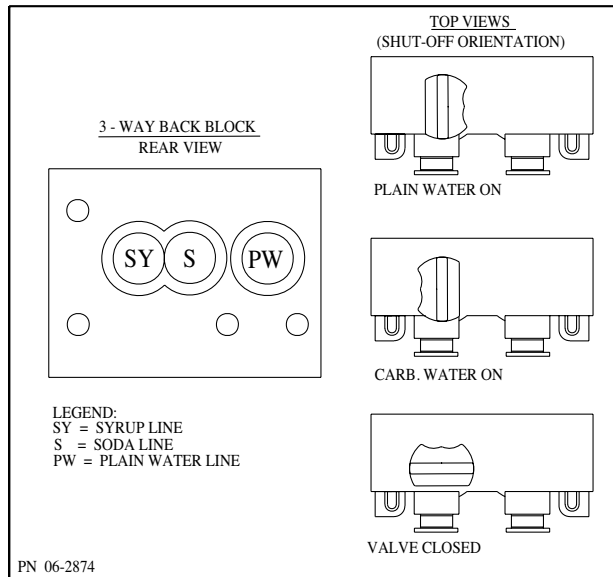


Figure 1
Setting 3-Way Adjustable Back Blocks

1.16 ADJUSTING WATER FLOW (LEV®)

- The water flow can be adjusted between 1.25 oz/sec (37 ml/sec) and 2.50 oz/sec (74 ml/sec) on all dispensing valves using the following procedures.
- The refrigeration unit should have been running for at least one (1) hour before you attempt to brix the valves. The drink temperature should be no higher than 40°F (4.4°C) when the brix is set. This is best done after the unit has made an ice bank.
- Slide up ID panel until flow controls are exposed (see Figure 2)
- Remove nozzle by twisting counter clockwise and pulling down.
- Remove diffuser by pulling down.
- Install Lancer (yellow) syrup separator (PN 54-0031) in place of nozzle.
- Activate dispensing valve to fill separator syrup tube.
- Hold a Lancer brix cup under the syrup separator and dispense water and syrup into cup for four (4) seconds. Divide number of ounces (ml) of water in cup by four (4) to determine water flow rate per second
- To obtain the proper flow, use a screwdriver to adjust water flow control (see Figure 2).
- Repeat process for each valve.

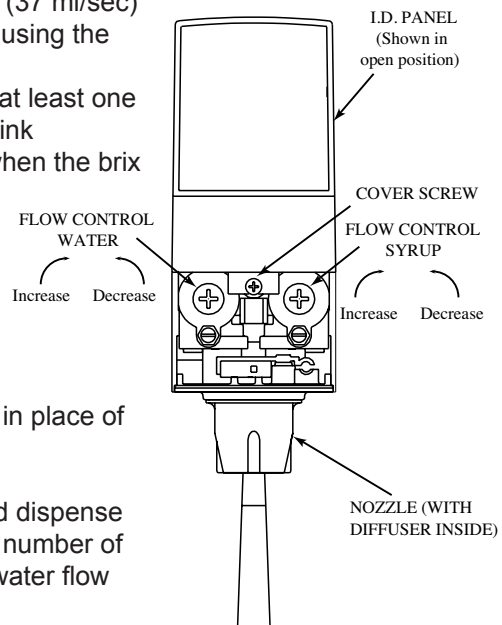


Figure 2
Typical Valve Adjustment, LEV®

1.17 ADJUSTING WATER TO SYRUP (RATIO) BRIX (LEV®)

- A. Hold the Lancer brix cup under the syrup separator and activate valve. Check brix.
- B. To obtain the proper brix, use screwdriver to adjust syrup flow control (see Figure 2).
- C. Once proper ratio is obtained repeat to verify.
- D. Remove syrup separator (PN 54-0031 installed in Section 1.16.F above).
- E. Install diffuser and nozzle.
- F. Slide down ID panel.
- G. Repeat process for each valve.

1.18 VALVE ACCESS (SYRUP MODULE OR SODA MODULE)

A. Removal from Back Block

1. Raise valve shroud and lock in place.
2. Turn back block shut-off to the closed position (counterclockwise rotation).
3. Lower shroud and activate the valve pushbutton to relieve pressure.
4. Raise valve shroud and lock in place again.
5. Unplug valve harness from PCB.
6. Raise valve retainer.

NOTE: The retainer cannot be pulled up until the back block shut-off is properly closed.

7. Pull the valve off of the back block.

B. Mounting on Back Block



CAUTION USE CARE TO INSURE O-RING IS NOT TORN OR OTHERWISE DAMAGED. IF DAMAGED, REPLACE O-RING.

PRECAUCIÓN TENGA CUIDADO PARA ASEGURAR O-ANILLO NO ESTÁ ROTO O DAÑADO. SI ESTÁ DAÑADO REEMPLÁCELO O-ANILLO.

ATTENTION PRÉCAUTION POUR ASSURER O-RING N'EST PAS DÉCHIRÉ OU ENDOMMAGÉ. REMPLACEZ-LA SI O-RING.

1. Check o-ring on back block. Replace o-ring, if necessary.
2. Apply 111 Lubricant (or another NSF approved lubricant) to o-ring, if necessary.
3. Press valve into the back block.
4. Lower the valve retainer to lock the valve in place.
5. Turn the back block shut-off to the open position (clockwise rotation).
6. Connect the valve harness to the proper position on the PCB.
7. Lower valve shroud.

2. SCHEDULED MAINTENANCE

2.1 DAILY

- A. Remove the cup rest and wash in warm soapy water.
- B. Pour warm soapy water into the drip tray and wipe with a clean cloth.
- C. Using a clean cloth and warm soapy water, wipe off all exterior surfaces of the unit and nozzles.
- D. Replace the cup rest.

2.2 WEEKLY

- A. Remove the unit's top cover and check the level of water in the water bath. Replenish as required, and replace the top cover.

2.3 MONTHLY

- A. Unplug the dispenser from power source.
- B. Remove the top cover, and clean the dirt from the unit's condenser using a soft brush.
- C. Replace the top cover and plug the unit into the power source.

2.4 EVERY SIX MONTHS

- A. Clean and sanitize the unit using the appropriate procedures outlined in Section 3.

2.5 YEARLY

- A. Clean water bath interior, including evaporator coils and refrigeration components.
- B. Clean the entire exterior of the unit.
- C. Sanitize syrup lines.
- D. Check water pump screen for debris and/or clogging.

NOTE: Because of difficulty in rinsing, detergent solution should not be introduced into the carbonator.

3. DISPENSER CLEANING AND SANITIZATION

3.1 GENERAL INFORMATION

- A. 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.

- B. 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.

3.2 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 sanitizing solutions in accordance with the manufacturer's written recommendations and safety guidelines. The solution must provide 100 parts per million (PPM) chlorine (e.g. Sodium Hypochlorite or bleach). A minimum of five gallons of sanitizing solution should be prepared. Any sanitizing solution may be used as long as it is prepared in accordance with the manufacturer's written recommendations and safety guidelines, and provides 50 to 100 parts per million (PPM) chlorine.

3.3 AMBIENT PROCESS

The ambient process is the most common method for cleaning and sanitizing dispenser equipment.

- A. Prepare the Cleaning Solution, referred to in Section 3.2.
- B. Fill lines at pump inlet with Cleaning Solution (Section 3.2). The solution should be prepared in accordance with the manufacturer's recommendations. Make sure the lines are completely filled and allow to stand for at least ten (10) minutes.
- C. Flush the detergent solution from the lines with clean water.
- D. Prepare the Sanitizing Solution, referred to in Section 3.2.
- E. Fill the lines with Sanitizing Solution. Make sure that lines are completely filled and allow to stand for ten (10) minutes.
- F. Draw drinks to refill lines and flush solution from the dispenser.
- G. Taste the beverage to verify that there is no off taste. If off-taste is found, flush the 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 ELIMINAR 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.

ATTENTION DÉFENSE DE RINCER L'OUTIL À L'EAU FRAICHE IMMÉDIATEMENT APRÈS UN TRAITEMENT SEPTIQUE. EN CAS DE APRÈS-GOÛT, NE PURGER AVEC LE PRODUIT FINAL UNE EXIGENCE NSF.

3.4 VALVE AND SYSTEM SANITIZING

- A. The complete valve and dispenser system must be sanitized during initial installation. Follow the manufacturer's instructions when scheduling and conducting dispenser sanitizing. The valve may remain on the dispenser during the sanitizing process.
- B. To purge syrup, shut off water at backblock and hold keypad switch down for five seconds. Syrup will purge for as long as the keypad switch is held down.

3.5 MONTHLY NOZZLE/DIFFUSER SANITIZING

Use the following procedure to sanitize the nozzle housing once a month:

- A. Disconnect power, so the valve will not be inadvertently activated while cleaning.
- B. Remove nozzle housing by twisting it counter-clockwise and pulling it down.
- C. Wash the nozzle housing with the cleaning solution.
- D. Immerse the nozzle housing in a bath of the sanitizing solution for 15 minutes.
- E. While the parts are in the sanitizing solution, visually inspect around the nozzle mounting area on the valve for syrup residue. Using a cloth or nozzle brush and warm water, clean this area.
- F. Wipe off the valve shroud assembly and any other areas that may have been splashed by syrup.
- G. Wearing sanitary gloves, remove, drain, and air dry the nozzle housing.
- H. Make certain the nozzle o-ring, is in place around the nozzle mounting area on the valve. If necessary, slide a new nozzle o-ring (PN 02-0228) onto the nozzle mounting area. (Wear sanitary gloves while handling the o-ring.) If needed, apply 111 lubricant (or another FDA approved lubricant) to the o-ring.
- I. Wearing sanitary gloves, install the nozzle housing by inserting it into the nozzle body and twisting it clockwise to lock it in place.
- J. Connect power and replace cover.
- K. Draw drinks to flush residual sanitizing solution. Taste the beverage to verify that there is no off taste. If an off-taste is found, additional flushing may be required.

3.6 CLEANING AND SANITIZING BEVERAGE COMPONENTS - BAG-IN-BOX SYSTEMS

NOTE: Extended lengths of product lines may require more time for flushing and rinsing lines than stated below.

- A. Disconnect the syrup quick disconnect coupling from the syrup packages and connect the coupling to a bag valve removed from an empty Bag-in-Box (BIB) package.
- B. Place the syrup inlet line in a clean container filled with clean, potable, room temperature water. Activate the valve until water is dispensed. Flush and rinse the line and fittings for a minimum of 60 seconds to remove all traces of residual product.
- C. Following the instructions as described in "Required Cleaning Supplies": mix the appropriate amount of cleaning solution in a clean container. Place the syrup inlet line in a container filled with cleaning solution.
- D. Activate the valve and draw sanitizing solution through the line for a minimum of 60 seconds. This will ensure the line is flushed and filled with sanitizing solution. Allow the line to stand for at least 30 minutes.
- E. Remove the bag valve from the quick disconnect coupling and reconnect the syrup inlet line to syrup package. Ready the unit for operation.
- F. Draw drinks to refill the lines and to flush the chlorine sanitizing solution from the dispenser.

NOTE: Do not follow the sanitization procedure with a fresh water rinse.. Purge only with end-use product until there is no aftertaste. this is an NSF requirement.

- G. Test the dispenser for proper operation. Taste the dispensed product to ensure there is no off-taste. If off-taste is found, flush the syrup system again.
- H. Repeat cleaning, rinsing, and sanitizing procedures for each valve and circuit.

4. TROUBLESHOOTING

TROUBLE	CAUSE	REMEDY
4.1 Miscellaneous leakage.	<p>A. Gap between parts.</p> <p>B. Damaged or improperly installed o-rings or seals</p>	<p>A. Tighten appropriate retaining screws</p> <p>B. Replace or adjust appropriate o-rings or seals</p>
4.2 Insufficient water flow.	<p>A. Insufficient incoming supply water pressure.</p> <p>B. Reduced flow</p>	<p>A. Verify incoming supply water pressure is a minimum of 35 PSI (0.241 MPA).</p> <p>B. Remove water pump. Remove screen from outlet port and check for debris/clogging. Clean screen, as necessary, and reinstall screen in outlet port. Reinstall water pump.</p>
4.3 Insufficient syrup flow.	<p>A. Insufficient CO₂ pressure to syrup pumps or figals.</p> <p>B. Shutoff on mounting block not fully open.</p> <p>C. Foreign debris in syrup flow control.</p>	<p>A. Adjust CO₂ pressure to 80 PSI (0.552 MPA) [minimum 70 PSI (0.483 MPA)] for BIB pumps.</p> <p>B. Open shutoff fully.</p> <p>C. Remove syrup flow control from upper body and clean out any foreign material to ensure smooth free spool movement.</p>
4.4 No product dispensed	<p>A. Water and syrup shutoffs on mounting block not fully open.</p> <p>B. The key switch on an electric valve is in the OFF position.</p> <p>C. Dispenser supply sufficient but no flow at back block.</p> <p>D. Power to circuit board interrupted.</p> <p>E. Valves not receiving power.</p> <p>F. Keypad inoperative.</p>	<p>A. Open shutoff fully.</p> <p>B. Turn key switch to ON position.</p> <p>C. Check dispenser for freeze-up or other problems.</p> <p>D. Reset circuit breaker on top of control box. If breaker trips again, refer to Section 8.22. Also check connection J10 on circuit board and check Fuse F2 on PCB.</p> <p>E. Check connectors J2 and J6 on circuit board. Check connections at valve.</p> <p>F. Check connection J13 on circuit board. Configure valve to different switch. If product dispenses at the new switch but not the old switch, replace keypad.</p>

TROUBLE	CAUSE	REMEDY
4.5 Water only dispensed; no syrup; or syrup only dispensed, no water	<p>A. Water or syrup shutoff on mounting block not fully open.</p> <p>B. Improper or inadequate water or syrup supply.</p> <p>C. BIB supply too far from dispenser</p> <p>D. CO2 pressure too low.</p> <p>E. Stalled or inoperative BIB pump.</p> <p>F. Kinked line.</p>	<p>A. Open shutoff fully.</p> <p>B. Remove valve from mounting block and open shutoffs slightly. Check water and syrup supply. If no supply, check dispenser for freeze-up or other problems. Ensure BIB connection is engaged.</p> <p>C. Check that BIB supply is within eight feet (2.4 m) of the dispenser.</p> <p>D. Check the CO2 pressure to the pump manifold to ensure it is between 70-80 PSI (0.483-0.552 MPA)</p> <p>E. Check CO2 pressure and/or replace pump.</p> <p>F. Remove kink or replace line.</p>
4.6 Valve will not shut off.	<p>A. Cup lever may be sticking or binding.</p> <p>B. Switch not actuating freely.</p> <p>C. Solenoid armature not returning to bottom position.</p>	<p>A. Correct or replace lever.</p> <p>B. Check switch for free actuation.</p> <p>C. Replace defective armature or spring.</p>
4.7 Syrup only dispensed. No water, but CO2 gas dispensed with syrup.	<p>A. Improper water flow to dispenser.</p> <p>B. Carbonator pump motor has timed out.</p> <p>C. Blown fuse on circuit board.</p> <p>D. Liquid level probe not connected properly to PCB.</p> <p>E. Faulty PCB assembly.</p> <p>F. Faulty liquid level probe.</p> <p>G. Water bath frozen.</p> <p>H. Water line frozen.</p>	<p>A. Check for water flow to dispenser (see Section 8.2)</p> <p>B. Reset by turning the unit OFF and then ON, by using the ON/OFF switch on top of the unit, or unplugging unit momentarily.</p> <p>C. Check Fuse F1 on circuit board.</p> <p>D. Check connections of liquid level probe to PCB assembly.</p> <p>E. Replace PCB assembly.</p> <p>F. Replace liquid level probe.</p> <p>G. Thaw water bath and repair faulty component. (See refrigeration related symptoms.)</p> <p>H. See Section 8.11.</p>

TROUBLE	CAUSE	REMEDY
4.8 Dispenser does not dispense proper syrup and/or water from proper nozzle.	<p>A. Membrane switch configuration is wrong.</p> <p>B. Tubing is improperly routed from module to nozzles.</p>	<p>A. Reconfigure membrane switch following steps in Section 5.</p> <p>B. Move water and syrup fittings to proper nozzle.</p>
4.9 Excessive foaming	<p>A. Incoming water or syrup temperature too high.</p> <p>B. CO2 pressure too high.</p> <p>C. Air in BIB lines.</p> <p>D. High beverage temperature.</p>	<p>A. Correct prior to dispenser. Consider larger dispenser or pre-cooler.</p> <p>B. Adjust CO2 pressure downward, but not less than 70 PSI (0.483 MPA).</p> <p>C. Bleed air from BIB lines.</p> <p>D. Check refrigeration system.</p>
4.10 Water continually overflows from water bath into drip tray.	<p>A. Loose water connection(s).</p> <p>B. Flare seal washer leaks.</p> <p>C. Faulty water coil.</p>	<p>A. Tighten water connection(s).</p> <p>B. Replace flare seal washer.</p> <p>C. Replace water coil.</p>
4.11 Compressor starts and continues to run until freeze up and will not cut off.	<p>First check that the three minute carbonator timer has not timed out. Turn unit OFF then ON. If the pump shuts off in less than 30 seconds, the dispenser is not frozen.</p> <p>A. PCB malfunctioning or faulty ice bank probe.</p> <p>B. Ice bank probe positioned improperly.</p> <p>C. Ice bank probe shorted to ground.</p>	<p>A. Disconnect ice bank probe from PCB. 1) If compressor continues to run, check relay in control box on refrigeration deck. If stuck closed, replace relay. If not stuck, replace circuit board. 2) If compressor stops, replace ice bank probe.</p> <p>B. Check positioning of ice bank probe, and replace if needed.</p> <p>C. Replace ice bank probe.</p>
4.12 Warm drinks.	<p>A. Restricted airflow.</p> <p>B. Dispenser connected to hot water supply.</p> <p>C. Refrigeration system not running.</p> <p>D. Refrigerant leak.</p> <p>E. Condenser fan motor not working.</p> <p>F. Dirty condenser.</p> <p>G. Dispenser capacity exceeded.</p>	<p>A. Check clearance around sides, top and inlet of unit. Remove objects blocking airflow through grill.</p> <p>B. Switch to cold water supply.</p> <p>C. See Sections 8.13 - 8.17.</p> <p>D. Repair and recharge.</p> <p>E. Replace condenser fan motor.</p> <p>F. Clean condenser.</p> <p>G. Add pre-cooler or replace with larger dispenser.</p>

TROUBLE	CAUSE	REMEDY
4.13 Compressor does not start (no hum), condenser fan motor does not run and no ice bank.	<p>A. There is a five minute compressor and condenser fan delay.</p> <p>B. Faulty refrigeration relay PCB.</p> <p>C. Ice bank probe not completely submerged.</p> <p>D. Circuit breaker tripped.</p> <p>E. Inadequate voltage.</p> <p>F. PCB malfunctioning.</p> <p>G. Incorrect wiring.</p> <p>H. Faulty ice bank probe.</p> <p>I. Transformer failure.</p> <p>J. Ice bank probe not connected properly to PCB.</p>	<p>A. Allow for a five minute delay to lapse.</p> <p>B. Replace refrigeration relay PCB in control box.</p> <p>C. Fill water reservoir until water flows from overflow tube.</p> <p>D. Reset breaker. If problem persists, 1) determine reason and correct, 2) electrical circuit overloaded; switch to another circuit.</p> <p>E. Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rated voltage.</p> <p>F. Replace PCB assembly.</p> <p>G. Refer to wiring diagram and correct.</p> <p>H. Replace ice bank probe.</p> <p>I. Reset circuit breaker on top of control box. If breaker trips again, see Section 8.22.</p> <p>J. Connect ice bank probe to PCB.</p>
4.14 Compressor does not start (no hum), but condenser fan motor runs.	<p>A. Compressor relay or overload malfunctioning.</p> <p>B. Inadequate voltage.</p> <p>C. Incorrect wiring.</p> <p>D. Compressor malfunctioning.</p>	<p>A. Replace compressor relay or overload.</p> <p>B. Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rated voltage.</p> <p>C. Refer to wiring diagram and correct.</p> <p>D. Replace compressor.</p>
4.15 Compressor does not start but hums.	<p>A. Inadequate voltage.</p> <p>B. Incorrect wiring.</p> <p>C. Compressor relay malfunctioning.</p> <p>D. Compressor malfunctioning.</p>	<p>A. Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rated voltage.</p> <p>B. Refer to wiring diagram and correct.</p> <p>C. Replace compressor relay. Be sure to use correct relay. Failure to use correct relay will cause compressor failure.</p> <p>D. Replace compressor or deck.</p>

TROUBLE	CAUSE	REMEDY
4.16 Compressor starts but does not switch offstart winding (will run for only a few seconds before internal overload switches compressor off).	<p>A. Inadequate voltage.</p> <p>B. Incorrect wiring.</p> <p>C. Compressor relay malfunctioning.</p>	<p>A. Measure voltage across common and run terminal on compressor.</p> <p>B. Refer to wiring diagram and correct.</p> <p>C. Replace compressor relay. Be sure to use correct relay. Failure to use correct relay will causecompressor failure.</p>
4.17 Compressor starts and runs a short time but shuts off on overload.	<p>A. Dirty condenser.</p> <p>B. Insufficient or blocked air flow.</p> <p>C. Inadequate voltage.</p> <p>D. Incorrect wiring.</p> <p>E. Defective condenser fan motor.</p> <p>F. Refrigerant leak.</p> <p>G. Compressor malfunctioning.</p>	<p>A. Clean the condenser.</p> <p>B. Remove all obstructions and allow for minimum clearances of eight inches (20.3 cm) over top.</p> <p>C. Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rate voltage.</p> <p>D. Refer to wiring diagram and correct.</p> <p>E. Replace condenser fan motor.</p> <p>F. Repair and recharge.</p> <p>G. Replace compressor.</p>
4.18 Compressor runs normally, but water line is frozen.	<p>A. Low water level in water bath.</p> <p>B. Syrup in water bath.</p> <p>C. Water cage is out of position.</p> <p>D. Low refrigerant charge/slow refrigerant leak.</p>	<p>A. Add water to water bath until water runs out of overflow into drip tray.</p> <p>B. Drain water from water bath and refill with clean water.</p> <p>C. Reposition water cage.</p> <p>D. Find and repair leak. Recharge system.</p>
4.19 Compresor cycles on and off frequently during the initial pulldown and/ or normal operations.	<p>A. PCB malfunctioning.</p> <p>B. Defective probe.</p> <p>C. Air flow blocked.</p>	<p>A. Replace PCB assembly.</p> <p>B. Replace probe.</p> <p>C. Check to ensure proper air clearance is provided (see Section 1.4)</p>
4.20 Plain water flow is insufficient.	<p>A. Insufficient incoming supply water and/ or pressure.</p>	<p>A. Verify incoming supply water pressure is a minimum of zero PSI flowing.</p>
4.21 Suspect faulty PCB.	<p>A. PCB not receiving proper input voltage.</p> <p>B. Green light not flashing (off or continuously on).</p> <p>C. Yellow lights off and green light is on when key switch is on.</p>	<p>A. Check power from transformer on pins 4 and 5 of J10.</p> <p>B. Replace PCB.</p> <p>C. Check fuses F1 and F2. Also check connection at J10.</p>

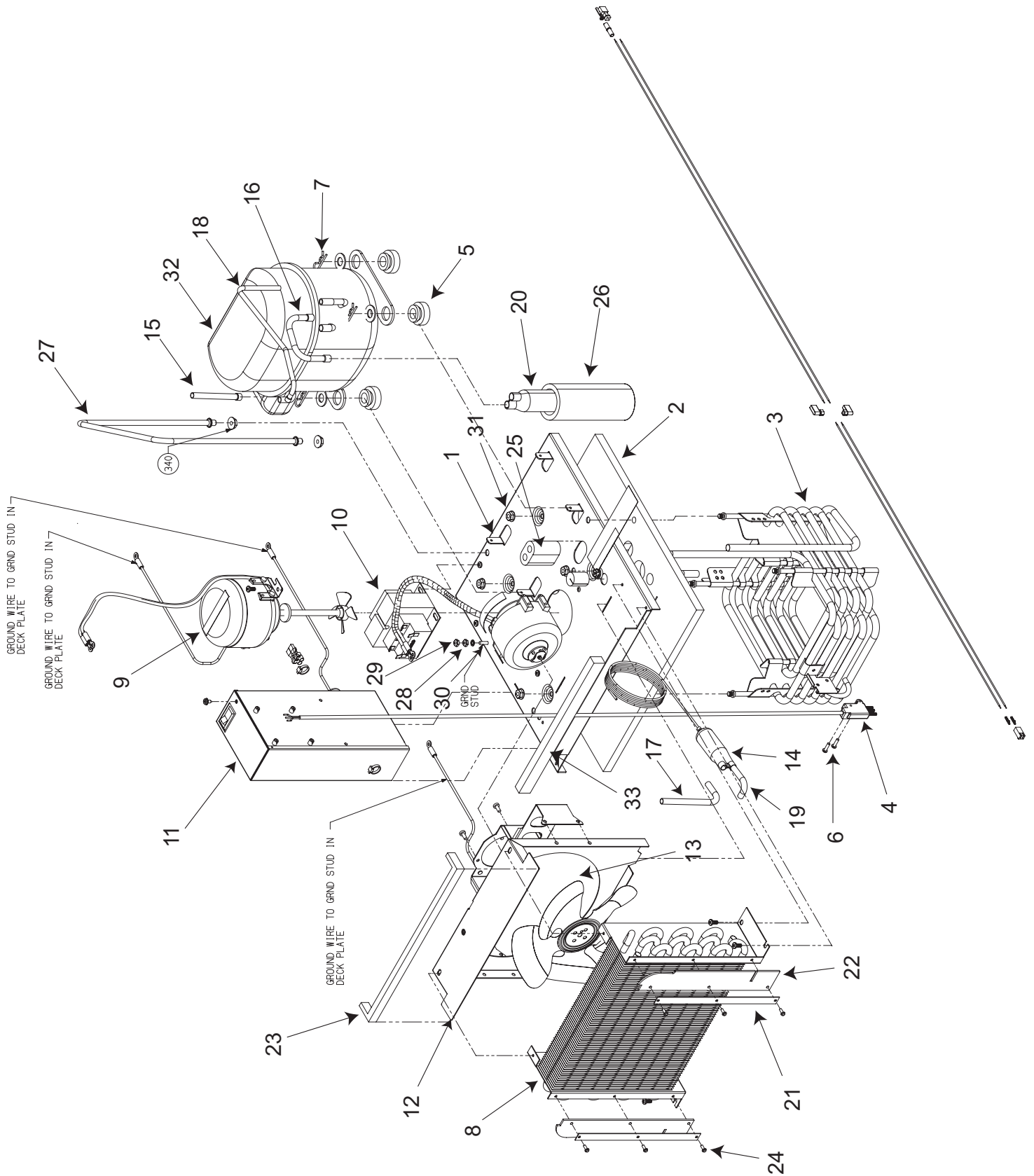
TROUBLE	CAUSE	REMEDY
4.22 Circuit breaker tripping.	<p>A. Pump is shorted.</p> <p>B. Refrigeration relay is bad.</p> <p>C. Secondary wire harness is bad.</p> <p>D. Transformer failure.</p>	<p>A. Disconnect pump and restore power. If breaker does trip, then pump is OK. If breaker does not trip, replace pump.</p> <p>B. Detect short by disconnecting J10 connector (24VAC input) from PCB. Restore power. If breaker doesn't trip, then replace refrigeration relay. If breaker does trip, then refrigeration relay is OK. Reconnect J10 connector.</p> <p>C. Detect short by disconnecting both secondary transformer fastons and restore power. If it does not trip, locate short in secondary harness between transformer and PCB.</p> <p>D. Detect short by disconnecting both primary transformer fastons and restore power. If breaker doesn't trip, replace transformer.</p>
4.23 BIB pump does not operate when dispensing valve is opened.	<p>A. Out of CO2, CO2 not turned on, or low CO2 pressure.</p> <p>B. Out of syrup.</p> <p>C. BIB connector not tight.</p> <p>D. Kinks in syrup or gas lines.</p>	<p>A. Replace CO2 supply, turn on CO2 supply, or adjust CO2 pressure to 70-80 PSI (0.483-0.552 MPA).</p> <p>B. Replace syrup supply.</p> <p>C. Fasten connector tightly.</p> <p>D. Straighten or replace lines.</p>
4.24 BIB pump operates but no flow.	<p>A. Leak in syrup inlet or outlet line.</p> <p>B. Defective BIB pump check valve.</p>	<p>A. Replace line.</p> <p>B. Replace BIB pump.</p>
4.25 BIB pump continues to operate when bag is empty.	<p>A. Leak in suction line.</p> <p>B. Leaking o-ring on pump inlet fitting.</p>	<p>A. Replace line.</p> <p>B. Replace o-ring.</p>
4.26 BIB pump fails to restart after bag replacement.	<p>A. BIB connector not on tight.</p> <p>B. BIB connector is stopped up.</p> <p>C. Kinks in syrup line.</p>	<p>A. Tighten BIB connector.</p> <p>B. Clean out or replace BIB connector.</p> <p>C. Straighten or replace line.</p>
6.27 BIB pump fails to stop when dispensing valve is closed.	<p>A. Leak in discharge line or fittings.</p> <p>B. Empty BIB.</p> <p>C. Air leak on inlet line or bag connector.</p>	<p>A. Repair or replace discharge line.</p> <p>B. Replace BIB.</p> <p>C. Repair or replace.</p>

TROUBLE	CAUSE	REMEDY
4.28 Low or no carbonation.	<p>A. Low or no CO₂.</p> <p>B. Excessive water pressure.</p> <p>C. Low water pressure.</p> <p>D. Worn or defective carbonator pump.</p>	<p>A. Check CO₂ supply. Adjust CO₂ pressure to 70 PSI (0.483 MPA).</p> <p>B. Water regulator should be set at 50 PSI (0.345 MPA)</p> <p>C. Water pressure must be 25 PSIG (0.175 MPA) flowing with carbonator pump running.</p> <p>D. Replace carbonator pump.</p>
4.29 Carbonator pump not running.	<p>A. Timed out.</p> <p>B. Fuse blown on PCB.</p> <p>C. Faulty carbonator probe.</p> <p>D. Air in carbonator.</p> <p>E. Faulty PCB.</p>	<p>A. Check water supply; turn machine off and on.</p> <p>B. Replace fuse F1 on PCB.</p> <p>C. Disconnect J14 connector from PCB. If pump runs with probe disconnected but will not run with carbonator empty and probe connected, replace probe.</p> <p>D. Purge carbonator (see Section 1.14).</p> <p>E. Replace PCB.</p>
4.30 Motor is not running.	<p>A. Time not set correctly on agitation board.</p>	<p>A. Ensure the LED light on the PCB board is turning on and off.</p> <p>If LED indicator is operating correctly, ensure the motor is connected to PCB board properly.</p> <p>Replace PCB.</p>

NOTES

5. ILLUSTRATIONS, PARTS LISTINGS, AND WIRING DIAGRAMS

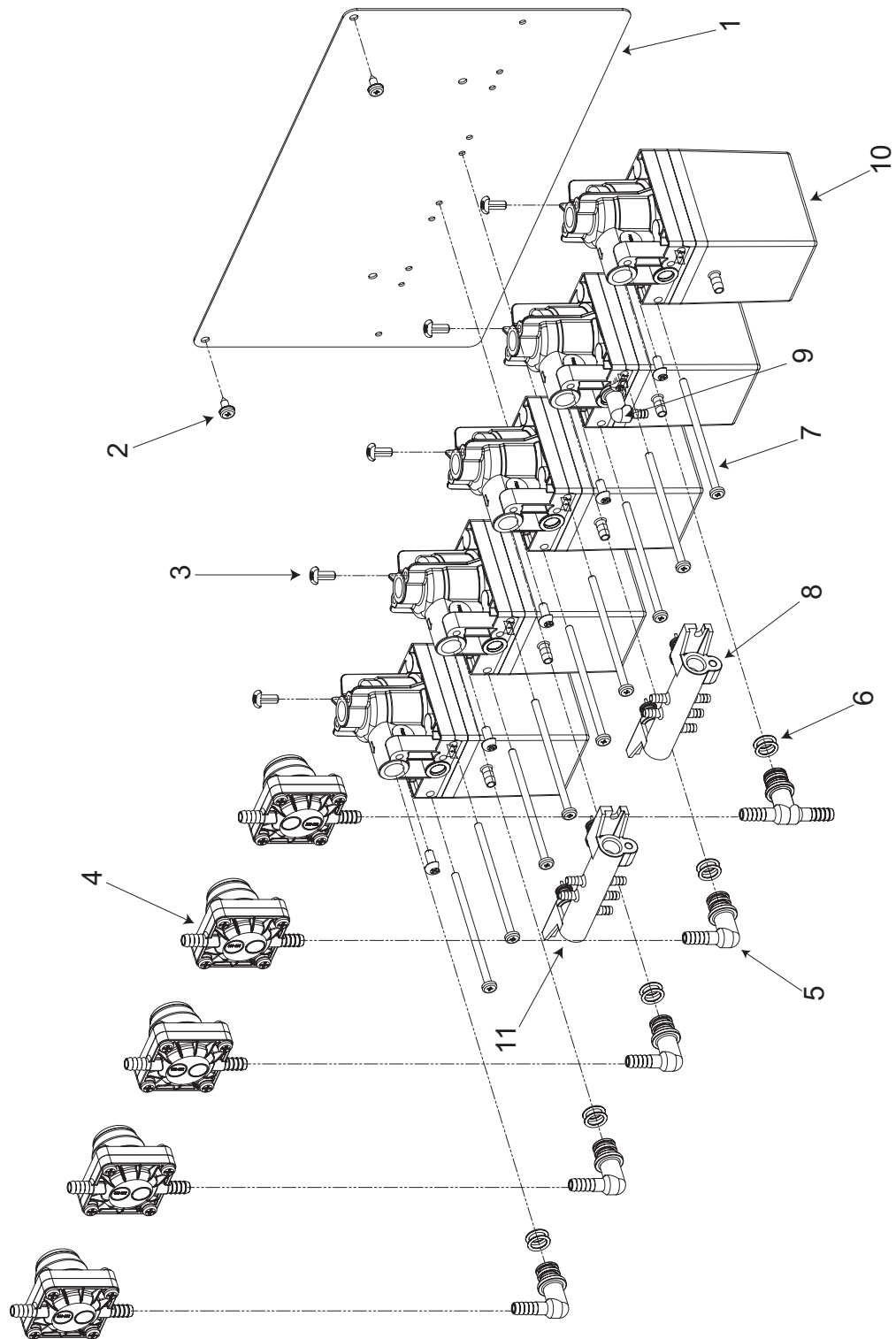
5.1 COMPRESSOR DECK ASSEMBLY



5.1 COMPRESSOR DECK ASSEMBLY (CONTINUED)

<u>Item</u>	<u>Part No.</u>	<u>Description</u>	<u>Item</u>	<u>Part No.</u>	<u>Description</u>
-	82-3891	Deck Assy, Comp, 230/50, Red 1	REF	12-0250	Overload
1	30-9872	Plate Assy, Compressor Deck, Red 1	REF	12-0026	Relay
2	50-0477	Insulation, Compressor Deck, Red 1	-	83-0047	Compressor Assy, 1/4HP, 220-240V/50Hz
3	82-1950	Coil Assy, Evaporator, Red 1	-	12-0345	Circuit Breaker, PNL MNT, 5 Amp (115V, 100V)
4	52-1773/02	Probe Assy, EIBC Series 2, CED	33	50-0347	Baffle, Condenser, Bottom
5	02-0114	Grommet, Compressor	-	50-0348	Insulation, Fill Hole
6	04-0394	Screw, 6 - 32 x 0.500, Phillips			
7	03-0150	Retainer, Clip, Convertible			
8	23-1112	Condenser, CCD, Red 1			
9	82-3897	Agitator Assy, Access, Red 1			
10	25-0048/01	Transformer, 230V/ 50-60Hz			
11	52-3231	Control Housing Assy, Red 1			
12	51-5380/01	Fan Shroud Assy, Red 1			
13	82-2735/01	Fan Assy, 220V/50-60Hz, 9W			
REF	07-0532	Fan Blade, 7.75", CW, UB, 30 Degree			
REF	02-0413	Silencer, 9W, Fan Motor QTY (2)			
REF	04-0060	Nut, Flat			
14	23-1144	Dryer/Cap Assy, 72"			
15	47-2238	Tube, Process, Compressor, Red 1			
16	47-2237/01	Tube, Suction, Red 1			
17	47-0344	Process Tube, Dryer, Red 1			
18	47-1655	Tube, High Side, Red 1			
19	47-1656	Tube, Condenser, Out, Red 1			
20	51-0061	Accumulator, 0.375 Holes			
21	30-6844	Retainer, Baffle, Condenser, Red 1			
22	50-0322/01	Baffle, Condenser, Side, Red 1			
23	50-0325	Baffle, Condenser, Top, Red 1			
24	04-0518	Rivet, 0.125 DIA x 0.328 LG, DH			
25	02-0040	Seal, Extrusion			
26	50-0211	Boot, 6", Delta II			
27	51-5423	Handle, Deck, Compressor, Red 1			
28	04-0576/01	Washer, Lock, Internal Tooth, No. 8, Type A, Steel			
29	04-0110	Nut, 8 - 32			
30	06-0877	Label, GROUND			
31	04-0753/01	Nut, Torq-Patch, 1/4 - 20 with Washer			
32	83-0047/01	Compressor Assy, 1/4HP, 240 - 220V/50Hz			
REF	12-0250	Overload			
REF	12-0060	Relay			
-	83-0045	Compressor Assy, 1/4HP, 115V/60Hz			

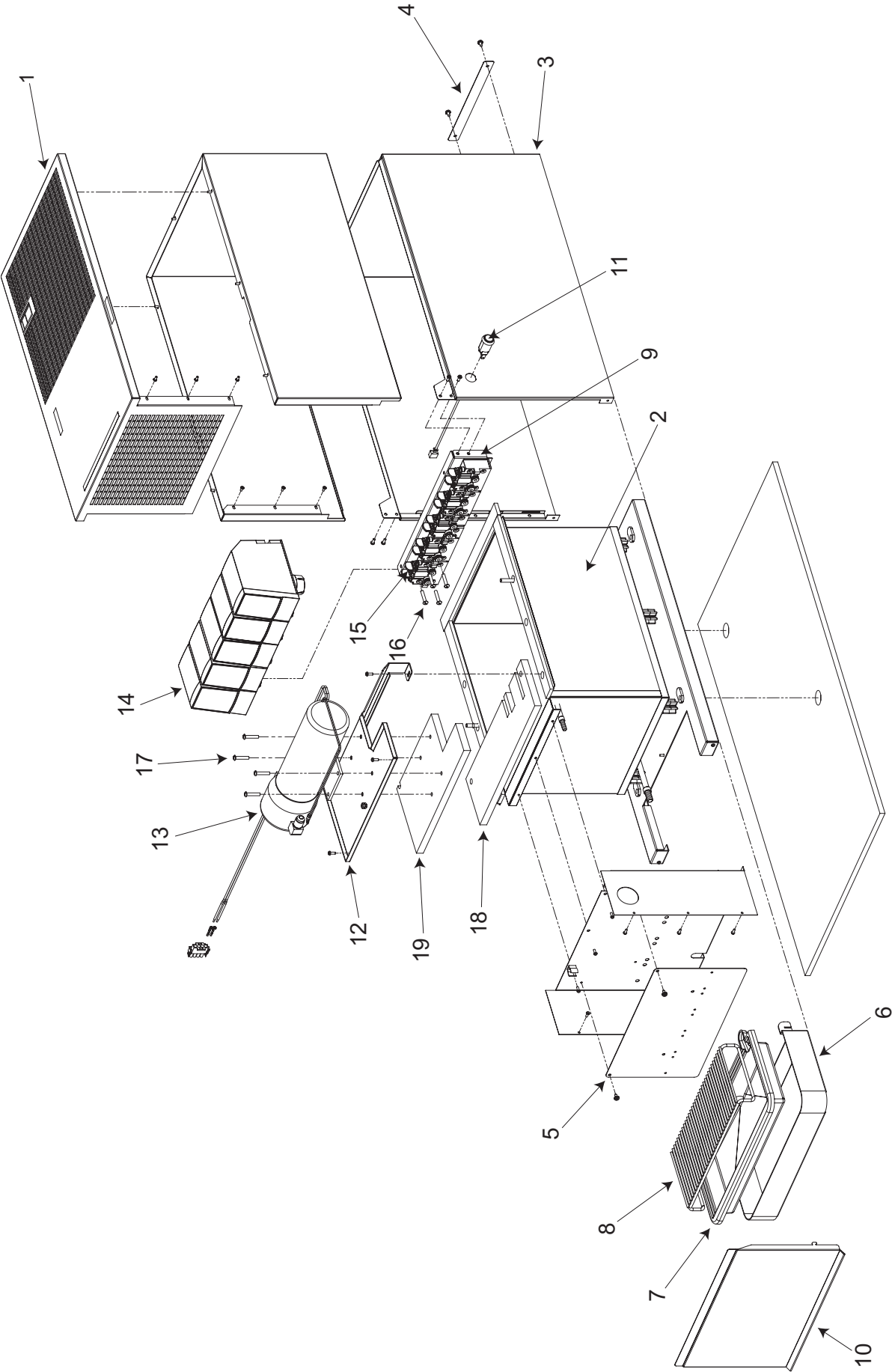
5.2 MINIPUMP ASSEMBLY (FIVE FLAVOR, PN 82-3900)



5.2 MINIPUMP ASSEMBLY (FIVE FLAVOR, PN 82-3900) (CONTINUED)

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
1	30-10046	Plate, Pump Sub-Assembly, Red 1
2	04-0504	Screw, 8 - 18 x 0.375
3	04-0275	Screw, 8 - 16 x 0.427
4	05-1687	Body, Cap, Housing, Dampener
5	01-1483	Elbow Assy, Syrup, 1/4 Barb
6	02-0089	O-Ring, 2-012, 97-0999
7	04-0359	Screw, 8 - 32 x 3.100, PHD, PH
8	54-0091	Manifold SubAssy, 5 Flavor, Black
9	01-1325/01	Fitting Assy, CO2, Check
10	82-0251	Pump Assy, Mini
11	54-0092	Manifold SubAssy, Gray

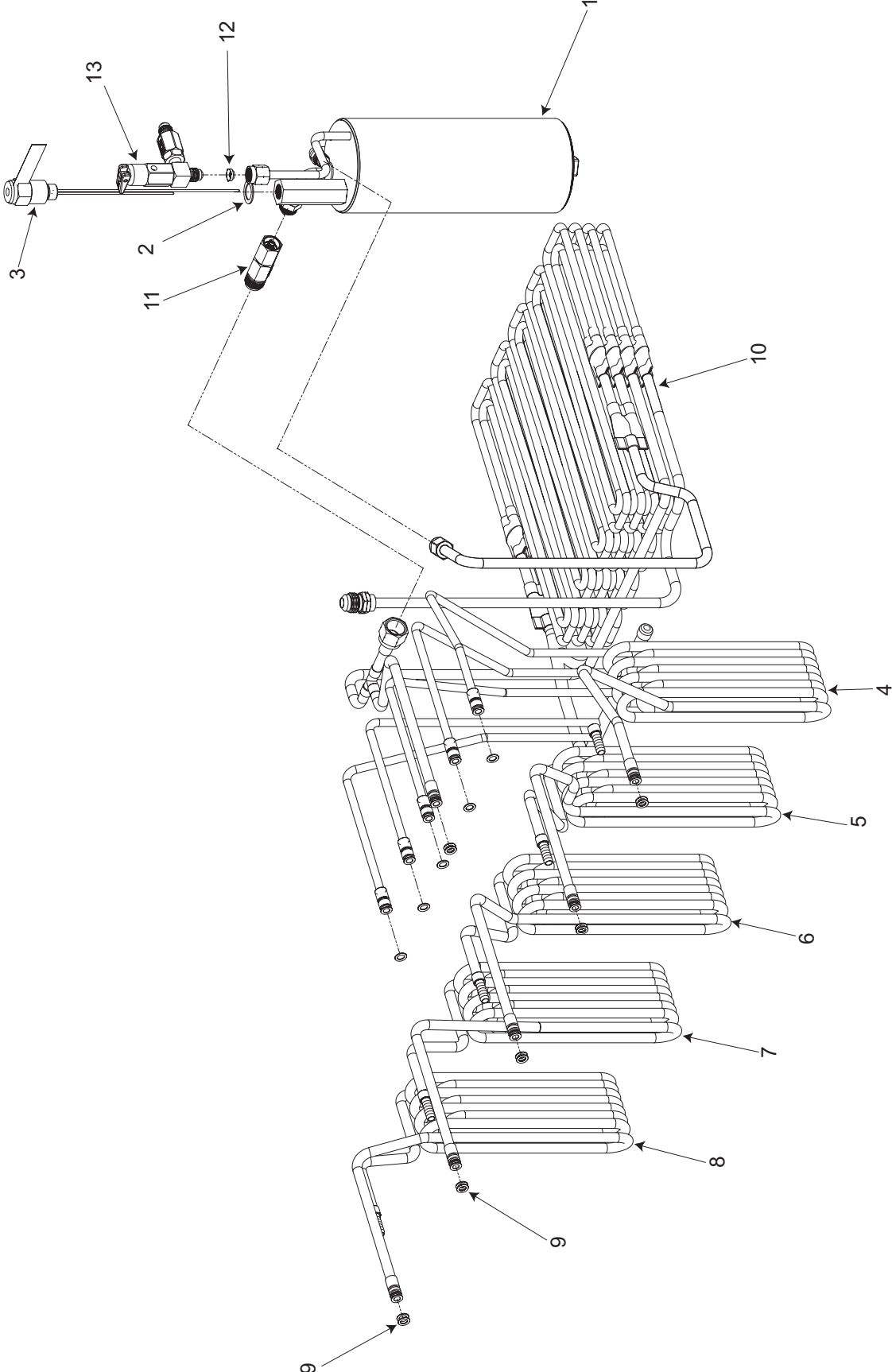
5.3 FOAM TANK/CABINET ASSEMBLY



5.3 FOAM TANK/CABINET ASSEMBLY (CONTINUED)

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
1	23-1461	Bonnet Assy, Red 1
2	42-0135	Foam Tank Assy, Red 1
3	30-9866	Wrapper, Main Unit, Red 1
4	30-9857	Plate, Rear Access, Red 1
5	30-10046	Plate, Pump Sub-Assembly, Red 1
6	30-9858	Base, Drip Tray, Red 1
7	05-2593-01	Drip Tray, No Drain, Red 1
8	23-1462	Cup Rest, Wire, Red 1
9	30-9864	Plate, Faucet, Red 1
10	30-9863	Plate, Splash, Red 1
11	12-0097	Switch, Key Lock, Maintain, Spade
12	30-15022	Bracket, Pump Mounting, Red 1
13	86-0164	Pump, Hi-Pressure, Red 1
14	19-0116/02	Valve Assy LEV
15	82-0274	Block, Mounting Assy, LEV
16	04-1089	Screw, 10 - 32 x 1.000
17	04-0778	Screw, 6 - 32 x .375, PH, PH, MS, SS, PL
18	50-0484	Insulation, Bath, Red 1
19	50-0478	Insulation, Carb Deck, Red 1

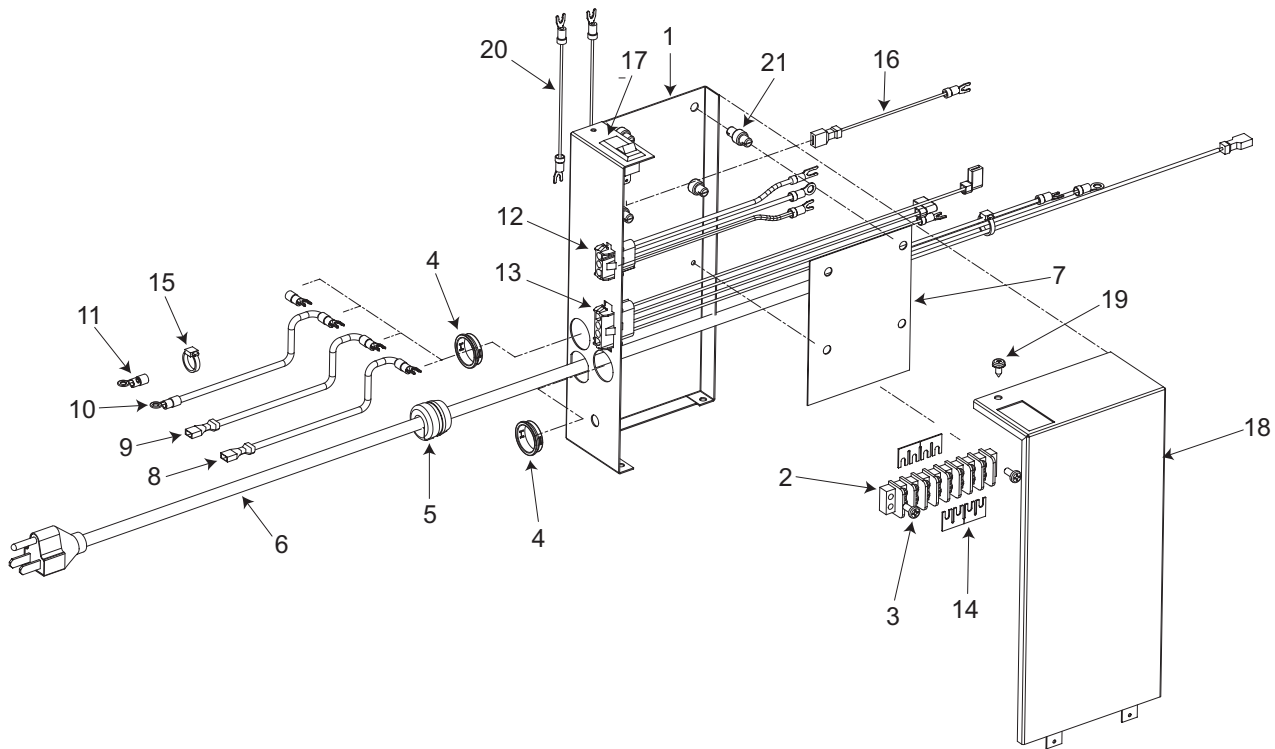
5.4 CARBONATOR, WATER/SYRUP LINE ASSEMBLIES



5.4 CARBONATOR, WATER/SYRUP LINE ASSEMBLIES

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
1	82-3884	Carbonator Assy
2	02-0096	Washer, Flat Plastic Probe
3	52-2224/01	Probe Assy, Carb, 600
4	48-2509	Tube Assy, Syrup #1, Red 1
5	48-2510	Tube Assy, Syrup #2, Red 1
6	48-2511	Tube Assy, Syrup #3, Red 1
7	48-2512	Tube Assy, Syrup #4, Red 1
8	48-2513	Tube Assy, Syrup #5, Red 1
9	02-0005	O-Ring
10	23-1457	Cage Assy, Water, Red 1
11	17-0341	Check Valve Assy, 3/8
-	01-0669	Body, Check Valve
-	01-0689	Sleeve
-	02-0003	O-Ring
-	03-0021	Spring
-	01-1466	Fitting, Check Valve
12	05-0011/01	Seal, Washer, 7/16-20M
13	17-0469	Relief Valve Assy, Carbonator
-	88-0013	Insulation, Tube, 6.750

5.5 CONTROL HOUSING ASSEMBLY (PN 52-3231)

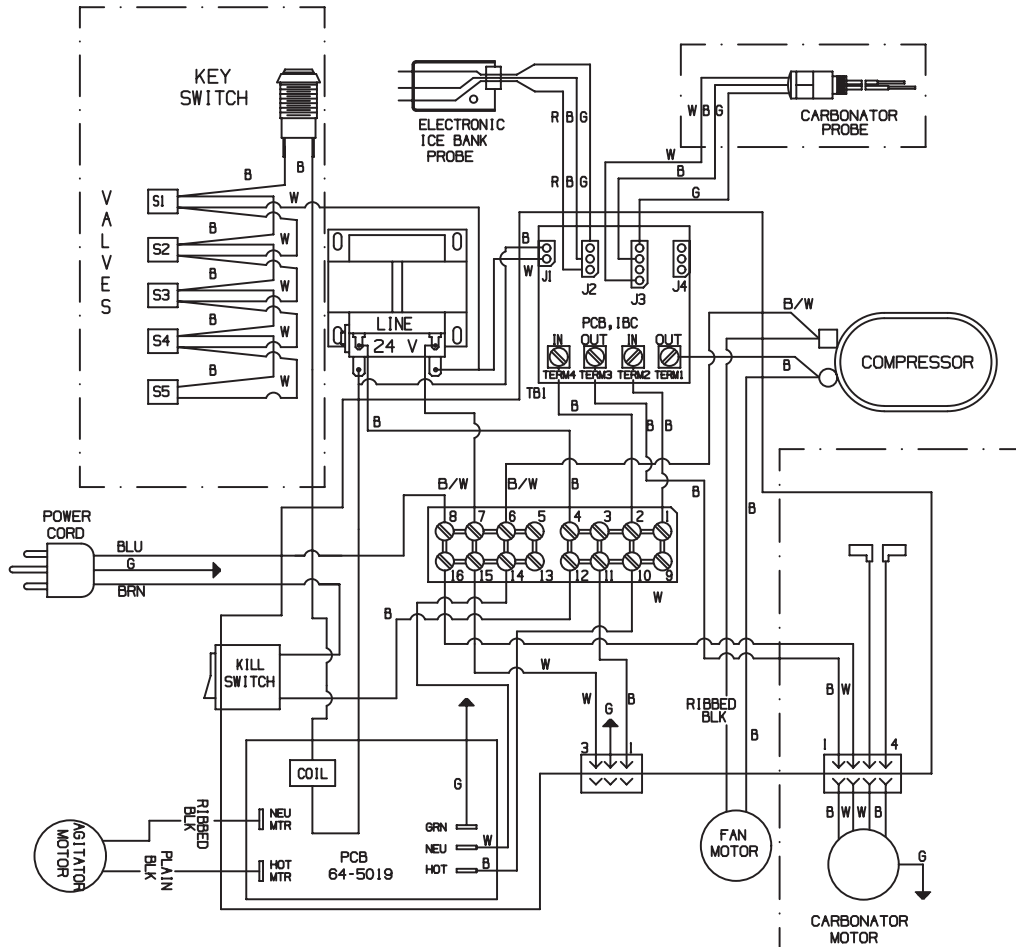


Item	Part No.	Description
1	30-5109/02	Housing, Control, Delta
2	12-0190	Block, Terminal, 16 Pos
3	04-0477	Scr, 8 - 32 x .375, PH, PH/S
4	13-0059	Bushing, 2850, Convert
5	13-0028	Relief, Strain, 7/8 Dia
6	15-1219	Power Cord Assy, New
7	52-1423/02	PCB Assy, Series II, EIBC
8	52-0904	Lead Assy, Transformer
9	52-0905	Lead Assy, Transformer
10	52-0906	Lead Assy, Compressor
11	52-0907	Lead Assy, Compressor
12	52-1210	Harness Assy, Recirc, Delta
13	52-0908	Harness Assy, Carb, Delta II
14	11-0186	Jumper, Terminal, 4 Circuit
15	11-0008	Tie, Wire
16	52-0868/01	Lead Assy, Kill Switch, Delta
17	12-0089	Switch, Kill, SPST
18	30-5108/01	Cvr, Cont Housing, W/Kill, Delta
19	04-0504	Scr, 8 - 18 x .375, PHD W/ELW, PH
20	52-2061	Lead Assy, EIBC, 2500
21	13-0047	STDR .250 Hartwell
22	64-5019	PCB Assy, ROHS, AGIT BD, RED ONE
23	05-1535	Support, PCB, 156 x .187
24	52-3221	Lead, PRI Trans, BLK/WHT, Red One
25	52-3222	Lead, PRI Trans, BLK, Red One
26	52-3213	Lead, Hot, Agit Cntrl
27	52-3214	Lead, Neut, Agit Cntrl
28	52-3059	Filter, Breaker, Lead, Ground

5.6 WIRING DIAGRAM, PN 06-3058

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 PUMP MOTOR. IF THE MOTOR HAS TIMED OUT, CHECK WATER SUPPLY AND RESET BY MOMENTARILY DISCONNECTING POWER.



SYM.	DESCRIPTION
	CHASSIS GROUND
	CHAMFER PIN
	CONTROL BOX

LANCER
 LABEL, WIRING DIAGRAM
 06-3058

6. DISPENSER DISPOSAL



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

LANCER[®]

Lancer Corp.

800-729-1500

Technical Support/Warranty: 800-729-1550

custserv@lancercorp.com

lancercorp.com