PREMIUM WATER DISPENSER

Installation and Operation Manual
PN 28-0866

LANCER
6655 Lancer Blvd.
San Antonio, Texas 78219

To order parts, call
Customer Service: 800-729-1500
Warranty/Technical Support: 800-729-1550
Email: custserv@lancercorp.com
www.lancercorp.com

ISO 9001:2000 Quality System Certified

Manual PN: 28-0866
Sept 2011

FOR QUALIFIED INSTALLER ONLY

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SPECIFICATIONS

DIMENSIONS

Height:	25 inches (635 mm)
Width:	13.5 inches (342.9 mm)
Depth:	28 inches (711.2 mm)

WEIGHT

Shipping:	140 lbs (70 kg)
Empty:	125 lbs (60 kg)
Operating:	163 lbs (81 kg)

ICE BANK WEIGHT: 8 - 11 pounds (3.6 to 5.0 kg)

SPACE REQUIRED

Left Side:	4 inches (101.6 mm)
Right side:	4 inches (101.6 mm)
Back:	4 inches (101.6 mm)
Top:	8 inches (203.2 mm)

ELECTRICAL

115VAC 60Hz 3AMPs,

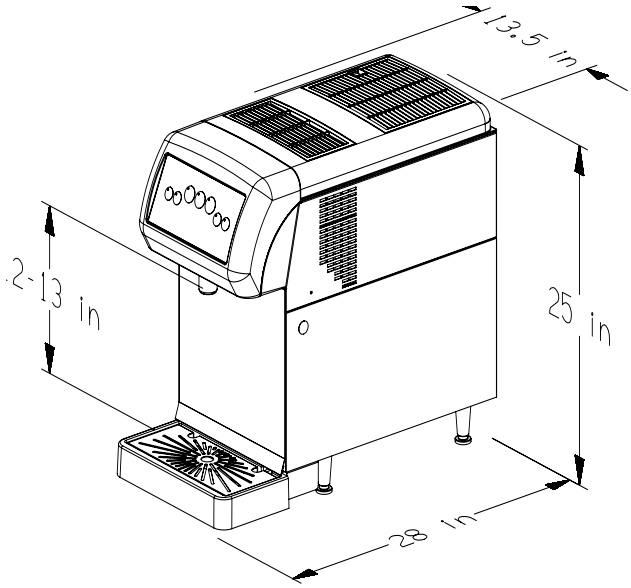
CARBON DIOXIDE (CO2) REQUIREMENTS

Min pressure of 70 PSIG (482.6 kPa, 4.9 kg/cm^2 4.83 BAR)

Max pressure of 80 PSIG (551.6 kPa, 5.6kg/cm^2, 5.52 BAR)

SODA WATER

Per carbonator manufacturer recommendations.



PLAIN WATER

FILTERED - Min pressure:

50 PSI (345 kPa, 3.52 kg/cm^2, 3.45 BAR)

FLOWING - Min pressure:

25 PSI (172 kPa, 1.76 kg/cm^2, 1.72 BAR)

Max static pressure:

50 PSI (345 kPa, 3.52 kg/cm^2, 3.45 BAR)

FITTINGS

Plain water inlet: 1/4" barb

CO_2 inlet: 1/4" barb

DRINK CAPACITY	CONDITION B (75°F, 45%RH)
2 - 24 ounce drinks below 50° (10°C)	55 drinks

WARNING/ADVERTENCIA/AVERTISSEMENT

⚠ The dispenser is for indoor use only. 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. This unit is not designed to dispense dairy products. The min/max ambient operating temperature for the dispenser is 40 to 75 degrees F.

⚠ El dispensador sólo debe usarse en interiores. 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. Esta unidad no ha sido diseñada para suministrar productos lácteos. La temperatura ambiente operativa mínima / máxima para el dispensador es de 40 a 75 grados F.

⚠ Le distributeur est destiné à un usage à l'intérieur seulement. 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. Cet appareil n'est pas conçu pour distribuer des produits laitiers. La température de service ambiante minimum/maximum pour le distributeur est de 40 à 75 degrés F.

ⓘ 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 (172 kPa, 1.76 kg/cm^2, 1.72 BAR); Maximum - 50 PSI (345 kPa, 3.52 kg/cm^2, 3.45 BAR); If pressure is over 50 PSIG, 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.

ⓘ 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 (172 kPa, 1.76 kg/cm^2, 1.72 BAR); Maximo 50 PSI (345 kPa, 3.52 kg/cm^2, 3.45 BAR. En unidades sin regulador de presión incorporado, si la presión del agua es superior a 50 PSIG 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.

ⓘ 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 (172 kPa, 1.76 kg/cm^2, 1.72 BAR); Maximo 50 PSI (345 kPa, 3.52 kg/cm^2, 3.45 BAR). Sur les unitès qui n'ont pas de règulateur de pression d'eau incorprè, si la pression d'H_2O est supèrieure à 50 PSIG, 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.

ELECTRICAL WARNING/ADVERTENCIA ELÉCTRICA/ AVERTISSEMENT ÉLECTRIQUE

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

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

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

CO^2/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 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 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 CO2 en todo el sistema de CO2 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 CO2 gazeux, aérez le secteur contaminé immédiatement avant d'essayer de réparer la fuite.

AUTOMATIC AGITATION/AGITACIÓN AUTOMÁTICO/ AGITATION AUTOMATIQUE

⚠ 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 20 PSI (137.9 kPa) line pressure, but not exceeding a maximum of 50 PSI (345 kPa). Water pressure exceeding 50 PSI (345 kPa) must be reduced to 50 PSI (345 kPa) 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 20 PSI (137.9 kPa) , pero sin superar el máximo de 50 PSI (345 kPa). La presión de agua que supere los 50 PSI se debe reducir a 50 PSI (345 kPa) 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 20 LPC (137.9 kPa) , mais ne doit pas dépasser un maximum de 50 LPC (345 kPa). Une pression d'eau de plus de 50 LPC (345 kPa) doit être réduite à 550 LPC (345 kPa) avec le régulateur de pression fourni. Utilisez un filtre dans la conduite d'eau pour éviter des dommages à l'équipement et un goût des boissons qui n'est pas juste. Vérifiez le filtre à eau périodiquement, selon les exigences des conditions locales. L'alimentation en eau doit être protégée au moyen d'un intervalle d'air, un disconnecteur hydraulique (situé en amont du système d'injection de CO2) ou une autre méthode approuvée pour se conformer aux normes de la NSF. Un clapet antiretour pour l'eau entrante qui fuie permettra à l'eau gazeuse de repasser par la pompe quand elle est fermée et de contaminer l'alimentation en eau. Assurez-vous que le disjoncteur hydraulique soit conforme aux normes de l'ASSE et locales. L'installateur est responsable d'assurer la conformité.

1. INSTALLATION

1.1 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 must be made with the carrier. Upon receiving units from the delivering carrier, carefully inspect carton for visible indication of damage. If damage exists, have carrier note the same 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 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 the unit secured to the plywood base.

H. 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 SPECIFICATIONS section.

⚠ CAUTION/PRECAUCIÓN/ATTENTION ⚠

FAILURE TO MAINTAIN SPECIFIED CLEARANCE WILL CAUSE THE COMPRESSOR TO OVERHEAT AND WILL RESULT IN COMPRESSOR FAILURE. ⚠ SI NO DEJA EL ESPACIO LIBRE ESPECIFICADO EL COMPRESOR PUEDE RECALENTAR Y FALLAR. ⚠ 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 of the unit, and discharged out the rear half of the top of the unit. A minimum of eight (8) inches (203 mm) clearance must be maintained over the top of the unit and a minimum 4 inches behind the unit to provide for proper air flow and air circulation.

1.5 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.

1.6 FILLING UNIT WITH WATER

⚠ CAUTION/PRECAUCIÓN/ATTENTION ⚠

THE WATER BATH COMPARTMENT MUST BE FILLED WITH WATER BEFORE PLUGGING IN THE UNIT, OTHERWISE THE COMPRESSOR DECK AND CONDENSOR FAN MAY NOT OPERATE PROPERLY ⚠ 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. ⚠ LE COMPARTIMENT DE BAIN-MARIE DOIT ÊTRE REMPLI AVEC DE L'EAU AVANT DE BRANCHER L'APPAREIL, SINON LA PLATEFORME DU COMPRESSEUR ET LE VENTILATEUR DU CONDENSATEUR PEUVENT NE PAS FONCTIONNER CORRECTEMENT.

A. Using screws from installation kit, install drip tray brackets on each side of dispenser and place drip tray onto brackets.

B. Remove the bonnet from the unit. Refer to Section 5.3 (Fig. 6, 10, and 11) for bonnet removal instructions..

B. Locate an opening in the compressor deck near the carbonator.

C. Using a funnel or tube, fill the water bath compartment (Fig 1), with water until it flows out of the overflow tube into the drip tray.

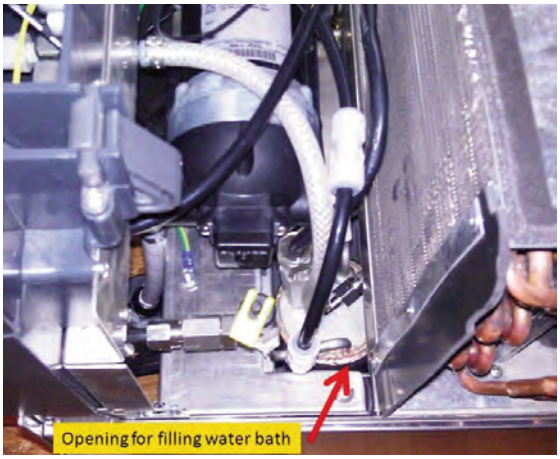


Figure 1

1.7 CONNECTING TO ELECTRICAL POWER

NOTE: Adhere to the ELECTRICAL Warnings/Cautions, Page 4.

⚠ WARNING/ADVERTENCIA/EXIGENCES ⚠
GROUNDING/PUESTA A TIERRA/DE MISE À LA TERRE

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.

⚠ 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.

⚠ 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.

CONTINUED ON NEXT PAGE

1.7 CONNECTING TO ELECTRICAL POWER, CONTINUED

⚠ CAUTION/PRECAUCIÓN/ATTENTION ⚠

FAILURE TO DISCONNECT THE MOTOR POWER SUPPLY WILL DAMAGE THE CARBONATOR MOTOR, THE PUMP AND VOID THE WARRANTY. ⚠ SI NO DESCONECTA LA ALIMENTACIÓN ELÉCTRICA DEL MOTOR PODRÍAN DAÑARSE LA BOMBA Y EL MOTOR DEL CARBONATADO Y ANULAR LA GARANTÍA. ⚠ LE FAIT DE NE PAS MAINTENIR LE DÉGAGEMENT SPÉCIFIÉ FERA SURCHAUFFER LE COMPRESSEUR ET AURA COMME CONSÉQUENCE UNE DÉFAILLANCE DU COMPRESSEUR.

A. The unit is equipped with a built-in carbonator, disconnect the power supply (Fig 2) to the carbonator motor by disconnecting the four pin 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.*

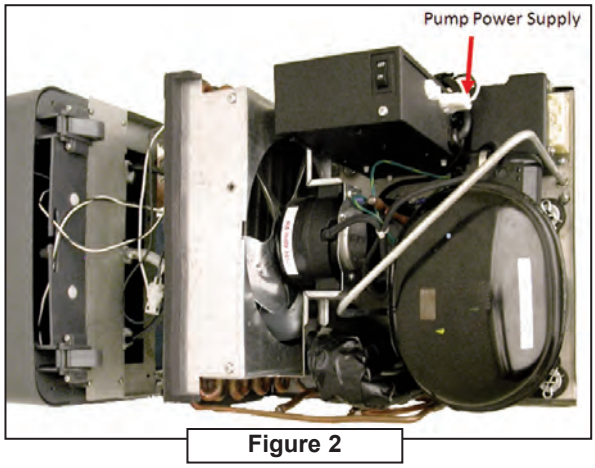


Figure 2

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.

1.8 CONNECTING TO WATER SUPPLY

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

A. Using appropriate tubing and fittings, connect tubing assembly to water source. *DO **NOT** CONNECT TO DISPENSER AT THIS TIME.*

B. Flush water supply line thoroughly.

C. Route tubing through a hole in the counter or underneath the dispenser. Route tubing through the area behind the splash plate to the carbonator area. Connect to water inlet fitting. Unit has a regulator, connect to the regulator located just behind splash plate.

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.

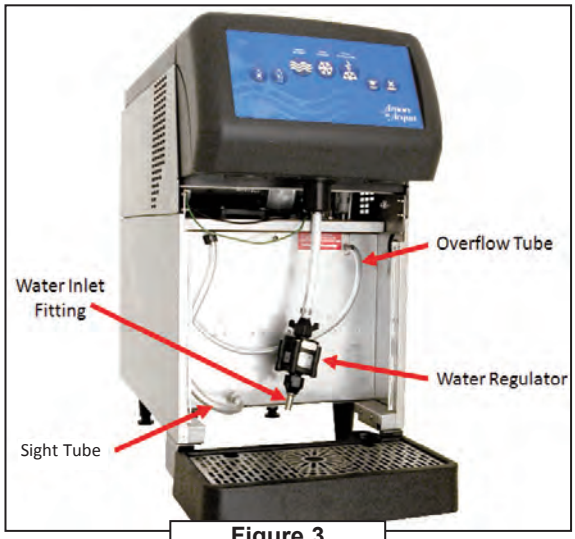


Figure 3

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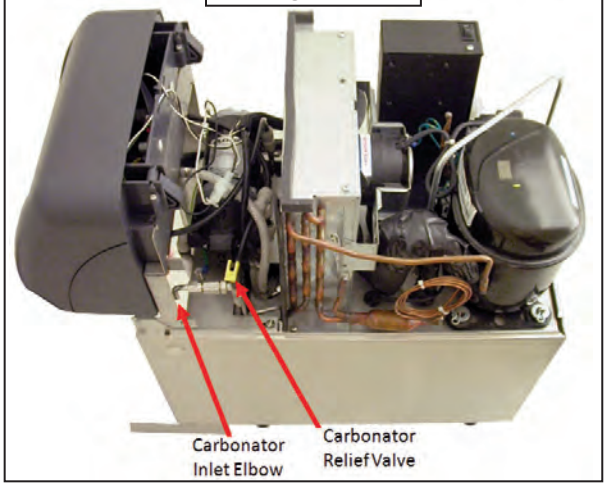
1.9 CONNECTING THE CO_2 SUPPLY

Figure 4



A. Connect high pressure CO_2 regulator assembly to CO_2 cylinder or bulk system. Use a new CO_2 tank washer if regulator does not have built-in o-ring seal.

B. Place CO_2 cylinder in service location under counter, etc., and secure it with a safety chain.

C. Install secondary CO_2 regulator if the bulk system is utilized.

D. Route gas line through hole in counter and through opening behind the dispenser splash plate.

E. Leave 12 inches (305 mm) of extra tubing length below the counter for servicing and moving the dispenser.

F. Using a barbed splicer and oetiker (supplied in the Install Kit), connect CO_2 supply line to inlet tubing of carbonator located just behind splash plate, connected to the carbonator inlet elbow.

G. Replace the bonnet and splash plate.

⚠ **WARNING/ADVERTENCIA/AVERTISSEMENT** ⚠

DO NOT TURN ON THE CO^2 SUPPLY AT THIS TIME. ⚠ NO CONECTE TODAVÍA LA ALIMENTACIÓN DE CO2. ⚠ N'OUVREZ PAS L'ALIMENTATION EN CO2 À CE MOMENT.

1.10 PURGING THE CARBONATION SYSTEM

A. 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.

B. Reconnect the power supply to the carbonator pump.

C. Back off on the CO_2 regulator pressure adjusting screw all the way. Open the CO_2 cylinder handle slowly. Turn the CO_2 pressure regulator up slowly to 75 PSIG (5.1 bar).

D. Select the "Chilled Sparkling Water" option and press the **POUR** button until water is flowing steadily from the valve.

E. Check all of the unit's water and CO_2 connections for leaks and repair if necessary.

NOTE: Tank Method Only - to check for CO_2 leaks, close the valve on the CO_2 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. Replace the unit's bonnet and splash plate.

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

2. SCHEDULED MAINTENANCE

⚠ CAUTION/PRECAUCIÓN/ATTENTION/ ⚠

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. ⚠ 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. ⚠ 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.

2.1 AS NEEDED

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

2.2 DAILY

A. Remove the nozzle 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 and nozzles.

2.3 WEEKLY

A. Taste each product for off tastes.

B. Remove the bonnet and check the level of water in the water bath. Replenish as required, and replace the bonnet.

2.4 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.

2.5 EVERY SIX MONTHS

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

2.6 YEARLY

A. Clean water bath interior, including evaporator coils and refrigeration components.

B. Clean the entire exterior of the unit.

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.

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.**

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 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. Ensure rinsing is thorough, using clean, potable water at a temperature of 90 to 110 degrees F. Extended lengths of product lines may require additional cleaning solution.

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

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 2.2). 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.

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3.3 AMBIENT PROCESS CONTINUED

E. Fill the lines with Sanitizing Solution. Make sure that lines are completely filled and allow to stand for ten (10) minutes.

E. Draw drinks to refill lines and flush solution from the dispenser.

F. Taste the beverage to verify that there is no off taste. If off-taste is found, flush the syrup system again.

⚠ CAUTION/PRECAUCIÓN/ATTENTION/ ⚠

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. ⚠ 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. ⚠ 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 NOZZLE CLEANING

NOTE: Refer to Section 5.2 for Nozzle Access

A. 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.

B. Wearing sanitary gloves, remove, drain and air dry the nozzle and diffuser.

C. Wearing sanitary gloves, replace diffuser and twist nozzle into place.

D. Connect power and replace cover.

4. WATER DISPENSER OPERATION

4.1 SYSTEM CONFIGURATION

Currently, only one configuration is applicable, the Crew Serve Configuration. Below is a table that shows the various configurations based on the positions of SW1.

SW1 Position 1	SW1 Position 2	No. Panels/ No. Flavors	System Type
OFF	OFF	1 panel / 0 flavors	Crew-Serve
ON	OFF	N/A	N/A
OFF	ON	N/A	N/A
ON	ON	N/A	N/A

4.2 WATER TYPES

The Water dispenser has the capability to dispense three types of water.

- Ambient water - Cold water - Sparkling water

4.3 DISPENSE CAPABILITY

The Water dispenser has the following user dispense capability.

- LARGE - SMALL - MANUAL POUR

4.4 CREW-SERVE DISPENSING

- The Water is in Crew-Serve mode when both the **SW1** positions are set to the **OFF** position.
- All the LEDs on the touch panel simultaneously turn on for 3 seconds and then turn off to indicate power up.
- Normal Dispense Mode is active directly after startup.

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4.5 NORMAL MODE:

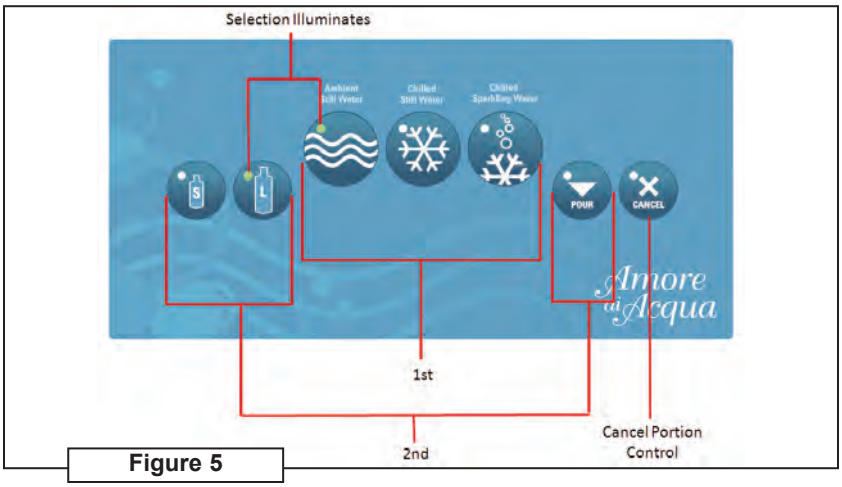


Figure 5

A. In normal mode the dispenser is idle waiting for the user to make water selection.

B. User selects the desired **WATER** key, the green LED next to the key turns on. If user decides to select another water type then user may do so by simply selecting the other desired W**ATER** key (Refer to Fig 5 - Touchpad Panel).

1. The user must then decide to dispense in **MANUAL POUR MODE or PORTION CONTROL MODE.**
2. In **MANUAL POUR MODE** the user must select and hold the **POUR** button until the desired amount of water has been dispensed. When user selects **POUR** the green LED next to the key remains on until the **POUR** button is released. The green LED next to the selected **WATER** key remains on for 10 seconds and then turns **OFF**. The dispenser will resume idle mode.
3. In **PORTION CONTROL MODE** the user must select either the **SMALL** or **LARGE** key. In the **PORTION CONTROL MODE**, the user does not have to continue holding the **SMALL** or **LARGE** key, simply press and release. The dispense starts as soon as the **SMALL** or **LARGE** key is pressed.
4. If the **SMALL** key is selected, the green LED next to the key turns on, water is dispensed continuously for 10 seconds, and then the green LED next to the **SMALL** key turns off. If a key is not pressed, then the green LED next to the selected **WATER** key remains on for 10 seconds and then turns off. The dispenser will resume idle mode.
5. If the **LARGE** key is selected, the green LED next to the key turns on, water is continuously dispensed for 12 seconds, and then the green LED next to the **LARGE** key turns off. If any key is not pressed, then the green LED next to the selected **WATER** key remains on for 10 seconds and then turns off. The dispenser will resume idle mode.
6. Anytime during a **SMALL** or **LARGE** dispense the user can select the **LARGE** key to immediately stop dispensing. When user selects **CANCEL** key a red LED turns on next to the key until the key is released. At this point the green LED next to the **SMALL** or **LARGE** key turns off. If no key is pressed, then the green LED next to the selected **WATER** key remains on for 10 seconds and then turns off. The dispenser will resume idle mode.
7. If user selects the same **WATER** key more than once then it is unselected, the LED turns off, and the dispenser will resume idle mode.
8. If a key is not pressed after the user selects the **WATER** key, the led will remain on for 10 seconds and then turns off. The dispenser will resume idle mode.

4.6 PORTION CONTROL PROGRAMMING

A. To begin, all LEDS lights should be off. Press the **SMALL** and the **POUR** keys simultaneously for 5 seconds.

B. The **CANCEL** LED will illuminate. The **SMALL** and the **LARGE** LED will blink two (2) times.

C. Select the desired **WATER** key, the LED should turn on. Next, press and hold the **SMALL** key until the desired amount of water has been dispensed. When the key is released, the dispense will stop and the dispensed time will be recorded. The associated LED will remain blinking to indicate that a new pour-duration has been programmed.

D. The **WATER** key that was previously selected should still have the LED on. If the LED is off, reselect the previous **WATER** key. While the desired **WATER** LED is on, press and hold the **LARGE** key. When the key is released, the dispense will stop and the dispensed time will be recorded. The associated LED will remain blinking indicating that a new pour-duration has been programmed.

E. Repeat Steps C and D to program the remaining **WATER** keys.

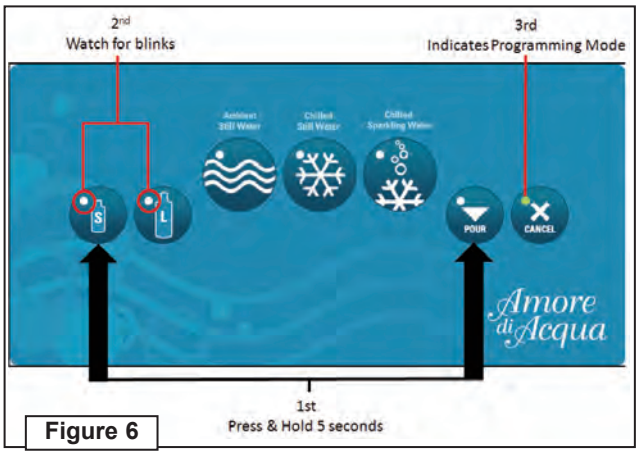


Figure 6

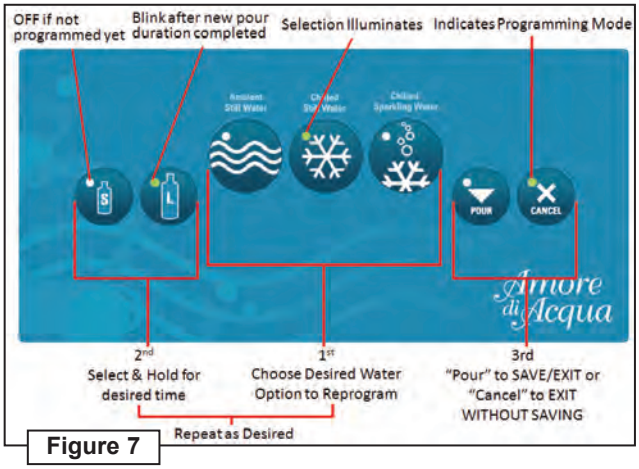


Figure 7

F. If user selects a previously programmed **WATER,** the **SMALL** and/or **LARGE** LED's will indicate their status by blinking. Programmed LEDs will not blink.

G. If the pour duration is greater than 30 seconds, the dispense will stop. Dispense time will not record and the system will return to Step C.

H. Once programming is complete and all **WATER** LEDs are off, press the **POUR** key to save the new programmed times and exit the Portion Control Program mode. Press the **CANCEL** key to cancel new programmed times and exit the Portion Control Program mode. The red LED next to the **CANCEL** key will turn off to indicate exit from the Portion Control Program Mode. All LEDs should be off and dispenser is now in idle.

I. If a key is not pressed within 60 seconds, the system will exit the **PORTION CONTROL PROGRAM MODE** with a save.

4.7 UNACTIVE FEATURE

There will be a program mode to enable / disable flavors for future use. This feature is not implemented and is listed here for documentation purposes only.

4.8 RESET DEFAULTS

To reset unit to default programming, press the three (3) **WATER** keys simultaneously. All LEDs on the touch panel will simultaneously illuminate for three (3) seconds and quickly turn off to indicate a successful reset. NOTE: This feature is only available upon initial power-up. After the first dispense has occurred, this feature is no longer available.

DEFAULT PORTION CONTROL TIMES		
WATER TYPE	**SMALL**	**LARGE**
Ambient	7.5 seconds	9 seconds
Cold	7.5 seconds	9 seconds
Sparkling	10 seconds	12 seconds

5. MECHANICAL COMPONENTS ACCESS

5.1 VALVES ACCESS

A. Removal from faucet plate.

1. Turn off the water and CO_2.
2. Must bleed lines of water and relieve CO_2 pressure to remove valves. No shut offs are located on the valves.
3. Verify unit is off. Lift the button panel shroud (Fig 6).
4. Remove inlet and outlet tubing from push-to-connect fittings on each side of valve (Fig 7).
5. Loosen screws on top of the valve.
6. Slide valve forward through slots in faucet plate.

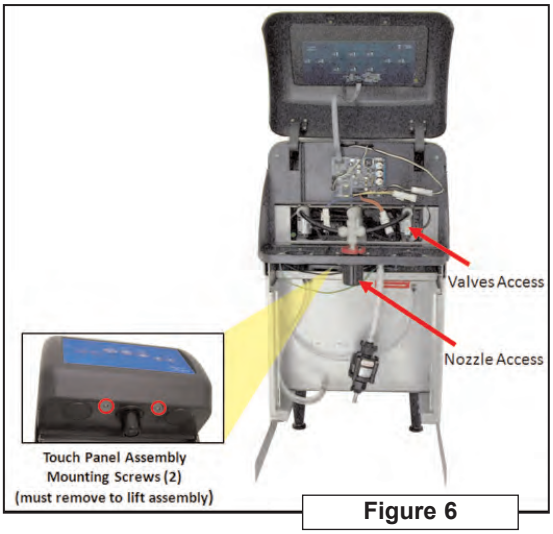


Figure 6

B. Mounting on Faucet Plate (Fig 6 & 7)

1. Verify unit is off. Connect the inlet side of the valve to the push-to-connect tubing.
2. Slide the screws located on the top of the valve into the slots in the faucet plate; loosen screws if difficult.
3. Tighten the screws until they are stable in the faucet plate.
4. Connect the outlet side of the valve to the nozzle tubing.
6. Pull on each tube to check security of the connections.

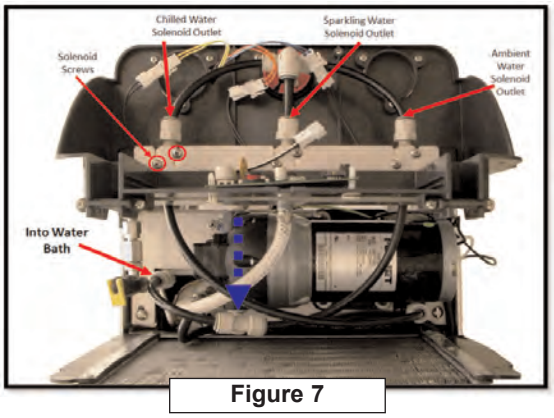


Figure 7

5.2 NOZZLE ACCESS

A. Removal of nozzle.

1. Lift button panel shroud, see Figure 6.
2. Unlock captivated water port inlet fitting from sliders as seen in Figure 16 and pull water fitting upward.
3. Remove outer nozzle and nozzle assembly as in Figure 9.

Figure 8

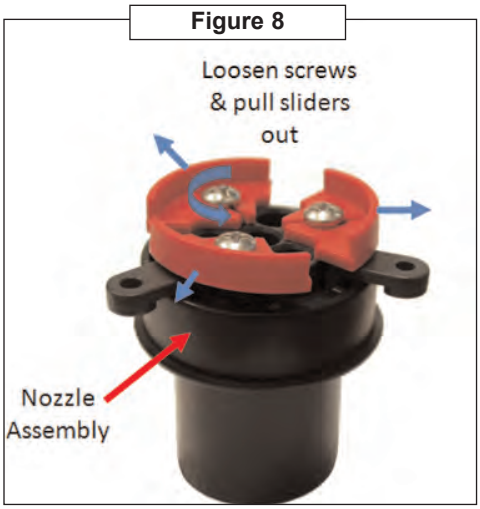
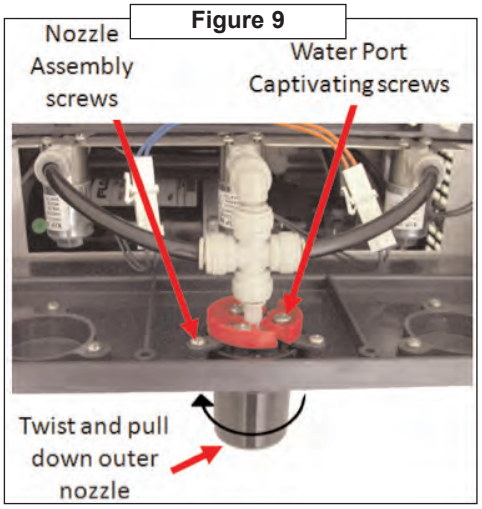


Figure 9



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5.3 PUMP ACCESS

A. Removal of Pump

1. Verify water source to the dispenser is shut-off, all lines are bled of water, CO2 pressure is off and relieved in the system.

2. Ensure unit is turned OFF.

3. Remove splash plate, the plastic and sheet metal bonnet assemblies (Fig 10 & 11).

4. Disconnect inlet & outlet push-to-connect fittings (Fig 12).

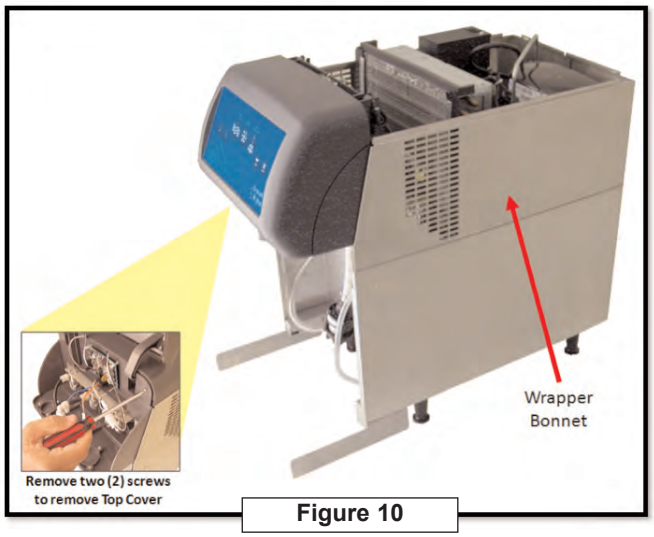

Figure 10

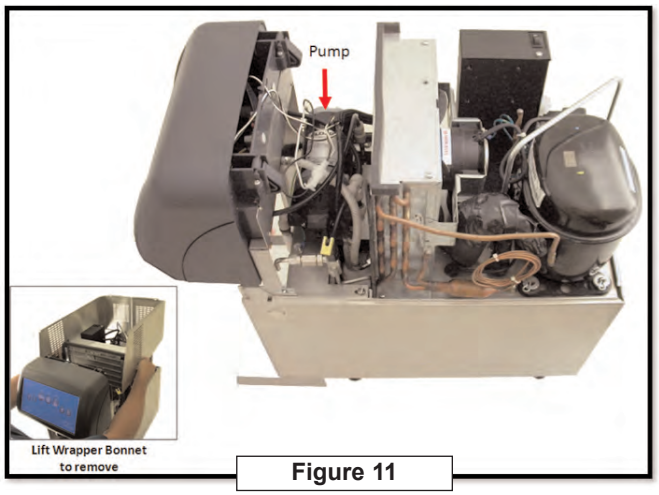

Figure 11

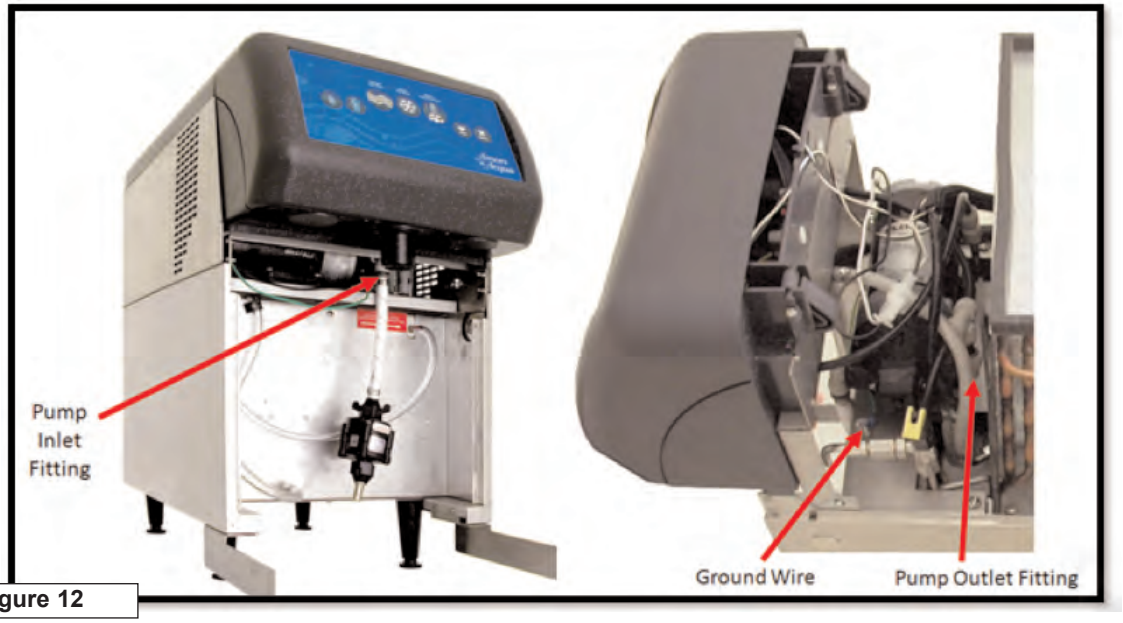

Figure 12

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5.3 PUMP ACCESS CONTINUED

5. Disconnect power harness and remove ground wire from ground stud, (Fig 12 & 13).

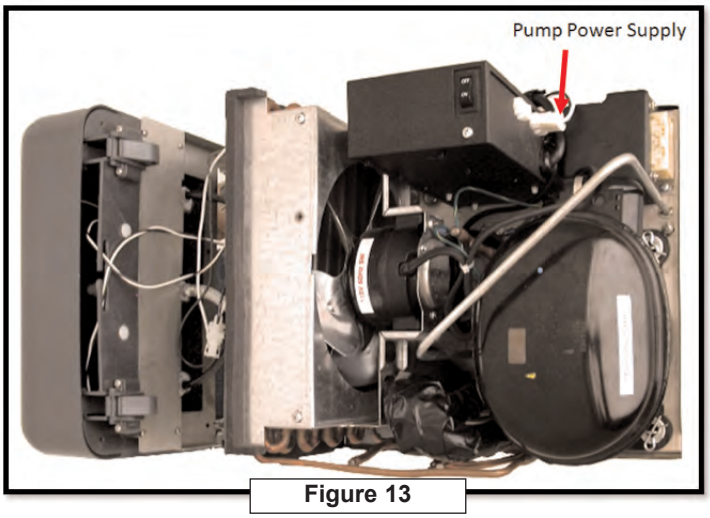

Figure 13

6. Unscrew the 4 screws mounting the pump to the pump plate.
7. Pull pump through the side or top of the dispenser.

B. Mounting of Pump

1. Place pump onto the pump mounting plate, align and place the mounting screws. Verify the pump is positioned with the inlet and outlet located closest to the carbonator assembly (Fig 20).
2. Connect inlet (regulator outlet tubing) and outlet fittings to pump. Verify fittings are pushed in as far as they can go.
3. Pull on the fittings to ensure secure connection.
4. Place ground wire back on ground stud and securely tighten nut.
5. Connect power harness.
6. Return splash plate and bonnet assemblies.

6. TROUBLESHOOTING

ISSUE	CAUSE	SOLUTION
6.1 Miscellaneous leakage.	A. Gap between parts.	A. Tighten appropriate retaining screws.
	B. Damaged or improperly install o -rings or seals.	B. Replace or adjust appropriate o-rings or seals.
6.2 Insufficient water flow.	A. Insufficient incoming supply water and/or pressure.	A. Verify incoming supply water pressure is a 0 PSI flowing.
	B. Reduced flow.	B. Remove water pump. Remove screen from outlet port and check for debris/clogging. Clean screen, as necessary, and reinstall screen in outlet port. Reinstall water pump.
6.3 User interface not responding.	A. Dispenser supply sufficient but no flow at valve.	A. Check dispenser for freeze-up or other problems.
	B. Power to circuit board interrupted.	B. Reset circuit breaker on top of control box. If breaker trips again, refer to Section 6.21.
	C. Valves not receiving power.	C. Check connections to valves. Refer to wiring diagram.
	D. Keypad inoperative.	D. Check connections for touch panel and main CPU board. Reference wiring diagram.
6.4 No water dispensed when button panel activated	A. Improper or inadequate water.	A. DO NOT REMOVE VALVE. Press each water option button and ensure the solenoid is activating properly. If it is not, replace the valve. If it is, check for freeze ups in the circuit or check for other problems in the circuit.
	B. CO_2 pressure too low.	B. Check the CO_2 pressure to the pump manifold to ensure it is between 70-80 PSI
	C. Kinked line.	C. Remove kink or replace line.
6.5 Valve will not shut off.	A. Solenoid armature not returning to bottom position.	A. Replace solenoid.
6.6 CO2 gas dispensed but no water	A. Improper water flow to dispenser.	A. Check for water flow to dispenser (see Section 8.2)
	B. Blown fuse on circuit board.	B. Check Fuse F1 on circuit board.
	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 line frozen.	F. See Section 6.10

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6. TROUBLESHOOTING, continued

6.7 Dispenser does not dispense proper water option from proper button selection.	A. Valve harness assigned incorrectly	A. Refer to wiring and plumbing diagrams to determine correct assignments.
	B. Tubing is assigned incorrectly to valves	B. Refer to plumbing diagram for correct assignments of tubing to valves.
6.8 Excessive foaming.	A. Incoming water temperature too high.	A. Correct prior to dispenser. Consider larger dispenser or precooler.
	B. CO2 pressure too high.	B. Adjust CO2 pressure downward, but not less than 70 PSI.
	C. High beverage temperature.	C. Check refrigeration system.
6.9 Water continually overflows from water bath into drip tray.	A. Loose water connection(s).	A. Tighten water connection(s).
	B. Flare seal washer leaks.	B. Replace flare seal washer.
	C. Faulty water coil.	C. Replace water coil.
6.10 Compressor starts and continues to run until freeze up and will not cut off.	First check that the three minute carbonator timer has not timed out.Turn unit OFF then ON. If the pump shuts off in less than 30 seconds, the dispenser is not frozen.	
	A. PCB malfunctioning or faulty ice bank probe.	A. Disconnect ice bank probe from PCB. 1) If compressor continues to run, check relay in control box on refrigeration deck. If stuck closed, replace relay. If not stuck, replace circuit board. 2) If compressor stops, replace ice bank probe.
	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.
6.12 Warm drinks.	A. Restricted airflow.	A. Check clearance 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. See Sections 6.13 - 6.17.
	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.

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6. TROUBLESHOOTING, continued

6.13 Compressor does not start (no hum), condensor fan motor does not run and no ice bank.	A. There is a five minute compressor and condenser fan delay.	A. Allow for a five minute delay to lapse.
	B. Faulty refrigeration relay PCB.	B. Replace refrigeration relay PCBs in control box.
	C. Ice bank probe not completely submerged.	C. Fill water reservoir until water flows from overflow tube.
	D. Circuit breaker tripped.	D. Reset breaker. If problem persists, 1) determine reason and correct, 2) electrical circuit overloaded; switch to another circuit.
	E. Inadequate voltage.	E. Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rated voltage.
	F. PCB malfunctioning.	F. Replace PCB assembly.
	G. Incorrect wiring.	G. Refer to wiring diagram and correct.
	H. Faulty ice bank probe.	H. Replace ice bank probe.
	I. Transformer failure.	I. Reset circuit breaker on top of control box. If breaker trips again, see Section 6.21.
	J. Ice bank probe not connected properly to PCB.	J. Connect ice bank probe to PCB.
6.14 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. Compressor relay malfunctioning.	C. Replace compressor relay. Be sure to use correct relay. Failure to use correct relay will cause compressor failure.
	D. Compressor malfunctioning.	D. Replace compressor or deck.
6.15 Compressor starts but does not switch (will run for only a few seconds before internal overload switches compressor off).	A. Inadequate voltage.	A. Measure voltage across terminal on compressor.
	B. Incorrect wiring.	B. Refer to wiring diagram and correct.
	C. Compressor relay malfunctioning.	C. Replace compressor relay. Be sure to use correct relay. Failure to use correct relay will cause compressor failure.

CONTINUED ON NEXT PAGE

6. TROUBLESHOOTING, continued

6.16 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 eight inches (20.3 cm) over top.
	C. Inadequate voltage.	C. Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rate 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
6.17 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/slow refrigerant leak.	D. Find and repair leak. Recharge system.
6.18 Compresor cycles on and off frequently during the initial pulldown and/or normal operations.	A. PCB malfunctioning.	A. Replace PCB assembly.
	B. Defective probe.	B. Replace probe.
	C. Air flow blocked.	C. Check to ensure proper air clearance is provided.
6.19 Plain water flow is insufficient.	A. Insufficient incoming supply water and/or pressure.	A. Verify incoming supply water pressure is a minimum of zero PSI flowing.
6.20 Suspect faulty PCB.	A. Check unit is plugged in. Check switch is in the ON position. Check harness from main CPU PCB to transformer.	A. No lights ON.
	B. Signifies no communication with touch panel. Check touch panel harness connections and restart. If red light is still on, replace the touch panel PCB.	B. Red light ON (steady).
	C. Signifies that there is power to the main CPU PCB.	C. Green light ON (steady).
	D. Signifies the software is running properly.	D. Green light ON (flashing).

CONTINUED ON NEXT PAGE

6. TROUBLESHOOTING, continued

6.21 Circuit breaker tripping.	A. Pump is shorted.	A. Disconnect pump and restore power. If breaker does trip, then pump is OK. If breaker doe not trip, replace pump.
	B. Secondary wire harness is bad.	B. Detect short by disconnecting both secondary transformer fastons and restore power. If it does not trip, locate short in secondary harness between transformer and PCB.
	C. Transformer failure	C. Detect short by disconnecting both primary transformer fastons and restore power. If breaker doesn't trip, replace transformer.
6.22 Low or no carbonation.	A. Low or no CO_2.	A. Check CO_2 supply. Adjust CO_2 pressure to 70 PSI.
	B. Excessive water pressure.	B. Water regulator should be set at 50 PSI.
	C. Low water pressure.	C. Water pressure must be 25 PSIG flowing with carbonator pump running.
	D. Worn or defective carbonator pump.	D. Replace carbonator pump.
6.23 Carbonator pump not running.	A. Timed out.	A. Check water supply; turn machine off and on.
	B. Fuse blown on PCB.	B. Replace fuse F1 on PCB.
	C. Faulty carbonator probe.	C. Disconnect J14 connector from PCB. If pump runs with probe disconnected but will not run with carbonator empty and probe connected, replace probe.
	D. Air in carbonator.	D. Purge carbonator (see Section 1.14).
	E. Power Harness disconnected .	E. Check harness connection and ensure proper connectivity.
	F. Faulty PCB.	F. Replace PCB.
6.24 Agitator is not running.	A. Faulty wiring.	A. Ensure harnesses are connected properly.

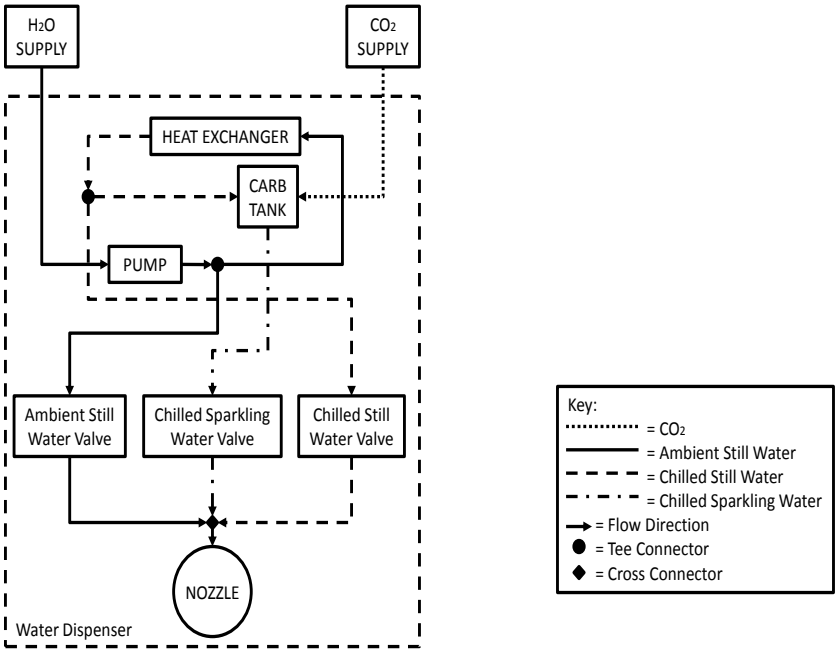
7. DISPENSER DISPOSAL

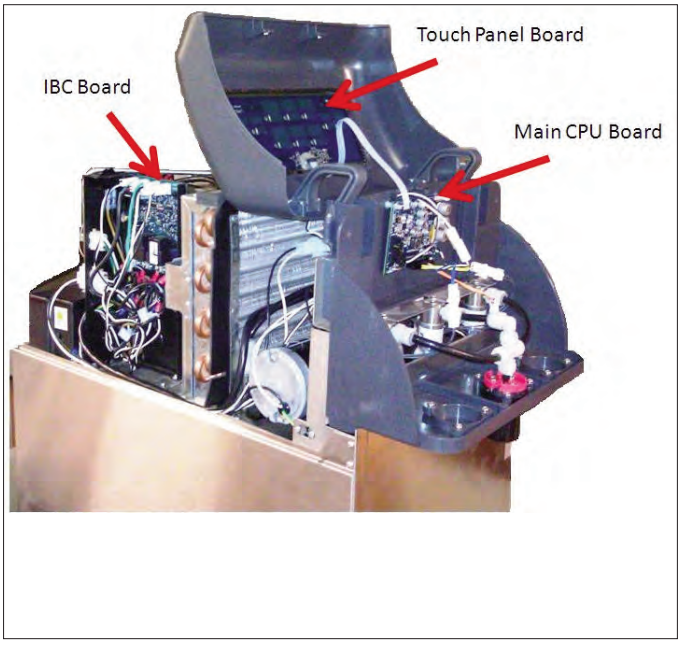
To prevent possible harm to the environment from improper disposal, recycle the unit by locating an authorized recycler or contact the retailer where the product was purchased. Comply with local regulations regarding disposal of the refrigerant and insulation.

NOTES

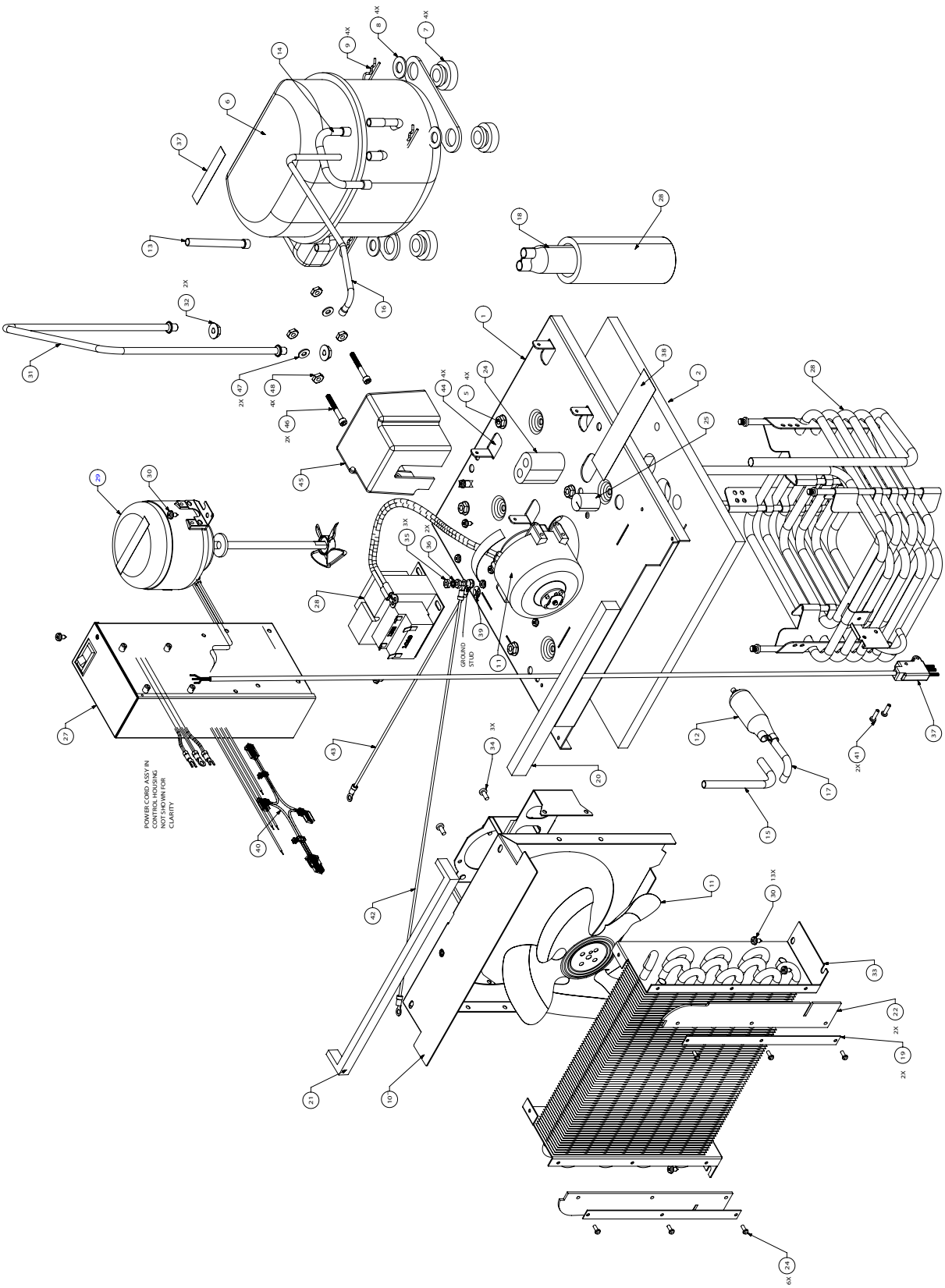
8. ILLUSTRATIONS, PARTS LISTINGS, WIRING DIAGRAMS, AND PLUMBING DIAGRAMS

8.1 PLUMBING DIAGRAM AND BOARD CONFIGURATION





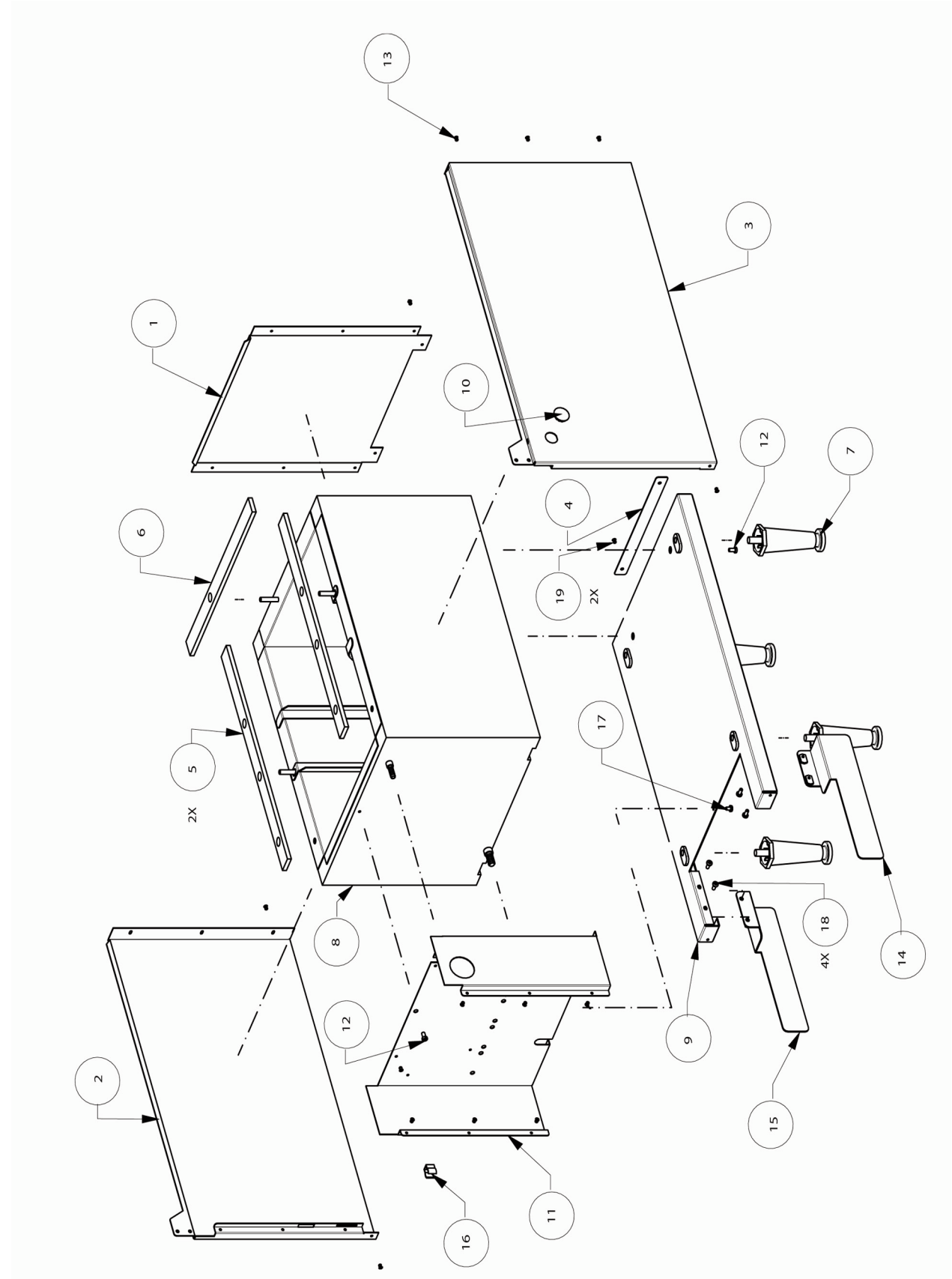
8.2 DECK ASSEMBLY



8.2 DECK ASSEMBLY PARTS LIST

ITEM	PART NO.	DESCRIPTION
1	30-9872/01	PLATE,COMP,DECK,RED 1
2	50-0477/01	INSULATION,COMP DECK,RED 1
3	82-1950	COIL ASSY,EVAP,600CCD
4	52-1773/02	PROBE ASSY,EIBC SERIES 2,CED
5	04-0753/01	NUT,TORQ-PATCH,1/4-20,W/WASHER
6	83-0045	COMP ASSY,1/4HP,115V,60HZ
7	02-0114	GROMMET,COMPRESSOR
8	04-0537	WASHER,.467ID X.923OD X.060THK
9	03-0150	RETAINER,CLIP,CONVERT
10	51-5380/01	FAN SHROUD ASSY,600
11	82-4191	FAN ASSY,115/60,9W,WATER
12	23-1144	DRIER/CAP TUBE ASSY,72
13	47-2238	TUBE,PROCESS,COMPRESSOR
14	47-2237/01	TUBE,SUCTION,600 CCD
15	47-0344	TUBE,PROCESS
16	47-1655	TUBE,HIGH SIDE,600CCD
17	47-1656	TUBE,COND,OUT,600CCD
18	51-0061	ACCUMULATOR,.375HOLES
19	30-6844	RETAINER,BAFFLE,COND,600
20	50-0347	BAFFLE,COND,BOTTOM,600
21	50-0325	BAFFLE,CONDENSER,TOP,600
22	50-0322/01	BAFFLE,CONDENSER,SIDE,RED1
23	04-0518	RIVET,.125DIA X.328LG,DH,ZP
24	02-0040	SEAL,EXTRUSION
25	02-0041	SEAL
26	50-0211	BOOT,6,DELTA II
27	52-3330	CONTROL HOUSING ASSY, WATER
28	25-0047/01	XFMR,75VA,24V,115,50/60,RESET
29	82-4192	AGITATOR ASSY,115/60,15W,WATER
30	04-0504	SCR,8-18X.375,PHD W/ELW,PH,AB
31	51-5423	HANDLE,DECK,COMP,600
32	04-0754/01	NUT,TORQ-PATCH,5/16-18,W/WSHR
33	23-1112	CONDENSER,600CCD
34	04-0059	SCR,8-36X.375,PHD,LNB,PH/SL
35	04-0110	NUT,8-32,ST,BT,CD,OR ZN
36	04-0576/01	WASHER,LOCK,INT TOOTH,#8,SS
37	06-0431	LABEL,115V60HZ,1/4HP
38	06-0080-01	NMPLT,VINYLE,RFRG DECK,CED/CCD
39	06-0877	LABEL,GROUND,DELTA
40	52-3323	HRNS,XFMR,REF DCK CPU,MAIN CPU
41	04-0394	SCR,6-32X.500,PH,PH,MS,SS,PL
42	52-3104	LEAD ASSY,GRND TO MTR,GP15R
43	52-3143	LEAD ASY,GRND/AGITATOR MTR,RED
44	89-0014	COVER,HOLE
45	05-2726	COVER,XFORMER,RED1
46	04-1561	SCR,10-32X1-1/2 SOCKET
47	04-0147	WASHER,FLAT,#10,ST,ZN
48	04-0154	NUT,10-32 HEX,M/S,SS

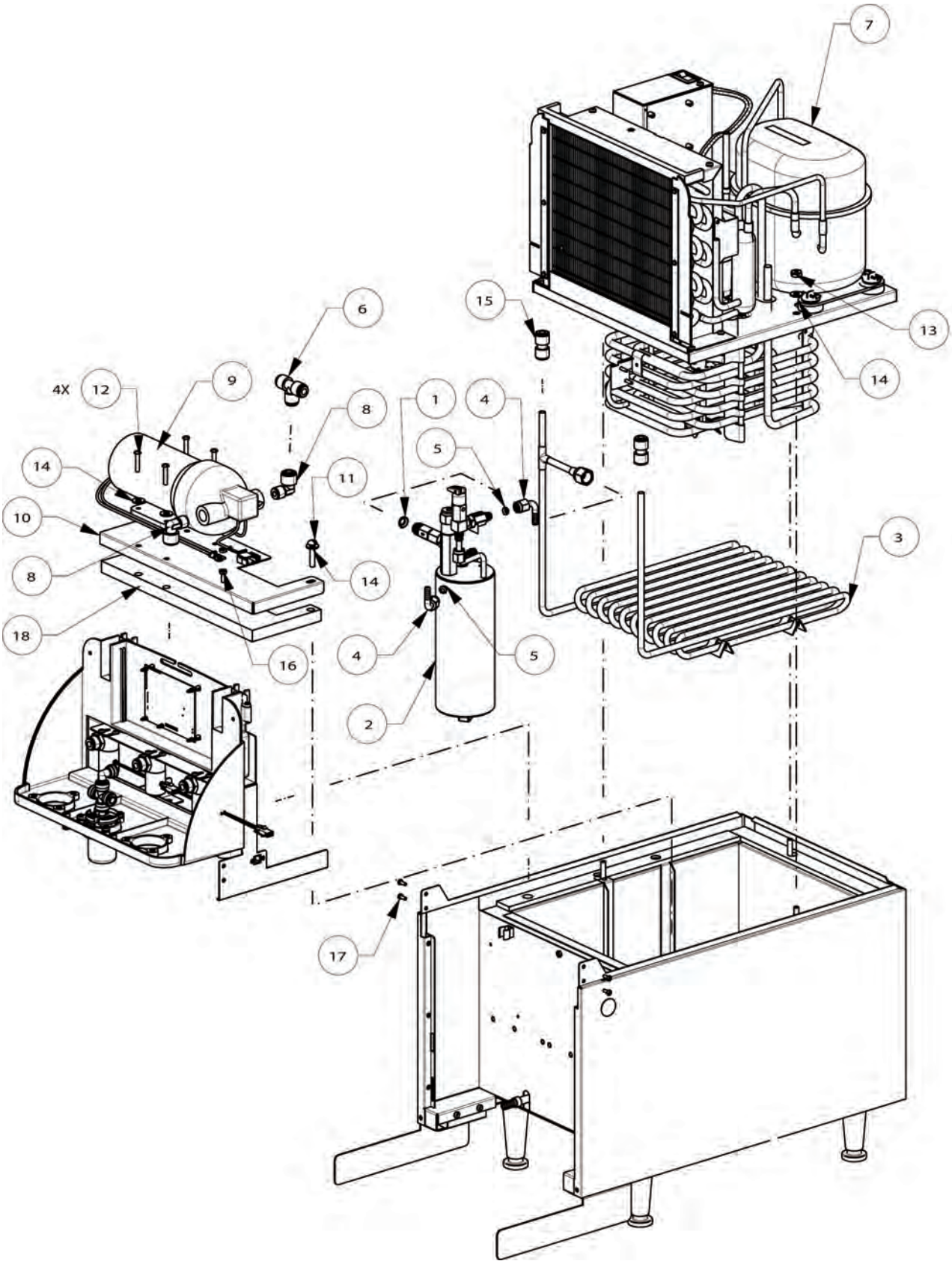
8.3 TANK AND BASE ASSEMBLY



8.3 TANK AND BASE ASSEMBLY PARTS LIST

ITEM	PART NO.	DESCRIPTION
1	30-10693	WRAPPER,BACK,MAIN UNIT,RED1
2	30-10694	WRAPPER,LEFT,MAIN UNIT,RED1
3	30-10695	WRAPPER,RIGHT,MAIN UNIT,RED1
4	30-9857	PLATE,REAR ACCESS,RED 1
5	50-0482	INSULATION,SIDE,TANK,RED1
6	50-0483/01	INSULATION,BACK TANK,RED 1
7	82-0025	LEG SET,4 LEGS,WSHRS & NUTS
8	42-0135/03	FOAM TANK ASSY,RED 1
9	30-9865/02	PLATE,BOTTOM,UNIT,RED1
10	07-0405	PLUG,HOLE,.750
11	30-9859/02	PLATE,PUMP MOUNTING,RED1
12	04-0397	SCR,8-16X.500,PHD,PH,PLT,SS
13	04-0067	RIVET,AK-42-B5-31
14	30-10706	BRACKET,RIGHT,DRIP TRAY,WATER
15	30-10705	BRACKLET,LEFT,DRIP TRAY,WATER
16	03-0302	CLIP,RTNG,DRAIN HOSE,VM1004
17	04-0504	SCR,8-18X.375,PHD W/ELW,PH,AB
18	04-0477	SCR,8-32X.375,PH,PH/SL,RL,SS”
19	04-0510	SCR,8-18X.50,PHD,PH,BSD, ZP

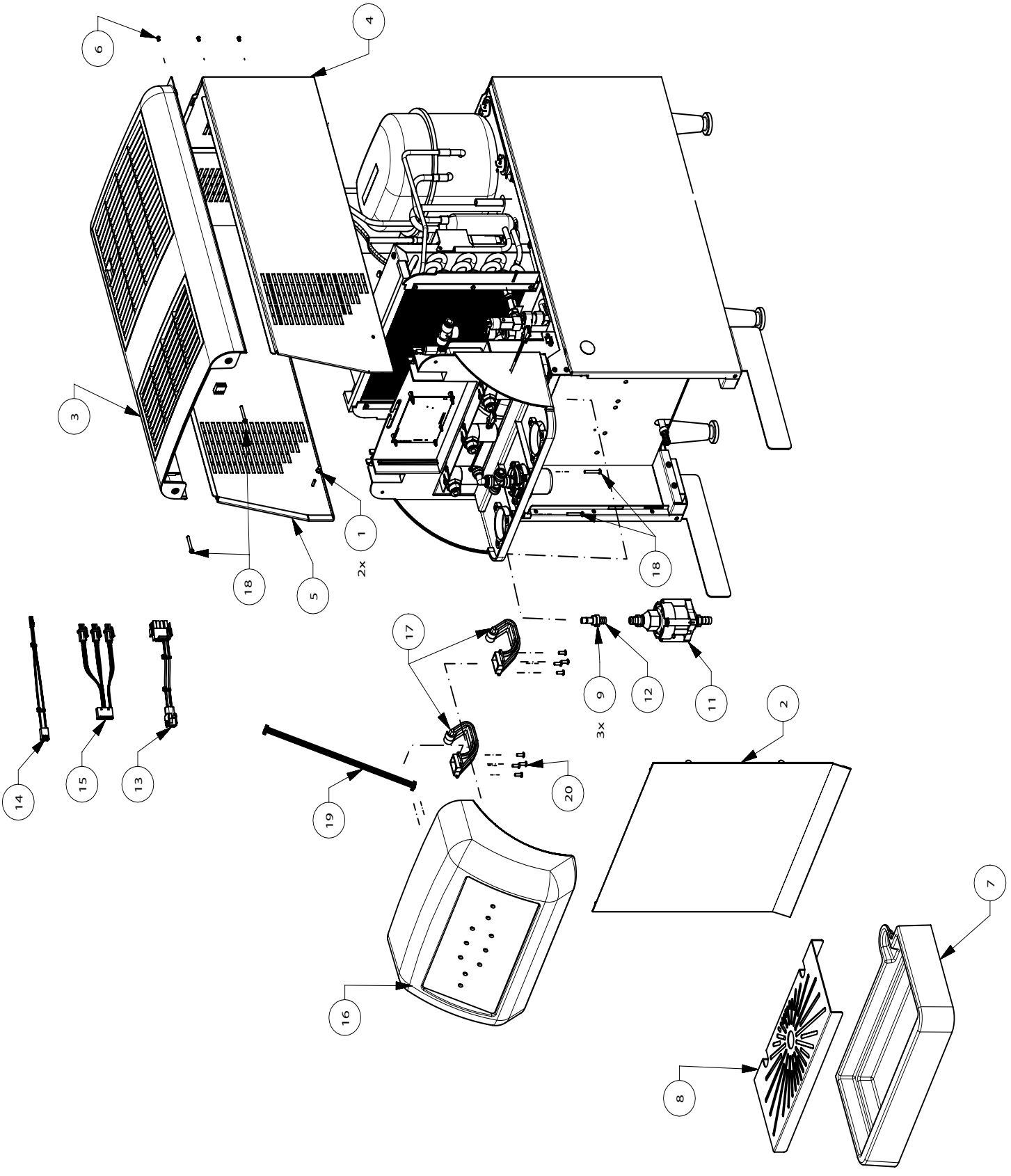
8.4 WATER CIRCUIT ASSEMBLY



8.4 WATER CIRCUIT PARTS LIST

ITEM	PART NO.	DESCRIPTION
1	05-0017	WASHER,SEAL,FLR,NYLON,3/8(5/8)
2	82-3884/01	TANK ASSY,CARB,RED1
3	48-2965	COIL,WATER ASSY 11 TURN
4	01-0424/01	ELBOW,SS,1/4 BARB X 1/4 S NUT
5	05-0011/01	SEAL,WASHER,7/16-20M FLARE
6	01-2752	TEE,UNION,PTC,5/16 ID
7	82-4246	DECK ASSY,COMP,115/60,WATER
8	01-2751	ELBOW,PTC,3/8 NPT X 5/16 ID
9	86-0173-01	PUMP,115V,1.4GPM,W/CONNECTORS
10	30-10834	PUMP PLATE,WATER
11	04-0431	SCR,10-32,RH,PH/SL,1.000
12	04-1089	SCR,1/4-20x1.250, RHD,SL,MS.SS
13	04-0032/01	NUT,NYLOCK,1/4-20,SS
14	04-0033/01	WSHR,FLT1/4X.065X.281IDX.625OD
15	01-2753	ADAPTOR,PTC,5/16 X 5/16 SS
16	04-0110	NUT,8-32,ST,BT,CD,OR ZN
17	04-0407	SCR,6-32X.375,PHD,PH,23,SS
18	50-0600	INSULATION,PUMP DECK,WATER
19	01-2753	STEM/PTC, 5/169 ODx1/4 BARB (not shown)

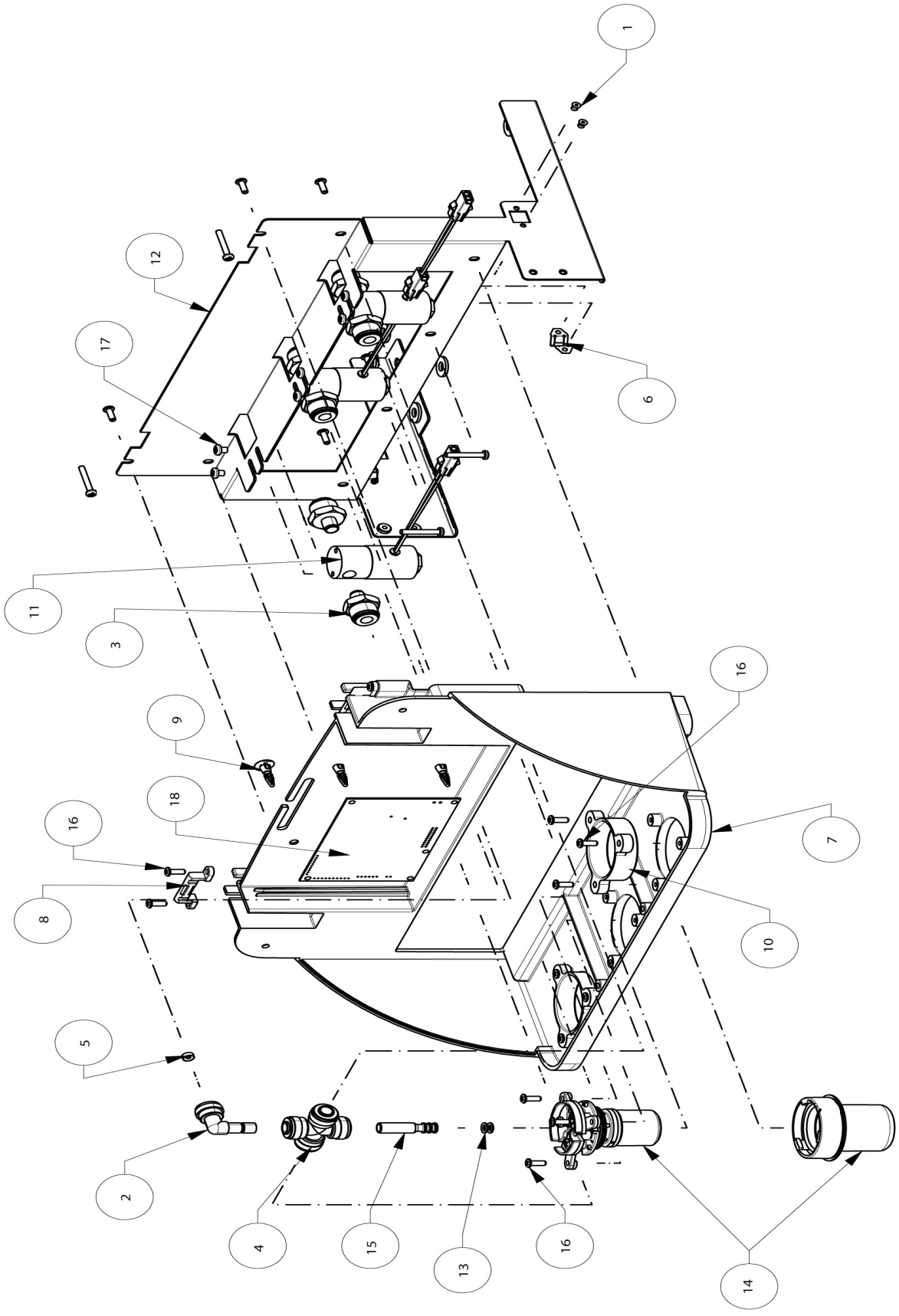
8.5 BONNETS, DRIP TRAY, AND HARNESSES ASSEMBLY



8.5 BONNETS, DRIP TRAY, AND HARNESSES PARTS LIST

ITEM	PART NO.	DESCRIPTION
1	04-1044	STUD,BALL,PN# P101-421-495
2	30-10783	SPLASH PLATE,WATER
3	82-2728	COVER ASSY,TOP
4	30-10692	WRAPPER,BONNET,WATER
5	30-10796	BONNET,WRAPPER,LEFT,WATER
6	04-0067	RIVET,AK-42-B5-31
7	05-2913	DRIP TRAY,WATER
8	30-10846	CUPREST,WATER
9	07-0409	CLP,STPLS,OTKR,16700992,31/64
10	21-0085	POWER CORD,EXTENSION,USA
11	18-0306	REGULATOR,WATER,SHURFLO,50 PSI
12	01-2750	ADAPTOR,PTC,5/16 OD X 3/8 BARB
13	52-3319	HARN,WATER PUMP,MAIN CPU
14	52-3324	HARNESS,MAIN CPU,REF DECK CPU
15	52-3325	HARNESS,MAIN CPU,VALVES
16	52-3329	TOUCH PANEL ASSY,WATER
17	05-1465	ARM,HINGE,SHROUD ASSY
18	04-0779	SCR,6-32X1.000,PH,PH,MS,SS,PL
19	52-3307	CABLE,RIBBON,WTR,TECH SENSOR
20	04-0633/01	SCR,6-19X.437,PHD,PH/SL,PL

8.6 VALVE & NOZZLE ASSEMBLY



8.6 VALVE & NOZZLE ASSEMBLY PARTS LIST

ITEM	PART NO.	DESCRIPTION
1	04-0067	RIVET,AK-42-B5-31
2	01-2745	ELBOW,PTC,5/16 OD X 5/16 ID
3	01-2746	ADAPTOR,PTC,5/16 ID X 1/8 NPT
4	01-2747	CROSS,UNION,PTC,5/16 ID
5	02-0420/01	FLOW WASHER,1.875
6	04-1046	RECEIVER,STUD,PN#C1663-012-3B
7	05-1360	PLATE,VALVES,600CCD
8	05-1464	PIN,HINGE,SHROUD ASSY
9	05-1678	STANDOFF,PCB,REV LCKNG
10	05-2022	PLATE,NOZZLE,BLANK
11	17-0647-01	SOLENOID,24VDC,W/CONNECTORS
12	30-10697	BRACKET,SOLENOID,WATER
13	02-0214	O-RING,2-008,97-0999
14	54-0260/01	NOZZLE ASSY,MULTI-FLAVOR
15	05-2862	WATER PORT,4-SHOOTER
16	04-0633/01	SCR,6-19X.437,PHD,PH/SL,PL
17	04-0320/01	SCR,8-32X.187,PHD,PH,MS,SS
18	64-5038	PCB ASSY,WATER MAIN CPU

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