

LANCER®

COLD CARBONATED DISPENSERS (CCD) SERIES 8000

Operation Manual

PN: 28-0631/06



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Model Number



Manual PN: 28-0631/06

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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.

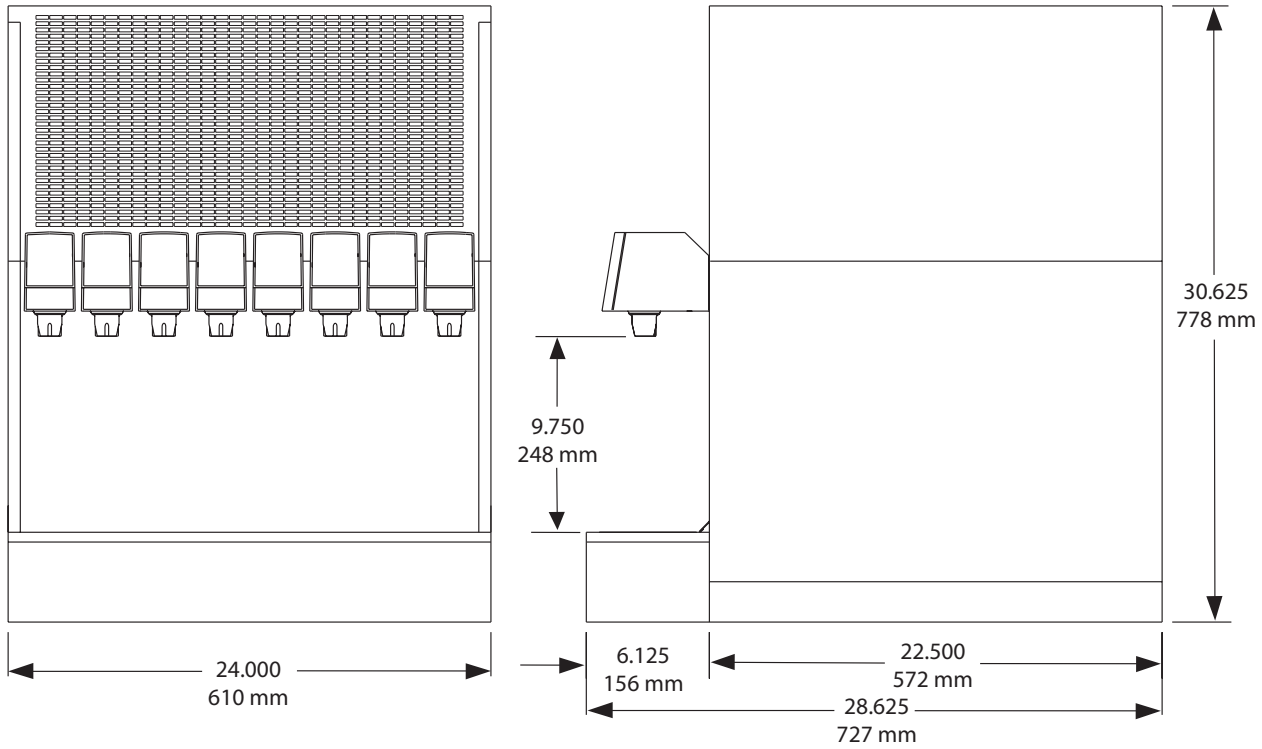
The installation and relocation, if necessary, of this product must be carried out by qualified personnel with up-to-date safety and hygiene knowledge and practical experience, in accordance with current regulations.

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CCD 8000 SPECIFICATIONS



<p>DIMENSIONS Width: 24 in (610 mm) Depth: 28 5/8 in (727 mm) Height: 30 5/8 in (778 mm)</p> <p>SPACE REQUIRED Left Side: 4 in (101.6 mm) Right side: 4 in (101.6 mm) Back: 4 in (101.6 mm) Top: 8 in (203.2 mm)</p> <p>ELECTRICAL 115VAC/60Hz/16AMPs 230VAC/50Hz/7AMPs</p>	<p>WEIGHT Empty: 220 lbs (99.8 kg) Operating: 386 lbs (175 kg) Shipping: 267 lbs (121 kg)</p> <p>ICE Capacity: 55 lbs (25 kg)</p> <p>FITTINGS Water for carbonator inlet: 3/8" barb Plain water inlet: 3/8" barb Brand syrup inlets: 3/8" barb CO2 inlet: 3/8" barb</p>	<p>CARBONATOR WATER SUPPLY Min flowing pressure: 25 PSIG (0.176 MPA) Max static pressure: 60 PSIG (0.414 MPA)</p> <p>CARBON DIOXIDE (CO2) Min pressure: 70 PSIG (0.483 MPA) Max pressure: 80 PSIG (0.552 MPA)</p>
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PRE-INSTALLATION CHECKLIST

BEFORE GETTING STARTED

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

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

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

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

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

PRE-INSTALLATION CHECKLIST (CONTINUED)

Series 8000 Performance		
Draw Performance		
Draws per Minute	75°	90°
4-12s	Indefinite	325
2-24s	Indefinite	168
2-18s	Indefinite	290

Initial Pull Down		
75°	90°	105°
2:45	3:40	5:40

OPTIONAL ACCESSORIES, SERIES 8000	
<u>PART NUMBER</u>	<u>DESCRIPTION</u>
82-2203	MARQUEE
06-1784	GRAPHICS, COCA-COLA, SCREENED
06-2104	GRAPHICS, COCA-COLA, THREE CUP
82-2184/01-20	MERCHANDISER KIT ASSEMBLY, USA
82-2184/01	MERCHANDISER KIT ASSEMBLY, INTERNATIONAL

DISPENSER INSTALLATION HIGHLIGHTS

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

1. Fill water bath until water over flows from tank overflow tube.

NOTE: Do NOT use distilled water to fill water bath.

2. The carbonator pump motor must be disconnected from the power supply (refer to this manual - Section 1.8A) 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 5 below) or damage to the pump.
3. If this dispenser is installed in an area that is susceptible to $\pm 10\%$ variation of the nominal line voltage, consider installing a surge protector or similar protection device.
4. There is a five 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 minute delay before the compressor starts.
5. The unit is equipped with a protective timer [set for three minutes] for the carbonator pump motor. If the carbonator motor has timed out, it must be manually reset by either momentarily unplugging the unit or switching the on/off switch OFF (if present). Once power is restored, the five minute compressor delay would be in effect.
6. Valve adjustment: Make sure drink temperature is below 40°F (4.4°C) before adjusting brix.



WARNING/ADVERTENCIA/AVERTISSEMENT



⚠ The dispenser is for indoor use only. This appliance is intended for use in commercial applications such as restaurants, stores or similar. This unit is not a toy. It should not be used by children or infirm persons without supervision. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Cleaning and user maintenance shall not be performed by children without supervision. This unit is not designed to dispense dairy products. The minimum/maximum ambient operating temperature for the dispenser is 40°F to 90°F (4°C to 32°C). Do not operate unit below minimum ambient operation conditions. Should freezing occur, cease operation of the unit and contact authorized service technician. Service, cleaning and sanitizing should be accomplished only by trained personnel. Applicable safety precautions must be observed. Instruction warnings on the product being used must be followed.

⚠ El dispensador sólo debe usarse en interiores. Esta unidad está diseñada para su uso en aplicaciones comerciales tales como restaurantes, tienda o similares. Esta unidad no es un juguete. No la deben usar niños ni personas discapacitadas sin supervisión. Esta unidad no está destinada al uso por parte de personas (incluso niños) con capacidad física, sensorial o mental reducida, o sin experiencia y conocimientos suficientes, a menos que una persona responsable de su seguridad les haya dado supervisión o capacitación en el uso de la unidad. Limpieza y mantenimiento de usuario no deberá ser realizada por los niños sin supervisión. Esta unidad no ha sido diseñada para suministrar productos lácteos. La temperatura ambiente operativa mínima / máxima para el dispensador es de 40°F a 90°F (4°C a 32°C). No opere la unidad por debajo de las condiciones mínimas de funcionamiento ambiente. En caso de ocurrir congelación, cesar la operación de la unidad y póngase en contacto con el servicio técnico autorizado. Servicio de limpieza y desinfección debe llevarse a cabo solamente por personal especializado. Precauciones de seguridad aplicables deben ser observadas. Advertencias de instrucciones en el producto que se use debe ser seguido.

⚠ Le distributeur est destiné à un usage à l'intérieur seulement. Cet appareil est conçu pour une utilisation dans des applications commerciales telles que les restaurants, les dépanneurs ou similaires. Cet appareil n'est pas un jouet. Il ne devrait pas être utilisé par des enfants ou des personnes infirmes sans surveillance. Cet appareil n'est pas destiné à un usage par des personnes (y compris les enfants) ayant des capacités physiques, sensorielles ou mentales réduites, ou manquant d'expérience et de connaissances, à moins qu'elles obtiennent de la surveillance ou des instructions au sujet de l'utilisation de l'appareil de la part d'une personne chargée de leur sécurité. Nettoyage et entretien de l'utilisateur ne doivent pas être effectués par des enfants sans surveillance. Cet appareil n'est pas conçu pour distribuer des produits laitiers. La température de service ambiante minimum/maximum pour le distributeur est de 40°F à 90°F (4°C à 32°C). Ne pas faire fonctionner l'appareil ci-dessous les conditions minimales de fonctionnement ambiantes. Faut-gel se produisent, cesser l'exploitation de l'appareil et contactez technicien agréé. Service de nettoyage et de désinfection doivent être effectuées uniquement par du personnel qualifié. Les mesures de sécurité applicables doivent être respectées. Avertissements Instruction sur le produit utilisé doit être suivie.



DISPENSER INSTALLATION HIGHLIGHTS



This unit has been factory sanitized per Lancer specifications.

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

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



PUNTOS IMPORTANTES EN LA UNIDAD DISPENSADORA



Esta tin/dad ha sido saneada en fabrica por las especificaciones de Lancer.

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

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



REGLES DE SECURITE POUR L'NSTALLATION DU DISTRIBUTEUR DE SODAS



La proprètè da cet ensamble est assurè à l'usine sylvant 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'à ce que l'eau déborde par le tuyau de trop-plein du réservoir.
2. Le moteur de la pompe du carbonateur doit être débranché de l'alimentation électrique (Voir le manuel, Section 1.7) avant l'arrivée de l'eau pour la formation initiale de la glace. Oublier ou négliger cette opération provoquera l'arrêt automatique du carbonateur (voir le point 6 cidessous) ou causera des dommages à la pompe.
3. Si le distributeur es installé dans une zone ou la tension électrique nominale est susceptible de variations de (+) 10%, il est conseillé d'installe 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 écoulè. Lorsque le courant électrique es interrompu, il y a toujours un délai de 5 minutes avant que le presseur ne se mette en.
5. Pression de l'eau: Minimum 25 PSI (0.172 MPA); Maximo 50 PSI (0.345 MPA). Sur les unités qui n'ont pas de régulateur de pression d'eau incorprè, si la pression d'H2O est supérieure à 50 PSIG (0.345 MPA), un régulateur de pression d'eau doit être utilisè.
6. Sur les unités avec régulateur d'eau incorporè, le régulateur doit être enlevè si la pression d'arrivve est inferieure à 25 PSIG (0.172 MPA)



ELECTRICAL WARNING/ADVERTENCIA ELÉCTRICA/ AVERTISSEMENT ÉLECTRIQUE



⚠ Check the dispenser serial number plate for correct electrical requirements of unit. Do not plug into a wall electrical outlet unless the current shown on the serial number plate agrees with local current available. Follow all local electrical codes when making connections. Each dispenser must have a separate electrical circuit. Do not use extension cords with this unit. Do not 'gang' together with other electrical devices on the same outlet. The keyswitch does not disable the line voltage to the transformer primary. Always disconnect electrical power to the unit to prevent personal injury before attempting any internal maintenance. The resettable breaker switch should not be used as a substitute for unplugging the dispenser from the power source to service the unit. Only qualified personnel should service internal components of electrical control housing. Make sure that all water lines are tight and units are dry before making any electrical connections!

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

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



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



⚠ Carbon Dioxide (CO₂) is a colorless, noncombustible gas with a light pungent odor. High percentages of CO₂ may displace oxygen in the blood. Prolonged exposure to CO₂ can be harmful. Personnel exposed to high concentrations of CO₂ gas will experience tremors which are followed by a loss of consciousness and suffocation. If a CO₂ gas leak is suspected, immediately ventilate the contaminated area before attempting to repair the leak. Strict attention must be observed in the prevention of CO₂ gas leaks in the entire CO₂ and soft drink system.

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

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



AUTOMATIC AGITATION/AGITACIÓN AUTOMÁTICA/



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

⚠ Las unidades están equipadas con un sistema automático de agitación, por lo que se pueden activar repentinamente. No ponga las manos ni objetos extraños en el 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 50 LPC (0.345 MPA) avec le régulateur de pression fourni. Utilisez un filtre dans la conduite d'eau pour éviter des dommages à l'équipement et un goût des boissons qui n'est pas juste. Vérifiez le filtre à eau périodiquement, selon les exigences des conditions locales. L'alimentation en eau doit être protégée au moyen d'un intervalle d'air, un disjoncteur 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 THE UNIT

Each unit is completely tested under operating conditions and thoroughly inspected before shipment. At time of shipment, the carrier accepts the unit and any claim for damage(s) must be made with carrier. Upon receiving units from the delivering carrier, carefully inspect carton for visible indication(s) of damage. If damage exists, have carrier note same on bill of lading and file a claim with the carrier.

1.2 UNPACKING



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

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

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

- A. Cut band and remove.
- B. Remove top portion of carton by lifting up.
- C. Remove accessory kit of 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 and if evident, notify delivering carrier and file a claim against same.
- 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 unit secured to plywood shipping base.

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

1.3 UNPACKING INSTALLATION KITS

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

1.4 SELECTING A COUNER LOCATION

The dispenser is designed to sit on a flat, supported surface capable of supporting a minimum weight of 400 pounds (90.7 kg). It may be either counter or leg mounted. When the dispenser is to be permanently bolted to the counter top, seal dispenser base to counter top with a silicone sealant which provides a smooth and easily cleanable bond to the counter.

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



WARNING FAILURE TO MAINTAIN PROPER AIR CLEARANCE WILL CAUSE THE COMPRESSOR TO OVERHEAT AND WILL RESULT IN PREMATURE COMPONENT FAILURE

WARNING FALTA DE MANTENIMIENTO DE LIQUIDACIÓN DE AIRE ADECUADO HACEN QUE EL COMPRESOR SE SOBRECALIENTE Y PODRÁ FALLAR COMPONENTE PREMATURO

WARNING NON-RESPECT DE LIQUIDATION DE L'AIR BONNE QUE LE COMPRESSEUR À SURCHAUFFER ET À ENTRAÎNER DE DURER COMPOSANT

Locate dispenser to allow approximately 15 inches (380 mm) of unobstructed space above and six (6) inches (152 mm) of unobstructed space in back of the unit for proper air circulation and removal of bonnet. Air is drawn in through the back grill and is exhausted out the top grill.

1.5 CONNECTING THE DRAIN

- A. Remove cup rest. Lift splash plate up and pull out and down on the bottom to remove.
- B. Remove the drip tray from the unit and connect the drain tube to the drain fitting located on the bottom. Secure drain tube with clamp provided in accessory kit.
- C. Route the drain tube to a suitable drain and replace the unit's drip tray.

1.6 FILLING UNIT WITH WATER

- A. Remove the bonnet from the unit.
- B. Remove the yellow plastic plug from the 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. Use bottled water where a water problem exists.
- D. Replace the yellow plug.

1.7 CONNECTING TO ELECTRICAL POWER

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



GROUNDING WARNING THE DISPENSER MUST BE PROPERLY ELECTRICALLY GROUNDED TO AVOID SERIOUS INJURY OR FATAL ELECTRICAL SHOCK. THE POWER CORD HAS A THREE-PRONG GROUNDED PLUG. IF A THREE-HOLE GROUNDED ELECTRICAL OUTLET IS NOT AVAILABLE, USE AN APPROVED METHOD TO GROUND THE UNIT. FOLLOW ALL LOCAL ELECTRICAL CODES WHEN MAKING CONNECTIONS. EACH DISPENSER MUST HAVE A SEPARATE ELECTRICAL CIRCUIT. DO NOT USE EXTENSION CORDS. DO NOT CONNECT MULTIPLE ELECTRICAL DEVICES ON THE SAME OUTLET.

ADVERTENCIA, PUESTA A TIERRA ES NECESARIO PONER A TIERRA ELÉCTRICAMENTE EL DISPENSADOR PARA EVITAR LESIONES GRAVES E INCLUSO ELECTROCHOQUES FATALES. EL CABLE DE ALIMENTACIÓN TIENE UN ENCHUFE PUESTO A TIERRA DE 3 CLAVIJAS. SI NO SE DISPONE DE UN TOMA ELÉCTRICO CONECTADO A TIERRA DE TRES AGUJEROS, USE UN MÉTODO APROBADO PARA PONER A TIERRA LA UNIDAD. AL HACER LAS CONEXIONES, RESPETE TODOS LOS CÓDIGOS ELÉCTRICOS LOCALES. CADA DISPENSADOR DEBE TENER UN CIRCUITO ELÉCTRICO INDEPENDIENTE. NO USE CABLES DE EXTENSIÓN. NO CONECTE VARIOS DISPOSITIVOS ELÉCTRICOS AL MISMO TOMACORRIENTE.

EXIGENCES DE MISE À LA TERRE LA DISTRIBUTRICE DOIT ÊTRE MISE À LA TERRE ÉLECTRIQUEMENT CORRECTEMENT POUR ÉVITER DES BLESSURES GRAVES OU UNE DÉCHARGE ÉLECTRIQUE MORTELLE. LE CORDON D'ALIMENTATION A UNE FICHE À TROIS BRANCHES MISE À LA TERRE. SI AUCUNE PRISE DE COURANT ÉLECTRIQUE À TROIS TROUS N'EST DISPONIBLE, UTILISEZ UNE MÉTHODE APPROUVÉE POUR METTRE L'UNITÉ À LA TERRE. RESPECTEZ TOUS LES CODES ÉLECTRIQUES LOCAUX LORSQUE VOUS FAITES DES CONNEXIONS. CHAQUE DISTRIBUTRICE DOIT AVOIR UN CIRCUIT ÉLECTRIQUE SÉPARÉ. N'UTILISEZ PAS DE CORDONS PROLONGATEURS. NE BRANCHEZ PAS PLUSIEURS APPAREILS ÉLECTRIQUES À LA MÊME PRISE DE COURANT.

1.7 CONNECTING TO ELECTRICAL POWER, CONTINUED

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



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

PRECAUCIÓN SI NO DESCONECTA LA ALIMENTACIÓN ELÉCTRICA DEL MOTOR PODRÍAN DAÑARSE LA BOMBA Y EL MOTOR DEL CARBONATADO Y ANULAR LA GARANTÍA.

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

1.8 CONNECTING TO WATER SUPPLY

NOTE: Adhere to the WATER SUPPLY Warnings/Cautions, Page 6.

- A. Using tubing and fittings from installation kit, connect Tubing Assembly to water source. DO NOT CONNECT TO DISPENSER AT THIS TIME.
- B. Flush water supply line thoroughly.
- C. IF THE WATER SOURCE IS ABOVE 50 PSIG (3.52 KG/CM²), CUT TUBING ASSEMBLY AND INSTALL WATER REGULATOR KIT.
- D. Route through hole in counter and through opening behind Splash Plate and connect to Carbonator Pump.
- E. Turn on water supply and check for leaks.
- F. Using Test Gauge Assembly (PN 22-0138), set Regulator at 50 PSIG (3.52 kg/cm²).

1.9 CONNECTING TO CO₂ SUPPLY

- A. Connect 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 in service location under counter, etc., and secure it with a safety chain.
- C. Route gas line through hole in counter and through opening behind the Dispenser Splash Plate.



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.

- D. Connect the CO₂ supply line directly to the Carbonator CO₂ Inlet Check Valve.

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

- A. To connect CO₂ regulator assembly to the CO₂ cylinder, see Section 1.9, 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 using an 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.

1.11 PURGING THE CARBONATION SYSTEM

- A. Turn on water source. Lift the black lever on the top of the carbonator tank relief valve until water flows from the holes in the relief valve. Then release the relief valve.
- B. Reconnect the power supply to the carbonator pump.
- C. 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 (5.1 bar).
- D. Press and hold each valve lever until water is flowing steadily from each valve.
- E. Check all of the unit's water, syrup, and CO₂ connections for leaks and repair if necessary.

NOTE: Tank Method Only - to check for CO₂ leaks, close the valve on the CO₂ cylinder and observe if the pressure to the system drops with the cylinder valve closed for five (5) minutes. Open the cylinder valve after check.

- F. Assemble the unit's bonnet, splash plate, and cup rest.

NOTE: Ensure a minimum of 5 gallons of water is flushed through each valve prior to use.

1.12 PURGING THE WATER AND SYRUP SYSTEMS

- A. Set the adjustable back blocks to deliver plain water
- 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

1.13 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.

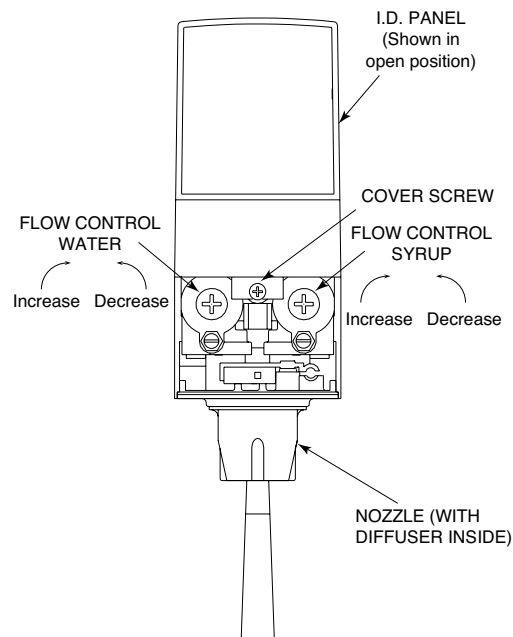


Figure 1
Typical Valve Adjustment, LEV®

1.14 ADJUSTING WATER TO SYRUP (RATIO) BRUX (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 1.10.F above).
- E. Install diffuser and nozzle.
- F. Slide down ID panel.
- G. Repeat process for each valve.

2. SCHEDULED MAINTENANCE

2.1 DAILY

- A. Remove the nozzle and diffuser from each valve and rinse well in warm water. Do NOT use soap or detergent. This will cause foaming and off taste in finished product.
- 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 water, wipe off all of the unit's exterior surfaces. DO NOT USE ABRASIVE SOAPS OR STRONG DETERGENTS.
- E. Replace the cup rest, valve diffusers, and valve nozzles.

2.2 WEEKLY

- A. Taste each product for off tastes and/or brix changes.
- B. Remove the bonnet and check the level of water in the water bath. Replenish as required, and replace the bonnet.

2.3 MONTHLY

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

2.4 EVERY SIX MONTHS

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

2.5 YEARLY

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

3. DISPENSER CLEANING AND SANITIZATION

3.1 GENERAL INFORMATION

- A. Lancer equipment (new or reconditioned) is shipped from the factory cleaned and sanitized in accordance with NSF guidelines. The operator of the equipment must provide continuous maintenance as required by this manual and/or state and local health department guidelines to ensure proper operation and sanitation requirements are maintained.

NOTE: The cleaning procedures provided herein pertain to the Lancer equipment identified by this manual. If other equipment is being cleaned, follow the guidelines established by the manufacturer for that equipment.

- B. Cleaning should be accomplished only by trained personnel. Sanitary gloves are to be used during cleaning operations. Applicable safety precautions must be observed. Instruction warnings on the product being used must be followed.

3.2 CLEANING AND SANITIZING SOLUTIONS

CLEANING SOLUTION: Mix a mild, non-abrasive detergent (e.g. Sodium Laureth Sulfate, dish soap) with clean, potable water at a temperature of 90°F to 110°F (32°C to 43°C). The mixture ratio is one ounce of cleaner to two gallons of water. Prepare a minimum of five gallons of cleaning solution. Do not use abrasive cleaners or solvents because they can cause permanent damage to the unit. Ensure rinsing is thorough, using clean, potable water at a temperature of 90°F to 110°F. Extended lengths of product lines may require additional cleaning solution.

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

3.3 AMBIENT PROCESS

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

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



CAUTION FOLLOWING SANITIZATION, RINSE WITH END-USE PRODUCT UNTIL THERE IS NO AFTERTASTE. DO NOT USE A FRESH WATER RINSE. THIS IS A NSF REQUIREMENT. RESIDUAL SANITIZING SOLUTION LEFT IN THE SYSTEM CREATES A HEALTH HAZARD.

PRECAUCIÓN DESPUÉS DE LA ESTERILIZACIÓN, ENJUAGUE CON EL PRODUCTO FINAL HASTA QUE ELIMINAR EL SABOR QUE QUEDA. NO ENJUAGUE CON AGUA FRESCA. ÉSTA ES UNA EXIGENCIA DE NSF. SI QUEDA SOLUCIÓN DE ESTERILIZACIÓN EN EL SISTEMA, GENERA UN PELIGRO PARA LA SALUD.

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

3.4 VALVES

- A. Valves may be cleaned and sanitized in the same manner
- B. Remove cover and disconnect power so not to activate the valve while cleaning. Remove nozzle and diffuser. Wash these parts in cleaning solution, then immerse them in a bath of sanitizing solution for 15 minutes.
- C. 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.
- D. Wearing sanitary gloves, remove, drain and air dry the nozzle and diffuser.
- E. Wearing sanitary gloves, replace diffuser and twist nozzle into place.
- F. Draw drinks to flush the chlorine solution from the valves.

NOTE: Please note that a fresh water rinse cannot follow sanitization of equipment. Purge only with the end use product. This is an NSF requirement.

- G. Taste the beverage to verify that there is no off taste.
- H. Connect power and replace cover. Valve is ready for operation.

4. TROUBLESHOOTING

TROUBLE	CAUSE	REMEDY
4.1 Water leakage around nozzle.	A. Damaged or improperly installed o-ring above diffuser.	A. if damaged, replace. If improperly installed, adjust.
4.2 Leake 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.
4.3 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
4.4 Insufficient water flow.	A. insufficient incoming supply water pressure. B. Shutoff on mounting bloack not fully open. C. Foreign debris in water flow control.	A. Verify incoming supply water pressure is a minimum of 35 PSI (2.4 BAR). B. Open shutoff fully. C. Remove water flow control from upper body and clean out any foreign material to ensure smooth free spool movement.
4.5 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 (5.5 BAR) [minimum 70 PSI (4.8 BAR)] 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.
4.6 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
4.7 No product dispensed	<p>A. Water and syrup shutoffs on mounting block not fully open.</p> <p>B. The key switch on an electric valve is in the OFF position.</p> <p>C. Cup lever arm or ID panel actuator on electric valve is not actuating the switch.</p> <p>D. Electric current not reaching valve.</p> <p>E. Improper or inadequate water or syrup supply.</p>	<p>A. Open shutoff fully.</p> <p>B. Turn key switch to ON position.</p> <p>C. Repair</p> <p>D. Check electric current supplied to valve. If current is adequate, check solenoid coil and switch, and replace if necessary.</p> <p>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</p>
4.8 Water only dispensed; no syrup; or syrup only dispensed, no water	<p>A. Water or syrup shutoff on mounting block not fully open.</p> <p>B. Improper or inadequate water or syrup flow.</p> <p>C. Kinked line.</p>	<p>A. Open shutoff fully.</p> <p>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.</p> <p>C. Remove kink or replace line.</p>
4.9 No water, just syrup. (Ice bank grew to water inlet line to carbonator tank).	<p>A. Syrup in water bath.</p> <p>B. Water cage is out of position.</p> <p>C. Coolant leak.</p> <p>D. Check water supply.</p> <p>E. Carbonator timed out.</p> <p>F. Ice bank control malfunctioning.</p>	<p>A. Melt ice bank and remove all water. Refill. Locate possible syrup leak area and repair.</p> <p>B. Reposition water cage.</p> <p>C. Find leak and recharge unit (if unit is not frozen).</p> <p>D. Turn on water and shut unit OFF, then ON to reset carbonator.</p> <p>E. Turn unit OFF, then ON to reset carbonator.</p> <p>F. Replace ice bank control.</p>
4.10 Valve will not shut off.	<p>A. Cup lever may be sticking or binding.</p> <p>B. Switch not actuating freely.</p> <p>C. Solenoid armature not returning to bottom position.</p>	<p>A. Correct or replace lever.</p> <p>B. Check switch for free actuation.</p> <p>C. Replace defective armature or spring.</p>

TROUBLE	CAUSE	REMEDY
4.11 Syrup only dispensed. No water, but CO2 gas dispensed with syrup.	<p>A. Improper water flow to dispenser.</p> <p>B. Carbonator pump motor has timed out.</p> <p>C. Liquid level probe not connected properly to PCB.</p> <p>D. Defective PCB assembly.</p> <p>E. Defective liquid level probe.</p> <p>F. Water bath frozen.</p> <p>G. Water line frozen.</p>	<p>A. Check for water flow to dispenser (see item 4.4).</p> <p>B. Reset by turning the unit OFF, and then ON by using the ON/OFF switch on top of the unit, or unplugging unit momentarily.</p> <p>C. Check connections of liquid level probe to PCB assembly.</p> <p>D. Replace PCB assembly.</p> <p>E. Replace liquid level probe.</p> <p>F. Thaw water bath and repair defective component. (see refrigeration-related symptoms).</p> <p>G. Refer to item 4.14 listed below.</p>
4.12 Excessive foaming.	<p>A. incoming water or syrup temperature too high.</p> <p>B. Water flow rate too high.</p> <p>C. Nozzle and diffuser not properly installed.</p> <p>D. Nozzle and diffuser not clean.</p> <p>E. Air in BIB lines.</p> <p>F. Poor quality ice.</p> <p>G. High beverage temperature</p>	<p>A. Correct prior to dispenser. Consider larger dispenser or precooler.</p> <p>B. Readjust and reset ratio. Refer to Section 1.11</p> <p>C. Remove and reinstall properly.</p> <p>D. Remove and clean.</p> <p>E. Bleed air from BIB lines.</p> <p>F. Check quality of ice used in drink.</p> <p>G. Check refrigeration system.</p>
4.13 Water continually overflows from water bath into drip tray.	<p>A. Loose water connections.</p> <p>. Flare seal washer leaks.</p> <p>C. Defective water coil.</p>	<p>A. Tighten water connections.</p> <p>B. Replace flare seal washer.</p> <p>C. Replace water coil.</p>
4.14 Compressor starts and continues to run until freeze up and will not turn off.	<p>A. Ice bank control malfunctioning.</p> <p>B. Ice bank probe positioned improperly.</p>	<p>A. Replace ice bank control.</p> <p>B. Check positioning of ice bank probe and reset if needed.</p>
<p>NOTE: First check to ensure that the three minute carbonator timer has not timed out. Turn unit off, then on. If the pump shuts off in less than thirty seconds, the dispenser is not frozen.</p>		

TROUBLE	CAUSE	REMEDY
4.15 Warm Drinks	<p>A. Restricted airflow</p> <p>B. Dispenser connected to hot water supply.</p> <p>C. Refrigeration system not running.</p> <p>D. Refrigeration leak.</p> <p>E. Condenser fan motor not working.</p> <p>F. Dirty Condenser.</p> <p>G. Dispenser capacity exceeded.</p>	<p>A. Check clearances around sides, top, and inlet of unit. Remove objects blocking airflow through grill.</p> <p>B. Switch to cold water supply.</p> <p>C. Refer to Sections 4.11 - 4.15.</p> <p>D. Repair and recharge.</p> <p>E. Replace condenser fan motor.</p> <p>F. Clean condenser.</p> <p>G. Add pre-chiller.</p>
4.16 Compressor does not start (no hum), condenser fan motor does not run and no ice bank.	<p>A. There is a five minute compressor and condenser fan delay.</p> <p>B. Ice bank probe not completely submerged.</p> <p>C. Circuit breaker or fuse tripped.</p> <p>D. Inadequate voltage.</p> <p>E. Ice bank control malfunctioning.</p> <p>F. Incorrect wiring.</p> <p>G. Circuit breaker tripped on 24 volt transformer.</p>	<p>A. Allow for five minute delay to lapse.</p> <p>B. Fill water reservoir until water flows from overflow tube.</p> <p>C. Reset breaker or replace fuse. If problem persists: 1) determine reason and correct, 2) electrical circuit overloaded; switch to another circuit.</p> <p>D. Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rated voltage.</p> <p>E. Replace ice bank control.</p> <p>F. Refer to wiring diagram and correct.</p> <p>G. Find cause of short and correct. Then reset transformer.</p>
4.17 Compressor does not start (no hum), but condenser fan motor runs	<p>A. Compressor relay or overload malfunctioning.</p> <p>B. Inadequate voltage.</p> <p>C. Incorrect wiring.</p> <p>D. Compressor malfunctioning</p>	<p>A. Replace compressor relay or overload.</p> <p>B. Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rated voltage.</p> <p>C. Refer to wiring diagram and correct.</p> <p>D. Replace compressor.</p>

TROUBLE	CAUSE	REMEDY
4.18 Compressor does not start but hums	<p>A. Inadequate voltage.</p> <p>B. Incorrect wiring.</p> <p>C. Starting relay malfunctioning.</p> <p>D. Compressor malfunctioning</p>	<p>A. Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rated voltage</p> <p>B. Refer to wiring diagram and correct</p> <p>C. Replace starting relay. Be sure to use correct relay. Failure to use correct relay will cause compressor failure.</p> <p>D. Replace compressor</p>
4.19 Compressor starts but does not switch off start winding (will run for only a few seconds before internal overload switches compressor off).	<p>A. Inadequate voltage.</p> <p>B. Incorrect wiring.</p> <p>C. Starting relay malfunctioning</p>	<p>A. Measure voltage across common and run terminal on compressor.</p> <p>B. Refer to wiring diagram and correct</p> <p>C. Replace starting relay. Be sure to use correct relay. Failure to use correct relay will cause compressor failure.</p>
4.20 Compressor starts and runs a short time but shuts off on overload	<p>A. Dirty condenser</p> <p>B. Insufficient or blocked air flow.</p> <p>C. Inadequate voltage.</p> <p>D. Incorrect wiring.</p> <p>E. Defective condenser fan.</p> <p>F. Refrigerant leak.</p> <p>G. Compressor malfunctioning</p>	<p>A. Clean the condenser.</p> <p>B. Remove all obstructions and allow for minimum clearances of 15 inches (380 mm) over top.</p> <p>C. Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rated voltage.</p> <p>D. Refer to wiring diagram and correct.</p> <p>E. Replace condenser fan motor.</p> <p>F. Repair and recharge.</p> <p>G. Replace compressor</p>
4.21 Compressor runs normally, but water line is frozen.	<p>A. Low water level in water bath.</p> <p>B. Syrup in water bath.</p> <p>C. Water cage is out of position.</p> <p>D. Low coolant charge/slow coolant leak.</p>	<p>A. Add water to water bath until water runs out of overflow into drip tray.</p> <p>B. Drain water from water bath and refill with clean water.</p> <p>C. Reposition water cage.</p> <p>D. Find and repair leak. Recharge system.</p>

TROUBLE	CAUSE	REMEDY
4.22 Circuit breaker popping.	<p>A. Valve wire harness shorted to itself or to faucet plate.</p> <p>B. Secondary wire harness is bad.</p> <p>C. Transformer failure.</p>	<p>A. Detect short by disconnecting input faston to keylock and single pin connector. Restore power. If breaker doesn't pop, then valve wire harness is shorted; if OK, reconnect.</p> <p>B. If breaker does not pop, locate short in secondary wire harness between transformer, PCB and valve wire harness.</p> <p>C. Detect short by disconnecting both transformer fastons and restore power. If breaker does pop, replace transformer.</p>
4.23 Low or no carbonation.	<p>A. Low or no CO2.</p> <p>B. Excessive water pressure.</p> <p>C. Worn or defective carbonator pump.</p>	<p>A. Check CO2 supply. Adjust CO2 pressure to 70 psi.</p> <p>B. Water regulator should be set at 50 psi.</p> <p>C. Replace carbonator pump.</p>
4.24 Carbonator motor does not run.	<p>A. Incorrect wiring.</p> <p>B. Bad carbonator capacitor.</p> <p>C. Blown fuse on PCB.</p> <p>D. Relay failure.</p> <p>E. Transformer failure.</p>	<p>A. Refer to wiring diagram and correct.</p> <p>B. Replace carbonator capacitor.</p> <p>C. Repair cause of blown fuse and replace defective or blown fuse.</p> <p>D. Replace relay/PCB.</p> <p>E. Replace transformer.</p>
4.25 Redundant control light comes on.	<p>A. Probe failure.</p> <p>B. PCB/relay failure.</p> <p>C. Probe springs contacting each other.</p> <p>D. Incorrect probe wiring.</p>	<p>A. Replace probe.</p> <p>B. Replace PCB/relay.</p> <p>C. Replace probe.</p> <p>D. Refer to wiring diagram and correct or replace as required.</p>

5. DISPENSER DISPOSAL

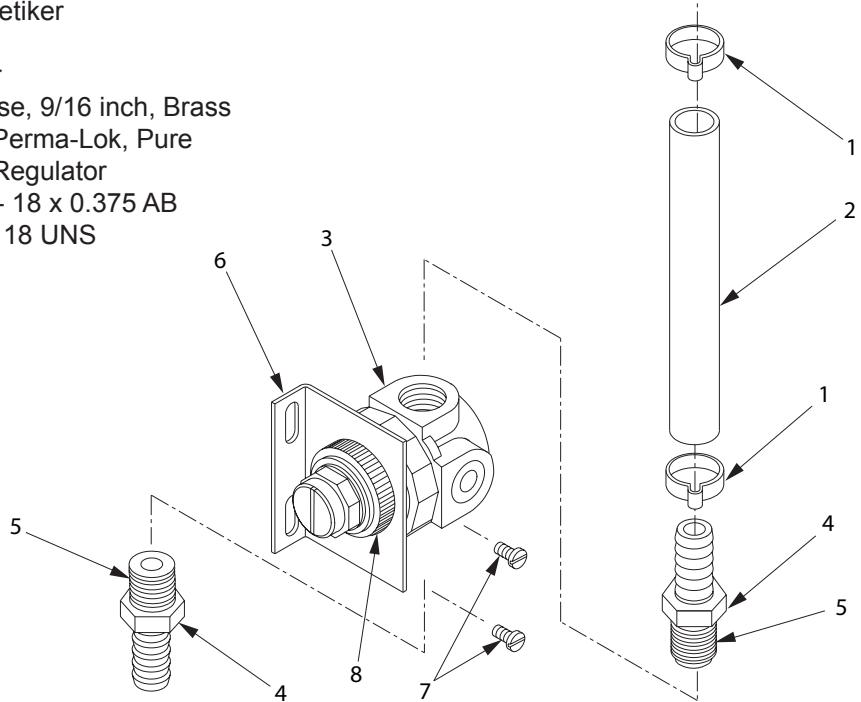


To prevent possible harm to the environment from improper disposal, recycle the unit by locating an authorized recycler or contact the retailer where the product was purchased. Comply with local regulations regarding disposal of the refrigerant and insulation.

6. ILLUSTRATIONS, PARTS LISTINGS, WIRING AND PLUMBING DIAGRAMS

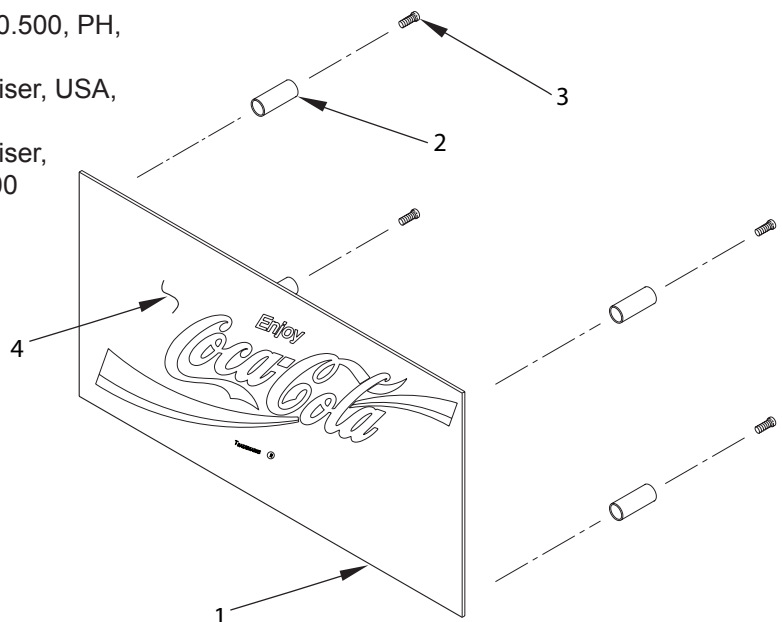
6.1 WATER REGULATOR

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
-	18-0302	Regulator Water Assy
1	07-0438	Clamp, Oetiker
2	08-0311	Hose
3	18-0252	Regulator
4	01-0446	Stem, Hose, 9/16 inch, Brass
5	15-0087	Sealant, Perma-Lok, Pure
6	07-0481/01	Bracket, Regulator
7	04-0504	Screw, 8 - 18 x 0.375 AB
8	01-1429	Nut, 7/8 - 18 UNS

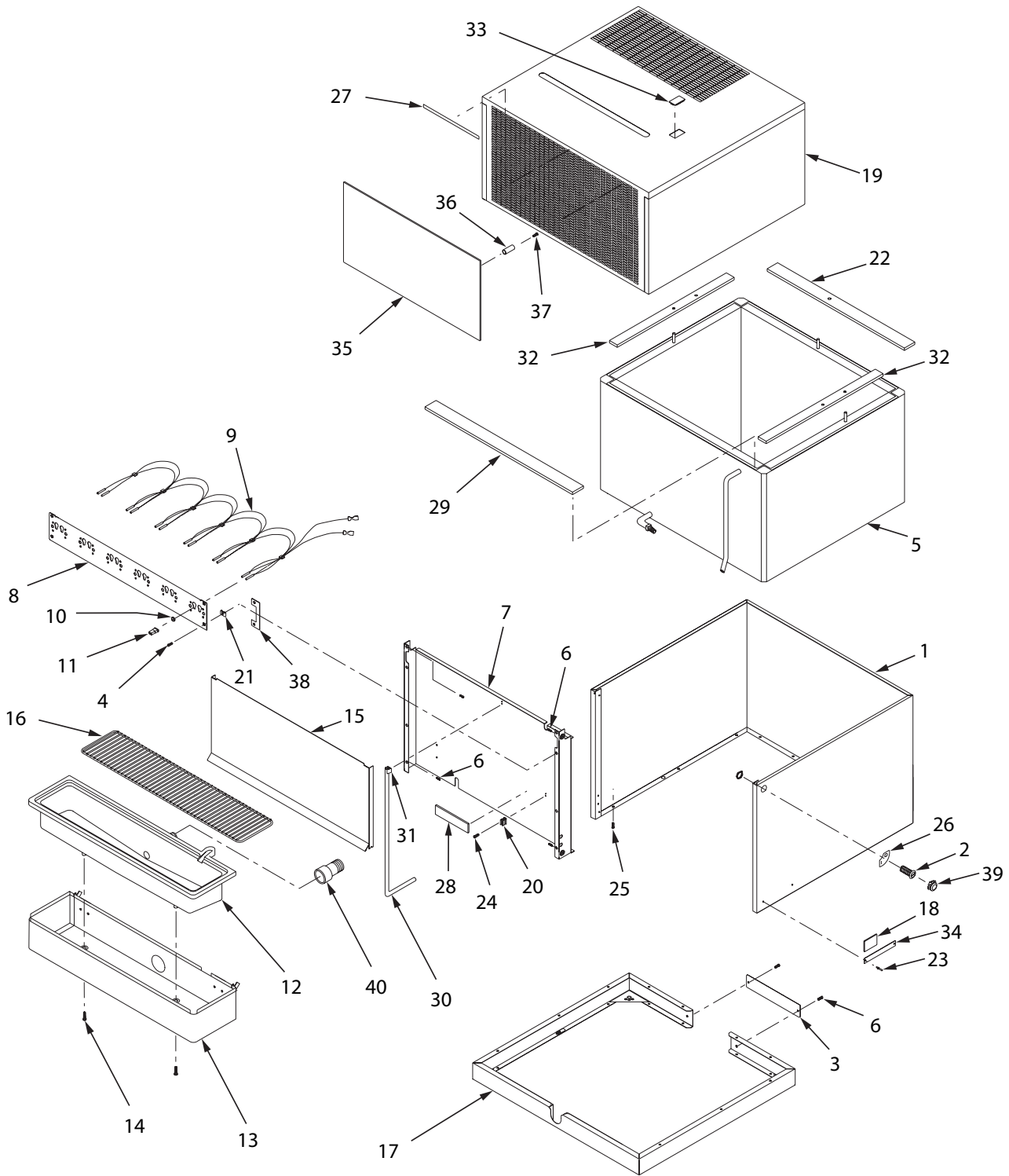


6.2 MERCHANDISER ASSEMBLY

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
-	82-2184/01-20	Merchandiser Kit Assy, USA
-	82-2184/01	Merchandiser Kit Assy, International
1	51-5544	Plate Assy, Front Merchandiser
2	10-0229	Stand Off
3	04-0069	Screw, 10 - 24 x 0.500, PH, Machine
4	06-1966	Decal, Merchandiser, USA, 8000
-	06-1965	Decal, Merchandiser, International, 8000



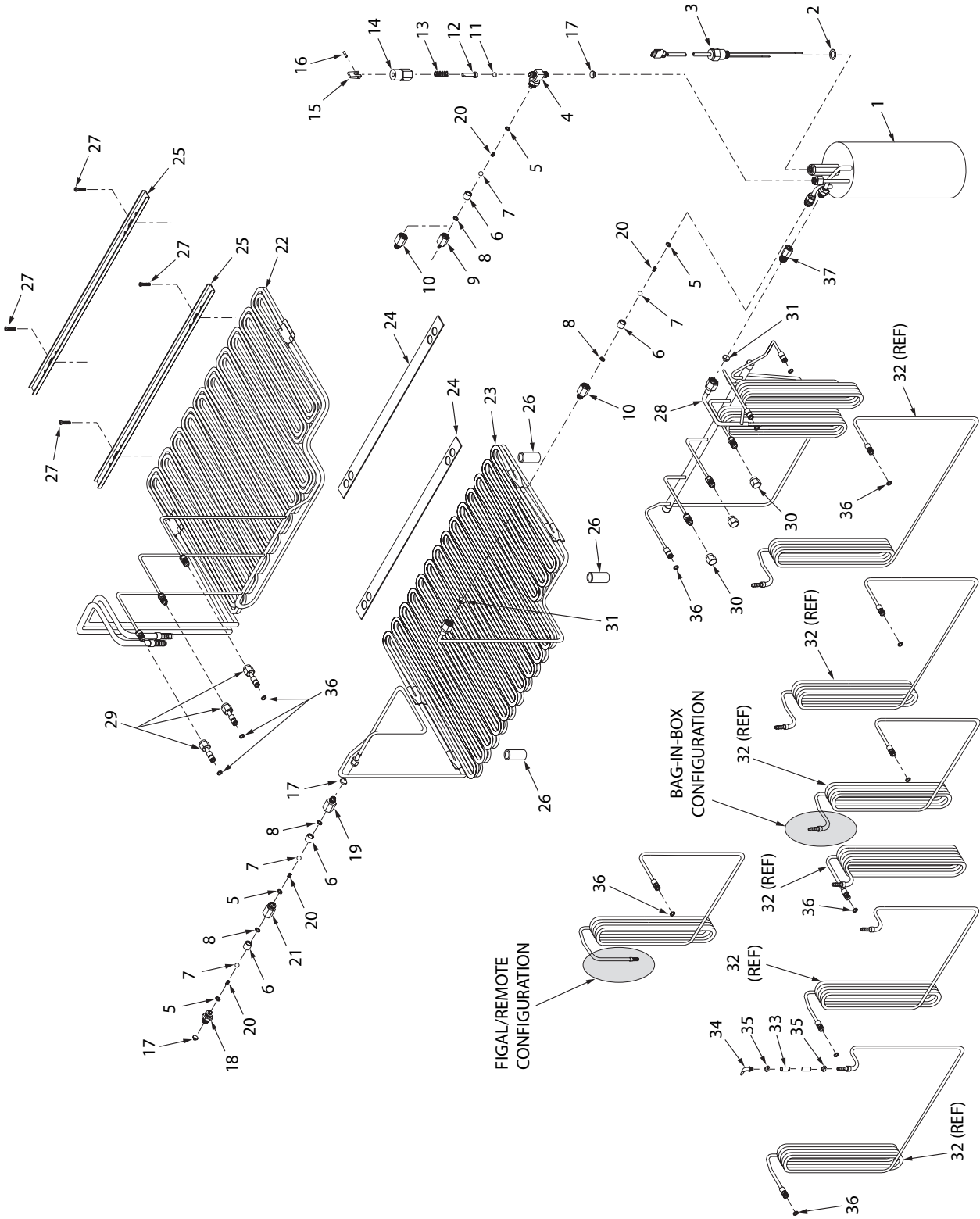
6.3 CABINET ASSEMBLY



6.3 CABINET ASSEMBLY (CONTINUED)

<u>Item</u>	<u>Part No.</u>	<u>Description</u>	<u>Item</u>	<u>Part No.</u>	<u>Description</u>
-	82-2089-01	Cabinet Assy, Self-Serve, 8000	33	05-0786	Plug, Bonnet
-	82-2089-06	Cabinet Assy, MDS, 8000	34	REF	Name Plate
-	82-2089	Cabinet Assy, 8000	-	06-0075-86	Name Plate, 8006 Model
1	30-7039	Wrapper, Tank, 8000	-	06-0075-88	Name Plate, 8008 Model
2	12-0097	Key Switch	35	82-2121	Merchandiser Plate Assy, 8000
3	30-7087	Cover, Two (2) Inch Base	36	10-0229	Stand Off
4	04-0068	Screw, 10 - 24 X 0.375 FH, Machine	37	04-0069	Screw
5	42-0101	Tank Assy, Foamed, 8000	38	30-5314	Shim Plate
6	04-0504	Screw, 8 - 18 X 0.375 AB	39	07-0405	Plug, Key Lock
7	30-7042	Front Plate, 8000	40	05-1054	Fitting, Insert X IPS, 3/4 inch
8	REF	Faucet Plate Assy			
-	51-5515	Faucet Plate Assy, 6 Valve, 8000			
-	51-5579	Faucet Plate Assy, 8 Valve, 8000			
9	REF	Harness Assy			
-	52-2032	Harness Assy, 6 Valve, 8000			
-	52-0893	Harness Assy, 8 Valve, 8000			
10	13-0005	Bushing			
11	11-0015	Socket, Housing			
12	05-1508	Drip Tray Top, 8000			
13	51-5510	Weld Assy, Drip Tray, 8000			
14	04-0407	Screw, 6 - 19 X 0.500, PHD			
15	REF	Splash Plate			
-	30-7080	Splash Plate, for Drip Tray, 8000			
-	30-7028	Splash Plate, No Drip Tray, 8000			
16	REF	Cup Rest			
-	23-1209	Cup Rest, 8000			
-	23-1219	Cup Rest, Sure-Fill, 8000			
17	51-5529	Frame Assy, Base			
18	06-0075-01	Nameplate, Serial Number			
19	23-1208	Bonnet Assy, 8000 (Graphics Ordered by Country)			
-	23-1092	Bonnet Assy, Self-Serve, 8000			
-	23-1235	Bonnet Assy, Front Access, 8000			
-	23-1223	Bonnet Assy, MDS			
20	03-0062	Clip, Retaining			
21	04-0074	Nut, Clip			
22	50-0307	Insulation, Back, 8000			
23	04-0072	Rivet			
24	04-0077	Screw, 4 - 20 X 0.250 AB			
25	04-0545	Screw, 8 - 16 X 0.780 Plastite			
26	06-0881	Label, Key Switch			
27	06-0632	Label CAUTION, Bonnet			
28	06-0851	Label, Overflow			
29	50-0308	Insulation, Front, 8000			
30	08-0004	Drain Tube, 8000			
31	03-0302	Clip, Retaining, Drain Tube, 8000			
32	50-0306	Insulation, Sides, 8000			

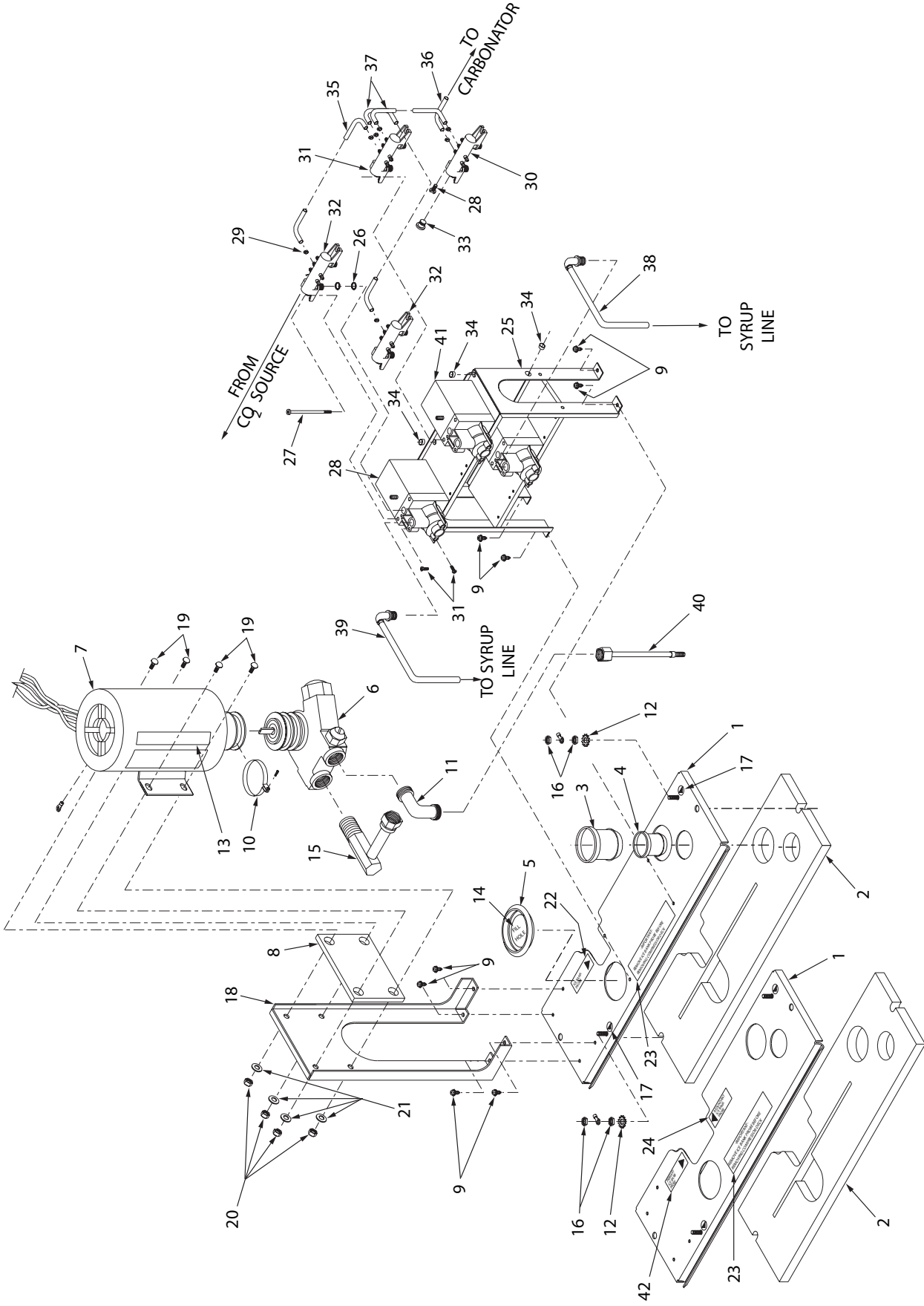
6.4 CARBONATOR, WATER/SYRUP LINE ASSEMBLY



6.4 CARBONATOR, WATER/SYRUP LINE ASSEMBLY (CONTINUED)

<u>Item</u>	<u>Part No.</u>	<u>Description</u>	<u>Item</u>	<u>Part No.</u>	<u>Description</u>
1	82-2102	Carbonator Assy	-	Syrup Tubes - 6 Valve Unit, No Pumps,	
-	82-2110	Carbonator Assy			3/8 Barb Inlet
2	02-0096	Washer	-	48-1411	Tube Assy, Syrup #1
3	52-2043	Probe Assy	-	48-1412	Tube Assy, Syrup #2
-	17-0468	Fitting Assy, CO2 IN (For Use With Pumps)	-	48-1413	Tube Assy, Syrup #3
-	17-0469	Fitting Assy, CO2 IN (For Use Without Pumps)	-	48-1414	Tube Assy, Syrup #4
			-	48-1415	Tube Assy, Syrup #5
			-	48-1416	Tube Assy, Syrup #6
4	01-1311	Fitting Sub-Assy, CO2	-	Syrup Tubes - 6 Valve Unit, With Pumps	
5	02-0003	O-Ring	-	48-1520	Tube Assy, Syrup #1
6	01-0689	Sleeve	-	48-1521	Tube Assy, Syrup #2
7	01-0674	Ball	-	48-1522	Tube Assy, Syrup #3
8	02-0025	O-Ring	-	48-1523	Tube Assy, Syrup #4
9	01-1334	Body, Check Valve, Gas	-	48-1524	Tube Assy, Syrup #5
10	01-0669	Body, Check Valve, Gas	-	48-1525	Tube Assy, Syrup #6
-	54-0066	Relief Valve Assy	-	Syrup Tubes - 8 Valve Unit, No Pumps,	
11	02-0023	Seat			1/4 Barb Inlet
12	05-0536	Stem	-	48-1640	Tube Assy, Syrup #1
13	03-0024/01	Spring	-	48-1641	Tube Assy, Syrup #2
14	05-0537	Body, Relief Valve	-	48-1642	Tube Assy, Syrup #3
15	05-0525	Lever	-	48-1643	Tube Assy, Syrup #4
16	81-0196	Pin	-	48-1644	Tube Assy, Syrup #5
17	05-0011	Flare Seal Washer, Small	-	48-1645	Tube Assy, Syrup #6
-	17-0485	Valve Assy, Double Check	-	48-1646	Tube Assy, Syrup #7
-	17-1001	Valve Assy, Check, Carmun	-	48-1647	Tube Assy, Syrup #8
18	01-1466	Fitting, Check Valve	-	Syrup Tubes - 8 Valve Unit, No Pumps,	
19	01-0673	Body			3/8 Barb Inlet
20	03-0021	Spring	-	48-1192	Tube Assy, Syrup #1
21	01-0670	Body	-	48-1193	Tube Assy, Syrup #2
22	48-1596	Tube Assy, Plain Water Coils, 8000	-	48-1194	Tube Assy, Syrup #3
			-	48-1195	Tube Assy, Syrup #4
23	48-1617	Tube Assy, Soda Coils, 8000	-	48-1196	Tube Assy, Syrup #5
24	30-7202	Water Coils Separators, 8000	-	48-1197	Tube Assy, Syrup #6
			-	48-1198	Tube Assy, Syrup #7
			-	48-1199	Tube Assy, Syrup #8
25	30-7073	Brace, Water Coils, 8000			
26	01-1697	Spacer, 10 - 24, TRD	-	Syrup Tubes - 8 Valve Unit, With Pumps	
27	04-0222/01	Screw, 10 - 24 X 1.50 RHD, SL, MS, SS	-	48-1175	Tube Assy, Syrup #1
			-	48-1176	Tube Assy, Syrup #2
28	REF	Manifold Assy	-	48-1177	Tube Assy, Syrup #3
-	48-1598	Rechill Manifold Assy, 6 Valve	-	48-1178	Tube Assy, Syrup #4
			-	48-1179	Tube Assy, Syrup #5
29	48-0492/01	Adapter, CO2 Water Out	-	48-1180	Tube Assy, Syrup #6
30	01-0204	Cap	-	48-1181	Tube Assy, Syrup #7
31	05-0017	Flare Seal Washer, Large	-	48-1182	Tube Assy, Syrup #8
32	REF	Syrup Tube Assemblies	33	08-0029	Tube, Flexible
-	Syrup Tubes - 6 Valve Unit, No Pumps,		34	REF	Adapter Assy
		1/4 Barb Inlet	-	01-1483	Adapter Assy, Elbow
-	48-1508	Tube Assy, Syrup #1	35	07-0409	Clamp, Oetiker
-	48-1509	Tube Assy, Syrup #2	36	02-0005	O-Ring
-	48-1510	Tube Assy, Syrup #3	37	17-1004	Valve Assy, Check
-	48-1511	Tube Assy, Syrup #4			
-	48-1512	Tube Assy, Syrup #5			
-	48-1513	Tube Assy, Syrup #6			

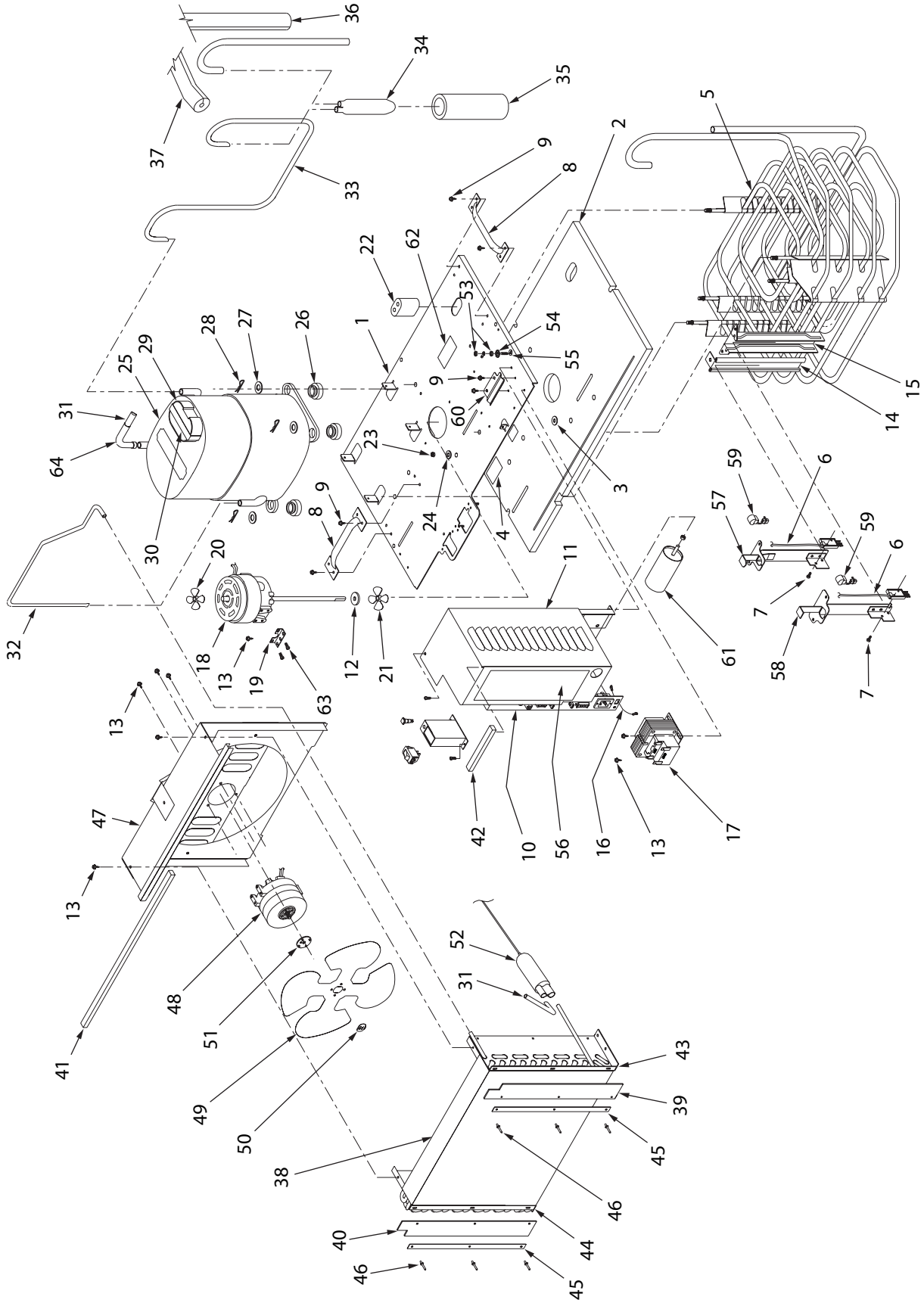
6.5 CARBONATOR DECK/PUMP BRACKET ASSEMBLY



6.5 CARBONATOR DECK/PUMP BRACKET ASSEMBLY (CONTINUED)

<u>Item</u>	<u>Part No.</u>	<u>Description</u>	<u>Item</u>	<u>Part No.</u>	<u>Description</u>
-	82-2094	Deck Assy, Carbonator, 115V/60Hz, 8000	26	02-0005	O-Ring
-	82-2104	Deck Assy, Carbonator, 230V/50Hz, 8000	27	04-0359	Screw
-	82-2147	Deck Assy, Carbonator, 115V/60Hz, Redundant Control	28	04-0275	Screw, Half Moon
-	82-2381	Deck Assy, Carbonator, 230V/50Hz, Redundant Control	29	07-0441	Clamp, Oetiker
1	REF	Plate, Carbonator Deck	30	54-0093	Manifold Assy
-	51-5524	Carbonator Deck Assy, PEM, 8000	31	54-0092	Manifold Assy
-	51-5552	Carbonator Deck Assy, PEM, Redundant Control	32	54-0091	Manifold Assy
2	REF	Insulation, Carbonator Deck	33	05-0604	Plug, CO2 Manifold
-	50-0305	Insulation, Carbonator Deck, 8000	34	13-0005	Strain Relief, Bushing
-	50-0317	Insulation, Carbonator Deck, Redundant Control	35	08-0271	Tube, CO2
3	05-0436	Sleeve, Probe	36	08-0268	Tube, CO2
4	05-0502	Sleeve, CO2 IN	37	08-0269	Tube, CO2
5	04-1004	Cap Plug, Two (2) Inch Fill Hole	38	49-0221	Tube Assy, 12 Inch
6	REF	Pump, BR, 100GPH	39	49-0271	Tube Assy, 18 Inch
-	86-0001	Pump, 100GPH	40	48-1556	Tube Assy, Carbonator Pump
-	86-0085	Pump, 100GPH, Fluid-O-Tech	41	82-0251	Mini Pump
7	REF	Carbonator Motor	42	06-1682	Label, Primary Probe
-	91-0063	Carbonator Motor, 115V/60Hz			
-	91-0065	Carbonator Motor, 220V/50-60Hz			
8	50-0309	Insulation, Carbonator Bracket			
9	04-0061	Screw, 8 - 18 X 0.500, PHD			
10	07-0017	Clamp with Screw			
11	01-0987	Elbow, 90, 3/8 MF X 3/8 MP			
12	04-0576	Washer, Lock, Internal Tooth			
13	REF	Label, Carbonator Motor			
-	06-0431	Label, 115V/60Hz, 1/4HP			
-	06-0461	Label, 220V/50-60Hz			
14	06-1648	Label, Cap Plug			
15	23-1211	Assy, Pump Outlet, 8000			
16	04-0110	Nut, 8 - 32, ST, BT			
17	06-0877	Label, Ground			
18	30-7069	Bracket, Carbonator Motor			
19	04-1013	Bolt, Carriage, 1/4 - 20 X 0.750			
20	04-0032	Nut, Lock, 1/4 - 20, ST, BT			
21	04-0033	Washer, Flat, 1/4 X 0.065, TX			
22	06-1649	Label, Probe			
23	06-1605	Label, Remove Probe			
24	06-1683	Label, Redundant Probe			
-	82-2093	Pump Bracket Assy, 6 Pump			
-	82-2201	Pump Bracket Assy, 8 Pump			
25	51-5512	Bracket Assy, Mini-Pump			

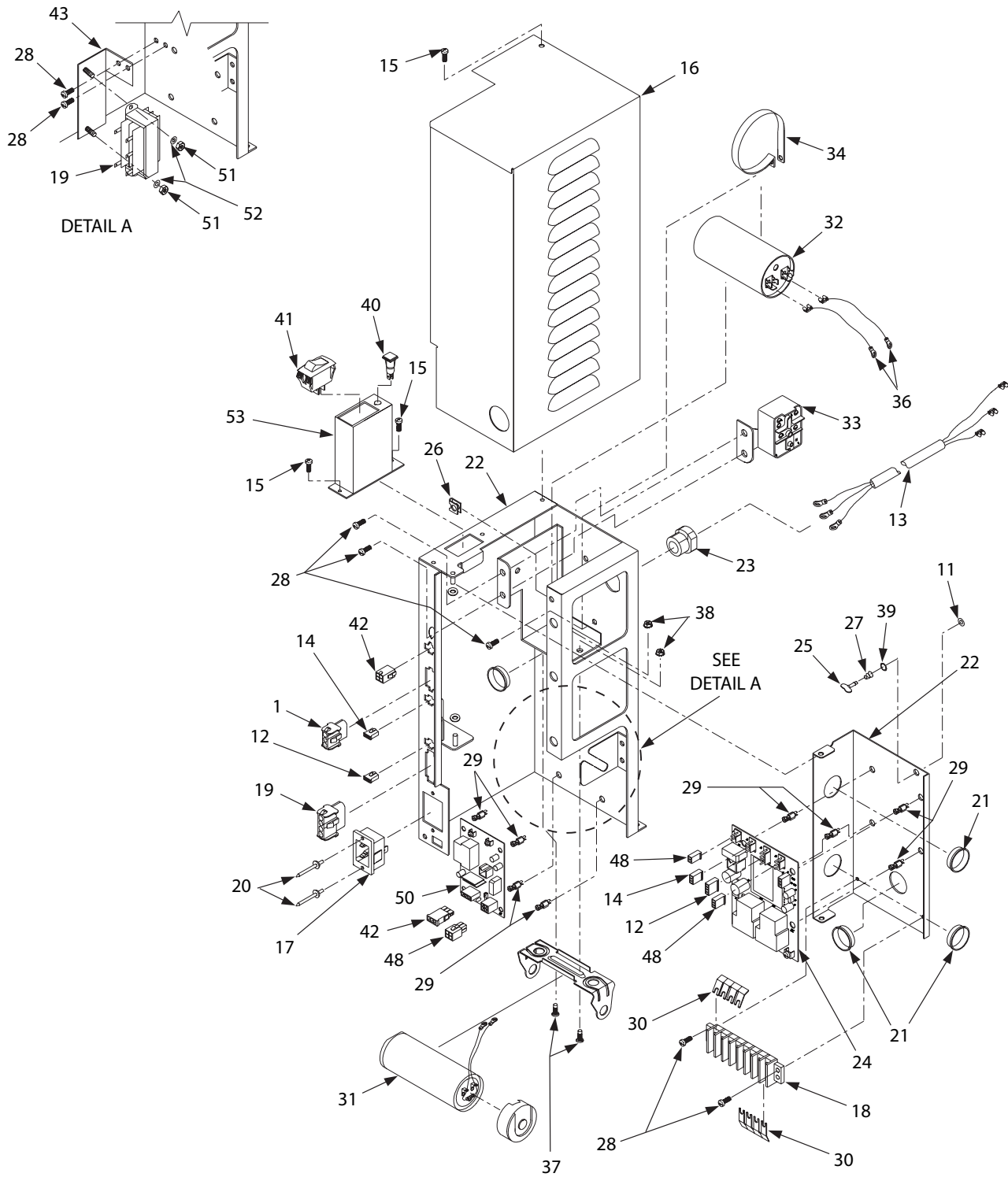
6.6 REFRIGERATION DECK ASSEMBLY



6.6 REFRIGERATION DECK ASSEMBLY (CONTINUED)

<u>Item</u>	<u>Part No.</u>	<u>Description</u>	<u>Item</u>	<u>Part No.</u>	<u>Description</u>
-	82-2091	Deck Assy, Refrigeration, 115V/60Hz, 134A	20	05-0424/01	Propeller, 2.625 Diameter, 35o Pitch
-	82-2146	Deck Assy, Refrigeration, 115V/60Hz, 134A, Redundant Control	21	05-0502	Propeller, 2.250 Diameter, 37o Pitch
-	82-2146-06	Deck Assy, Refrigeration, 115V/60Hz, 134A, Redundant, MDS	22	02-0040	Seal, Extrusion
-	82-2130	Deck Assy, Refrigeration, 115V/60Hz, 134A, Export	23	04-0032	Nut, NYLOK, 1/4 - 20
-	82-2195	Deck Assy, Refrigeration, 220V/60Hz, 134A	24	04-0033	Washer, Flat (0.281 ID)
-	82-2101	Deck Assy, Refrigeration, 230V/50Hz, 134A	25	REF	Compressor
-	82-2382	Deck Assy, Refrigeration, 230V/50Hz, 134A, Redundant Control	-	83-0104	Compressor, 3/4 HP, 134A, 115V/60Hz
-	82-2382-06	Deck Assy, Refrigeration, 230V/50Hz, 134A, Redundant Control, MDS	-	83-0105	Compressor, 3/4 HP, 134A, 230V/50Hz
-	82-2384	Deck Assy, Refrigeration, 220V/60Hz, 134A, Redundant Control	-	83-0106	Compressor, 3/4 HP, 134A, 220V/60Hz
-	82-2384-06	Deck Assy, Refrigeration, 220V/60Hz, 134A, Redundant Control, MDS	26	02-0114	Grommet, Compressor
1	51-5523	Deck/Pem Assy, Compressor	27	04-0537	Washer, Flat (0.467 ID)
-	51-5551	Deck/Pem Assy, Compressor Redundant Control	28	03-0150	Retainer, Clip
2	50-0304	Insulation, Compressor Deck	29	13-0006	Cover, Terminal
3	04-0063	Washer, Flat	30	03-0301	Bale Strap
4	89-0014	Cover, Hole	31	47-0344	Tube, Process
5	REF	Evaporator Coil Assy	32	47-2047	Tube, Compressor (HI Side)
-	82-2090	Evaporator Coil Assy, 8000	33	47-2065	Tube, Suction Line
-	82-2148	Evaporator Coil Assy, Redundant Control	34	51-5400	Accumulator, Vertical
6	52-2053	Probe Assy, EIBC	35	50-0105	Boot
-	52-2088	Probe Assy, Redundant EIBC	36	50-0310	Insulation, Tube, 35 Inch
7	04-0470	Screw, 6 - 19 X 0.438	37	50-0311	Insulation, Tube, 15 Inch
8	07-0268	Handle, 2000X Compressor Deck	38	23-1210	Condenser
9	04-0260	Screw, 10 - 16 X 0.625, OHD, PH, AB, SS, ZP	39	50-0312	Insulation, Baffle, Right
10	REF	Control Housing Assy	40	50-0313	Insulation, Baffle, Left
-	52-2055	Control Housing Assy, with ON/OFF Switch, 115V/60Hz	41	50-0314	Insulation, Baffle, Top
-	52-2090	Control Housing Assy, 115V/60Hz, Redundant Control	42	50-0315	Insulation, Baffle, Control Box
-	52-2090-06	Control Housing Assy, 115V/60Hz, Redundant, MDS	43	30-7184	Bracket, Baffle, Right
-	52-2068	Control Housing Assy, 115V/60Hz, Without Kill Switch	44	30-7185	Bracket, Baffle, Left
-	52-2059	Control Housing Assy, 230V/50Hz	45	30-7186	Plate, Retainer
-	52-2104	Control Housing Assy, 220V/60Hz	46	04-0518	Rivet, 0.1250 X 0.328
11	30-7079	Cover, Control Housing	47	51-5577	Bracket/Shroud Assy, Fan
-	30-7166	Cover, Control Housing, Redundant Control	48	REF	Motor, Fan
12	02-0032	Washer	-	91-0017	Motor, Fan, 35W, 115V/60Hz
13	04-0504	Screw, 8 - 18 X 0.375	-	91-0019	Motor, Fan, 35W, 230V/60Hz
14	51-5519	Holder Assy, Probe	49	07-0553	Fan Blade, 11 Inch, 4 Petal, 28 Degree
15	51-5548	Bracket, Holder Assy	50	04-0060	Nut, Flat
16	52-2048	Lead Assy, Ground	51	02-0413	Silencer
17	REF	Transformer	52	23-0999	Dryer Cap Assy
-	25-0047	Transformer, 75VA, 24V, 115V/50-60Hz, Reset Breaker	53	04-0110	Nut, 8 - 32
-	25-0048	Transformer, 75VA, 24V, 220V/50-60Hz, Reset Breaker	54	04-0576	Washer, Internal Tooth
18	REF	Motor Assy	55	06-0877	Label, Ground
-	52-2034	Motor Assy, Agitator, 25W, 115V/60Hz, 8 Inch Vented	56	06-1719	Label, Connector Locations, Redundant Control
-	52-2060	Motor Assy, Agitator, 230V/50Hz, 18.3 Watts, 8 Inch	-	06-1609	Label, Connector Locations, Electric Box
19	30-5113/01	Bracket, Agitator	57	51-5520	Bracket Assy, Slider
			58	51-5547	Bracket Assy, Slider, Redundant Control
			59	13-0089	Relief, Strain 90 Degree
			60	30-7173	Bracket, Transformer
			61	26-0377	Capacitor, Carbonator Motor (230V/50Hz ONLY)
			62	06-0080-01	Label, Name Plate
			63	04-0059	Screw, 8 - 36 X 0.375, PHD
			64	01-1713	Fitting, Reducer, EL, 1/2 X 5/16
			65	REF	Overload
			-	12-0227	Overload, Thermal, 3/4 HP, Compressor, 115V/60Hz
			-	12-0045	Overload, Thermal, 3/4 HP Compressor, 230V/60Hz
			66	95-0177	Refrigerant, R134A
			67	30-7071	Bracket, Filter, Left
			68	30-7172	Bracket, Filter, Right
			69	23-1218	Air Filter Assy, 8000
			-	23-1222	Air Filter Assy, MDS
			70	52-1213	Harness Assy, Transformer, Second

6.7 CONTROL HOUSING ASSEMBLIES

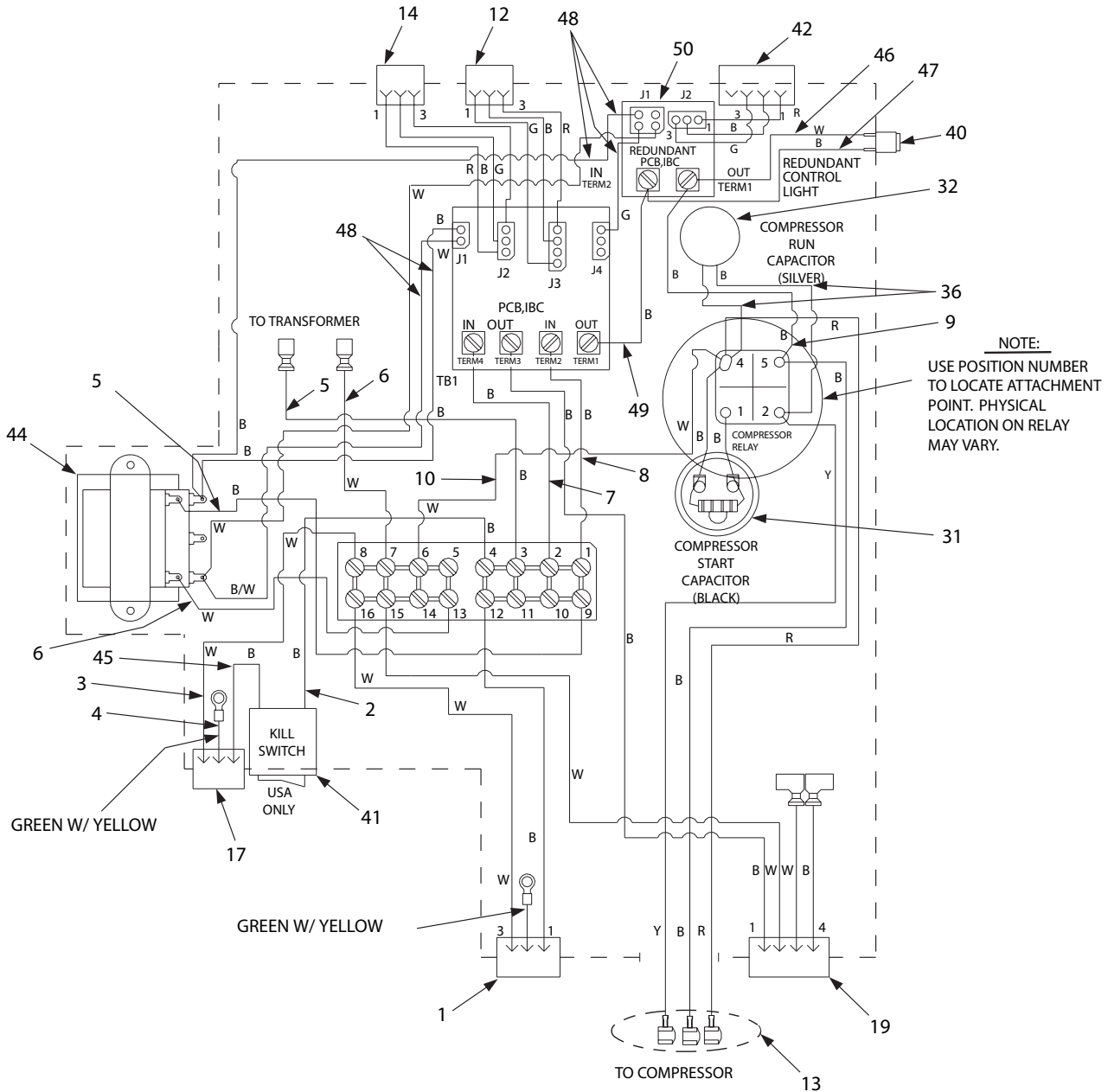


6.7 CONTROL HOUSING ASSEMBLIES (CONTINUED)

<u>Item</u>	<u>Part No.</u>	<u>Description</u>	<u>Item</u>	<u>Part No.</u>	<u>Description</u>
-	52-2059	Control Housing, Without ON/OFF, 230V/50Hz	31	12-0233	Capacitor, Start, 115V/60Hz
-	52-2055	Control Housing, With ON/OFF, 115V/60Hz	-	12-0246	Capacitor, Start, 220V/60Hz
-	52-2068	Control Housing, Without ON/OFF, 115V/60Hz	-	12-0235	Capacitor, Start, 230V/50Hz
-	52-2090	Control Housing, Redundant Control, 115V/60Hz	32	12-0231	Capacitor, Run, 115V/60Hz
-	52-2090-06	Control Housing, MDS, 115V/60Hz	-	03-0303	Clip, Capacitor, Retaining (For 220V and 230V 50/60Hz Only)
-	52-2104	Control Housing, 220V/60Hz	33	12-0232	Relay, Compressor, 115V/60v
1	52-2037	Harness Assy, Recirc A/C Outlet	-	12-0247	Relay, Compressor, 220V/60Hz
2	52-2038	Lead Assy, Hot, Power Supply	-	30-7034	Bracket, 220V Compressor, Relay (For 220V Use Only)
3	52-2039	Lead Assy, Common Inlet	-	12-0236	Relay, Compressor, 230V/50Hz
4	52-2040	Lead Assy, Ground Inlet	34	30-7100	Bracket, Run, Cap, 115V/60Hz
5	52-2041	Lead Assy, Hot, PCB, Transformer	35	30-7101	Bracket, Start, Cap, 115V/60Hz
6	52-2042	Lead Assy, Common, PCB	36	52-2054	Lead Wire Assy, 14 AWG
7	52-2044	Lead Assy, Carbonator, Terminal PCB	37	04-1018	Screw, 10 - 32 X 0.500, FH
8	52-2045	Lead Assy, Compressor, Terminal PCB	38	04-1019	Nut, Locknut with Star Washer
9	52-2046	Lead Assy, Compressor, PCB Relay	39	04-1023	Washer, Black Nylon Wear
10	52-2047	Lead Assy, Common Relay	40	12-0242	Indicator Light, Neon Red
11	04-1024	Retainer, Nylon	41	12-0243	Switch, SPST, ON/OFF
12	52-2050	Harness Assy, Carbonator Probe	-	12-0089	Switch, KILL, SPDT
13	52-2051	Cable Assy, Compressor Relay	42	52-2084	Harness Assy, Probe Connector
14	52-2052	Harness Assy, EIBC Probe	43	51-5560	Bracket Assy, Transformer
15	04-0504	Screw, 8 - 18 X 0.375	44	25-0101	Transformer, 115V, 12 VA.
16	30-7166	Cover, Control Box, RC	45	52-2080	Lead Assy, Power to Kill
-	30-7079	Cover, Control Box	-	52-2049	Lead Assy, Power, IN/KILL
17	11-0369	Plug, Male, Schurter	46	52-2086	Lead Assy, RPCB to Light
18	12-0190	Block, Terminal	47	52-2087	Lead Assy, Hot RPCB to Light
19	52-0908	Harness Assy, Carbonator	48	52-2081	Harness Assy, Transformer to PCB
20	04-0072	Rivet, 0.125 Diameter X 0.312	49	52-2085	Lead Assy, Compressor, PCB - RPCB
21	13-0059	Bushing, 2850, Convert	50	52-1737	PCB Assy, EIBC
22	51-5555	Control Box Hinge Assy, RC	51	04-0110	Nut, 8 - 32
-	51-5528	Control Box Hinge Assy	52	04-0576	Washer, Lock, Internal Tooth
23	13-0088	Relief, Strain, 14/3 SJT	53	51-5546	Extension Assy, Switch
24	52-1423	PC Board Assy, Series II			
25	04-1015	Stud, Wing Head			
26	04-1016	Receptacle, Clip-On			
27	04-1017	Spring, SS, Ejector			
28	04-0477	Screw, 8-32 X .375, PHD			
29	13-0047	Stand-Off, 0.250			
30	11-0186	Jumper, Terminal, 40 Circuit			

NOTE: The parts listing above (Section 5.7) also applies to the illustrations in Sections 5.8, 5.9, and 5.10 which follow.

6.8 CONTROL HOUSING ASSEMBLIES - 115V/60HZ - REDUNDANT CONTROL



8000 CCD

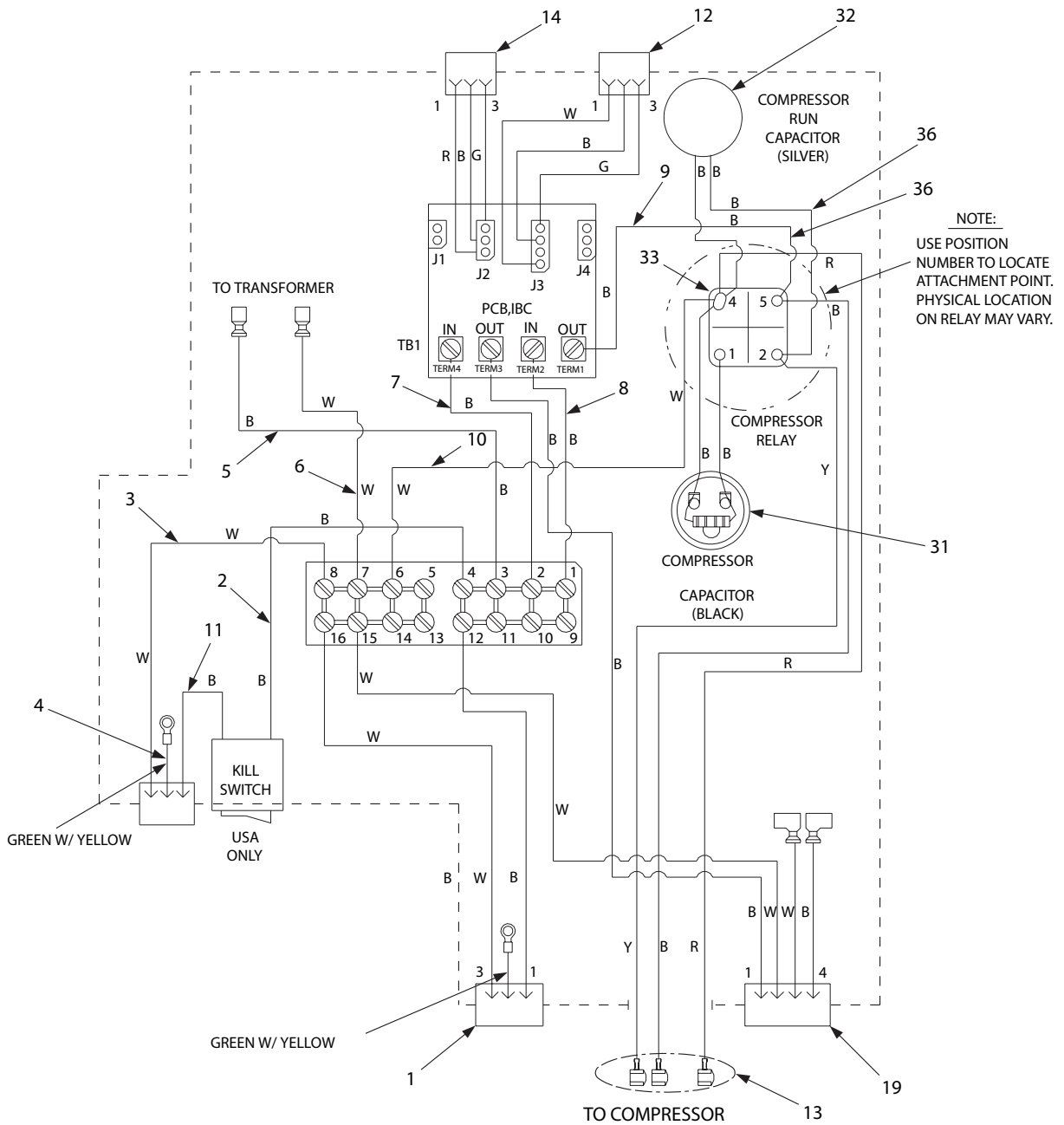
115V/60HZ - REDUNDANT CONTROL

SYMBOL	DESCRIPTION
	CONTROL BOX
	CHAMFER PIN 1

SCHEMATIC SHOWN FOR WIRING CLARITY

NOTE: The parts listing for Section 5.7 also applies to this illustration.

6.9 CONTROL HOUSING ASSEMBLIES - 115V/60HZ



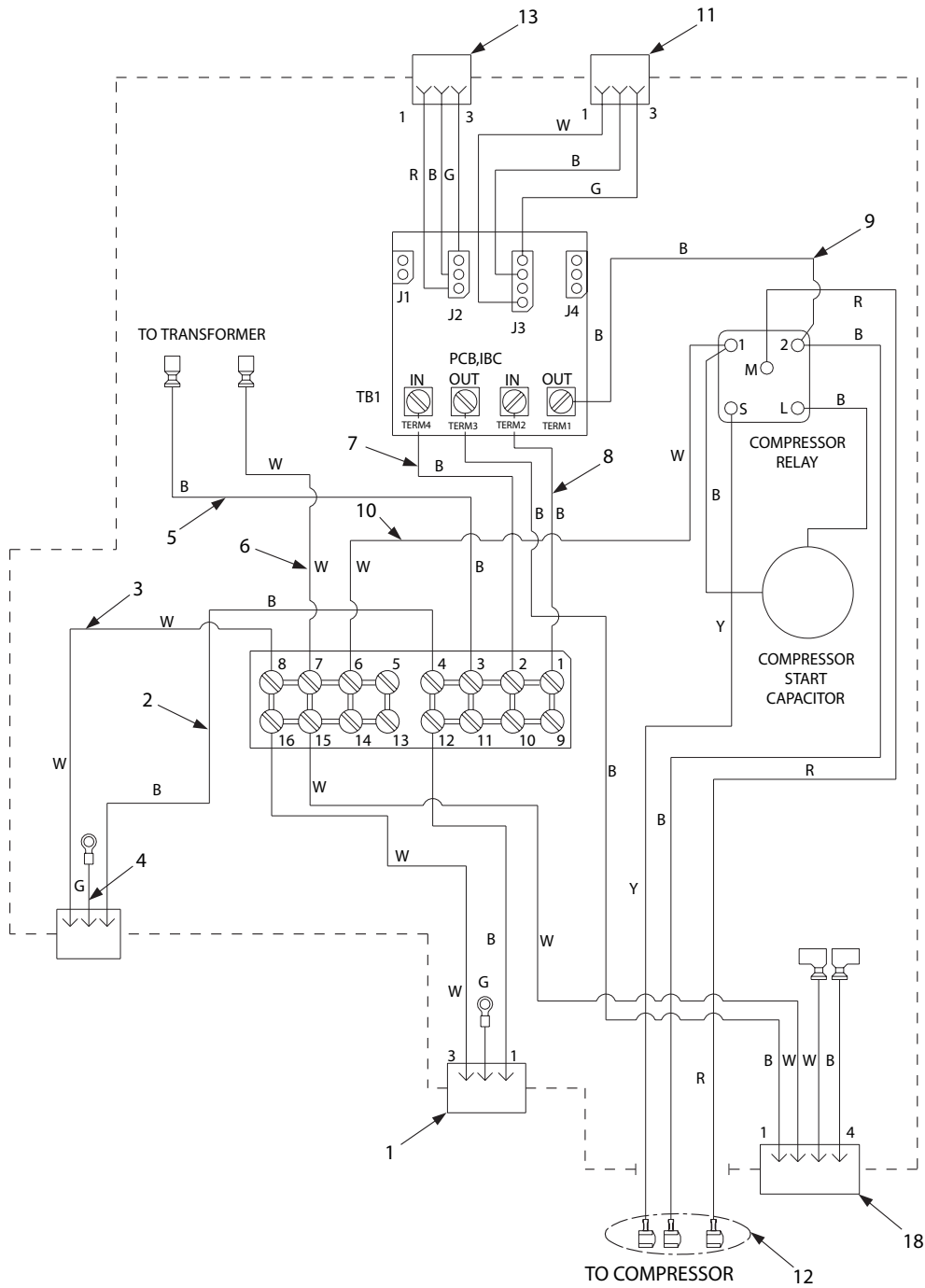
8000 CCD
115V/60HZ

SYMBOL	DESCRIPTION
---	CONTROL BOX
	CHAMFER PIN 1

SCHEMATIC SHOWN FOR WIRING CLARITY

NOTE: The parts listing for Section 5.7 also applies to this illustration.

6.10 CONTROL HOUSING ASSEMBLIES - 230V/50HZ - 220V/60HZ



8000 CCD
230V/50HZ - 220V/60HZ

SYMBOL	DESCRIPTION
-----	CONTROL BOX
	CHAMFER PIN 1

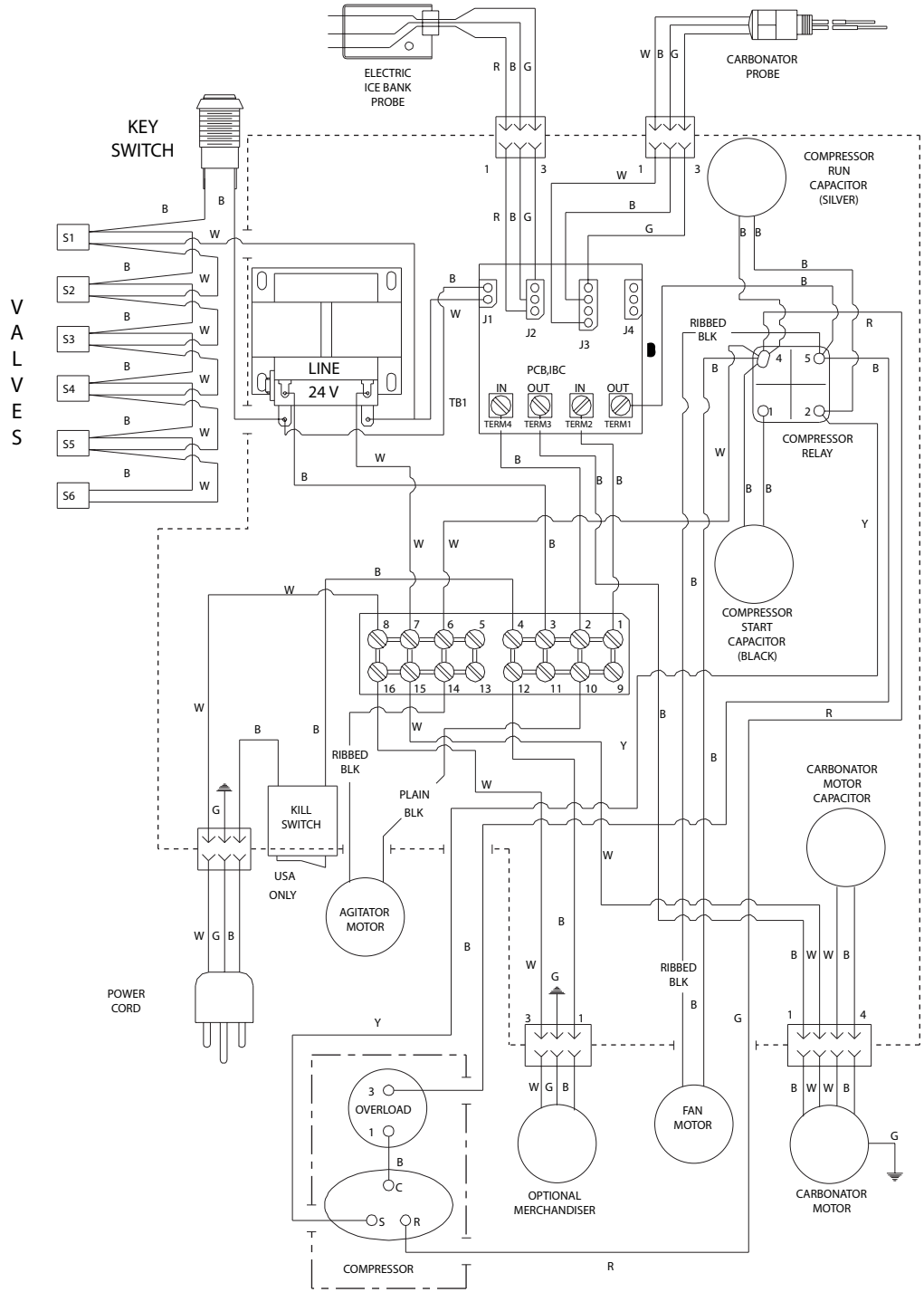
SCHEMATIC SHOWN FOR WIRING CLARITY

NOTE: The parts listing for Section 5.7 also applies to this illustration.

6.11 WIRING DIAGRAM - 115V/60HZ, PN 06-1604

IMPORTANT

1. WHEN STARTING UNIT OR IF CURRENT IS INTERRUPTED, THERE IS A 5 MINUTE DELAY BEFORE THE COMPRESSOR/FAN STARTS.



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• 8000 CED

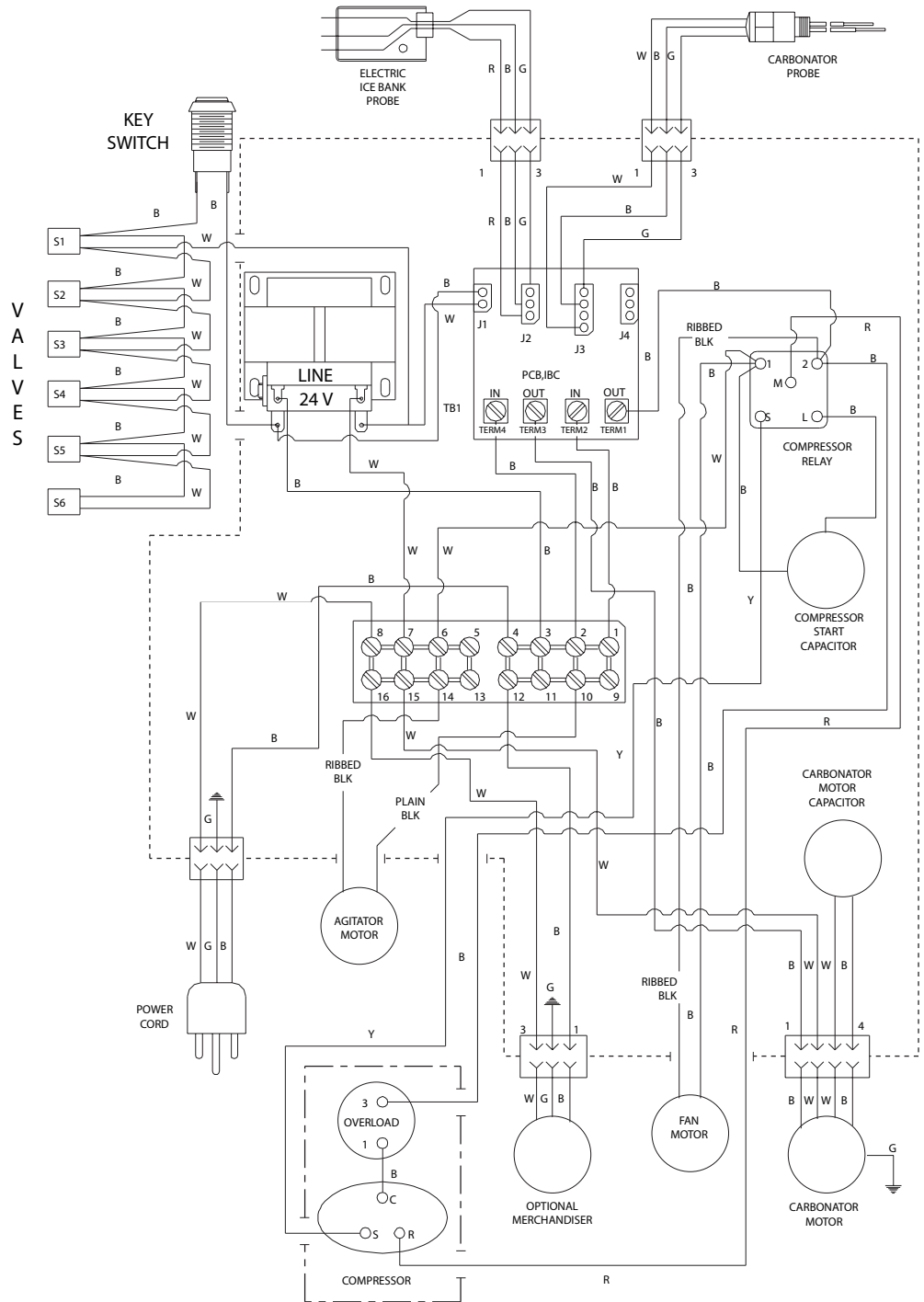
SYMBOL	DESCRIPTION
	CHASSIS GROUND
	CONTROL BOX
	CHAMFER PIN 1
	COMPRESSOR

LANCER LABEL,
115V/60HZ
WIRING DIAGRAM
PN 06-1604

6.12 WIRING DIAGRAM - 230V//50HZ - 220V/60HZ, PN 06-1652

IMPORTANT

1. WHEN STARTING UNIT OR IF CURRENT IS INTERRUPTED, THERE IS A 5 MINUTE DELAY BEFORE THE COMPRESSOR/FAN STARTS.



• 8000 CED

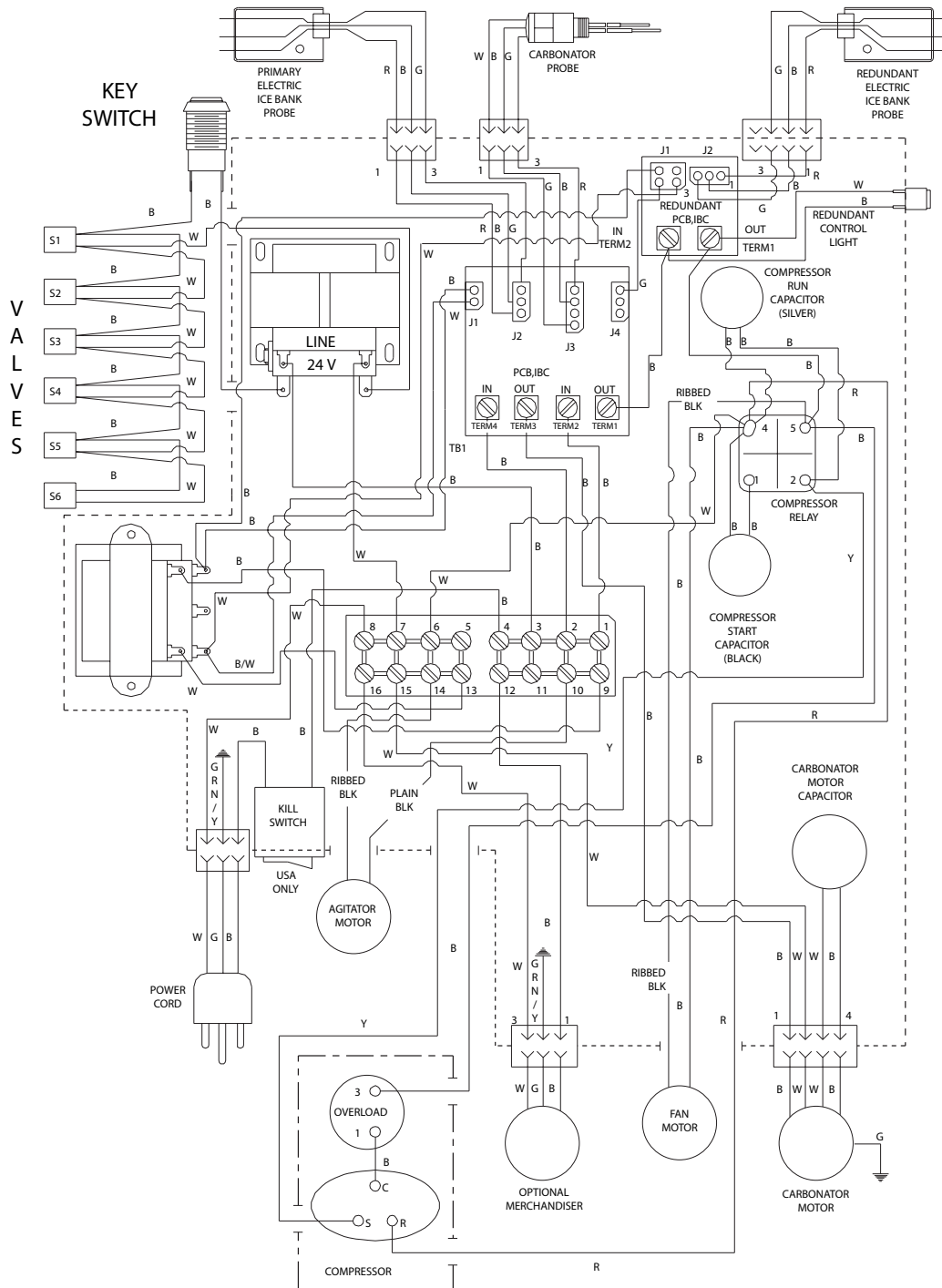
SYMBOL	DESCRIPTION
	CHASSIS GROUND
	CONTROL BOX
	CHAMFER PIN 1
	COMPRESSOR

LANCER LABEL,
 WIRING DIAGRAM
 230V/50HZ, 220V/60HZ
 PN 06-1652

6.13 WIRING DIAGRAM - 115V/60HZ - REDUNDANT CONTROL, PN 06-1718

IMPORTANT

1. WHEN STARTING UNIT OR IF CURRENT IS INTERRUPTED, THERE IS A 5 MINUTE DELAY BEFORE THE COMPRESSOR/FAN STARTS.

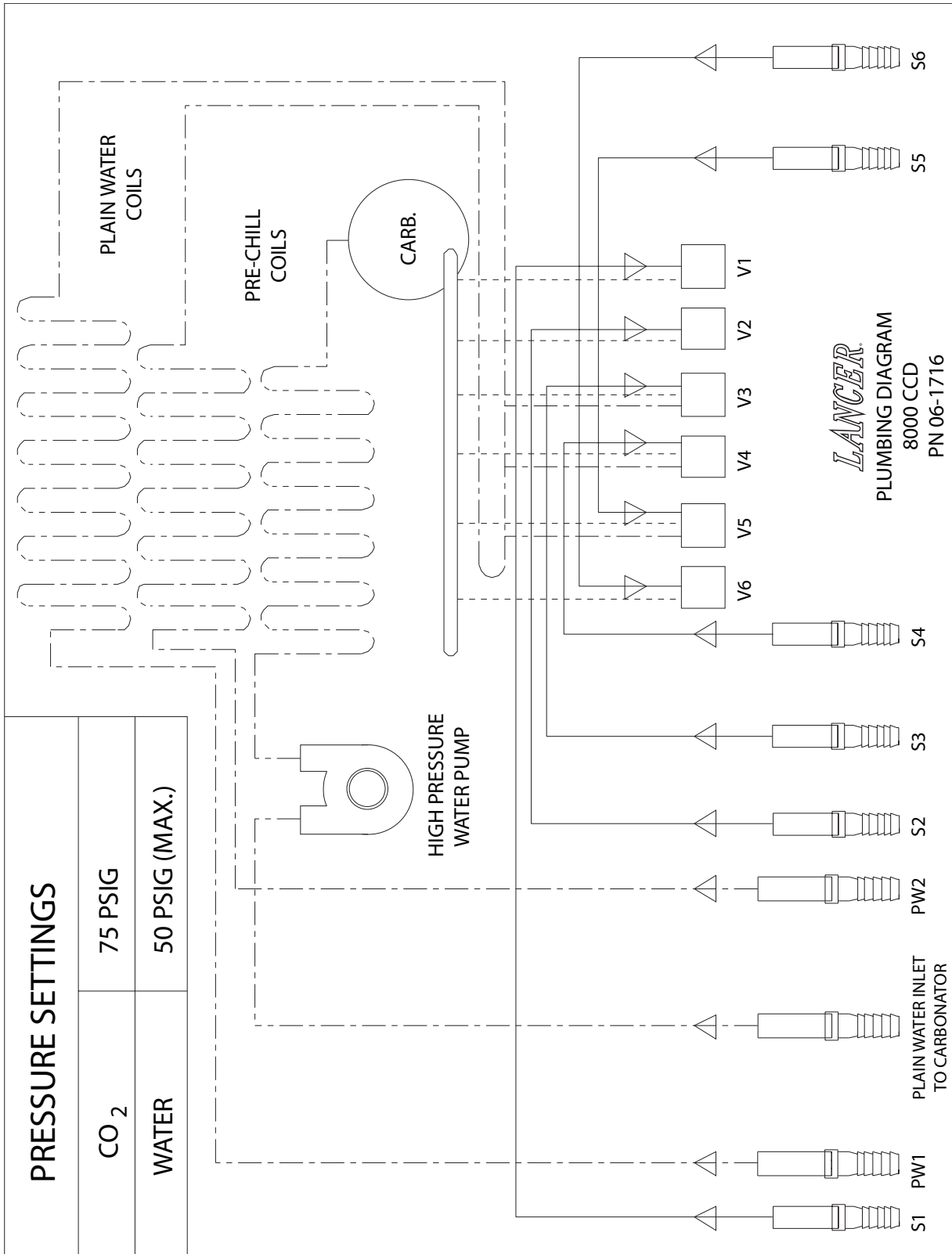


• 8000 CED

SYMBOL	DESCRIPTION
	CHASSIS GROUND
	CONTROL BOX
	CHAMFER PIN 1
	COMPRESSOR

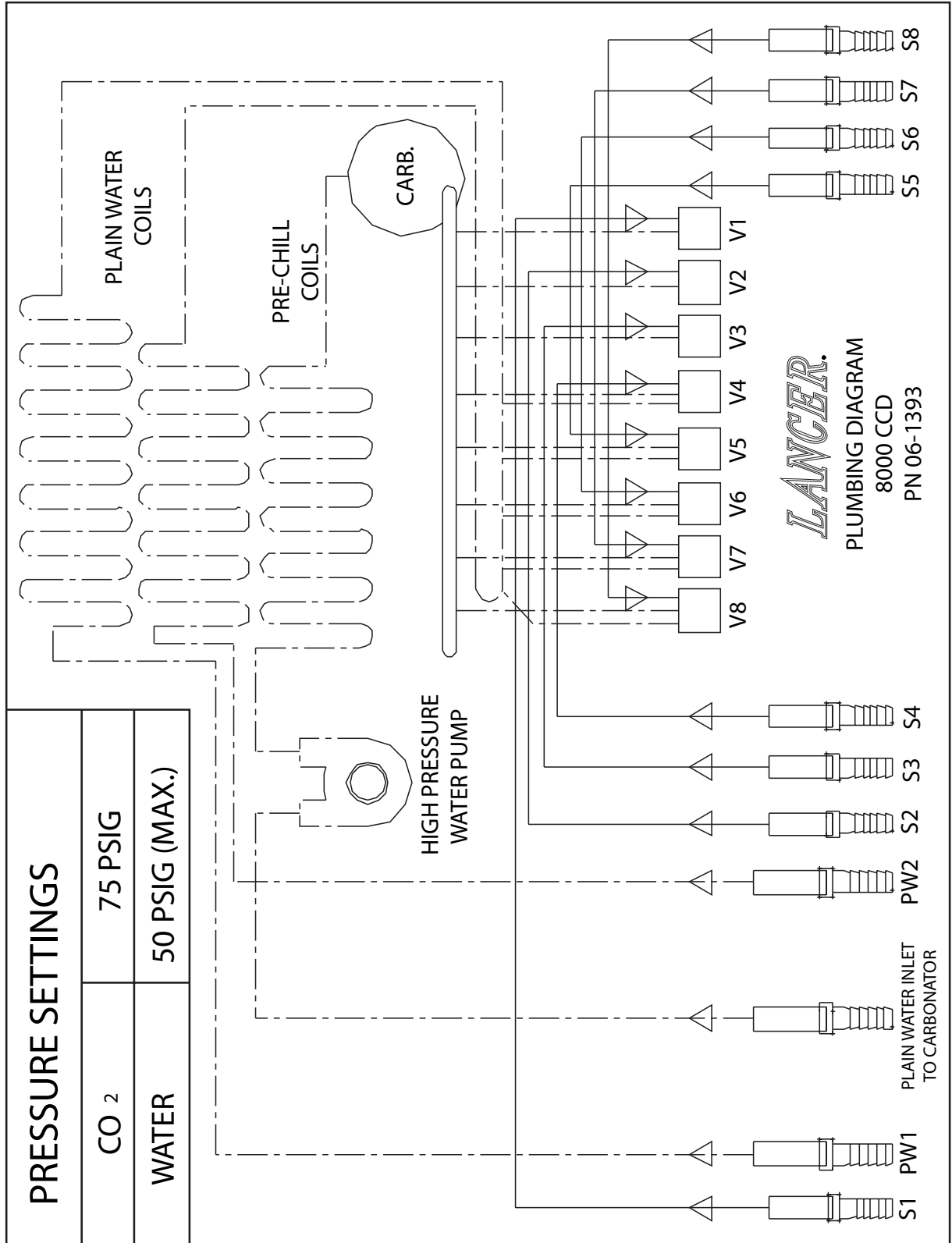
LANCER LABEL,
115V/60HZ - REDUNDANT
CONTROL
WIRING DIAGRAM
PN 06-1718

6.14 PLUMBING DIAGRAM - 6 VALVE, PN 06-1716



LANCER
 PLUMBING DIAGRAM
 8000 CCD
 PN 06-1716

6.15 PLUMBING DIAGRAM - 8 VALVE, PN 06-1393



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