DELTA III DISPENSER SERIES 9000

Operation Manual

PN: 28-0437/04

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9006

Manual PN: 28-0437/04
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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.

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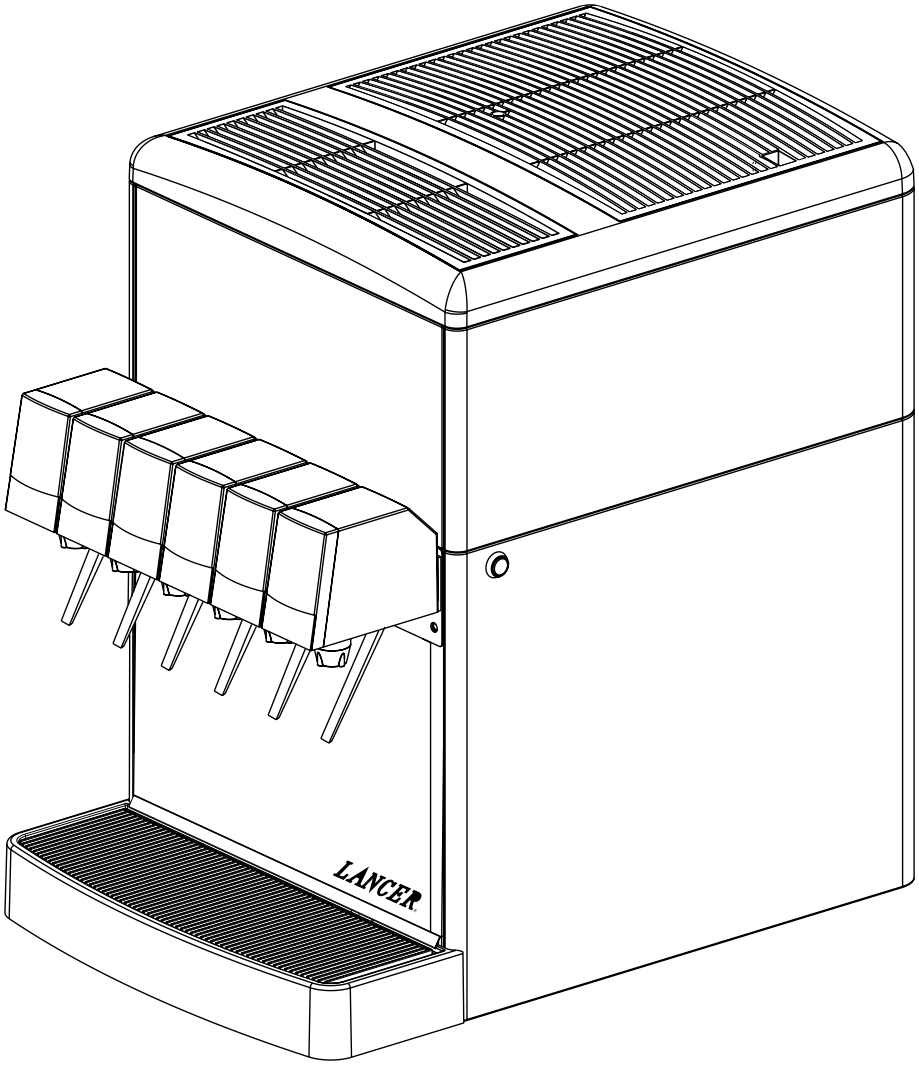
DELTA III SPECIFICATIONS



DIMENSIONS **Width:** 25 9/16 inches (649 mm) **Depth:** 25 7/8 inches (657 mm) **Height:** 16 7/8 inches (429 mm) **SPACE REQUIRED** **Left Side:** 4 inches (101.6 mm) **Right side:** 4 inches (101.6 mm) **Top:** 8 inches (203.2 mm) **Optional legs:** 4 inches (101.6 mm) **ELECTRICAL** 115VAC/60Hz/3 amps 220-230VAC/50-60Hz/1.5 amps	**WEIGHT** **Empty:** 146 pounds (66.2 kg) **Operating:** 220 pounds (99.8 kg) **Shipping:** 160 lbs (72.5 kg) **ICE** **Capacity:** 25 - 28 pounds (11.3 to 12.7 kg) **FITTINGS** **Water for carbonator inlet:** 3/8 in barb **Plain water inlet:** 3/8 in barb **Brand syrup inlets:** 3/8 in barb **CO2 inlet:** 3/8 in barb	**PLAIN WATER SUPPLY** **Min flowing pressure:** 20 PSI (0.138 MPA) **Soda Water:** Per carbonator manufacturer recommendations. **CARBON DIOXIDE (CO2)** **Min pressure:** 70 PSIG (0.483 MPA) **Max pressure:** 80 PSIG (0.552 MPA)

DRINK CAPACITY	**CONDITION C** (90°F (32°C), 65%RH)	**CONDITION D** (105°F (41°C), 75%RH)
2-12 ounce drinks below 40°F (4.4°C)	125 drinks	115 drinks
4-12 ounce drinks below 40°F (4.4°C)	97 drinks	92 drinks

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	
□ Oetiker Pliers	□ Slotted Screwdriver
□ Tubing Cutters	□ Phillips Screwdriver
□ Wrench	□ Cordless Drill

POST MIX ACCESSORIES	
□ CO2 Regulator Set	□ CO2 Supply
□ Beverage Tubing	□ Oetiker Clamps/Fittings
□ Water Booster	□ Water Regulator
□ Precision Cutters (if removing/replacing carbonator tank)	

BIB SYSTEM	
□ BIB Rack	□ BIB Regulator Set
□ BIB Syrup Boxes	
□ BIB Connectors - ensure you have the correct connectors for syrup lineup.	

CONSIDER LOCATION OF THE FOLLOWING PRIOR TO INSTALL	
□ Water supply lines	□ Drain
□ Is the countertop level?	□ Heating and air conditioning ducts
□ Grounded electrical outlet.	
□ Enough space to install the dispenser. Include space for a top-mounted ice machine, if necessary.	
□ Does the top-mounted ice machine have a minimum clearance on all sides?	
□ Located away from direct sunlight or overhead lighting.	
□ 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.	
□ 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 105°F (4°C to 41°C). Do not operate unit below minimum ambient operation conditions. Should freezing occur, cease operation of the unit and contact aurthorized 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 105°F (4°C a 41°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 105°F (4°C à 41°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 ±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 tin/dad ha sido saneada en fabrica por las especificaciones de Lancer.

A continuacion se relacionan 6 puntos importantes para una connecta 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'NSTALLATION DU DISTRIBUTEUR DE SODAS

La proprètè da cet ensamable est assurè à l'usine sulvant les spècifications 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 dèborde par le tuyau de trop-plein du rèservoir.
2. Le moteur de la pompe du carbonateur doit etre dèbranchè de l'alimentation èlectrique (Voir le manuel, Section 1.7) avant l'arrivèe de l'eau pour la formation initiale de la glace. Oublier ou nègliger cette opèration provoquera l'arret automatique du carbonateur (voir le point 6 cidessous) ou causera des dommages à la pompe.
3. Si le distributeur es installè dans une zone ou la tension èlectrique nominale est susceptible de variations de (+) 10%, il est conseillè 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 ècoulè. Lorsque le courant èlectrique es interrompu, il y a toujours un dèlai 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 unitès qui n'ont pas de règulateur de pression d'eau incorprè, si la pression d'H2O est supèrieure à 50 PSIG (0.345 MPA), un règulateur de pression d'eau doit etre utilsisè.
6. Sur les unitès avec règulateur d'eau incorporè, le règulateur doit etre enlevè si la pression d'arrivve est inferièure 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 códi- gos 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 /El ANHÍDRIDO CARBÓNICO/ DIOXYDE DE CARBONE

Carbon Dioxide (CO_2) is a colorless, noncombustible gas with a light pungent odor. High percentages of CO_2 may displace oxygen in the blood. Prolonged exposure to CO_2 can be harmful. Personnel exposed to high concentrations of CO_2 gas will experience tremors which are followed by a loss of consciousness and suffocation. If a CO_2 gas leak is suspected, immediately ventilate the contaminated area before attempting to repair the leak. Strict attention must be observed in the prevention of CO_2 gas leaks in the entire CO_2 and soft drink system.

El anhídrido carbónico (CO_2) es un gas incoloro, no combustible, con un olor pungente ligero. Altos porcentajes de CO_2 en la sangre pueden desplazar el oxígeno en la sangre. La exposición prolongada al CO_2 puede ser nociva. El personal expuesto a concentraciones altas de CO_2 sufre temblores seguidos de la pérdida de la consciencia y sofocación. Si se sospecha que existe una pérdida de CO_2, ventile el área contaminada antes de tratar de reparar la pérdida. Hay que prestar suma atención para evitar pérdidas de CO_2 en todo el sistema de CO_2 y de bebidas gaseosas.

Le dioxyde de carbone (CO_2) est plus lourd que l'air et déplace l'oxygène. Le CO_2 est un gaz incolore et incombustible, ayant une odeur un peu âcre. Des concentrations fortes de CO_2 peuvent déplacer l'oxygène dans le sang. Une exposition prolongée au CO_2 peut être nocive. Le personnel exposé à de fortes concentrations de CO_2 gazeux éprouvera des tremblements, suivis rapidement d'une perte de conscience et de suffocation. On doit faire très attention de prévenir les fuites de CO_2 gazeux dans le système entier de CO_2 et de boisson gazeuse. Si on suspecte qu'il y a une fuite de CO_2 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 compartimiento 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 550 LPC (0.345 MPA) avec le régu- lateur de pression fourni. Utilisez un filtre dans la conduite d'eau pour éviter des dommages à l'équipement et un goût des boissons qui n'est pas juste. Vérifiez le filtre à eau périodiquement, selon les exigences des conditions locales. L'alimentation en eau doit être protégée au moyen d'un intervalle d'air, un disconnecteur hydraulique (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 RECEIVING

Each unit is tested and thoroughly inspected before shipment. At the time of shipment, the carrier accepts the unit and any claim for damages. Upon receiving units from the delivering carrier, the customer should carefully inspect carton for visible indication of damage. If damage exists, have the carrier note the damage on the bill of lading and file a claim with the carrier.

1.2 UNPACKING

A. Cut steel band and remove.
B. Remove top portion of carton by lifting up.
C. Remove accessory kit and loose parts from top packaging.
D. Remove top inner carton pad and corners.
E. Lift unit up by plywood shipping base and remove lower portion of carton.
F. Inspect unit for concealed damage. If evident, notify delivering carrier and file a claim against the carrier.
G. Remove plywood shipping base from unit by moving unit so that one side is off the counter top or table allowing access to screws on the bottom of the plywood shipping base.

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

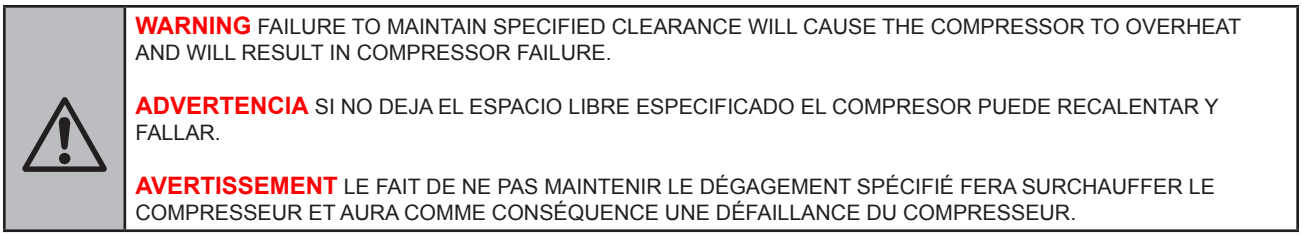
H. If unit is to be installed with optional legs, assemble legs to unit by tilting unit. DO NOT LAY UNIT ON ITS SIDE OR BACK.

1.3 UNPACKING INSTALLATION KITS

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

1.4 SELECTING A COUNTER LOCATION

A. Select a location close to a properly grounded electrical outlet and water supply that meet the requirements as shown in the section, SPECIFICATIONS.



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 from the front half of the top cover, and discharged out the rear half of the top cover. A minimum of eight (8) inches (203 mm) clearance must be maintained over the top of the unit to provide for proper air flow and air circulation.

1.5 INSTALLING THE DISPENSER

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

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

B. When the dispenser is to be permanently bolted to the counter top, the dispenser base must be sealed to the counter top with a bead of clear silicone caulk or sealant which provides a smooth and easily cleanable bond to the counter.
C. For installation using the unit legs, use Lancer kit (PN 82-1704).

1.6 LEVELING THE DISPENSER

In order to facilitate proper dispenser drainage and carbonation, ensure that the dispenser is level, front to back and side to side. Place a level on the top of the rear edge of the dispenser. The bubble must settle between the level lines. Repeat this procedure for the remaining three sides.
Level unit if necessary. For optimum performance place the unit at a 0 degree tilt. The maximum tilt is 5 degrees.

1.7 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 and replace the unit's drip tray.

1.8 FILLING UNIT WITH WATER

A. Remove the bonnet from the unit.
B. Remove the (yellow) plastic plug (located in the front of the unit's compressor deck) from the unit's fill hole.
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.

CAUTION THE WATER BATH COMPARTMENT MUST BE FILLED WITH WATER BEFORE PLUGGING IN THE UNIT, OTHERWISE THE COMPRESSOR DECK AND CONDESOR FAN MAY NOT OPERATE PROPERLY

PRECAUCIÓN EL COMPARTIMIENTO DE BAñO DE AGUA DEBA ESTAR LLENO DE AGUA ANTES DE ENCHUFAR LA UNIDAD PUES, DE LO CONTARIO, LA PLATAFORMA DEL COMPRESOR Y EL VENTILADOR DEL CONDENSADOR NO FUNCIONARíAN CORRECTAMENTE.

ATTENTION LE COMPARTIMENT DE BAIN-MARIE DOIT ÊTRE REMPLI AVEC DE L'EAU AVANT DE BRANCHER L'APPAREIL, SINON LA PLATEFORME DU COMPRESSEUR ET LE VENTILATEUR DU CONDENSATEUR PEUVENT NE PAS FONCTIONNER CORRECTEMENT.

D. Replace the plastic plug.

1.9 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 four pin connector located near the top of the electrical control box on the refrigeration deck.
B. Route and plug the power supply cord to a grounded electrical outlet that supplies the proper voltage and amperage rating for this 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 have a five (5) minute delay.

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.

1.10 CONNECTING TO WATER SUPPLY - CARBONATED WATER INLET

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

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

NOTE: If the water source is above 50 PSIG (345 kPa, 3.52 kg/cm2, 3.45 BAR), cut tubing assembly and install Water Regulator Kit (PN 18-0253/02) as shown in kit instruction sheet.

C. Route tubing through hole in counter and through opening behind splash plate and connect to carbonator pump using a flare seal washer (PN 05-0017). Use a back-up wrench to prevent damage to carbonator pump.
D. Leave 12 inches (305 mm) of extra tubing length below the counter for servicing and moving the dispenser.
E. Turn on water supply and check for leaks.
F. Using test gauge assembly (PN 22-0138), set regulator at a maximum of 50 PSIG (3.52 kg/cm2).

1.11 CONNECTING TO WATER SUPPLY - PLAIN WATER INLET

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

A. Using appropriate tubing and fittings, connect plain water supply line to water source. DO NOT CONNECT TO DISPENSER AT THIS TIME
B. Flush plain water supply line thoroughly.
C. Route tubing through hole in counter and through opening behind splash plate and connect to check valve on plain water inlet (labeled “Water”). Use a back-up wrench to prevent damage to the check valve or water line.
D. Leave 12 inches (305 mm) of extra tubing length below the counter for servicing and moving the dispenser.
E. Turn on water supply and check for leaks.

1.12 CONNECTING THE CO2 SUPPLY

A. Verify the CO2 tank valve is in the closed position. Connect the high pressure CO2 regulator assembly to CO2 cylinder. Use a new CO2 tank washer if regulator does not have built-in o-ring seal.
B. Place CO2 cylinder upright in a cool service location (under counter, etc.), and secure it with a safety chain.
C. Using tubing and fittings from installation kit connect tubing assembly to tank mount regulator using flare seal washer (PN 05-0011). Use a back-up wrench to prevent damage to regulator assembly.
D. Route gas line through hole in counter and through opening behind the dispenser splash plate. Leave 12 inches (305 mm) of extra tubing length below the counter for servicing and moving the dispenser.
F. Remove the protective plug from the CO2 manifold (located on top of mini pumps on left side of unit) and connect the CO2 supply line using a 1/4 inch elbow (supplied in installation kit.)

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 dispenser does not have built in syrup pumps, connect directly to the carbonator CO2 inlet check valve.
H. Attach a CO2 supply line from each of the figal syrup containers to the low pressure regulator and pressurize the containers.

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

WARNING THE SYRUP INLET TUBE ASSEMBLIES (SHIPPED WITH THE INSTALLATION KIT) ARE EIGHT (8) FEET (2.4 M) 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 (8) FEET (2.4 M). IF EITHER THE HEIGHT OF PUMPS OR LENGTH OF INLET LINE LIMITATIONS IS EXCEEDED, REMOTE SYRUP PUMPS OR PRESSURIZED SYRUP CONTAINERS SHOULD BE USED.

ADVERTENCIA LOS CONJUNTOS DE TUBERÍA DE ENTRADA DE SYRUP (SUMINISTRADOS CON EL KIT DE INSTALACIÓN) TIENEN OCHO (8) PIES (2,4 M) DE LARGO. ESTAS LÍNEAS SE PUEDEN EXTENDER HASTA UN MÁXIMO DE 12 PIES (3,7 M). LA ALTURA MÁXIMA DE LAS BOMBAS POR ENCIMA DEL PAQUETE BIB MÁS BAJO NO DEBE SUPERAR LOS OCHO (8) PIES (2,4 M). SI SE SUPERAN LAS LIMITACIONES EN CUANTO A LA ALTURA DE LAS BOMBAS O EL LARGO DE LA LÍNEA DE ENTRADA, HAY QUE USAR CONTENEDORES DE SYRUP PRESIONIZADOS O BOMBAS DE SYRUP REMOTAS.

AVERTISSEMENT LES GROUPES DE TUBE D'ENTRÉE DE SIROP (EXPÉDIÉES AVEC LA TROUSSE D'INSTALLATION) SONT HUIT (8) PIEDS (2,4 M) DE LONG. CES LIGNES PEUVENT ÊTRE PROLONGÉES JUSQU'À UN MAXIMUM DE 12 PIEDS (3,7 M). LA HAUTEUR MAXIMUM DES POMPES AU-DESSUS DU SAC DE CONCENTRÉ LE PLUS BAS NE DOIT PAS DÉ PASSER HUIT (8) PIEDS (2,4 M). SI LA HAUTEUR DES POMPES OU LA LIMITE DE LONGUEUR DE LA CONDUITE D'ENTRÉE EST DÉPASSÉE, DES POMPES DE SIROP À DISTANCE OU DES CONTENEURS DE SIROP PRESSURISÉS DOIVENT ÊTRE UTILISÉS.

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 clean 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 to the BIB syrup supply.
D. Dip hose connectors in a cup of warm, clean water.
E. Attach the BIB hose connectors to the appropriate syrup flavor.

1.14 CONNECTING TO BAG-IN-BOX (BIB) SYRUP SUPPLY TO REMOTE SYRUP PUMPS

A. To connect CO2 regulator assembly to the CO2 cylinder, see Section 1.11, Steps A - C.
B. Place the remote BIB syrup supply and pumps in a convenient location.
C. Attach the syrup supply tubes 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.
D. Route the syrup supply tubes to the remote syrup pumps.
E. Complete installation of the remote syrup pump system following the manufacturer's instructions.

1.15 CONNECTING TO REMOTE PRESSURIZED SYRUP SUPPLY (FIGAL)

A. To connect CO2 regulator assembly to the CO2 cylinder, see Section 1.11, Steps A - C.
B. Place the five gallon (figal) syrup containers and the CO2 cylinder and regulator set in a convenient location.
C. 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.
D. Route the syrup supply tubes to the figal syrup containers and attach them to the appropriate syrup flavor.

1.16 PURGING THE CARBONATION SYSTEM

A. Set the adjustable back blocks to deliver carbonated water (see Section 1.20).
B. The relief valve for the built-in carbonator is located on the right hand side of the unit's carbonator deck. Lift the yellow lever on the top of the relief valve until water flows from the holes in the relief valve. Then release the relief valve.
C. Reconnect the control box to the carbonator pump.
D. Back off on 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 (0.510 MPA).
E. Activate a dispensing valve until water and syrup are flowing steadily from the valve.
F. Repeat procedure "D" for each valve.
G. Check all of the unit's syrup, water and CO2 connections for leaks and repair if necessary.

NOTE: To check for CO2 leaks, close the valve on the CO2 tank and observe for five (5) minutes if the pressure to the system drops. Open the cylinder valve after check.

H. Replace the unit's bonnet, splash plate and cup rest.

1.17 PURGING THE WATER AND SYRUP SYSTEMS

A. Set the adjustable back blocks to deliver plain water (see Section 1.20).
B. Open a dispensing valve until water and syrup are flowing steadily from the valve.
C. Repeat procedure “A” for each valve.
D. Check all of the unit’s syrup and water connections for leaks and repair if necessary.
E. Replace the unit’s bonnet, splash plate and cup rest.

1.18 ADJUSTING WATER FLOW (LEV®)

A. 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.
B. 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.
C. Slide up ID panel until flow controls are exposed (see Figure 1)
D. Remove nozzle by twisting counter clockwise and pulling down.
E. Remove diffuser by pulling down.
F. Install Lancer (yellow) syrup separator (PN 54-0031) in place of nozzle.
G. Activate dispensing valve to fill separator syrup tube.
H. 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
I. To obtain the proper flow, use a screwdriver to adjust water flow control (see Figure 1).
J. Repeat process for each valve.

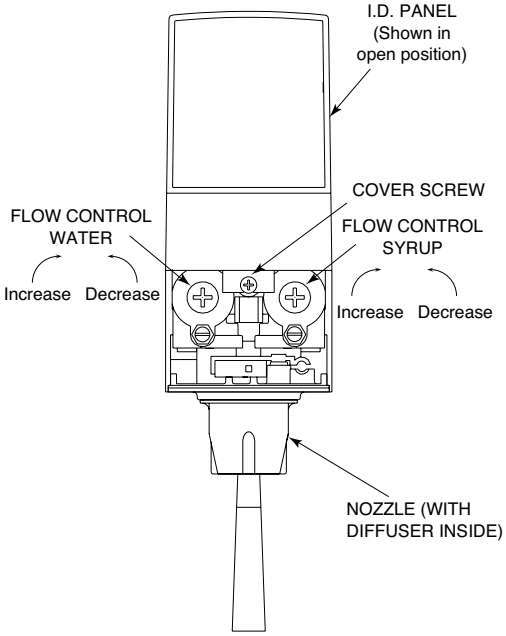


Figure 1
Typical Valve Adjustment, LEV®

1.19 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 1).
C. Once proper ratio is obtained repeat to verify.
D. Remove syrup separator (PN 54-0031 installed in Section 1.18.F above).
E. Install diffuser and nozzle.
F. Slide down ID panel.
G. Repeat process for each valve.

1.20 VOLUMETRIC VALVE ADJUSTMENT

NOTE: The ***Volumetric Valve*** is an optional valve with the Delta III Dispenser (Fig. 2).

A. Valve Specifications

1. Finished Drink Flow Rates
   3.0 ounces per second (88.7 ml/sec), as shipped
   2.25 ounces per second (66.6 ml/sec)
   1.5 ounces per second (44.4 ml/sec)

2. Flowing Pressure Requirements

	MINIMUM	**MAXIMUM**
Water	40 PSIG (0.276 MPA)	110 PSIG (0.758 MPA)
Syrup	20 PSIG (0.138 MPA)	70 PSIG (0.483 MPA)

3. Electrical Requirement: 24 VAC, 50/60Hz

1.20 VOLUMETRIC VALVE ADJUSTMENT - CONTINUED

B. Programmer Operating Procedures

1. Connecting
   a. Remove the ID panel from the front of the valve.
   b. Insert the programmer's 10-pin connector into the ID Panel plug on the front of the circuit board.
   c. When properly connected, the programmer will run a self diagnostic test. The display will show all "8"s with the decimal points lighted.
      After three (3) seconds, the display indicates the setting of the dip switches.
   d. If the programmer does not run its diagnostic test properly, disconnect it and try plugging it in again. If the programmer still fails, replace the programmer.
2. Functions

Figure 2
Handheld Programmer, Volumetric Valve

Read Memory: Press this button to read and display the current settings programmed into the valve memory (i.e., S/W revision, ratio, andcarb/non carb settings).

Read Dip Switches: Press this button to read the dip switch settings (applies only to valves manufactured before July 1997). nOTE: Dip switches were used on some field test valves (refer to 28-0301, 12/20/95).

Write Memory: Press this button to write the programmer's displayed ratio and carbonation settings into the valve's memory.

Timed 5 Second Water: Press this button to pour water for five (5) seconds. The programmer will display the ratio, the counts from the flowmeter, the flow rate in oz/sec, and the flow rate in ml/sec.

Timed 5 Second Pour: Press this button to dispense a five (5) second pour of water and syrup for ratio testing. When complete, the programmer displays the ratio, carbonation settings, and total Flowmeter counts.

Syrup Purge: Press and release to dispense a six (6) second syrup purge. Continue holding to purge syrup from system.

Ratio + (Plus): Pressing this button will increase the ratio number on the display.

Ratio - (Minus): Pressing this button will decrease the ratio number on the display.

Carb Toggle: Pressing this button will toggle the carbonation setting from carbonated "C" to plain water "n" (non-carbonated).

Pour/Stop: Press this button to manually pour a mixed drink. This button will also stop a timed pour.

1.20 VOLUMETRIC VALVE ADJUSTMENT - FUNCTIONS, CONTINUED

C. Setting the Ratio/Carbonation
   1. Connect the programmer to the Valve.
   2. Press the “Read Mem” button.
   3. Press the “Ratio +” or the “Ratio -” key until the desired ratio is displayed.
   4. Verify the drink type. Press “Carb Toggle”to select “C” for carbonated or “n” for non-carbonated.
   5. Press the “Enter” button to program the valve with the setting on the display.
   6. Verify Ratio by pressing “Read Mem”.
   7. Disconnect the programmer.

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

A. For a six-valve unit, valves 3, 4, and 5 can be set to deliver either plain or carbonated water. On a five-valve unit, valves 3 and 4 are adjustable. Refer to Figure 3 or to the label on the front support plate behind the splash plate.

B. 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 shutoff.

C. Be sure the shut-off stem is fully turned to the desired position, or the flow of water will be restricted.

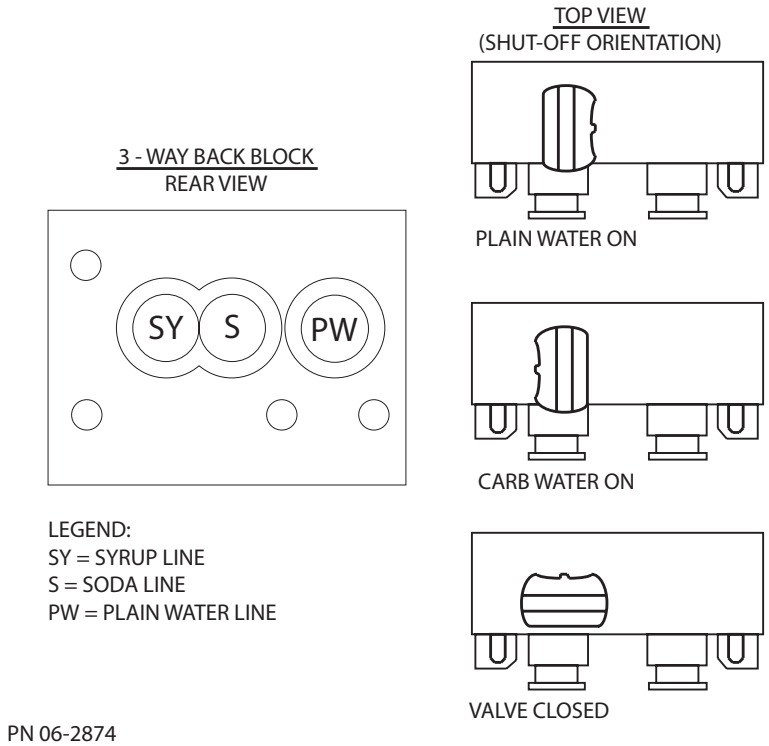


Figure 3
Setting 3-Way Adjustable Back Blocks

2. CLEANING AND SANITIZING

2.1 GENERAL INFORMATION

Lancer equipment is shipped from the factory cleaned and sanitized in accordance with NSF guide lines. After installation, it is the responsibility of the installer to clean and sanitize the dispenser again. The operator of the equipment must provide continuous maintenance as required by this manual and state and local health department guidelines to ensure proper operation and sanitation requirements are maintained.

For optimum dispenser performance and highest drink quality, follow the instructions listed for cleaning your dispenser. Cleaning and sanitizing should be accomplished only by trained personnel. If other equipment is being cleaned, follow the guidelines established by the manufacturer for that equipment.

USE SANITARY GLOVES.
OBSERVE APPLICABLE SAFETY PRECAUTIONS.

- ⃠ **DO NOT USE A WATER JET TO CLEAN OR SANITIZE THE UNIT**
- ⃠ **DO NOT DISCONNECT WATER LINES WHEN CLEANING AND SANITIZING SYRUP LINES, TO AVOID CONTAMINATION.**
- ⃠ **DO NOT USE STRONG BLEACHES OR DETERGENTS; THESE CAN DISCOLOR AND CORRODE VARIOUS MATERIALS.**
- ⃠ **DO NOT USE METAL SCRAPERS, SHARP OBJECTS, STEEL WOOL, SCOURING PADS, ABRASIVES, OR SOLVENTS ON THE DISPENSER.**
- ⃠ **DO NOT USE HOT WATER ABOVE 140º F (60º C). THIS CAN DAMAGE THE DISPENSER.**
- ⃠ **DO NOT SPILL SANITIZING SOLUTION ON ANY CIRCUIT BOARDS. INSURE ALL SANITIZING SOLUTION IS REMOVED FROM THE SYSTEM.**

2.2 CLEANING SOLUTION

Mix a mild, non-abrasive detergent (e.g. Sodium Laureth Sulfate, dish soap) with clean, potable water at a temperature of 90 to 110°F (32 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. Rinsing must be thorough, using clean, potable water at a temperature of 90 to 110°F (32 to 43°C). Extended lengths of product lines may require that an additional volume of cleaning solution be prepared.

2.3 SANITIZING SOLUTION

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

OTHER SUPPLIES NEEDED:

- Sanitary gloves
- Clean cloth towels
- Extra nozzle
- Bucket
- Small brush (PN 22-0017), included with installation kit

2.4 SCHEDULED MAINTENANCE

AS NEEDED

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

DAILY

A. Remove the nozzle and diffuser from each valve and wash them in warm water.
B. Remove the cup rest and wash in warm soapy water.
C. Pour warm soapy water into the drip tray and wipe with a clean cloth.
D. With a clean cloth and warm soapy water, wipe off all of the unit's exterior surfaces.
E. Replace the cup rest, valve diffusers and valve nozzles.

SCHEDULED MAINTENANCE - WEEKLY

A. Check the flow and brix of each LEV® valve following the brixing instructions given in Sections 1.18 and 1.19.
B. Remove the unit's bonnet and check the level of water in the water bath. Replenish as required, and replace the bonnet.

SCHEDULED MAINTENANCE - MONTHLY

A. Unplug the dispenser from its power source.
B. Remove the bonnet and, using a soft brush, clean the dirt from the unit's condenser.
C. Replace the bonnet. Plug in the unit.

SCHEDULED MAINTENANCE - EVERY SIX (6) MONTHS

A. Unplug the dispenser from its power source.
B. Clean and sanitize the unit using the appropriate procedures outlined in Section 2.

SCHEDULED MAINTENANCE - YEARLY

A. Clean water bath interior, including evaporator coils and refrigeration components.
B. Clean the entire exterior of the unit.
C. Sanitize syrup lines.

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

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.

2.5 AMBIENT PROCESS (SYRUP LINE CLEANING)

A. The ambient process is the most common method for cleaning and sanitizing dispenser equipment. The detergent should be as recommended and the sanitizer should be low pH (7.0) chlorine solution.
B. Disconnect syrup containers and remove product from tubing.
C. Rinse the lines and fittings with clean room temperature water to remove all traces of residual product.
D. Fill lines with a low-sudsing, non-perfumed, and easily rinsed detergent solution. The solution should be prepared in accordance with the manufacturers recommendations. Make sure the lines are completely filled and allow to stand for at least 10 minutes.
E. Flush the detergent solution from the lines with clean water.
F. Fill the lines with a low pH (7.0) chlorine solution containing at least 100 PPM (100mg/L) available chlorine. Flow sanitizing solution through dispenser until output tests to full 100 PPM (100mg/L) concentration. Allow to stand for 15 minutes.
G. Reconnect syrup containers and ready Unit for operation.
H. Draw drinks to refill lines and flush the chlorine solution from the dispenser.
I. Taste the beverage to verify that there is no off taste.

2.6 VALVE CLEANING

A. **LEV**® Valves may be cleaned and sanitized as described in Section 3.2.

NOTE: Refer to the current revision level of Lancer Installation and Service Manual 28-0027 for complete information on the **LEV**®.

1. Remove cover and disconnect power so the valve will not be activated during the cleaning procedure. Remove nozzle and diffuser. Wash these parts in cleaning solution; then immerse them in a bath of sanitizing solution for 15 minutes.
2. Visually inspect around nozzle area for syrup residue. This area may be cleaned with warm water and cloth or with the nozzle brush supplied. Wipe off dispensing lever (if valve is so equipped).
3. Wearing sanitary gloves, remove, drain and air dry the nozzle and diffuser.
4. Wearing sanitary gloves, replace diffuser, twist nozzle in place.
5. Connect power and replace cover. Valve is ready for operation.

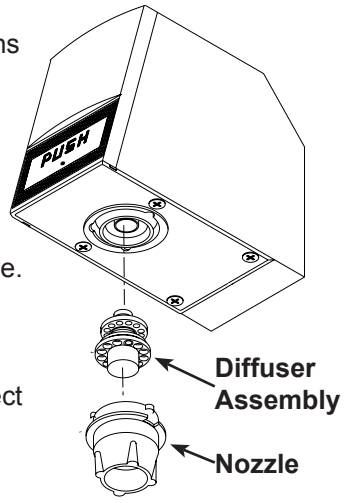
B. VOLUMETRIC VALVE CLEANING AND SANITIZING PROCEDURES

NOTE: The Volumetric Valve is an optional valve with the Delta III Dispenser. Refer to the Lancer Maintenance Manual 28-0301/02 for complete information on the Volumetric Valve.

1. Daily nozzle/Diffuser Cleaning (Figure 4)

a. Remove nozzle by twisting it counter-clockwise and pulling it down.
b. Pull the diffuser assembly down to remove it from the valve.
c. Wash the nozzle and diffuser with warm water.
d. If needed, apply 111 lubricant to the o-ring on the diffuser assembly. Then, use care to press the o-ring into the diffuser mounting area on the underside of the valve.
e. Verifty the nozzle o-ring, is in place around the nozzle mounting area on the valve. If necessary, slide a new nozzle o-ring onto the nozzle mounting area.
f. Install the nozzle by inserting it into the bottom plate. Twist the nozzle clockwise to lock in place.

Figure 4
Nozzle/Diffuser



2. Monthly Nozzle/Diffuser sanitizing

a. Separately prepare both the Cleaning and Sanitizing Solutions (refer tp page 19).
b. Cleaning Procedure
   1. Disconnect power, so the valve will not be inadvertently activated while cleaning.
   2. Remove nozzle by twisting it counter-clock wise and pulling the nozzle down.
   3. Pull the diffuser assembly down to remove it from the valve.
   4. Wash the nozzle and diffuser with the cleaning solution.
   5. Immerse the nozzle and diffuser in a bath of the sanitizing solution for 15 minutes.
   6. 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.
   7. Wipe off the dispensing lever (if so equipped) and any other areas that may have been splashed by syrup.

NOTE: sanitary gloves are required for the following: steps 8-13.

8. Remove, drain, and air dry the nozzle and diffuser.
9. Carefully press the diffuser into the mounting area on the underside of the valve.
10. 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 onto the nozzle mounting area.
11. Wearing sanitary gloves, install the nozzle by inserting it into the bottom plate and twisting it clockwise to lock it in place.
12. Connect power and replace cover. Valve is ready for operation.
13. 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. Valve and System Sanitizing

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 must be sanitized once every two weeks. The valve may remain on the dispensing tower during the sanitizing process.

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.

C. SYRUP PURGE PLUG (FIGURE 5)

1. The Syrup Purge Plug (PN 52-1912), places the valve in continuous syrup side operation. The targeted uses for the purge plug consist of priming the syrup line on an initial Volumetric Valve install, and for cleaning and sanitization of the syrup side of the dispensing unit.
2. Operation of the syrup purge plug is as follows:

NOTE: With a standard 75 VA transformer, up to six (6) Volumetric Valves can be operated in the syrup purge mode simultaneously.

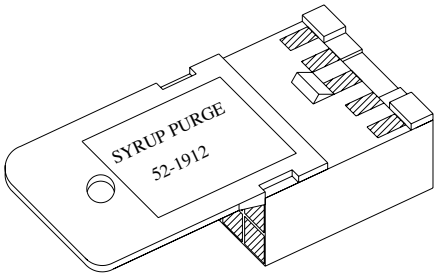


Figure 5
Syrup Purge Plug

a. Turn off electrical power to all valves.
b. Install syrup purge plugs into the valve or valves to be primed or sanitized. The syrup purge plug installs in the ten-pin connector of the Volumetric Valve circuit board.
c. Turn on electrical power to the valves. At this time, the syrup side of the valves will begin continuous operation.
d. When through with the priming or sanitization operation, syrup purge operation can be stopped in either of two ways:

Method 1: Turn off electrical power to all valves, remove syrup purge plugs from the valves. Turn on electrical power to all valves. Tap valve lever or push button to ensure proper operation of all valves.

Method 2: Remove syrup purge plug from the valves while they are in purge operation. In this case, the valve may continue in the purge mode for up to six (6) seconds after removal of the plug (this is normal). Tap valve lever or push button to ensure proper operation of all valves.

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2.7 CLEANING AND SANITIZING BAG-IN-BOX (BIB) SYSTEMS

A. Disconnect syrup quick disconnect coupling from syrup packages and connect coupling to a bag valve removed from an empty Bag-in-Box package.
B. Place end of syrup inlet line, with bag valve attached, in a clean container filled with clean, potable, room temperature water.
C. Place waste container under applicable dispensing valve. Activate valve until water is dispensed. Flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of residual product.

NOTE: Extended lengths of product lines may require additional time for flushing and rinsing lines.

D. Prepare cleaning solution as described in section 3.2. Place end of syrup inlet line in container filled with cleaning solution.
E. Place waste container under applicable dispensing valve. Activate valve and draw cleaning solution through lines for a minimum of 60 seconds. This will ensure line is flushed and filled with cleaning solution. Allow line to stand for at least 30 minutes.
F. Place end of syrup inlet line in a clean container filled with clean, potable, water at a temperature of 90° to 110°F (32.2° to 43.3°C).
G. Place waste container under applicable dispensing valve. Activate valve to flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of cleaning solution. Test dispenser in normal manner for proper operation. Taste dispensed product to ensure there is no off-taste. If off-taste is found, additional flushing of syrup system may be required.
H. Prepare sanitizing solution as described in section 3.2. Place end of syrup inlet line in container filled with sanitizing solution which has been prepared.
I. Activate valve and draw sanitizing solution through line for a minimum of 60 seconds. This will ensure line is flushed and filled with sanitizing solution. Allow line to stand for at least 30 minutes.
J. Remove bag valve from quick disconnect coupling and reconnect syrup inlet line to syrup package. Prep unit for operation.
K. Draw drinks and refill lines with end product to flush sanitizing solution from the dispenser.
L. Test dispenser in normal manner for proper operation. Taste dispensed product to ensure there is no off-taste. If off-taste is found, additional flushing of syrup system may be required.
M. Repeat cleaning, rinsing, and sanitizing procedures for each valve circuit.

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2.8 CLEANING AND SANITIZING FIGAL SYSTEMS

A. Remove quick disconnect from syrup tank.
B. Using a clean plastic bristle brush and cleaning solution as described in section 3.2, scrub both valves of the disconnect. Rinse with clean, potable water.

CAUTION DO NOT USE A WIRE BRUSH TO CLEAN VALVES.

PRECAUCIÓN NO USE CEPILLOS DE ALAMBRE PARA LIMPIAR LAS VÁLVULAS.

ATTENTION N'UTILISEZ PAS UNE BROSSE MÉTALLIQUE POUR NETTOYER LES SOUPAPES.

C. Using a mechanical spray bottle and a sanitizing solution prepared in accordance with the instructions in Section 3.2, spray both halves of the quick disconnects. Allow to air dry.
D. Connect syrup line to a syrup tank filled with clean, potable, room temperature water. Connect CO2 supply hose to tank and pressurize.
E. Place waste container under applicable dispensing valve. Activate valve until water is dispensed. Flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of residual product, per NSF requirements stated above.

NOTE: Extended lengths of product lines may require additional time for flushing and filling lines.

2.8 CLEANING AND SANITIZING FIGAL SYSTEMS (CONTINUED)

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.

F. Disconnect CO2 supply hose from the water filled syrup tank.
G. Prepare cleaning solution as described in Section 3.2. Fill a tank with cleaning solution. Connect syrup line to the tank. Connect CO2 supply hose to tank and pressurize.
H. Place waste container under applicable dispensing valve. Activate valve and draw cleaning solution through lines for a minimum of 60 seconds. This will ensure line is flushed and filled with cleaning solution. Allow line to stand for at least 30 minutes.

NOTE: Extended lengths of product lines may require additional time for flushing and filling lines.

I. Disconnect CO2 supply hose from the tank.
J. Connect syrup line to a tank filled with clean water at a temperature of 90° to 110°F(32.2° to 43.3°C). Connect CO2 supply hose to tank and pressurize.
K. Place waste container under applicable dispensing valve. Activate valve to flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of cleaning solution. Test dispenser in normal manner for proper operation. Taste dispensed product to ensure there is no off-taste. If off-taste is found, additional flushing of syrup system may be required.
L. Disconnect CO2 supply hose from the tank.
M. Fill a tank with sanitizing solution prepared as described in Section 3.2. Connect syrup line to the tank. Connect CO2 supply hose to tank and pressurize.
N. Remove dispensing valve nozzle (twist and pull down) and pull out center mixing baffle. Using a plastic bristle brush and detergent soap solution, scrub the nozzle, mixing baffle, bottom of dispensing valve, and cup lever. Rinse with clean water.
O. Reassemble mixing baffle and nozzle.
P. Place waste container under applicable dispensing valve. Activate valve and draw sanitizing solution through line for a minimum of 60 seconds. This will ensure line is flushed and filled with sanitizing solution. Allow line to stand for at least 30 minutes.
Q. Disconnect CO2 supply hose from the tank.
R. Reconnect syrup lines to syrup containers (for example, quick disconnects, figal containers, etc.) and ready unit for operation.
S. Draw drinks and refill lines with end product to flush sanitizing solution from the dispenser.
T. Test dispenser in normal manner for proper operation. Taste dispensed product to ensure there is no off-taste. If off-taste is found, additional flushing of syrup system may be required.
U. Repeat cleaning, rinsing, and sanitizing procedures for each valve/syrup circuit.
V. Clean exterior of unit as instructed in Section 3.2.
W. Using a spray bottle of sanitizing solution, spray the underside of all dispenser valves, valve spouts and cup levers. Allow to air dry.

NOTE: Thoroughly rinse inside and outside of syrup tank that was used for sanitizing solution with plain water to remove all solution residue.

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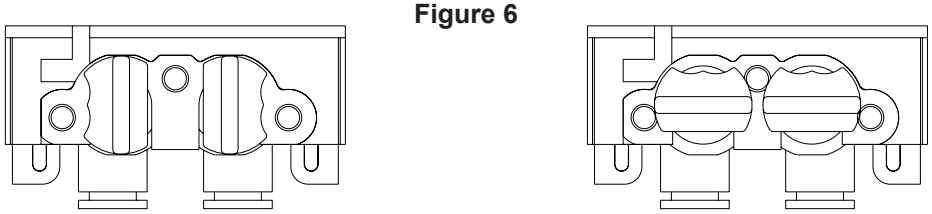
3. CONVERTING FROM EXTERNAL PRESSURIZED SYRUP SUPPLY TO BIB WITH BUILT-IN SYRUP PUMPS

This conversion can be accomplished. Contact Lancer for parts and instructions.

4. CONVERTING FROM BUILT-IN SYRUP PUMPS TO REMOTE PUMPS OR SYRUP TANKS

4.1 REMOVING EXISTING BUILT-IN SYRUP PUMPS

Figure 6



Shutoff open **Shutoff closed**

A. Disconnect the unit from the power supply and remove the bonnet.
B. Loosen the valve cover retaining screws and remove the valve covers.
C. Shut off the water supply to each Valve by turning the water shutoff knob (located on the left hand side of the valve mounting block) clockwise until it stops (see Figure 6).
D. Prepare three to four (3 to 4) gallons of warm water in a suitable open container.
E. Disconnect the syrup supply lines from the BIB syrup supply, assemble a BIB adapter to the end of each line, and place the line in the container of warm water.
F. Open each dispensing valve until the water flowing from the valve shows no discoloration due to syrup.
G. Remove the syrup supply lines from the warm water and open each dispensing valve to purge the water from the system.
H. Turn off the CO2 supply to the unit and disconnect the CO2 supply line from CO2 inlet fitting on the built-in pump package.
I. Disconnect the syrup inlet lines from the built-in syrup pumps and remove them from the unit.
J. Disconnect the pump's syrup outlet lines from the unit's syrup inlet fittings.
K. Remove 1/8 inch barbed carbonator CO2 check valve, if one is present.
L. Remove the four (4) sheet metal screws that secure the pump assembly to the carbonator deck and remove the pump assembly from the unit.
M. Remove braided inlet tubes and elbow. It will be necessary to cut the securing Oetiker clamps.

4.2 INSTALLING REMOTE PUMP OR SYRUP TANKS

A. Install new 1/4 inch male flare CO2 carbonator check valve.
B. Connect the CO2 supply line to the carbonator check valve.
C. Connect the syrup outlet line from each remote pump to the appropriate syrup inlet fitting on the unit using a 1/4 inch Oetiker clamp.

NOTE: Each 1/4 inch braided syrup tube will be looped from the inlet line to the remote pumps. Take caution not to bend, crimp, or kink the 1/4 inch tube at the loop. It may be necessary to use a tie wrap.

D. Make all necessary connections on remote pump system or syrup tank.
E. Turn on water (25 to 50 PSIG)(0.172 to 0.345 MPA) and CO2 (70 to 80 PSIG)(0.483 to 0.552 MPA) supply.
F. Open each valve until syrup flow is established and check all connections for leaks.
G. Replace the bonnet and reconnect the unit to the power supply.
H. Open the water supply to each valve and replace the valve covers.
I. Brix the valves if necessary. (Refer to Sections 1.17 and 1.18 of this manual.)

5. TROUBLESHOOTING

Refer to the current revision levels of Lancer Installation and Service Manual **28-0027** for complete troubleshooting information for **LEV®** valves and/or Lancer Maintenance Manual **28-0301** for complete troubleshooting information for the **Volumetric Valve**.

TROUBLE	CAUSE	REMEDY
5.1 Water leakage around nozzle.	A. Damaged or improperly installed o-ring above diffuser.	A. if damaged, replace. If imporoperly installed, adjust.
5.2 Leakae between upper and lower valve bodies.	A. Gap between upper and lower valve bodies. B. Worn or damaged paddle arm assemblies.	A. Tighten all six (6) retaining screws. B. Replace paddle arm assemblies.
5.3 Miscellanease leakage.	A. Gap between parts. B. Damaged or improperly installed o-rings.	A. Tighten appropriate retaining screws B. Replace or adjust appropriate o-rings
5.4 Insufficient water flow.	A. insufficient incoming supply water pressure. B. Shutoff on mounting bloack not fully open. C. Foreign debris in water flow control. D. Foreign debris in water pumpstrainer.	A. Verify incoming supply water pressure is a minimum of 25 PSI (0.172 MPA). B. Open shutoff fully. C. Remove water flow control from upper body and clean out any foreign material to ensure smooth free spool movement. D. Remove water pump strainer and clean.
5.5 Insufficient syrup flow.	A. Insufficent CO_2 pressure to BIB pumps. B. Shutoff on mounting block not fully open. C. Foreign debris in syrup flow control.	A. Adjust CO_2 pressure to 80 PSI (0.550 MPA) [minimum 70 PSI (0.480 MPA)] for BIB pumps. B. Open shutoff fully. C. Remove syrup flow control form upper body and clean out any foreign material to ensure smooth free spool movement.
5.6 Erratic ratio.	A. Incoming water and/or syrup supply not at minimum flowing pressure. B. Foreign debris in water and/or syrup flow controls.	A. Check pressure and adjust B. Remove flow controls from upper body and clean out any foreign material to ensure smooth free spool movement.

TROUBLE	CAUSE	REMEDY
5.7 No product dispensed	A. Water and syrup shutoffs on mounting block not fully open.	A. Open shutoff fully.
	B. The key switch on an electric valve is in the OFF position.	B. Turn key switch to ON position.
	C. Cup lever arm or ID panel actuator on electric valve is not actuating the switch.	C. Repair
	D. Electric current not reaching valve.	D. Check electric current supplied to valve. If current is adequate, check solenoid coil and switch, and replace if necessary.
	E. Improper or inadequate water or syrup supply.	E. Remove valve from mounting block and open shutoffs slightly and check water and syrup flow. If no flow, check dispenser for freeze-up or other problems
	F. Transformer Failure	F. Reset transformer circuit breaker. If breaker trips again, refer to Seciton 5.23
5.8 Water only dispensed; no syrup; or syrup only dispensed, no water	A. Water or syrup shutoff on mounting block not fully open.	A. Open shutoff fully.
	B. Improper or inadequate water or syrup flow.	B. 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.
	C. BIB supply too far from dispenser.	C. Check that BIB supply is within six (6) feet of the dispenser.
	D. CO2 pressure too low.	D. Check the CO2 pressure to the pump manifold to ensure it is between 70 and 80 PSI.
	E. Stalled or inoperative BIB pump	E. Check CO2 pressure and/or replace pump.
	F. Kinked line.	F. Remove kink or replace line.

TROUBLE	CAUSE	REMEDY
5.9 Ice bank grew to water inlet line to carbonatortank.	A. Low water bath level.	A. Add water until it flows from overflow tube.
	B. Unit not level.	B. Level unit and add water.
	C. Syrup in water bath.	C. Melt ice bank. Remove all water. Refill. Locatepossible syrup leak area and repair.
	D.Water cage is out of position.	D. Align the water cage into the water tank studs.
	E. Refrigerant leak.	E. Find leak and recharge unit. (If unit is not frozen.)
	F. Check water supply.	F. Turn water ON and shut unit OFF,
	G. Carbonator timed out.	G. Turn unit OFF then ON to reset
	H. PCB malfunctioning.	H. Refer to Section 6.
5.10 Valve will not shut off.	A. Cup lever may be sticking or binding.	A. Correct or replace lever.
	B. Switch not actuating freely.	B. Check switch for free actuation.
	C. Solenoid armature not returning to bottom position.	C. Replace defective armature or spring.
5.11 Syrup only dispensed. No water, but CO2 gas dispensed with syrup.	A. Improper water flow to dispenser.	A. Check for water flow to dispenser (see 5.4).
	B. Carbonator pump motor has timed out.	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).
	C. Liquid level probe not connected properly to PCB.	C. Check connections of liquid level probe to PCB assembly.
	D. Faulty PCB assembly.	D. Replace PCB assembly.
	E. Faulty liquid level probe.	E. Replace liquid level probe.
	F. Water bath frozen.	F. Thaw water bath and repair faulty component. (See refrigeration related symptoms.)
	G. Water line frozen.	G. Refer to 5.14 listed below.

TROUBLE	CAUSE	REMEDY
5.12 Excessive foaming.	A. Incoming water or syrup temperature too high.	A. Correct prior to dispenser. Consider larger dispenser or pre-cooler.
	B. CO2 pressure too high.	B. Adjust CO2 pressure downward, but not less than 70 PSI.
	C. Water flow rate too high.	C. Readjust and reset ratio. Refer to Section 1.18.
	D. Nozzle and diffuser not installed.	D. Remove and reinstall properly.
	E. Nozzle and diffuser not clean.	E. Remove and clean.
	F. Air in BIB lines.	F. Bleed air from BIB lines.
	G. Poor quality ice.	G. Check quality of ice used in drink.
	H. High beverage temperature.	H. Check refrigeration system.
5.13 Water continually overflows from water bath into drip tray.	A. Loose water connection(s).	A. Tighten water connections.
	B. Flare seal washer leaks.	B. Replace flare seal washer.
	C. Faulty water coil.	C. Replace water coil.
5.14 Compressor starts and continues to run until freeze and will not cut off.	A. PCB malfunctioning or faulty ice bank probe.	A. Refer to Section 6.
	B. Ice bank probe positioned improperly.	B. Check positioning of ice bank probe, and replace if needed.
	C. Ice bank probe shorted to ground.	C. Replace ice bank probe.
NOTE: First check to ensure that the 3 minute carbonator timer has not timed out. Turn unit off and then on. If the pump shuts off in less than 30 seconds the dispenser is not frozen.		
5.15 Warm drinks.	A. Restricted airflow.	A. Check clearances around sides, top, and inlet of unit. Remove objects blocking airflow through grill.
	B. Dispenser connected to hot water supply.	B. Switch to cold water supply.
	C. Refrigeration system not running.	C. Refer to 5.16 - 5.20.correct relay will cause compressor failure.
	D. Refrigerant leak.	D. Repair and recharge.
	E. Condenser fan motor not working.	E. Replace condenser fan motor.
	F. Dirty condenser.	F. Clean condenser.
	G. Dispenser capacity exceeded.	G. Add pre-cooler or replace with larger dispenser.

TROUBLE	CAUSE	REMEDY
5.16 Compressor does not start (no hum), gas cooler fan does not run, and no ice bank.	A. There is a five (5) minute compressor and condenser fan delay.	A. Allow for five (5) minute delay to lapse.
	B. Ice bank probe not completely submergered or not sensing water.	B. Fill water reservoir until water flows from overflow tube.
	C. Circuit breaker or fuse tripped.	C. Reset breaker or replace fuse. If problem persists: 1. Determine reason and correct. 2. Electrical circuit overloaded; switch to another circuit.
	D. Inadeequate Voltage	D. Measure voltage across common and run terminal on compressor.Voltage must not drop below 90% of rated voltage.
	E. PCB malfunctioning	E. See Section 6.
	F. Incorrect Wiring	F. Refer to wiring diagram and correct.
	G. Faulty ice bank probe.	G. Replace ice bank probe.
	H. Transformer failure.	H. Reset transformer circuit breaker. If breaker pops again, refer to Sec. 5.25.
	I. Ice bank probe not connected properly to PCB.	I. Connect ice bank probe to PCB.
5.17 Compressor does no start (no hum), but gas cooler fan motor runs.	A. Compressor relay capacitors or overload malfunctioning.	A. Replace compressor relay capacitors or overload.
	B. Inadequate voltage.	B. Measure voltage across commom and run terminal on compressor. Voltage must not drop below 90% of rated voltage.
	C. Incorrect wiring.	C. Refer to wiring diagram and correct.
	D. Compressor malfunctioning.	D. Have the unit repaired by a qualified service technician.

TROUBLE	CAUSE	REMEDY
5.18 Compressor does not start but hums.	A. Inadequate voltage.	A. Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rated voltage.
	B. Incorrect wiring.	B. Refer to wiring diagram and correct.
	C. Starting relay capacitors malfunctioning.	C. Replace starting relay or capacitors. Be sure to use correct rating. Failure to use correct rating will cause compressor failure.
	D. Compressor malfunctioning.	D. Replace compressor or deck.
5.19 Compressor starts and runs a short time but shuts off on overload.	A. Inadequate voltage.	A. Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rated voltage.
	B. Incorrect wiring.	B. Refer to wiring diagram and correct.
	C. Starting relay malfunctioning.	C. Replace starting relay. Be sure to use correct relay. Failure to use correct relay will cause compressor failure.
5.20 Compressor starts and runs a short time but shuts off on overload.	A. Dirty condenser.	A. Clean the condenser.
	B. Insufficient or blocked air flow.	B. Remove all obstructions and allow for minimum clearances of 8 inches (203 mm) over top.
	C. Inadequate voltage.	C. Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rated voltage.
	D. Incorrect wiring.	D. Refer to wiring diagram and correct.
	E. Defective condenser fan motor.	E. Replace condenser fan motor.
	F. Refrigerant leak.	F. Repair and recharge.
	G. Compressor malfunctioning.	G. Replace compressor.
5.21 Compressor runs normally, but water line is frozen.	A. Low water level in water bath.	A. Add water to water bath until water runs out of overflow into drip tray.
	B. Syrup in water bath.	B. Drain water from water bath and refill with clean water.
	C.Water cage is out of position.	C. Reposition water cage.
	D. Low refrigerant charge or slow refrigerant leak.	D. Find and repair leak. Recharge system.

TROUBLE	CAUSE	REMEDY
5.22 Compressor cycles on and off frequently during the initial pulldown and/or normal operations.	A. PCB malfunctioning B. Defective probe. C.Weak overload or pressure switch.	A. See Section 6. B. Replace probe. C. Have the unit repaired by a qualified service technician.
5.23 Transformer circuit breaker tripping.	A. Valve wire harness shorted to itself or to faucet plate. B. PCB is bad. C. Secondary wire harness is bad. D. Transformer failure.	A. Detect short by disconnecting input faston to keylock and single pin connector. Restore power if breaker doesn't trip. Then valve wire harness is shorted. If OK, reconnect. B. Detect short by disconnecting J1 connector (24 VAC input) from PCB. Restore power, if breaker doesn't trip. Then replace PCB. If breaker does trip, then PCB is OK. Reconnect J1 connector. C. If it does not trip, locate short in secondary harness between transformer, PCB, and valve wire harness. D. Detect short by disconnecting both transformerfastons and restore power. If breaker does trip, replace transformer.
5.24 BIB pump does not operate when dispensing valve opened.	A. Out of CO2, CO2 not turned on, or low CO2 pressure. B. Out of syrup. C. BIB connector not tight. D. Kinks in syrup or gas lines.	A. Replace CO2 supply, turn on CO2 supply, or adjust CO2 pressure to 70-80 PSI (0.483-0.552 MPA) B. Replace syrup supply. C. Fasten connector tightly. D. Straighten or replace lines.
5.25 BIB pump operated, but no flow.	A. Leak in syrup inlet or outlet line. B. Defective BIB pump check valve.	A. Replace line. B. Replace BIB pump
5.26 BIB pump continues to operate when bag is empty.	A. Leak in suction line. B. Leaking o-ring on pump inlet fitting.	A. Replace line. B. Replace o-ring.
5.27 BIB pump fails to restart after bag replacement.	A. BIB connector not on tight. B. BIB connector is stopped up. C. Kinks in syrup line	A. Tighten BIB connector. B. Clean out or replace BIB connector. C. Straighten or replace line.

TROUBLE	CAUSE	REMEDY
5.28 BIB pump fails to restart when dispensing valve is closed.	A. Leak in discharge line or fittings. B. Empty BIB. C. Air leak on inlet line or bag connector.	A. Repair or replace discharge B. Replace BIB. C. Repair or replace.
5.29 No product out light.	A. Burned-out lamp B. Faulty wiring or pressure switch in product line.	A. Replace lamp. B. Repair or replace.
5.30 Low or no carbonation.	A. Low or no CO2. B. Excessive water pressure. C.Worn or defective carbonator pump. D.PCB malfunctioning.	A. Check CO2 supply. Adjust CO2 pressure to 70 PSI (0.483 MPA). B. Water regulator should be set at 50 PSI (0.345 MPA) C. Replace carbonator pump. D. See Section 6.

6. TROUBLESHOOTING THE LANCER ELECTRONIC ICE BANK CONTROL (EIBC)

6.1 CHECKING FOR NORMAL PCB OPERATION

A. Turn dispenser power OFF or insure power has been disconnected from dispenser.

B. Check 0.5 amp fuse condition (Fig 7). If fuse is blown, trace cause of short in valve wire harness and associated 24 VAC lines and replace fuse. If fuse is good, continue with troubleshooting of PCB.

C. Disconnect leads from the terminal block that connect to the PCB, noting specific location for reconnection.

D. Disconnect both the Ice Bank Probe (J2) and the Carbonator Probe (J3) (if equipped) connections from the board (Fig 6).

E. Use a short copper wire or paper clip to short the Ice Bank Probe terminals (J2) on the PCB by touching all three (3) pins together.

F. Set Ohm test meter to measure for continuity.

G. Reconnect power or turn dispenser On. Observe time and check continuity of the PCB screw lug connections (see Fig 6).

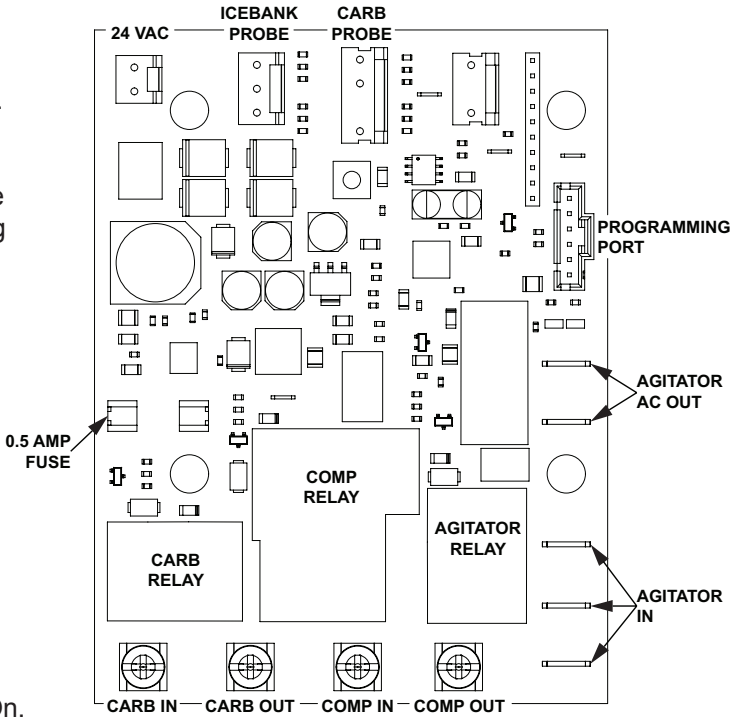


Figure 7

1. The following should be observed:

   a. Terminal 3 to 4 (Carbonator): During the first 2.5 to 3.5 minutes, there should be continuity. After 3.5 minutes, there should be **NO** continuity.

   b. Terminal 2 to 1 (Compressor): During first 4 to 6 minutes, there should be **NO** continuity. After 4 to 6 minutes, there should be continuity. Remove wire from J2 connector. There should be **NO** continuity from 2 to 1.

   c. You should be able to hear the “click” sound of the relay closing when the time delays end.

H. Turn electrical power **OFF** for 15 seconds and then back **ON** again to reset Carbonator timer. Again, measure continuity of the PCB screw lug connections.

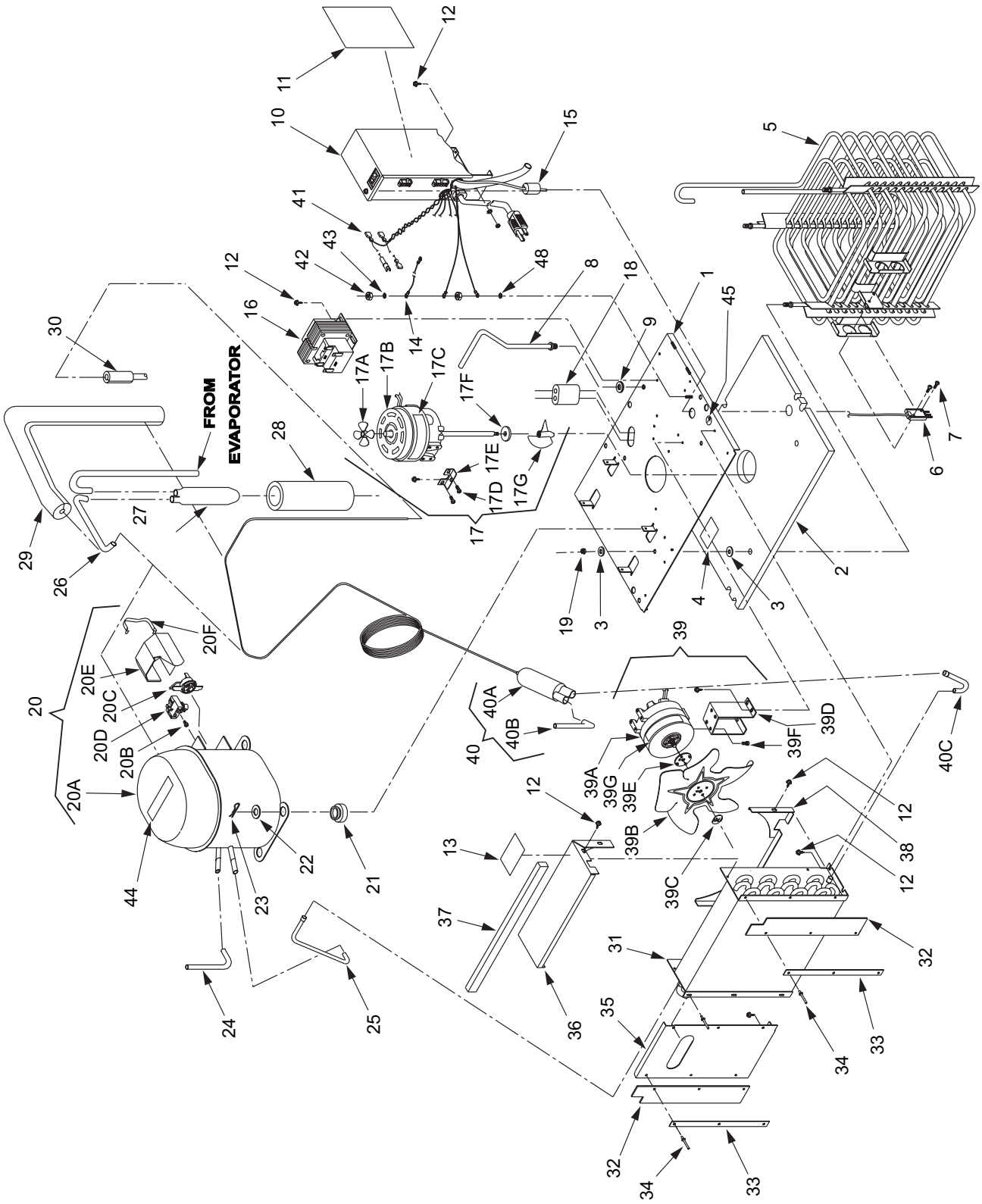
1. Terminal 3 to 4: There should be continuity. Use a short copper wire, paper clip, or other means to short the Carbonator probe terminals (J3) on the PCB by touching all three (3) pins together. This should be done before the 2.5 to 3.5 minute time limit has elapsed. Measure the continuity again between Terminal 3 to 4: There should be **NO** continuity.

I. If all the above work as noted, then the board is functioning properly. Remove tape and reconnect board. If any non-conformities are found, the PCB must be replaced (PN 52-1423/01).

NOTES

7. ILLUSTRATIONS, PARTS LISTINGS, WIRING DIAGRAMS, AND PLUMBING DIAGRAMS

7.1 REFRIGERATION DECK ASSEMBLY

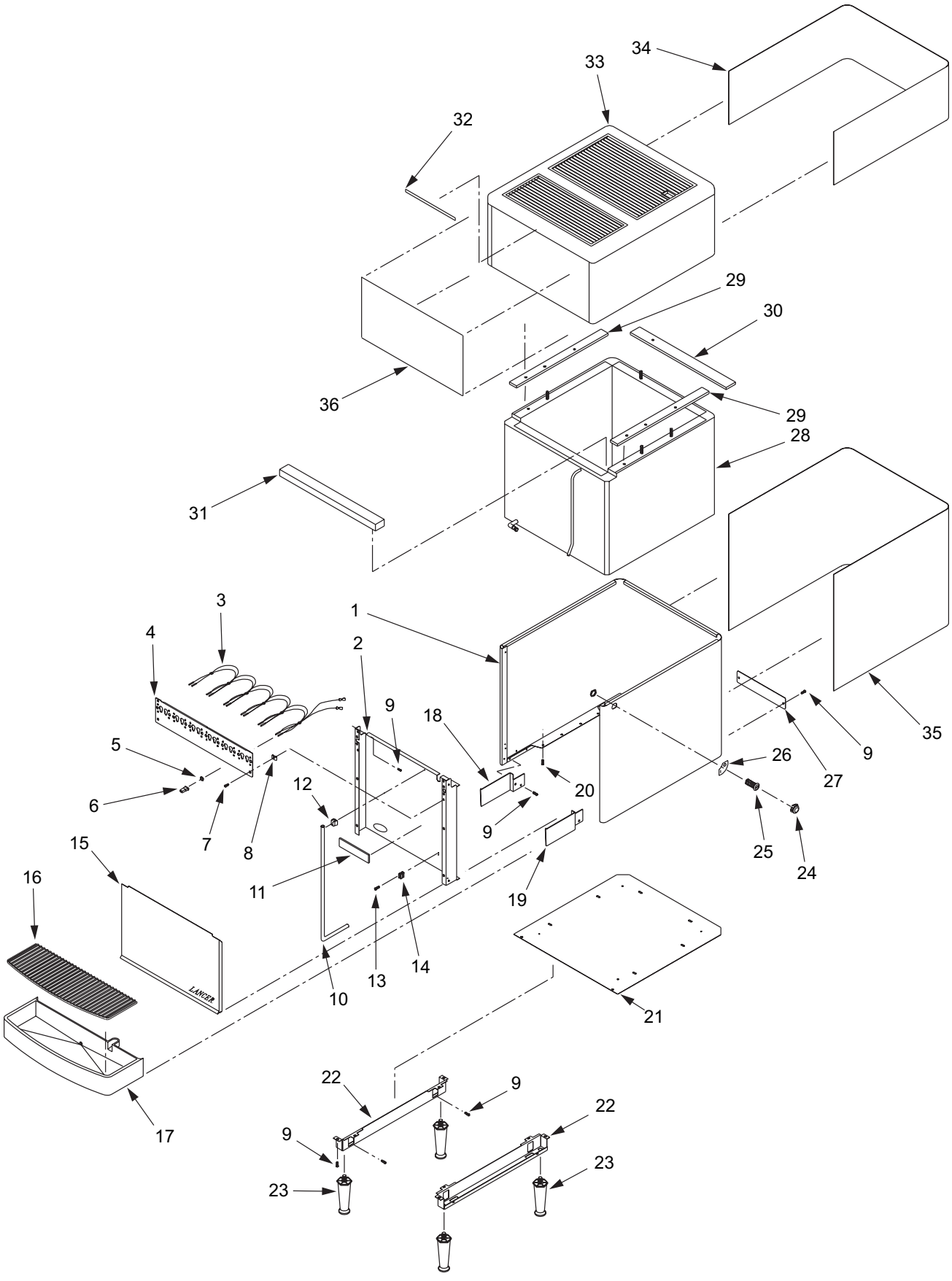


7.1 REFRIGERATION DECK ASSEMBLY (CONTINED)

	Item	Part No.	Description
	-	82-2554	Deck Assy, Refrigeration, 115V/60Hz
	-	82-2486	Deck Assy, Refrigeration, 230V/50Hz
	-	82-2633	Deck Assy, Refrigeration, 220V/60Hz
	1	51-5496	Deck Plate, Sub-Assy
	2	50-0200/01	Insulation, Deck Plate
	3	04-0063	Washer, Flat, 1/4”
	4	89-0014	Hole Cover
	5	82-2494/01	Evaporator Assy, 115V/60Hz
	-	82-2494	Evaporator Assy, 230V/50Hz
R	6	52-1773/01	Probe Assy
	7	04-0394	Screw, 6 - 32 X .500”
	8	51-0068/01	Handle
	9	04-0574	Washer, Lock, 5/16”
	10	REF	Control Housing Assy
	-	52-0900/02 Kill Switch	Control Housing Assy with
	-	52-0903/02	Control Housing Assy without Kill Switch
	11	06-2221	Label, Wiring Diagram
	12	04-0504	Screw, 8 - 18 X .375”
	13	06-0080-01	Label, Nameplate
	14	52-1209	Lead Assy, Ground
	15	02-0041	Seal
R	16	25-0047/01	Transformer, 75VA, 24V, 115V/60Hz
R	-	25-0048/01	Transformer, 75VA, 24V, 220V/50-60Hz
	17	82-2558	Agitator Assy, 115V/60Hz
	-	82-2487	Agitator Assy, 230V/50Hz
	-	82-2761	Agitator Assy, 220V/60Hz
R	17a	05-0495/01	Propeller, 2.062” Diameter
	17b	91-0119	Motor, Agitator, 115V/60Hz
	-	91-0112	Motor, Agitator, 230V/50Hz
	-	91-0130	Motor, Agitator, 220V/60Hz
	17c	06-0633	Label, 115V/60Hz, 25W
	-	06-0634	Label, 230V/50Hz, 25W
	-	06-2191	Label, 220V/60Hz, 25W
	17d	04-0059	Screw, 8 - 36 X .375”
	17e	30-5113/01	Bracket, Agitator Motor
	17f	02-0032	Washer, Rubber
	17g	05-1437	Propeller, Water
	18	02-0040	Seal, Extrusion
R	19	04-0032	Nut, Lock, 1/4” - 20
	20	83-0033	Compressor Assy, 1/3 hp, 115V/60Hz (includes items listed below)
	-	83-0034	Compressor Assy, 1/3 hp, 240-220V/50Hz
	-	83-0038	Compressor Assy, 1/3 hp, 220V/60Hz
	20a	83-0033-01	Compressor, 1/3 hp, 115V/60Hz
	-	83-0034-01	Compressor, 1/3 hp, 240-220V/50Hz
	20b	04-1010	Screw, Brass, 6 - 32 X 0.250”
	20c	12-0339	Overload, 115V/60Hz
	-	12-0290	Overload, 230V/50Hz
	-	12-0253	Overload, 220V/60Hz
	20d	12-0005	Relay, 115V/60Hz
	-	12-0031	Relay, 230V/50Hz
	-	12-0028	Relay, 220V/60Hz
	20e	13-0066	Cover, Terminal
	20f	03-0040	Bale Strap
R	20g	03-0041	Overload Spring (Not Shown)
	20h	12-0260	Start Capacitor, 220V/60Hz (Not Shown)
	21	02-0114	Grommet, Compressor
	22	04-0537	Washer, Compressor
	23	03-0150	Clip, Retainer, Compressor
	24	47-0344	Tube, Process
	25	47-0718	Tube, Compressor Discharge
	26	47-0724	Tube, Return Line
	27	51-0061	Accumulator
	28	50-0211	Boot
	29	50-0205	Insulation
	30	50-0159	Insulation
R	31	23-0985/01	Condenser
R	32	50-0201/01	Baffle, Rubber
	33	30-5112	Retainer Strip
	34	04-0518	Rivet, 0.125” X 0.328”
	35	30-5867	Handle/Air Shield
	36	51-5697	Fan Shroud, Upper
	37	50-0249	Insulation, Strip
	38	30-5866	Fan Shroud, Lower
	39	52-2146	Fan Assy, 115V/60Hz
	-	52-2147	Fan Assy, 220V/50-60Hz
	39a	91-0007	Motor Assy, 115V/60Hz, 9W
	-	91-0009	Motor Assy, 220V/50-60Hz, 9W
	39b	07-0354	Fan Blade
	39c	04-0060	Nut, Flat
	39d	30-5864	Bracket, Fan Motor
R	39e	02-0413	Silencer, Fan Blade
	39f	04-0059	Screw, 8 - 36 X 0.375”
	39g	06-0433/01	Label, 115V/60Hz, 9W
	-	06-0670	Label, 220V/50-60Hz, 9W
	40	23-0765	Dryer Cap Assy
	40a	23-0982	Dryer Cap
	40b	47-0344	Tube, Process
	40c	47-0698	Tube, Condenser, Out
R	41	52-2008	Harness Assembly, Transformer
	42	04-0110	Nut, 8-32
	43	04-0576	Washer, Lock, Internal Tooth
	44	06-0430	Label, 115V/60 Hz, 1/3 HP
	-	06-0460	Label, 230V/50 Hz, 1/3 HP
	-	06-0666	Label, 240V/60 Hz, 1/3 HP
	45	06-0877	Label, Ground
	-	11-0018	Wire Tie
	-	15-0012	Duct Tape
	-	15-0011	Adhesive, Insulation
	-	95-0177	Refrigerant, R-134a
R	-	96-0004/01	Solder, 60/40
	-	96-0003	Brazing Alloy
R	-	26-0377/01	Capacitor, 230V/50Hz (For use with PN 91-0065)
R	-	26-0374/01	Capacitor, 115V/60Hz (For use with PN 91-0063)

R in margin indicates change or revision

7.2 STANDARD CABINET ASSEMBLY

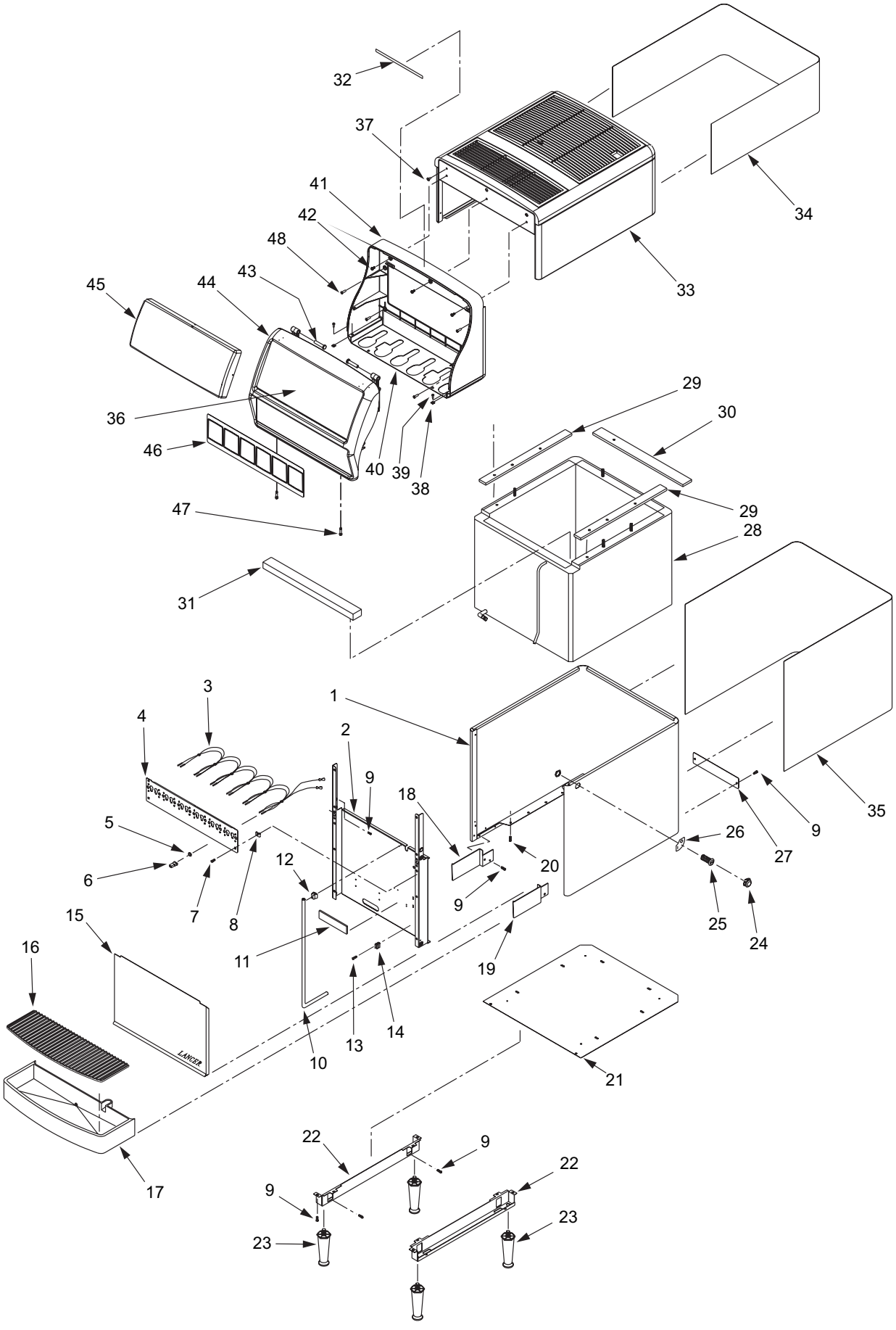


7.2 STANDARD CABINET ASSEMBLY (CONTINUED)

	Item	Part No.	Description
	-	82-2551	Cabinet Assy
	1	51-5629/02	Wrapper Assy
R	2	30-7353/03	Front Support, SS
	3	REF	Harness Assy, Valve
	-	52-1214	Harness Assy, 6 Valve, (Requires 6 each; Items 5 & 6)
	-	52-1215	Harness Assy, 5 Valve, (Requires 5 each; Items 5 & 6)
	4	REF	Faucet Plate
R	-	30-9276	Faucet Plate, 6 Valve
R	-	30-9277	Faucet Plate, 5 Valve
	5	13-0005	Bushing
	6	11-0015	Connector, Housing, 2-Pin
	7	04-0443	Screw, 10 - 24 x 0.375”, Countersink
	8	04-0074	Nut, Clip, 10 - 24
R	9	04-1071/01	Screw, 8 - 32 x 0.375”, Taptite
	10	08-0004	Tubing, Tygon, 5/16” ID
	11	06-0851	Label, Overflow
	12	03-0302	Clip, Drain Hose
	13	04-0077	Screw, 4 - 20 x 0.250”
	14	03-0062	Clip, Overflow Tube
	15	30-0319-01	Splash Plate, with Logo
	16	05-1585	Cup Rest, Plastic
	17	05-1657	Drip Tray
	18	30-7533/02	Bracket, Drip Tray, Right
	19	30-7534/02	Bracket, Drip Tray, Left
R	20	04-0545/01	Screw, 8 - 16 x 0.750”
	21	30-7358	Plate, Tank, Bottom
R	22	30-5221/02	Bracket, Leg
	23	81-0112	Leg, Plastic
	24	07-0405	Plug, Key Switch
	25	12-0097	Key Switch (Includes Nut)
	26	06-0881	Label, Key Switch
	27	07-0347	Plate, Cover
	28	REF	Tank Assy
	-	42-0057/01	Tank Assy
	29	50-0151	Insulation, Tank, Side
	30	50-0150	Insulation, Tank, Back
	31	50-0248	Insulation, Tank, Front
	32	06-0632	Label, “WARNING”
	33	REF	Bonnet Assy
	-	82-2764	Bonnet Assy (Contact Customer Service for Graphic Options)
	34	06-2177	Label, Graphic, Bonnet (Contact Customer Service for Graphic Options)
	35	06-2178	Label, Graphic, Tank Wrapper (Contact Customer Service for Graphic Options)
	36	06-2227	Decal, Bonnet, Front (Contact Customer Service for Graphic Options)
R	-	82-0274	Back Block, Standard
R	-	82-2658/01	Back Block, 3-way
R	-	04-1089	Screw, 10 - 32 x 1.000, for Back Blocks
R	-	18-0253/02	Water Regulator Assy (see Section 8.7)

R in margin indicates change or revision

7.3 SHROUDED CABINET ASSEMBLY

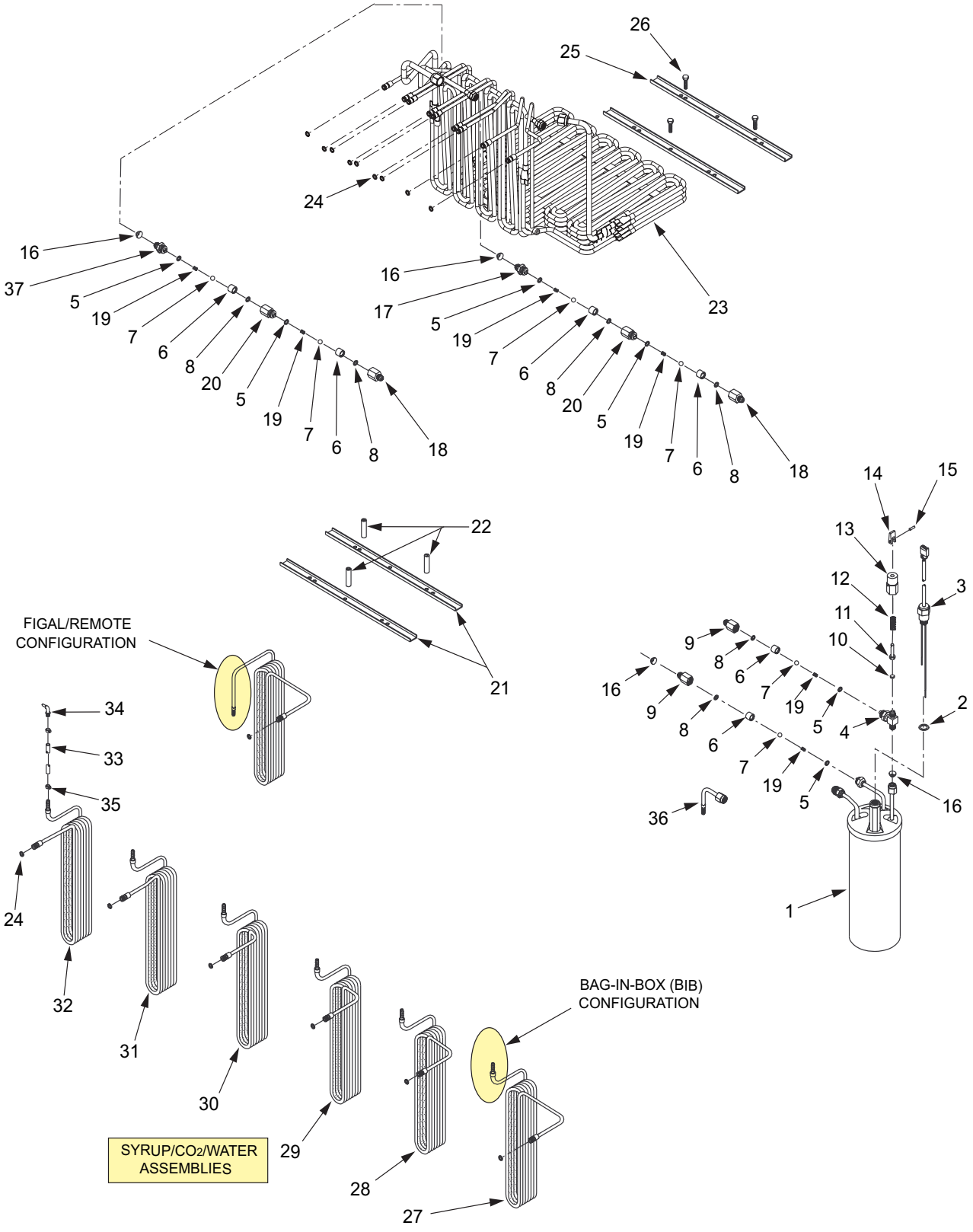


7.3 SHROUDED CABINET ASSEMBLY (CONTINUED)

	Item	Part No.	Description
	-	82-2551	Cabinet Assy
	1	51-5629/02	Wrapper Assy
R	2	30-7574/03	Front Support, SS
	3	REF	Harness Assy, Valve
	-	52-1214	Harness Assy, 6 Valve, (Requires 6 each; Items 5 & 6)
	-	52-1215	Harness Assy, 5 Valve, (Requires 5 each; Items 5 & 6)
	4	REF	Faucet Plate
R	-	30-9276	Faucet Plate, 6 Valve
R	-	30-9277	Faucet Plate, 5 Valve
	5	13-0005	Bushing
	6	11-0015	Connector, Housing, 2-Pin
	7	04-0443	Screw, 10 - 24 x 0.375", Countersink
	8	04-0074	Nut, Clip, 10 - 24
	9	04-0504	Screw, 8 - 18 x 0.375", with Washer
	10	08-0004	Tubing, Tygon, 5/16" ID
	11	06-0851	Label, Overflow
	12	03-0302	Clip, Drain Hose
	13	04-0077	Screw, 4 - 20 x 0.250"
	14	03-0062	Clip, Overflow Tube
	15	30-0319-01	Splash Plate, with Logo
	16	05-1585	Cup Rest, Plastic
	17	05-1657	Drip Tray
	18	30-7533/02	Bracket, Drip Tray, Right
	19	30-7534/02	Bracket, Drip Tray, Left
R	20	04-0545/01	Screw, 8 - 16 x 0.750"
	21	30-7358	Plate, Tank, Bottom
R	22	30-5221/02	Bracket, Leg
	23	81-0112	Leg, Plastic
	24	07-0405	Plug, Key Switch
	25	12-0097	Key Switch (Includes Nut)
	26	06-0881	Label, Key Switch
	27	07-0347	Plate, Cover
	28	REF	Tank Assy
	-	42-0057/01	Tank Assy
	-	42-0058	Tank Assy, LF Sol
	29	50-0151	Insulation, Tank, Side
	30	50-0150	Insulation, Tank, Back
	31	50-0248	Insulation, Tank, Front
	32	06-0632	Label, "WARNING"
	33	REF	Bonnet Assy
	-	23-1255	Bonnet Assy (Contact Customer Service for Graphic Options)
	34	06-2177	Label, Graphic, Bonnet (Contact Customer Service for Graphic Options)
	35	06-2178	Label, Graphic, Tank Wrapper (Contact Customer Service for Graphic Options)
	36	06-2347	Decal, Bonnet, Front (Contact Customer Service for Graphic Options)
	37	04-0302	Screw, 8 - 32 x 0.375
	38	04-1218	Nut, Clip, #6
	39	04-0407	Screw, 6 - 32 x 0.375
	40	30-7646	Valve Trim Panel, 6 Valve
	-	30-8288	Valve Trim Panel, 5 Valve
	41	05-1683	Shroud, Rear
	42	04-1071	Screw, 8 - 32 x 0.375, Taptite
R	43	04-1172/01	Pin, Hinge, Shroud
	44	54-0292	Shroud Assy
	-	05-1690	Support, Arm, Hinge
	-	05-1813	Bar, Lift, Support
	45	82-3056	Marquee Assy (Option)
	46	06-2404	Panel, Plain, 6 Valve
	-	06-2414	Panel, Plain, 5 Valve
	47	04-1171	Screw, 8 - 32 x 0.625, Shoulder
	48	04-0619	Screw, 10 - 24 x 0.625
R	-	82-0274	Back Block, Standard
R	-	82-2658/01	Back Block, 3-way
R	-	04-1089	Screw, 10 - 32 x 1.000, for Back Blocks
R	-	18-0253/02	Water Regulator Assy (see Section 8.7)

R in margin indicates change or revision

7.4 CARBONATOR, WATER/SYRUP LINE ASSEMBLIES

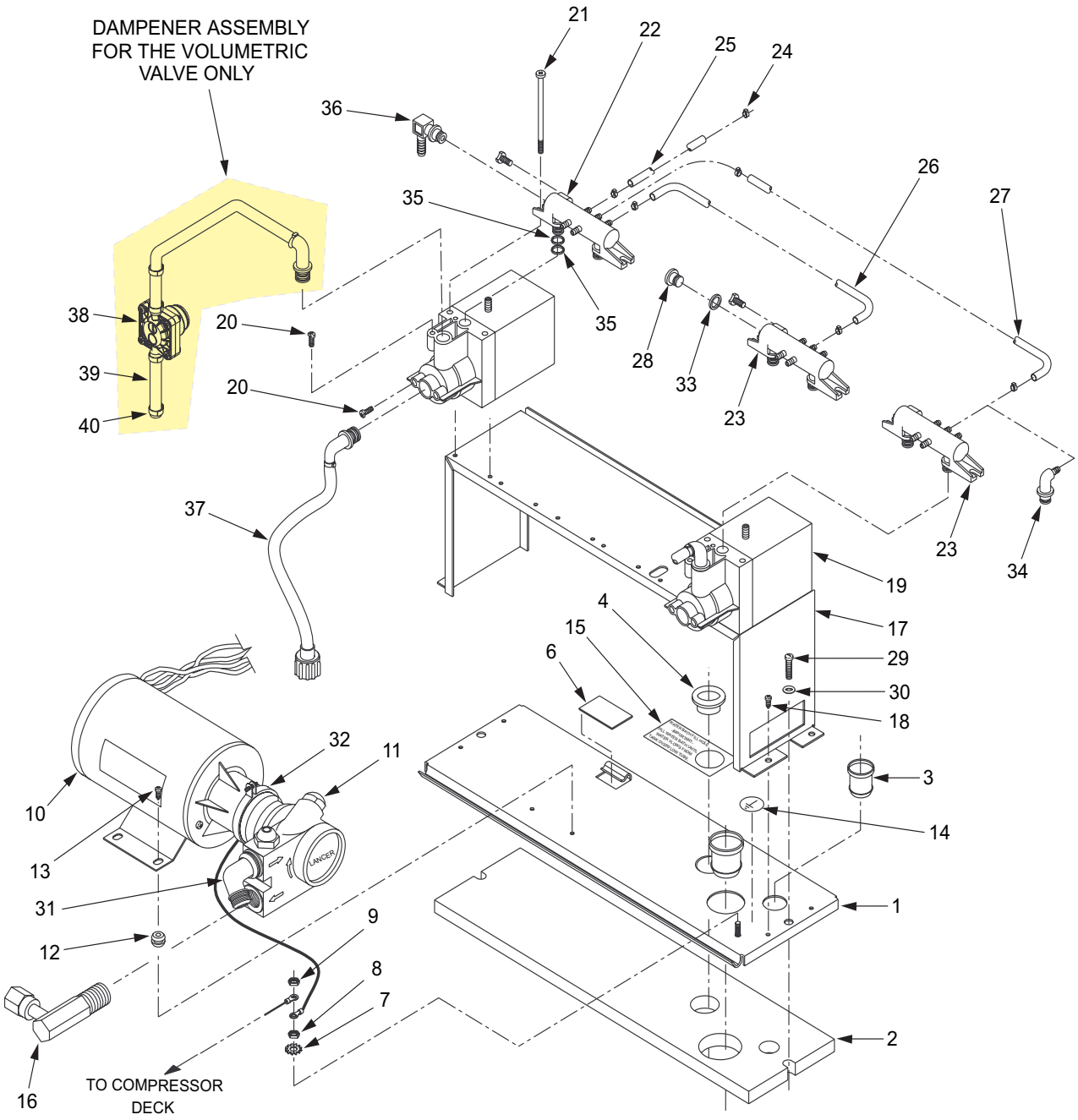


7.4 CARBONATOR, WATER/SYRUP LINE ASSEMBLIES (CONTINUED)

	Item	Part No.	Description
R	-	82-2676	Carbonator Assy, 60Hz
R	-	82-2678	Carbonator Assy, 50Hz
	1	REF	Tank Assy, Carbonator
	-	23-1152	Tank Assy, Carbonator, 60 Cycle
	-	23-1153	Tank Assy, Carbonator, 50 Cycle
	2	02-0096	Washer
	3	52-0909	Probe Assy
R	-	17-0469	Fitting Assy, CO2 IN
	4	01-1311	Fitting, Sub Assy, CO2
	5	02-0003	O-Ring
	6	01-0689	Sleeve
	7	01-0674	Ball
	8	02-0025	O-Ring
R	9	01-0669	Body, Check Valve, Gas
	-	54-0066	Relief Valve Assy
R	10	02-0023	Seal
R	11	05-0536/01	Stem
R	12	03-0024/02	Spring
R	13	05-0537	Body, Relief Valve
R	14	05-0525	Lever
R	15	81-0196	Pin
R	16	05-0011/01	Flare Seal Washer, Small
R	-	17-0485	Double Check Valve Assy, Carbonated Water Inlet
R	-	17-0596	Double Check Valve Assy, Plain Water inlet
R	17	01-1466	Fitting, Check Valve18 01-0673 Body
R	19	03-0021	Spring
R	20	01-0670	Body
R	21	30-6807	Spacer, Lower, Water Cage
R	22	01-1831	Standoff, 10 - 24, Threaded
R	23	REF	Cage Assy
R	-	23-1366	Cage Assy, 5 Valve
R	-	23-1357	Cage Assy, 6 Valve
R	24	02-0005	O-Ring
R	25	30-6767	Brace, Water Coils
R	26	04-1116	Screw, 10 - 24 x 0.625, PHD, PH, 18 - 8, SS
R	27	REF	Tube Assy, Syrup #1
	-	48-0473/01	Tube Assy, Syrup, Figal/Remote
	-	48-0449/01	Tube Assy, Syrup, BIB
R	28	REF	Tube Assy, Syrup #2
	-	48-0474/01	Tube Assy, Syrup, Figal/Remote (use on 6 Valve Units)
	-	48-0502/01	Tube Assy, Syrup, Figal/Remote (use on 5 Valve Units)
	-	48-0450/01	Tube Assy, Syrup, BIB (use on 6 Valve Units)
	-	48-0500/01	Tube Assy, Syrup, BIB (use on 5 Valve Units)
R	29	REF	Tube Assy, Syrup #3
	-	48-0475/01	Tube Assy, Syrup, Figal/Remote (use on 6 Valve Units)
	-	48-0503/01	Tube Assy, Syrup, Figal/Remote (use on 5 Valve Units)
	-	48-0451/01	Tube Assy, Syrup, BIB (use on 6 Valve Units)
	-	48-0501/01	Tube Assy, Syrup, BIB (use on 5 Valve Units)
R	30	REF	Tube Assy, Syrup #4
	-	48-0476/01	Tube Assy, Syrup, Figal/Remote (use on 6 Valve Units)
	-	48-0477/01	Tube Assy, Syrup, Figal/Remote (use on 5 Valve Units)
	-	48-0452/01	Tube Assy, Syrup, BIB (use on 6 Valve Units)
	-	48-0453/01	Tube Assy, Syrup, BIB (use on 5 Valve Units)
R	31	REF	Tube Assy, Syrup #5
	-	48-0477/01	Tube Assy, Syrup, Figal/Remote (use on 6 Valve Units)
	-	48-0478/01	Tube Assy, Syrup, Figal/Remote (use on 5 Valve Units)
	-	48-0453/01	Tube Assy, Syrup, BIB (use on 6 Valve Units)
	-	48-0454/01	Tube Assy, Syrup, BIB (use on 5 Valve Units)
R	32	REF	Tube Assy, Syrup #6
	-	48-0478/01	Tube Assy, Syrup, Figal/Remote (use on 6 Valve Units)
	-	48-0454/01	Tube Assy, Syrup, BIB (use on 6 Valve Units)
R	33	08-0029	Tube, Flexible
R	34	01-0483	Adapter Assy, Elbow
R	35	07-0409	Clamp, Oetiker
R	36	01-0424/01	Elbow, Swivel, Hose Assy, Units Without Pumps
R	37	01-2548	Fitting, Check Valve, 3/8”

R in margin indicates change or revision

7.5 CARBONATOR DECK/PUMP BRACKET ASSEMBLIES



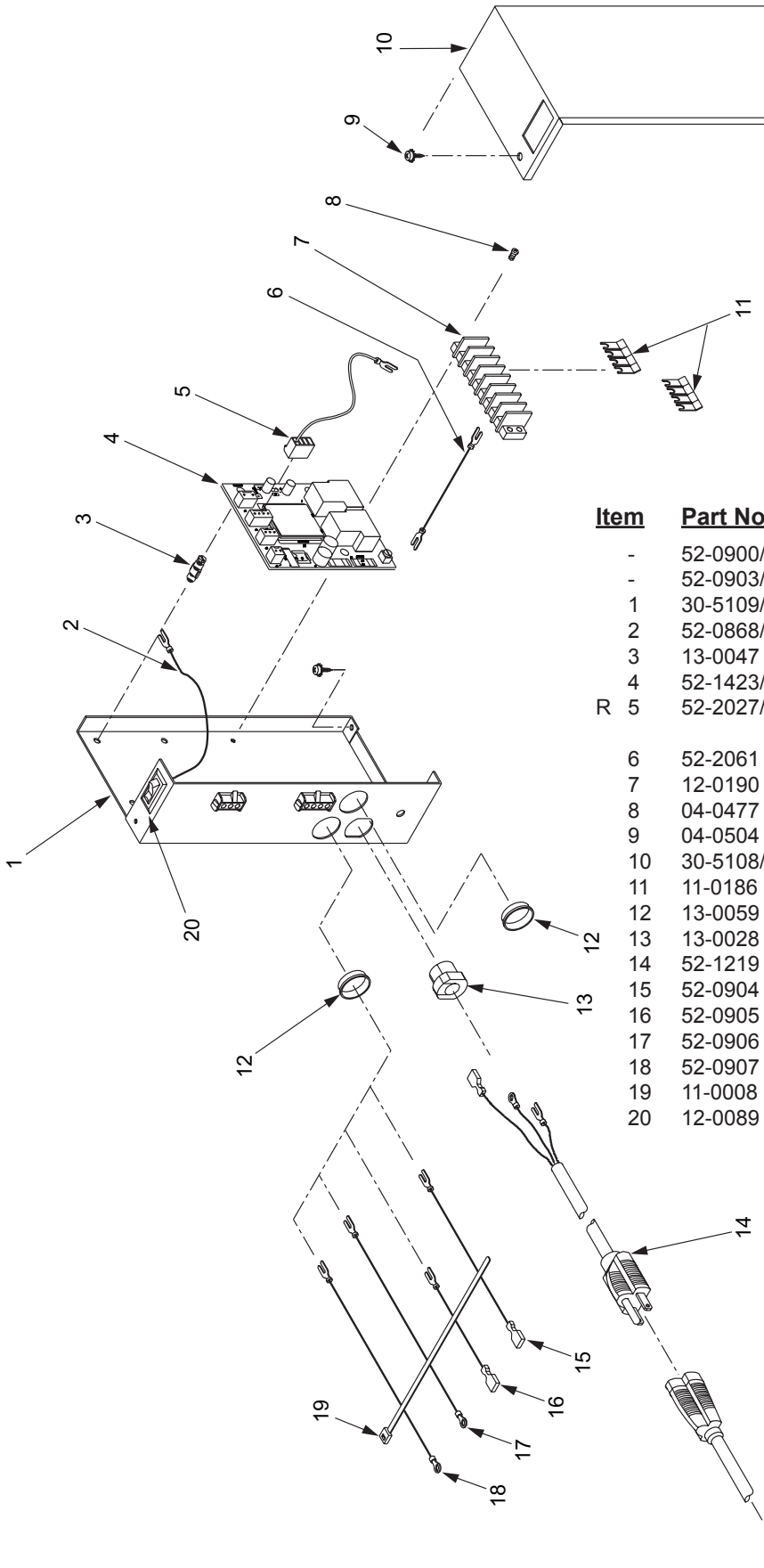
7.5 CARBONATOR DECK/PUMP BRACKET ASSEMBLIES (CONTINUED)

	Item	Part No.	Description
	-	82-2555	Deck Assy, Carbonator, 115V, 60Hz
	-	82-2552	Deck Assy, Carbonator, 220V, 50-60Hz
	1	REF	Plate, Carbonator Deck
	-	51-5411	Plate Assy, Carbonator Deck
	-	30-6800	Plate, Carbonator Deck
	2	REF	Insulation, Carbonator Deck
	-	50-0328	Insulation, Carbonator Deck
	3*	05-0436	Sleeve, Probe
	4	04-0711	Caplug
	5*	05-0435	Sleeve, CO2 IN
	6	89-0014	Cover, Hole
	7	04-0576	Washer, No. 8 Int. tooth
	8*	04-0110	Nut, no. 8 - 32
	9	REF	Lead Assy, Ground (Compressor Deck to Carbonator Deck)
	10*	REF	Carbonator Motor
	-	91-0063	Carbonator Motor, 115V/60Hz
	-	91-0065	Carbonator Motor, 220V/50-60 Hz
R	11*	86-0084	Pump, 100 GPH
	12*	02-0194	Grommet, 0.250 OD X 0.156 ID X 0.049 W
	13*	04-0061	Screw, 8 - 18 X 0.500 AB
	14	06-0877	Label, Ground
R	15	06-0856/01	Label, Water Fill
	16	01-1515	Pump Outlet Assy
	-	82-0900	Pump Bracket Assy, 6 Pump
	-	82-0906	Pump Bracket Assy, 5 Pump
	17	30-5111	Pump Support
	18*	04-0504	Screw, 8 - 18 X 0.375
	19*	82-0251	Mini Pump
	20*	04-0275	Screw, Half Moon
	21*	04-0359	Screw, 8 - 32 X 3.100
	22	54-0091	Manifold Assy (used on 6V and 5V)
	23	54-0092	Manifold Assy (used in 6V and 5V)
	24	07-0441	Clamp, Oetiker
R	25	08-0272/01	Tube, CO2 Carbonator (used on 6V and 5V)
	26	08-0271	Tube, CO2 Carbonator (used on 6V and 5V)
	27	08-0268	Tube, CO2 Carbonator (used on 6V)
	-	08-0269	Tube, CO2 Carbonator (used on 5V)
	28	05-0604	Plug, CO2 Manifold
	29*	04-0431	Screw, 1/4 - 20 X 1.000, Round Head
	30*	04-0033	Washer, 1/4”
	31	01-0987	Elbow, Brass
R	32*	07-0017/01	Clamp with screw
	33	02-0089	O-Ring
	34	01-1325/01	Elbow Assy, CO2 (used on 5V)
	35	02-0005	O-Ring
	36	01-1072	Elbow Assy (included in Installation Kit)
	37	49-0101/01	Tubing Assy, BIB
	38	82-2744	Dampener Assy
	39	08-0029	Tubing, Braided, 0.250 ID
	40	07-0409	Clamp, Oetiker

* Items can be interchanged between Delta, Delta II, and Delta III.

R in margin indicates change or revision

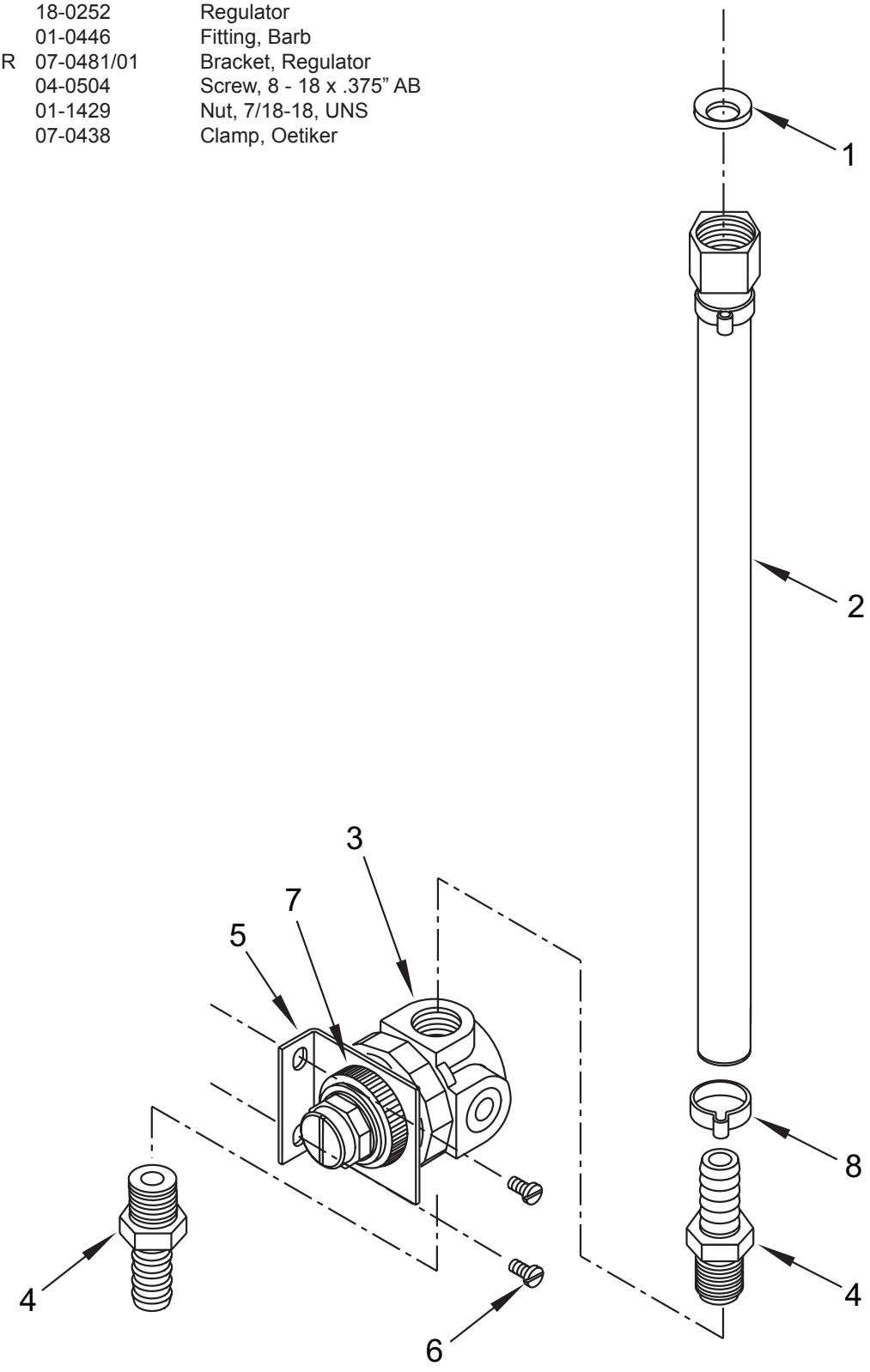
7.6 CONTROL HOUSING (ALSO SEE SECTION 7.8, WIRING DIAGRAM)



Item	Part No.	Description
-	52-0900/02	Control Housing, With ON/OFF Switch
-	52-0903/02	Control Housing, Without Kill Switch
1	30-5109/02	Control Housing
2	52-0868/01	Lead Assy, ON/OFF Switch
3	13-0047	Stand-off
4	52-1423/01	PCB Assy
R 5	52-2027/01	Lead Assy, Probe Ground (Non-Carb Units Only)
6	52-2061	Lead Assy, EIBC
7	12-0190	Terminal Block
8	04-0477	Screw, 8 - 32 X 0.375”
9	04-0504	Screw, 8 - 16 X 0.375”
10	30-5108/01	Cover, Control Box
11	11-0186	Jumper, 4-Position
12	13-0059	Bushing
13	13-0028	Strain Relief
14	52-1219	Power Cord (Pigtail)
15	52-0904	Harness Assy, Trans #1
16	52-0905	Harness Assy, Trans #2
17	52-0906	Harness Assy, Comp #1
18	52-0907	Harness Assy, Comp #2
19	11-0008	Tie Wrap
20	12-0089	Switch

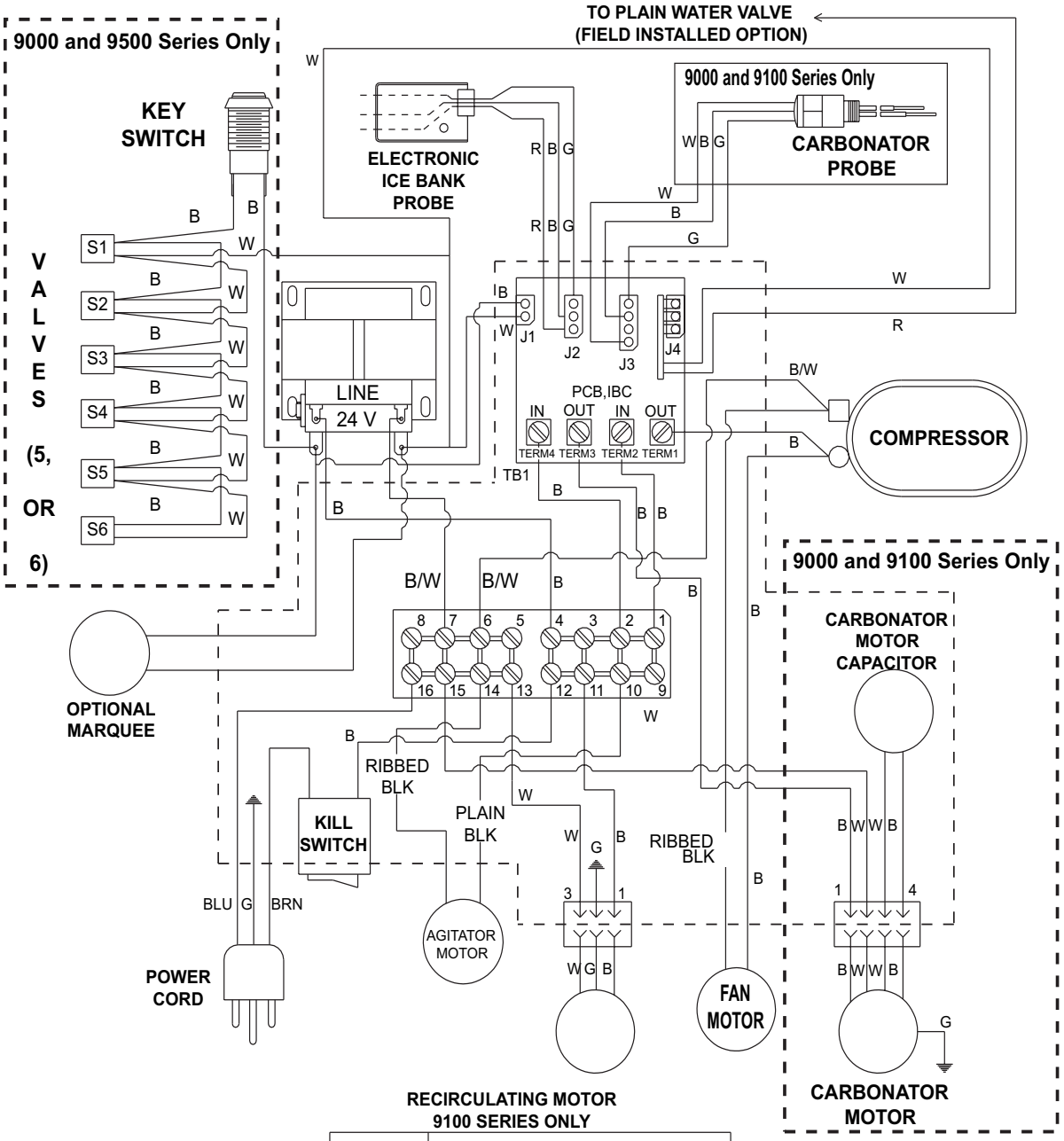
7.7 WATER REGULATOR ASSEMBLY

Item	Part No.	Description
	18-0253/02	Regulator Assembly, Water
1	05-0017	Washer, Seal, Flare, Nylon
2	49-0227	Hose, Regulator Assy
3	18-0252	Regulator
4	01-0446	Fitting, Barb
5 R	07-0481/01	Bracket, Regulator
6	04-0504	Screw, 8 - 18 x .375” AB
7	01-1429	Nut, 7/18-18, UNS
8	07-0438	Clamp, Oetiker



IMPORTANT

1. **WHEN STARTING UNIT OR IF CURRENT IS INTERRUPTED, THERE IS A FIVE (5) MINUTE DELAY BEFORE THE COMPRESSOR/FAN STARTS.**
2. **THERE IS A THREE (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
▭▭▭	OPTIONAL WATER BOOST PCB,IBC J4
- - - -	CONTROL BOX

DELTA

LANCER®

LABEL, WIRING DIAGRAM
06-2221

8. 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®

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