ICE BEVERAGE DISPENSERS, IBD 25 SERIES 4500

Operation Manual

PN: 28-0417/02

Model Number

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Manual PN: 28-0417/02
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FOR QUALIFIED INSTALLER ONLY

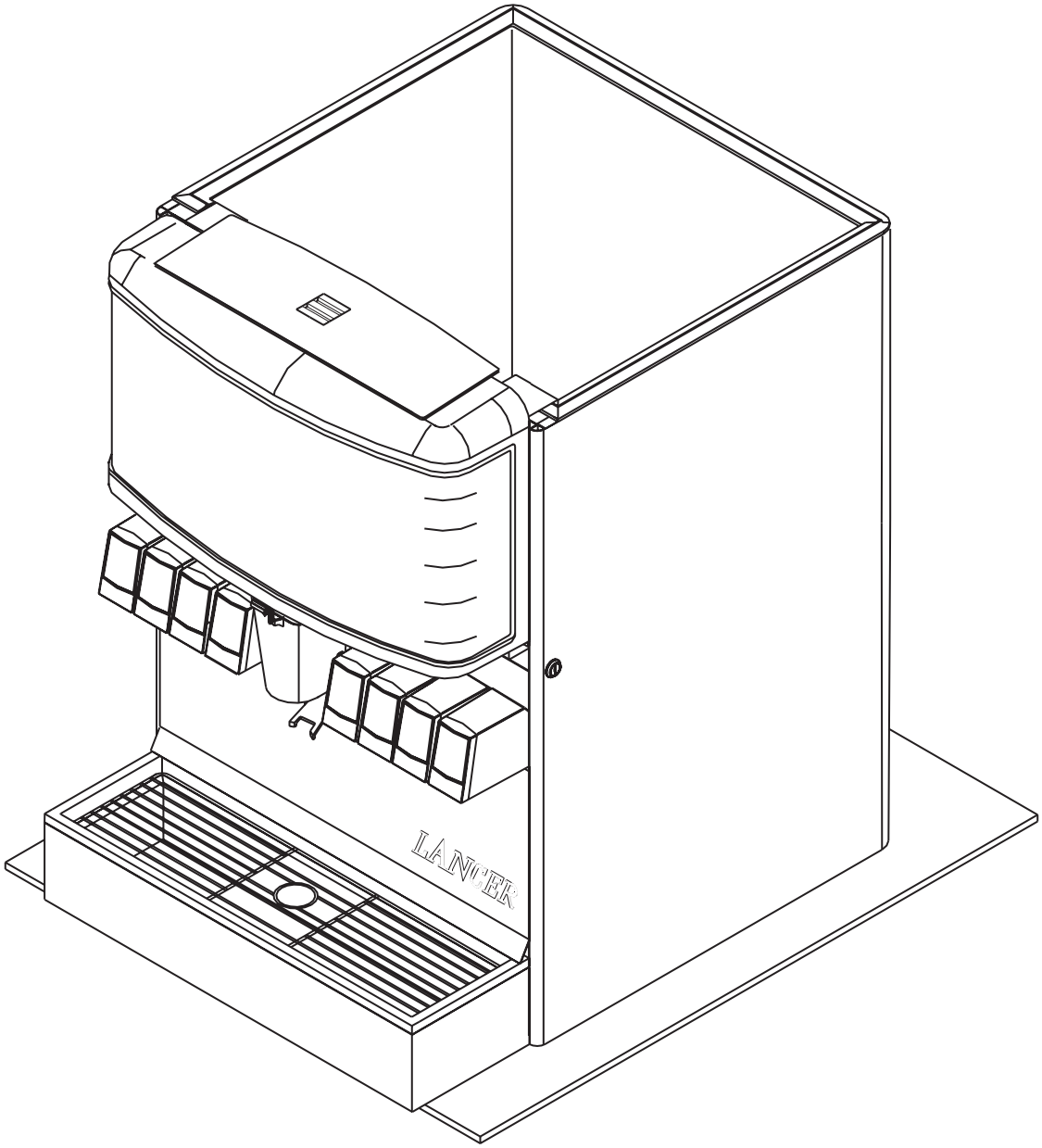
ABOUT THIS MANUAL

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.

TABLE OF CONTENTS

IBD - 25” SPECIFICATIONS



DIMENSIONS **Width:** 25 in (635 mm) **Depth:** 30.5 in (774.7 mm) **Height:** 34 in (863.6 mm) **SPACE REQUIRED** **Left Side:** 6 in (152.4 mm) **Right side:** 6 in (152.4 mm) **ELECTRICAL** 115V/60Hz/3.6 amps 230V/50-60Hz/1.8 amps	**WEIGHT** **Shipping:** 285 lbs (129.3 kg) **Empty:** 250 lbs (113.4 kg) **ICE** **Capacity:** 210 lbs (95.2 kg) **Dispensable:** 170 lbs (77.1 kg) **FITTINGS** **Soda water inlet:** 3/8” barb **Brand syrup inlets:** 3/8” barb	**PLAIN WATER SUPPLY** **Min flowing pressure:** 25 PSI (0.172 MPA) **Max flowing pressure:** 50 PSI (0.345 MPA) **CARBON DIOXIDE (CO2)** **Min pressure:** 60 PSIG (0.413 MPA) **Max pressure:** 80 PSIG (0.552 MPA)

LANCER IBD SERIES 4500

85-4528H ICE BEVERAGE DISPENSER, 25 INCH WIDE, 8V, 115V/60Hz

85-4538H ICE BEVERAGE DISPENSER, 25 INCH WIDE, 8V, 230V/50-60Hz

85-4425H ICE DISPENSER, 25 INCH WIDE, 115V/60Hz

85-4435H ICE DISPENSER, 25 INCH WIDE, 230V/50-60Hz

PRE-INSTALLATION CHECKLIST

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

ACCESSORIES	
□ CO2 Regulator Set	□ CO2 Supply
□ Beverage Tubing	□ Oetiker Clamps/Fittings
□ Water Booster	□ Water Regulator

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

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

WARNING/ADVERTENCIA/AVERTISSEMENT

⚠ The dispenser is for indoor use only. This unit is not a toy. Children should not be supervised not to play with appliance. 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 min/max ambient operating temperature for the dispenser is 40°F to 105°F (4.4°C to 40.5°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 no es un juguete. Los niños deben ser supervisados para no jugar con aparato. No la deben usar niños ni personas discapacitadas sin supervisión. Esta unidad no está destinada al uso por parte de personas (incluso niños) con capacidad física, sensorial o mental reducida, o sin experiencia y conocimientos suficientes, a menos que una persona responsable de su seguridad les haya dado supervisión o capacitación en el uso de la unidad. Limpieza y mantenimiento de usuario no deberá ser realizada por los niños sin supervisión. Esta unidad no ha sido diseñada para suministrar productos lácteos. La temperatura ambiente operativa mínima / máxima para el dispensador es de 40°F a 105°F (4.4°C a 40.5°C). No opere la unidad debajo de las condiciones de funcionamiento ambientales mínimos. En caso de congelación se produce, cesar la operación de la unidad y el contacto técnico de servicio autorizado. Servicio de limpieza y desinfección deben llevarse a cabo solamente por personal capacitado. Es necesario tomar medidas de seguridad aplicables. Advertencias de las instrucciones sobre el producto utilizado se deben seguir.

⚠ Le distributeur est destiné à un usage à l'intérieur seulement. Cet appareil n'est pas un jouet. Les enfants doivent être surveillés afin de ne pas jouer avec l'appareil. Il ne devrait pas être utilisé par des enfants ou des personnes infirmes sans surveillance. Cet appareil n'est pas destiné à un usage par des personnes (y compris les enfants) ayant des capacités physiques, sensorielles ou mentales réduites, ou manquant d'expérience et de connaissances, à moins qu'elles obtiennent de la surveillance ou des instructions au sujet de l'utilisation de l'appareil de la part d'une personne chargée de leur sécurité. Nettoyage et entretien de l'utilisateur ne doivent pas être effectués par des enfants sans surveillance. Cet appareil n'est pas conçu pour distribuer des produits laitiers. La température de service ambiante minimum/maximum pour le distributeur est de 40°F à 105°F (4.4°C à 40.5°C). Ne pas utiliser l'appareil dans des conditions de performance environnementale minimale. En cas de gel, cesser l'exploitation de l'unité et contactez un technicien agréé. Nettoyage et désinfection doivent être effectuées uniquement par du personnel qualifié. Vous devez prendre des mesures de sécurité. Avertissements instructions sur le produit utilisé doivent être respectées.

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. 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.
2. The unit is equipped with a protective timer for the carbonator pump motor, set for three (3) minutes. If the carbonator motor has timed out, it must be manually reset by either momentarily unplugging the unit or switching off the ON/OFF switch (if present). Once power is restored, the five (5) minute compressor d elay would be in effect.
3. Supply Water Pressure: Minimum - 25 PSI (0.172 MPA); Maximum - 50 PSI (0.345 MPA); If pressure is over 50 PSIG, a water pressure regulator must be used.
4. CO2 Pressure: Recommend nominal pressure 70 PSIG (0.483 MPA). Pressure may be reduced to a minimum of 60 PSIG (0.413 MPA) if remote syrup pumps are being used. It may be increased to a maximum of 80 PSIG (0.552 MPA) only when internal syrup pumps are being used with highlyviscous syrups. Important: Internal syrup pumps may not work at pressures less than 60 PSIG (0.413 MPA). CO2 pressure over 80 PSIG (0.552 MPA) may result in damage or leakage from the syrup pump system or may cause excessive foam in the drink.
5. Valve Adjustment: Make sure drink temperature is below 40°F (4.4°C) before adjusting brix.

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. 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.
2. La unidad esta provista de un protector de tiempo para el motor de la bomba del carbonatador, regulado en 3 minutos. Si el motor del carbonatador se desajustara, se deabe restablecer manualmente, bien desconectando electricamente la unidad o desconectando el interrupter on/off (si lo tiene). Una vez se restablezca la corriente, la demora de los 5 minutos sera efectiva nuevamente.
3. Presión de suministro del agua de red: Minimo 25 PSIG (0.172 MPA). Maximo 50 PSIG (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.
4. PRESION CO2: Presión nominal recomendada 70 PSIG (0.483 MPA). Se puede reducir la presión a un minimo de 60 PSIG (0.413 MPA), si se utilizan bombas de jarabe internas con jarabes de alta viscosidad. IMPORTANTE: Las bombas de jarabe intemas pueden no trabajr a presiónes par debajo de 60 PSIG (0.413 MPA). Presiónes superiores a 80 PSIG (0.552 MPA) pueden dañar o causer fugas en el sistema de bombeo de jarabe o producir excesiva espuma en el producto terminado.
5. Ajuste de las valvulas: Cerciórese de que la temperatura de la bebida es inferior a 4.4°C (40°F) antes de regular el coeficiente Brix.

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. 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.
2. L' unitè est èquipèe d'une minuterie de protection pour le moteur de la pompe de carbonateur, règlèe sur 3 minutes. Si le moteur du carbonateur s'est dèrèglèe, il faut refaire le règlage manuellement, soit en dèbranchant temporairement l'unitè, solt en arretant l'appareil avec l'interrupteur (s'il y en a un). Le rètablissement du courant sera suivi par le de'lai de 5 minutes du compresseur.
3. Pression de l'eau: Minimum 25 PSIG (0,176 MPA); Maximum 50 PSIG (0,352 MPA). Sur les unitès qui n'ont pas de règulateur de pression d'eau incorprè, si la pression d'H2O est supèrieure à 50 PSIG (0,352 MPA), un règulateur de pression d'eau doit etre utilsisè.
4. Pression de CO2: on recommande une pression nominal de 70 PSIG (0,483 MPA). La pression peut etre rèduite à un minumum de 60 PSIG (0,413 MPA) si on utilise des pompes à sirop sèparès. Elle peut etre aumentee jusqu'à un maximum de 80 PSIG (0,552 MPA) uniquement les pompes à sirop internes sont utilisèes avec des sirops très èpals. ATTENTION: Les pompes à sirop internes peuvent ne pas fonctionner à des fuites dans le système de ponmpage du sirop, ou produire trop de mousse dans les boissons.
5. Règlage des valves: S' assurer que la tempèrature de la boisson est infèrieure a 4.4°C (40°F) avant de règler le degrè Brix.

ELECTRICAL WARNING/ADVERTENCIA ELÉCTRICA/ AVERTISSEMENT ÉLECTRIQUE

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

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

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

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

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

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

⚠ Le dioxyde de carbone (CO_2) est plus lourd que l'air et déplace l'oxygène. Le CO_2 est un gaz incolore et incombustible, ayant une odeur un peu âcre. Des concentrations fortes de CO_2 peuvent déplacer l'oxygène dans le sang. Une exposition prolongée au CO_2 peut être nocive. Le personnel exposé à de fortes concentrations de CO_2 gazeux éprouvera des tremblements, suivis rapidement d'une perte de conscience et de suffocation. On doit faire très attention de prévenir les fuites de CO_2 gazeux dans le système entier de CO_2 et de boisson gazeuse. Si on suspecte qu'il y a une fuite de CO_2 gazeux, aérez le secteur contaminé immédiatement avant d'essayer de réparer la fuite.

AUTOMATIC AGITATION/AGITACIÓN AUTOMÁTICA/

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

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

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

WATER NOTICE/AGUA AVISO/ PRÉAVIS DE L'EAU

⚠ Provide an adequate potable water supply. Water pipe connections and fixtures directly connected to a potable water supply must be sized, installed, and maintained according to federal, state, and local laws. The water supply line must be at least a 3/8 inches (9.525 mm) pipe with a minimum of 25 PSI (0.172 MPA) line pressure, but not exceeding a maximum of 50 PSI (0.345 MPA). Water pressure exceeding 50 PSI (0.345 MPA) must be reduced to 50 PSI (0.345 MPA) with the provided pressure regulator. Use a filter in the water line to avoid equipment damage and beverage off-taste. Check the water filter periodically, as required by local conditions. The water supply must be protected by means of an air gap, a backflow prevention device (located upstream of the CO2 injection system) or another approved method to comply with NSF standards. A leaking inlet water check valve will allow carbonated water to flow back through the pump when it is shut off and contaminate the water supply. Ensure the backflow prevention device complies with ASSE and local standards. It is the responsibility of the installer to ensure compliance.

⚠ Proporcione un suministro adecuado de agua potable. La línea de suministro de agua debe ser de una tubería de por lo menos 3/8 pulgadas (9.525 mm) con una presión de línea mínima de 25 PSI (0.172 MPA) , pero sin superar el máximo de 50 PSI (0.345 MPA). La presión de agua que supere los 50 PSI se debe reducir a 50 PSI (0.345 MPA) con un regulador de presión. Use un filtro en la línea de agua para evitar daños al equipo y cierto sabor raro en las bebidas. Verifique periódicamente el filtro de agua de acuerdo con las condiciones imperantes. El suministro de agua debe estar protegido por una separación de aire, un dispositivo de prevención del contraflujo (situado antes del sistema de inyección de CO2) u otro método aprobado para cumplir las normas NSF. Si la válvula de retención de entrada de agua tuviera pérdidas, permitiría el contraflujo del agua carbonatada a través de la bomba cuando se la detiene y contaminaría el suministro de agua. Asegúrese de que el dispositivo de prevención del contraflujo cumpla con las normas locales y de ASSE. Es responsabilidad del instalador cumplir con estos requisitos.

⚠ Fournissez une alimentation en eau potable adéquate. Les connexions et les dispositifs de conduite d'eau connectés directement à une alimentation en eau potable doivent être calibrés, installés et maintenus selon les lois fédérales, provinciales et locales. La conduite d'alimentation en eau doit être un tuyau d'au moins 3/8 pouces (9.525 millimètres) avec une pression de ligne minimum de 25 LPC (0.172 MPA) , mais ne doit pas dépasser un maximum de 50 LPC (0.345 MPA). Une pression d'eau de plus de 50 LPC (0.345 MPA) doit être réduite à 550 LPC (0.345 MPA) avec le régu- lateur de pression fourni. Utilisez un filtre dans la conduite d'eau pour éviter des dommages à l'équipement et un goût des boissons qui n'est pas juste. Vérifiez le filtre à eau périodiquement, selon les exigences des conditions locales. L'alimentation en eau doit être protégée au moyen d'un intervalle d'air, un disconnecteur hydraulique (situé en amont du système d'injection de CO2) ou une autre méthode approuvée pour se conformer aux normes de la NSF. Un clapet antiretour pour l'eau entrante qui fuie permettra à l'eau gazeuse de repasser par la pompe quand elle est fermée et de contaminer l'alimentation en eau. Assurez-vous que le disjoncteur hydraulique soit conforme aux normes de l'ASSE et locales. L'installateur est responsable d'assurer la conformité.

1. INSTALLATION

1.1 RECEIVING

Each unit is completely tested under operating conditions and thoroughly inspected before shipment. At time of shipment the carrier accepts the unit, and any claim for damage 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 same on bill of lading and file claim with carrier.

1.2 UNPACKING

A. Set shipping carton upright on the floor.
B. Cut band and remove.
C. Open top of carton and remove interior packing.
D. Lift carton up and off of the dispenser.
E. Remove wood shipping base from the bottom of the dispenser. (Support dispenser while removing shipping base to prevent damage to the dispenser.)

1.3 SELECTING COUNTER LOCATION (SEE FIGURE 1)

WARNING THIS APPLIANCE MUST BE EARTHED. THIS DISPENSER MUST BE ELECTRICALLY GROUNDED TO AVOID DANGER TO THE OPERATOR. THE POWER CORD PROVIDED HAS A THREE PRONG GROUNDED PLUG. IF A THREE HOLE GROUNDED ELECTRICAL OUTLET IS NOT AVAILABLE, USE AN APPROVED METHOD OF INSURING A PROPER GROUND TO THE DISPENSER.

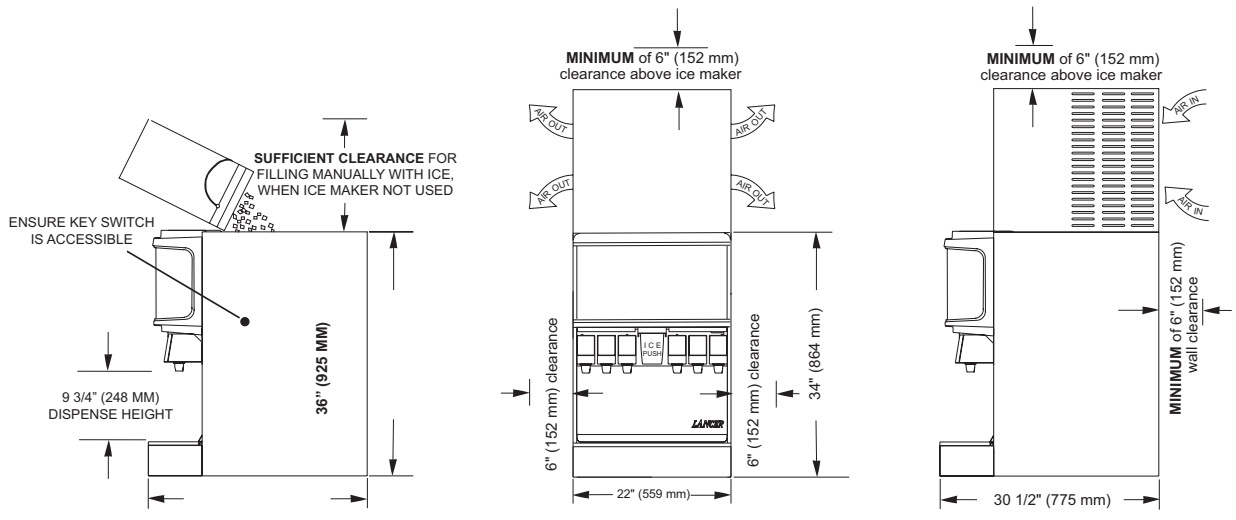
ADVERTENCIA ESTE APARATO DEBE CONECTARSE A TIERRA. ESTE DISPENSADOR DEBE TENER CONEXIÓN A TIERRA PARA EVITAR PELIGRO PARA EL OPERADOR. EL CABLE SUMINISTRADO TIENE UN ENCHUFE DE TIERRA DE TRES PUNTAS. SI UN AGUJERO TRES TOMACORRIENTE PUESTO A TIERRA NO ESTÁ DISPONIBLE, UTILICE UN MÉTODO APROBADO DE ASEGURAR UNA TIERRA CORRESPONDIENTE EN LA CUBETA.

AVERTISSEMENT CET APPAREIL DOIT ETRE MIS A LA TERRE. CE DISTRIBUTEUR DOIT ÊTRE MIS À LA TERRE ÉLECTRIQUE POUR ÉVITER DANGER POUR L'OPÉRATEUR. LE CORDON D'ALIMENTATION FOURNIS A UN TROIS BROCHES TERRE. SI UN TROIS TROUS TERRE ALIMENTATION ÉLECTRIQUE N'EST DISPONIBLE, UTILISER UNE MÉTHODE APPROUVÉE D'ASSURER UN MOTIF VALABLE AU DISTRIBUTEUR.

A. Select a location close to a properly grounded electrical outlet, convenient to an open type drain, access for soda, water, and syrup lines, and sufficient clearance for air circulation.
   1. If at all possible, location should be away from direct sunlight or other heat sources.
   2. Connecting lines may be run through access in back of the unit or extend down through a counter cut out.
   3. The counter must support the weight of the dispenser, ice, and possibly an ice maker. Total weight may exceed 800 lbs (363.6 kg).

B. Unit may be installed directly on the countertop or on legs supplied with the unit. If installed directly on the counter, the unit must be sealed to the countertop. If an ice maker is to be mounted on top of dispenser, do not install dispenser on legs.

FIGURE 1.



1.3 SELECTING COUNTER LOCATION (CONTINUED)

NOTE: Water pipe connections and fixtures directly connected to a potable water supply must all be sized, installed, and maintained according to Federal, State, and Local laws. 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 backflow prevention device must comply with ASSE and local standards. It is the responsibility of the installer to ensure compliance.

C. Location must insure sufficient clearance on sides, top and back of unit is provided for ventilation and air circulation (see Figure 1).
D. Additionally, if an ice maker is not top mounted on the unit, sufficient clearance should be provided [a minimum of 16 inches (40.6 cm) is recommended] to allow filling the unit with ice from a five (5) gallon (19 liter) container (see Figure 1).

1.4 INSTALLING THE DISPENSER

A. Remove Cup Rest, Drip Tray, Splash Plate, and Top Cover.
B. Remove Cover Plate at rear of unit if not a through the counter installation.
C. Connect soda and water supply lines to 3/8 inch barb fittings at the front of the unit. Check for leaks. (If dispenser is to operate with all soda valves, connect water line into one of the soda supply lines.)
D. Connect syrup supply lines to the 3/8 inch barb inlet fittings at the front of the unit. Check for leaks.
E. Uncoil drain hose from Cold Plate drain and extend to an open type drain.
F. Install Drip Tray and extend hose to open type drain.
G. Both drain lines must be insulated with a closed cell insulation. Insulation must cover the entire length of the drain hose, including fittings. The drain should be installed in such a manner that water does not collect in sags or other low points, as condensation will form.
H. Install Cup Rest and Splash Plate.
I. Connect Power Cord to grounded electrical outlet.
J. Test Motor operation by pushing Ice Chute.
K. Clean and sanitize dispenser (see Section 2).
L. Fill unit approximately half full with ice. Push Chute and check for ice delivery.
M. Finish filling unit with ice.
N. Install Top Cover.

NOTE: Lancer does not recommend the use of shaved, flake, nugget, or pellet ice in dispensers not properly equipped to do so.

O. Set brix ratio for beverage dispensing valves according to manufacturer's instructions.

WARNING WHEN INSTALLING AN ICEMAKER ON AN IBD UNIT, A BIN THERMOSTAT OR OTHER MEANS OF CONTROLLING THE ICE LEVEL MUST BE INSTALLED. FAILURE TO DO SO COULD RESULT IN DAMAGE TO THE DISPENSING MECHANISM AND VOID THE WARRANTY. DURING THE AUTOMATIC AGITATION CYCLE AND/OR WHILE DISPENSING ICE, THERE MUST BE ADEQUATE ROOM BETWEEN THE TOP OF THE ICE LEVEL AND THE BOTTOM OF THE ICEMAKER SO THAT THE ICE CAN MOVE WITHOUT OBSTRUCTION. CONTACT YOUR ICEMAKER SUPPLIER FOR INFORMATION ON PROPER BIN THERMOSTAT.

ADVERTENCIA AL INSTALAR UNA MÁQUINA DE HIELO EN UNA UNIDAD DE IBD, A BIN TERMOSTATO U OTROS MEDIOS DE CONTROLAR EL NIVEL ICE DEBE ESTAR INSTALADO. NO HACERLO PUEDE CAUSAR DAÑOS AL MECANISMO DISPENSING Y ANULAR LA GARANTÍA. DURANTE EL CICLO AUTOMÁTICO AGITACIÓN Y / O HIELO, MIENTRAS QUE LA DISPENSACIÓN, DEBE HABER ESPACIO SUFICIENTE ENTRE EL TOP DEL NIVEL DE HIELO Y EL FONDO DE LA MÁQUINA DE HIELO PARA QUE EL ICE PUEDE MOVERSE SIN OBSTRUCCIÓN. CONTACTO CON SU PROVEEDOR DE FABRICACIÓN DE HIELO PARA INFORMACIÓN SOBRE ADECUADO BIN TERMOSTATO.

AVERTISSEMENT LORSQUE VOUS INSTALLEZ UNE MACHINE À GLAÇONS SUR UNE UNITÉ EIA, UN THERMOSTAT DU BAC OU AUTRES MOYENS DE CONTRÔLER LE NIVEAU DE LA CIE DOIT ÊTRE INSTALLÉ. PANNE DE LE FAIRE POURRAIT PROVOQUER DES DOMMAGES AU MÉCANISME DE DISTRIBUTION ET ANNULE LA GARANTIE. PENDANT LE CYCLE AUTOMATIQUE AGITATION ET / OU TOUT DISTRIBUTION DE GLACE, DOIVENT TROUVER PLACE SUFFISANTE ENTRE LE SOMMET DE L'ÉCHELLE DE L'ICE ET LE BAS DE LA MACHINE À GLAÇONS POUR QUE LA GLACE PEUT SE DÉPLACER SANS ENTRAVE. CONTACTEZ VOTRE FOURNISSEUR DE ICEMAKER INFORMATIONS SUR UNE BONNE THERMOSTAT DU BAC.

1.5 ADJUSTING THE ICE FLOW REGULATOR (230 VOLT UNITS ONLY) (SEE FIGURE 2)

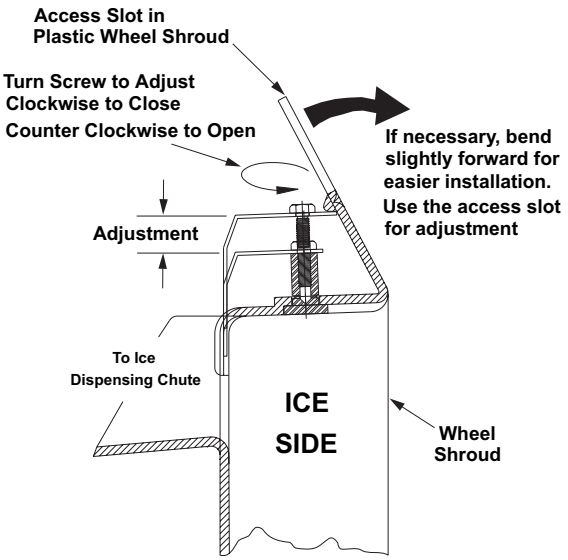
The Regulator Door Assembly (PN 82-2904) can regulate the dispensed ice flow. Installation of an Ice Flow Regulator is NOT necessary for the dispensing of ice. This IBD unit will dispense ice unrestricted.

A. Remove Bin Lids.
B. Adjust Ice Regulator to desired position by turning the nut screw clockwise to close, or counter clockwise to open, with the use of a nut driver or a socket wrench (see Figure 2).

NOTE: Total adjustment: 1/2 inch.

C. Reinstall bin lids.

FIGURE 2.



CUT AWAY VIEW

2. CLEANING AND SANITIZING INSTRUCTIONS

2.1 GENERAL INFORMATION

A. Lancer equipment (new or reconditioned) is shipped from the factory cleaned and sanitized in accordance with NSF guidelines. This equipment must be cleaned and sanitized after installation is complete, and 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 and sanitizing procedures provided herein pertain to the Lancer equipment identified by this manual. If other equipment is being cleaned, follow the guidelines established for that equipment.

B. Cleaning and sanitizing should be accomplished only by trained personnel. Sanitary gloves are to be used during cleaning and sanitizing operations. Applicable safety precautions must be observed. Instruction warnings on the product being used must be followed.
C. Water lines are not to be disconnected during the cleaning and sanitizing of syrup lines to avoid contamination.
D. Do NOT use strong bleaches or detergents. They tend to discolor and/or corrode various materials.
E. Do NOT use metal scrapers, sharp objects, steel wool, scouring pads, abrasives, solvents, etc., on the dispenser.
F. Do NOT use hot water above 140°F (60°C). This may damage certain materials.

2.2 REQUIRED CLEANING EQUIPMENT

A. Cleansers (for example, Ivory Liquid, Calgon, etc.) mixed with clean, potable water at a temperature of 90 to 110 degrees Fahrenheit should be used to clean equipment. The mixture ratio, using Ivory Liquid, is one (1) ounce of cleanser to two (2) gallons of water. A minimum of five (5) gallons of cleaning mixture should be prepared. Any equivalent cleanser may be used as long as it provides a caustic based, non-perfumed, easily rinsed mixture containing at least two (2) percent sodium hydroxide (NaOH). Rinsing must be thorough and use clean, potable water which is also at a temperature of 90° to 110°F.

NOTE: Extended lengths of product lines may require that an additional volume of cleaning solution be prepared.

B. Sanitizing solutions should be prepared in accordance with the manufacturer's written recommendations and safety guidelines. The solution must provide 200 parts per million (PPM) available chlorine. A minimum of five (5) 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 200 parts per million (PPM) available chlorine. Sanitizing solution is to be purged from line(s) and equipment by flushing with product only until there is no after taste. Do not rinse with water.

2.2 REQUIRED CLEANING EQUIPMENT (CONTINUED)

NOTE: Please note that a fresh water rinse cannot follow sanitization of equipment. Purge only with the end use product until there is no after taste in the product. This is an NSF requirement. Extended lengths of product lines may require that an additional volume of sanitizing solution be prepared.

C. Other:

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

2.3 DAILY CLEANING

Using a mild detergent solution, clean Top Cover and all exterior stainless steel surfaces. Clean exterior of dispensing valves and ice chute. Remove Cup Rest. Clean Drip Tray and Cup Rest, and replace Cup Rest. Wipe clean all splash areas using a damp cloth soaked in cleaning solution. Clean beverage valves as specified by the valve manufacturer.

2.4 ICE BIN CLEANING - START UP AND MONTHLY

A. Disconnect Dispenser from power source.
B. Remove Top Cover.
C. Remove Agitator Pin from Agitator Shaft. Slide Agitator Shaft rearward out of Motor Shaft and pull out of rear Bearing to remove.
D. Remove Dispensing Wheel from Motor Shaft by sliding rearward.
E. Remove Dispensing Wheel Shroud.
F. Remove Splash Plate Assembly by lifting it up and out from the dispenser face.
G. Using cleaning solution, described in Section 2.2, and a clean cloth or soft brush, clean all removable parts, sides of Ice Bin, Ice Chute, and surface of aluminum casting.
H. Repeat Step G for all exterior surfaces of the dispenser.
I. Using hot water, thoroughly rinse away the cleaning solution.
J. Wearing sanitary gloves, soak a clean cloth towel in sanitizing solution, described in Section 2.2, and wash all surfaces of removable parts, sides of Ice Bin, Ice Chute, and surface of aluminum casting.
K. Repeat Step J for all metal and plastic surfaces (but not labels) of the dispenser exterior.
L. Wearing sanitary gloves, reassemble all removable parts.
M. Fill Unit with ice and replace Top Cover.

NOTE: Lancer does not recommend the use of shaved, flake, nugget, or pellet ice in dispensers not properly equipped to do so.

N. Reconnect Dispenser to power source.

2.5 CLEANING AND SANITIZING BEVERAGE COMPONENTS - FIGAL SYSTEMS

NOTE: Extended lengths of product lines may require more time than stated below to flush and rinse lines.

A. Disconnect syrup lines from syrup containers (for example, quick disconnects, figal containers, etc.).
B. Connect hose half of syrup line to a syrup tank filled with clean, potable, room temperature water. Connect CO2 supply hose to tank and pressurize.
C. Activate valve until water is dispensed. Flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of residual product.

2.5 CLEANING AND SANITIZING BEVERAGE COMPONENTS - FIGAL SYSTEMS (CONTINUED)

WARNING TO AVOID POSSIBLE PERSONAL INJURY OR PROPERTY DAMAGE, DO NOT ATTEMPT TO REMOVE SYRUP TANK COVER UNTIL CO2 HAS BEEN RELEASED FROM TANK.

ADVERTENCIA PARA EVITAR POSIBLES LESIONES PERSONALES O DAÑOS MATERIALES, NO TRATE DE RETIRAR LA TAPA DEL TANQUE DE SOROPE HASTA QUE SE HAYA LIBERADO LA PRESIÓN DEL CO2 DEL TANQUE.

AVERTISSEMENT POUR ÉVITER DES BLESSURES OU DES DOMMAGES MATÉRIELS POSSIBLES, N'ESSAYEZ PAS DE RETIRER LE COUVERCLE DU RÉSERVOIR DE SIROP, JUSQU'A CE QUE DE LA PRESSION DE CO2 AIT ÉTÉ LIBÉRÉE DU RESERVOIR.

D. Disconnect CO2 supply hose from the water filled syrup tank.
E. Following the instructions as described in Section 3.1 above, mix appropriate amount of cleaning solution. Fill a tank with this solution. Connect hose half of syrup line to the tank. Connect CO2 supply hose to tank and pressurize.
F. Activate valve and draw cleaning solution through lines for a minimum of 60 seconds. This will ensure line is flushed and filled with cleaning solution. Allow line to stand for at least 30 minutes.
G. Disconnect CO2 supply hose from the tank.
H. Connect hose half of syrup line to a tank filled with clean, potable, water at a temperature of 90° to 110°F. Connect CO2 supply hose to tank and pressurize.
I. Activate valve to flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of cleaning solution. Taste dispensed product to ensure there is no off-taste. If off-taste is found, additional flushing of syrup system may be required.
J. Disconnect CO2 supply hose from the tank.
K. Reconnect Dispenser to power source.
L. Following the instructions as described in 3.1 above, mix appropriate amount of sanitizing solution.Fill a tank with this solution. Connect hose half of syrup line to the tank. Connect CO2 supply hose to tank and pressurize.
M. Activate valve and draw sanitizing solution through line for a minimum of 60 seconds. This will ensure line is flushed and filled with sanitizing solution. Allow line to stand for at least 30 minutes.
N. Disconnect CO2 supply hose from the tank.
O. Reconnect syrup lines to syrup containers (for example, quick disconnects, figal containers, etc.) and ready unit for operation.
P. Draw drinks to refill the lines and flush the sanitizing solution from the dispenser.

NOTE: Please note that a fresh water rinse cannot follow sanitization of equipment. Purge only with the end use product until there is no after taste in the product.

Q. Test dispenser in normal manner for proper operation. Taste dispensed product to ensure off-taste is not present. If off-taste is found, additional flushing of syrup system may be required.
R. Repeat cleaning, rinsing, and sanitizing procedures for each valve and each circuit.

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

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

A. Disconnect the syrup quick disconnect coupling from the syrup packages and connect the coupling to a bag valve removed from an empty Bag-in-Box (BIB) package.
B. Place the syrup inlet line in a clean container filled with clean, potable, room temperature water.
C. Activate valve until water is dispensed. Flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of residual product.
D. Following the instructions as described in 3.1 above, mix appropriate amount of cleaning solution in a clean container. Place syrup inlet line in container filled with cleaning solution.
E. Activate valve and draw cleaning solution through lines for a minimum of 60 seconds. This will ensure line is flushed and filled with cleaning solution. Allow line to stand for at least 30 minutes.
F. Place syrup inlet line in a clean container filled with clean, potable, water at a temperature of 90° to 110°F.
G. Activate valve to flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of cleaning solution.

2.6 CLEANING AND SANITIZING BEVERAGE COMPONENTS - BAG-IN-BOX SYSTEMS (CONTINUED)

H. Following the instructions as described in 3.1 above, mix appropriate amount of sanitizing solution in a clean container. Place syrup inlet line in container filled with sanitizing solution. Refer to Section 3.3 CAUTION.

I. Activate valve and draw sanitizing solution through line for a minimum of 60 seconds. This will ensure line is flushed and filled with sanitizing solution. Allow line to stand for at least 30 minutes.

J. Remove bag valve from quick disconnect coupling and reconnect syrup inlet line to syrup package. Ready unit for operation.

K. Draw drinks to refill lines and to flush the chlorine sanitizing solution from the dispenser.

NOTE: Please note that a fresh water rinse cannot follow sanitization of equipment. Purge only with the end use product until there is no after taste in the product. This is an NSF requirement.

L. Test dispenser in normal manner for proper operation. Taste dispensed product to ensure off-taste is not present. If off-taste is found, additional flushing of syrup system may be required.

M. Repeat cleaning, rinsing, and sanitizing procedures for each valve and each circuit.

3. TROUBLESHOOTING

ISSUE	CAUSE	SOLUTION
3.1 No product when switch is activated (switch panel is not lit).	A. Malfunctioning switch assembly.	A. Replace switch assembly.
	B. No power to dispenser.	B. Check internal breaker and incoming power.
	C. Malfunctioning power supply.	C. Check voltage to power supply. Check fuses.
	D. Malfunctioning PCB board.	D. Replace PCB board.
3.2 No product when switch is activated (switch panel is lit).	A. Keyswitch is off or keyswitch harness is disconnected.	A. Turn keyswitch on and/or reconnect keyswitch harness.
	B. Malfunctioning switch assembly.	B. Replace switch assembly.
	C. Malfunctioning LEV module.	C. Replace module.
3.3 Push chute; no response.	A. Dispenser not connected to power source.	A. Connect dispenser to power source.
	B. Hall-effect sensor defective.	B. Replace ice chute base.
	C. Wiring harness not plugged in.	C. Plug in wiring harness.
	D. PC board defective.	D. Replace PC board.
	E. Malfunctioning power supply.	E. Check voltage to power supply. Check fuses.
	F. Magnet not in ice chute shell.	F. Install magnet in ice chute shell.
3.4 Push chute, ice door opens but motor does not run.	A. Wiring harness not plugged in.	A. Plug in wiring harness.
	B. PC board defective.	B. Replace PC board.
	C. Motor defective.	C. Replace motor.
3.5 Push chute, motor runs but ice door does not open.	A. Solenoid not connected to PC board.	A. Connect solenoid to PC board.
	B. Solenoid defective.	B. Replace solenoid.
	C. PC board defective.	C. Replace PC board.
3.6 Push chute, ice door opens, motor runs, but ice does not dispense, or ice is of poor quality.	A. Dispenser is out of ice.	A. Fill dispenser with ice.
	B. Agitator pin is missing or damaged.	B. Replace agitator pin.
	C. Poor ice quality.	C. Service ice machine.
	D. Key not installed on auger shaft.	D.Install key on auger shaft.
	E. Auger trough empty.	E. Change agitation settings.

ISSUE	CAUSE	SOLUTION
3.7 Water in ice bin.	A. Coldplate drain is obstructed.	A. Remove splash plate and drip tray to obtain access to drain tubes and clear accordingly.
3.8 Water leakage around nozzle.	A. Damaged or improperly installed o-ring on nozzle.	A. If damaged, replace. If improperly installed, adjust.
3.9 Miscellaneous leakage.	A. Gap between parts. B. Damaged or improperly installed o-rings.	A. Tighten appropriate retaining screws. B. Replace or adjust appropriate o-rings.
3.10 Noisy/cavitating carbonator pump.	A. Insufficient incoming water supply pressure.	A. Verify incoming supply water pressure to carbonator pump is min. of 25 PSI, max. of 50 PSI.
3.11 Insufficient soda flow (carbonated drinks).	A. Insufficient CO2 supply pressure. B. Shutoff on mounting block is not fully open. C. Foreign debris in soda flow control.	A. Verify incoming CO2 pressure is between 70-75 PSI. B. Open shutoff fully. C. Remove soda flow control from valve and clean out any foreign material to ensure smooth spool movement.
3.12 Insufficient water flow (plain water drinks).	A. Insufficient incoming supply pressure. B. Shutoff on mounting block not fully open. C. Foreign debris in water flow control. D. Water filtration problem.	A. Verify incoming supply water pressure to plain water inlet is a minimum of 75 PSI, max. of 125 PSI. B. Open shutoff fully. C. Remove water flow control from valve and clean out any foreign material to ensure smooth spool movement. D. Service water system as required.
3.13 Erratic ratio.	A. Incoming water and/or syrup supply not at minimum flowing pressure. B. Foreign debris in water and/or syrup flow control. C. CO2 regulator malfunction.	A. Check pressure and adjust. B. Remove flow control from suspected valve and clean out any foreign material to ensure smooth spool movement. C. Repair or replace CO2 regulator.

ISSUE	CAUSE	SOLUTION
3.14 Insufficient syrup flow.	A. Insufficient CO2 pressure to BIB pumps.	A. Adjust CO2 pressure to BIB pumps to 80 PSI (min. 70 PSI). Do not exceed manufacturer's recommendations.
	B. Shutoff on mounting block not fully open.	B. Open shutoff fully.
	C. Foreign debris in syrup flow control.	C. Remove syrup flow control from valve and clean out any foreign material to ensure smooth spool movement.
	D. Defective BIB pump.	D. Replace pump.
3.15 Valve will not shut off.	A. Debris in solenoid seat.	A. Activate valve a few times to free debris. Remove the solenoid coil and plunger. Clean out any foreign material.
	B. Solenoid plunger sticking.	B. Replace solenoid coil.
3.16 Water continually leaking at connections.	A. Loose water connections.	A. Tighten water connections.
	B. Flare seal washer leaks.	B. Replace flare seal washer.
3.17 Water only dispensed, no syrup. Or syrup only dispensed, no water.	A. Syrup BIB empty.	A. Replace syrup BIB as required.
	B. Water or syrup shutoff on mounting block not fully open.	B. Open shutoff completely.
	C. Improper or inadequate water or syrup supply.	C. Remove valve from mounting block & open shutoffs slightly. Check water & syrup supply. If no supply, check unit for other problems. Ensure BIB connection is engaged.
	D. CO2 pressure to syrup pump too low.	D. Check the CO2 pressure to the pump to ensure it is between 70-80 PSI.
	E. Stalled or inoperative BIB pump.	E. Check CO2 pressure and/or replace pump.
	F. Kinked line.	F. Remove kink or replace line.
	G. CO2 regulator malfunction.	G. Repair or replace CO2 regulator as required.
	H. Defective LFCV module.	H. Replace module.

ISSUE	CAUSE	SOLUTION
3.18 Syrup only dispensed. No water, but CO2 gas dispensed with syrup.	A. Improper water flow to dispenser.	A. Check for water flow to dispenser.
	B. Carbonator pump motor has timed out (display message on the LCD screen).	B. Reset by turning the unit OFF, then ON by using the circuit breaker on the power supply or momentarily unplugging unit.
	C. Liquid level probe not connected properly to PCB.	C. Check connections of liquid level probe to PCB assembly.
	D. Defective PCB assembly.	D. Replace PCB assembly.
	E. Defective liquid level probe.	E. Replace liquid level probe.
	F. Weak or defective carbonator pump.	F. Replace pump.
3.19 Excessive foaming.	A. No ice in bin.	A. Fill bin with ice and allow coldplate to re-stabilize.
	B. Incoming water or syrup temperature too high.	B. Correct prior to dispenser.
	C. CO2 pressure too high.	C. Adjust CO2 pressure downward, but not less than 70 PSI.
	D. Water flow rate too high.	D. Re-adjust and reset ratio.
	E. Nozzle and diffuser not clean.	E. Remove and clean.
	F. Air in BIB lines.	F. Bleed air from BIB lines.
3.20 Circuit breaker tripping.	A. Valve wire harness shorted to itself or faucet plate.	A. Detect short by disconnecting valve harnesses from switch panel (4 25-pin harnesses and 4 9-pin harnesses). Restore power. If breaker does not trip, find and replace shorted harness. If breaker trips, re-install the 8 harnesses, and proceed to step B.
	B. Controller PCB is bad.	B. Detect by disconnecting the white 5-pin harness from the controller PCB. Restore power. If breaker does not trip, replace controller PCB. If breaker trips, re-install the white 5-in harness and proceed to step C.
	C. Secondary wire harness has a short.	C. Locate short from a motor or solenoid harness and replace.
	D. Power supply is bad.	D. Detect short by disconnecting all harnesses connected to power supply. Restore power. If breaker still trips, replace power supply.

ISSUE	CAUSE	SOLUTION
3.21 BIB pump does not operate when dispensing valve is opened.	A. Out of CO2, CO2 not turned on, or low CO2 pressure. B. Out of syrup. C. BIB connector not tight. D. Kinks in syrup or gas lines.	A. Replace CO2 supply, turn on CO2 supply, or adjust CO2 pressure to 70-80 PSI. B. Replace syrup supply. C. Fasten connector tightly. D. Straighten or replace lines.
3.22 BIB pump operating, but no flow.	A. Leak in syrup inlet or outlet line. B. Defective BIB pump.	A. Replace line. B. Replace BIB pump.
3.23 BIB pump continues to operate when bag is empty.	A. Leak in suction line. B. Leaking o-ring on pump inlet fitting. C. Defective syrup BIB pump.	A. Replace line. B. Replace o-ring C. Replace defective pump.
3.24 BIB pump fails to restart after bag replacement.	A. BIB connector not on tightly. B. BIB connector is stopped up. C. Kinks in syrup line.	A. Tighten BIB connector. B. Clean out or replace BIB connector. C. Straighten or replace line.
3.25 BIB pump fails to stop when dispensing valve is closed.	A. Leak in discharge line or fittings. B. Empty BIB. C. Air leak on inlet line or bag connector.	A. Repair or replace discharge line. B. Replace BIB. C. Repair or replace.
3.26 Low or no carbonation.	A. Low or no CO2. B. Low water pressure. C. Worn or defective carbonator pump. D. Backflow preventer not allowing water to flow. E. Probe malfunctioning. F. PCB malfunctioning.	A. Check CO2 supply. Adjust CO2 pressure to 70 PSI. B. Need water booster kit. C. Replace carbonator pump. D. Replace backflow preventer, noting the flow direction arrow from pump to coldplate. E. Replace probe. F. Replace PCB.

4. LIGHT EMITTING DIODES (LEDS)

4.1 LED D3

This light is on when the ice dispense switch is activated. If the chute is depressed and the light does not turn on, check to see if the wire harness is connected or if the dispense switch is defective.

4.2 LED D4

This light is used on units with lid interlock switches. On the 4500 series ice-beverage dispenser, this light should always be lit. If it is not, check the Lid Interlock Jumper (black wire with 4 pin white connector).

4.3 LED D5

This light is on when +5VDC is present at the circuit board. It should be lit whenever the unit is connected to a power source. If the light is off, check to see if the internal circuit breaker on the transformer has tripped. If it has tripped, it can be reset by depressing the switch on the top of the transformer.

4.4 LED D6

This light is on when +32VDC is present at the circuit board. It should be lit whenever the unit is connected to a power source. If the light is off, check to see if the internal circuit breaker on the transformer has tripped. If it has tripped, it can be reset by depressing the switch on the top of the transformer.

4.5 LED D7

This light flashes when there is no ice between the sensors in the ice bin. If the bin is empty and the light is not flashing, check all wiring harnesses.

4.6 LED D8

This light is on when the solenoid is activated. When the chute is depressed, this light should turn on. If it does not, check to see if the solenoid leads are connected to the PC board or damaged, check continuity of solenoid. Replace if defective.

4.7 LED D9

This light is on when the motor is activated. When the chute is depressed, this light should turn on. If it does not, check to see if the motor harness is connected to the PC board or damaged, check continuity of motor harness and motor. Replace if defective.

5. AUTOMATIC AGITATION AND LOW ICE ALARM CONTROL

WARNING THIS UNIT IS EQUIPPED WITH AUTOMATIC AGITATION. IT MAY ACTIVATE UNEXPECTEDLY. DO NOT PLACE HANDS, OR FOREIGN OBJECTS IN THE ICE STORAGE COMPARTMENT. WHEN UNIT IS BEING SERVICED, CLEANED, OR SANITIZED, UNPLUG DISPENSER FROM THE POWER SOURCE.

ADVERTENCIA ESTA UNIDAD ESTÁ EQUIPADA CON AUTOMÁTICO AGITACIÓN. PUEDE ACTIVAR INESPERADAMENTE. NO INTRODUZCA LAS MANOS, NI OTROS OBJETOS EXTRAÑOS EN EL COMPARTIMIENTO DE ALMACENAMIENTO DE HIELO. CUANDO LA UNIDAD SE ESTÁ ATENDIENDO, LIMPIADOS O DESINFECTADOS DISPENSADOR DESENCHUFE DE LA FUENTE DE ALIMENTACIÓN.

AVERTISSEMENT CET APPAREIL EST ÉQUIPÉ AUTOMATIQUE AGITATION. ELLE PEUT ACTIVER UNE FAÇON INATTENDUE. NE PAS METTRE LES MAINS OU DES OBJETS DANS LE COMPARTIMENT DE STOCKAGE DE GLACE. AVEC L'APPAREIL EST RÉPARÉ, NETTOYÉES OU ASEPTISÉ, DISTRIBUTEUR DÉBRANCHEZ LA SOURCE D'ALIMENTATION.

Each Series 4500 ice beverage dispenser is equipped with automatic agitation for the ice bin. The unit is shipped with timing set at two (2) seconds ON every 60 minutes. Referring to the tables on the wiring diagram included in this manual (also affixed to the electrical box cover), the automatic agitation timing can be changed as follows. A set of DIP switches is provided to control the timing and low ice control.

NOTE: Dispensers using pellet ice must have the automatic agitation settings adjusted to four (4) seconds ON every 150 minutes. See Section 6.11.

5. AUTOMATIC AGITATION AND LOW ICE ALARM CONTROL (CONTINUED)

5.1 DIP#1

This switch controls the low ice indicator light. With the switch in the ON position, the light operates when a low ice condition exists. In the OFF position, the light is turned off. The unit is shipped with the light switch in the ON position.

5.2 DIP#2

This switch controls the low ice audible alarm. With the switch in the ON position, the alarm operates when a low ice condition exists. In the OFF position, the alarm is turned off. The unit is shipped with the alarm switch in the OFF position.

5.3 DIP#3 & #4

These switches control the ON time for automatic agitation. By referring to the table and setting the switches as shown, ON times from one (1) second to four (4) seconds [in one (1) second increments] can be obtained. EXAMPLE: For three (3) seconds ON time, switch 3 should be in the ON position, and switch 4 should be in the OFF position. The unit is shipped with two (2) seconds ON time.

5.4 DIP#5 through #8

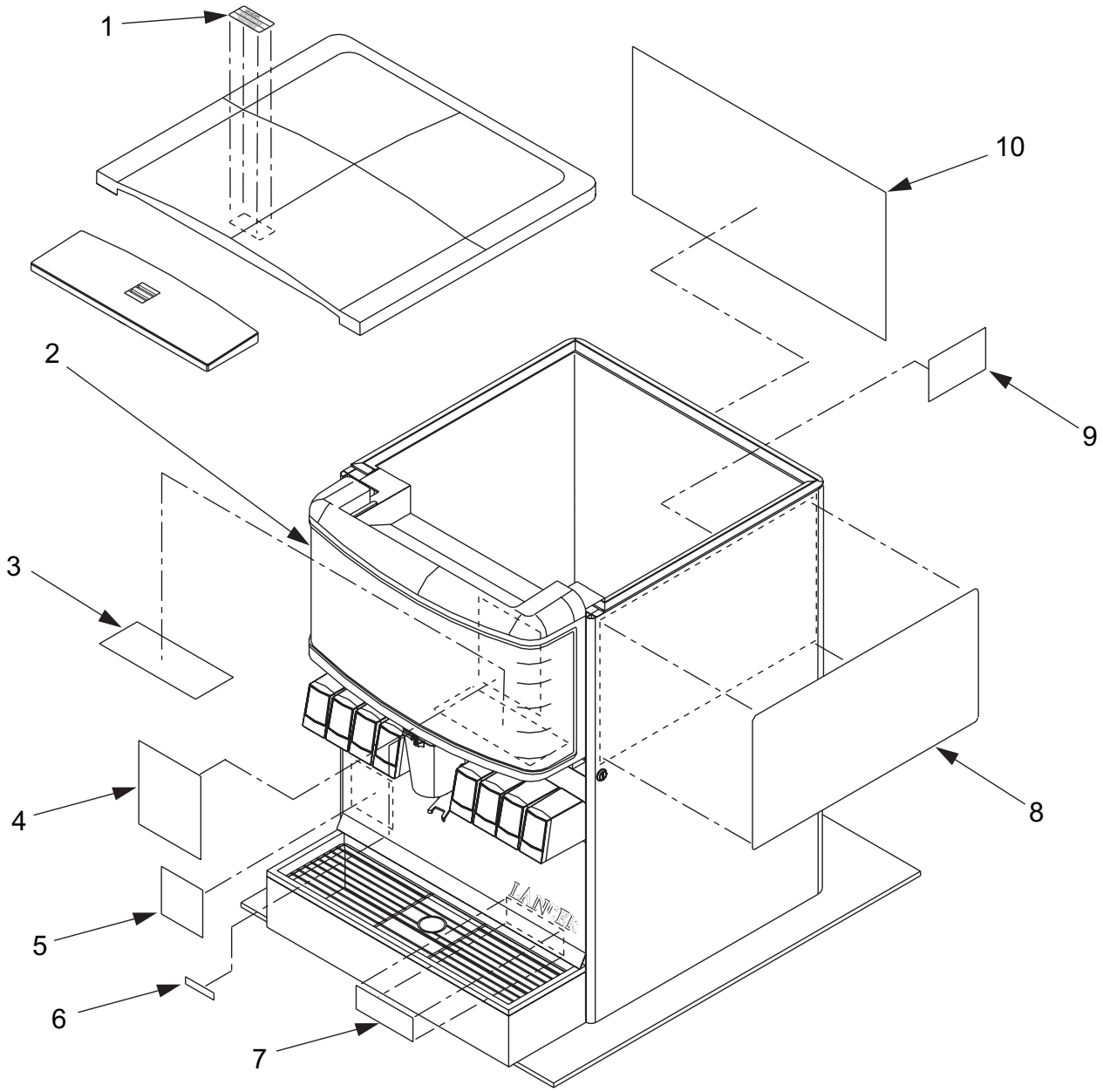
A. These switches control the OFF time for automatic agitation. By referring to the table and setting the switches as shown, OFF times from 10 minutes to 150 minutes (in 10 minute increments) can be obtained. EXAMPLE: For 40 minute OFF time, switch 5 should be in the OFF position, switch 6 should be in the ON position, switch 7 should be in the OFF position, and switch 8 should be in the OFF position. The unit is shipped with 60 minute OFF time.

B. To turn the agitation completely off, set switches 5 through 8 all OFF.

NOTES

6. ILLUSTRATIONS, PARTS LISTINGS, AND WIRING DIAGRAMS, IBD25

6.1 DECALS AND LABELS, IBD25

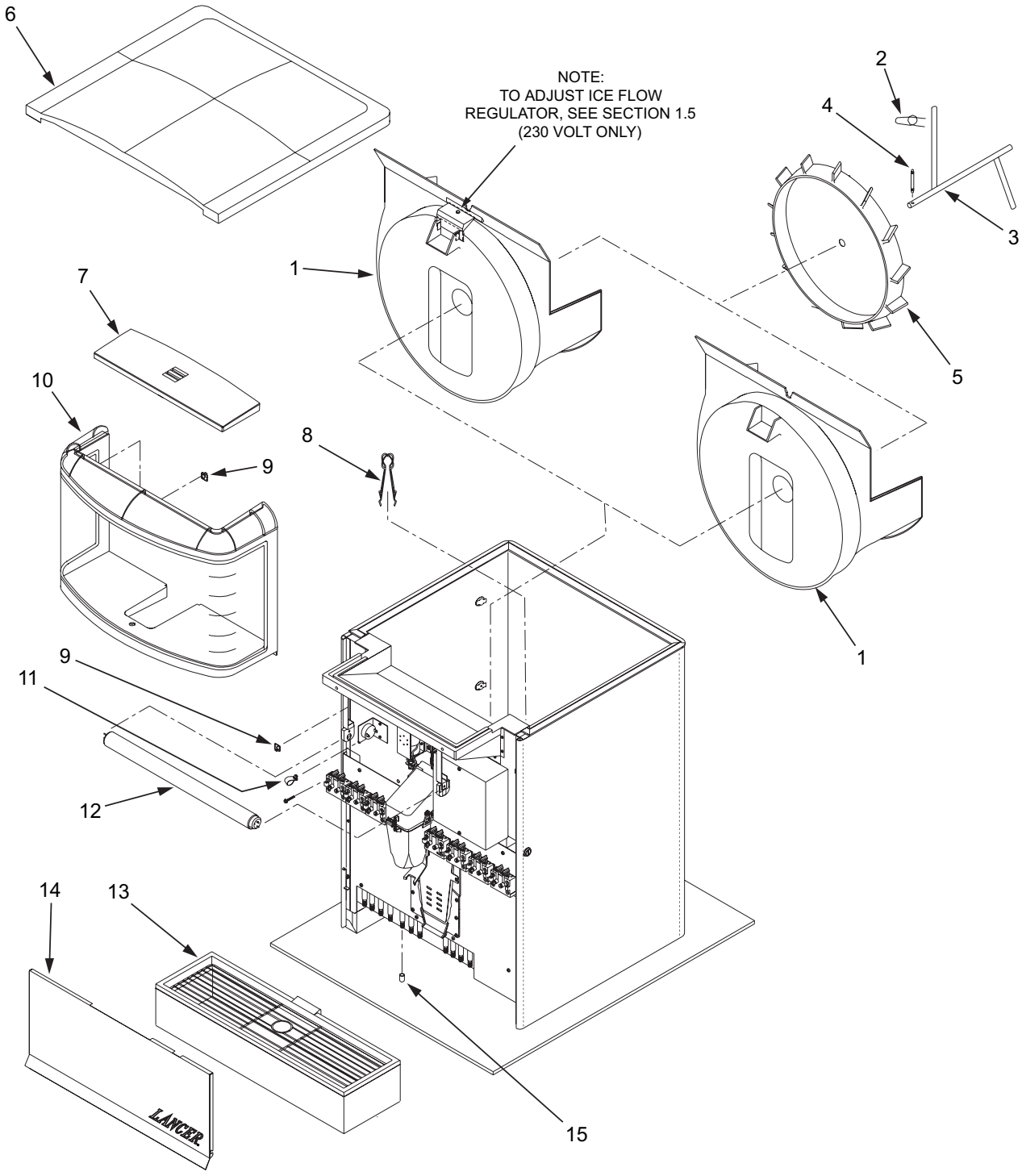


6.1 DECALS AND LABELS, IBD25 (CONTINUED)

	Item	Part No.	Description
	-	85-4528H-100	IBD25H, Series 4500, 115V/60Hz, 8 LEV®
	-	85-4538H-100	IBD25H, Series 4500, 230V,/50-60Hz, 8 LEV®
	1	06-1139	Label, Warning, Lid, IBD
	2	06-2117/01	Panel, Graphic, IBD25, Round
	3	06-1184/01	Label, Cleaning, Merchandiser
R	4	06-1182/04	Label, Wiring Diagram, 115V, IBD (See Section 6.6)
R	-	06-1521/02	Label, Wiring Diagram, 230V, IBD (See Section 6.7)
R	5	06-2226	Label, Plumbing Diagram, IBD25 (See Section 6.2)
	6	06-1522	Label, Low Ice, IBD
	7	06-1207	Label, Cold Plate Cleaning, IBD
	8	06-2058/01	Decal, Wrapper, Side, IBD, Round
	9	06-1183	Label, Cleaning, Hopper, IBD
	10	06-2118/01	Decal, Wrapper, Back, IBD25, Round
	-	12-0193	Ice Out Indicator
	-	27-0068,	Lens, Clear, Marquee
	-	27-0071,	Diffuser, Marquee

R in margin indicates change or revision

6.2 FINAL ASSEMBLY, POST-MIX IBD AND ICE DISPENSER, IBD25

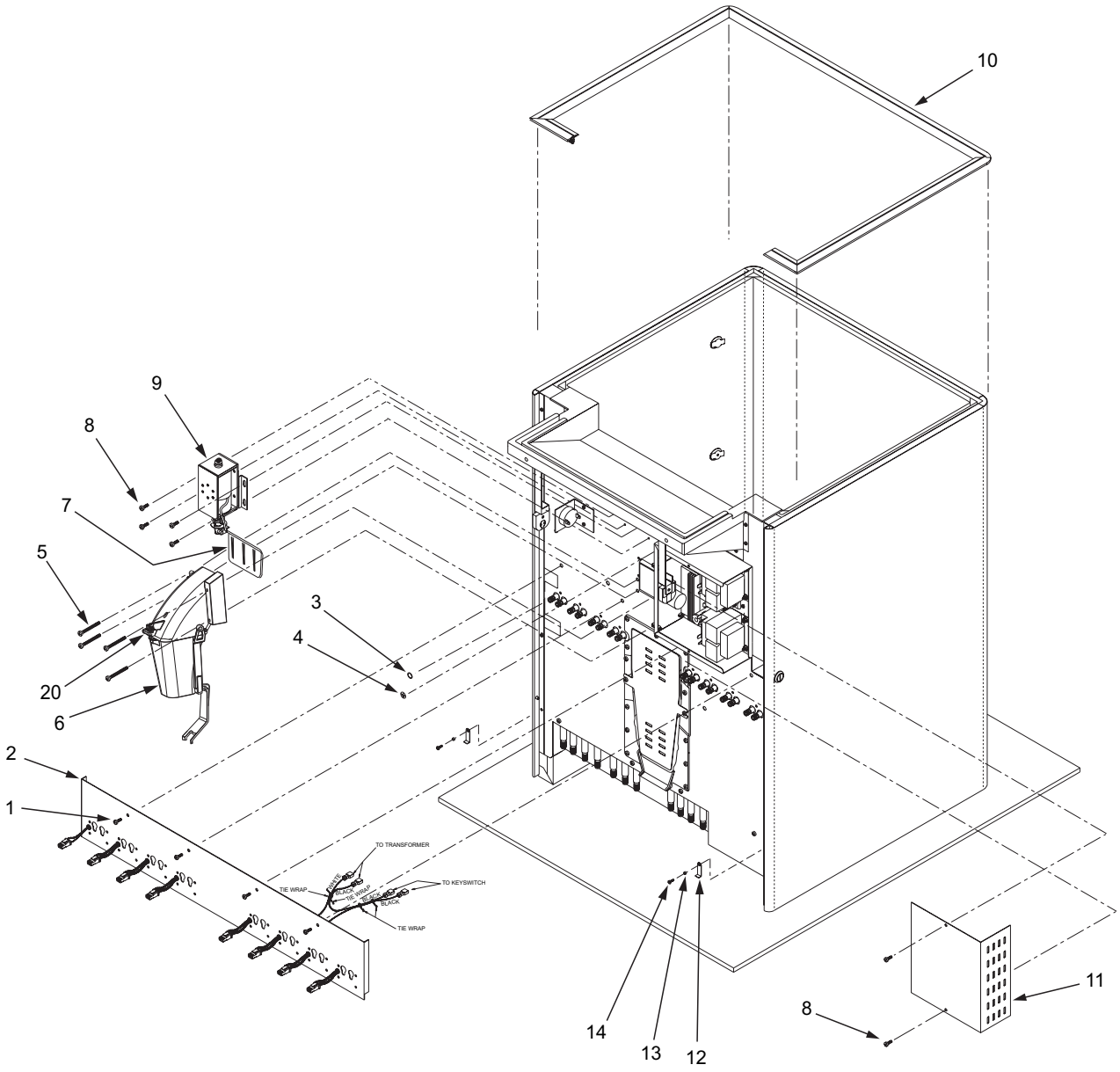


6.2 FINAL ASSEMBLY, POST-MIX IBD AND ICE DISPENSER, IBD25 (CONTINUED)

	Item	Part No.	Description
	-	85-4528H	IBD25H, Series 4500, 115V/60Hz, 8 Valve
	-	85-4538H	IBD25H, Series 4500, 230V/50-60Hz, 8 Valve
R	1	05-1658/01	Wheel Shroud Assy, IBD25, Mod (115V)
R	-	82-2705	Wheel Shroud Assy, IBD25, Mod (230V Only)
R	2	03-0368	Retainer, RUE-14-S
R	3	23-1373	Agitator Assy, HEX, IBD (115V)
R	-	23-1355	Agitator Assy, IBD, (230V Only)
R	4	10-0762	Pin, Agitator, IBD, Single Retainer
R	5	82-3556	Dispensing Wheel Assy, HEX, IBD (115V)
R	-	82-3413	Dispensing Wheel Assy, IBD (230V Only)
	6	05-1659	Lid, Back, IBD25, Round
	7	05-1476	Lid, Front, IBD, Round
	8	23-1038/01	Drain, Spider, IBD
	9	03-0300	Wire Clip, Adhesive
	10	82-2706	Merchandiser Assy, IBD25
	11	03-0049	Clip, Cord
	12	12-0146/01	Lamp, 18 Inch, 15W, T8
	13	82-2707-SP	Drip Tray Assy, IBD, 25 Inch Wide (Before December 30, 2003)
	--	82-3186-SP	Drip Tray Assy, IBD, 25 Inch Wide (After December 30, 2003)
	14	30-7517/01	Plate, Splash, IBD, 25 Inch Wide (Before December 30, 2003)
	--	30-8625	Plate, Splash, IBD, 25 Inch Wide (After December 30, 2003)
	15	04-0559	Cap, Protective, Vinyl, VC-375-8

R in margin indicates change or revision

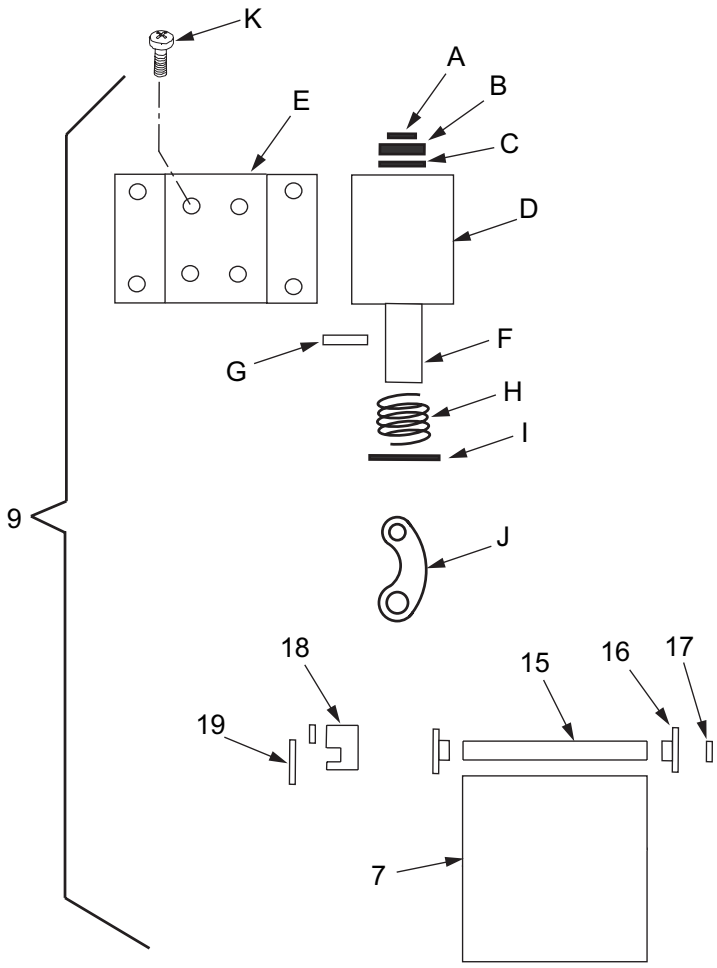
6.3 FAUCET PLATE AND ICE CHUTE SUB-ASSEMBLY, POST-MIX, IBD25



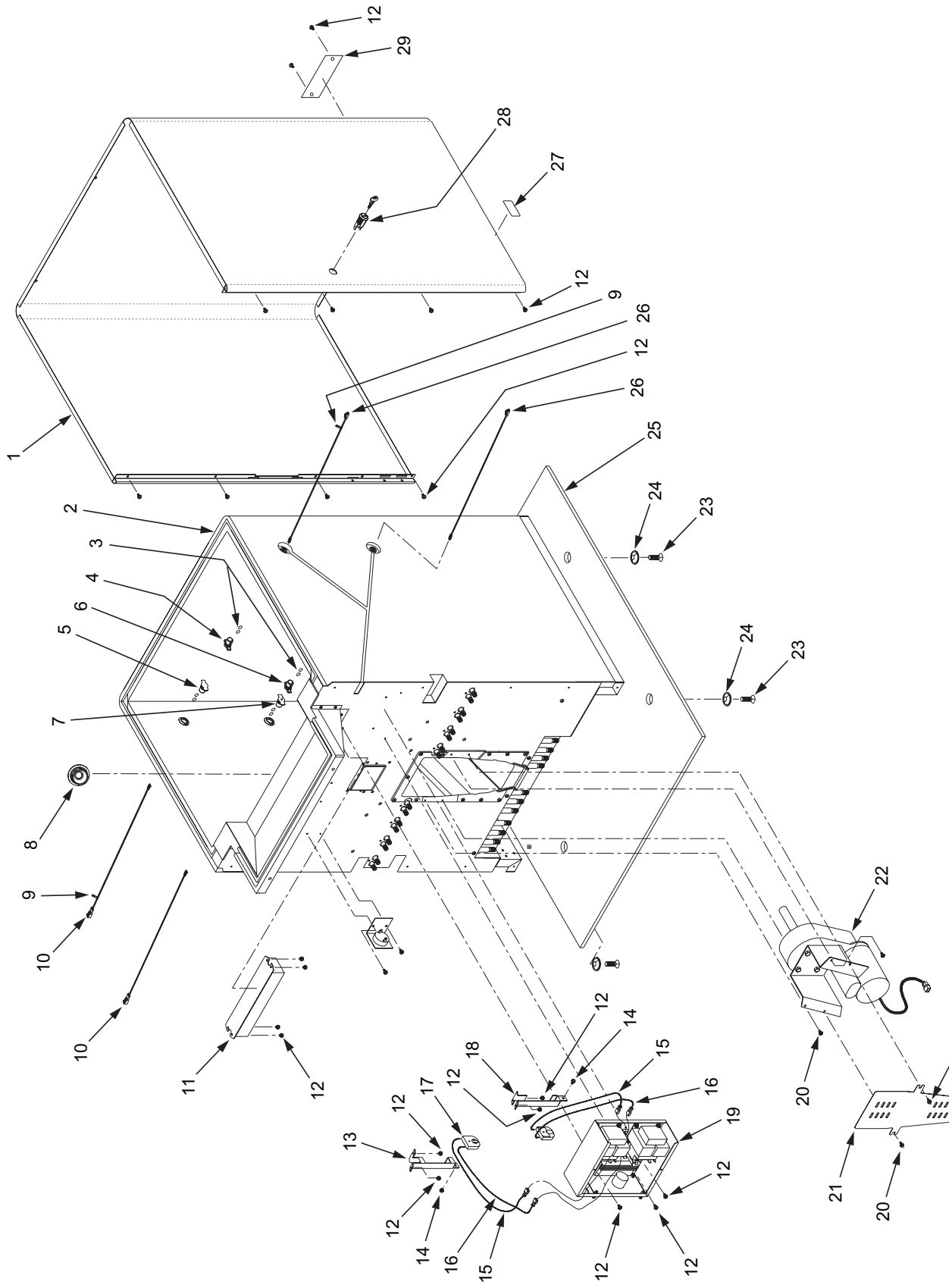
6.3 FAUCET PLATE AND ICE CHUTE SUB-ASSEMBLY, POST-MIX, IBD25 (CONTINUED)

Item	Part No.	Description
-	85-4528H	IBD25H, Series 4500, 115V/60Hz, 8 Valve
-	85-4538H	IBD25H, Series 4500, 230V/50-60Hz, 8 Valve
1	04-0308	Screw, 10 - 32 X 0.438
2	82-2703	Faucet Plate Assy, IBD25
R 3	02-0005	O-Ring, 2-010
R 4	06-0877	Label, Ground
R 5	04-0553	Screw, 10 - 24 X 1.75, LG
R 6	82-3538	Chute Assy, Printed, Small Dispenser, IBD
R 7	05-0928/01	Trap Door, IBD
R 8	04-0504	Screw, 8 - 18 x 0.375, PHD
R 9	82-1566/01	Solenoid Assy
R A	03-0086	Ring, Retaining (5304-18)
R B	04-0328	Washer, Rubber
R C	04-0327	Washer, Flat
R D	12-0195	Solenoid, D-90
R E	30-5165	Bracket, Solenoid
R F	23-1380	Plunger Assy
R G	10-0496	Pin, Solenoid Assy
R H	03-0110	Spring, Solenoid
R I	03-0111	Ring, Retaining (5133-62)
R J	10-0353	Linkage, Door, IBD
R K	04-0320	Screw, 8 - 32 x. 0.187, PHD
R 10	82-2704	Trim Assy, IBD25, Round
11	30-5876/01	Cover, Electrical Box, IBD
R 12	30-6145	Lock, Drip Tray, IBD
R 13	10-0364	Spacer, Drip Tray Lock, IBD
R 14	04-0529	Screw, 8 - 32 x 0.750, PH
R 15	10-0732	Shaft, ice Chute Door
R 16	05-0359	Bushing, Shaft
R 17	03-0113	Ring, Retaining (5144-12)
R 18	05-0546	Lever, Door
R 19	03-0205	Ring, Retaining (5304-25)
R 20	12-0244	Ice Door Switch

R in margin indicates change or revision



6.4 ELECTRICAL BOX AND GEAR MOTOR SUB-ASSEMBLY, POST-MIX, IBD25

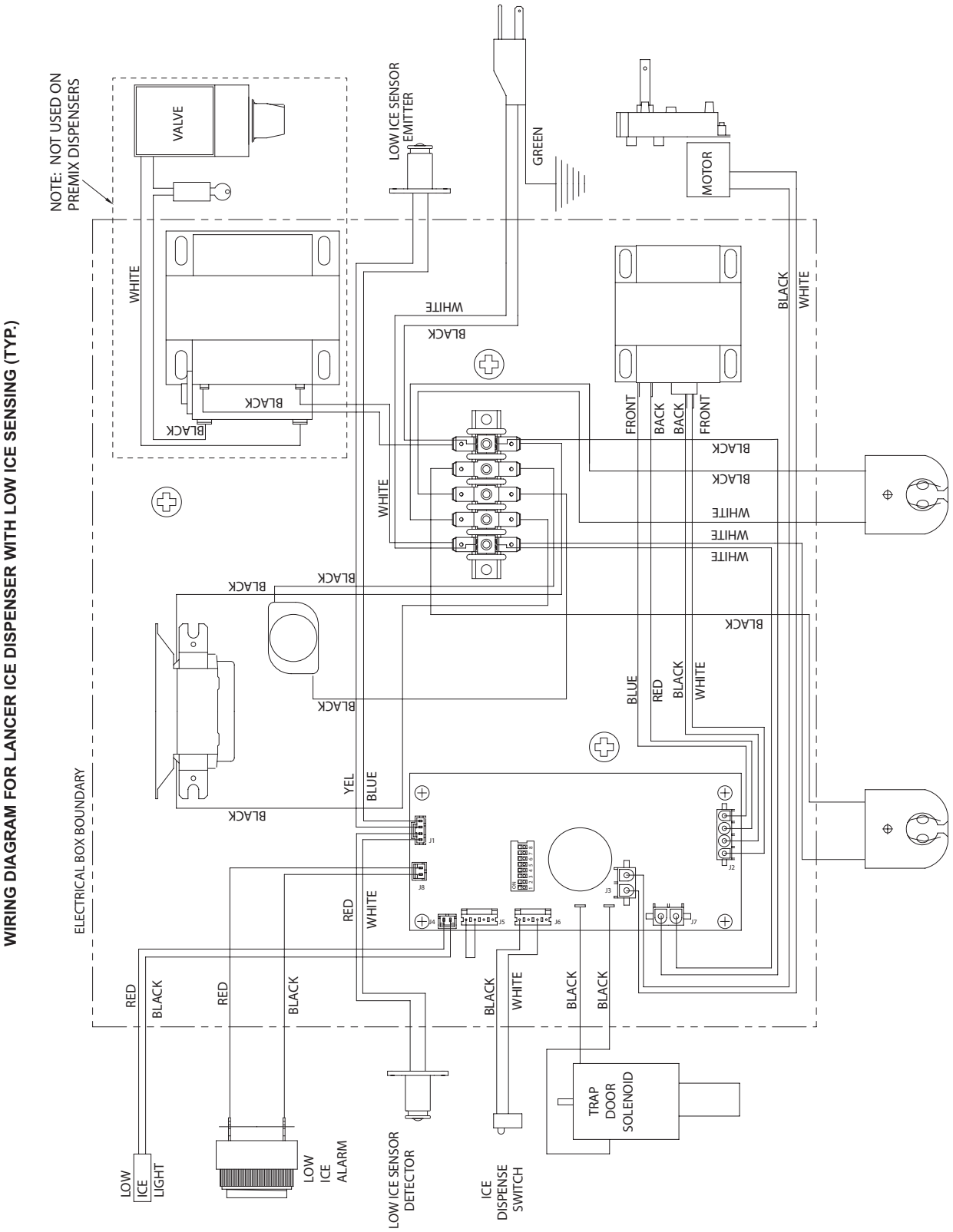


6.4 ELECTRICAL BOX AND GEAR MOTOR SUB-ASSEMBLY, POST-MIX, IBD25 (CONTINUED)

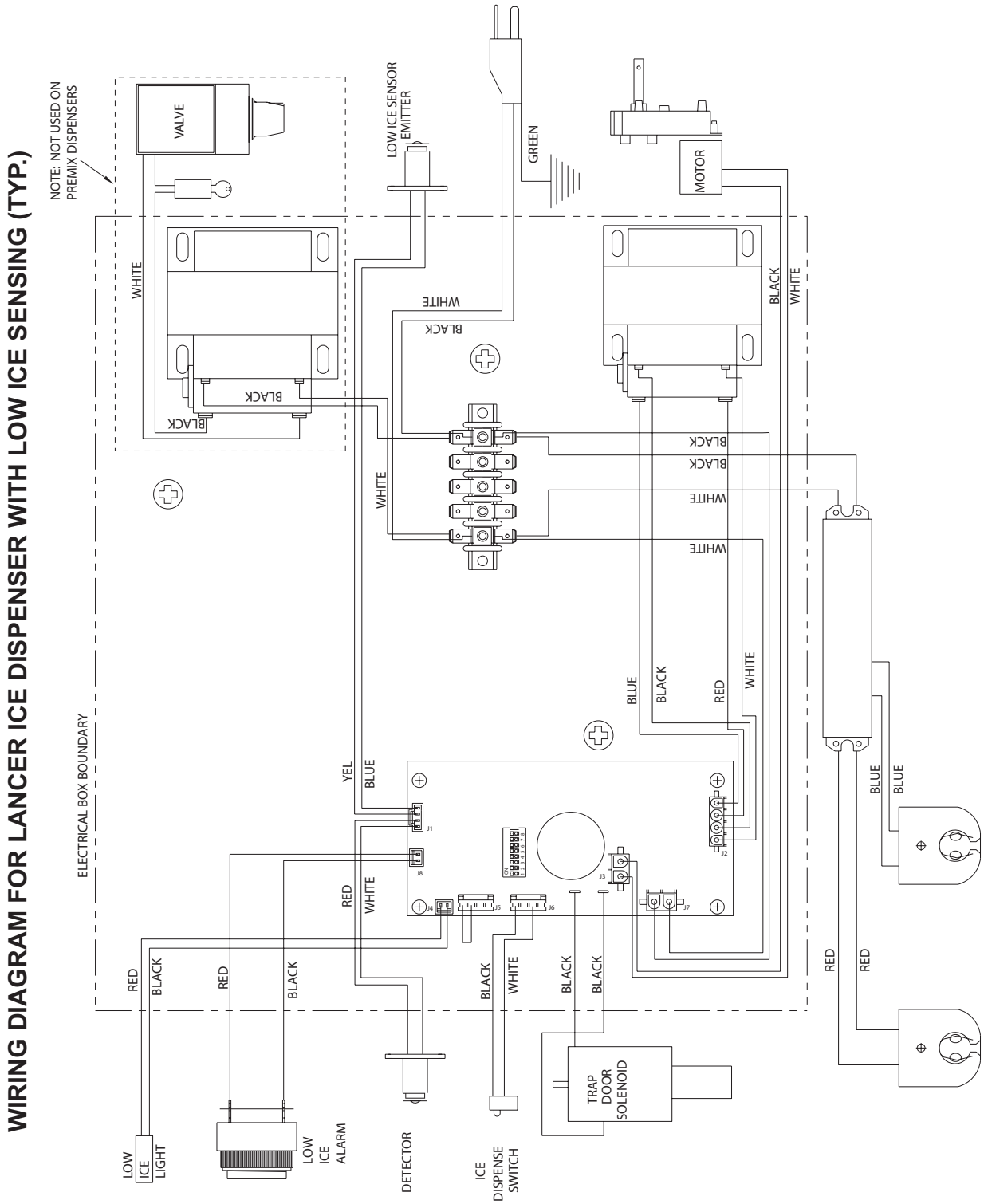
	Item	Part No.	Description
	-	85-4528H	IBD25H, Series 4500, 115V/60Hz, 8 Valve
	-	85-4538H	IBD25H, Series 4500, 230V/50-60Hz, 8 Valve
	1	30-7153	Wrapper Assy, IBD25, Round (Before December 30, 2003)
	--	30-8628	Wrapper Assy, IBD25, Round (After December 30, 2003)
	2	82-2701H	Tank Assy, Foamed, IBD25
R	3	02-0155	O-Ring, 2-015
	4	05-1858	Body, Emitter, Sensor, Plug
	5	05-1859	Body, Detector, Sensor, Plug
	6	52-2352	Emitter Assy, Sensor
	7	52-2353	Detector Assy, Sensor
	8	02-0406	Seal, Shaft, Motor, IBD
	9	06-2488	Label, Ice Link Tag, IBD
	10	52-2450	Harness Assy, Detector, IBD
	11	52-2122	Ballast Assy, Long Lead, 230V, IBD
	12	04-0504	Screw, 8 - 18 x 0.375
	13	30-6153	Bracket, Left, Light, IBD
	14	04-0237	Screw, 8 - 32 x 0.250
	15	52-1584	Harness Assy, Light, Black
	16	52-1583	Harness Assy, Light, White
	17	11-0295	Socket, 660W/600V MAX
	18	30-6152	Bracket, Right, Light, IBD
R	19*	82-1529/02	Electrical Box Assy, IBD, 115V*
R	-**	82-2017/02	Electrical Box Assy, IBD, 230V**
R	-	52-1527	Power Cord Assy, 115V
R	-	52-2006	Power Cord Assy, 230V
	20	04-0069	Screw, 10 - 16 X 0.500
	21	30-6147	Cover, Motor, IBD
R	22	82-3688	Drive Assy, Motor, HEX, IBD, 115V
	-	82-2018	Drive Assy, Motor, IBD, 230V
	23	04-0203	Screw, 3/8 - 16 X 1.00, FHD
	24	07-0211	Washer, Shipping Base
	25	90-0985	Shipping Board, IBD, 25 Inch Wide
	26	52-2449	Harness Assy, Emitter, IBD
	27	06-1580	Label, Patent
R	28***	12-0097	Switch, Key Lock***
	29	30-7113	Cover, Cutout, Wrapper, IBD
R	-	05-1555	Rear Bearing (Not Shown)
R		REF	Ballast Assy Components (Not Shown)
R	--	12-0104	Starter, 115VAC, 14-20 WA
R	--	12-0194	Starter, Base
R		REF	Electrical Box Assy Components (Not Shown)
R	*--	52-1436/05	PCB Assy, Available as Spare Part
R	*--	25-0039	120V-24V Transformer, Available as Spare Part
R	*--	25-0047	75VA-24V Transformer, Available as Spare Part
R	**--	25-0040	220V-24V Transformer, Available as Spare Part
R	***--	81-0126	Key, Available as Spare Part

R in margin indicates new or revised data

6.5 WIRING DIAGRAM - 115V/60HZ, SERIES 4500 IBD



6.6 WIRING DIAGRAM - 230V/50-60HZ, SERIES 4500 IBD



EXPANDED VIEW OF CONTROLS

LED
INDICATORS

D3-ON WHEN ICE DISPENSE SWITCH IS CLOSED

D4-ON WHEN LID IS CLOSED

D5-ON WHEN +5VDC IS AVAILABLE

D6-ON WHEN +32VDC IS AVAILABLE

D7-FLASHES WHEN ICE IS LOW

D8-ON WHEN TRAP DOOR SOLENOID IS OPEN

D9-ON WHEN MOTOR IS ON

SWITCH NUMBER				AGITATION
5	6	7	8	OFF TIME
O	O	O	O	NO AGITATION
O	O	O	X	10 MINUTES
O	O	X	O	20 MINUTES
O	O	X	X	30 MINUTES
O	X	O	O	40 MINUTES
O	X	O	X	50 MINUTES
O	X	X	O	60 MINUTES
O	X	X	X	70 MINUTES
X	O	O	O	80 MINUTES
X	O	O	X	90 MINUTES
X	O	X	O	100 MINUTES
X	O	X	X	110 MINUTES
X	X	O	O	120 MINUTES
X	X	O	X	130 MINUTES
X	X	X	O	140 MINUTES
X	X	X	X	150 MINUTES

CUBE ICE SETTING:

AGITATION ON TIME: 2 SEC.

OFF TIME: 60 MIN.

FOR PELLET CAPABLE DISPENSERS ONLY

PELLET ICE SETTING:

AGITATION ON TIME: 4 SEC.

OFF TIME: 150 MIN.

SWITCH 1 : "LOW ICE" LED INDICATOR

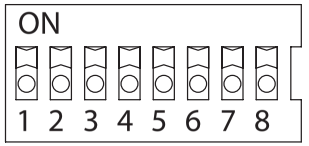
SWITCH 2 : "LOW ICE" ALARM

SWITCHES 3-4 : AGITATION "ON TIME"

SWITCHES 5-8 : AGITATION "OFF TIME"

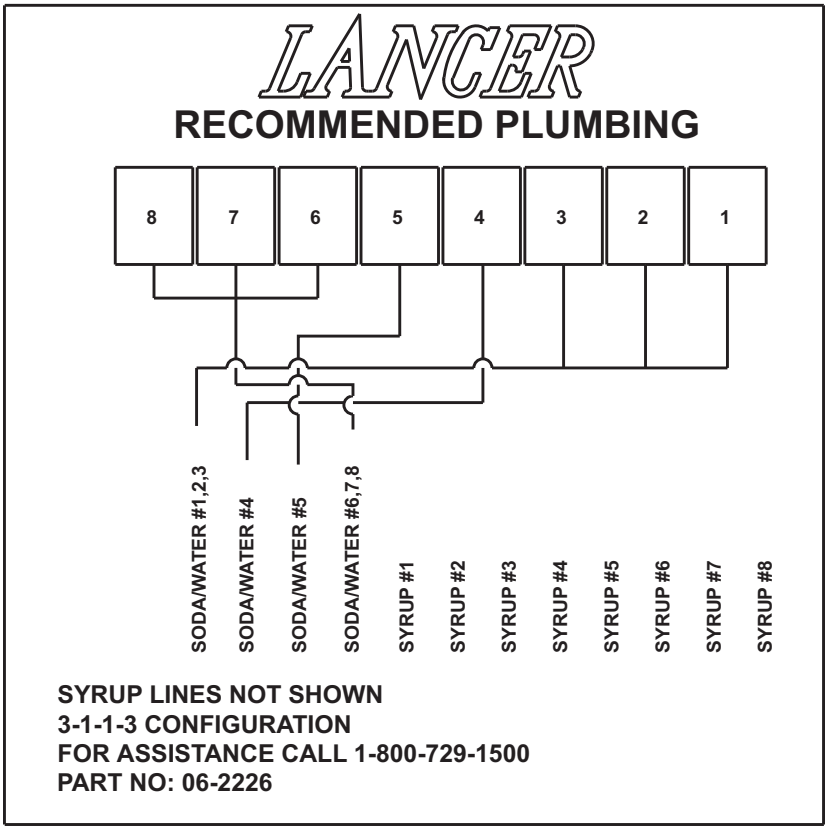
SWITCH NUMBER		AGITATION
3	4	ON TIME
O	O	1 SECOND
O	X	2 SECOND
X	O	3 SECOND
X	X	4 SECOND

X = ON
O = OFF



SLIDE SWITCHES:
SLIDE SWITCH UP TO TURN "ON"
SLIDE SWITCH DOWN TO TURN "OFF"

6.8 PLUMBING DIAGRAM



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 pur chased. Comply with local regulations regarding disposal of the refrigerant and insulation.

LANCER®

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