

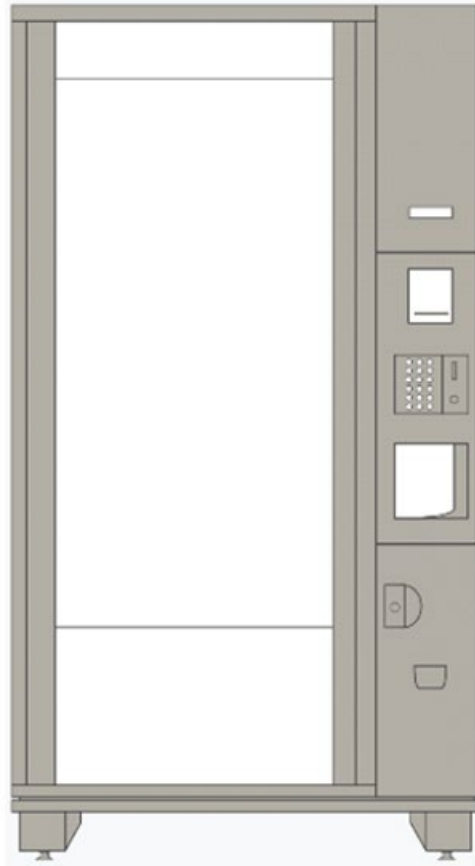
CRANE[®]

MERCHANDISING SYSTEMS

CRANE[®] MERCHANDISING SYSTEMS

BevMAX 4 Coke

Parts Manual Models DN5800-4 & DN3800-4



3330 Crane Way – Williston SC 29853

www.cranems.com

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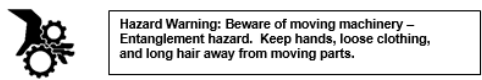
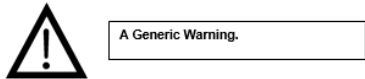
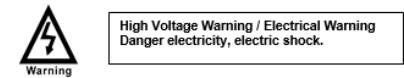
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VENDER SAFETY PRECAUTIONS

Please read this manual in its entirety. This service information is intended for use by a qualified service technician who is familiar with proper and safe procedures to be followed when repairing, replacing or adjusting any Crane Merchandising Systems Dixie-Narco vender components. All repairs should be performed by a qualified service technician who is equipped with the proper tools and replacement components, using genuine Crane Merchandising Systems factory parts. This Vender should only be used by those individuals that have a clear understanding of how to operate a vending machine in a safe manner.



REPAIRS AND/OR SERVICING ATTEMPTED BY UNQUALIFIED PERSONS CAN RESULT IN HAZARDS DEVELOPING DUE TO IMPROPER ASSEMBLY OR ADJUSTMENTS WHILE PERFORMING SUCH REPAIRS. PERSONS NOT HAVING A PROPER BACKGROUND MAY SUBJECT THEMSELVES TO THE RISK OF INJURY OR ELECTRICAL SHOCK WHICH CAN BE SERIOUS OR EVEN FATAL.

PRODUCT IDENTIFICATION

First production of Coca-Cola BevMax 4 5800-4/3800-4 Domestic and BevMax 4 5800-E4/3800-E4 Export Venders was May 2009. The production date of Crane Merchandising Systems Dixie-Narco products is determined by the date code incorporated in the serial number.

The vender serial number takes the form xxxx-yyyy zz. The first 4 digits (xxxx) identify the specific vender. The next 4 digits (yyyy) identify the manufacturing run that the vender was built in. The last two alpha characters (zz) identify the quarter and the year the vender was built. The first alpha character identifies the quarter as follows:

- A= 1st Quarter
- B= 2nd Quarter
- C= 3rd Quarter
- D= 4th Quarter

The second alpha character identifies the year:

- H = 2009 K = 2012
- I = 2010 L = 2013
- J = 2011 M = 2014

CE Mark & IIA Declaration:

An updated CE Mark or IIA Declaration document can be provided upon request. If needed please contact

Technical Support Manager in Williston, SC. Phone: 1- 803-266-5001 or email bstaubs@cranems.com.

PHYSICAL CHARACTERISTICS

| | DN5800-4 DN5800-E4 | DN3800-4 DN3800-E4 |
|--------------------------------------------------------------------------------------------------------|------------------------|-----------------------|
| HEIGHT | 72" (1828.8 mm) | 72" (1828.8 mm) |
| WIDTH | 47" (1193.8 mm) | 39" (990.6 mm) |
| DEPTH CABINET | 32" (812.8 mm) | 32" (812.8 mm) |
| DEPTH WITH SERVICE DOOR | 33.5" (850.9 mm) | 33.5" (850.9 mm) |
| BASE | 3.5" (88.9 mm) | 3.5" (88.9 mm) |
| SHIPPING WEIGHT | 764 lbs. (346.54kg) | 675 lbs. (306.17g) |
| Noise Level | Operates at < 70db. | |
| Glass door width is 37.5" (952.5 mm) 5800's, 28.1" (713.74 mm) 3800's, height is 68" (1727.2 mm) both. | | |

RECEIVING INSPECTION

DO NOT STORE THE VENDER OUTSIDE.

Upon receipt, inspect the vender for any shipping damage. If there is any damage, have the delivery driver note the damage on the bill of lading and notify Crane Merchandising Systems. Although the terms of sale are FOB shipping point, which requires the consignee to originate shipping damage claims, Crane Merchandising Systems will gladly help if you must file a claim.

UNPACKING THE VENDER

Remove the stretch wrap, fiberboard edge protectors and corrugated front protector from the outside of vender.



Do not store the vender with stretch wrap on. Stretch wrap could bond to the vender's surface, which could damage the finish.

Remove the shipping boards from the bottom of the vender. The shipping boards are attached by the leveling legs. To avoid unnecessary damage to the leveling legs or base, remove the shipping boards by using a 1-1/2 inch or 38mm socket type wrench to unscrew the leveling legs. Be sure to replace the legs after removing the shipping boards. Once the skid boards are removed there is 3" (76.2 mm) from base flange to the floor with the leveling legs screwed all the way in.

Once the vender is unpacked, check the "B" Tray area for any additional parts, price/product labels,

service/operation manual or other information concerning factory-equipped accessories such as coin mech and validator. It is recommended the vender be vend tested before shipping to the location. See Pg 12, "Test Modes".



Note: Remove tape from ends of top lamp in the top lamp assembly after placing the Vender on location, but before plugging the Vender in to an AC power supply.

WARNING: TO AVOID THE POSSIBILITY OF A FIRE HAZARD, DO NOT STORE ANYTHING OR ALLOW DEBRIS OF ANY KIND TO ACCUMULATE AROUND, UNDER OR BEHIND THE CABINET, IN THE BOTTOM OF THE SERVICE AREA, IN AND AROUND THE REFRIGERATION COMPARTMENT OF THE CABINET, OR IN FRONT OF THE EVAPORATOR AND CONDENSER COILS.



WARNING: ENSURE THAT POWER IS DISCONNECTED FROM THE VENDER BEFORE INSPECTING OR REPLACING THE LAMPS, OTHER ELECTRICAL COMPONENTS, OR WORKING WITH OR ADJUSTING THE VENDING MECHANISM. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY SUBJECT THE USER TO THE RISK OF ELECTRICAL SHOCK OR MECHANICAL INJURY, WHICH CAN BE SERIOUS OR FATAL.



ELECTRICAL POWER NEEDED

Refer to the cabinet serial number plate to determine the correct voltage and frequency for the machine. In the US and Canada this is 120Vac, 60Hz, 1P. In Europe, Australia, and other export countries, this is 220/230/240Vac, 50Hz, 1P depending upon your country voltage. The serial plate also specifies the

ampere rating of the machine. This machine must be plugged into a properly rated receptacle with its own circuit protection (fuse or circuit breaker).

Equipment Nominal Power Requirements -

120V / 10.2 A = *1224W (1.224kw)

220V / 5.8 A = *1276W (1.276kw)

240V / 5.8 A = *1392W (1.392kw)

*Note: Watts = V X A

DO NOT USE AN EXTENSION CORD.

POWER SUPPLY CORD and GROUNDING REQUIREMENTS

In accordance with the National Electrical Code and Underwriters Laboratories Inc., domestic vending machines are equipped with a three-wire power supply cord and Ground Fault Circuit Interrupter (GFCI). The GFCI device is provided as part of the power supply cord and is either incorporated directly into the plug or mounted on the cord adjacent to the plug.

WARNING

- The GFCI protects against current leakage caused by ground faults. The GFCI is not designed to protect against over current or short circuits.
- **DO NOT** use the TEST and RESET buttons on the GFCI as an ON/OFF switch.
- The vending machine supply cord **MUST** be plugged directly into a properly grounded, 3 wire receptacle that is properly protected by a fuse or circuit breaker. If the receptacle will not accept the power cord plug, it must be replaced with a properly grounded, 3 wire receptacle in accordance with the National Electrical Code and Local Codes and Ordinances. The work should be done by a qualified electrician. **DO NOT USE A 3 WIRE TO 2 WIRE ADAPTOR**



DO NOT REMOVE THE GROUND PIN ON THE PLUG OR IN ANY WAY BYPASS, MODIFY, DEFEAT, OR DESTROY THE GROUNDING SYSTEM OF THE VENDING MACHINE



- **DO NOT USE WITH AN EXTENSION CORD.**
- **DO NOT REMOVE THE WARNING TAG ATTACHED TO THE POWER SUPPLY CORD.**
- The GFCI must be tested frequently and before each use in accordance with the instructions provided on the GFCI device. **IF THE GFCI DOES NOT PASS THE TEST, DO NOT USE THE MACHINE.** Unplug the supply cord from the receptacle and call the Crane Merchandising Systems Technical Support Group for assistance at 1-803-266-5001.

It is recommended that the machine be located so that the GFCI device will be accessible after the machine is installed. After installation, visually inspect the GFCI and power supply cord to be sure it is not crushed, pinched, or stretched.

Protect the power supply cord during transportation and use. Periodically inspect the power supply cord for damage. If the cord or plug is worn or damaged, it must be replaced with a power supply cord of the same type, size and specification as originally provided with the machine. **DO NOT USE THE VENDING MACHINE UNTIL THE WORN OR DAMAGED CORD IS REPLACED.**



FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY SUBJECT THE USER TO THE RISK OF INJURY OR ELECTRICAL SHOCK WHICH CAN BE SERIOUS OR FATAL. PERIODICALLY INSPECT THE POWER SUPPLY CORD FOR DAMAGE. IF THE CORD BECOMES DAMAGED IT MUST BE REPLACED WITH THE SAME SIZE AND TYPE CORD. CONTACT CRANE MERCHANDISING SYSTEMS FOR ASSISTANCE.

INSTALLATION AND SETUP INSTRUCTIONS

MANUAL LOCK

Open the service door on the right side using the key provided in the coin return cup, or if shipped with a locking clip, remove the clip and install the lock. Ensure there is no power to the AC Distribution Box. On venders with a main power switch on the AC

Distribution Box the switch needs to be in the OFF position. On venders with a main power quick disconnect plug on the AC Distribution Box the quick disconnect plug needs to be unplugged. Check that all connectors are firmly seated on the control board and at the various components on the service door (coin mech, keypad, etc.).

Retrieve the main power plug from the hole in the rear of the vender and plug the cord in a properly grounded 120VAC, 15 Amp receptacle (U.S. and Canada).

Open the service door and apply power to the AC Distribution Box (if equipped with a bill acceptor, the acceptor should cycle twice). The display on the door will briefly show the software version in use as "Software ###.## (i.e. ##.01) followed by the default idle message "ENJOY A REFRESHING DRINK", the fluorescent lamp should be lit and the cooling unit should start. If the display shows "OUT OF SERVICE", or the cooling unit fails to start, refer to the TROUBLESHOOTING SECTION beginning on page 36.

SERVICE NOTE

Battery Backup

The battery backup is used to maintain the date and time in case of power interruptions, or any time the main power is off. When the vender is shipped, the battery is connected and memory is being maintained. If the vender is to be stored for long periods of time, disconnecting the battery is recommended. The following steps will guide you through this procedure.

- Open the service door, turn the main power switch to the off position or unplug the main power harness located on the front of the power box.
- Locate the control board mounted on the rear wall.
- Remove the battery from its holder (B1).

PLACING THE VENDER ON LOCATION

!! CAUTION !!



DO NOT TRANSPORT THE VENDER TO OR FROM THE LOCATION LOADED WITH PRODUCT OR DAMAGE TO THE VENDER MAY RESULT.

The vender is intended for **INDOOR USE ONLY**. It should be kept out of direct sunlight and away from any heat source. This machine is not suitable for installation in an area where a water jet or hose and nozzle may be used.

The vender must be on a solid, flat and level surface. Ensure the flooring can bear the weight load of a fully loaded vender (approximately 1109 lbs. or 413kg).

The vender must be positioned close enough to an electrical outlet so that an extension cord is not required. If the machine will be subject to user misuse or vandalism, it is recommended that the vender be secured to the floor or wall as described in Crane Merchandising Systems / Dixie-Narco Technical Bulletin 344. Due to the large size and weight of the Vender, never attempt to move the Vender with a Hand Truck or Stair Climber. Use a pallet jack or Vender/Cooler Dollies at all times when moving the Vender. The vender should never be slid or pushed in place. Never side load the leveling legs; doing so will cause damage to the legs. Do not transport the vender to or from customer locations loaded with product, as damage may result due to excessive weight. Call the Crane Merchandising Systems Technical Service Department or your Crane Merchandising Systems Representative for assistance.

ACCEPTABLE AMBIENT OPERATING TEMPERATURE RANGE.

Coke BevMax 4 5800-4/3800-4 equipment manufactured by Crane Merchandising Systems is designed to work properly in a temperature range of 75°F to 90°F (23°C to 32°C) in still air 65% R.H. non-condensing.

LEVEL THE VENDER

Adjust the front leveling legs, ensuring that an even gap exists between the glass door and the top security angle and receiver box, and then level the cabinet front to rear. A carpenter's level will help verify that the vender is level. Leveling legs are adjusted using a wrench or socket 1 1/2" or 38 mm in size. If the vender is to be used in a bank of equipment, check the top and sides for proper alignment. If you are unable to properly level the vender, select an alternate location. NEVER PLACE OBJECTS UNDER THE LEVELING LEGS OF THE VENDER.

DANGER

THE VENDER MUST BE PROPERLY LOCATED AND LEVELED. IF THE MACHINE WILL BE SUBJECT TO USER MISUSE OR VANDALISM IT IS RECOMMENDED THAT THE VENDER BE SECURED TO THE FLOOR OR WALL AS DESCRIBED IN CRANE MERCHANDISING SYSTEMS DIXIE-NARCO TECHNICAL BULLETIN 344 TO MINIMIZE THE RISK OF INJURY OR DEATH FROM TIPPING. CALL THE CRANE MERCHANDISING SYSTEMS TECHNICAL SERVICE DEPARTMENT OR YOUR CRANE MERCHANDISING SYSTEMS REPRESENTATIVE FOR ASSISTANCE.



SPACE THE VENDER

Do not block the rear of the vender. Maintain a minimum of 4 inches (10 cm) from the wall to ensure adequate airflow to the condenser and compressor. At the rear of the vender, make sure nothing obstructs the air exhaust at the bottom of the cabinet.

WARNING

TO AVOID THE POSSIBILITY OF A FIRE HAZARD, DO NOT STORE ANYTHING OR ALLOW DEBRIS OF ANY KIND TO ACCUMULATE AROUND, UNDER OR BEHIND THE CABINET, IN THE BOTTOM OF THE SERVICE AREA, IN AND AROUND THE REFRIGERATION COMPARTMENT OF THE CABINET, OR IN FRONT OF THE EVAPORATOR AND CONDENSER COILS.



INSTALLING PRICE LABELS

Pricing labels included in the literature package kit. Remove the pricing label sheets from the service manual package and gently remove the label corresponding to the vend price of each selection by tearing at the perforation. The label is installed at the top of the front knuckle. Once installed, push the label firmly against the front of the knuckle. This will insure the label is locked in place.

INSTALLING PRODUCT ID CARDS

To assist with consistent loading, product ID cards can be installed in the product pusher to designate to the route driver which product the column is set for. To install the flavor card, simply detach it from the sheet at the perforation and slide it into the slots in the product pusher. Contact your graphics supplier to purchase as needed.

COIN CHANGERS & OTHER ACCESSORIES

The vender can have an MDB coin changer installed and can have an MDB bill acceptor installed as well. Note: BevMax 4 5800-4/3800-4 will work with an MDB bill acceptor only. If the MDB coin changer and other MDB accessories are not factory installed, refer to the instructions received from the manufacturer of the MDB coin changer and other MDB accessories for proper set-up and installation.

The vender will support the following Domestic MDB coin changers:

- All available NRI MDB
- All available Coinco MDB
- All available Mars MDB
- All available Conlux MDB

The vender will support the following domestic MDB Bill validators:

- All available Cashcode MDB
- All available Coinco MDB
- All available Mars MDB
- All available Conlux MDB

The vender will support MDB card readers.

SETTING THE TEMPERATURE CONTROL

This vender is equipped with an electronic temperature sensor. Defrost is controlled both electronically based on run time of the compressor and with a manual Defrost thermostat. The temp sensor is factory pre-set to maintain a cabinet temperature of 35° Fahrenheit (1.7°C). It is also a good practice to ensure the proper operating temperature prior to installing the vender on location. To set the temperature, apply power to the vender and allow it to run for several hours with the glass door closed or until the minimum cabinet temperature is achieved. Then, using the method below, verify the temperature inside the cabinet:

With an electronic temperature sensor, use the keypad on the service door to show cabinet temperature in Fahrenheit by pressing the F key followed by the asterisk (*) key or in Centigrade by pressing the C key followed by the asterisk key. The temperature will be shown on the digital display located on the front of the service door.

The manual Defrost thermostat is located on the side of the refrigeration unit. The Defrost control is preset and is not adjustable.

LOADING THE VENDER

CAN/BOTTLE DRINK TRAYS

The BevMax 4 5800-4/3800-4 Vender does not require spacers or shims to vend most packages. Load product in each column one package at a time insuring that the package being loaded is in front of the product pusher. Insure that the package is stable within the column (doesn't move excessively from side to side). After loading the vender, test vend each column to insure proper operation. Please contact a Service Representative or refer to the proper Technical Publication for any special settings you may need.

LOADING CHANGE TUBES

The changer tubes can be loaded using one of the following methods:

1. Load the coin mechanism with coins to the desired level by inserting coins in the loading slots on the coin tube front.

Minimum coin tube levels are:

- 6-8 nickels
- 7-8 dimes
- 5-6 quarters

Note: A low coin level in the coin tubes will interfere with operation of the bill validator.

2. For exact cash accountability and to insure maximum dollar bill acceptance, load the mechanism utilizing the coin insert slot on the front of the vender while in the coin Tube Fill mode in the programming section of Technical Manual for more information.

For additional information about coin mechanism, refer to the manufacturer's instructions.

POWER AC DISTRIBUTION BOX

The power distribution box is where the 120VAC or 220VAC input voltage is broken down to the main operating voltages of the vender (24 VAC and 12 VAC) by a transformer. Those voltages are sent to the controller via the P1 (3 pin) connector. Domestic Venders contain a 15 Amp Outlet which provides power to the Refrigeration Unit. It contains a main power switch/plug that allows power to the AC Distribution Box to distribute AC power to the lights, evaporator fan, and refrigeration system, which are always energized when the vender is powered up. It is located inside the service area, mounted to the back wall.

VENDING MACHINE CONTROLLER (VMC)

The vending machine controller is the heart of the Glass Front Vender and is located on the rear wall inside the service area. It is flash programmable and may or may not include the program chip (EPROM), which controls all aspects of the vender. It also contains the power supply which regulates the voltages required to operate the motors as well as the coin mechanism, digital display, and all logic functions in the vender.

KEYPAD

The keypad is located on the front of the service door. It consists of a 6" X 3" (15.2 mm X 7.6 mm) matrix, tactile feel membrane switch pad and an overlay. The pad utilizes the letters A thru F on the left side and numbers 1 thru 0 along with the * symbol and CLR to the right. The keypad is where the vender programming is accomplished and where the customers make their selections.

DIGITAL DISPLAY

The digital display is located directly above the keypad on the front of the service door. It is used to convey information to the consumer as well as to the person programming the vender.

REFRIGERATION SYSTEM

The refrigeration system is a single piece unit and is hermetically sealed. The Model BevMax 4 units consist of a 1/3 plus horsepower compressor, with a single fin and tube style condensing unit with one condenser fan, condensation overflow pan, evaporator, and evaporator fan motor. The refrigeration unit is located behind the refrigeration unit cover panels, mounted in the bottom of the cabinet. This unit is designed for easy removal and replacement from the front or rear of the vender as a complete assembly. An electronic thermostat regulates the cabinet temperature. The control of the thermostat is attached to the evaporator coils and reads the temperature of air being pulled in to the evaporator coil.

SHELF ASSEMBLY

Typically, there are 5 shelf assemblies in every vender; however, this can vary depending upon the configuration specified at the time of ordering. Each can/bottle shelf consists of 9 or 7 columns. Each shelf is capable of holding a variety of packages. The shelf assembly consists of the tray, where all of the following parts are mounted: Double Gate assembly, and the slide/pusher assembly. These items are discussed in detail below.

DOUBLE GATE ASSEMBLY (Can/Bottle Trays)

The double gate assembly is mounted on the front portion of the tray assembly and contains the vending mechanism. Incorporated in the gate assembly are the front and rear knuckle assemblies as well as the product kicker. In standby operation, the front knuckle is in the blocking position, which holds the front displayed product in position to be vended. The rear knuckle assembly is in a flat position, which allows product to enter the gate area, and the kicker is flush to the rear knuckle assembly. A stainless steel pin is inserted through the rear most portion of the front knuckle assembly and connects to a gear box below the tray. When a selection is made, the plunger pushes the lever toward the back of the tray. At the same time the front knuckle is opened into a flat position, the rear knuckle is closed to a blocking position, holding the remaining product out of the gate area, and the kicker is extended to firmly push the front displayed product off of the tray. The plunger is energized for approximately 1-½ seconds to allow ample time for the displayed product to be ejected from the shelf. The plunger is then released and the front knuckle returns to the blocking position, the rear knuckle and kicker return to their standby position and the next product slides into the vend display position.

SLIDE/PUSHER ASSEMBLY (Can/Bottle Trays)

The slide/pusher is located on the bottom of each product column. Its purpose is to provide a slick, friction resistant surface for the product to rest on. The tall product pusher is mounted on the top of the slide and incorporates a coil spring in the body that attaches to the bottom of the slide through a slit. This spring adds needed tension to insure that all products in the column remain tight against each other and are allowed to progress into the gate area. Although these pushers reduce the effects of dirt and grime, periodic cleaning and lubrication of the slides is recommended. **DO NOT USE SOLVENTS OR ABRASIVE MATERIALS TO CLEAN ANY PORTION OF THE TRAY.**

DELIVERY (PICKER) CUP ASSEMBLY

The delivery (picker) cup assembly is located on the XY vend mechanism. Its purpose is to pick the product from the column and deliver the product to the delivery port assembly. The delivery (picker) cup assembly is mounted on the XY assembly and bolts in position.

The X axis runs left to right. The X axis assembly is cabinet mounted to prevent any cabinet torque and has one belt to synchronize the top and bottom when the X moves left or right.

The Y axis runs up and down and has the delivery (picker) cup assembly attached. A top channel is used to contain and hide the e chain and wiring.

Both X and Y motors have encoders for positioning.

REFRIGERATION DECK CLAMP ASSEMBLY

The refrigeration deck clamp assembly is located on the rear left side of the cabinet base plate. Its purpose is to secure the refrigeration assembly tight against the vertical base plate for refrigerated air flow in to the cabinet. A 7/16" wrench or socket is needed to adjust the bolt.

BELT TENSION ADJUSTMENT COMPONENTS

The belt tensioning adjustment components have been designed to ease adjusting belts when needed. The X Belt Idler Tensioning Assembly in the upper left hand corner of cabinet now includes a thumb screw. Adjustments should only be needed if a belt is replaced.

The Bottom X Drive Tensioner Assembly in the lower right hand corner of cabinet has a plastic spring loaded tensioner designed to keep the belt against the pulley when moving and does not require any adjustments.

**COCA-COLA
BevMax 4
(70x.x1 Software)
PROGRAMMING METHOD**

NORMAL MODE:

In normal mode, on power up display will show software installed in vender, then change to POS message or decimal point and / or vend price. When money is inserted, the display indicates the total amount of the deposit. The keys on the keypad are used to select the product. In normal mode you may access an external menu for reading historical sales counters, cash counters, error codes, No Error Codes, or return to normal mode.

SERVICE MODE:

If configuration switch 4 is set to "Config 4 0", when the door is opened, "No Error Codes" or a list of Error codes will show on the display. If configuration switch 4 is set to "Config 4 1", when the door is opened, "Cash - ####-##-##", "Card - #####-##", "Sale - ####-####", "Error Codes", or "No Errors" will show on the display. NOTE: Card is only shown if a card reader is present. The service mode is entered when the door is open and the service switch on the controller is pressed. The operator can now use the keypad to move through the main routine menu.

- Key number 1: Abort/Cancel - will return to previous menu prompt.
- Key number 2: Scroll Up - forward in menu.
- Key number 3: Scroll Down - backward in menu.
- Key number 4: Enter/Save/Clear - Allows you to enter a specific routine, save what you have programmed, or clear the error prompts.

Note: Routines with * are password protected. They can only be viewed and entered after the password is entered at the "Password Entry" prompt.

EXTERNAL MENU MODE:

The information available in this mode is obtainable with the door closed or open as long as the vender is in normal mode, by entering the password which is set at 4, 2, 3, 1. Note: 4231 is the factory default and can be programmed to any four digit combination. Information available is historical cash counted, interval cash counted for each selection, historical sale (total number of vends), interval vends counted for each selection, error codes, and return. Refer to the

"Cash Counters", "Sales Counters", and "Error Codes" routines for instructions to move through the menus.

PROGRAMMING MENU**"Error Codes" - ERROR ROUTINE**

This function allows you to enter the error readout routine. "Error Codes" will appear when you press the service button on the control board. Press key number 4, if there have been no Error Codes since the last reset, the display will read "No Errors". If one or more Error Codes have occurred, the display will show the first error code that occurred. The following are error codes that may be displayed and detailed information accessed: "No Errors", "Vend Mechanism", "Control System", "Selection Switch", "Changer", "Bill Validator", "Card Reader", "Remote Vend Mech", "Selection/Display", "Refrigeration", "Health Timer".

Press key number 2 or 3 to scroll through any error codes that are present.

Important: If there is only one problem, it will be the only error code shown when you enter the error code submenus.

With an error code showing on the display, press key number 4 to access detailed information.

After making repairs with an error code showing on the display, press and hold key number 4 for 2 seconds will clear the error.

Press key number 1 to return to "Error Codes".

"Vend Mechanism" - Vend Mechanism Summary Error Codes

Press key number 4 and the display will show the following:

- "HORIZ", X (horizontal) motor issue.
- "VERT", Y (vertical) motor issue.
- "PICKI", picker home switch issue.
- "PICKO", picker out switch issue.
- "PICKRS", picker return spring issue.
- "PORT", port door switch/board issue.
- "VS", port vend sensor board issue.
- "XHOME", X (horizontal) motor home switch issue.
- "YHOME", Y (vertical) motor home switch issue.
- "MOTOR", port/delivery cup motor issue.

Press key number 1 will return to "Vend

Mechanism" if all vend mech Error Codes have not been cleared. If all vend mech Error Codes have been cleared the next error mode will be displayed, or "No Error Codes" if there are no Error Codes. Press key number 1 will return to "Error Codes".

"Control System" - Control System Summary Error Codes

Press key number 4 and the display will show one of the following:

- "Door Switch", indicating a door switch in the open position for more than 1 hour.
- "RAM Checksum", indicating the check sum for service mode settings memory has been corrupted.
- "Scale Factor", indicating a peripheral has introduced a scaling factor that is incompatible with current setting.
- "FRAM", memory module read/write error.
- "RTC", RTC read/write error, real time clock issue.
- "Low Battery", low battery issue.
- "PWROUT", power lost.

Press key number 1 will return to "Control System" if all control system Error Codes have not been cleared. If all control system Error Codes have been cleared the next error code will be displayed, or "No Error Codes" if there are no Error Codes. Press key number 1 will return to "Error Codes".

"CHANGER" - Changer Summary Error Codes

Press key number 4 and the display will show one of the following:

- "Changer Comm", indicating a changer communication error (No communication for more than 2 seconds).
- "Tube Sense", indicating a tube sensor error.
- "Changer Inlet", indicating an inlet chute blocked error (no coins sensed in acceptor for 96 hours).
- "Tube Jam #", indicating a tube jam error.
- "Changer ROM", indicating a changer ROM check sum error (failed changer).
- "Excessive Escrow", indicating excessive escrow attempts (more than 255 since last coin sensed).
- "Coin Jam", indicating a coin jam reported by coin mech.
- "Low Acceptance", indicating a low coin acceptance rate (less than 80%).
- "Acceptor Disconnected", indicating an acceptor is unplugged.
- "Coin Routing Err", indicating a coin was mis-routed.

Press key number 1 will return to "CHANGER" if all changer Error Codes have not been cleared. If all changer Error Codes have been cleared the next error code will be displayed or "No Error

Codes" if there are no Error Codes. Press key number 1 will return to "Error Codes".

"Bill Validator" - Bill Validator Summary Error Codes

Press key number 4 and the display will show one of the following:

- "Bill Val Comm" indicating a bill validator communication error (No communication for more than 5 seconds).
- "Bill Stack Full" indicating the bill stacker is full.
- "Bill Motor Error" indicating a defective motor in the validator.
- "Bill Jam" indicating a bill jam in the validator.
- "Bill Val ROM" indicating a check sum error.
- "Bill Stack Open" indicating an open stacker.
- "Bill Sense Err" indicating a bill validator sensor error.

Press key number 1 will return to "Bill Validator" if all changer Error Codes have not been cleared. If all validator Error Codes have been cleared the next error code will be displayed or "No Error Codes" if there are no Error Codes. Press key number 1 will return to "Error Codes".

"Card Reader" - Card Reader Summary Error Codes

Press key number 4 and the display will show one of the following:

- "Card Reader Comm", indicating no card reader communication for 5 seconds.
- "Card Reader #", indicating the most recent "non-transient error" from the card reader (failed card reader).

Press key number 1 will return to "Card Reader" if all changer Error have not been cleared. If all card reader Error Codes have been cleared the next error code will be displayed or "No Error Codes" if there are no Error Codes. Press key number 1 will return to "Error Codes". Press key number 2 will scroll to the next routine.

"OLM" - On Line Module Summary Error Codes

Press key number 4 and the display will show one of the following:

- "On Line Network", error reported by the OLM.
- "On Line Internal", error reported by the OLM.

Press key number 1 will return to "OLM" if all OLM Errors have not been cleared. If all OLM Error Codes have been cleared the next error code will be displayed or "No Error Codes" if there are no Error Codes. Press key number 1 will return to "Error Codes". Press key number 2 will scroll to the next routine.

“Remote Vend Mech” - Remote Vend Mechanism (USD) Error.

Press key number 4 and the display shows one of the following.

- “Remote Vend Comm #”, indicates no communication for 5 seconds with remote vend mech at address “#”.
- “Remote Vend #”, indicates error code number “#” from the remote vend mech at address “a”.

Press key number 1 will return to “Remote Vend Mech” if all remote vend mechanism Error Codes have not been cleared. If all remote vend mechanism Error Codes have been cleared the next error code will be displayed, or “No Error Codes” if there are no Error Codes. Press key number 1 will return to “Error Codes”. Press key number 2 will scroll to the next routine.

“SAT” – Satellite Device Error.

Press key number 4 and the display shows one of the following.

- “SATC”, satellite communication issue.
- “BADM”, bad motor reported.
- “MISM”, missing motor reported.

Press key number 1 will return to “SAT” if all SAT Error Codes have not been cleared. If all SAT Error Codes have been cleared the next error code will be displayed, or “No Error Codes” if there are no Error Codes. Press key number 1 will return to “Error Codes”. Press key number 2 will scroll to the next routine.

“Select/Display” - Selection / Display Device (ASD) Error

Press key number 4 and the display shows:

- “Select/Display Comm”, indicating no communication to selection / display device for five seconds.

Press key number 1 will return to “Select/Display” if all selection / display device Error Codes have not been cleared. If all selection / display device error have been cleared the next error code will be displayed or “No Error Codes” if there are no Error Codes. Press key number 1 will return to “Error Codes”. Press key number 2 will scroll to the next routine.

“Refrigeration” - Refrigeration Summary Error Codes

Press key number 4 and the display shows one of the following:

- “Temp Sense Err”, indicating the temperature sensor is defective or unplugged.
- “Temp Too Cold”, indicating the cabinet temperature is 3^oF below lower limit.
- “Temp Too Hot”, indicating the cabinet temperature is 3^oF above upper limit.

- “Not Cooling”, indicating the cooling system has failed to decrease temperature 1^oF per hour while the compressor is running.

- “Health Timer” – Health Timer Error

The initial pull down time has not met the health timer constraints. Refer to “Health Timer” section for details. Press and hold key number 4 for 2 seconds will clear the error and the display will show “No Error Codes”.

- “Health Code” – Health Code Error

The health code cooling constraints have not been met. Refer to “Health Timer” section for details. Press and hold key number 4 for 2 seconds will clear the error and the display will show “No Error Codes”.

Press key number 1 will return to “Refrigeration” if all refrigeration summary errors have not been cleared. If all refrigeration summary Error Codes have been cleared the next error code will be displayed, or “No Error Codes” if there are no Error Codes. Press key number 1 will return to “Error Codes”. Press key number 2 will scroll to the next routine.

“Coin Pay Out” - COIN PAYOUT ROUTINE

This function allows you to dump coins from the coin mechanism. Note: If a coin mech is not installed, you will not be able to enter the program to display information. Press key number 4 to enter mode and the lowest coin value dispensable will show on the display. Press key number 2 or 3 to scroll through the different coin values available. Press and hold key number 4 to dump the coins whose value is shown on the display. Press key number 1 will return to “Coin Pay Out”. Press key number 2 to scroll to the next routine.

“Tube Fill” - TUBE FILL ROUTINE

This function allows you to count the coins loaded in the top (separator) of the coin mech that will be routed to an inventory tube. Note: If a coin mech is not installed, you will not be able to enter the program to display information. Press key number 4 to enter mode and the total number of the coin type being loaded will be displayed and counted in the vender controller as they are accepted. The controller will inhibit the acceptance of any coin which does not go to a tube during this procedure. If a tube full status is detected, that coin type will be inhibited. When you finish loading all coins press key number 1 to return to “Tube Fill”. Press key number 2 to scroll to the next routine.

“Test Modes” - TEST ROUTINE

This function allows you to diagnose different functions of the vender. Press key number 4 and the display will show “Test vend”. For additional Dixie-Narco Factory Diagnostics refer to page 27. Press key number 2 or 3

to scroll through the test routines available. Press key number 1 to return to "Test Modes".

"Test Vend" - Vend Testing

This function allows you to test vend each column. Press key number 4 and the display will show "Column A1". Press key numbers 2 or 3 to scroll through the columns available to run in motor test. Press and hold the Power Interrupt (PI) switch. Press key number 4 to vend from the column displayed. Press key number 1 will return to "Test Vend". Press key number 2 to scroll to next test mode.

"Test Sel Switch" - Select Switch Test

This function allows you to test each selection. Press key number 4 and the display will show "Selection 4". Then press any key and the display will show the last key number pressed. Press and hold key number 1 for approximately 5 seconds will return to "Test Sel Switch". Press key number 2 to scroll to the next test mode.

"Test Display" - Display Test

This function allows you to test all segments in the display. Press key number 4 and a lower case alphabet will display, then turn off, then an upper case alphabet will display alternating until key number 1 has been pressed to return to "Test Display". Press key number 2 to scroll to next test mode.

"Test Relays" - RELAY TEST

This function allows you to test the relay electronic control of the compressor ("Compressor #"), the evaporator fan(s) ("Fan #"), and the sign front light ("Light#").

CAUTION: Disconnect power to the compressor before testing the compressor relay. Failure to disconnect power to the compressor before testing the relay could result in damaging the compressor.

Press key number 4 and the display will show "Compressor #", where # is the state of the relay - 0 = not activated or off, 1 = activated or on. Press key number 4 to toggle the relay on and off. Press key number 2 to scroll to "Fan #", where # is the state of the relay - 0 = not activated or off, 1 = activated or on. Press key number 4 to toggle the fan(s) on and off. Press key number 2 to scroll to "Light #", where # is the state of the relay - 0 = not activated or off, 1 = activated or on. Press key number 4 to toggle the lights on and off. Press key number 1 to return to "Test Modes". Press key number 2 to scroll to "Password Entry".

*** "Password Entry" - PASSWORD ROUTINE**

This function allows you to enter the following routines which are not accessible until the operator enters a password, which is set as 4-2-3-1. To enter the password, press key number 4 until the display goes blank. Then press key number 2, then 3, then 1, and then 4, and "Cash Counters" should appear on the display. If not entered properly, the display will return to "Password Entry" after approximately 16 seconds. If entered correctly, the display will go to the next function "Cash".

*** "Cash Counters" - CASH COUNTER ROUTINE**

This function will show the user the vender historical total cash counted and the interval cash counted for each selection for the vender. Press key number 4 and "Cash Tot"/"#####.##" will show on the display where the 8"# characters are the historical total cash counters that have been recorded. Note: Leading zeros are not displayed. Example: Display flashes "Cash Tot", then "262500". This is \$2625.00 historical total cash. Press key number 2 to scroll to "Card Tot"/"#####.##", where the 8"# characters are the historical card reader cash counters. Note: Leading zeros are not displayed. Press key number 2 or 3 to display "Cash Sel A1"/"#####.##" where the 8"# characters are the interval cash counters for that selection. Note: Leading zeros are not displayed. Pressing key number 2 or 3 at this time will scroll through the available selection cash counters. Example: Display flashes "Cash Sel A1", then "520.50". This is \$520.50 interval cash for selection A1. Press key number 1 to return to "Cash Tot"/"#####.##". Press key number 1 to return to "Cash Counters". Press key number 2 to scroll to the next routine.

*** "Sales Counters" - SALES COUNTER ROUTINE**

This function will show the user the vender historical total number of vends and the interval vends counted for each selection for the vender. Press key number 4 and "Sales Tot"/"#####" will show on the display where the 8"# characters are the historical total vend counters that have been recorded. Note: Leading zeros are not displayed. Example: Display flashes "Sales Tot", then "1325". This is 1325 historical vends. If in a BevMax 4 with a Snack Vender attached you will also have available Drink Sales # & Snack Sales #. Press key number 2 to display Drink Sales # (if Snack Vender attached). Press key number 2 to display Snack Sales # (if Snack Vender attached). Press key number 2 to display "Sales Sel A2"/"#####", where the 8"# characters are the interval vend counters for that selection. Note: Leading zeros are not displayed. Pressing key number 2 or 3 at

this time will scroll through the available selection vend counters. Example: Display flashes "Sales Sel A1" then "145". This is 145 interval vends counted for selection A1. Pressing key number 1 will return to "Sales Tot"/"#####". Press key number 1 to return to "Sales Counter". Press key number 2 to scroll to the next routine.

"Price Mode"- This function will only display if "EXE" is turned on in the "Coke Factory Setup" mode.

This function is used to set the price mode to either VMC holding the prices or the EXE Coin Mech holding the prices. Press Key 4 to enter menu. The current setting is displayed as "Price Holding: On" or "Price Holding Off". Press key 2 to select the desired price mode On or Off. Press key 4 to confirm setting. Press key 1 to exit menu.

Note: If Price mode is set for "Price Holding", then the Price Program will allow the user to set the price lines for each selection. It will operate the same as setting prices, except the user will be prompted to set a price line rather than a price.

"Price Program" - PRICE SETTING ROUTINE

This function allows the user to set pricing. When Configuration Code 1 is programmed to "Config 1 0" the vender is set for single price vending. When Configure Code 1 is set to "Config 1 1", the vender is set for multi-pricing (or a price for each selection needs to be set). Note: This routine is lockable when using a data collection device.

Single Price price setting:

Press key number 4 "Single Price" will show on display. Press the "4" key and "Price Sel #.##" will show on display. Press key "2" to increase the vend price or key "3" to decrease the vend price. With the display showing the vend price you require, press key "4" to save. All selections will be set to vend at the saved vend price.

Multiprice price setting:

Press key 4 and display will show "All Selections". Press key 2 to scroll from "All Selections" to individual tray selections "A, B, C, D, E". With the display showing the All settings of the tray you wish to set price in press the key 4 to enter. At "All Selections" when you press 4 and enter the display will show "#.##" or current price set. Press key "2" to increase the vend price or key "3" to decrease the vend price. With the display showing the vend price you require, press key "4" to save. If you select an individual tray letter to set price in, when you press 4 and enter the display will show "All Selections (for tray A only)". Press key 2 to scroll to A1 thru A9 then back to All Selections (for A tray only)". At the position you wish to set price when you press 4 and enter the

display will show "#.##" or current price set. Press key "2" to increase the vend price or key "3" to decrease the vend price. With the display showing the vend price you require, press key "4" to save.

Factory default setting is "Single Price". Press key number 1 to return to "Price Program". Press key number 2 to scroll to the next routine.

Price line setting:

This function will only display if Price Holding: On" is set. It will operate the same as setting prices except the user will be prompted to set a price line rather than a price.

IMPORTANT: If Enable Snack Vender is set to "1" or on the vender must be set for Multiprice price setting. When scrolling through to select where to set prices you will see the following; "All Drink Selections, A, B, C, D, E, and then All Snack Selections. At "All' Snack Selections" Press key 2 to scroll from "All Snack Selections" to individual tray selections "21, 22, 23, 24,25, 26". With the display showing the setting of the tray you wish to set price in press the key 4 to enter. At "All' Selections" when you press 4 and enter the display will show "#.##" or current price set. Press key "2" to increase the vend price or key "3" to decrease the vend price. With the display showing the vend price you require, press key "4" to save. If you select an individual tray number to set price in, when you press 4 and enter the display will show "All Selections (for tray 21 only)". Press key 2 to scroll to 211 thru 21# then back to All Selections (for 21 tray only)". At the position you wish to set price when you press 4 and enter the display will show "#.##" or current price set. Press key "2" to increase the vend price or key "3" to decrease the vend price. With the display showing the vend price you require, press key "4" to save.

"View PL Assignments"- This function will only display when EXE in the "Coke Factory Setup" is turned on.

This function allows the user to see which selections are assigned to which price lines. Even if price holding is turned off, this menu will show what the price line assignments will be when price holding mode is enabled. To enter this menu press key 4. Press key 2 to scroll through the price lines 0-100. Press key 1 to exit menu.

"View PL Value"- This function will only display when EXE in the "Coke Factory Setup" is turned on.

This menu allows the user see the value of each Price line held by the EXE coin mech. In order to

see this value, the "Display Price" feature on the EXE coin mech must be turned on.

Note: If no price is programmed in the EXE coin mech for the requested price line, or if the "Display Price" feature is not turned on in the Coin Mech this menu will show "not available". Enter this menu by pressing key 4. Press key 2 or key 3 to select the desired price line. Press key 4, the display will show "requesting.". After the EXE Coin Mech has responded with the value of the price line, it will be shown. If the EXE CM does not respond with the value, then "not available" will be shown. Press key 2 or 3 to select another price line or press 1 to exit menu.

"Quick Payback"- This function will only display when EXE in the "Coke Factory Setup" is turned on.

This menu allows the user to set the VMC to pay back change immediately after a vend is requested. With this option set, the price of the vend is always deducted from the available credit after a selection is made, even if the vender fails to deliver the selected item. To enter this menu press key 4. The current setting will display as "Quick Payback; On or "Quick Payback Off". Press key 2 to select the desired mode ON or OFF. Press key 4 to confirm. Press key 1 to exit menu.

"StS Programming" – SPACE TO SALES ROUTINE

This function allows you to change the space to sale settings. Press key number 4 and "Option #" or "Custom StS" will show on the display, which indicates the current space to sales option. For the 7 options available, see list below. Press key number 2 to scroll through the options. Press key number 4 with the desired option showing on the display to save that option and return to "StS Programming".

Space to Sales Options:

- "Option 1" 1 to 1 = Columns are assigned to selections with the same number.
- "Option 2" Tray = Full tray assigned.
Example: selections A1 thru A9 vend from columns A1 thru A9 sequentially.
- "Option 3" Half Tray = Half tray assigned.
Example: selections A1 thru A5 vend from columns A1 thru A5 sequentially and selections A6 thru A9 vend from columns A6 thru A9 sequentially.
- "Option 4" Groups of 3 = Groups of 3 columns are assigned sequentially to work with associated selections.
Example: selections A1 thru A3 vend from columns A1 thru A3

- sequentially.
- "Option 5" Combined groups of 2 & 3 = Selection grouping per tray will be assigned columns 1 & 2; 3 & 4; 5 & 6; 7, 8, & 9 working with associated selections.
- "Option 6" Combined groups of 3 = Selection grouping per tray will be assigned columns 1, 2, & 3; 4 & 5; 6 & 7; 8 & 9 working with associated selections.
- "Custom StS" Custom space to sales = Allows you to assign columns in blocks working with associated selections.

With "Custom StS" showing, press key number 4 and "Clear Settings?" will show on display. Press key number 4 and wait a few seconds will clear the current space to sale settings. Press key number 1 will return to "Custom StS". Press key number 4 and wait a few seconds will show "Selection A1" alternating with columns assigned to blocks. Press key number 4 will show "First?A1" or the individual selection to start a block. Press key number 3 to scroll to "First?E9" or the largest selection available. Press key number 4 will show "Last?A1" or the last column for custom space to sales blocks. Press key number 2 will show "Last?A1" or the largest column for custom space to sales blocks available. Press key number 4 will show "Save Setting?" Press key number 4 will save the new settings.

*** "Config Switches" - MACHINE CONFIGURATION**

This function allows the user to access and change the programming of the following machine configuration settings. Note: This routine is lockable when using a data collection device. If you press key number 4 and the display shows "Locked Menu", this means configuration setting changes will not be allowed. If "Config 1" is displayed, then configuration setting changes will be allowed. "Locked Menu" can only be enabled or disabled through DEX interrogation. If "Config 1" is displayed, the listed settings are available. Note: You must press key number 4 with the configuration code displayed if you wish to enter the edit mode. The "0" or "1" will be flashing to acknowledge you are in the edit mode.

IMPORTANT: All machine configuration codes are disabled coming from the factory (Config # 0).

Config 1 - Configuration Switch 1 - Multi-Price Setting Mode

This code is used to enable the single price mode "Config 1 0" or multi-price mode "Config 1 1". Press key number 4 and "Config 1 #" will be displayed, with the "#" flashing. Press key numbers 2 or 3 to scroll between "Config 1 0"

and "Config 1 1". Press key number 4 with the display flashing the setting you wish to use. Press key number 1 to return to "Config 1". Press key number 2 to scroll to "Config 2".

Config 2 - Configuration Switch 2 - Optional Features Enable

This code is used to allow (Config 2 1) the following optional features to be displayed and enabled: "Lighting Control", "Select Discount", "Over-ride Switch", "Select Block 1", and "Select Block 2". Press key number 4 and "Config 2 #" will be displayed with the # flashing. Press key numbers 2 or 3 to scroll between "Config 2 0" and "Config 2 1". Press key number 4 with the display flashing the setting you wish to use. Press key number 1 to return to "Config 2". Press key number 2 to scroll to "Config 3".

Config 3 - Configuration Switch 3 - POS Message

This code is used to disable the point of sale message. Config 3 0 = enabled, Config 3 1 = disabled. Press key number 4 and "Config 3 #" will be displayed, with the # flashing. Press key numbers 2 or 3 to scroll between "Config 3 0" and "Config 3 1". Press key number 4 with the display flashing the setting you wish to use. Press key number 1 to return to "Config 3". Press key number 2 to scroll to "Config 4".

Config 4 - Configuration Switch 4 - Automatic Viewing of Historical Sales and Cash

Accounting, Error Codes or No Error Codes
This code is used to enable viewing of historical sales, historical cash, Error Codes or No Errors automatically when the door is opened. To enable automatic viewing option enter "Config 1"; to disable enter "Config 4 At "Config 4 0" Error Codes or No Errors automatically displays when the door is open. Press key number 4 and "Config 4 #" will be displayed, with the # flashing. Press key number 2 or 3 to scroll between "Config 4 0" and "Config 4 1". Press key number 4 with the display flashing the setting you wish to use. Press key number 1 to return to "Config 4". Press key number 2 to scroll to "Config 5".

Config 5 - Configuration Switch 5 – Door

Switch Reset Status

This code is used to reset all interval data when the door switch is cycled and at least one data register is read via the display when set at "Config 5 1" or to reset all interval data only when the "RESET" command is received via handheld or portable computer when set at

"Config 5 0". Press key number 4 and "Config 5 #" will be displayed, with the # flashing. Press key numbers 2 or 3 to scroll between "Config 5 0" and "Config 5 1". Press key number 4 with the display flashing the setting you wish to use. Press key number 1 to return to "Config 5". Press key number 2 to scroll to "Config 6".

Config 6 - Configuration Switch 6 - Reserved
this code is reserved for future use. Press key number 2 to scroll to "Config 7".

Config 7 - Configuration Switch 7 - Save Credit

This code is used to determine how long a credit will be saved. C7 0 will save the credit for five minutes. Config 7 1 will save the credit indefinitely. Press key number 4 and "Config 7 #" will be displayed, with the # flashing. Press key number 2 or 3 to scroll between Config 7 0 and Config 7 1. Press key number 4 with the display flashing the setting you wish to use. Press key number 1 to return to "Config 7". Press key number 2 to scroll to "Config 8".

Config 8 - Configuration Switch 8 - Force Vend

This code is used to determine escrow to select or escrow to price. Config 8 0 will set vender to escrow to select and Config 8 1 will set vender to escrow to price. Press key number 4 and "Config 8 #" will be displayed, with the # flashing. Press key number 2 or 3 to scroll between Config 8 0 and Config 8 1. Press key number 4 with the display flashing the setting you wish to use. Press key number 1 to return to "Config 8". Press key number 2 to scroll to "Config 9".

Config 9 - Configuration Switch 9 - Multi Vend

This code is used to allow multiple vends without re-depositing funds. Config 9 0 will not allow multiple vends and Config 9 1 will allow multiple vends. Press key number 4 and "Config 9 #" will be displayed, with the # flashing. Press key number 2 or 3 to scroll between Config 9 0 and Config 9 1. Press key number 4 with the display flashing the setting you wish to use. Press key number 1 to return to "Config 9". Press key number 2 to scroll to "Config 10".

Config 10 - Configuration Switch 10 - Bill Escrow Inhibit

This code is used to allow last bill that meets or exceeds maximum vend price to be held in escrow. Config 10 0 will escrow bill and Config 10 1 will not escrow bill (or stack the bill). Press key number 4 and "Config 10 #" will be displayed, with the # flashing. Press key

number 2 or 3 to scroll between Config 10 0 and Config 10 1. Press key number 4 with the display flashing the setting you wish to use. Press key number 1 to return to "Config 1 0". Press key number 2 to scroll to the next configuration code. Press key number 1 to return to "Config Switches". Press key number 2 will scroll to next routine.

***Correct Change" - CORRECT CHANGE ONLY CONTROL ROUTINE

This function is used to allow consumer overpay, set a correct change value, and set an unconditional acceptance value. Press key number 4 will enter "ConsumerOverpay#".

"ConsumerOverpay #" - Allow Consumer Overpay

This function allows the vender to vend with the risk of not being able to return the full amount of change. This function has to be turned on to be able to allow consumer overpay. Press key number 4 and display will show "ConsumerOverpay #", where "#" is flashing. "ConsumerOverpay1" will allow consumer overpay (customer could potentially be shortchanged) and "ConsumerOverpay0" will not allow consumer overpay (will not allow customer to be shortchanged). Press key number 2 or 3 to scroll between "ConsumerOverpay0" and "ConsumerOverpay1". Press key number 4 with the display blinking the setting you wish to use. Display will return to "ConsumerOverpay#". Press key number 2 to scroll to "Corr Chg value".

"Corr Chg Value" - Correct Change Value

This is the function that the control board will use to set a value which will turn on the correct change indicator. Note: If "Uncond Accept" is set, the "Corr Chg Value" should be equal to or less than the "Uncond Accept". Note: If the value set is 00.00, the correct change indicator will never come on.

If the controller determines that it cannot return the exact amount of the correct change value or any value less than it, then the indicator will be turned on. Press key number 4 and the display will show "###.###". Press key number 2 or 3 to scroll from 00.00 to 99.99. Press key number 4 with the display showing the value you wish to use. Display will return to "Corr Chg Value". Press key number 2 to scroll to "Uncond Accept".

"Uncond Accept" - Unconditional Acceptance Value

This is the function that the control board will use to set the largest value of any single form

or currency (coin or bill) that can be accepted without having enough change to pay back the full amount. Press key number 4 and the display will show "###.###". Press key number 2 or 3 to scroll from 00.00 to 99.95. Press key number 4 with the display showing the value you wish to use. Display will return to "Uncond Accept". Press key number 1 to return to "CorrectChange". Press key number 2 to scroll to next routine.

***Preview Password" - PREVIEW DATA PASSWORD ROUTINE

This function is used to enable viewing of cash collected, product sales, and error codes without opening the door. To view the data the 4 digit password (4-2-3-1) must be entered. Once entered the "Cash Counters", "Sales Counters", "Error Codes", and "Return to Sales" menus are available from the front of the vender. To view, follow instructions for cash counter routine, sales counter routines, error routine and return.

To change "Preview Password" password:

At "Preview Password" press key number 4, "####" (representing current four digit password) will show on display with the far left digit blinking. Press key number 2 to scroll to number desired for password. Press key number 4. The next digit will start blinking, press key number 2 to scroll to number desired for password. Press key number 4. Continue this process until all 4 digits are set. Then press key number 4 and the display will return to "Preview Password" and the new password has been saved. Pressing key number 1 at anytime during this routine will return to "Preview Password" with no changes to password occurring. Press key number 2 to scroll to next routine.

***Language Select" - LANGUAGE ROUTINE

This function is used to set the language that will be used for display messages. Note: This does not change the menu prompts. Press key number 4 and the display will show the language currently set in the controller. Press key number 2 or 3 to scroll through the languages available.

| | |
|---------|-------------------|
| English | Spanish |
| French | Italian |
| German | Русский (Russian) |

With the language you wish to enter showing on the display, press key number 4. The display will return to "Language Select". Press key number 2 to scroll to next routine.

****Time Programming” – TIME AND DATE ROUTINE**

This function is used to set the year, month, date, and hour (military 24 hour clock). Press key number 4 and "Enable #" will show on display.

"Enable #" - Time and Date Enable Routine
Press key number 4 and Enable 0 = disabled or Enable 1 = enabled will show on display. Press key number 2 to scroll between Enable 0 and Enable 1. Press key number 4 with the display showing the setting you wish to use and display will return to "Enable #". Press key number 2 to scroll to "Year".

"Year" - Year Setting (00 to 99)
Press key number 4 and the current year setting will show on display. Press key number 2 or 3 to change the last 2 digits of the year (00 to 99). Press key number 4 with the display showing the year you wish to use and display will return to "Year". Press key number 2 to scroll to "Month".

"Month" - Month Setting (01 to 12)
Press key number 4 and the current 2 digit month setting will show on display. Press key number 2 or 3 to change the month (01 to 12). Press key number 4 with the display showing the month you wish to use and display will return to "Month". Press key number 2 to scroll to "Day".

"Day" - Day of Month Setting (1 to 31)
Press key number 4 and the current 2 digit day of month setting will show on display. Press key number 2 or 3 to change the day of month (1 to 31). Press key number 4 with the display showing the day you wish to use and display will return to "Day". Press key number 2 to scroll to "Hour".

"Hour" - Hour and Minute Setting (0000 to 2359)
Press key number 4 and the current 4 digit hour and minute setting will be displayed (24 hour). The hour setting will be blinking to indicate it can be changed. Press key number 2 or 3 to change the hour setting.

Press key number 4 to save and the minute setting will start blinking to indicate it can be changed. Press key number 2 or 3 to change the minute setting. Press key number 4 will save and return display to "Hour". Press key number 2 to scroll to "Daylight Savings".

"Daylight Savings" - Daylight Saving Time Setting

This function is used to set the preferred daylight savings time setting. Press key number 4 will display the current setting. Press key number 2 or 3 to scroll through the "Daylight savings" options listed:

- "OFF", no daylight savings time changes

made.

- "Australia", Australian rules - Set forward 1 hour at 1:00 am on the first Sunday in October; Set backward 1 hour at 1:00 am on the last Sunday in March.

- "Europe", European rules - Set forward 1 hour at 1:00 am on the last Sunday in March; Set backward 1 hour at 1:00 am on the last Sunday in October.

- "North America", North American rules - Set forward 1 hour at 2:00 am on the second Sunday in March; Set backward 1 hour at 2:00 am on the first Sunday in November.

Press key number 4 with the display showing the setting you wish to use and display will return to "Daylight Savings". Press key number 1 to return to "Time Programming". Press key number 2 to scroll to next routine.

****Lighting Control” - LIGHTING CONSERVATION CONTROL ROUTINE (Config 2 Must Be Enabled – Config 2 1)**

This function is used to turn the lights off and on during certain periods of the day. Press key number 4 will enter "Enable #".

"Enable #" - Lighting Conservation Control Enable Routine

This function is used to disable Lighting Conservation Control "Enable 0" (lights will be on at all times) or enable Lighting Conservation Control "Enable 1" (lights can be set to turn off). Press key number 4 and the current "Enable #" setting will be displayed. Press key number 2 or 3 to scroll between "Enable 0" and "Enable 1". Press key number 4 with the display showing the setting you wish to use. Press key number 2 to scroll to "Start Time".

"Start Time" - Start Lighting Conservation Setting (lights off)

This function is used to set the days and time to start light conservation when "Enable 1" is selected. Press key number 4 and "Start Day" will show on the display.

"Start Day" - Day to Start Setting

This function is used to set the days of the week to start light conservation. Press key number 4 and "XXXXXX#" will show on the display, where XXXXXX will be the day of the week (i.e. Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday, Every day) and # is 0 = disable, 1 = enable. With the display showing the day you wish to set press key number 4. The # will start blinking. Press key number 2 or 3 to scroll between "XXXXXX0" and "XXXXXX1". Press key number 4 with the display showing the setting

you wish to use. Display will return to "XXXXXX#". Press key number 2 to scroll to the next day to set or press key number 1 to return to "Start Day". Press key number 2 to scroll to "Start Hour".

"Start Hour" - Start Hour and Minute Setting
This function is used to set the hours to start light conservation (lamps off). Press key number 4 and "hhmm" will show on the display, where "hh" is the hour (military time) and "mm" is the minute. "hh" will be blinking, indicating the hour setting may be changed. Press key number 2 to scroll from 00 to 23. With the display showing the hour you wish to start light conservation, press key number 4. "mm" will start blinking, indicating the minute setting may be changed. Press key number 2 to scroll from 00 to 59. With the display showing the minute you wish to start light conservation, press key number 4. The display will return to "Start Hour". Press key number 1 to return to "Start Time". Press key number 2 to scroll to "Stop Time".

"Stop Time" - Stop Light Conservation Setting (lights on)

This function is used to set the days and time to stop light conservation. Press key number 4 and "Stop Day" will show on the display.

"Stop Day" - Day to Stop Setting

This function is used to set the days of the week to stop light conservation and can be set in the same manner as Day to Start Setting.

"Stop Hour" - Stop Hour and Minute Setting

This function is used to set the hours and minutes to stop light conservation and can be set in the same manner as Start Hour and Minute Setting. Press key number 1 to return to "Stop Time". Press key number 1 to return to "Lighting Control". Press key number 2 to scroll to next routine.

****Refrigeration" - REFRIGERATION ROUTINE**

This function is used to electronically control the refrigeration operations of the vender. Press key number 4 will enter "Enable #".

"Enable #" - Energy Conservation Enable Routine

This function is used to disable Energy Conservation "Enable 0" or enable Energy Conservation "Enable 1". When enabled the cabinet temperature will be allowed to rise to the programmed storage level ("Storage") during the following programmed time blocks. Press key number 4 and the current "Enable X" setting will be displayed. Press key number 2 or 3 to scroll between "Enable 0" and "Enable 1". Press key number 4 with the display showing the setting you

wish to use. Press key number 2 to scroll to "Start".

"Start Time" - Start Energy Conservation

This function is used to set the days and time to start Energy Conservation when "Enable 1" is selected. Press key number 4 and "Start Day" will show on the display.

"Start Day" - Day to Start Setting

This function is used to set the days of the week to start Energy Conservation.

Press key number 4 and "XXXXXX#" will show on the display, where XXXXXX will be the day of the week (i.e. Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday, Every day) and # is 0 = disable, 1 = enable. With the display showing the day you wish to set press key number 4. The # will start blinking. Press key number 2 or 3 to scroll between "XXXXXX0" and "XXXXXX1". Press key number 4 with the display showing the setting you wish to use. Display will return to "XXXXXX#". Press key number 2 to scroll to the next day to set or press key number 1 to return to "Start Day". Press key number 2 to scroll to "Start Hour".

"Start Hour" - Start Hour and Minute Setting

This function is used to set the hours to start Energy Conservation. Press key number 4 and "hhmm" will show on the display, where "hh" is the hour (military time) and "mm" is the minute. "hh" will be you wish to start Energy Conservation, press key number 4. The display will return to "Start Hour". Press key number 1 to return to "Start Time". Press key number 2 to scroll to "Stop Time".

"Stop Time" - Stop Energy Conservation

This function is used to set the days and time to stop energy conservation when "Enable 1" is selected. Press key number 4 and "Stop Day" will show on the display.

"Stop Day" - Day to Stop Setting

This function is used to set the days of the week to stop energy conservation and can be set in the same manner as "Start Day" and "Start Hour".

"Start Hour" - Stop Hour and Minute Settings

This function is used to set the hours and minutes to stop energy conservation and can be set in the same manner as "Start Hour". Press key number 1 to return to "Stop Time". Press key number 2 to scroll to "Degrees".

"Degrees F(C)" - Degree Fahrenheit / Celsius Setting Routine

This function is used to set the degree reading to Fahrenheit (Degrees F) or Celsius (Degrees C). Press key number 4 and "Degrees X", where the current setting (X) will be blinking.

Press key number 2 or 3 to scroll between Degrees F and Degrees C. Press key number 4 with the display blinking the setting you wish to use. Press key number 1 to return to "Degrees".

Press key number 2 to scroll to "Setpoint".

"Setpoint" - Set Point Control Routine (Default Temperature 35.0^o F)

This function is used to set the average product temperature for initial pull down and reload recovery. Press key number 4 and "tt.x" will show on the display where x is F (Fahrenheit) or C (Celsius) and tt.t is the degrees.

Press key number 2 to increase or 3 to decrease the number by 1^o F or 0.5^o C. With the display showing the set point temperature you wish to use, press key number 4.

Press key number 2 to scroll to "Storage".

"Storage" - Storage Setting Routine (Default Temperature 60.0^o F / 15.5^o C)

This function is used to set the temperature for product storage and is used when Energy Conservation is enabled. Press key number 4 and "tt.x" will show on display when X is F (Fahrenheit) or C (Celsius) and tt.t is the degrees. Press key number 2 to increase and 3 to decrease the number by 1^o F or 0.5^o C.

With the display showing the storage setting you wish to use, press key number 4. Press key number 2 to scroll to "Display X".

"Display #" - POS Temperature Display Enable Routine

This function is used to enable the POS Temperature to be displayed following the "Ice Cold COCA-COLA" POS message.

Press key number 4 and "Display X" will show on the display where x is the current setting.

With "X" blinking, press key number 2 or 3 to scroll between "Display 0" disabled or not displayed and "Display 1" enabled or displayed. With the display showing the setting you wish to use, press key number 4. Press key number 1 to return to

"Refrigeration". Press key number 2 to scroll to next routine.

*****Select Block 1" - BLOCK SELECTION BANK 1 ROUTINE (Config 2 must be enabled – Config 2 1)**

This function is used to set selections which will be blocked during certain periods of the day. Press key number 4 will enter "Enable X".

"Enable X" - Blocking Enable Routine

This function is used to disable blocking "Enable 0" or enable blocking "Enable 1". When enabled, active selections will not be allowed to vend on the days and times programmed. Press key number 4 and the current "Enable" setting will be displayed.

Press key number 2 or 3 to scroll between "Enable 0" and "Enable 1". Press key number 4 with the display blinking the setting you wish to use. Display will return to "Enable X". Press key number 2 to scroll to "Start Time".

"Start Time" - Start Selection Blocking Routine

This function is used to set the day(s) and time to start selection blocking. Press key number 4 and "Start Day" will show on the display.

"Start Day" - Day of Week Start Setting

This function is used to set the day(s) of the week to start selection blocking. Press key number 4 and "XXXXXX#" will show on the display, where XXXXXX will be the day of the week (i.e. Monday, Tuesday, Wednesday, Thursday,

Friday, Saturday, Sunday, Every day) and # is 0 = disable, 1 = enable. With the display showing the day you wish to set press key number 4. The # will start blinking. Press key number 2 or 3 to scroll between "XXXXXX0" and "XXXXXX1."

Press key number 4 with the display showing the setting you wish to use. Display will return to "XXXXXX#". Press key number 2 to scroll to the next day to set or press key number 1 to return to "Start Day". Press key number 2 to scroll to "Start Hour".

"Start Hour" - Start Hour and Minute Setting
This function is used to set the hours and minutes to start selection blocking. Press key number 4 and "hhmm" will show on the display, where hh is the hour (military time) and mm is the minute. "hh" will be blinking, indicating the hour setting may be changed. Press key number 2 to scroll from 00 to 23. With the display showing the hour you wish to start selection blocking, press key number 4. "mm" will then start blinking, indicating the minute setting may be changed. Press key number 2 to scroll from 00 to 59. With the display showing the minute you wish to start selection blocking, press key number 4. The display will return to "Hour". Press key number 1 to return to "Start Time". Press key number 2 to scroll to "Stop Time".

"Start Hour" - Start Hour and Minute Setting

This function is used to set the hours and minutes to start selection blocking. Press key number 4 and "hhmm" will show on the display, where hh is the hour (military time) and mm is the minute. "hh" will be blinking, indicating the hour setting may be changed. Press key number 2 to scroll from 00 to 23. With the display showing the hour you wish to start selection blocking, press key number 4. "mm" will then start blinking, indicating the minute setting may be changed. Press key number 2 to scroll from 00 to 59. With the display showing the minute you wish to start selection blocking, press key number 4. The display will return to "Hour". Press key number 1 to return to "Start Time". Press key number 2 to scroll to "Stop Time".

Press key number 2 to scroll to "Stop Time".

"Stop Time" - Stop Selection Blocking Routine

This function is used to set the day(s) and times to stop selection blocking. Press key number 4 and "Stop Day" will show on the display.

"Stop Day" - Day of Week Stop Setting

This function is used to set the days of the week to stop selection blocking and can be set in the same manner as Day of Week Start Setting.

"Stop Hour" - Stop Hour and Minute Setting

This function is used to set the hours and minutes to stop selection blocking and can be set in the same manner as Start Hour and Minute Setting.

Press key number 1 to return to "Stop Time".

Press key number 2 to scroll to "Selection".
"Selection" - Selection to Be Affected By Blocking
 This function is used to set selection(s) which will be blocked during certain periods of the day. Press key number 4 and "Select A1 #" will be displayed, where # is the current setting for the selection number displayed. 0 = disabled; 1 = enabled. Press key number 2 to scroll to the key number setting you desire to change. Press key number 4 with the key number showing you wish to change (i.e. Select A1 #) and the # will start blinking. Press key number 2 or 3 to scroll between Select A1 0 and Select A1 1. Press key number 4 with the display showing the setting you wish to use. Display will return to Select A1 #. Press key number 1 to return to "Selection".

Press key number 2 to scroll to "Lighting #".
"Lighting #" - Lighting / P.O.S. Display Control
 This function is used to turn the lights (if supported) and P.O.S. Display Message off during selection blocking period 1. 0 = disable or on; 1 = enable or off. Press key number 4 and the "# will start flashing. Press key number 2 or 3 to scroll between "Lighting 0" and "Lighting 1". Press key number 4 with the display showing the setting you wish to use. Display will return to "Lighting X". Press key number 1 to return to "Select Block 1". Press key number 2 to scroll to "Select Block 2".

****Select Block 2" - BLOCK SELECTION BANK 2 ROUTINE**

This function is a second set used to set selection(s) which will be blocked during certain periods of the day. Press key number 4 will enter "Enable X".

"Enable X" - Blocking Enable Routine.

Set this function using instruction for "Enable X" in "Select Block 1".

"Start Time" - Start Selection Blocking Routine

This function is used to set the day(s) and times to start selection blocking. Press selection button 4 and "Start Day" will show on the display.

"Start Day" - Day of Week Start Setting

Set this feature using instructions for "Select Block 1", "Start Time", "Start Day".

"Start Hour" - Start Hour and Minute Setting

Set this function using instructions for "Select Block 1", "Start Time", "Start Hour".

"Stop Time" - Stop Selection Blocking Routine.

This function is used to set the day(s) and times to stop selection blocking. Press key number 4 and "Day" will show on the display.

"Day" - Day of Week Stop Setting

Set this function using instructions for "Select Block 1", "Stop Time", "Stop Day".

"Hour" - Stop Hour and Minute Setting

Set this function using instructions for "Select Block 1", "Stop Time", "Stop Hour". Press key number 1 to return to "Stop Time".

Press key number 2 to scroll to "Selection".
"Selection" - Selection to Be Affected By Blocking
 This function is used to set selection(s) which will be blocked during certain periods of the day. Set this function using instructions for "Select Block 1", "Selection". Press key number 1 to return to "Selection".

Press key number 2 to scroll to "Lighting #".

"Lighting #" - Lighting / P.O.S. Display Control

This function is used to turn the lights (if supported) and P.O.S. Display Message off during selection blocking period 2. Set this function using instructions for "Select Block 1", "Lighting". Press key number 1 to return to "Select Block 2". Press key number 2 to scroll to "Select Discount".

****Select Discount" - DISCOUNT SETTING ROUTINE**

This function is used to set the day(s) and times to allow discount prices. Press key number 4 and Enable # will show on the display.

"Enable #" - Discount Setting Enable Routine

This function is used to disable discounting "Enable 0" or enable discounting "Enable 1". Press key number 4 and the current "Enable X" setting will be displayed. Press key number 2 or 3 to scroll between "Enable 0" and "Enable 1". Press key number 4 with the display blinking the setting you wish to use. Display will return to "Enable X". Press key number 2 to scroll to "Start Time".

"Start Time" - Start Discount Pricing

This function is used to set the day(s) and times to start discount prices. Press key number 4 and "Start Day" will show on the display.

"Start Day" - Day of the Week Start Setting

Set this feature using instructions for "Select Block 1", "Start Time", "Start Day".

"Start Hour" - Start Hour and Minute Settings

Set this feature using instructions for "Select Block 1", "Start" Time, "Start Hour".

"Stop Time" - Stop Discount Pricing

This function is used to set the day(s) and times to stop discount prices. Press key number 4 and "Stop Day" will show on the display.

"Stop Day" - Day to Stop Setting

Set this feature using instructions for "Select Block 1", "Stop Time", "Stop Day".

"Hour" - Stop Hour and Minute Setting

Set this function using instructions for "Select Block 1", "Stop Time", "Stop Hour".

"Selection" - Selection Affected by Discount Pricing

This function is used to set selection(s) which will be affected by discount prices. Press key number 4 and "Select A1 #" will be displayed, where # is the current setting for the selection number displayed. 0 = disabled, 1 = enabled. Press key number 2 to

scroll to the key number you desire to change. Press key number 4 with the key number showing you wish to change (i.e. Select A1 #) and the # will start blinking. Press key number 2 or 3 to scroll between "Select A1 0" and "Select A1 1". Press key number 4 with the display showing the setting you wish to use. Display will return to "Select A1 1". Press key number 1 to return to "Selection". Press key number 2 to scroll to "Less Amount".

"Less Amount" - Discount Amount (Price)
This function is used to set the discount amount (price) for selection(s) and times set. Press key number 4 and "##.##" will be displayed, where "##.##" is the current discount price that is set. Press key number 2 or 3 to change the price (00.00 to 99.99). Press key number 4 with the display showing the price setting you wish to use. Display will show price. Press key number 1 to return to "Less Amount". Press key number 1 to return to "Select Discount". Press key number 2 to scroll to "Health Setting".

Health Safety" – HEALTH SETTING ROUTINE

This function is used to enable the health protection feature for product when needed. When enabled it operates as follows:

1. Cabinet temperature must be maintained at 41° F (5° C) or below for product to be vended while in normal operation. If the cabinet temperature exceeds 41° F, and fails to return to 41° F or below for 15 minutes the controller will issue a "Health Code" error and disable vending of health protected products.
2. After door closure, (refill or service) the machine has 30 minutes to pull down to 45° F (7° C). If the machine has not reached 45° F (7° C) after 30 minutes the controller will issue a "Health Timer" error. Once a health time error is activated the controller will not allow product to be delivered. After 30 minutes if the temperature is 45° F or less, but not 41° F the controller will set a 15 minute timer. During this time, if the cabinet temperature falls below 41° F (5° C) the controller will allow health guarded product to be delivered. If the temperature doesn't fall below 41° F (5° C) the controller will issue a "Health Code" error and disable vending of health protected products.
3. Power loss for 30 minutes or longer will result in automatic "Health Code" error activation and disable vending of health protected products upon power up.
4. Power loss less than 30 minutes. Once the machine regains power, if the cabinet temperature is 45° F (7° C) or less the controller will allow product to be dispensed. The controller will allow an additional 15 minutes for the temperature to pull down to 41° F (5° C). If the

temperature doesn't reach 41° F (5° C) or less after the 15 minute period the controller will issue a "Health Code" error and disable vending of health protected products. If the temperature is greater than 45° F (7° C) on power up the controller will automatically set a "Health Code" error and disable vending of health protected products.

5. Power loss less than 15 minutes. On power up the controller will allow vending. If the cabinet temperature doesn't reach 41° F (5° C) or less in 15 minutes the controller will issue a "Health Code" error and disable vending of health protected products.

To enable, with "Health Setting" on display press key number 4 will enter "Enable #".

"Enable #" – Health Enable Routine

This function is used to enable the Health Protection feature. When enabled, protected selections will only be allowed to vend if health constraints listed above are met. Press key number 4 and the current "Enable" setting will be displayed. Press key number 2 or 3 to scroll between "Enable 0" and "Enable 1". Press key number 4 with the display blinking the setting you wish to use. Display will return to "Enable #". Press key number 2 to scroll to "SELECT".

"Selection" – Selection(s) To Be Affected By Health Protection

This function is used to set selection(s) which will be protected by the Health Protection constraints. Press key number 4 and "All Selections" will be displayed. Press key number 2 to scroll through "All Selections, A, B, C, D, and E". Press key number 4 with the setting you wish to enter. Selecting "A, B, C, D, or E" will allow you to choose settings for that tray. Example: With "A" showing on display press key number 4. Display will show "All Selections #", press key number 2 to scroll through "A All Selections #, Select A1 #, Select A2 #, Select A3 #, etc... With the setting you wish to change press key number 4 and the # will start blinking. Press key number 2 to scroll between "0" disabled and "1" enabled. With the setting you wish to use showing on the display press key number 4. Display will return to "A All Selections # or Select A# #". Press key number 1 to return to "Selection". Press key number 1 to return to "Health Safety". Press key number 2 to scroll to "Over-ride Switch"

"Over-ride Switch" - MANUAL SWITCH OVERRIDE ROUTINE

This function is used to allow a key switch to override some of the settings stored for normal operations. This function can be programmed to control one or several of the following features: Free Vend Enable, Selection Blocking, Discount Pricing, and Lighting Control. Press key number 4 and the display will show "Free Vend #".

Press key number 2 or 3 to scroll through the override routines available. Press key number 1 to return to "Over-ride Switch".

"Free Vend #" - Free Vend Enable Routine

This function is used to set the vender to free vend. 0 = disable, 1 = enable. Press key number 4 and "#" will start flashing. Press key number 2 or 3 to scroll between "Free Vend 0" and "Free Vend 1". Press key number 4 with the display blinking the setting you wish to use. Display will return to "Free Vend #". Press key number 2 to scroll to "No Vend #".

"No Vend #" - No Vend (Vend Override) Enable Routing

This function is used to set vender selections to not be allowed to vend and a "No sales available" message to be displayed. 0 = disable, 1 = enable. Press key number 4 and "#" will start flashing. Press key number 2 or 3 to scroll between No Vend 0 and No Vend 1. Press key number 4 with the display showing the setting you wish to use. Display will return to "No Vend #". Press key number 2 to scroll to "Sales Block #".

"Sales Block #" - Selection Blocking Override Routine

This function is used to override "Select Block 1" and "Select Block 2" if they are being used. "Sales Block 0" is disabled, "Sales Block 1" is enabled. Press key number 4 and "#" will start flashing. Press key number 2 or 3 to scroll between "Sales Block 0" and "Sales Block 1". Press key number 4 with the display blinking the setting you wish to use. Display will return to "Sales Block #". Press key number 2 to scroll to "Discount #".

"Discount #" - Discounting Override Routine

This function is used to override "Select Discount" if it is being used. "Discount 0" is disabled and "Discount 1" is enabled. Press key number 4 and "#" will start flashing. Press key number 2 or 3 to scroll between "Discount 0" and "Discount 1". Press key number 4 with the display showing the setting you wish to use. Display will return to "Discount #". Press key number 2 to scroll to "Lighting #".

"Lighting #" - Lighting Control Override Routine

This function is used to override "Lighting Control" if it is being used. "Lighting 0" is disabled and "Lighting 1" is enabled. Press key number 4 and "#" will start flashing. Press key number 2 or 3 to scroll between "Lighting 0" and "Lighting 1". Press key number 4 with the display blinking the setting you wish to use. Display will return to "Lighting #". Press key number 2 to scroll to "Refrigeration #".

"Refrigeration #" - Refrigeration Control Override Routine

This function is used to override "Refrigeration", if it is being used. "Refrigeration 0" = disabled and "Refrigeration 1" = enabled. Press key number 4 and "#" will start flashing. Press key number 2 or 3 to scroll between "Refrigeration 0" and "Refrigeration 1". Press key number 4 with the display showing the setting you wish to use. Display will return to "Refrigeration #". Press key number 1 to return to "Over-ride Switch". Press key number 2 to scroll to "Remote Vend Mech".

"Remote Vend Mech" - REMOTE VEND MECHANISM ROUTINE

This function is used to activate the Universal Satellite Device Control routine. Press key number 4 to enter routine. If the controller detects a device responding to the remote vend mechanism address (USD address #3,50H), the vend request commands for this device will be controlled by the following parameters.

"Start Time" - Start Time Setting Routine

This function is used to set the day(s) and time to start the routine. Press key number 4 and "Star Day" will show on the display.

"Start Day" - Day of week to start setting

Set this feature using instructions for "Select Block 1", "Start Time", "Start Day".

"Start Hour" - Start hour and minute settings

Set this feature using instructions for "Select Block 1", "Start Time", "Start Hour".

"Stop Time" - Stop Time Setting Routine

This function is used to set the day(s) and time to stop the routine. Press key number 4 and "Stop Day" will show on the display.

"Stop Day" - Day of week to stop setting

Set this feature using instructions for "Select Block 1", "Stop Time", "Stop Day".

"Stop Hour" - Stop hour and minute settings

Set this feature using instructions for "Select Block 1", "Stop Time", "Stop Hour".

"Selection" - Selection Setting Routine

This feature is used to set the selection(s) which will be affected by the Remote Vend Mechanism routine. Press key number 4 and "Select A1 #" will be displayed, where # is the current setting for the selection number displayed. 0 = disabled, 1 = enabled. Press key number 2 to scroll to the select button number you desire to change. Press key number 4 with the select button number showing you wish to change (i.e. Select A1 #) and the # will start blinking. Press key number 2 or 3 to scroll between "Select A1 0" and "Select A1 1". Press key number 4 with the display showing the setting you wish to use. Display will return to "Select ## #". Press key number 1 to return to "Selection". Press key number 2 to scroll to "Vend Rate".

"Vend Rate" - Universal Satellite Device (USD)

Vend Rate Routine This function is used to set the vend rate (0-255). Press key number 4 and the current vend rate (0-255) will show on the display.

Press key number 2 to increase, or 3 to decrease the number in single digit increments. NOTE: A rate of "0" disables the USD. All other rates, #, will cause a vend command every #th local vend. Press key number 4 with the display showing the vend rate you wish to use and the display will return to "Vend Rate". Press key number 1 to return to "Remote Vend Mech".

"Combo Vend Discount" – used with Snack Vender to set combination drink/snack vends at discount pricing (only available if Snack Vender Enable is turned on in Satellite (137/937) Setup or if a Snack Vender is connected).

This function is used to activate the Selections that will be used and the discount value that will be set in the combination drink/snack vend discount. Important: To setup Combo Vend Discount enable Multivend, enable Combo Discount, set Satellite (137/937) Prices, and Set Discount Prices. Press key number 4 to enter routine and display will show "All Selections", press button 2 to scroll through Set Row A through Row E of Drink Vender and then continues with Set Row 21 through Set Row 26 of Snack Vender. Press key number 1 to move to "All Drink Selections". Press key number 2 to move to "All Snack Selections". Once the display shows the selection setting you wish to use press key 4 and display will show "All Values: \$#.## (flashing) – this message depends on if you pick an entire row or an individual selection. Press key 2 or 3 to scroll to the value you wish the discount set. Press key 4 to save the value and return to "All Selections. Press key number 1 to return to "Combo Vend Discount"

"Return to Sales Mode" - RETURN TO SALES MODE

Press key number 4 will exit Service Mode and return to Sales Mode.

Dixie-Narco Factory Setup Menus - BevMax Setup/Test Modes/Satellite (137/937) Setup

The below diagnostic features are used for aligning the XY assembly and providing pertinent information that is unique to the Coca-Cola BevMax 4 Vender and is not found in the standard programming of the vender. These include menus for "BevMax Setup", "Test Modes", and "Satellite (137/937) Setup". The menus include the following sub-menus. In BevMax Setup you have "Set Price/Temperature 4 Test", "Set Price/Temperature Default", "Set Shelf Offset", "Position Test", "Set Hook Offset", "Cup Sensor On/Off", "Cup Test", "Port Test", "Set Shelf Configuration", "Master Reset", "Update Software", "Double Talk", and "Build Number ####". In Test Modes you have "Test Vend", "Test Sel Switch", "Test Display", and "Test Relays". In Satellite (137/937) Setup you have "Enable Snack Vender", "Golden-Eye Policy", Set Golden-Eye Sel, Snack Motor Scan", and "Combo Vend Discount En".

To enter "BevMax Setup" sub menus:

Press the service switch on the controller (Blue button on the control board). When the display reads "Error Codes" press and let go of the following keys in order, "1" "5" "1" "5" "1". If the keys were actuated correctly, the VMC will enter the factory diagnostic mode and the display will read "BevMax Setup". Press the number 2 key to scroll to Test Modes or press the number "4" key one time will cause the VMC to enter the BevMax Setup sub menu or press and hold the number "1" key for 1 second to exit the "BevMax Setup" submenu and return to the "Error Codes" service menu prompt. Once you enter the "BevMax Setup" mode press key 4 to enter submenu and Coke Factory Setup Set Prc/Tmpr 4 Test will show on display, press and hold the number "2" key and the VMC will begin to cycle forward through the available options or press and hold the number "3" key to cycle backwards through the available options. Press key 4 one time at any option for the VMC to enter that option.

BevMax Setup **Coke Factory Setup** **Set Model Number**

Press key 4 to enter menu
Displays "Reset Model?"
Continue 4 = Y, 1 = N
Press A key to scroll thru the models.

Models are 3800-4, 5800-4, 3800-E4, 5800-E4. The display will display save? A = ^, * = Y, Clear = no. Press the * key at the correct model to save setting. Note: Program the model 5800-4 for all Domestic BevMax 4 & 3 Venders with 9 columns per shelf. Program the model 3800-4 for all Domestic BevMax 3800-4 with 7 columns per shelf. There is not an option for a model number for 5800 and 3800 glass front.

Coke Factory Setup **Set Prc/Tmpr 4 Test – (DO NOT USE IN THE FIELD)**

This sub menu will be used to set the vend price and temperature during our factory testing and should not be used in the field.

Coke Factory Setup **Set Prc/Tmpr Default – (DO NOT USE IN THE FIELD)**

This sub menu will be used to set the vend price and temperature back to factory default settings during our factory testing and should not be used in the field. Press key 4 and display will show "Set to Default? Continue? 4=Y 1=N. Press key 4 to set price and temperature settings to factory default settings.

Coke Factory Setup **Set Shelf Offset – Test Delivery Cup to Shelf Alignment:**

This sub menu will be used to set the XY to the proper shelf height. Press key number "4" one time at the "Shelf Offset" prompt. The VMC will enter the shelf adjust option and display the current shelf offset position as "Shelf Offset: 900 3310 counts = 1 inch". To adjust Shelf (Y) Offset (up and down), enter a new number and press the "*" key to save and display will show "#### Offset recorded. Then press "CLR to go back to "Shelf Offset". Go to Position Test and check the plunger is contacting the targets correctly.

Coke Factory Setup **Position Test –Test Delivery Cup to column selected:**

This sub menu will be used to test the vend mechanism alignment to specific columns confirming the proper X belt tension. Note: The left door switch must be pulled to the out position to perform this test. **Caution: XY needs to be in the home position before performing this test.** If you look at the control board the green, amber (yellow), and red lights should be on at this time. If not please check the following: Green light is for home switch on bottom of port cup, amber (yellow) light is for home

switch on left side of Y motor assembly, red light is for home switch for picker cup plunger. Press the number 4 key and the display will show a set of numbers (i.e. ##### # ##### #). To position test press the following:

- Shelf letter (A,B,C,D,E) to travel to selected shelf.
- Column number (1,2,3,4,5,6,7,8, & 9) to travel to selected column.
- Key "0" to cycle cup plunger to hit column target.
- Key "F" to return cup to home position.
- Key "*" is all stop.
- Press "CLR" key to return to "Position Test".

Coke Factory Setup

Set Hook Offset – Test Delivery Cup to Port

Alignment:

This sub menu will be used to test the vend mechanism alignment to the port area confirming the proper X belt tension. Adjust Hook Swipe "X" Offset (left to right). Press the number "4" key and the display will show "Hook Swipe ####, 3310 counts = 1 inch". For factory default setting see born on label settings listed on service door. To change the off set, pull the top left (white) door switch in the out position to power the XY motors. Press the "*" key once will automatically run the Delivery Cup Assembly to the swipe position and allow specific vender coordinates to be changed and saved in the control board memory. Use the numbers on the key pad to change the coordinates. Press the "*" key to save the new setting and the Delivery Cup Assy. will automatically go to the "Home" position, then move back to the swipe position again. Press the "*" key to send the Delivery Cup Assy. back to the "Home" position and the programming will return to "Set Hook Offset". Press key 2 to go to next menu item.

Coke Factory Setup

Cup Sensor On/Off – Turns Delivery Cup

Sensor On & Off:

This sub menu will be used to set the Cup Sensor On or Off. Press key 4 and the display will show "Cup Sensor On". Press the "4" key to toggle the Extended Cup to the On setting. Factory default setting beginning with software revision 700.21 is on. Note: Cup Sensor Off setting is used in BevMax 4 with non Z Cup Coke Venders manufactured prior to run 8843AH. Cup Sensor On is used in all BevMax 4 Venders produced on run 8843AH & higher or if there is a problem in the cup the sensor can be turned off. Press key 1 to return to "Cup Sensor On/Off".

Coke Factory Setup

Cup Test – Turns Delivery Cup Sensor On & Off:

This sub menu will be used to test the operation of the Delivery (Picker) Cup Assy and Sensor. Press key 4 and the display will show "Cup Test". Press key 4 and the display will show "On:0 In:0 Out:0 Hm:1". Note: The left door switch must be pulled to the out position to perform this test. **Caution: XY needs to be in the home position before performing this test.** Press the "*" key and the display will show "Cup Sensor On/Off On:0 In:0 Out:0 Hm:1". Press the "*" key to toggle the Cup Sensor to the Off setting. To test the Cup with the Cup Sensor On, press the "*" key and Display will show "Cup Sensor On - On:1 In:0 Out:0 Hm:1". To perform tests press the following:

- Shelf letter (A,B,C,D,E) to travel to selected shelf.
- Column number (1,2,3,4,5,6,7,8, & 9) to travel to selected column.
- Key "0" to cycle cup plunger to hit column target. The Out:0 will change to 1 momentarily and back to 0 and the Hm:1 will change to 0 momentarily and back to 1.
- Key "F" to return cup to home position.
- If the delivery cup has a cup sensor in it, place a package in the delivery cup and the In:0 will change to In:1, remove package and it will change to In:0.

There are 4 pieces of data shown on the display labeled as "On", "In", "Out", and "Hm".

"On" indicates whether the delivery cup sensor if present is turned on or off. A "1" indicates it is on and a "0" indicates it is off.

"In" indicates whether the delivery cup sensor detects product in the cup. In order to be detected the product must be placed in the cup after the sensor was turned on. If a product is in the cup when the sensor is turned on, the sensor will not detect it. A "1" indicates product is detected and a "0" indicates it is not. When the sensor is turned off, there will be a "0" regardless of whether product is in the cup or not. The Yellow LED on the controller also will be on when a "1" is displayed.

"Out" indicates whether the picker out switch is closed. A "1" indicates that the picker out switch is closed and a "0" indicates it is opened (plunger at home position). Please note that the switch is moved by the cam, not the picker. Pulling the picker out by hand will not activate the switch. The cam position

is what activates the switch. The motor must actually drive the picker out and it must be all the way out in order for the switch to detect it is out. The Green LED on the controller also will be on when a "1" is displayed.

"Hm" indicates whether the picker home switch is closed. A "1" indicates that the picker home switch is closed (plunger at home position) and a "0" indicates it is opened. This switch is moved by the plunger, pulling the plunger out by hand will turn the switch off. The Red LED on the controller will also be on when a "1" is displayed.

Coke Factory Setup

Port Test – Test the operation of the Port:

This sub menu will be used to test the operation of the Port Cup Assy and Port Sensor. Press the number 4 key and the display will show four numbers "####". The 1st # is Port Open switch and 0 = Port not open or 1 = Port opened. The 2nd # is Port Closed switch and 0 = Port not closed or 1 Port closed. The 3rd # is Sensor and 1 = Sensor on or 0 = Sensor off. The 4th # is Vend detect (only if Sensor is on) 0 = No product in port or 1 Product in port. To test the port press the following:

- a. Key "A" to open port. Display 1###.
- b. Key "B" to close port. Display 0###
- c. Key "C" to turn sensor on. When turned on and something is placed in the port a red LED will light on the board. Display ##1#.
- d. Key "D" to turn sensor off. Display ##0#.
- e. Key "*" All Stop on any of these tests.
- f. Key "CLR" to return to "Port Test".

Coke Factory Setup

Set Shelf Config – Allows for shelf configuration to be set:

This submenu allows the service technician to program the electronics to match the different settings available for the shelves. These settings are available to vend different package heights. The factory default setting is Shelf Setting D2. Press the number "4" on the keypad and display will show "Set Shelf Config". Press the "4" key and display will show current setting. To change the setting press key 4 until the current setting flashes. Press 2 to scroll through the following: A = G setting, B = M1 setting, C = M2 setting, D = D setting, E = E setting, F = E1 setting, 1 = D2 setting, 2 = E3 setting, & 3 = E4 setting. D2 = BM3 5800-4 domestic setting. Note Shelf settings G, M1, & M2 settings are used in venders prior to 8487-0001AE. Shelf settings D, E, & E1 settings are used in venders 8487-0001AE to 8900-0001BH. Shelf settings D2 is setting used in all domestic BevMax 4 5800-4 venders and E3 (5 shelf

Export) & E4 (4 shelf Export) are used in export BevMax 4 5800-E4 venders 8900-0001BH and higher. Once the desired setting is showing on the display press the "4" key to save the setting. Note: all shelf settings have to be physically set to match the programmed setting. You can not set the physical shelf settings differently. Press the "1" key to return to "Set Shelf Location". Press the "2" key to scroll to the next menu item below.

Coke Factory Setup

Master Reset – Allows for Vender settings to be changed to factory default setting:

This submenu allows the service technician to restore factory defaults to the machine or reset the Controller Board's memory after installing a new EPROM. Since this feature resets interval sales data, care should be taken prior to using. Press key "4" on the keypad and "MASTER RESET" will show on the display. Press the "4" key and the display will read "Master Reset Continue? 4 = Y 1 = N. To reset press the "4" Key and display will show "Resetting" then show software version and then the idle message will scroll. Press the 1 Key to return to "Master Reset". Please see table below for programming options effected by MASTER RESET. NOTE: A power out error message will be generated when a master reset is performed. The table outlines the results of using MASTER RESET.

| ITEM | RESET TO |
|----------------------------|---------------------|
| Tube Fill | Cleared |
| Cash Counters each select | \$0.00 |
| Sales Counters each select | 0 |
| Price Program | 99.95 |
| StS Programming | Option 1 |
| Config 1 | 0 (single price) |
| Config 2 | 0 (disabled or off) |
| Config 3 | 0 (enabled or on) |
| Config 4 | 0 (disabled or off) |
| Config 5 | 0 (disabled or off) |
| Config 6 | Not used |
| Config 7 | 0 (disabled or off) |
| Config 8 | 0 (disabled or off) |
| Config 9 | 0 (disabled or off) |
| Config 10 | 0 (escrow bill) |
| Correct Change | 0 (disabled or off) |
| Preview Password | Reset to 4231 |
| Language | English |
| Tim Programming | 0 (disabled or off) |
| Lighting Control | 0 (disabled or off) |
| Refrigeration | Set point 35°F |
| Select Block 1 | 0 (disabled or off) |
| Select Block 2 | 0 (disabled or off) |
| Select Discount | 0 (disabled or off) |
| Health Safety | 0 (disabled or off) |
| Over-ride Switch | 0 (disabled or off) |
| Remote Vend Mech | 0 (disabled or off) |
| Combo Vend Discount | 0 (disabled or off) |

Coke Factory Setup**Update Software** – Allows for manual software loading as needed:

This submenu allows the service technician to manually load software if needed. New software automatically loads on power up. **Caution:** If this mode is entered with no EPROM installed in controller, it will cause control board failure. The following information describes how to update software. All new software revisions will automatically update the software revision in the control board. **Important:** EPROM's containing software are sensitive to Electrostatic Discharge (ESD). Failure to handle the Eprom carefully could cause damage, which may result in a failed control board. **ALWAYS KEEP THE EPROM IN THE ESD TUBE. GROUND YOURSELF ON THE VENDER CABINET BEFORE REMOVING THE EPROM FROM THE ESD TUBE OR CONTROL BOARD. AN EPROM CAN BE USED TO PROGRAM MANY VENDERS, AS LONG AS CARE IS TAKEN NOT TO DAMAGE THE EPROMS LEGS. ALWAYS TURN POWER OFF BEFORE REMOVING OR INSTALLING EPROMS IN THE CONTROL BOARD.** Important Notes: Use the programming section of the manual to program the vender.

1. EPROM Removal:
 - a. Power down the Vender. Ground yourself on the vender cabinet before removing the EPROM from the ESD tube or control board.
 - b. If an Eprom is present in the control board, remove the existing Eprom.
 - i. Note; An Eprom does not need to be in the control board after the control board has been programmed. The Eprom can be used to program other boards.
 - c. Verify the pins of the new Eprom are not bent before installing in the Eprom socket.
 - d. Install the new Eprom in the Eprom socket. Ensure the Eprom is oriented correctly with its reference marker (locator) in the same direction as the reference marker (locator) of the Eprom socket. Do not rely on the Eprom label for orientating the Eprom.
2. Automatic Reprogramming:
 - a. Turn power on to Vender. When auto-updating the display will show old version for a few seconds while the red LED on the control board blinks.
 - b. Display will change to "EPROM UPGRADE..." for approximately 10 seconds with the green LED rapidly blinking.
 - c. Display will change to new version software with red LED blinking at a steady heart beat rate.
3. Manual Reprogramming (used if Eprom does not automatically reprogram):

- a. At power up, the current software version will be displayed. To manually program the control board with the new software, press the service switch on the control board to enter service menus. Advance to "UPDATE SOFTWARE".
- b. Press the "4" Key. The Display will show Continue? 4 = Y 1 = N.
- c. Press the "4" key for yes to continue. The Display will show one of the following messages: "EPROM not installed, EPROM is corrupt, EPROM mismatch, EPROM version same, or EPROM version older". If Display shows EPROM version older force? 8 = Y 1 = N. Press the 8 key to force new eprom in memory. **IMPORTANT:** for all other messages (EPROM not installed, EPROM is corrupt, EPROM mismatch, EPROM version same) press 1 not to force (if you press 8 on these the board will be locked and you will need to replace it and return it to the factory to be repaired).
- d. Display will show "Reprogramming Vendor" while the yellow LED blinks. . Display will show new software revision, then return to stand by. This confirms new software has been successfully updated.

Note: to remove the Eprom after programming, remove power to the vender, ground yourself on the vender cabinet before removing the Eprom, remove the Eprom, while still grounded install a label on the microprocessor showing the revision of software that is installed in the controller, power the vender back on and test for proper operation.

Coke Factory Setup**Double Talk** – Turns Double Talk feature On & Off

The function is used to turn on or turn off the "Double Talk" feature. Press the number "4" key and "Double Talk" will show on display. Press the "4" Key and display will show current state "On" or "Off". Press "2" to toggle from On to Off. With the display showing the state you wish the mode to be in, press the "4" key. Press key 1 to return "Double Talk".

Coke Factory Setup**Build Number ###** – Displays current software build number

This sub menu will be used to show the current software build number being used. Press key 4 and the display will show "Build Number ####". Where #### is the software build number significant to Dixie-Narco engineering. Press the "1" Key to return to "BevMax Setup".

Coke Factory Setup**Sold Out Enable- Should be "ON"**

Press key 4 to enter menu, Use Vend Sensor, "ON" or "OFF" will display. Press key 4 and the current setting will flash. Press key 2 to change the setting. Press key 4 to the setting will stop flashing and is set. Press key "1" to exit menu.

Coke Factory Setup**\$ Enable-**

Press key 4 to enter menu. Use Dollar sign, "ON" or "OFF" will display. Press key 4 and current setting will flash. Press key 2 to change setting. Press key 1 to exit menu.

Coke Factory Setup**Enable EXE -**

Use this menu to set the VMC for EXE peripheral communication. If the EXE is OFF, then the VMC will communicate with MDB peripherals. (Note: factory default is OFF. If the EXE is ON, then the VMC will not communicate with MDB peripherals. When the EXE is ON, additional configuration menus will be made available in the standard setup menus following Price Program. They include "Price Mode", "Price Program", "View PL Assignments", "View PL Value" & "Quick Payback". To enable EXE communications: Press key 4 to select this menu. You will see the current setting. Press key 4 to edit the setting. You will see the current setting begin to flash. Press key 2 to change the setting. Select "ON" or "OFF." Press key 4 to confirm the change. You will see the current setting stop flashing. Press key 1 to exit menu.

Test Modes**Test Vend – Vend Testing:**

This function allows you to test vend each column. Press key number 4 and the display will show "Column A1". Note: The left door switch must be pulled to the out position to perform this test. Press key numbers 2 or 3 to scroll through the columns available to run in motor test. Press and hold the Power Interrupt (PI) switch. Press key number 4 to vend from the column displayed. Press key number 1 will return to "Test Vend". Press key number 2 to scroll to next test mode.

Test Sel Switch – Select Switch Test:

This function allows you to test each selection. Press key number 4 and the display will show "Selection 4". Then press any key and the display will show the last key number pressed. Press and hold key number 1 for approximately 5 seconds will return to "Test Sel Switch". Press key number 2 to scroll to the next test mode.

Test Display – Display Test:

This function allows you to test all segments in the display. Press key number 4 and a row of lower case letters "a" through "t" will display, then turn off, then a row of upper case letters "A" through "T" will display alternating until key number 1 has been pressed. Press key number 1 to return to "Test Display". Press key number 2 to scroll to next test mode.

Test Relays – Relay Test:

This function allows you to test the relay electronic control of the compressor ("Compressor #"), the evaporator fan(s) ("Fan #"), and the sign front light ("Light#").

CAUTION: Disconnect power to the compressor before testing the compressor relay. Failure to disconnect power to the compressor before testing the relay could result in damaging the compressor.

Press key number 4 and the display will show "Compressor #", where # is the state of the relay - 0 = not activated or off; 1 = activated or on. Press key number 4 to toggle the relay on and off. Press key number 2 to scroll to "Fan #", where # is the state of the relay - 0 = not activated or off; 1 = activated or on. Press key number 4 to toggle the fan(s) on and off. Press key number 2 to scroll to "Light #", where # is the state of the relay - 0 = not activated or off; 1 = activated or on. Press key number 4 to toggle the lights on and off. Press key number 1 to return to "Test Modes".

Press key number 2 to scroll to "Password Entry".

Satellite (137/937) Setups**Satellite (137/937) Setup****Enable Snack Vender – Snack Vender Enable on or off:**

This sub menu is used to enable and disable the Snack Vender attached to the BevMax 4. 0 = off, 1 = on. Press key number 4 and "#" will start flashing. Press key number 2 or 3 to scroll between "Snack Vender Enable 0" and "Snack Vender Enable 1". Press key number 4 with the display blinking the setting you wish to use. Display will return to "Snack Vender". To set prices you must set vender for multiprice price setting routine and return to Price Program. Press key number 2 to scroll to next menu item.

Satellite (137/937) Setup**Golden-Eye Policy – Golden-Eye operating condition:**

This sub menu is used to set the operating condition of Golden-Eye. Note: Selections are enabled/disabled in Set Golden-Eye Sel Mode. Press key number 4 and the display will show the

current state of "Golden-Eye Policy Drop" or "Golden-Eye Policy Home". Home = motor will always return to the home position after a product drop failure and Drop = motor will rotate one complete revolution, pause, then stop upon detection of product falling into bin (may leave the spiral in mid cycle). Important: If you use Drop feature, before filling the Satellite (137/937) machine you should press the service mode switch on the control board and then press the door interlock switch on the Satellite (137/937) to force a scan of the snack motors and return them to the normal home position. Failure to do this may result in Full Selections Being Left Out Of Order or spirals dropping products after the machine has been filled. Press key number 2 or 3 to scroll between "Golden-Eye Policy Drop" or "Golden-Eye Policy Home". Press key number 4 with the display showing the setting you wish to use. Display will return to "Golden-Eye Policy".

Press key number 2 to scroll to next menu item.

Satellite (137/937) Setup

Set Golden-Eye Sel – Golden-Eye operating condition:

This sub menu is used to set up the Golden-Eye Selections. Press key number 4 and display will show "Set Golden-Eye Sel Sel: ### 1(0)" where ### is the column number and the 1 = enabled or 0 = disabled. Press key 4 and the 1(0) will start flashing, press key 2 to toggle between 1 and 0. With the display showing the condition you wish to use press key 4 to save. Display will show column & setting selected. Press key 2 to scroll to next column and repeat for all columns as needed. Press key 1 to return to "Set Golden-Eye Sel ". Press key number 2 to scroll to next menu item.

Satellite (137/937) Setup

Snack MotorScan – Verify State of Satellite (137/937) Motors:

This sub menu is used to verify the state of the selection motors in the Satellite (137/937) Vender. Press key number 4 and display will show "Snack Motor Scan Execute Motor Scan?". Press key number 4 and the display will show the results of the last motor scan test. Press key 2 to scroll through the results. Press key 4 to initiate a new scan of the motors. The display will say Scanning Motors. When scan is complete the display will say Scanning motors done press * to continue. Press key 2 to scroll through the results. The report will show Motor Scan Results Good Motors:## (number of good motors detected), Motor Scan Results Bad Motors:## (number of bad motors detected), and Motor Scan Results Missing Motors:## (number of missing motors detected). Note: If a selection motor runs 3 times without delivering a product the selection is then locked out until a motor scan or door open close occurs. Press key number 1 to return to "Snack Motor Scan". Press key number 2 to

scroll to next menu item.

Satellite (137/937) Setup

Combo Vend Discnt En – Enable the Combo Vend Discount that has been set:

This sub menu is used to enable and disable the Combo Vend Discount when a Snack Vender is attached to the BevMax 4. 0 = off, 1 = on. Press key number 4 and "#" will start flashing. Press key number 2 or 3 to scroll between "Combo Vend Discount Enable 0" and "Combo Vend Discount Enable 1". Press key number 4 with the display blinking the setting you wish to use. **Important:** The Multivend option in BevMax programming must be enabled for Combo Vend Discount to function. Display will return to "Combo Vend Discount En".

Press key number 1 to return to "BevMax Setup".

Major Component Description

AC DISTRIBUTION BOX

BevMax 4 5800-4/3800-4

110 VAC units

| | |
|--------------------------|---------------------------------------------------------------------|
| Main Power Switch / Plug | Interrupts hot side of incoming power to all components in machine. |
| 15 Amp Outlet (110 VAC) | Provides power to Refrigeration unit. |

| | |
|------------------|-------------------------------------------------|
| Transformer (T1) | Provides 24 Volt power to the Controller Board. |
|------------------|-------------------------------------------------|

DN5800-E4/3800-E4

220 VAC units

| | |
|--------------------------|---------------------------------------------------------------------|
| Main Power Switch / Plug | Interrupts hot side of incoming power to all components in machine. |
|--------------------------|---------------------------------------------------------------------|

| | |
|-------------------------------------------|---------------------------------------|
| Receptacle, Panel Mount IEC 320 (220 VAC) | Provides power to Refrigeration unit. |
|-------------------------------------------|---------------------------------------|

| | |
|------------------|-------------------------------------------------|
| Transformer (T1) | Provides 24 Volt power to the Controller Board. |
|------------------|-------------------------------------------------|

Service Door Switches

If 2 Switches - Left Switch (10 Amp) – in XY Motor Circuits, Port Door Motor Circuit, and Picker Motor Circuit (Power Interrupt Switch).

If 2 Switches - Right Switch (.1 Amp) – in Controller Circuit.

General Maintenance

The most important facets of proper care and maintenance of your machine are the electrical power supplied to it, leveling, and cleanliness of the machine.

POWER

Domestically the machine must be connected to a dedicated 120 VAC, 15 Amp circuit (U.S. and Canada). Refer to the cabinet serial number plate to determine the correct voltage and frequency for the machine.

CAUTION:

REMOVE POWER TO THE AC DISTRIBUTION BOX BEFORE CLEANING OR WHEN ANY ELECTRICAL COMPONENTS ARE CONNECTED / DISCONNECTED FOR TESTING OR REPLACEMENT.

Periodically inspect the power supply cord for damage. If the cord or plug is worn or damaged, it must be replaced with a power supply cord of the same type, size and specification as originally provided with the machine. DO NOT USE THE VENDING MACHINE UNTIL THE WORN OR DAMAGED CORD IS REPLACED.

The Ground Fault Circuit Interrupter (GFCI) must be tested frequently and before each use in accordance with the instructions provided on the GFCI device. **IF THE GFCI DOES NOT PASS THE TEST, DO NOT USE THE MACHINE.** Unplug the supply cord from the receptacle and call the Crane Merchandising Systems Technical Support Group for assistance at 1-803-266-5001.

CAUTION:

REMOVE POWER TO THE AC DISTRIBUTION BOX BEFORE CLEANING OR WHEN ANY ELECTRICAL COMPONENTS ARE CONNECTED / DISCONNECTED FOR TESTING OR REPLACEMENT.

CLEANING

DO NOT USE A WATER JET OR NOZZLE TO CLEAN THE VENDER

GLASS DOOR

The display glass should be cleaned inside and out with paper towels and glass or non-abrasive all-purpose cleaner. The gasket around the product door should be wiped down using warm

water, any mild general purpose, non-abrasive cleaner and a soft towel. Never lubricate the gasket and always check for cracking or deformities which may cause leaks. Replace if necessary.

VERTICAL LAMP LENS COVER

Then vertical lamp lens covers are of a polycarbonate material. Clean as needed with warm water only. Ammonia or alcohol based products will damage the lens cover.

TRAYS / TRAY INSERTS

The trays and tray inserts should be cleaned periodically using warm water and a mild general purpose, non-abrasive cleaner. Care should be taken to ensure debris does not enter the gear box assemblies. **DO NOT USE SOLVENTS OR ABRASIVE MATERIALS TO CLEAN ANY PORTION OF THE TRAY.**

DOOR LIGHTING

The machine is designed with an energy efficient T8 Lighting System. To ensure continued reliable operation, replace only with the same type and size lamps. Lamps must be properly installed and seated in the lamp holders.

SLIDE/PUSHER ASSEMBLY

The slide/pusher assembly should be cleaned periodically using warm water and any mild general-purpose non-abrasive cleaner. After drying, the slide assembly needs to have a coat of Armoral applied. Care should be taken to ensure debris does not enter the gear box assemblies. **DO NOT USE SOLVENTS OR ABRASIVE MATERIALS TO CLEAN ANY PORTION OF THE TRAY.**

CABINET

Wash the cabinet with a good detergent or soap mixed in warm water. Wax the vender often with a good grade of automobile wax. Any corrosion inside the vender should be removed with fine steel wool and the area should be painted with white paint.

Repair any scratches on painted surfaces to prevent corrosion.

DRAIN PAN, DRAIN TUBE, AND DRAIN HOSE



To prevent mold and mildew growth, and to avoid personal injury or property damage, the drain pan, drain tube, and drain hose must be properly aligned and routed. Ensure nothing obstructs the drain tube or drain hose and that the hose is not

bent, pinched, or twisted in such a way as to prevent the flow of condensate. Periodically inspect the drain pan, drain tube, and drain hose for alignment and the presence of dirt, debris, mold, and mildew. Clean as needed.

WARNING

THE COMPRESSOR ELECTRICAL CIRCUIT IS ALWAYS LIVE WHEN THE PLUG IS CONNECTED TO AN ELECTRICAL OUTLET.

REFRIGERATION CONDENSER

Clean the condenser periodically of dirt or lint build-up. Remove the build up with a brush or vacuum, or blow the dirt out of the condenser with compressed air and approved safety nozzle. Ensure nothing obstructs air intake at the bottom of the main door. Ensure nothing obstructs air exhaust at the rear of the cabinet.

COIN ACCEPTOR

Follow the Coin Acceptor Manufacturer's instructions.

LUBRICATING THE VENDER

The vender refrigeration system does not require any field lubrication. The hermetic refrigeration system and fan motors are manufactured with lifetime lubrication.

NEW CONTROL BOARD INSTALLATION

Set Model Number. On power up the display will show "Reset Model? Continue? * = Yes CLR = No". Press the * key and display will show "No Model Set Save? A = ^ (scroll up) * = Yes CLR = No". Press key A to scroll through available model numbers DN5800-4, DN3800-4, DN5800-E4 (export), DN3800-E4 (export). With vender model displayed that you are installing board press the * key to save.

UPDATE SOFTWARE

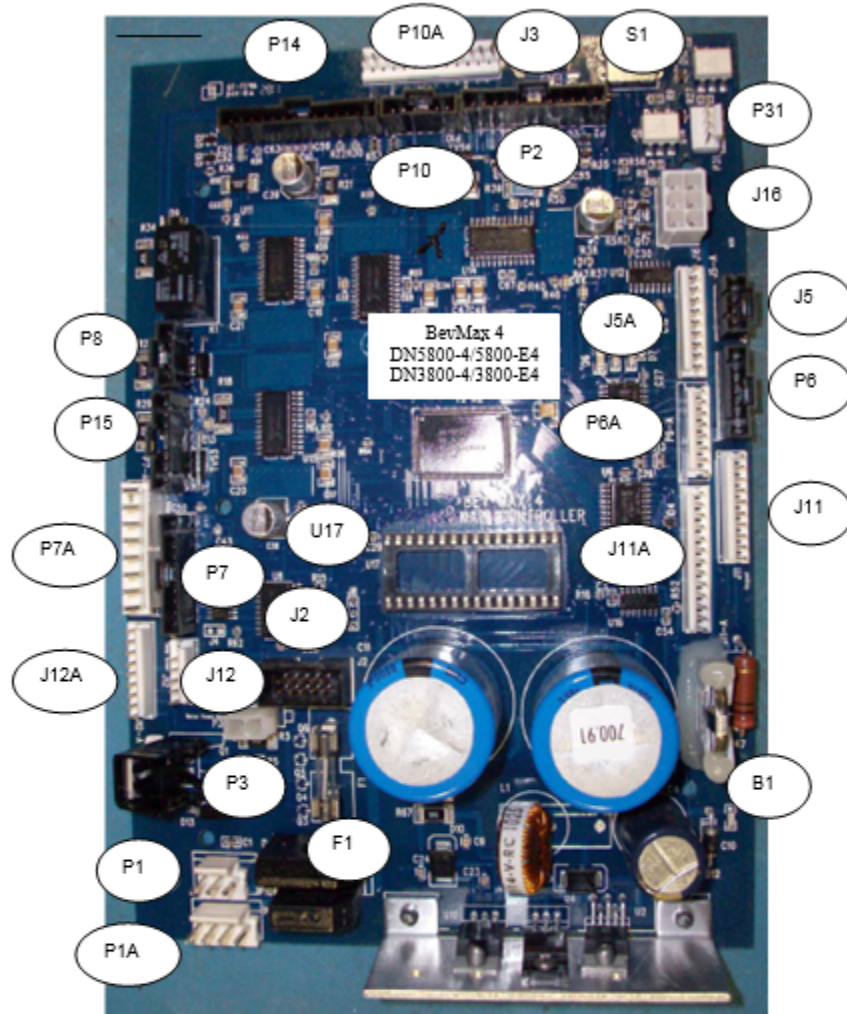
The following information describes how to update software. All new software revisions will automatically update the software revision in the control board. **Important:** Eproms containing software are sensitive to Electrostatic Discharge (ESD). Failure to handle the Eprom carefully could cause damage, which may result in a failed control board. **ALWAYS KEEP THE EPROM IN THE ESD TUBE. GROUND YOURSELF ON THE VENDER CABINET BEFORE REMOVING THE EPROM FROM THE ESD TUBE OR CONTROL BOARD. AN EPROM CAN BE USED TO PROGRAM MANY VENDERS, AS LONG AS CARE IS TAKEN NOT TO DAMAGE THE EPROMS LEGS. ALWAYS TURN POWER OFF BEFORE REMOVING OR**

INSTALLING EPROMS IN THE CONTROL BOARD.

EPROM Removal:

- a. Power down the Vender. Ground yourself on the vender cabinet before removing the EPROM from the ESD tube or control board.
 - b. If an Eprom is present in the control board, remove the existing Eprom.
 - ii. Note; An Eprom does not need to be in the control board after the control board has been programmed. The Eprom can be used to program other boards.
 - c. Verify the pins of the new Eprom are not bent before installing in the Eprom socket.
 - d. Install the new Eprom in the Eprom socket. Ensure the Eprom is oriented correctly with its reference marker (locator) in the same direction as the reference marker (locator) of the Eprom socket. Do not rely on the Eprom label for orientating the Eprom.
4. Automatic Reprogramming:
- e. Turn power on to Vender. When auto-updating the display will show old version for a few seconds while the red LED on the control board blinks.
 - f. Display will change to "EPROM UPGRADE..." for approximately 10 seconds with the green LED rapidly blinking.
 - g. Display will change to new version software with red LED blinking at a steady heart beat rate.

Note: to remove the Eprom after programming, remove power to the vender, ground yourself on the vender cabinet before removing the Eprom, remove the Eprom, while still grounded install a label on the microprocessor showing the revision of software that is installed in the controller, power the vender back on and test for proper operation.



BEVMAX 4 DN5800-4/3800-4/5800-E4/3800-E4 MDB/EXE CONTROLLER CONNECTIONS

| CONNECTION | CONNECTION | DESCRIPTION | CONNECTION | CONNECTION | DESCRIPTION |
|------------|------------|--------------------------------|------------|------------|----------------|
| P1A | P1 | Power from AC Distribution Box | | F1 | Fuse |
| | P14 | Cup Signal & Y Encoder | J5A | J5 | DEX |
| | P15 | X Motor & Encoder | J11A | J11 | Keypad |
| | P2 | Product Port | J12A | J12 | Temp Sensor |
| P6A | P6 | Display | | J16 | Multi Drop Bus |
| P7A | P7 | Relays | | U17 | EPROM Socket |
| | P8 | Y & Cup Motors | | P3 | Door Switch XY |
| P10A | P10 | Door Switch | | B1 | Battery |
| | J2 | Supplier Programming Connector | | S1 | Service Switch |
| | P31 | Executive Interface | | J3 | Dongle Harness |

BEVMAX 4 5800-4/3800-4 TROUBLESHOOTING "XY" ISSUES

1. Selection will not vend.
 - a. Does a different selection vend?
 - i. Perform TEST VEND in TEST MODE to ensure proper selection vends.
 - ii. Check Custom Space-To-Sales has been enabled.
 1. Check STS configuration in Menu and verify that the selection in question has a column assigned to it.
 - b. Did the gate actuate at all?
 - i. Plunger cycled but gate but did not fully actuate.
 1. Gate Sticking.
 - a. Check plunger to target alignment in DN Factory Diagnostics BevMax Setup Coke Factory Setup Position Test.
 - b. Shuttle bad.
 - c. Bent pins.
 - d. Check gear box & follower.
 2. Possible delivery cup assembly position alignment problem
 - a. Plunger should hit approximately ¼" from top edge of target.
 - i. Adjust shelf adjust in DN Factory Diagnostics BevMax Setup Coke Factory Setup Set Shelf Offset.
 - b. Perform vend test on selections.
 - i. Only occurs on one column.
 1. Defective target.
 2. Defective gear box.
 3. Defective follower.
 - ii. Occurs on entire shelf.
 1. Shelf not secured on supports.
 2. Position alignment.
 - iii. Occurs on same column, multiple shelves (A2, B2, C2, D2, E2).
 1. Shelf not secured on supports.
 2. Position alignment.
 3. Plunger did not cycle fully.
 - a. Replace delivery cup assembly.
 - b. Replace control board.
 - ii. Gate did actuate
 1. Product and gate mismatch.
 2. Possible delivery cup assembly position alignment problem
 - a. Plunger should hit approximately ¼" from top edge of target.
 - i. Adjust position alignment in DN Factory Diagnostics BevMax Setup Coke Factory Setup Set Shelf Offset.
 - b. Perform vend test on columns.
 - i. Only occurs on one column.
 1. Defective target.
 2. Defective gear box.
 3. Defective follower.
 3. Dirty / worn tray slide with pusher.
 - a. Check slide with pusher.
 2. Delivery Cup Assembly Plunger Issues.
 - a. Plunger jam/dry vend controller sets the error message "Vend Mechanism, PICKI or PICKO Error".
 - i. Syrup/dirt causing plunger or plunger home switches to stick.
 - ii. Replace delivery cup assembly.
 - iii. Replace Control Board.
 1. Software did not attempt to vend.
 - a. Check error list. Does error list show Vend Mechanism error?
 - b. A previous vend operation or vend test failed.
 2. Software has selection identified as sold out.
 3. Selection is disabled for recorded Refrigeration Health Timer or Health Code.
 4. Selection is disabled through Select Block.

- b. Plunger Hits Chassis.
 - i. Check tray is level and secured to tray supports.
 - ii. Check harness connections.
 - iii. Check X motor (bottom right).
 - iv. Check belt tension. Look for the belt to slip.
 - v. Check shelf adjust in DN Factory Diagnostics BevMax Setup Coke Factory Setup Shelf Offset.
 - c. Plunger Stays Out.
 - i. Check for syrup or dirt build up.
 - ii. Check Harness connections.
 - iii. Replace cup assy.
3. Delivery Cup Assembly Will Not Go Home.
- a. Is there a "Vend Mechanism" error on the display when the door has been opened?
 - i. If yes check the "Y" (lower) and "X" (top far left) home switches.
 - 1. In Test Mode/ Test Vend with the top door switch (PI) pressed in:
 - a. At the home position the "Y" (lower) home switch will light a green LED on the control board.
 - b. At the home position the "X" (top far left) home switch will light an amber LED on the control board.
 - i. Adjust the X drive belt at the bottom left belt clamp.
4. Elevator will not move vertically.
- a. Perform TEST MODE/TEST VEND to test movement.
 - b. Check left side door switch.
 - i. Is it functioning.
 - ii. Is it being made when door is closed.
 - c. Check the Delivery Cup Plunger & Plunger Home Switch.
 - i. If plunger arm is stuck out it will shut down XY delivery system.
 - ii. If plunger arm home switch fails it will shut down XY delivery system.
 - d. Check the 10 pin harness connector to the "Y" motor.
 - e. Check rollers.
 - f. Check Y motor harness and motor.
 - g. Check E-Chain harness.
 - h. Replace control board.
5. Elevator will not move horizontally.
- a. Perform TEST MODE/TEST VEND to test movement.
 - b. Check left side door switch
 - i. Is it functioning.
 - ii. Is it being made when door is closed.
 - c. Check the lower and top far left home switches.
 - i. In Test Vend/Position Test with the left door switch (PI) pressed in:
 - 1. At the home position the "Y" (lower) home switch will light a green LED on the control board.
 - 2. At the home position the "X" (top far left) home switch will light an amber LED on the control board.
 - a. Adjust the X drive belt.
 - d. Check the Delivery Cup Plunger & Plunger Home Switch
 - i. If plunger arm is stuck out it will shut down XY delivery system.
 - ii. If plunger arm home switch fails it will shut down XY delivery system.
 - e. Check rollers.
 - f. Check X motor harness and motor.
 - g. Replace control board.

6. Product Will Not Load From Delivery Cup Assembly To Port Assembly.
 - a. Perform TEST MODE/TEST VEND to test movement.
 - b. Check belt tension.
 - c. Check Service Wall Port Door Assembly is securely installed.
 - d. Check the vend mechanism alignment.
 - e. Check the vertical swipe position.

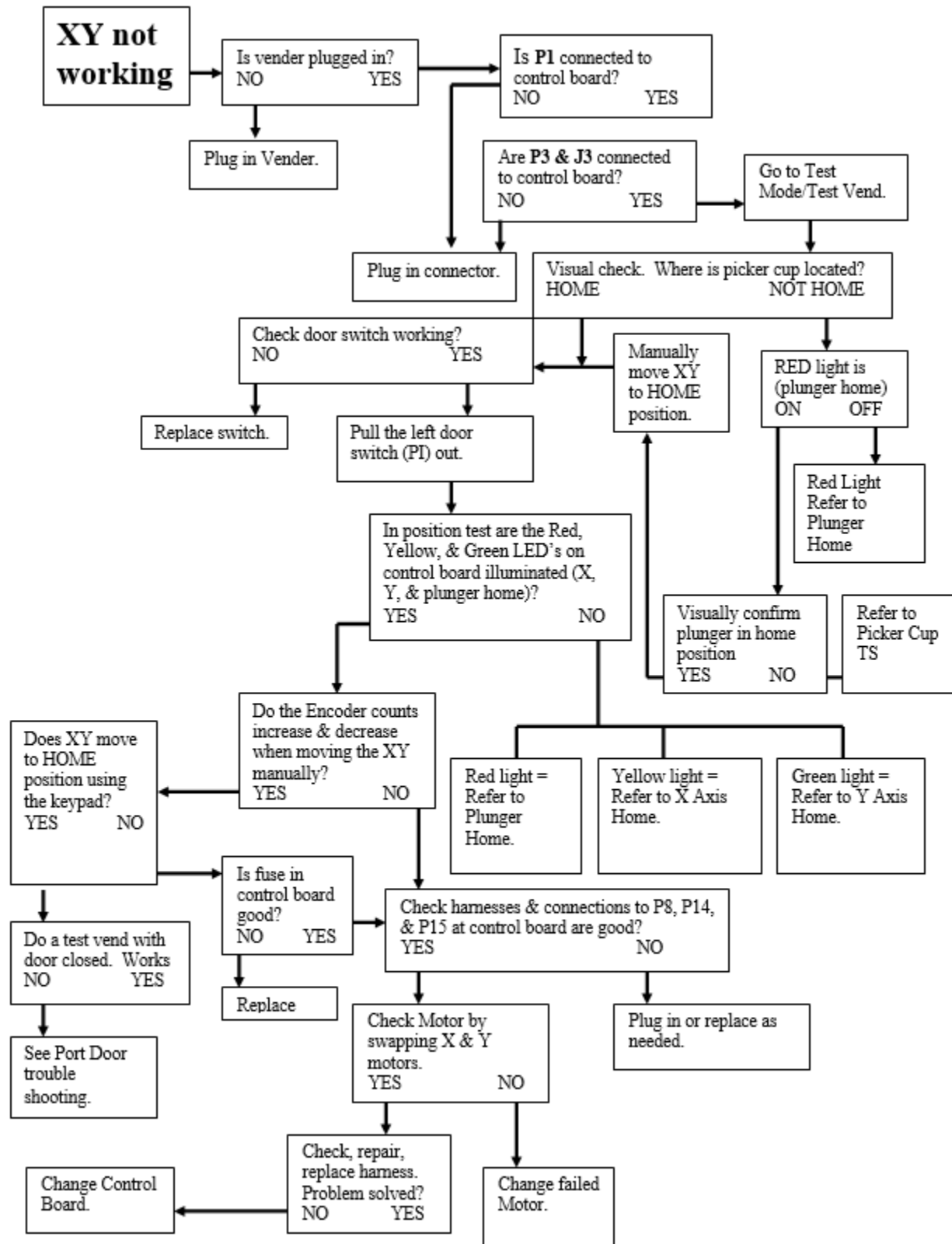
7. Port Assembly On Service Door Will Not Open.
 - a. Perform TEST MODE/TEST VEND test movement.
 1. Port open will light the Amber LED on control board.
 2. Port closed will light the Green LED on control board.
 - b. Check for syrup or dirt build up.
 - c. Replace port assembly.
 - d. Check harness and motor.
 - e. Check vend sensor and vend sensor harness.
 - f. Check vend sensor ground wire.
 - g. Check the port open and closed switches.
 - h. Replace control board.

8. Double Vend From Gate
 - a. Too many packages loaded in column.
 - b. Check gear box assy.
 - c. Check pins in gate assy

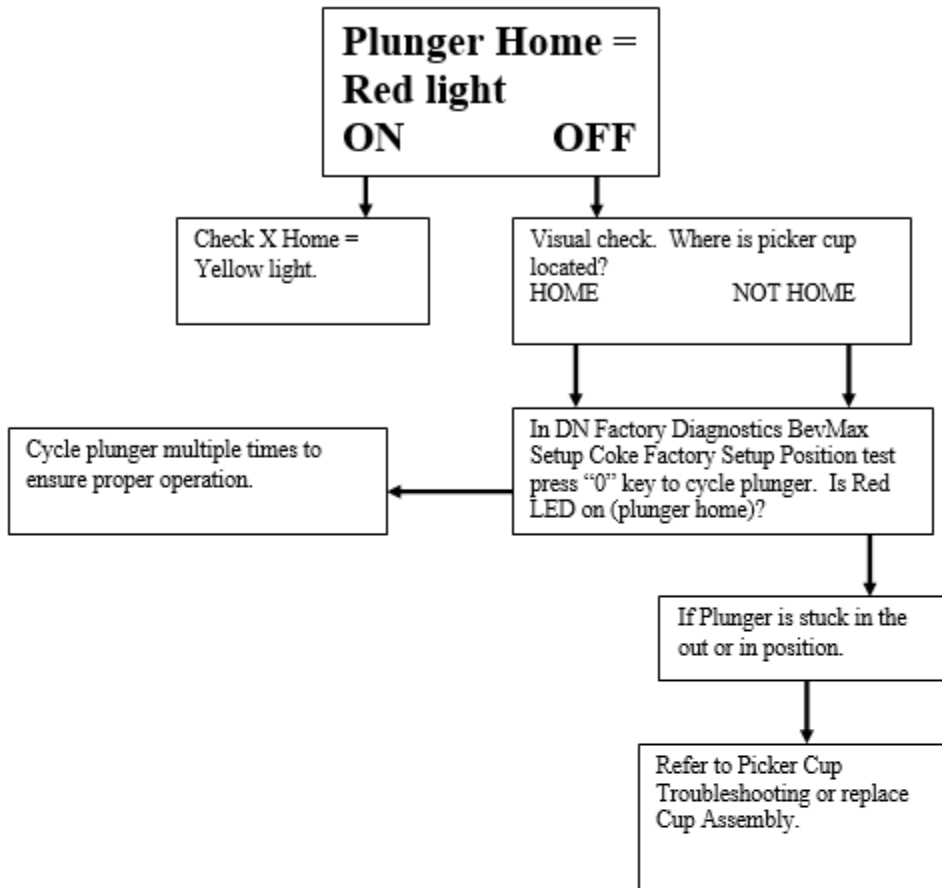
9. Package Not Sliding On Slide Assembly.
 - a. Vender not level.
 - b. Slide not installed correctly.
 - c. Check slide for flash from mold process.
 - d. Slide dirty. Clean and apply Armoral or Food Grade Silicone.

10. Delivery Cup Assembly Caught On Tray
 - a. Check vender is level.
 - b. Check rollers.

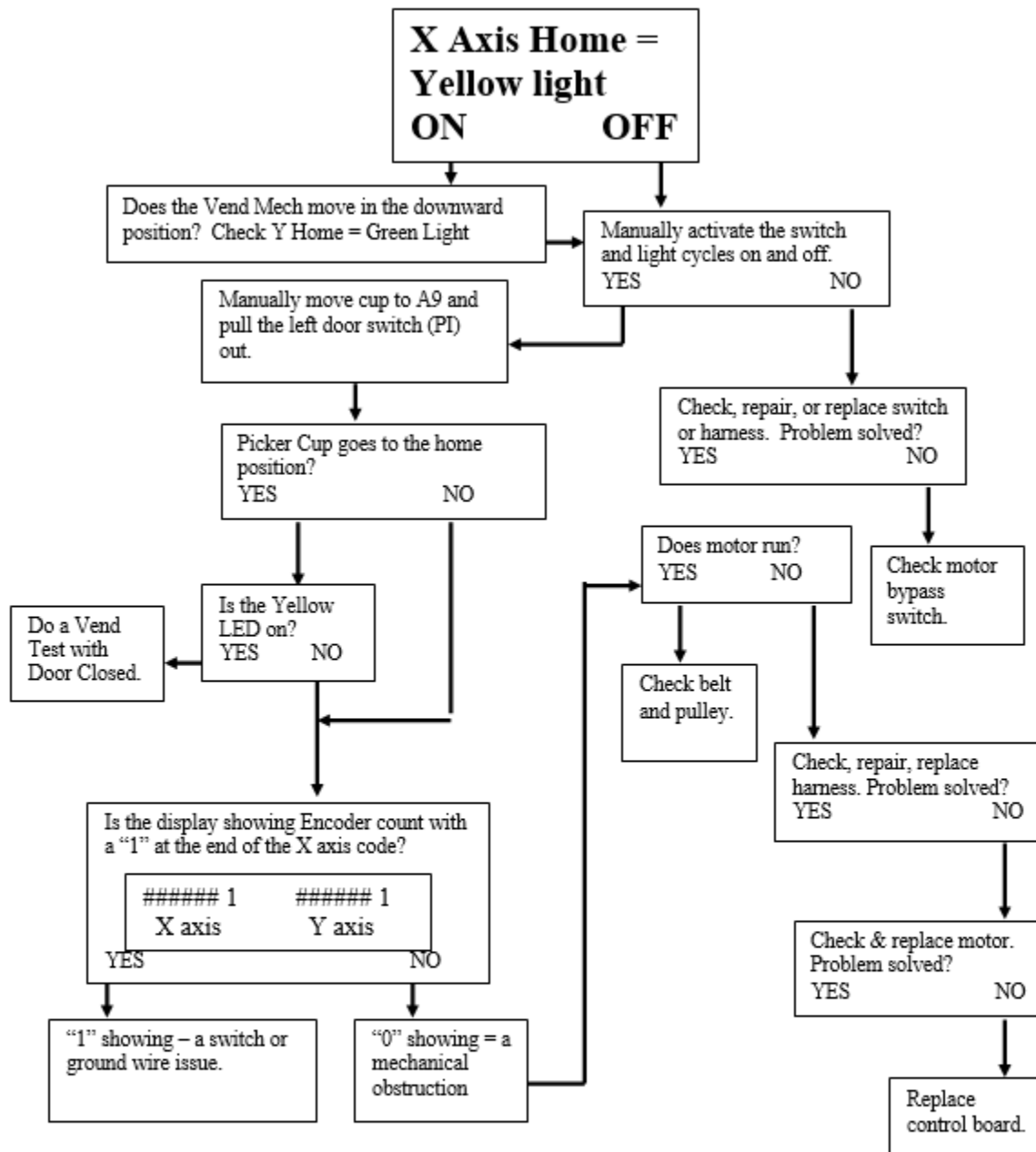
CRANE MERCHANDISING SYSTEMS



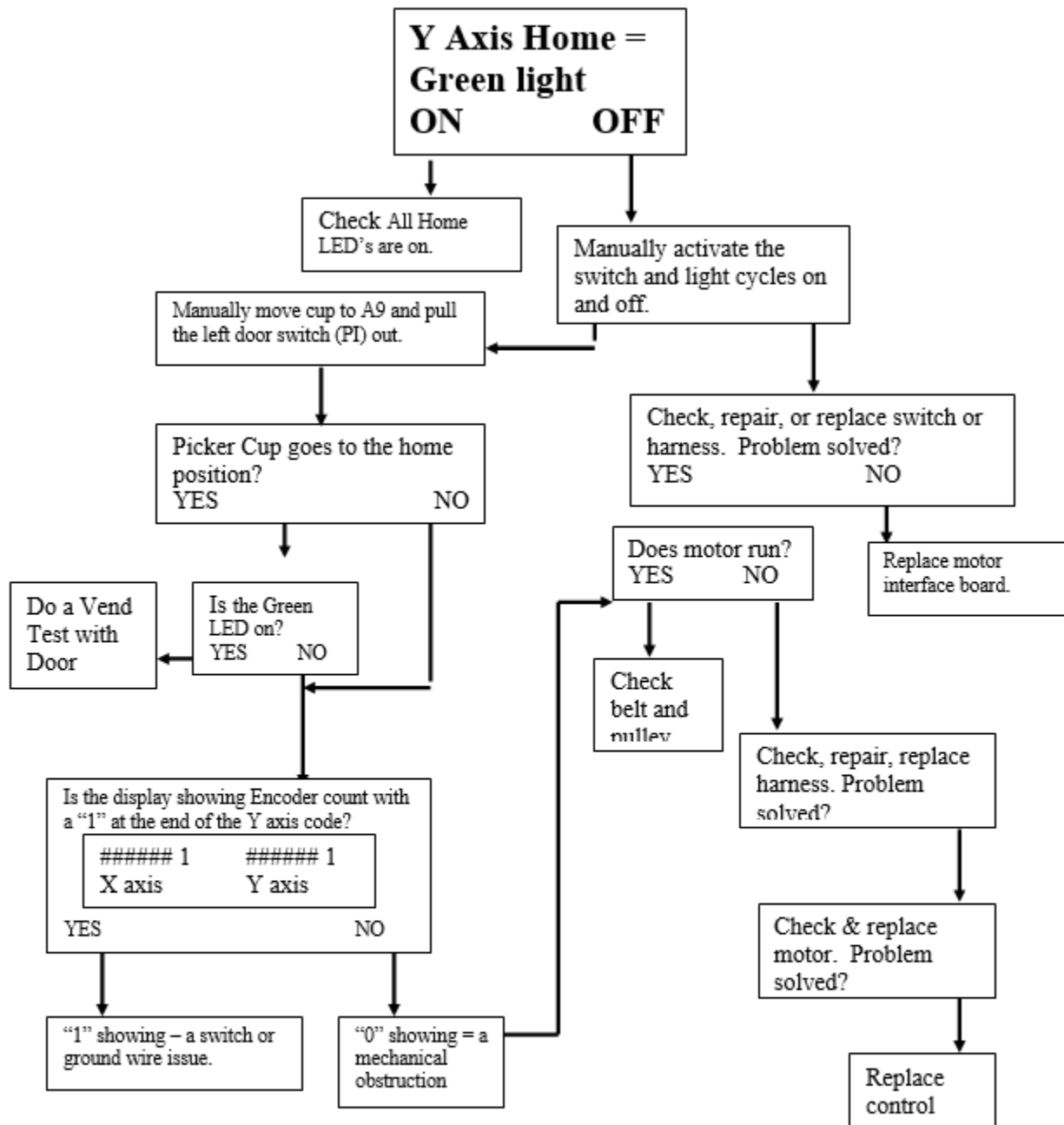
CRANE MERCHANDISING SYSTEMS



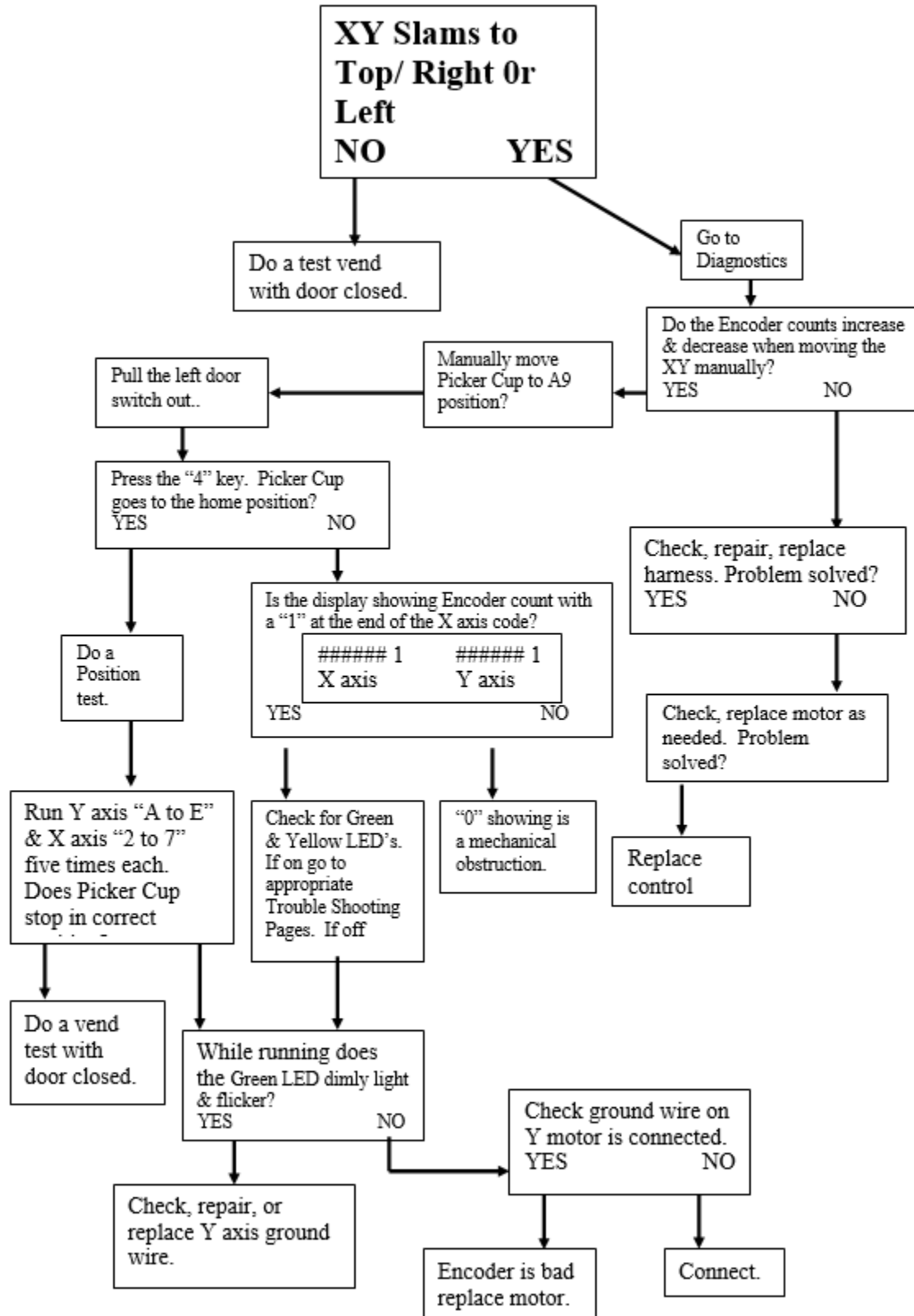
CRANE MERCHANDISING SYSTEMS



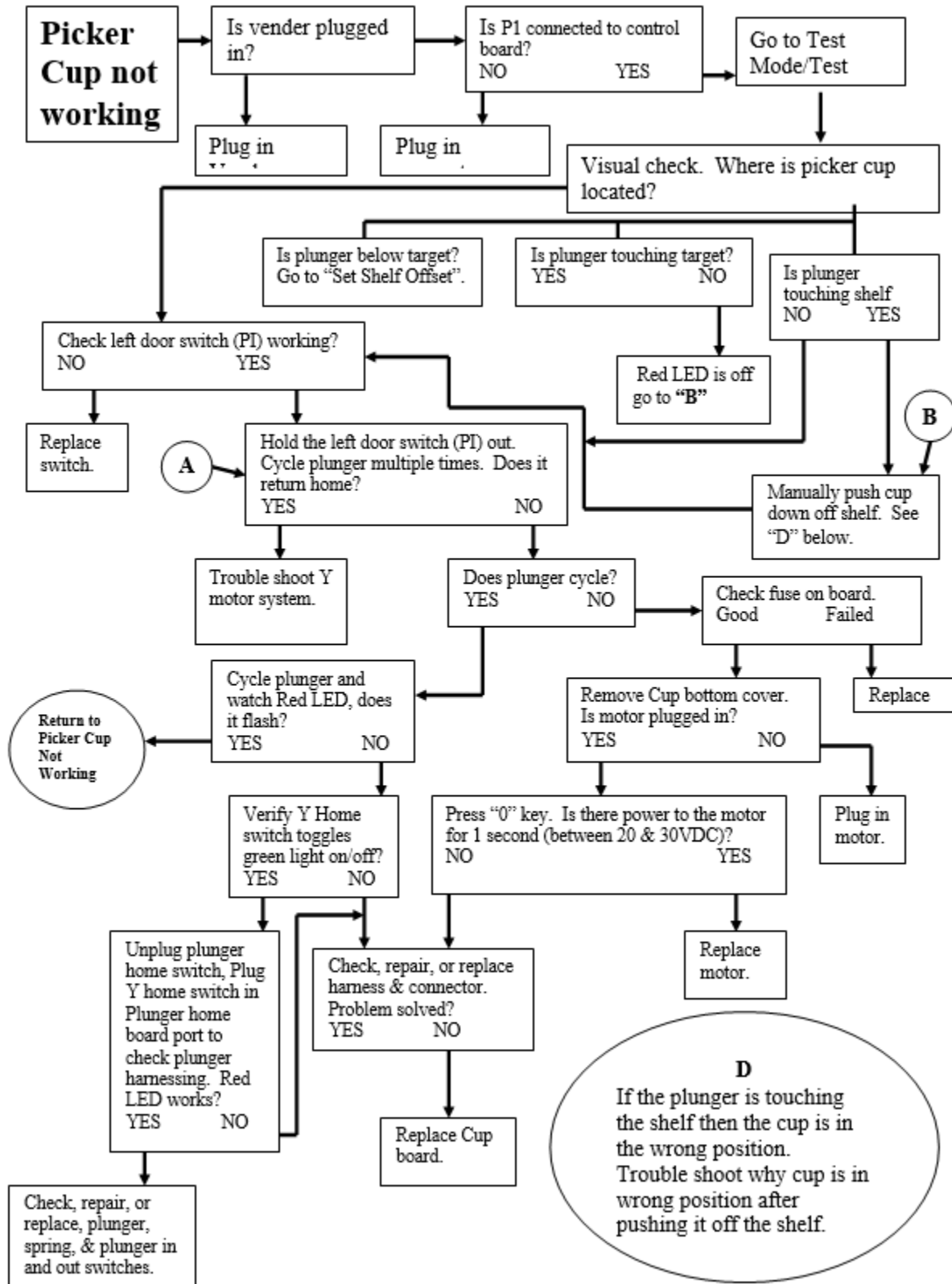
CRANE MERCHANDISING SYSTEMS

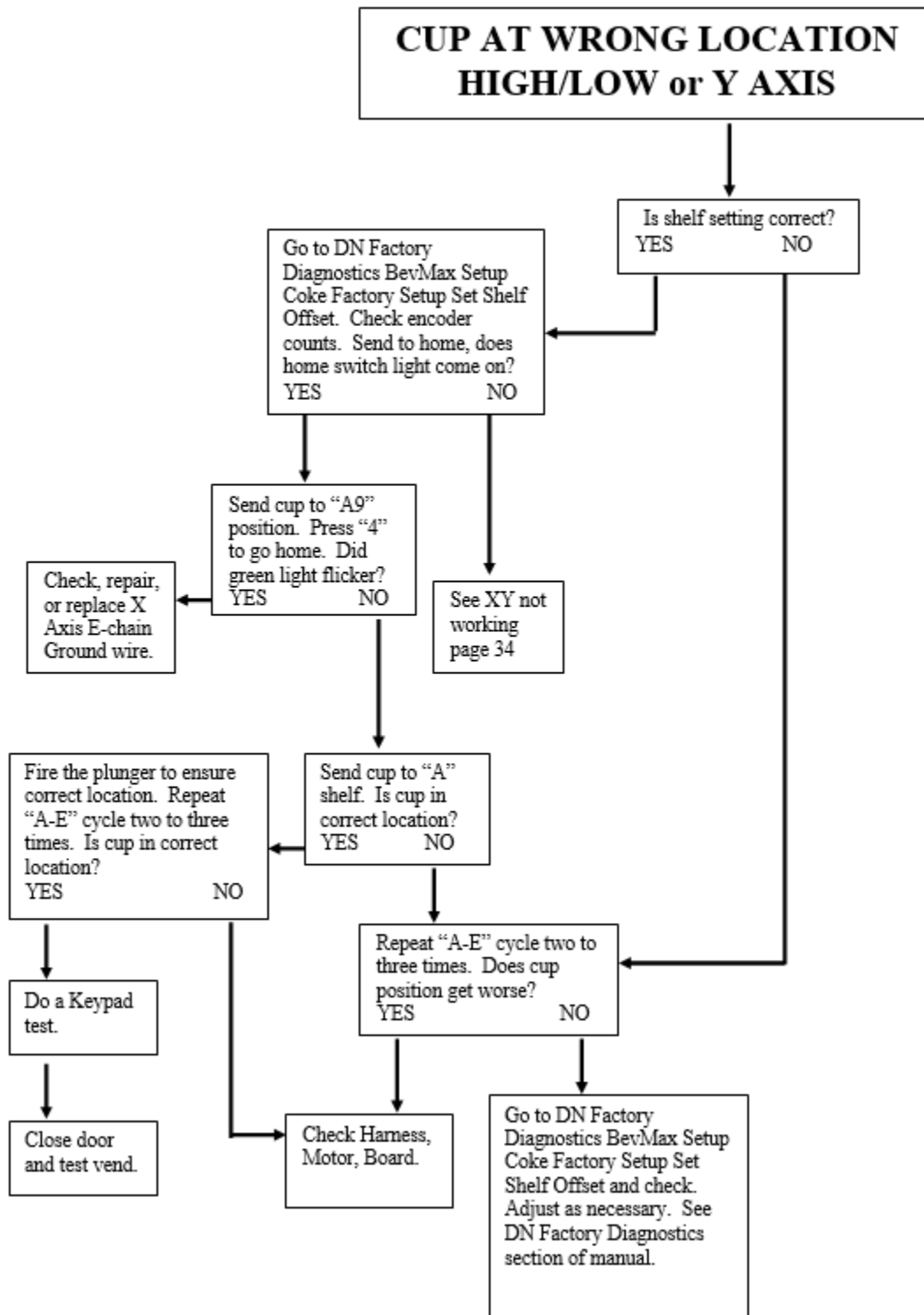


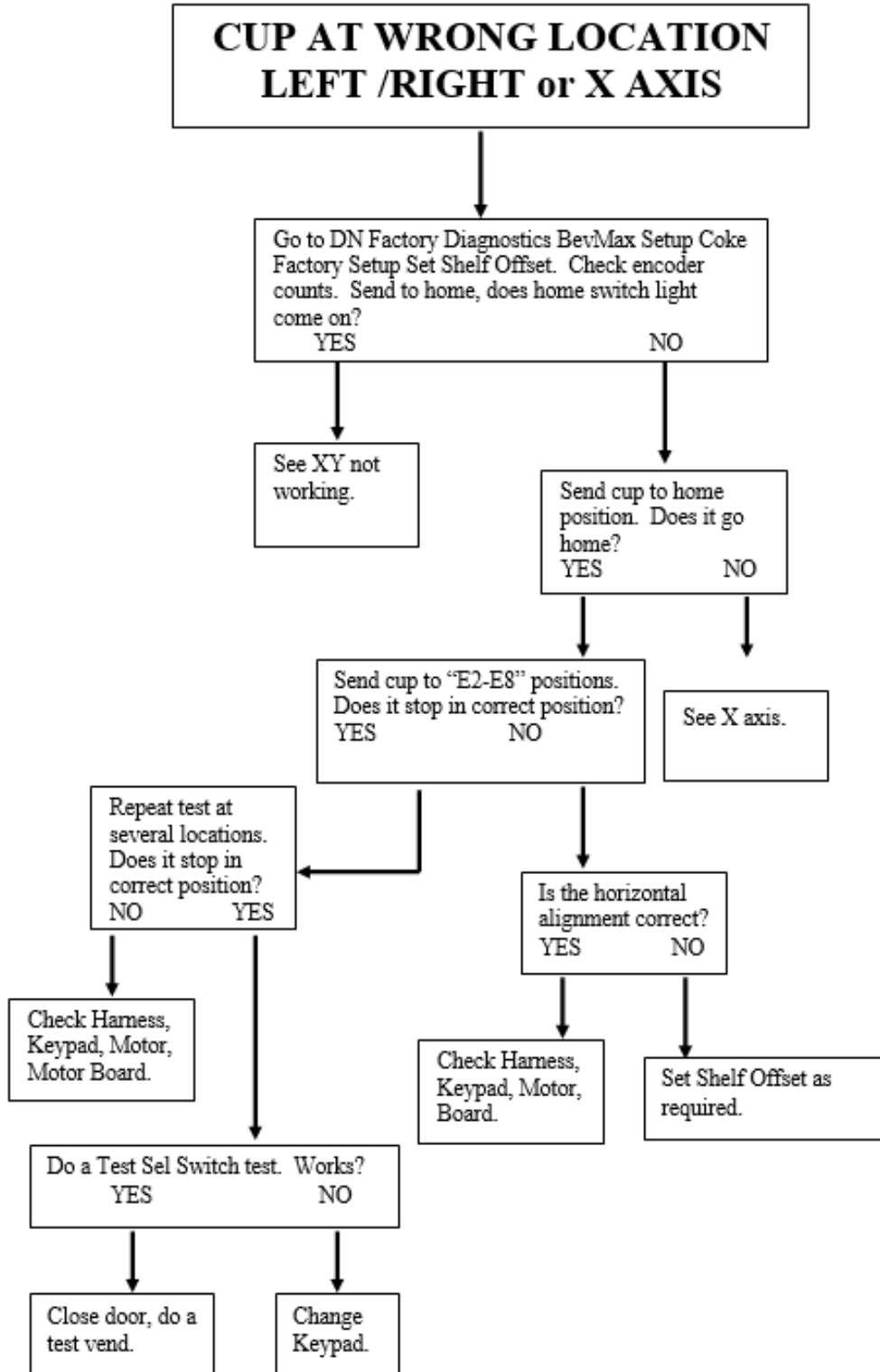
CRANE MERCHANDISING SYSTEMS

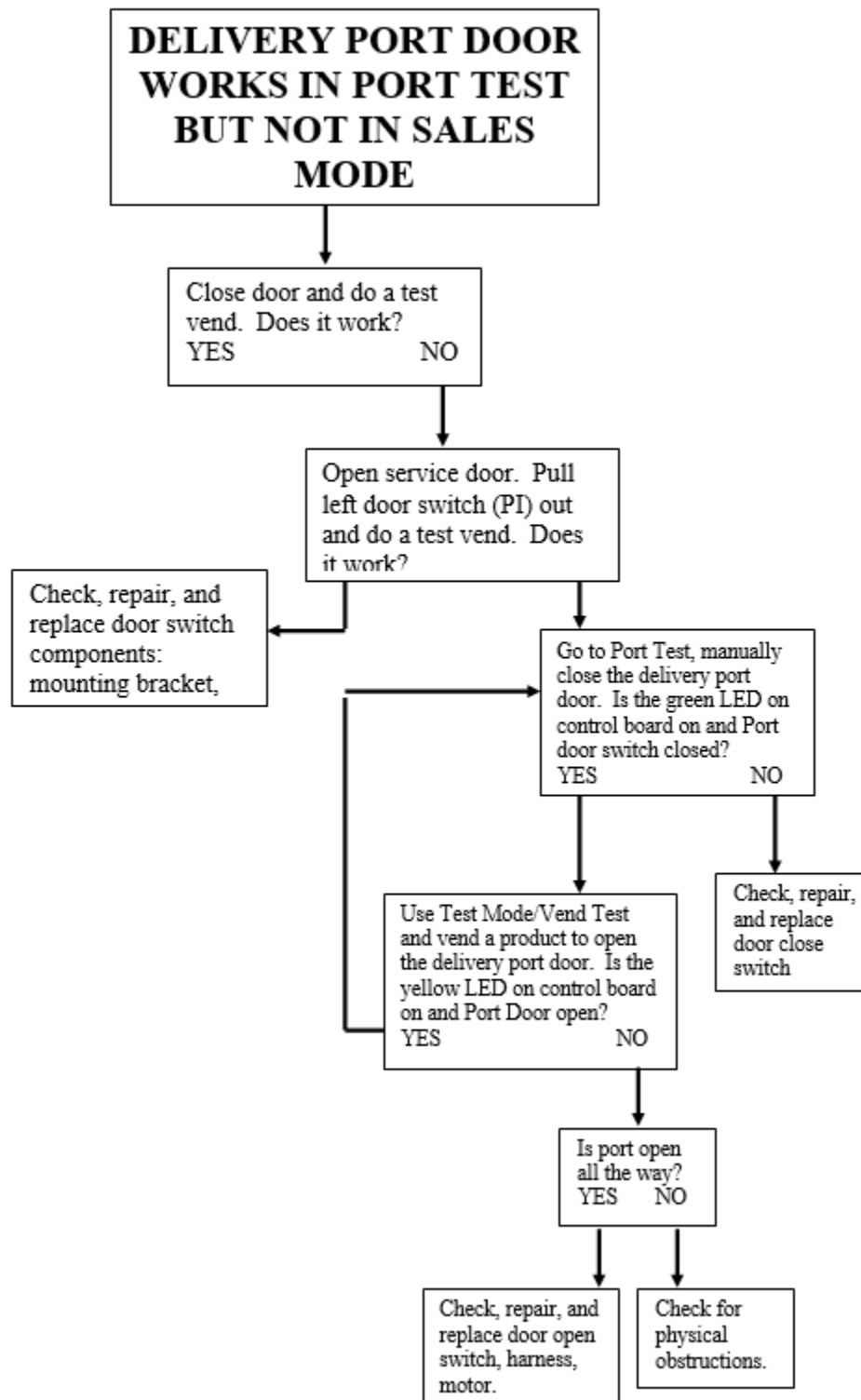


CRANE MERCHANDISING SYSTEMS









CRANE MERCHANDISING SYSTEMS

COIN ACCEPTANCE ISSUES

| PROBLEM | CAUSE | FIX |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Coins Returned to Customer With No Credit Issued | <ol style="list-style-type: none"> 1. Price set to zero. 2. Coin Jam in Mech 3. Flight Deck Dirty 4. No Power to Mech 5. Coin Return Lever Activated 6. Vender in Test Mode 7. Not Available Time Set 8. Defective Coin Mech | <ol style="list-style-type: none"> 1. Set price in programming. 2. Clear Jam and Test 3. Clean Flight Deck 4. Check Harness, Changer to VCU 5. Adjust Coin Return Lever 6. Close Service Door 7. Disable Not Available Time 8. Replace Mech |
| Will Not Payback Coins | <ol style="list-style-type: none"> 1. No Power to Mech 2. Harness not plugged in control board. 3. No Coins in Tubes 4. Tubes Programmed Incorrectly (4 Tube Mech) 5. Defective Coin Mech | <ol style="list-style-type: none"> 1. Check / Replace MDB Harness Plug in harness. 3. Fill Coin Tubes with Coins 4. Reprogram per Manufacturer Recommendation 5. Replace Coin Mech |

DOLLAR BILL ACCEPTANCE ISSUES

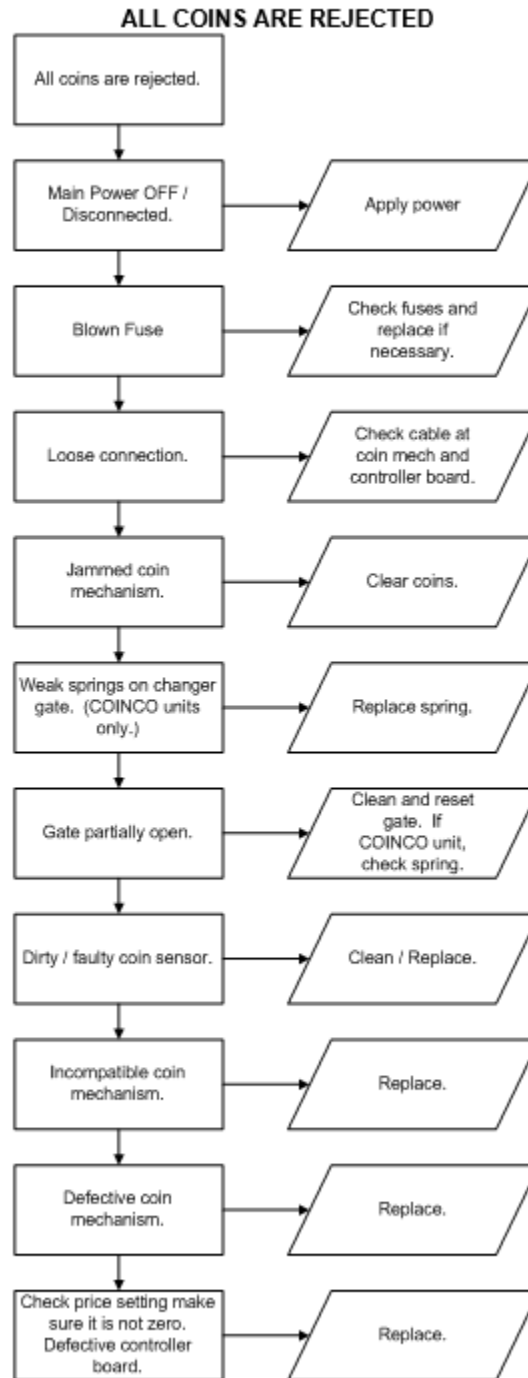
| PROBLEM | CAUSE | FIX |
|----------------------------------|----------------------------------------------------------------------------|---------------------------------------------------|
| Bill Validator will not run. | Prices / tube cash conditions. | Check Mech Tubes. |
| Takes Bill in Then Rejects it | | Check Validator or Replace |
| Stacks Bill While in Escrow Mode | Max Price Not Yet Reached | |
| Bill Error Listed in Test Mode | Communication Error with Bill Validator. Bill Validator Reported Error. | |
| Takes Bill, Gives No Credit | Harness, Validator, Board | Check or Replace Validator Harness, Replace Board |

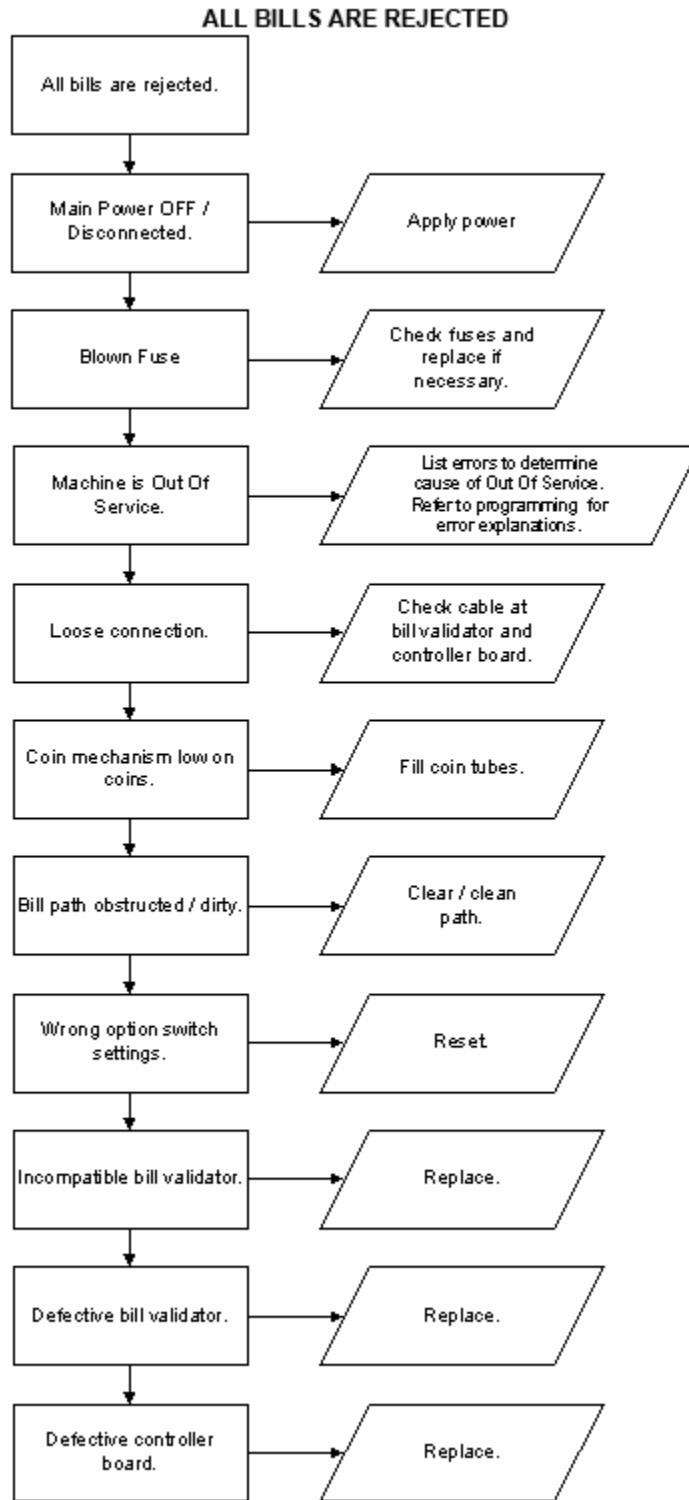
CONTROL BOARD (VMC)

| PROBLEM | CAUSE | FIX |
|------------------------------------------------------|------------------------|-----------------------------------------------------------------------------|
| No Power to Controller. | AC Box | Replace AC box. |
| Out of Order or other error codes showing on display | RAM Error | Refer to Programming Section on page 10 for specific error codes and cures. |
| No Sales Available | No Vendable Selections | Check StS programming |
| | | |
| | | |

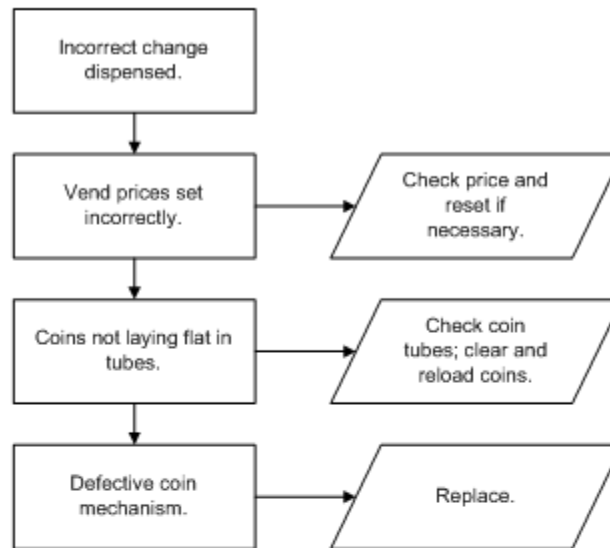
CRANE MERCHANDISING SYSTEMS

These charts are intended as a guide to isolate and correct most problems you might encounter. Should your machine show "OUT OF SERVICE", go in the TEST MODE and press "B" to list errors.

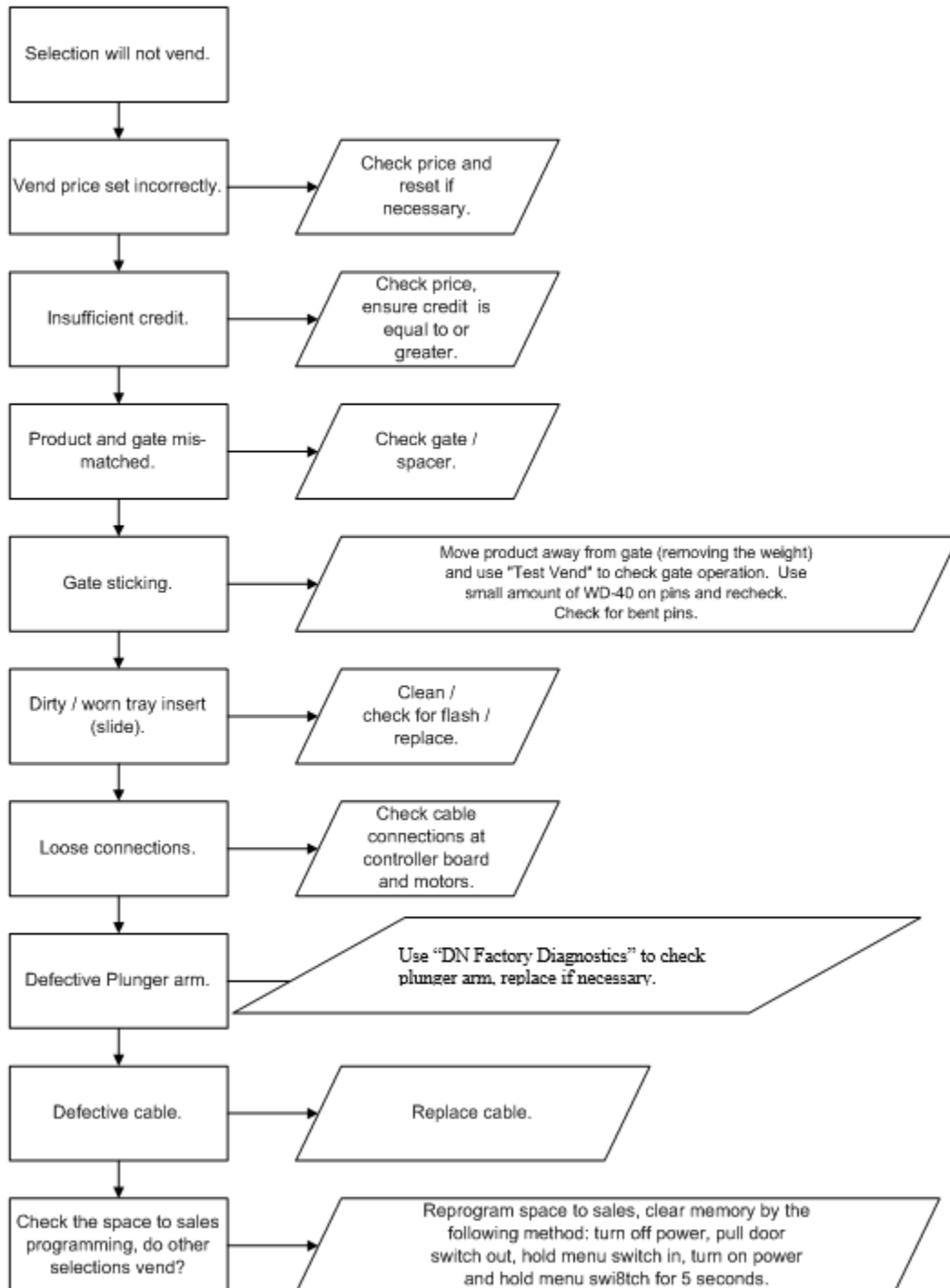




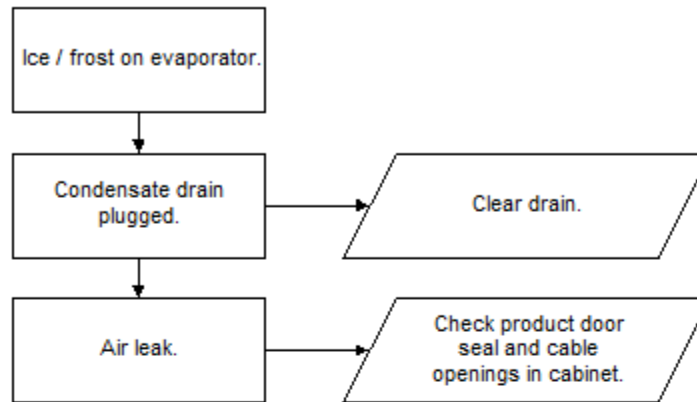
INCORRECT CHANGE DISPENSED



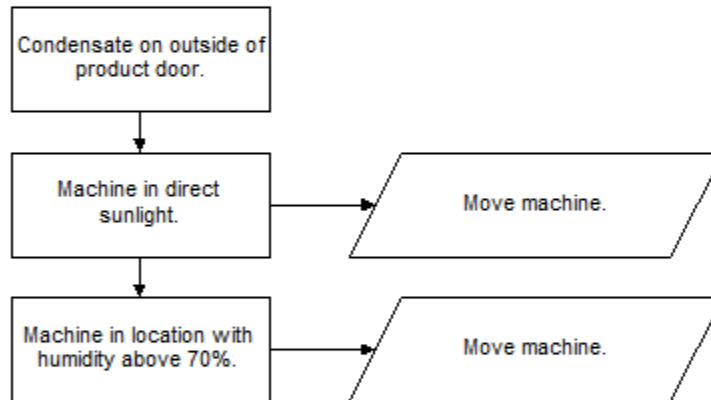
SELECTION WILL NOT VEND



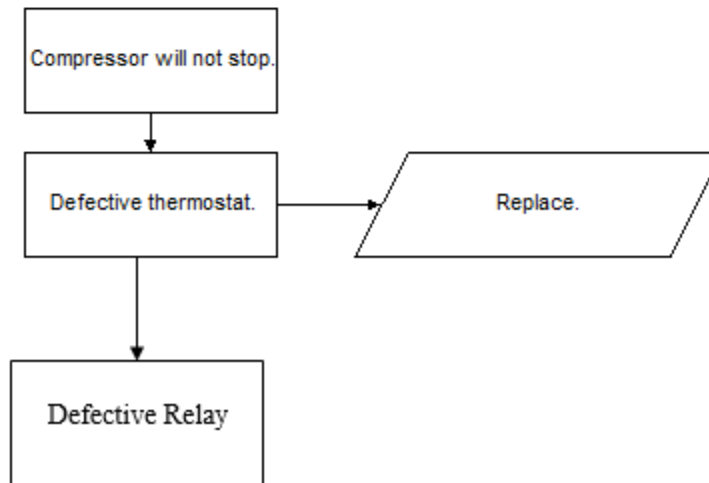
ICE / FROST ON EVAPORATOR



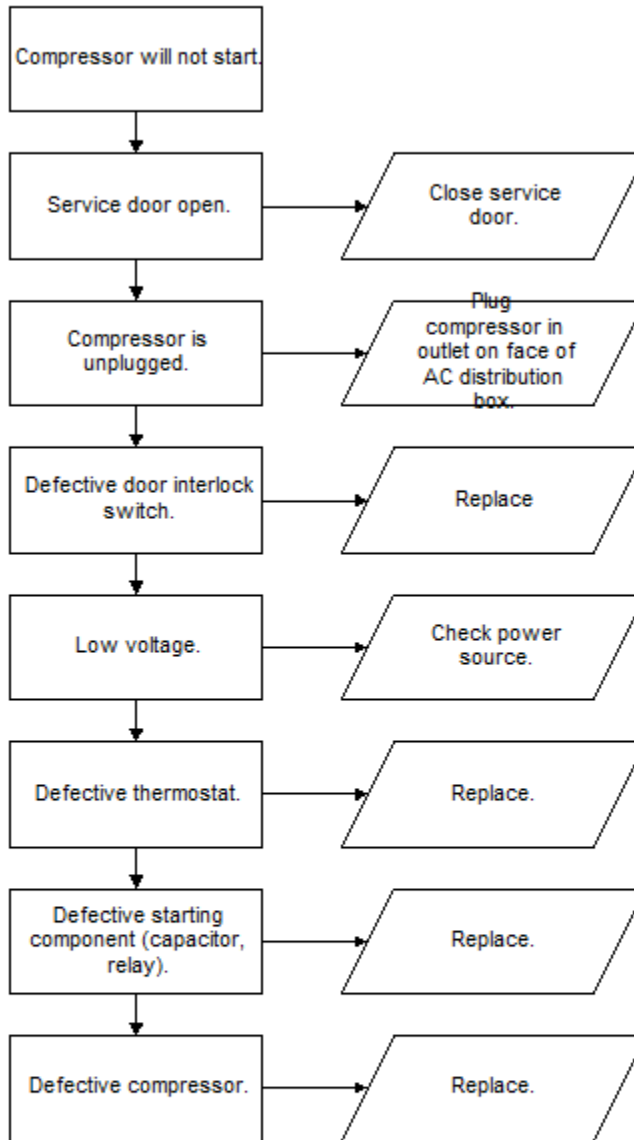
CONDENSATE ON OUTSIDE OF PRODUCT DOOR



COMPRESSOR WILL NOT STOP

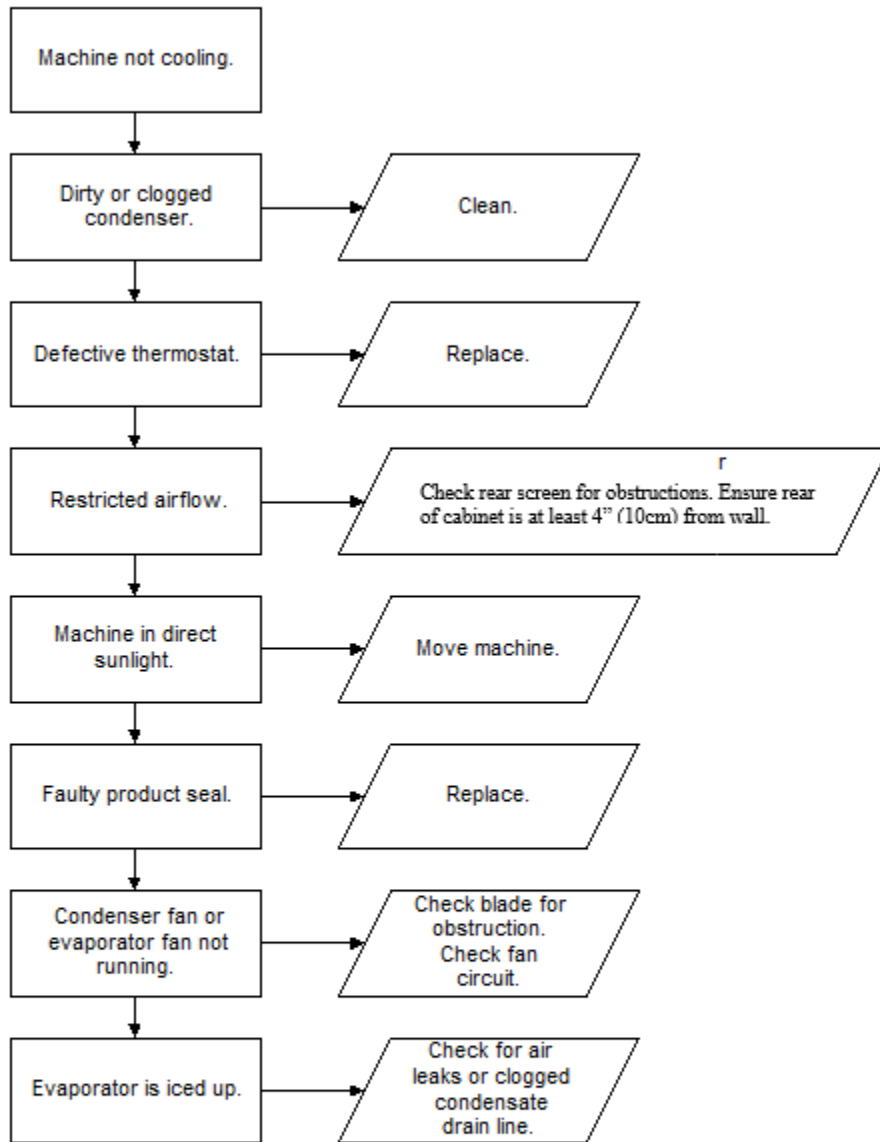


COMPRESSOR WILL NOT START

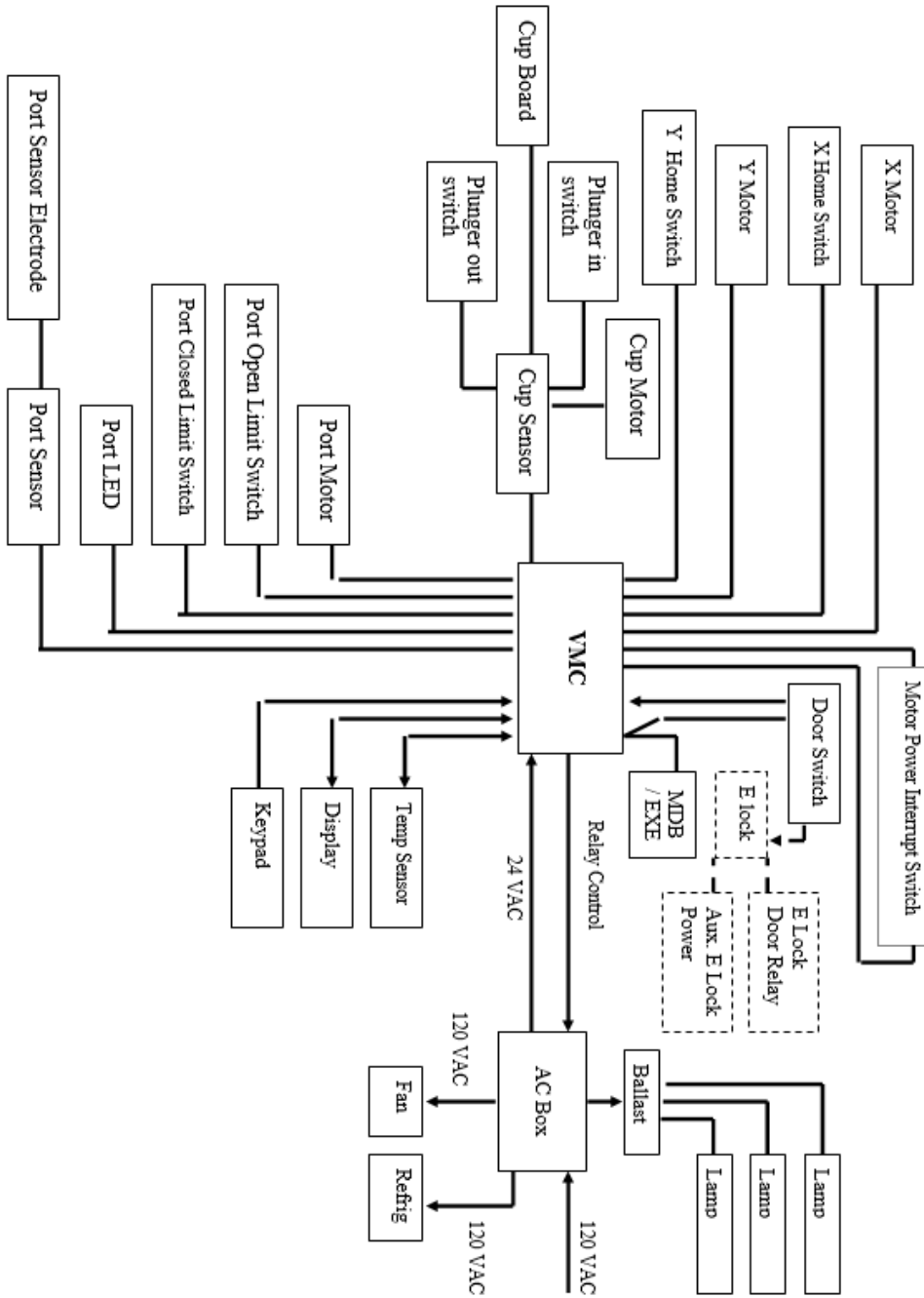


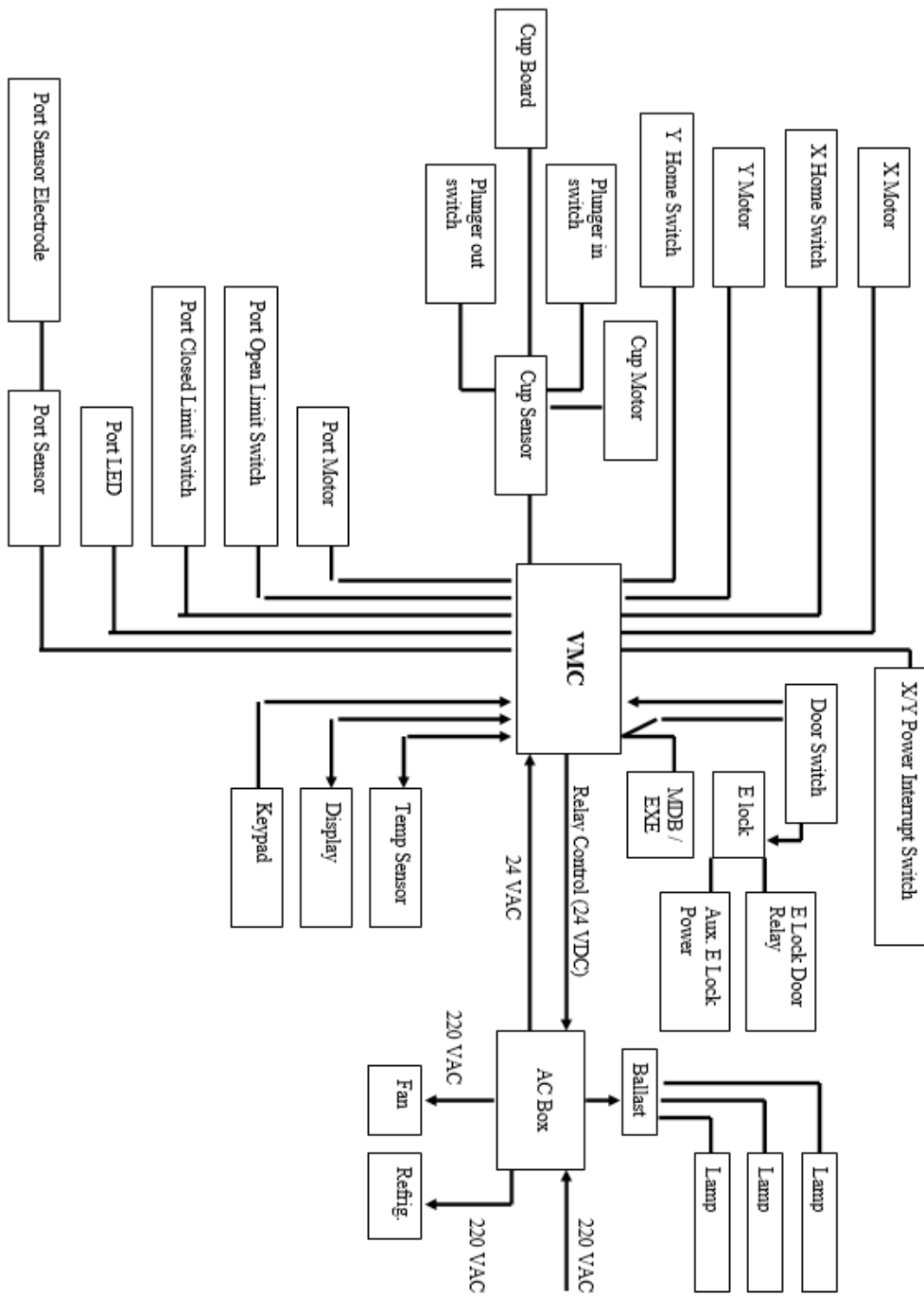
Troubleshooting Tip: Use a short 15 Amp extension cord and plug the compressor directly into the wall outlet. This will bypass the AC distribution box.
Note: For Testing Purposes Only.

MACHINE NOT COOLING



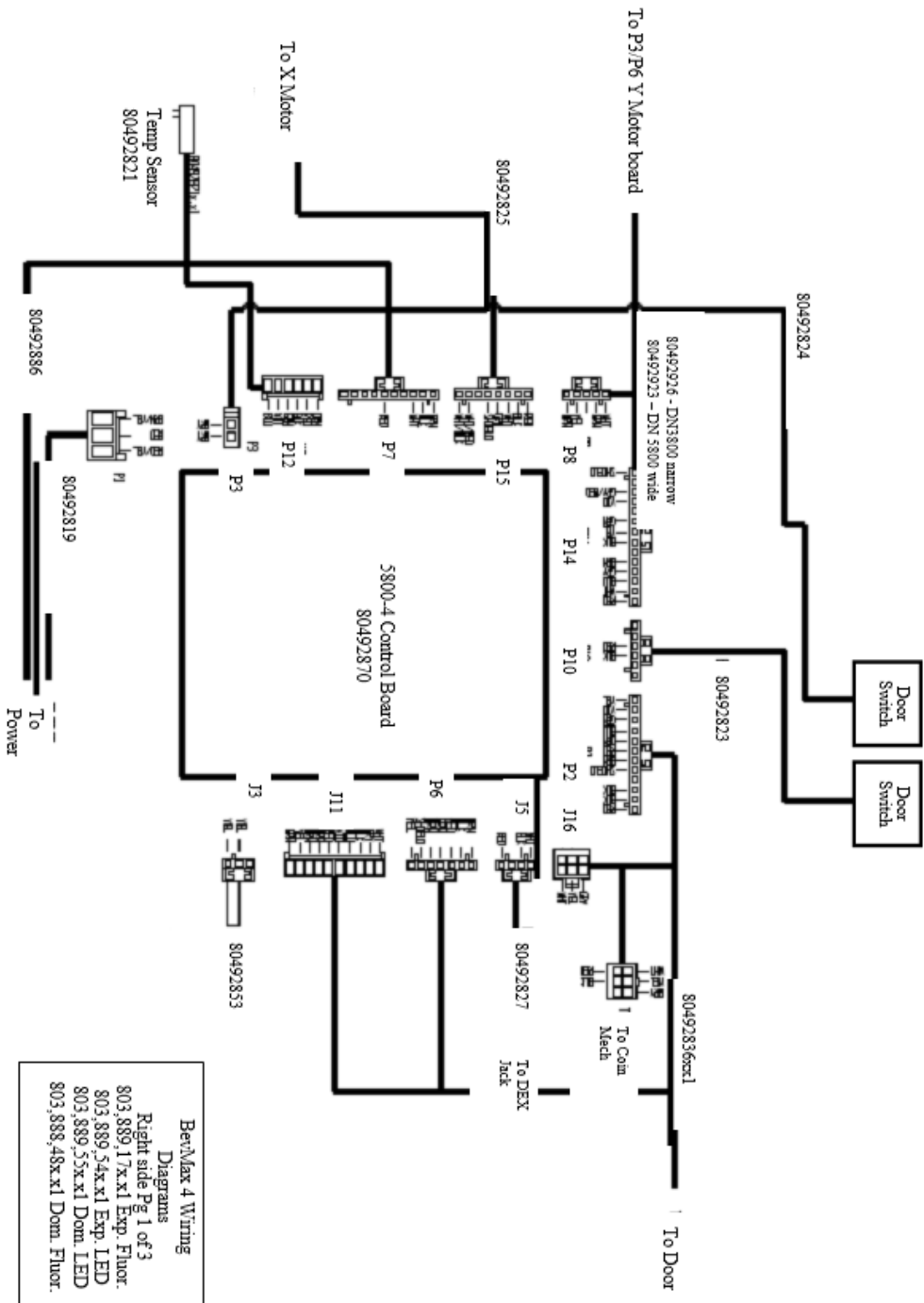
BevMax 4 5800-4/3800-4 Domestic Block Diagram





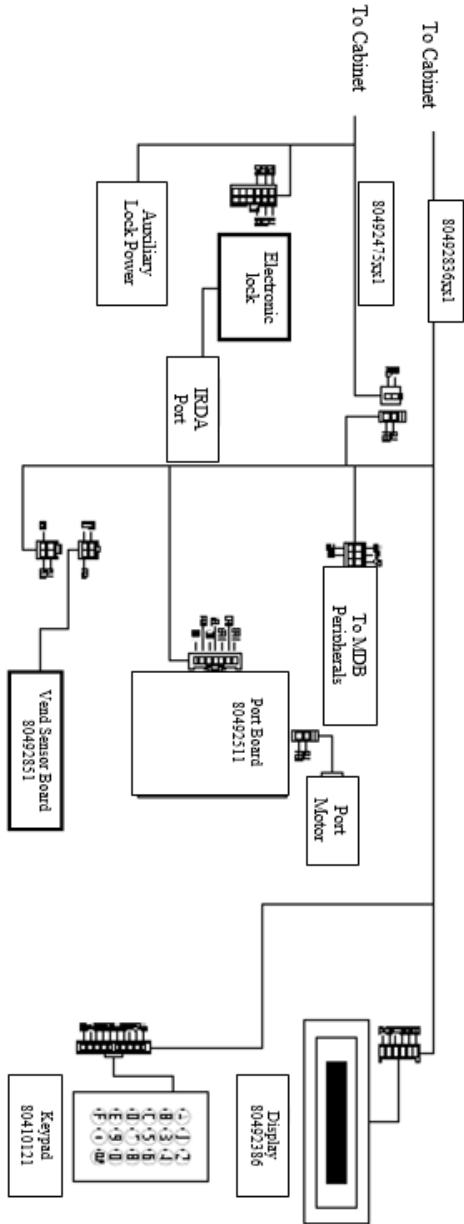
BevMax 4 5800-E4/3800-E4 Export Block Diagram

BevMax 4 5800-4/3800-4/5800-E4/3800-E4 Cabinet Diagram (Domestic & Export)



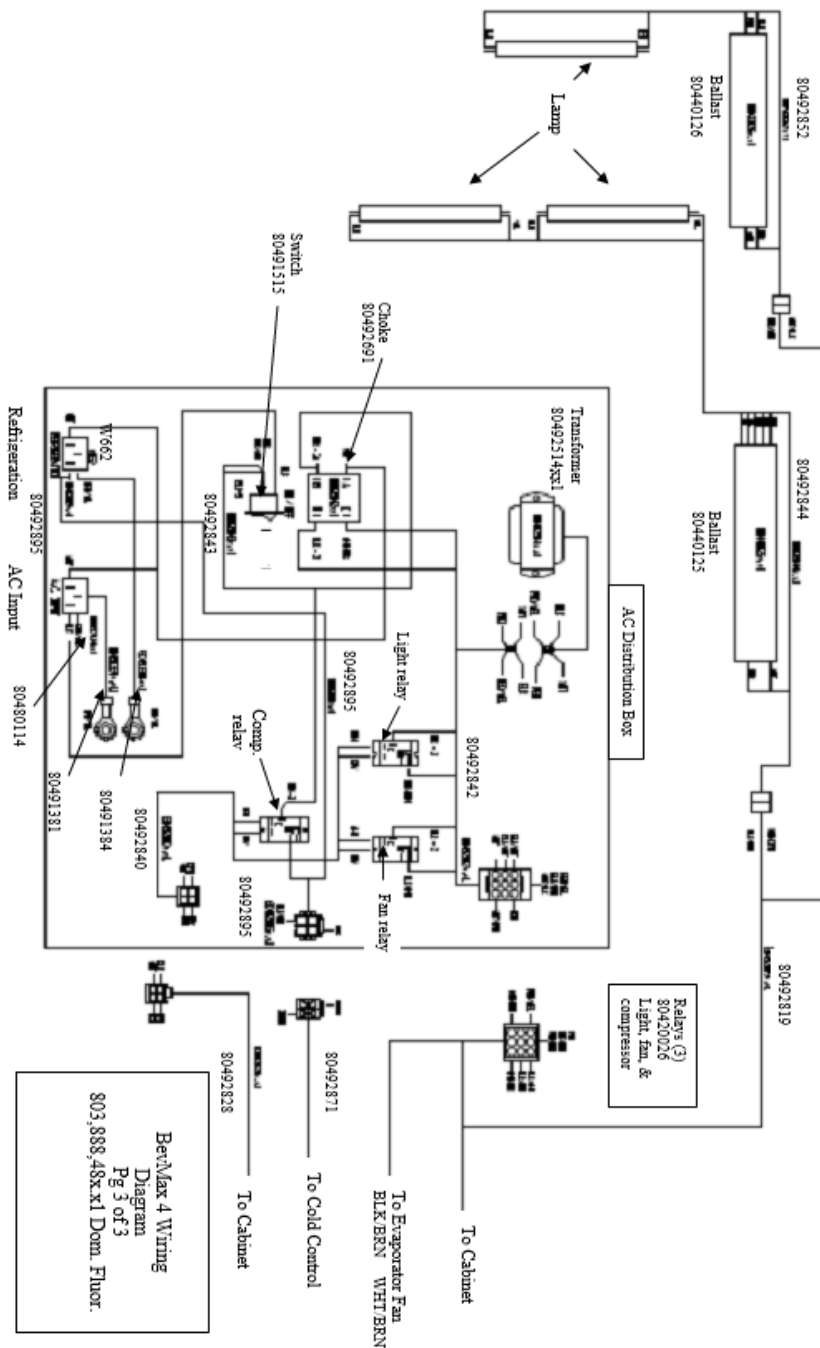
BevMax 4 Wiring
Diagrams
Right side Pg 1 of 3
803,889,17x x1 Exp. Fluor.
803,889,54x x1 Exp. LED
803,889,55x x1 Dom. LED
803,888,48x x1 Dom. Fluor.

BevMax 4 5800-4/3800-4/5800-E4/3800-E4 Door Diagram (Domestic & Export)



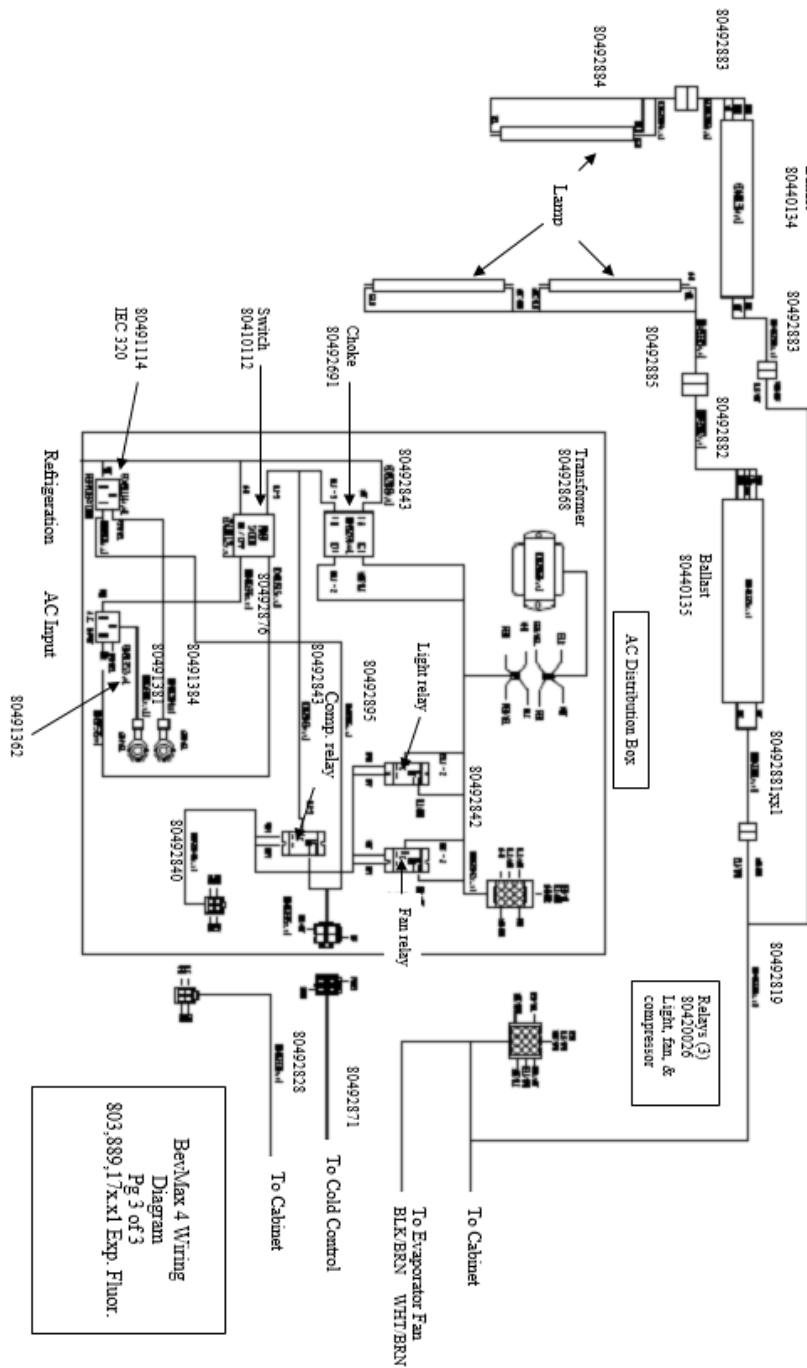
BevMax 4 Wiring
Diagrams
Pg 2 of 3
803,889,17x x1 Exp. Fluor.
803,889,54x x1 Exp. LED
803,889,55x x1 Dom. LED
803,888,48x x1 Dom. Fluor.

**BevMax 4 5800-4/3800-4 Domestic Power & Fluorescent Lighting Diagram
With JST Connectors**



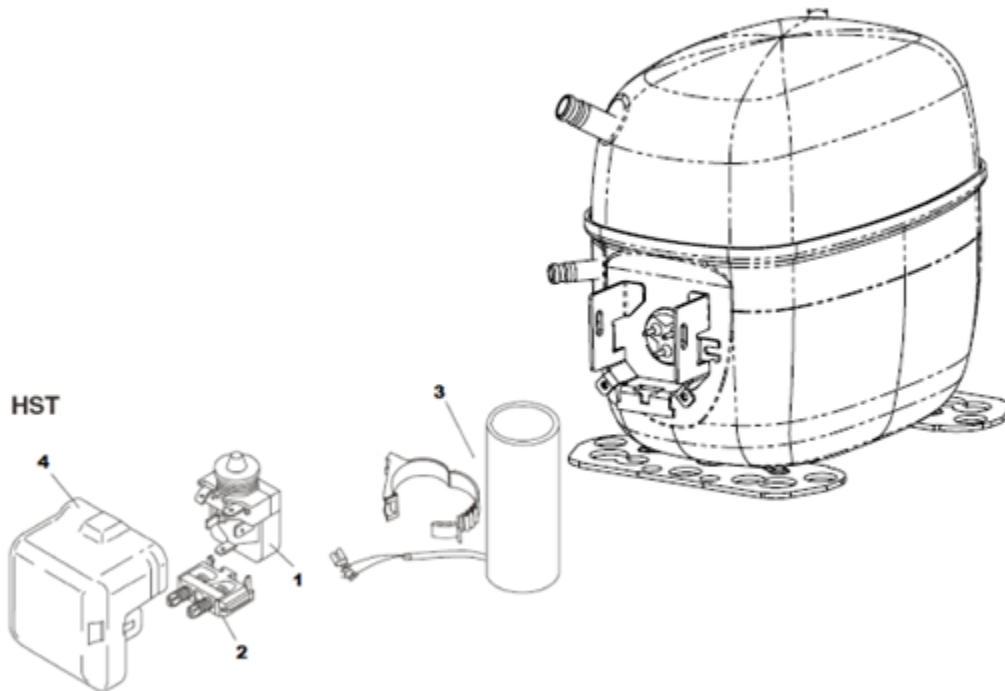
BevMax 4 Wiring
Diagram
Pg 3 of 3
803,888,48x x1 Dom. Fluor.

BevMax 4 5800-4/3800-4 Export Power & Fluorescent Lighting Diagram



BevMax 4 Wiring
Diagram
Pg 3 of 3
803,889,17x1 Exp. Fluor.

BevMax 4 5800-E4/3800-E4 Compressor Parts Diagram

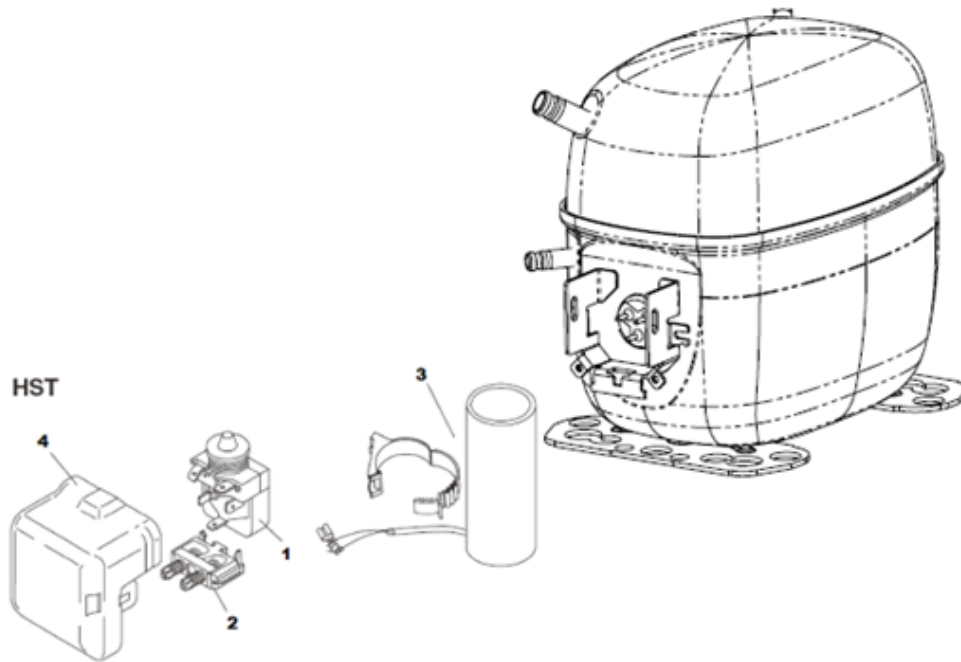


Domestic Compressor Parts BevMax 4 5800-4/3800-4

105574 Domestic Refrigeration Kit

| ITEM # | DESCRIPTION |
|--------|-------------------------------------------------------|
| 1 | Compressor, Embraco FFU130HAX 115/60 (EM# 513200620) |
| 2 | Bracket, Capacitor FFU130HAX (EM#US-2255008) |
| 3 | Overload, Compressor FFU130HAX (EM#513554617) |
| 4 | Cover, Electrical Component FFU130HAX (EM#13555028) |
| 5 | Relay, Compressor Start FFU130HAX (EM#213516051) |
| 6 | Capacitor, Compressor Start FFU130HAX (EM#US-3252378) |
| 7 | Cap, Capacitor FFU130HAX (EM#2254002) |
| 8 | Cord, Relief FFU130HAX (EM#513545045) |
| 9 | Holder Capacitor FFH130HAX (EM#513555135) |
| 10 | Freon (9.5oz or .269kg) |

BevMax 4 5800-E4/3800-E4 Compressor Parts Diagram

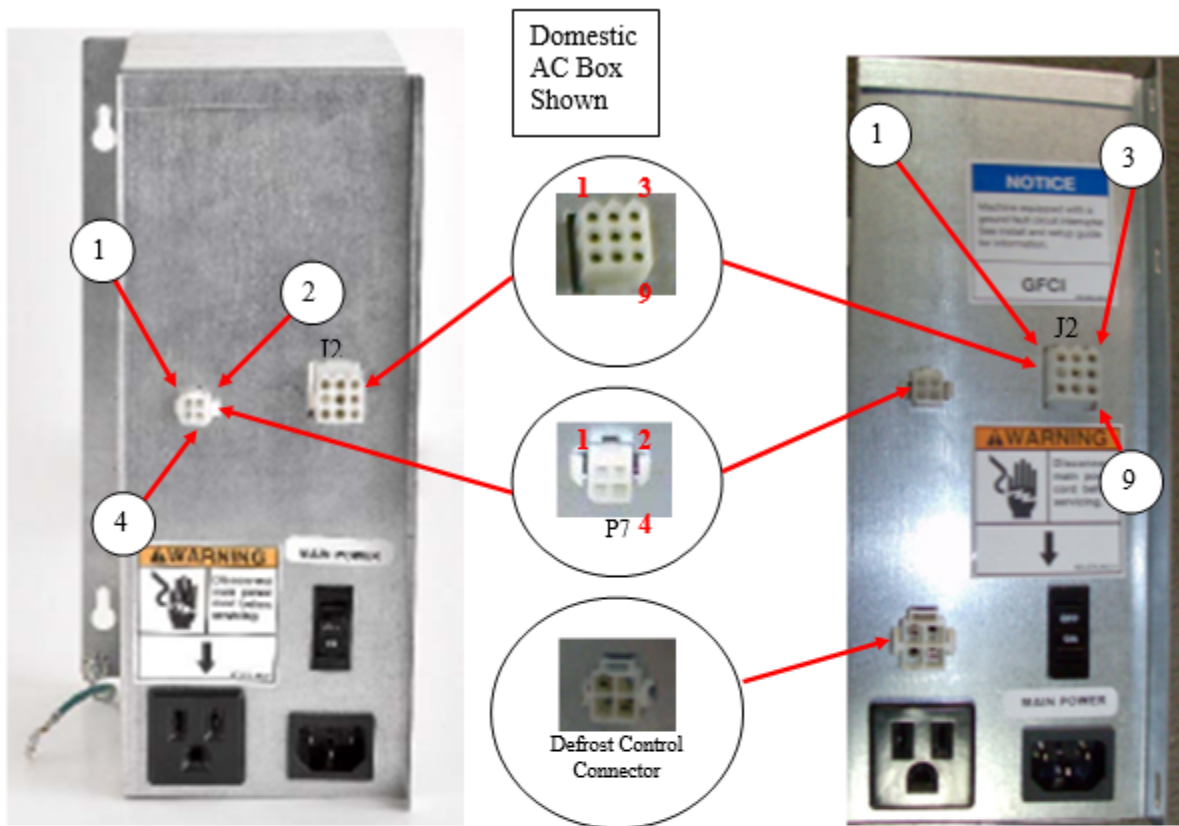


Export Compressor Parts BevMax 4 5800-4/3800-4

105575 Export Refrigeration Kit

| ITEM # | DESCRIPTION |
|--------|------------------------------------------------------------------------------|
| | Compressor, Export |
| 1 | Starting Relay, Danfoss |
| 2 | Cord, Relief Compressor Danfoss |
| 3 | Capacitor, Compressor Start 80 μ F, Danfoss (Sold as part of Compressor) |
| 4 | Cover, Electrical Component FFU130HAX (EM#13555028) |
| 5 | Freon (9.5oz or .269kg) |

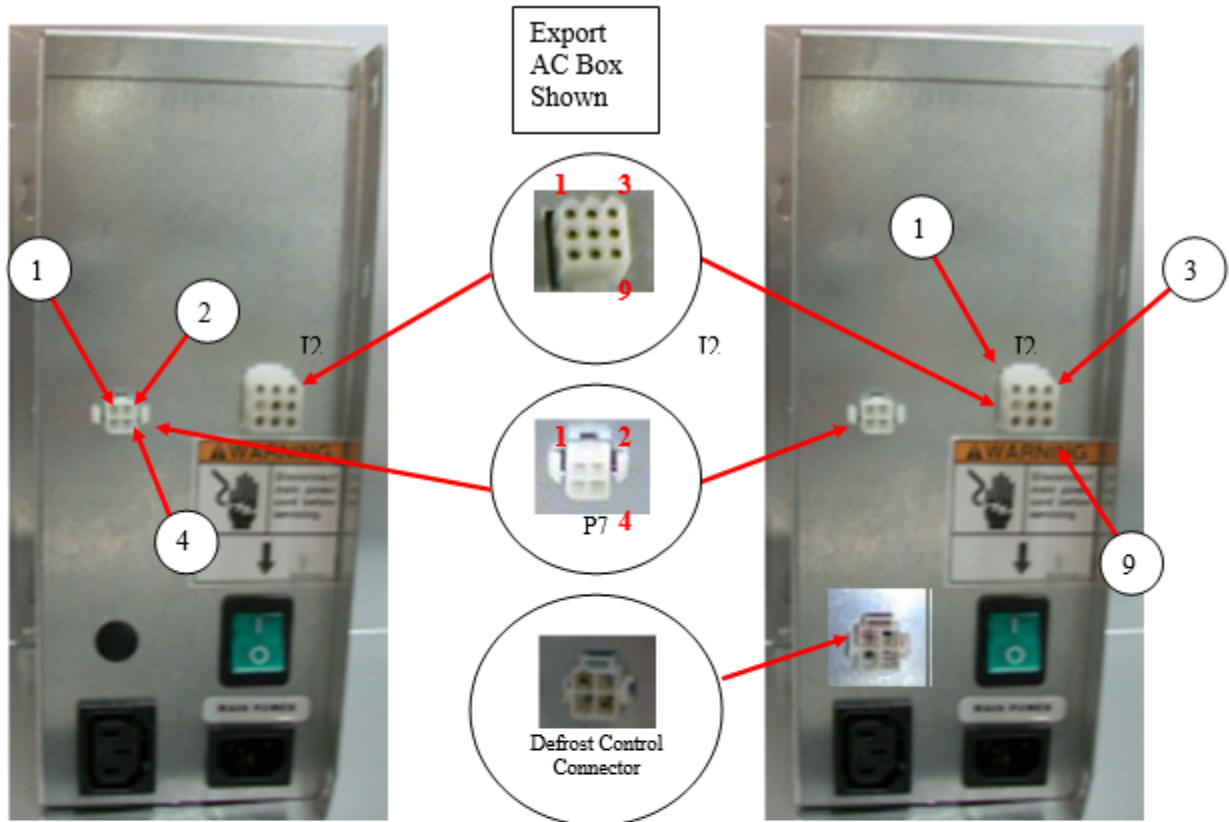
BevMax 4 5800-4/3800-4 AC Distribution Box



| Domestic Test Voltages 9 Pin J2 Output Power Connector | | |
|--------------------------------------------------------|-------------------------|--------------------------------------------|
| 1 st lead to Pin | 2 nd lead to | Domestic Reading |
| 1 | 2 | 24 (26 to 30) VAC secondary of transformer |
| 2 | 1 | 24 (26 to 30) VAC secondary of transformer |
| 3 | ground | 110 VAC Hot not switched for 1 lamp assy. |
| 4 | NA | OPEN |
| 5 | ground | 115 VAC Hot switched for fan motor |
| 6 | ground | 115 VAC Hot switched for lights |
| 7 | ground | 0 VAC Neutral |
| 8 | ground | 0 VAC Neutral |
| 9 | ground | 0 VAC Neutral |

| Domestic Test Measurements 4 Pin P7 AC Distribution Box | | | |
|---------------------------------------------------------|-----------------------------|---------------------------|--------------------------------------------------|
| 1 st lead to Pin | 2 nd lead to Pin | Domestic Reading | When 4 pin connector is unplugged – OHMS reading |
| 1 | 3 | Lights control relay coil | 570 ohms |
| 2 | 3 | Fan control relay coil | 570 ohms |
| 4 | 3 | Compressor relay coil | 570 ohms |
| 3 | NA | Common | NA |

Export BevMax 4 5800-E4/3800-E4 AC Distribution Box

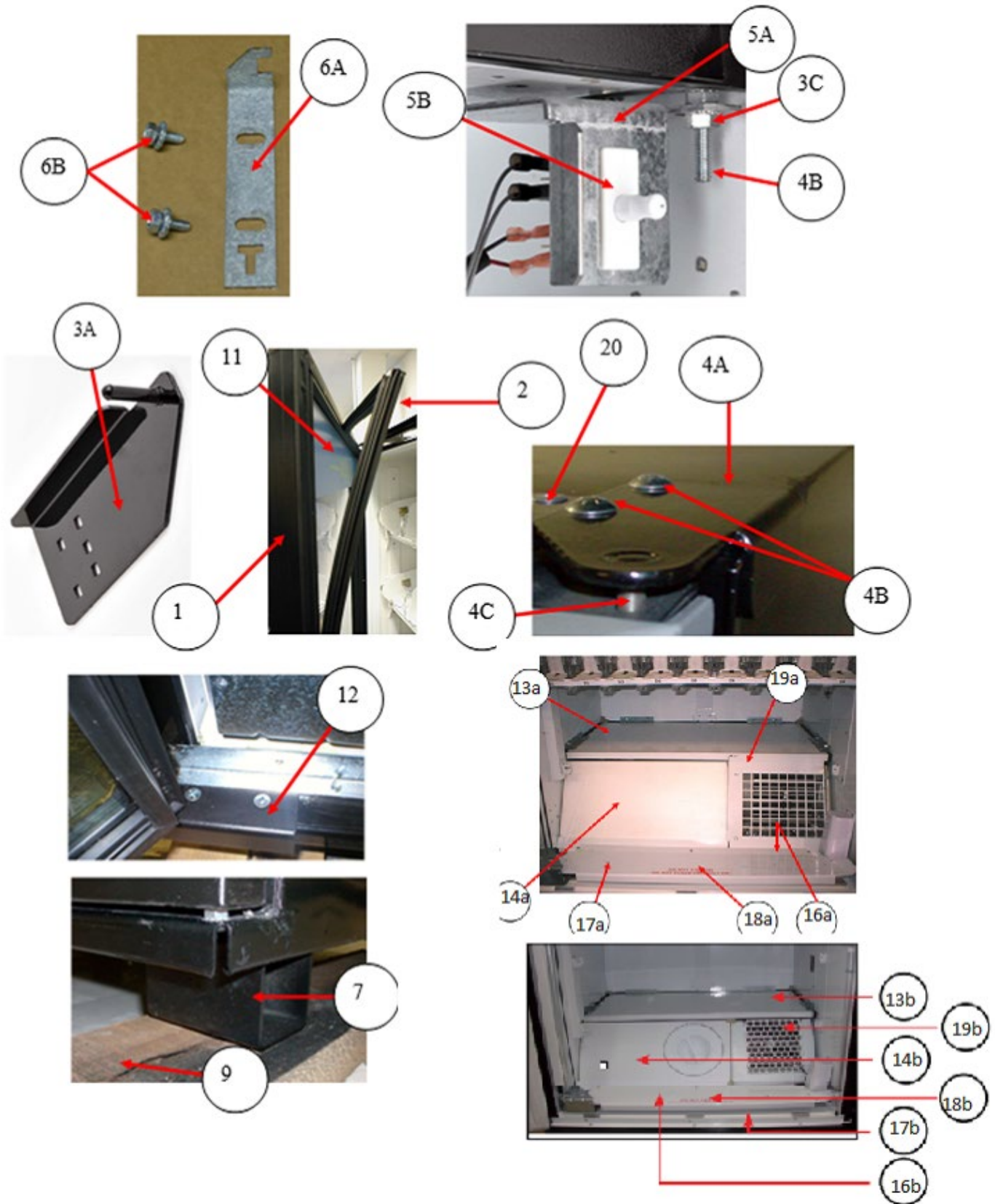


| Export Test Voltages 9 Pin J2 Output Power Connector | | |
|------------------------------------------------------|-------------------------|--------------------------------------------|
| 1 st lead to Pin | 2 nd lead to | Export Reading |
| 1 | 2 | 24 (26 to 30) VAC secondary of transformer |
| 2 | 1 | 24 (26 to 30) VAC secondary of transformer |
| 3 | ground | 240 VAC Hot not switched for 1 lamp assy. |
| 4 | NA | OPEN |
| 5 | ground | 240 VAC Hot switched for fan motor |
| 6 | ground | 240 VAC Hot switched for lights |
| 7 | ground | 0 VAC Neutral |
| 8 | ground | 0 VAC Neutral |
| 9 | ground | 0 VAC Neutral |

| Export Test Measurements 4 Pin P7 AC Distribution Box | | | |
|-------------------------------------------------------|-----------------------------|---------------------------|--------------------------------------------------|
| 1 st lead to Pin | 2 nd lead to Pin | Export Reading | When 4 pin connector is unplugged – OHMS reading |
| 1 | 3 | Lights control relay coil | 570 ohms |
| 2 | 3 | Fan control relay coil | 570 ohms |
| 4 | 3 | Compressor relay coil | 570 ohms |
| 3 | NA | Common | NA |

CRANE MERCHANDISING SYSTEMS

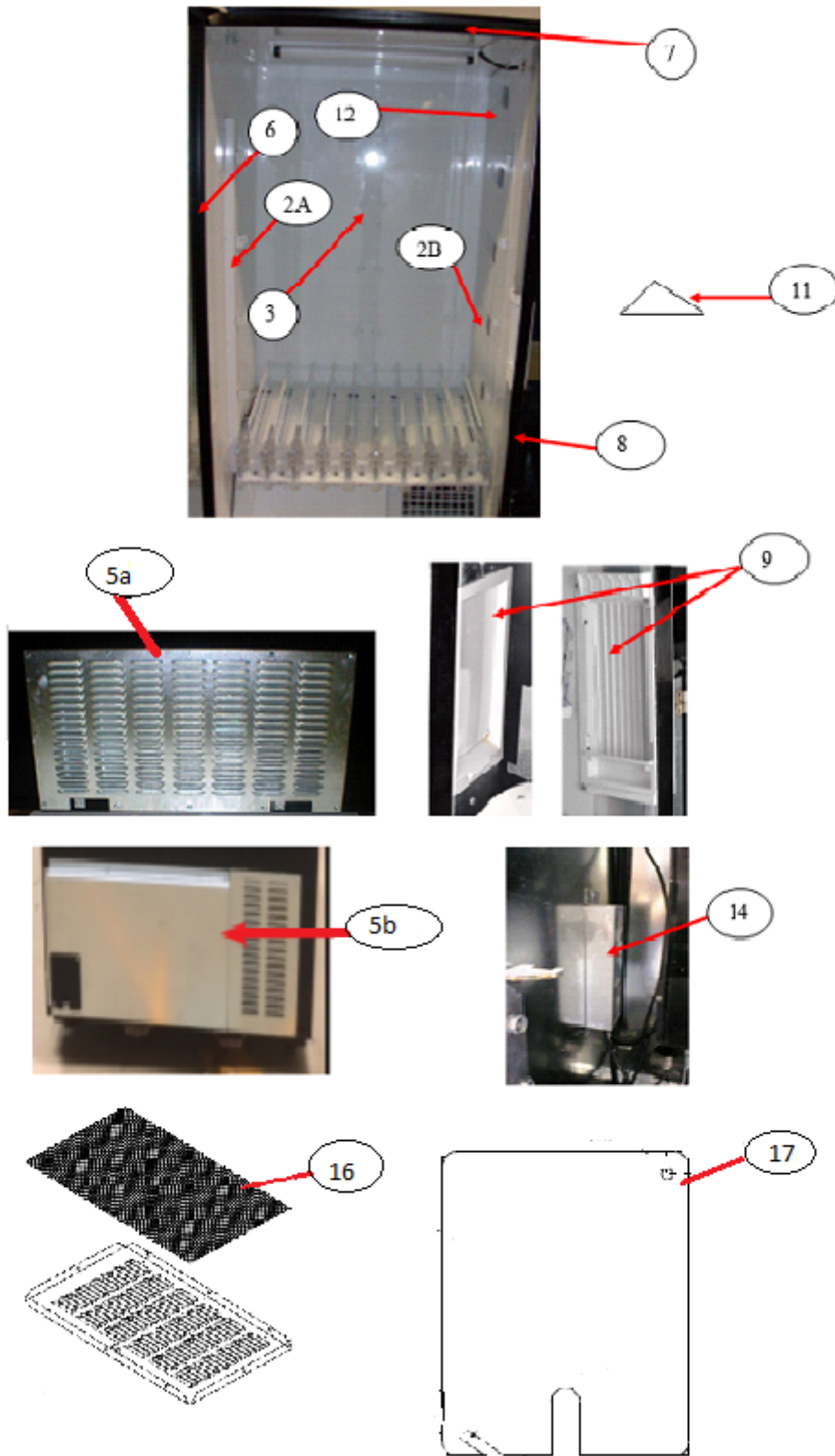
MACHINE FRONT VIEW



Machine Front View

| ITEM # | PART DESCRIPTION | DN5800-4 DN5800-E4 | DN3800-4 DN3800-E4 |
|--------|-------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|
| 1 | Door Assembly, Glass (does not include decals) | 101452 | 101453 |
| 2 | Gasket, Glass Door | 102720 | 102721 |
| 3a | Top Hinge Glass Door | 100136 | Same |
| 3b | Carriage Bolt – ¼ - 20 x 1 1/4 | 100020 | Same |
| 3c | Hex Nut – ¼ - 20 | 100156 | Same |
| 3d | Washer, Flat | 100488 | Same |
| 3e | Screw, Torx 8 X 5/8 (nib size TRX27) | 100277 | Same |
| | Screw, Fl. Torx Tap ¼-20 X ½ | 100298 | Same |
| 4a | Top Hinge Service Door | 104555 | Same |
| 4b | Carriage Bolt, 1/4 –20 X 2.5" (also service door bottom hinge pin) | 100009 | Same |
| 4c | Top Hinge Pin, Service Door | 100207 | Same |
| 4d | Lock Nut, Service Door Hinge Pin Bolt ¼ - 20 | 100148 | Same |
| 4e | Washer, Service Door Hinge Pin | 100488 | Same |
| 5a | Door Switch Bracket – Single Switch | 105415 | Same |
| | Door Switch Bracket – Double Switch (electronic lock venders only) | 105414 | Same |
| 5b | Power Interrupt Switch | 101188 | Same |
| 5c | Lock Switch .1Amp (electronic lock venders only) | 101201 | Same |
| 6a | Door Latch High Security, 2 Point Lock | 104691 | Same |
| 6b | Screw, Hex ¼ - 20 x 5/8 | 100319 | Same |
| 7 | Leg Assembly, welded in place | 105561 | Same |
| 8 | Leg Leveler, 5/8 – 11 x 2 1/16 | 101288 | Same |
| 9 | Shipping Boards, Domestic and Export | NLA | Same |
| 10 | Thermometer | 103073 | Same |
| 11 | Wear Strip Door Decal | 102359 | Same |
| 12 | Glass Door Bottom Hinge | 111170 | Same |
| 13a | Bottom Panel Assembly | 104578 | REVIEW |
| 13b | Bottom Panel Assembly | 104580 | 104594 |
| 14a | Assembly Panel Slanted with metal evap box Refrig unit | 104588 | 104595 |
| 14b | Assembly Panel Slanted w/ clean out, with plastic evap box Refrig unit (for sub-components see pg 36) | 104831 | 104832 |
| 15 | Door Stop | 105405 | Same |
| 16 | Wire Chase Assembly w/ Gasket | 104596 | 111570 |
| 17 | Ramp | 104810 | 104809 |
| 18 | Warning Label, Ramp | 102159 | Same |
| 19a | Evaporator Inlet Grill | 104561 | Same |
| 19b | Evaporator Inlet Grill, Plastic | 102854 | Same |
| 20 | Bolt, Bottom Hinge Service Door | 100207 | Same |
| 21 | Lock Nut, Bottom Service Door Hinge Pin Bolt ¼ - 20 | 100148 | Same |

CABINET DETAIL PRODUCT AREA

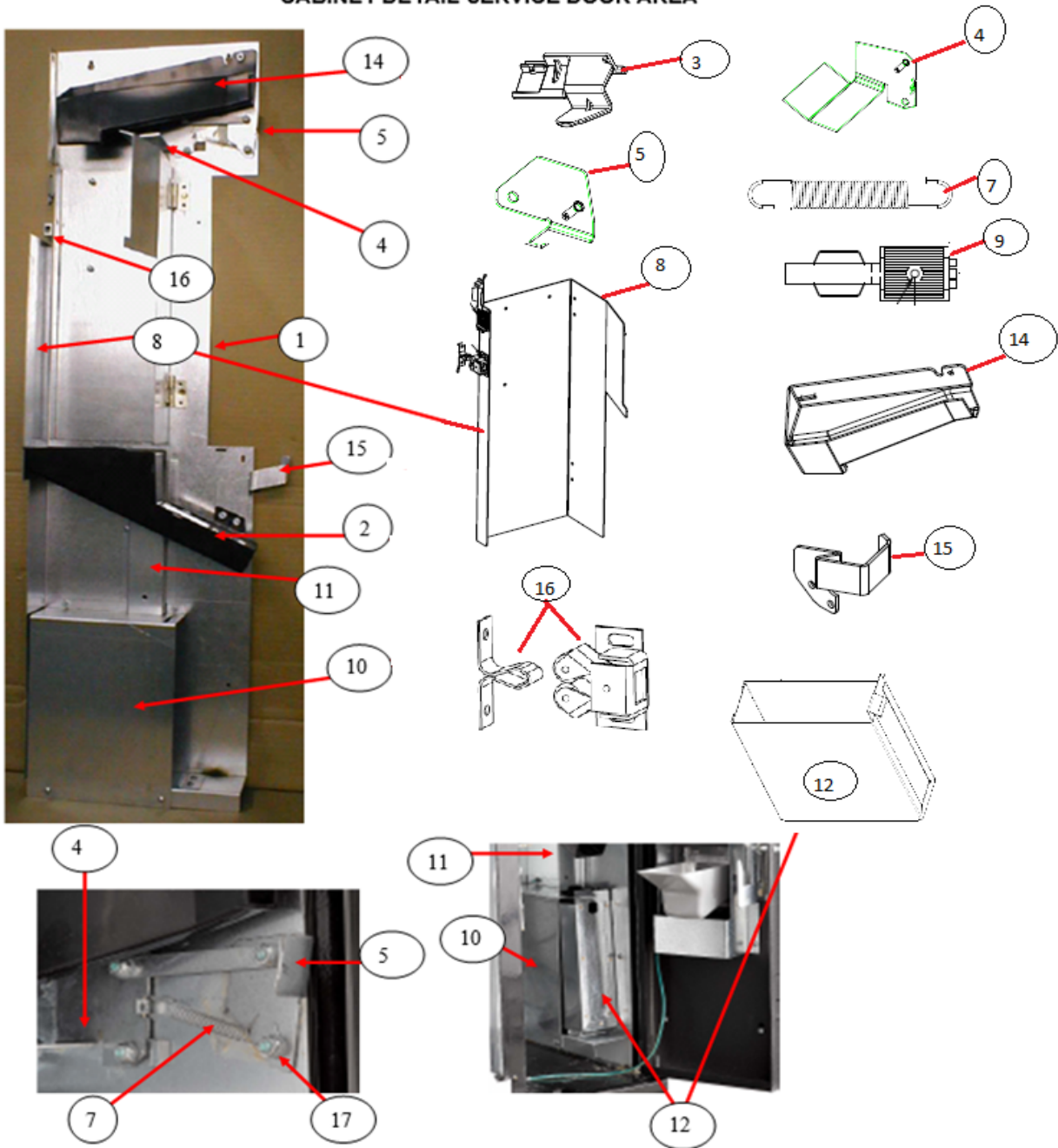


Cabinet Detail Product Area

| ITEM # | PART DESCRIPTION | DN5800-4 DN5800-E4 | DN3800-4 DN3800-E4 |
|--------|-------------------------------------------------------------------|-----------------------|-----------------------|
| 1 | Cabinet Assembly, Generic | 105588 | 104565 |
| 2A | Left Tray Mount Bracket, 2 piece prior to 9133DH (All) | 105464 | Same |
| | Left Tray Rail, 2 piece (5 shelf) prior to 9133DH (E4) | NLA | NLA |
| | Left Tray Rail, 2 piece (5 shelf) prior to 9133DH (Export) | NLA | NLA |
| | Left Tray Rail, 2 piece (5 shelf) prior to 9133DH – E6 | NLA | NLA |
| | Left Tray Support, 1 piece (5 shelf) 9133DH & higher - E3 | 104644 | Same |
| | Left Tray Support, 1 piece (5 shelf) 9133DH & higher - E4 | 104646 | Same |
| | Left Tray Support, 1 piece (5 shelf) 9133DH & higher - E5 | 104652 | Same |
| | Left Tray Support, 1 piece (5 shelf) 9133DH & higher – E6 | 104666 | Same |
| | Left Tray Support, 1 piece (5 shelf) 9133DH & higher - D2 | 104613 | Same |
| 2B | Right Tray Mount Bracket, 2 piece prior to 9133DH (All) | 105463 | Same |
| | Right Tray Rail, 2 piece (5 shelf) – E4 | NLA | NLA |
| | Right Tray Rail, 2 piece (5 shelf) prior to 9133DH (Export) | 111379 | Same |
| | Right Tray Rail, 2 piece (5 shelf) prior to 9133DH – E6 | NLA | NLA |
| | Right Tray Support, 1 piece (5 shelf) 9133DH & higher - E3 | 104643 | Same |
| | Right Tray Support, 1 piece (5 shelf) 9133DH & higher - E4 | 104647 | Same |
| | Right Tray Support, 1 piece (5 shelf) 9133DH & higher - E5 | 104653 | Same |
| | Right Tray Support, 1 piece (5 shelf) 9133DH & higher – E6 | 104665 | Same |
| | Right Tray Support, 1 piece (5 shelf) 9133DH & higher - D2 | 104614 | Same |
| 3 | Rear Tray Mount Bracket, 2 piece prior to 9133DH (All) | 105462 | Same |
| | Rear Tray Rail, 2 piece (5 shelf) – E4 | NLA | NLA |
| | Rear Tray Rail, 2 piece (5 shelf) prior to 9133DH (Export) | 111378 | Same |
| | Rear Tray Support, 1 piece (5 shelf) 9133DH & higher - E3 | 104645 | Same |
| | Rear Tray Support, 1 piece (5 shelf) 9133DH & higher - E4 | 104648 | Same |
| | Rear Tray Support, 1 piece (5 shelf) 9133DH & higher - E5 | 104654 | Same |
| | Rear Tray Support, 1 piece (5 shelf) 9133DH & higher – E6 | 104667 | Same |
| | Rear Tray Support, 1 piece (5 shelf) 9133DH & higher - D2 | 104615 | Same |
| 4a | Tray Support Screw #8-18x1/2 Phil Pan (Self drilling, 9 per rail) | 100265 | Same |
| | Hex Washer Screw (2 per shelf) | 100277 | Same |
| 5a | Ingress Guard | NLA | NLA |
| 5b | Ingress Guard | 104800 | 104800 |
| | Modified Rodent Guard Assy (not shown) 12.625" x 45.625" | 105409 | Same |
| 6 | Security Angle, Left | NLA | NLA |
| 7 | Security Angle, Top | 105559 | 112876 |
| 8 | Security Angle, Right | 104539 | Same |
| 9 | Assembly Discharge Frame | 101480 | Same |
| 10 | Discharge Door Magnet | NLA | NLA |
| 11 | Discharge Port Diverter | 114937 | Same |
| 12 | Louver Panel Assembly | 110349 | Same |
| 13 | Defrost Control Mounting Bracket | 105431 | Same |
| 14 | Defrost Control Cover | 115162 | Same |
| 15 | Defrost Control Vinyl Tube | 103081 | Same |
| 16 | Mesh Inlet Screen Assembly (near unit handle) - Export | 108052 | Same |
| 17 | Cord Cover | 104864 | Same |

Coin Mech Housing Assembly Prior to SN 9191BI

CABINET DETAIL SERVICE DOOR AREA

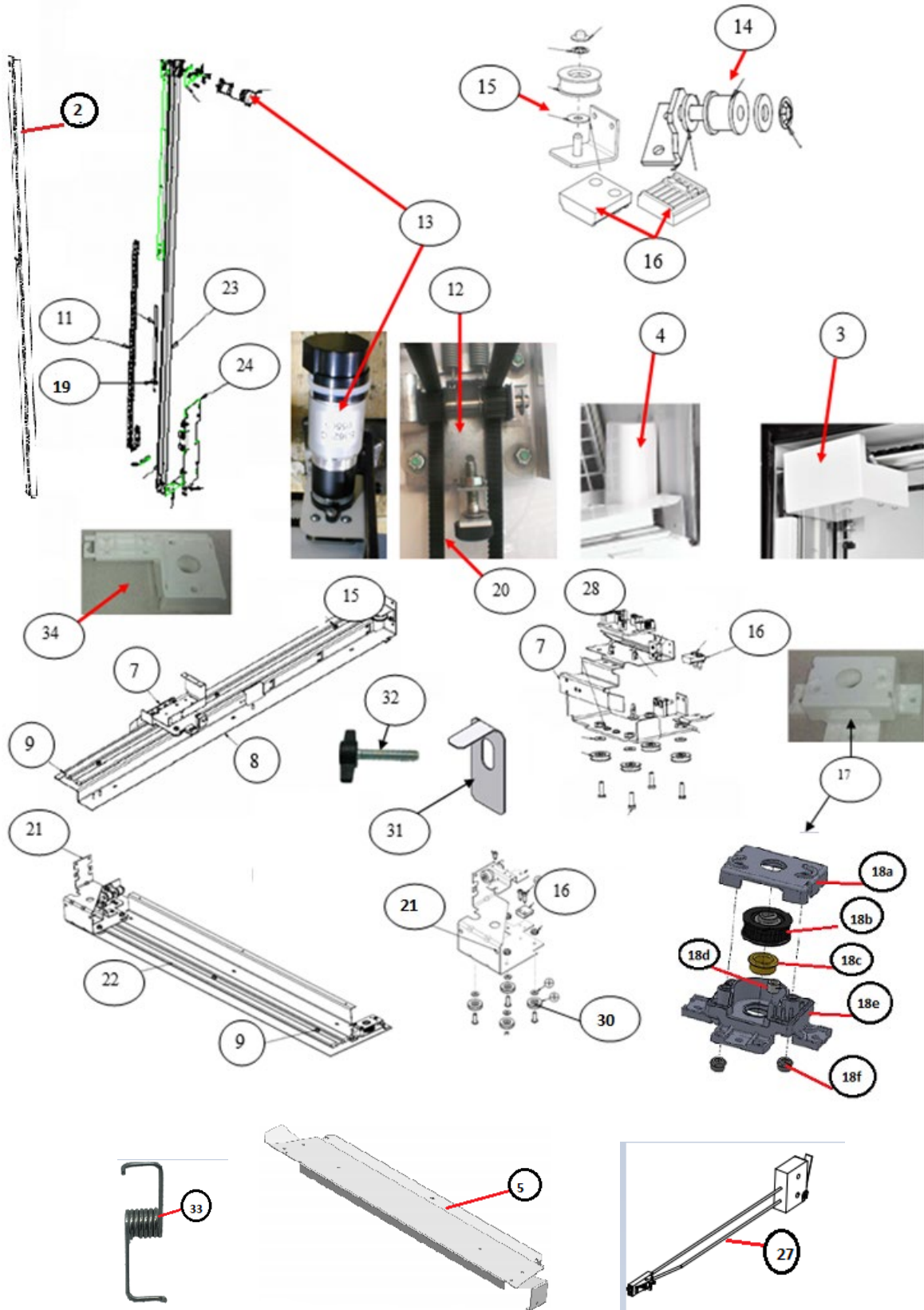


Cabinet Detail Service Door Area

| ITEM # | PART DESCRIPTION | DN5800-4/3800-4 DN5800-E4/3800-E4 Prior to s/n 9191BI | DN5800-4/3800-4 DN5800-E4/3800-E4 s/n 9191BI |
|--------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------------|
| 1 | Coin Mech Housing Assembly (After 9191 Coin Mech Door Assy. and Coin Return Bracket Assy. are separate components) | 108465 | 111126 |
| 1a | Coin Return Bracket Assembly | NA | 104610 |
| 2 | Lower Coin Chute Assembly | 101394 | Same |
| 2A | Lower Coin Chute | Not Sold Separately | Same |
| 2B | Lower Coin Chute Cover | Not Sold Separately | Same |
| 3 | Cash Box Clip | 100085 | Same |
| 4 | Coin Return Paddle | 105418 | 104609 |
| 5 | Assembly, Lever Button Rod | 105417 | NA |
| 7 | Extension Spring ¼ x 1 ¾ x .029 MW | 100396 | 100420 |
| 8 | Mech Door/Hinge Mech Assembly | 105419 | 111126 |
| 9 | Flat Mount Cable with adhesive | 102922 | Same |
| 10 | Cash Box Cover/Cash Box Shelf | 105404 | 104650 |
| 11 | Coin Box Chute | 105403 | 104656 |
| 12 | Cash Box, metal | 105410 | NA |
| | Cash Box, plastic | NA | 101420 |
| 13 | Locking Cash Box Kit | NLA | Same |
| 14 | Upper Coin Chute | 101393 | Same |
| 15 | Door Stop | 105405 | Same |
| 16 | Roller Double Catch | 103020 | Same |
| 17 | Lock Nut 8-32 | 100154 | Same |
| 23 | Cash Box Blocker Bracket (attaches to bottom of service door) | NA | 114934 |
| 24 | Bev Max 4 High Security Kit | 401390 | Same |
| 24a | Validator Guard | 111250 | Same |
| 24b | Coin Mech Door High Security Assembly | 400950 | Same |
| 24c | Label, High Security Notice | 401285 | Same |

CRANE MERCHANDISING SYSTEMS




XY MOTOR PICKER UNIT



XY Motor Picker Unit

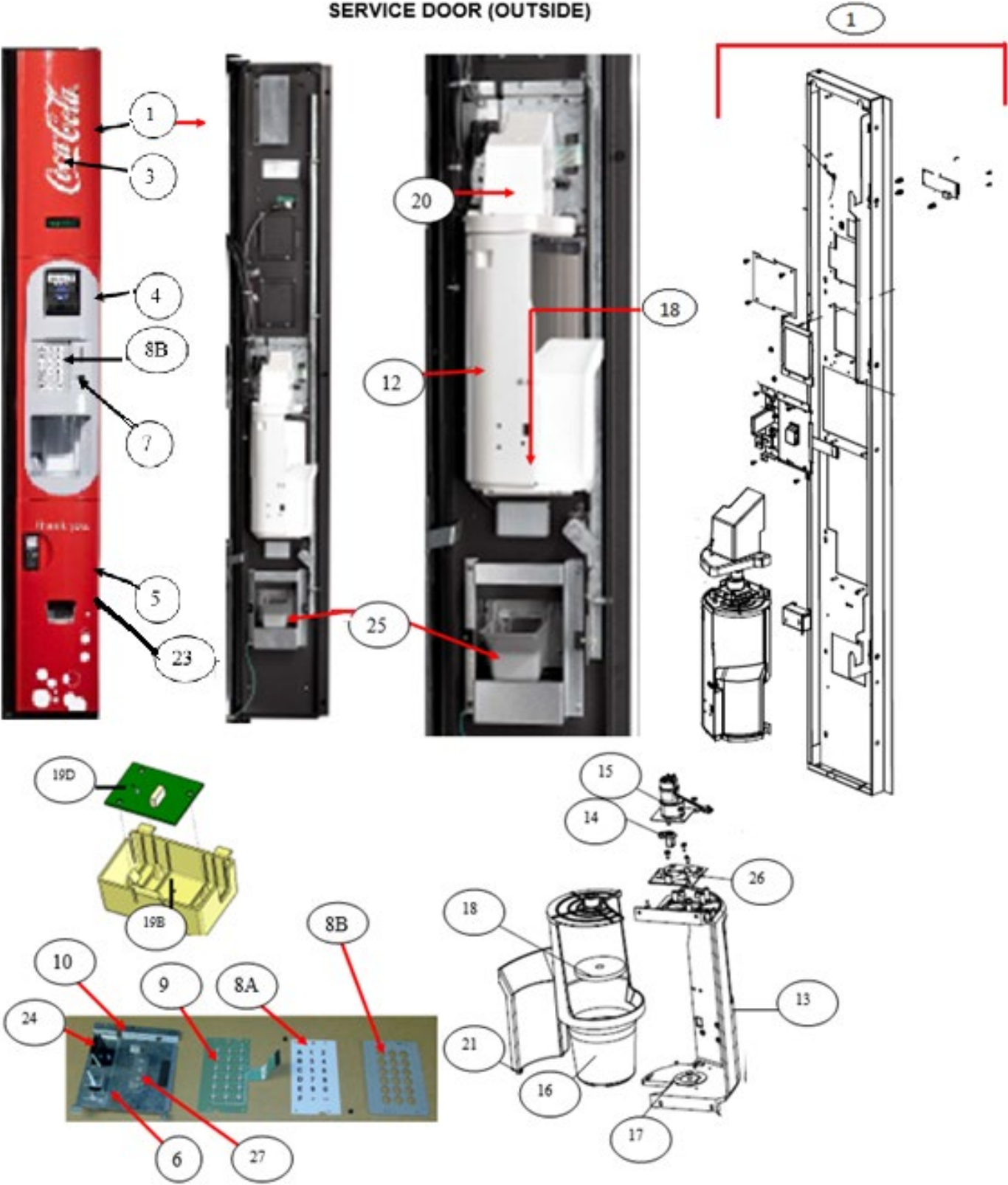
| ITEM # | PART DESCRIPTION | DN5800-4 DN5800-E4 | DN3800-4 DN3800-E4 |
|--------|---------------------------------------------------------------------------------|-----------------------|-----------------------|
| 1 | XY Delivery System (Consists of Items: 2/8/13/20/22/23) | 110321 | 104567 |
| 2 | Assembly Cover Y Belt | 104770 | Same |
| 3 | Y Motor Cover Top | 101728 | Same |
| 4 | X Motor Cover Bottom | 101727 | Same |
| 5 | X Bottom Belt Cover (Ramp) | 104810 | 104809 |
| 6 | Harness, X Motor – bottom, not shown | 100969 | Same |
| 7 | X Top Carriage Assembly (top of XY) | 104551 | Same |
| 8 | X Axis Mounting Assembly Top | 111388 | 105639 |
| 9 | XY Extrusion (X track) | 101750 | 101753 |
| 10 | Harness, XY E Chain (Top horizontal) – not shown | 100981 | 100811 |
| 11 | Harness, Y E Chain (vertical) | 101007 | Same |
| 12 | XY Belt Idler Tensioning Assembly (top left) | 105492 | Same |
| 13 | Motor XY System (Large D shaft) | 101105 | Same |
| 14 | Idler Pulley and Bracket Assembly | 105499 | Same |
| 15 | X Top Idler Pulley Assembly | 105495 | Same |
| 16 | Belt Clamp | 100059 | Same |
| 17 | X Pulley Drive Assembly | 104636 | Same |
| 18a | X Top Drive Cover | 101739 | Same |
| 18b | Pulley, 32 tooth “D” Drive | 101817 | Same |
| 18c | Bushing (.5 x .691 x .187) | 100047 | Same |
| 18d | Nylon Spacer | 100388 | Same |
| 18e | X Bottom Drive Cover | 101740 | Same |
| 18f | Nylock 10-32 Nut | 100170 | Same |
| 19 | Cup Cable Guide Bracket | 105478 | Same |
| 20 | X Axis Belt (22') | 101690 | Same |
| 21 | X Bottom Carriage Assembly (bottom of XY) | 105504 | Same |
| 22 | Assembly X Axis Drive, Bottom | 105491 | 104566 |
| 23 | Assembly Y Drive | 105638 | Same |
| 24 | Y Carriage Assembly | 105503 | Same |
| 25 | Y Axis Belt (11.25') | 105562 | Same |
| 27 | Micro Switch with Straight Arm (Part of 7-X Top Carriage Assy.) | 101226 | Same |
| 28 | Y Board (Part of 7-X Top Carriage Assy.) | 100630 | Same |
| 29 | Y Extrusion (Part of 23-Y Drive Assy. Long track that Y Carriage Assy. travels) | 101752 | Same |
| 30 | Pulley Roller | 101814 | Same |
| 31 | XY Shipping Bracket | 105476 | Same |
| 32 | Screw, Wing ¼ - 20 x 1 ¼ molded nylon (for shipping bracket) | 100332 | Same |
| 33 | Belt Tensioner Spring (Y Belt only) | 100403 | Same |
| 34 | Y Pulley Drive Assy. | 104634 | Same |
| | #8-32 x 5/8 Phil Pan Screw (used to install the Y-Drive Assy) | 100325 | Same |

Delivery (Picker) Cup Assembly

| ITEM # | PART DESCRIPTION | DN5800-4 DN5800-E4 | DN3800-4 DN3800-E4 |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|
| 1 | Assembly Delivery (Picker) Cup Assembly w/ Sensor | 101729 | Same |
| 2 | Cup Base Board (Picker Cup Board with sensor) 3/26/08 & after | 101161 | Same |
| 3 | Cup/Port Motor Assembly | 101080 | Same |
| 4 | Cup Motor Cam | 101702 | Same |
| 5 | Micro Switch with Bent Arm (Picker Home Switch)  At top of Picker | 101227 | Same |
| 6 | Micro Switch with Straight Arm (Cup Home Switch – Y)  Bottom of Picker | 101208 | Same |
| 7 | Micro Switch with Bent Arm (Picker Out Switch)  Midway next to Cam | 101209 | Same |
| 8 | Screw, Phil Pan 2 – 32 X 1/2 | 100280 | Same |
| 9 | Plunger Cup Bumper | 101699 | Same |
| 10 | Base Cup Cover | 101726 | Same |
| 11 | Delivery Cup Sleeve | 103044 | Same |
| 12 | Delivery Cup Body | 101694 | Same |
| 13 | Pin Cup Hinge | 100122 | Same |
| 14 | Assembly Plunger | 101810 | Same |
| 15 | Motor Cam Cover | 105468 | Same |
| 16 | Return Spring, Plunger | 100411 | Same |
| 17 | Cam Bearing | 100004 | Same |
| 18 | Harness, Cup to E Chain (Part not shown) | 100930 | Same |
| 19 | Screw, 8 – 18 x ½ Pan Head, Machine | 100316 | Same |
| 20 | Screw, #4 – 40 x 3/8 Machine w/ lock washer | 100328 | Same |
| 21 | Cup Sensor Plate (3/26/08 & after) | 102989 | Same |
| 22 | Flat Wire Clip | 100086 | Same |
| 23a | Cup Sleeve Deflector Ribbed | 101737 | Same |
| 23b | Cup Sleeve Deflector Flat | 101738 | Same |
| | | | |

CRANE MERCHANDISING SYSTEMS

SERVICE DOOR (OUTSIDE)

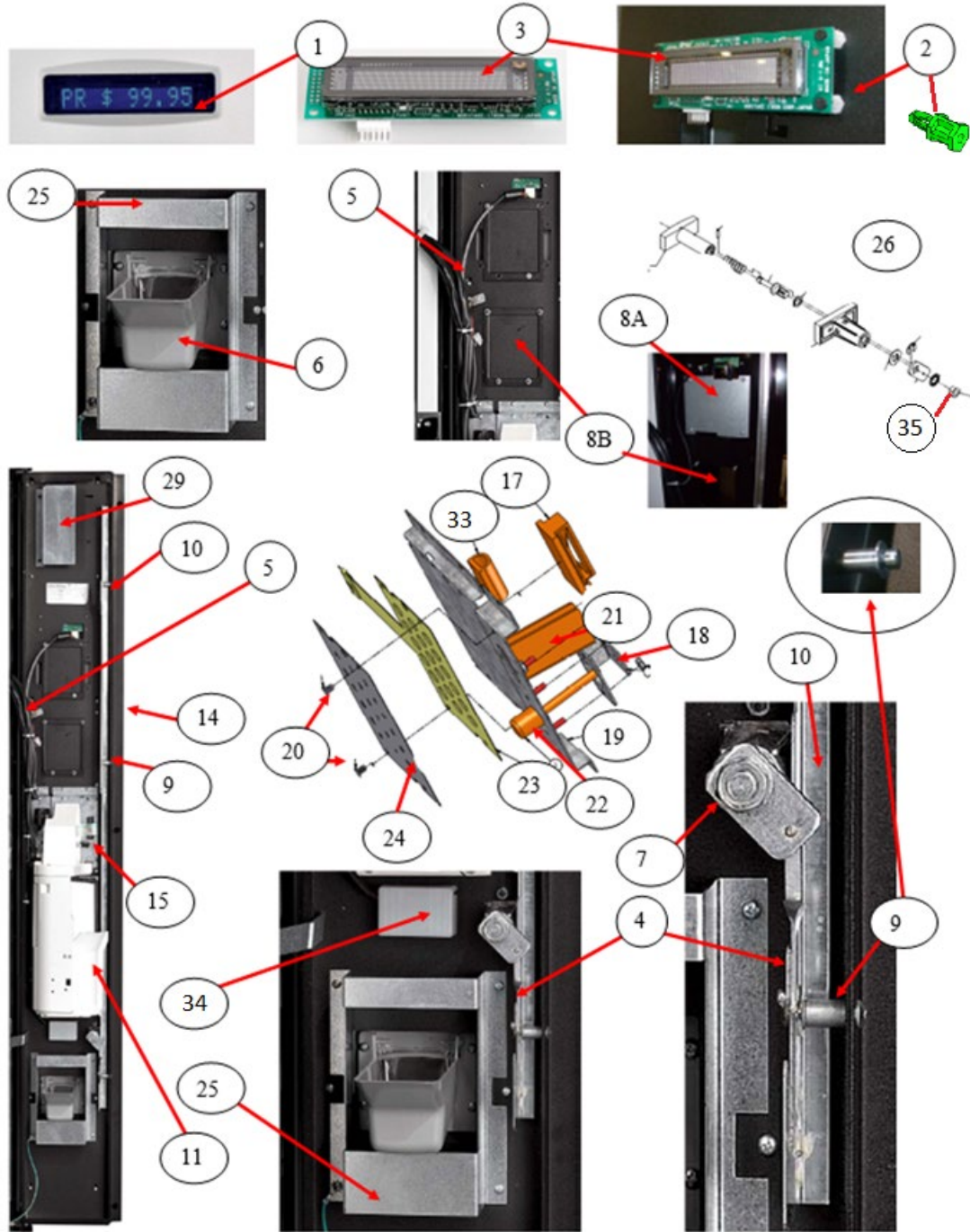


Service Door (Outside) All BevMax 4

| ITEM # | PART DESCRIPTION | No Knock Out | Knock Out | Milled Knock Out |
|--------|-----------------------------------------------------------------------------------------------|--------------|-----------|------------------|
| 1 | Service Door Assembly (Does not include front Bezels) | 110318 | Same | Same |
| 2 | Weld Assembly Service Door | 104546 | Same | Same |
| 3 | Assembly Bezel Top, Red | 111808 | 101336 | 105741 |
| | Assembly Bezel Top, Black | 104602 | 101335 | 105756 |
| 4 | Bezel Center, Red (screws to install bezels 100281-SCREW 8-18 X 5/8 PHILPAN) | NA | 101330 | NA |
| | Bezel Center, Black | NA | 101333 | NA |
| 5 | Bezel Bottom T Handle, Red (included in item 23) | 115511 | NA | NA |
| | Bezel Bottom T Handle, Black (included in item 23) | 101331 | NA | NA |
| 6 | Coin Return Button Bracket | 104616 | NA | NA |
| 7 | Coin Return Button | 101418 | NA | NA |
| 8A | Overlay, Keypad – Gray | 101467 | NA | NA |
| 8B | Keypad Cover, Gray | 101424 | NA | NA |
| | Keypad Cover, Black | 101423 | NA | NA |
| 9 | Membrane Switch with Metal Dome Assembly (letter sheet, membrane and metal dome are included) | 101210 | NA | NA |
| 10 | Coin & Keypad Bracket Assembly | 104545 | NA | NA |
| 11 | Keypad security Bracket (not shown) | 105440 | NA | NA |
| 12 | Assembly Port (without LED's) | 109321 | NA | NA |
| 13 | Port Enclosure | 102820 | NA | NA |
| 14 | Port Cam (Black plastic piece between port motor and inner cup) | 101714 | NA | NA |
| 15 | Bracket and Motor Assembly (with notch) | 109109 | NA | NA |
| 16 | Assembly Inner Cup Port | 101481 | NA | NA |
| 17 | Vend Sensor Plate (Clear, plastic cup that spins to deliver product) | 105452 | NA | NA |
| 18 | Port Discharge Pad | 101700 | NA | NA |
| 19A | Vend Sensor Board Assembly, Port (After Serial Number 2851-0001BP) | 104570 | NA | NA |
| 19A | Vend Sensor Board Assembly, Port (Prior to Serial Number 2851-0001BP) | 114909 | NA | NA |
| 19B | Port Sensor Cover/Housing | 102867 | NA | NA |
| 19C | Port Sensor with Harness | 103099 | NA | NA |
| 20 | Motor Port Cover | 101725 | NA | NA |
| 21 | Port Handoff Slide | 103050 | NA | NA |
| 22 | Screw, Phil Pan 8 – 18 x5/8 (secures bezels to panel) | 100281 | NA | NA |
| 23 | Assembly T Handle, Red | 115457 | NA | NA |
| | Assembly T Handle, Black | 111804 | NA | NA |
| 24 | Coin Insert Chute | 101395 | NA | NA |
| 25 | Extended Coin Return Cup Assembly (also see Service Door Inside) | 101717 | NA | NA |
| 26 | Port Circuit Board (top of port assy) | 100627 | NA | NA |
| 27 | Keypad Cable Clamp with adhesive | 100096 | NA | NA |

CRANE MERCHANDISING SYSTEMS

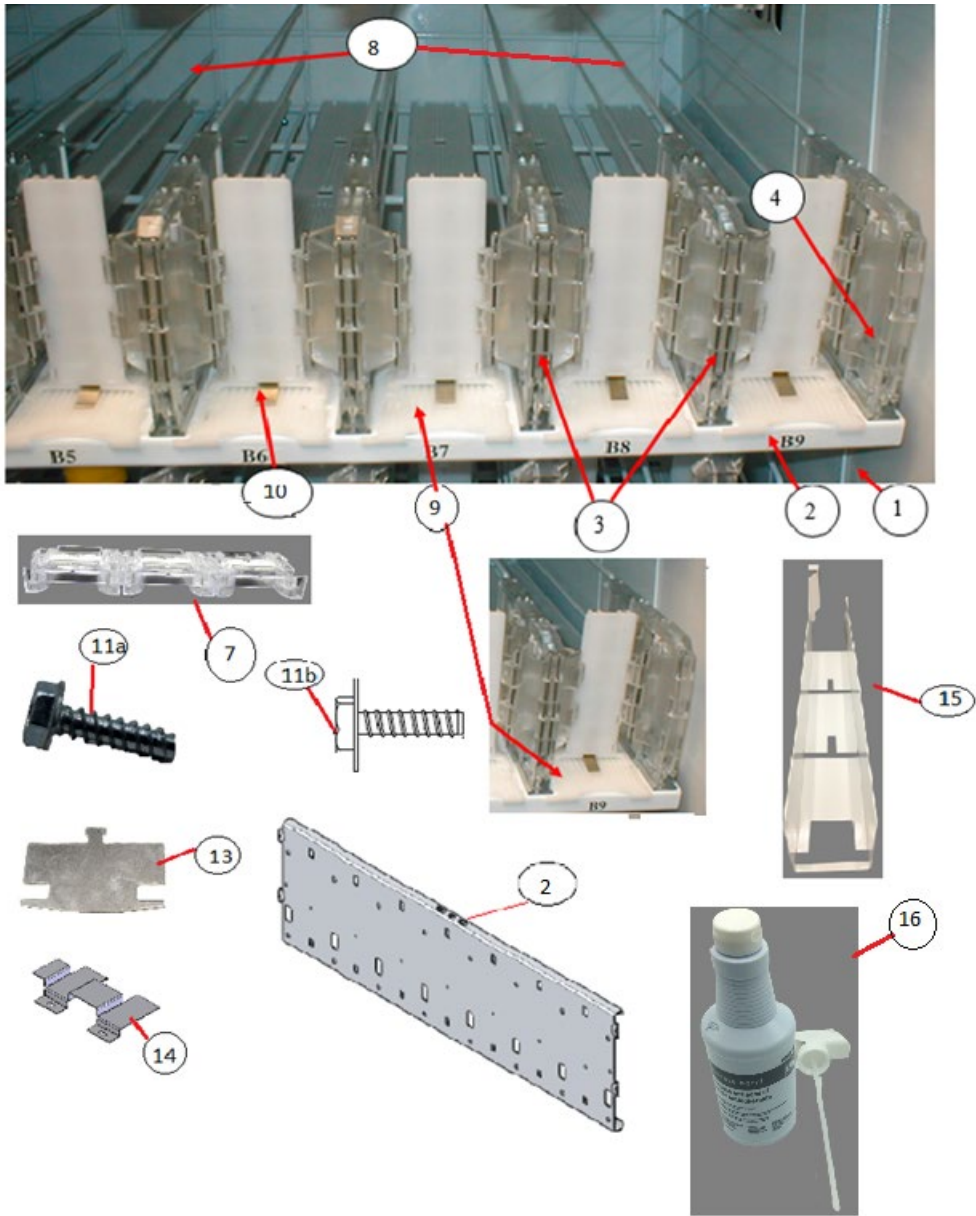
SERVICE DOOR (INSIDE)



Service Door (Inside)

| ITEM # | PART DESCRIPTION | DN5800-4 DN5800-E4 | DN3800-4 DN3800-E4 |
|--------|-----------------------------------------------------------------------|-----------------------|-----------------------|
| 1 | Display Lens, Blue (part of top bezel) | 102454 | Same |
| 2 | Screw, Nylon Circuit Board Support | 100341 | Same |
| 3 | Assembly Display (Noritake) | 100626 | Same |
| 4 | Rod, Latch Bar | 105433 | Same |
| 5 | Door Harness | 100802 | Same |
| 6 | Extended Coin Return Cup Assembly | 101717 | Same |
| 7 | Hex Nut, ½ - 20 | 100175 | Same |
| 8A | Door Security Plate | 105441 | Same |
| 8B | Validator Filler Plate | 104929 | Same |
| 9 | Lock Bar Spacer Pin | 100197 | Same |
| 10 | Lock Bar | 105432 | Same |
| 11 | Enclosure, Port | 102820 | Same |
| 12 | DEX Harness (See page 95 for picture) | 100970 | Same |
| 13 | Hex Nut for DEX Harness (not shown) | 100162 | Same |
| 14 | Service Door Security Angle | 104547 | Same |
| 15 | Coin Insert Assembly | 104550 | Same |
| 16 | Compress Spring (Coin Return Spring) | 100408 | Same |
| 17 | Keypad Cable Clamp with adhesive | 100096 | Same |
| 18 | Coin Return Button Bracket | 104616 | Same |
| 19 | Coin & Keypad Bracket Assembly | 104545 | Same |
| 20 | Panel Retainer Clip (holds membrane switch.& overlay to bracket) | 100094 | Same |
| 21 | Coin Insert Chute | 101395 | Same |
| 22 | Coin Return Button Assembly (Consists of: Coin return button and rod) | 101418 | Same |
| 23 | Keypad & Overlay, Membrane Switch Assembly with metal dome | 101210 | Same |
| 24 | Keypad Overlay, Gray | 101467 | Same |
| 25 | Extended Change Cup Security Bracket | 104622 | Same |
| 26 | T Handle Assembly | 401813 | Same |
| 27 | T Handle Security Bracket (not shown) | 105447 | Same |
| 28 | Hex Washer #29-34, T Handle (not shown) | 100504 | Same |
| 29 | Door Switch Striker Plate | 104622 | Same |
| 33 | Seal, Rubber "D" Gasket | NLA | NLA |
| 34 | Vend Sensor Board Assembly, Port | 105641 | Same |
| 35 | Hex Nut, ¼-20 (End of T-Handle) | 100175 | 100175 |
| 36 | Kit, Card Reader USA Tech Hardware | 105564 | Same |

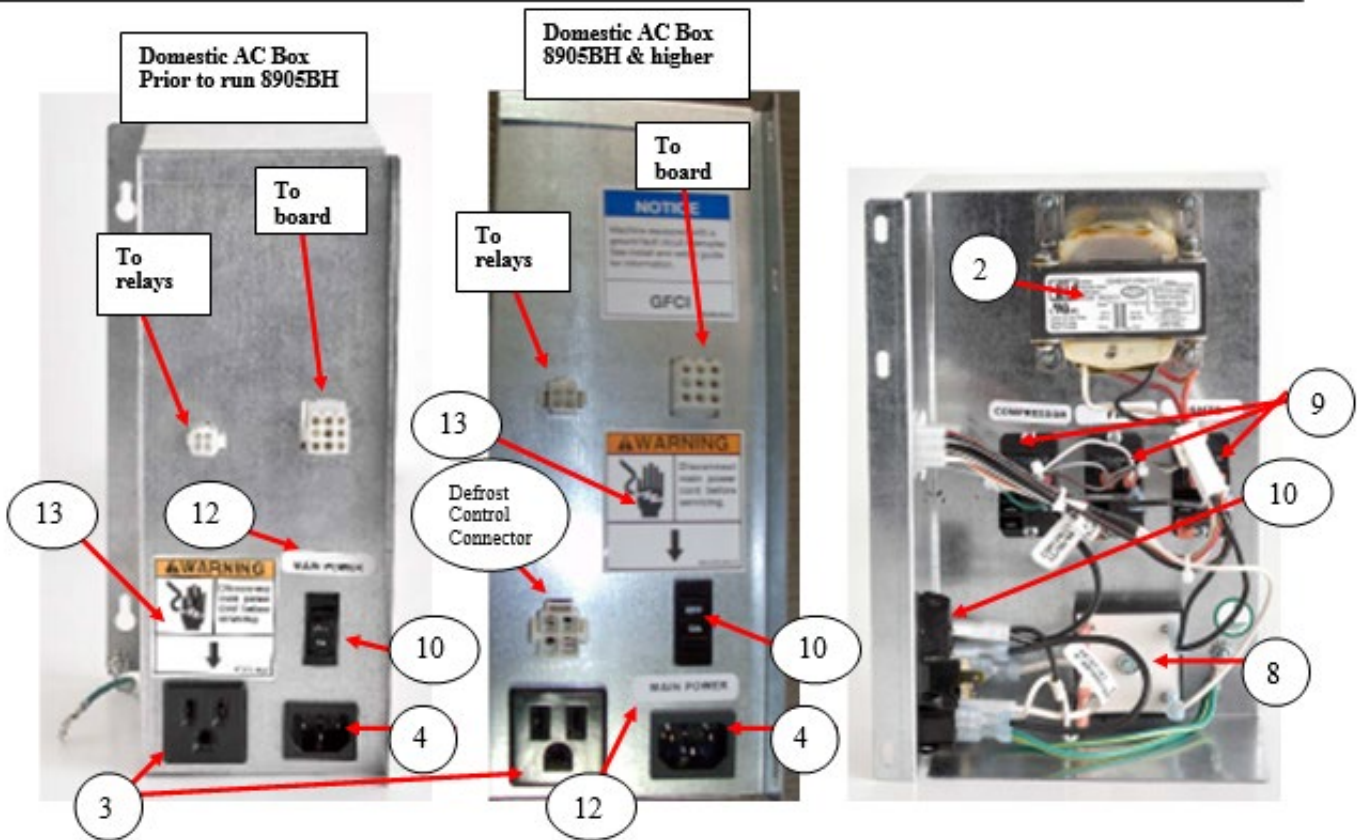
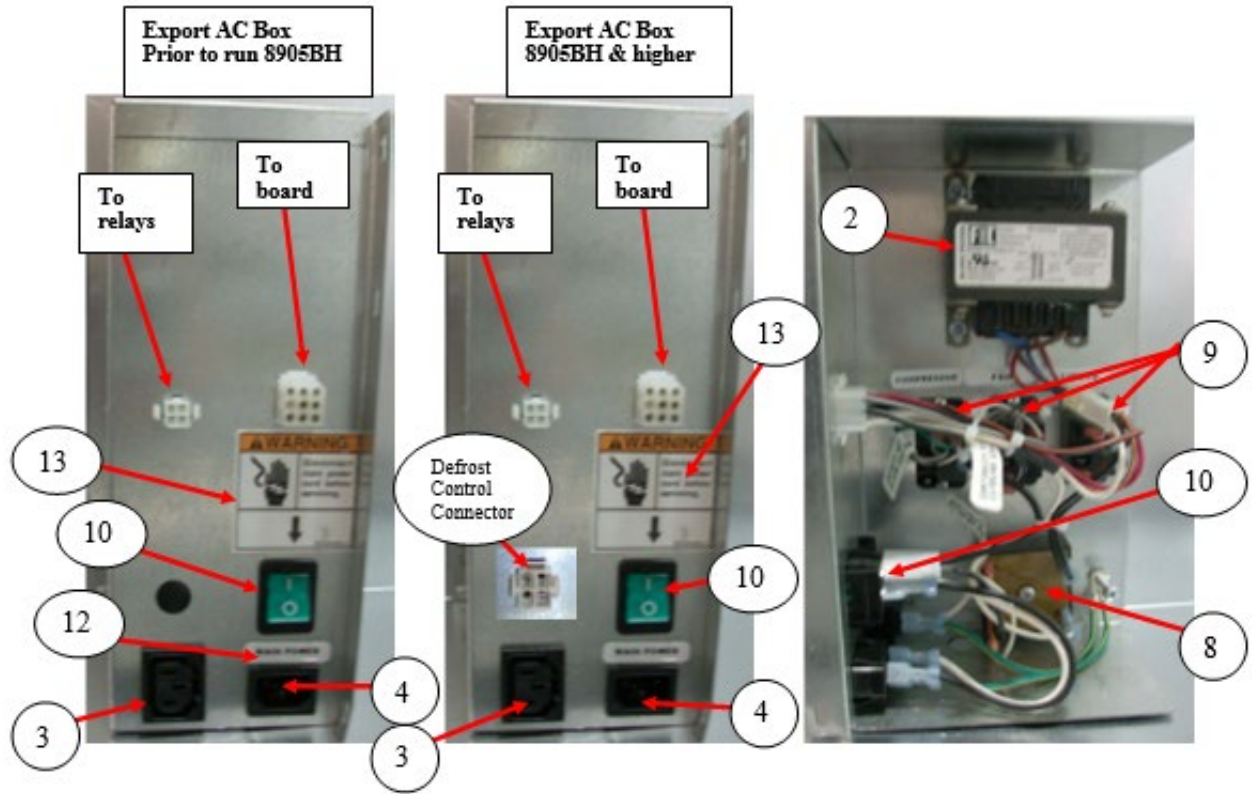
CRANE MERCHANDISING SYSTEMS



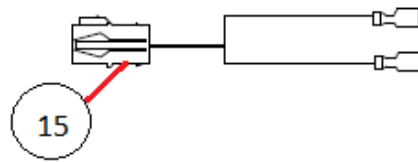
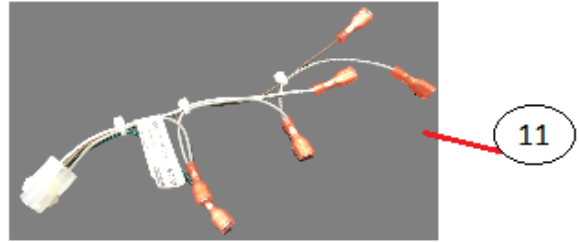
Gate Tray Detail

| ITEM # | PART DESCRIPTION | DN5800-4 DN5800-E4 | DN3800-4 DN3800-E4 |
|--------|-----------------------------------------------------------------|-----------------------|-----------------------|
| 1 | Tray Assembly | 105565 | 104709 |
| | Tray Kit Modified (For Vending Square Bottle) | 111459 | 111457 |
| 2 | Chassis Tray, Tall Gate | 102808 | 102809 |
| 3 | Double Gate Assembly Kit w/2 screws (columns 2 through 8) | 111801 | Same |
| | Double Gate Assembly Imp Feida (For Vending Square Bottle) | 101788 | Same |
| | Double Gate Assembly | 101773 | Same |
| 4 | Gate Assembly Right Kit w/2 screws (Last Column of Tray Ex. A9) | 111799 | Same |
| | Gate Assembly Right Imp Feida (For Vending Square Bottle) | 101790 | Same |
| | Gate Assembly Right | 101775 | Same |
| 5 | Gate Assembly Left Kit w/2 screws (First Column of Tray Ex. A1) | 111800 | Same |
| | Gate Assembly Left Imp Feida (For Vending Square Bottle) | 101789 | 101789 |
| | Gate Assembly Left | 101774 | Same |
| 7 | Gear Box Assembly, 3 column | 102850 | Same |
| | Gear Box Assy., 2 column | NA | 102851 |
| 8 | Tray Wire, Formed Domestic | 101854 | 101855 |
| 9 | Product Pusher and Slide Assembly | 103047 | Same |
| 10 | Product Pusher Spring (Not Sold Separately) | NLA | NLA |
| 11a | Screw, Hex Head Hi Lo #6 X ½ (5/30/08 and lower) | 100241 | Same |
| 11b | Screw, Hex Washer #6-19 x .5 (For Vending Square Bottle) | 100304 | Same |
| 12 | 1/8" Socket, ¼" Drive | 100348 | Same |
| | 3/16" Socket, ¼" Drive | 100349 | Same |
| 13 | Stabilizer, Tray Slide (8881-0049AH & higher) | 101849 | Same |
| | Stabilizer, Tray Slide (prior to 8881-0049AH) | 101848 | Same |
| 14 | Gearbox Brace | 104830 | Same |
| 15 | Column Insert for Narrow Diameter Packages | 104845 | Same |
| 16 | Food Grade Lubricant | 111174 | Same |

AC DISTRIBUTION BOX

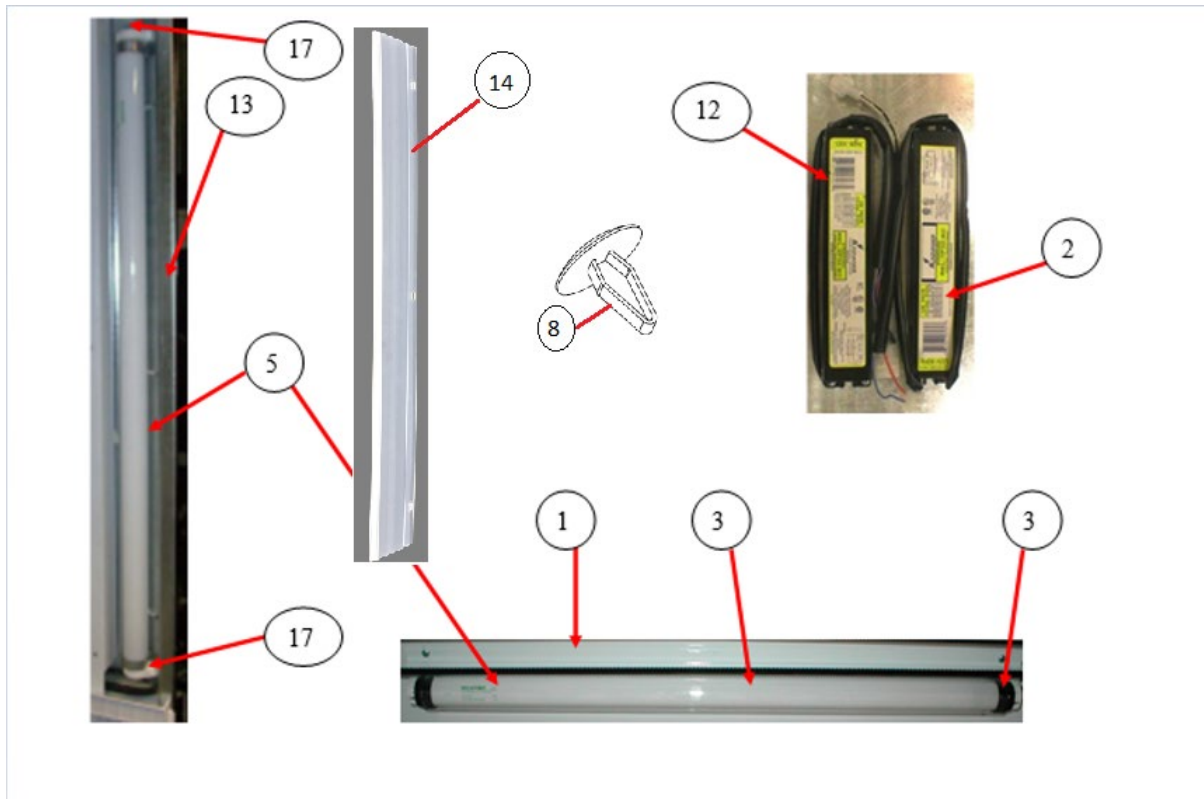


AC Distribution Box



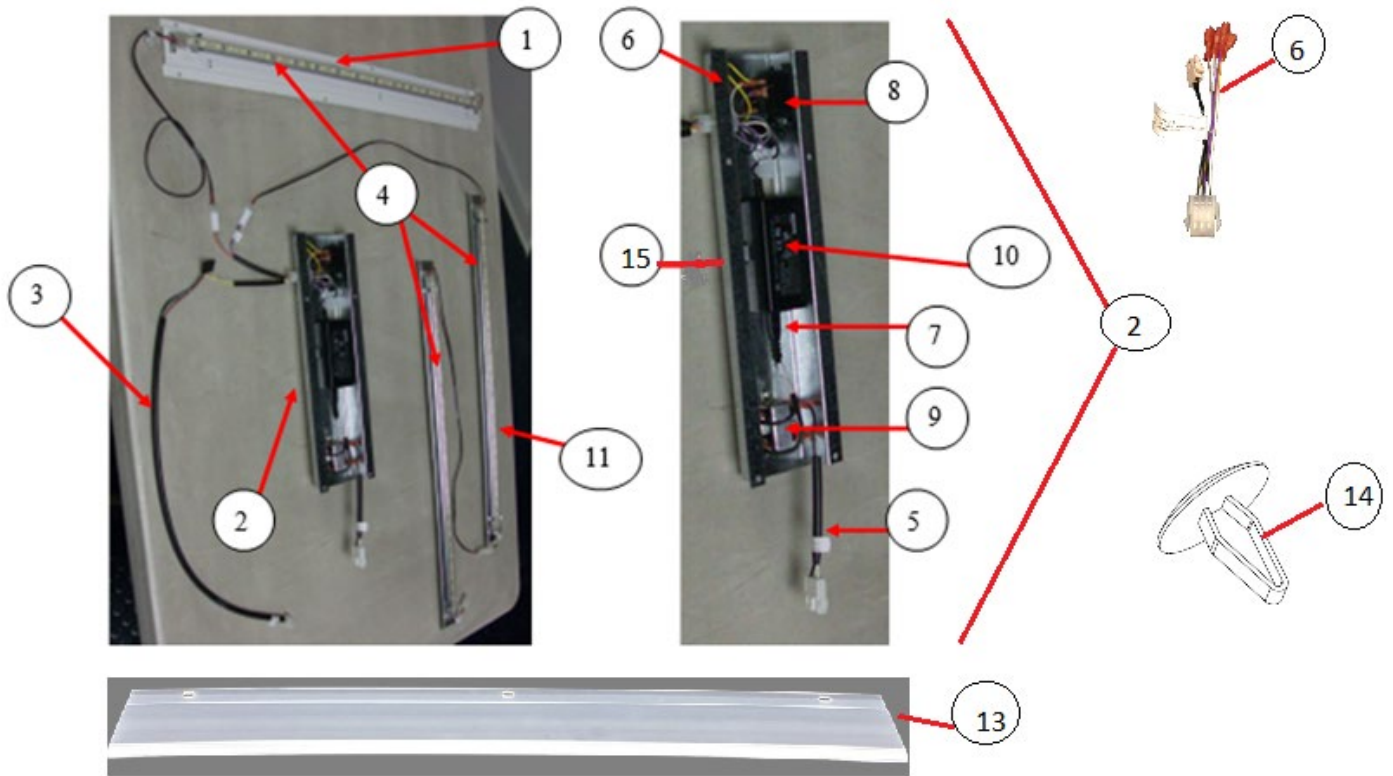
| ITEM # | PART DESCRIPTION | DN5800-4 DN3800-4 Domestic | DN5800-E4 DN3800-E4 Export |
|--------|-------------------------------------------------|----------------------------------|----------------------------------|
| 1 | Assembly AC Distribution Box, BevMax 4 | 105595 | 105596 |
| 2 | Transformer, 120V / 24V, 60 Hz, 8A Domestic | 101241 | 101238 |
| 3 | Outlet, 15 Amp, Grounded | 102941 | NA |
| | Receptacle, Panel Mount IEC 320 | NA | 101134 |
| 4 | Power Inlet Plug | 102993 | Same |
| 5 | Harness, AC Power In (pictured on pg 95) | 100974 | Same |
| 6 | Harness, Power Distribution (pictured on pg 95) | 100973 | Same |
| 7 | Harness, Main Power – GFCI Inline | 111454 | See Page 96 Item 16 |
| 8 | Choke-Filter 6 amp | 114433 | Same |
| 9 | Relay – Fan, Compressor, and Light | 101145 | Same |
| 10 | Rocker Switch | 101228 | 101200 |
| 11 | Harness, Relay | 100972 | Same |
| 12 | Main Power Label | 102163 | Same |
| 13 | Label, AC Box Power Disconnect | 102147 | Same |
| 14 | Defrost Control Harness (pictured on pg 95) | 115163 | Same |
| 15 | Harness, Compressor Power AC Box | 100980 | Same |

Lighting – Fluorescent



| ITEM # | PART DESCRIPTION | DN5800-4/3800-4 | DN5800-E4/3800-E4 |
|--------|-------------------------------------------------------------------------------|-----------------|-------------------|
| | | Domestic | Export |
| 1 | Horizontal (Upper) Light Assembly (1 Lamp) | 101474 | 112946 |
| 2 | Ballast Assembly, T8 Electronic 110V/60Hz (Horizontal Lamp) – 2 pin connector | 400908 | 102408 |
| 3 | Lamp Cover (22.6”) & End Caps | 102432 | Same |
| 4 | Light Harness – 1 Lamp T8-Upper Light (Pictured on Pg 95) | 100804 | NLA |
| | Lamp Holder, T8 Bi Pin - Leviton 23653 (Horizontal) | Use 4 | NLA |
| 5 | Fluorescent Lamp T8, 2’ (OS #21718) | 102429 | Same |
| 8 | Canoe Clip – Lens Cover | 100082 | Same |
| 11 | Vertical Light Assembly (2 Lamp) | 105570 | 111342 |
| 12 | Ballast Assembly, T8 Electronic 110V/60Hz (Vertical Lamps) - 9 pin connector | 400909 | 102409 |
| 13 | Assembly Lamp Channel 2’ (Vertical) | 108508 | Same |
| 14 | Lens, Fluorescent Lamp Vertical | 102449 | Same |
| 5 | Fluorescent Lamp T8, 2’ (OS #21718) | 102429 | Same |
| 16 | Light Harness, 120 Volt – 2 Lamp T8 (Pictured on Pg 95) | 100803 | NLA |
| 17 | Lamp Holder, T8 Bi Pin - Leviton 23652 (Vertical) | 102441 | Same |
| | LED Field Upgrade Kit (To Convert From Fluorescent to LED) | 111556 | Same |

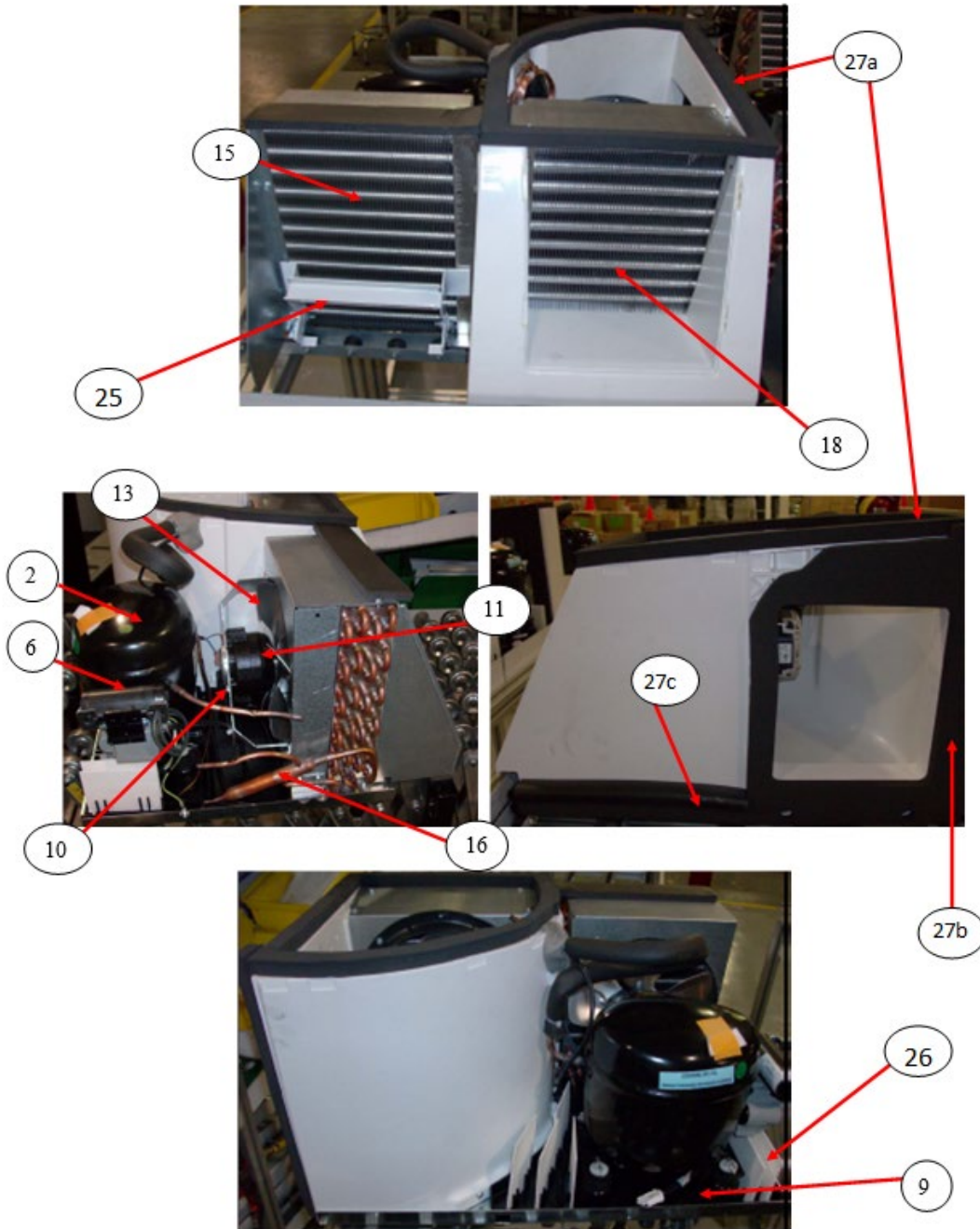
Lighting – LED



| ITEM # | PART DESCRIPTION | DN5800-4/3800-4 Domestic | DN5800-E4/3800-E4 Export |
|--------|--------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| 1 | Horizontal (Upper) Light Assembly (1 Lamp) LED | 105571 | Same |
| 2 | LED Module Assembly (does not include power supply switch mod line – 24vDC) | 105573 | Same |
| 3 | Harness, Relay extension, 5800-4 with LED's | 100977 | Same |
| 4 | Lamp Assy., T5 600MM, 30 LED's 24vDC | 102443 | Same |
| 5 | Harness, Power LED Lighting (to filter) | 100978 | Same |
| 6 | Harness, LED Output (to relay) | 100993 | Same |
| 7 | Harness, LED Adapter (to power adapter) | 100676 | Same |
| 8 | Relay | 101145 | Same |
| 9 | Light Filter | 100703 | Same |
| 10 | Power Supply, Switch Mode– 24vDC (Harness 100993 should be ordered with this power supply) | 107794 | Same |
| 11 | Vertical (Side) Light Assembly (2 Lamp) LED | 105572 | Same |
| 12 | Assy. Lamp Chanel 2' Modified (not shown) | 105459 | Same |
| 13 | Lens | 102449 | Same |
| 14 | Canoe Clip – Lens Cover | 100082 | Same |
| 15 | LED Power Bracket Housing | 104573 | Same |

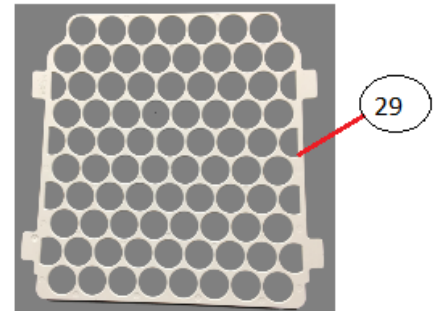
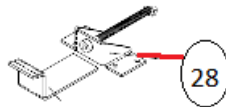
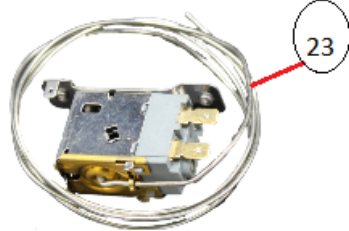
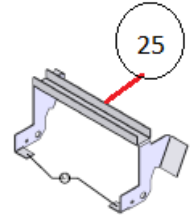
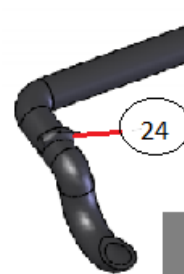
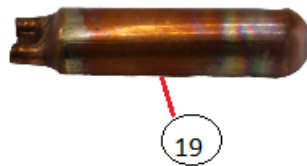
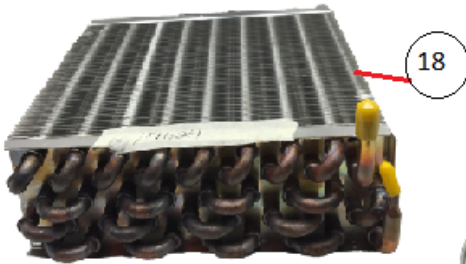
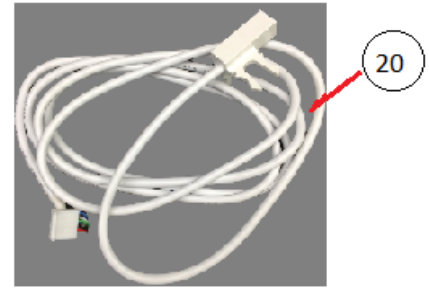
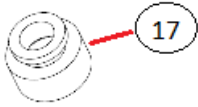
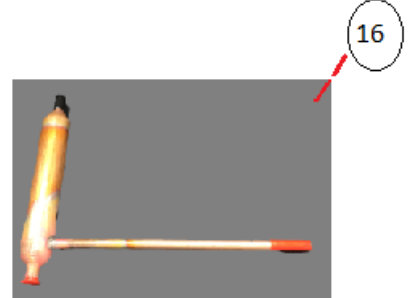
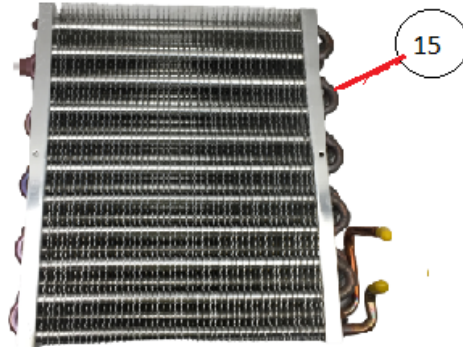
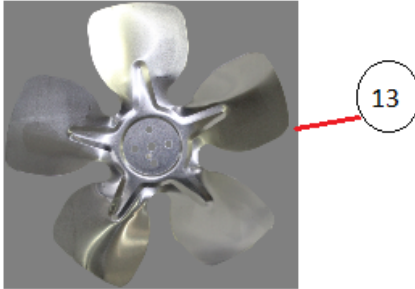
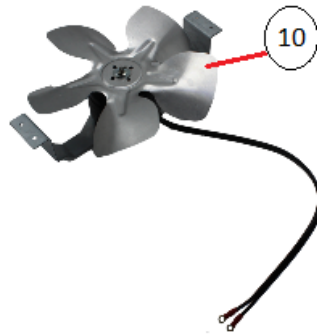
CRANE MERCHANDISING SYSTEMS

REFRIGERATION UNIT BevMax 4 (with Plastic Evap Box - 9539-0032DJ and higher)



or

CRANE MERCHANDISING SYSTEMS

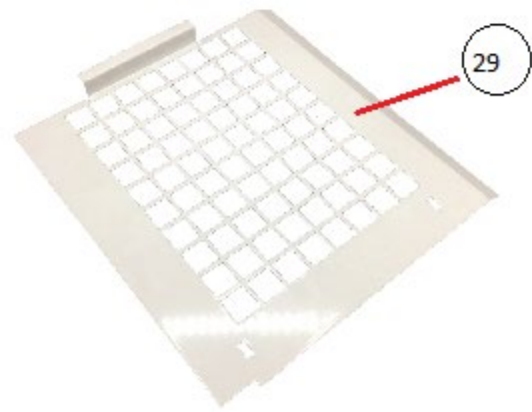
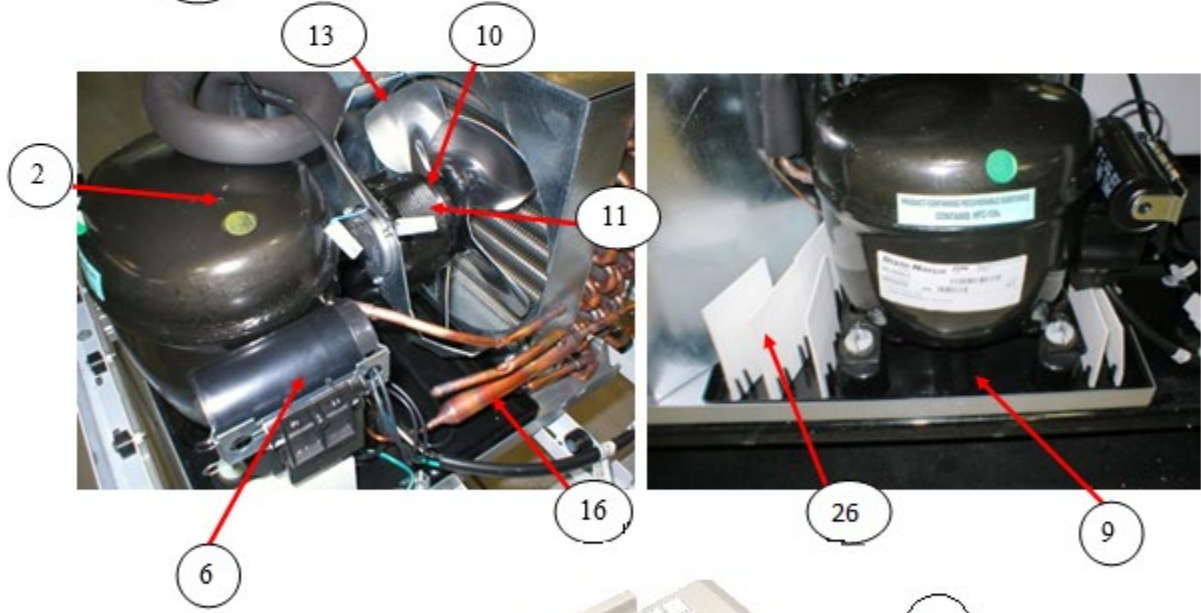
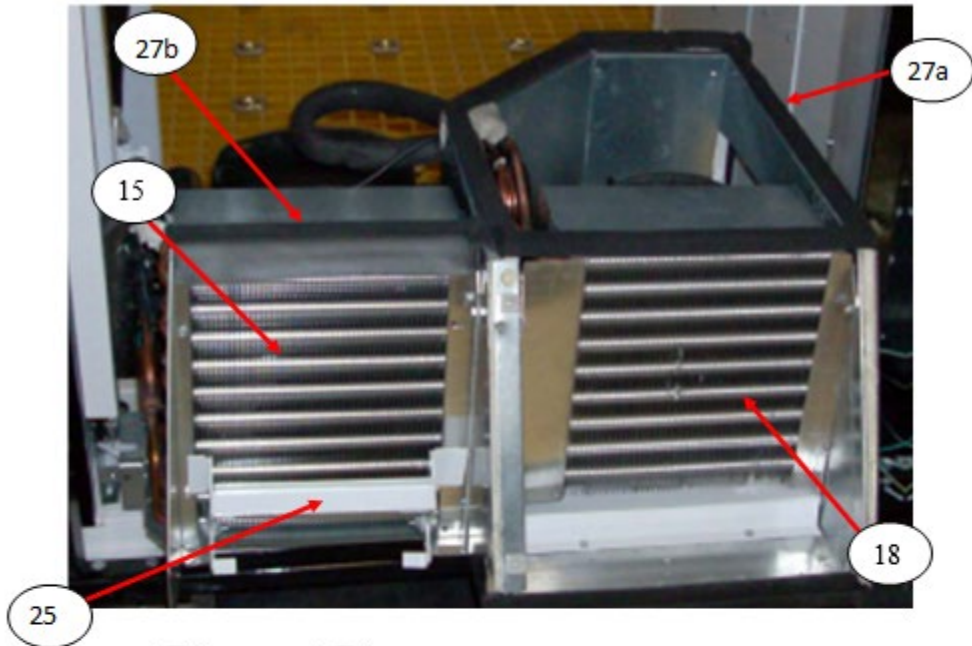


Refrigeration Unit BevMax 4 (with Plastic Evap Box – 9539-0032DJ and higher)

| ITEM # | PART DESCRIPTION | DN5800-4/3800-4 Domestic | DN5800-E4/3800-E4 Export |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------|
| 1A | Refrigeration Unit, 115V/60Hz Domestic Kit (Plastic Evap Box) | 105574 | 105575 |
| 2 | Compressor Assy. FFU130HAX , 115V/60Hz Domestic (1/3HP) | 101569 | 101571 |
| 3A | Overload, 115V Domestic (EM# 513554617) | 101112 | Not Sold Separately |
| 4A | Relay | 101141 | 101148 |
| 5 | Cover, Electrical (Not Sold Separately) | Not Sold Separately | 110339 |
| 6 | Start Capacitor | 108821 | Not Sold Separately |
| 7 | Start Capacitor, End Cap Bottom Hole | 108822 | Not Sold Separately |
| 8 | Bracket, Capacitor | 101562 | Not Sold Separately |
| 9 | Drain Pan, Condensate | 102962 | Same |
| 10 | Assembly Condenser Fan | 104559 | 104583 |
| 11 | Condenser Fan Motor | 101633 | 101095 |
| 12 | Silencer (Not Shown) | 105628 | Same |
| 13 | Fan Blade, Condenser 8.75" | 101554 | 101557 |
| 14 | Speed Nut | 100171 | Same |
| 15 | Condenser Coil 11"x 8"x 2.5" | 101592 | Same |
| 16 | Dryer | 100693 | Same |
| 17 | Grommet Compressor | 100115 | Same |
| 18 | Evaporator Coil 9"x 8"x 3.125" | 101624 | Same |
| 19 | Accumulator | 101548 | Same |
| 20 | Encapsulated Temperature Sensor | 101160 | Same |
| 21 | Assembly Evaporator Fan 115V Energy Star (5 blade) | 110719 | 101628 |
| 22 | Evaporator Fan | Not Sold Separately | 110340 |
| 23 | Defrost Control | 100673 | Same |
| 24 | Condensate Drain P Trap | 110319 | Same |
| 25 | Deck Handle Clamp | 104558 | Same |
| 26 | Soaker | 101658 | Same |
| 27 | Gasket Assembly – includes: A – 110325 Top Evaporator; B – 110326 Right side Evaporator; C – 110383 Lower Right side air gasket | 102757 | Same |
| 28 | Refrigeration Deck Clamp | 104554 | Same |
| 29 | Grill | 102854 | Same |
| 30 | Cord, Relief | 108820 | 110360 |
| 31 | Capacitor Holder | 109196 | Same |

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REFRIGERATION UNIT BevMax 4 (with Metal Evap Box prior to 9539-0032DJ)



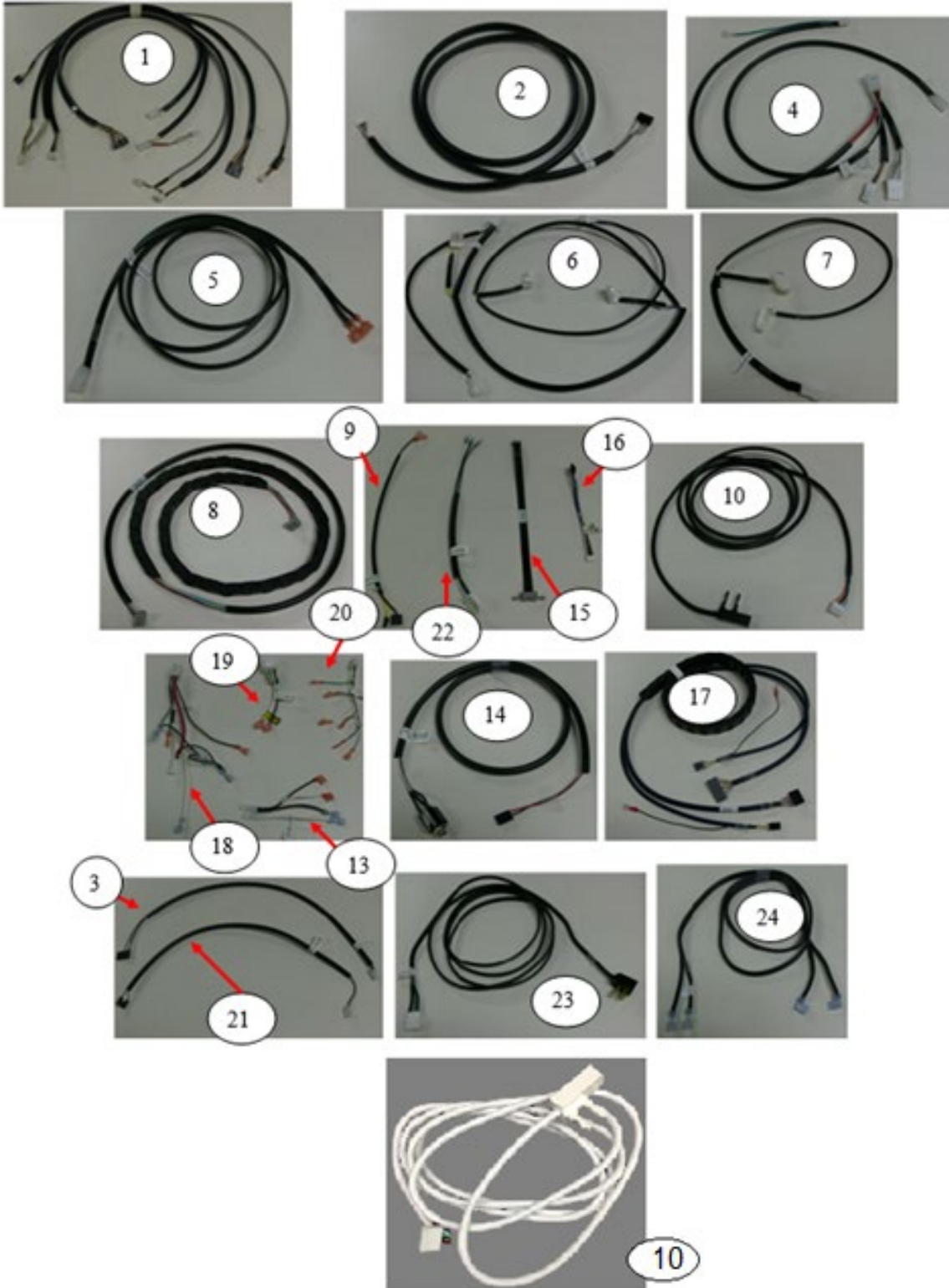
Refrigeration Unit BevMax 4 (with Metal Evap Box prior to 9539-0032DJ)

| ITEM # | PART DESCRIPTION | DN5800-4/3800-4 Domestic | DN5800-E4/3800-E4 Export |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| 1 | Refrigeration Unit | 105574 | 105575 |
| 2 | Compressor Assembly | 101569 | 101571 |
| 3 | Overload | 101112 | Not Sold Separately |
| 4 | Relay | 101141 | 101148 |
| 5 | Cover, Electrical | Not Sold Separately | 110339 |
| 6 | Start Capacitor | 108821 | Not Sold Separately |
| 7 | Start Capacitor, Cap | 108822 | Not Sold Separately |
| 8 | Bracket, Capacitor | 101562 | Not Sold Separately |
| 9 | Drain Pan, Condensate | 102962 | Same |
| 10 | Assembly, Condenser Fan | 104559 | 104583 |
| 11 | Condenser Fan Motor | 101633 | 101095 |
| 12 | Silencer | 105628 | Same |
| 13 | Fan Blade, Condenser 8.75" | 101554 | 101557 |
| 14 | Speed Nut | 100171 | Same |
| 15 | Condenser Coil | 101592 | Same |
| 16 | Dryer | 100693 | Same |
| 17 | Grommet Compressor | 100115 | Same |
| 18 | Evaporator Coil | 101592 | Same |
| 19 | Accumulator | 101548 | Same |
| 20 | Encapsulated Temperature Sensor | 101160 | Same |
| 21 | Assembly Evaporator Fan (5 blade) | 110719 | 101628 |
| 22 | Evaporator Fan Motor | Not Sold Separately | 110340 |
| 23 | Defrost Control | 100673 | Same |
| 24 | Condensate Drain P Trap | 101606 | Same |
| 25 | Deck Handle Clamp | 104558 | Same |
| 26 | Soaker | 101658 | Same |
| 27 | Gasket Assembly – includes A –Top Evaporator; B - Right side Evaporator; C - Top Condenser ; D- Right side air gasket (gaskets are not sold separately) | 102756 | Same |
| 28 | Refrigeration Deck Clamp | 104554 | Same |
| 29 | Grill | 104561 | Same |

Electronics

| ITEM # | PART DESCRIPTION | DN5800-4 DN5800-E4 | DN3800-4 DN3800-E4 |
|--------|------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|
| 1 | Bev Max 4 Control Board Service Kit (Note: refer to CMS Tech Notice M099.# for older vender kits) | 105424 | Same |
| | Bev Max 4 Control Board Service Kit – Indonesia only | 105563 | Same |
| 2 | Standoffs, .8 – 32 x 5/8 | 101171 | Same |
| 3 | EPROM, Firmware, Bev Max 4 Board (For Blue Board) | 101267 | Same |
| | EPROM, Firmware, Bev Max 4 Board – Indonesia only | 101268 | Same |
| 4 | Display Assembly (Noritake) | 100626 | Same |
| 5 | Transformer – Domestic (shown) | 101241 | Same |
| | Transformer – Export (not shown) | 101238 | Same |
| 6 | Fuse, 3 Amp 5 X 20mm Sloblo (on Control Board) | 100713 | Same |
| 7 | Battery, 3 Volt Lithium | 100624 | Same |
| 8 | Board Y Motor | 100630 | Same |
| 9 | Control Board Cover | 104544 | Same |
| 10 | Delivery (Picker) Cup Base Board | 101161 | Same |
| 11 | Port Vend Sensor with Harness | 103099 | Same |
| 12 | Port Circuit Board | 100627 | Same |
| 13 | Controller Mounting Bracket | 104623 | Same |

HARNESSES



HARNESSES

| ITEM REF | PART DESCRIPTION | FROM/TO | PART # FOR MODEL 1 | PART # FOR MODEL 2 |
|----------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------|
| 1 | Harness, Door Bundle 44" long | Black & grey hrns 12 pin flat black plug to P2 of board, 4 pin white plug to port motor, 7 pin flat white plug to port board. Black hrns 10 pin flat white plug to PJ11 of board, 10 pin flat black plug to key pad. Black & black hrns 6 pin white plug to J16 or board, 6 pin white cap to mdb mech, 6 pin white cap to mdb peripheral, 2 pin white plug to electronic lock if used. Grey hrns 7 pin flat black plug to P6 of board, 6 pin flat white plug to display. | 100802 | Same |
| 2 | Harness, X Motor, 74" long | 8 pin flat black at P15, 4 pin white plug to motor | 100969 | Same |
| 3 | Relays Extension Harness, 23" long | 10 pin flat black at P7 to 4 pin white plug at AC Distribution Box | 100801 | Same |
| 4 | Harness, AC Distribution Interior Power, 28" long | 3 pin white plug at P1 to 9 pin white cap at AC Distribution Box, 2 pin white plug at evaporator fan, 2 pin plug to 2 lamp ballast harness, 3 pin white plug to 1 lamp ballast harness | 401675 | Same |
| 5 | Harness, Evaporator, 80" long | 2 spade plugs to evaporator fan harness to 2 pin white plug from AC Box Harness | 100975 | Same |
| | Harness, Evaporator Fan | Connects to Fan | 108877 | Same |
| 6 | Harness, Lighting 2 Lamp | 9 pin white plug to ballast, 2 pin white cap to 2 pin white plug from AC Distribution Box | 100803 | Same |
| 7 | Harness, Top Light 1 Lamp | 2 pin white cap from horizontal light to 2 pin white plug from lighting harness | 100804 | Same |
| 8 | Harness, Y Motor E Chain | 10 pin Gray at J1 of Y board, 10 pin Gray to delivery cup harness | 101007 | Same |
| 9 | Harness, Dual Door Switch with CC Dongle, 14" long | 6 pin flat black at P10 to Double Door Switch | 100805 | Same |
| | Harness, Machine Options with CC Dongle | 13 pin black to P10A, 2 pin socket to override switch kit, 2 spades to door switch | 100810 | Same |
| | Harness, Single Door Switch | 6 pin flat black at P10 to Single Door Switch, 3 pin flat black to J3 | 100800 | Same |
| 10 | Encapsulated Temp Sensor | 6 pin plug at J12 to Temp Sensor 87" long | 101160 | Same |
| 11 | Harness, Port Cup Bottom – Vend Sensor | 4 pin plug to bottom of Port Cup (Part of Vend Sensor Assy-103099) | Not Sold Separately | |
| 12 | Harness, Main Power 198" long | Detachable GFCI Power Cord | 111454 | Same |
| | Cord, Power UK | Detachable, 3 pin 78" long | 101124 | Same |
| | Cord, Power Denmark | Detachable, 3 pin 78" long | 101118 | Same |
| | Cord, Power Israel | Detachable, 3 pin 78" long | 101119 | Same |
| | Cord, Power South Africa | Detachable, 3 pin 78" long | 111845 | Same |
| | Cord, Power Australia | Detachable, 3 pin 78" long | 101122 | Same |
| | Cord, Power Europe Shulo | Detachable, 3 pin 78" long | 101126 | Same |
| 13 | Harness, AC Power In | In AC Distribution Box 2 white caps, 2 red flag, 2 blue spade connectors | 100974 | Same |
| 14 | Harness, DEX 36" long | 4 pin flat black connector at J5 | 100970 | Same |
| 15 | Harness, Cup to E-Chain | 10 pin Gray at J3 Picker Cup Board to Y E Chain (Black Ribbon Harness) | 100930 | Same |
| 16 | Harness, Board to Y Motor | 6 pin flat black at P1 Y Board to 6 pin white to Y Motor | 100934 | Same |
| 17 | Harness, X/Y E Chain, 56 » long | 14 pin flat black at P14 controller to 10 pin flat black at P6 Y Board, 5 pin flat black at P8 controller to 4 pin flat black at P3 Y Board | 100981 | 100811 |
| 18 | Harness, Power Dist. | 9 pin cap to relays & transformer | 100973 | Same |
| 19 | Harness, Choke Output | 9 pin plug to AC Dist. Box Choke | 100905 | Same |
| 20 | Harness, Relay AC Box | 4 pin cap to relay harness, compressor relay, fan relay, light relay | 100972 | Same |
| 21 | Power Interrupt Sw. (Motor By Pass) 21" long | 2 pin white plug to P3 | 100968 | Same |
| 22 | Harness, Compressor Extension 23" long | 3 "U" shaped connectors from overload/relay to 3 pin white socket to item 28 | 100822 | Same |
| 23 | Harness, Compressor Power Domestic | 3 pin white plug to item 27 - 115" long | 100971 | Same |
| | Harness, Compressor Power Export | 3 pin white plug to item 27 - 115" long | 100815 | Same |
| 24 | Harness, Defrost Control | 2 blue flag connectors to AC Box, 2 blue spade connectors to Defrost Control | 115163 | Same |

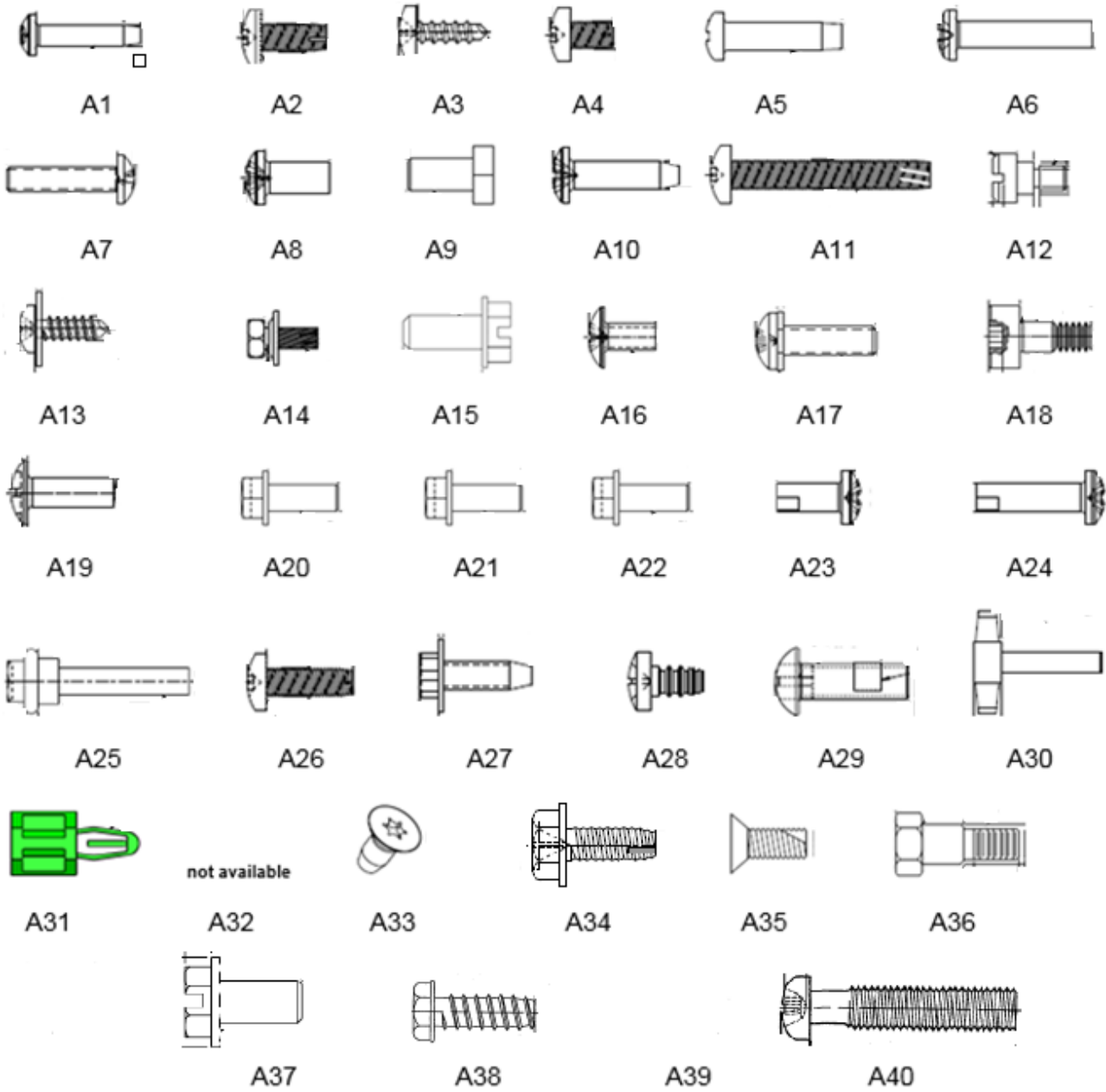
LABELS/DECALS/MISC.

Note: Graphics change frequently.

Contact your Crane Merchandising Systems Factory for current graphic parts & part numbers

| ITEM # | PART DESCRIPTION | DN5800-4 DN5800-E4 | DN3800-4 DN3800-E4 |
|--------|------------------------------------------------------------------------------|-----------------------|-----------------------|
| 1 | Vender Lag Bracket Kit | NLA | NLA |
| 2 | Thermometer | 103073 | Same |
| 3 | Price Sheet .35 – 1.10 | 102245 | Same |
| | Price Sheet 1.15 – 1.85 | 102246 | Same |
| | Price Sheet 1.90 – 3.75 | 102247 | Same |
| 4 | Label, Selection - BevMax 4 5800-4 (A1 to E9/A1 to E7) | 102194 | 102194 |
| 5 | Label, Warning "DO NOT TILT" | 102133 | Same |
| 6 | Programming Card, Quick Reference | 102176 | Same |
| 7 | Label, Coin Mech | NLA | NLA |
| 8 | Decal, Side Cabinet – Coke | 101901 | Same |
| | Decal, Side Cabinet – Dasani | 101900 | Same |
| 9 | Decal , Glass Door – Coke | 102025 | 102026 |
| | Decal , Glass Door – Dasani | 102036 | 102047 |
| 10 | Decal, Cup Base – Coke | 101891 | Same |
| | Decal, Cup Base – Black | 101880 | Same |
| | Decal, Cup Base – Dasani | 101878 | Same |
| 11 | Decal, Sleeve – Coke Straight | 101873 | Same |
| | Decal, Sleeve – Black Straight | 101871 | Same |
| | Decal, Sleeve – Dasani Straight | 101877 | Same |
| 12 | Coke BevMax 4 5800-4 Technical Manual, Service / Operation / Parts – 8900ABH | 102220 | Same |
| | Coke BevMax 4 5800-4 Manual, Installation SetUp Guide – 8900BH | 108862 | Same |
| 13 | Overlay Keypad – Gray | 101467 | Same |
| 14 | Label, Factory XY Settings | 111127 | Same |
| 15 | Label, Warning Ramp | 102159 | Same |
| 16 | Shipping Bracket & Bolt Instruction Sheet | 102170 | Same |
| 17 | Decal, Top Bezel - Coke Large Bottle | 101888 | Same |
| 18 | Decal, Lower Bezel - Enjoy | 101889 | Same |
| 19 | Decal, Lower Bezel – Thank You | 101890 | Same |
| 20 | Override Switch Kit | 105195 | Same |

Screws
(diagrams are for shape reference only)

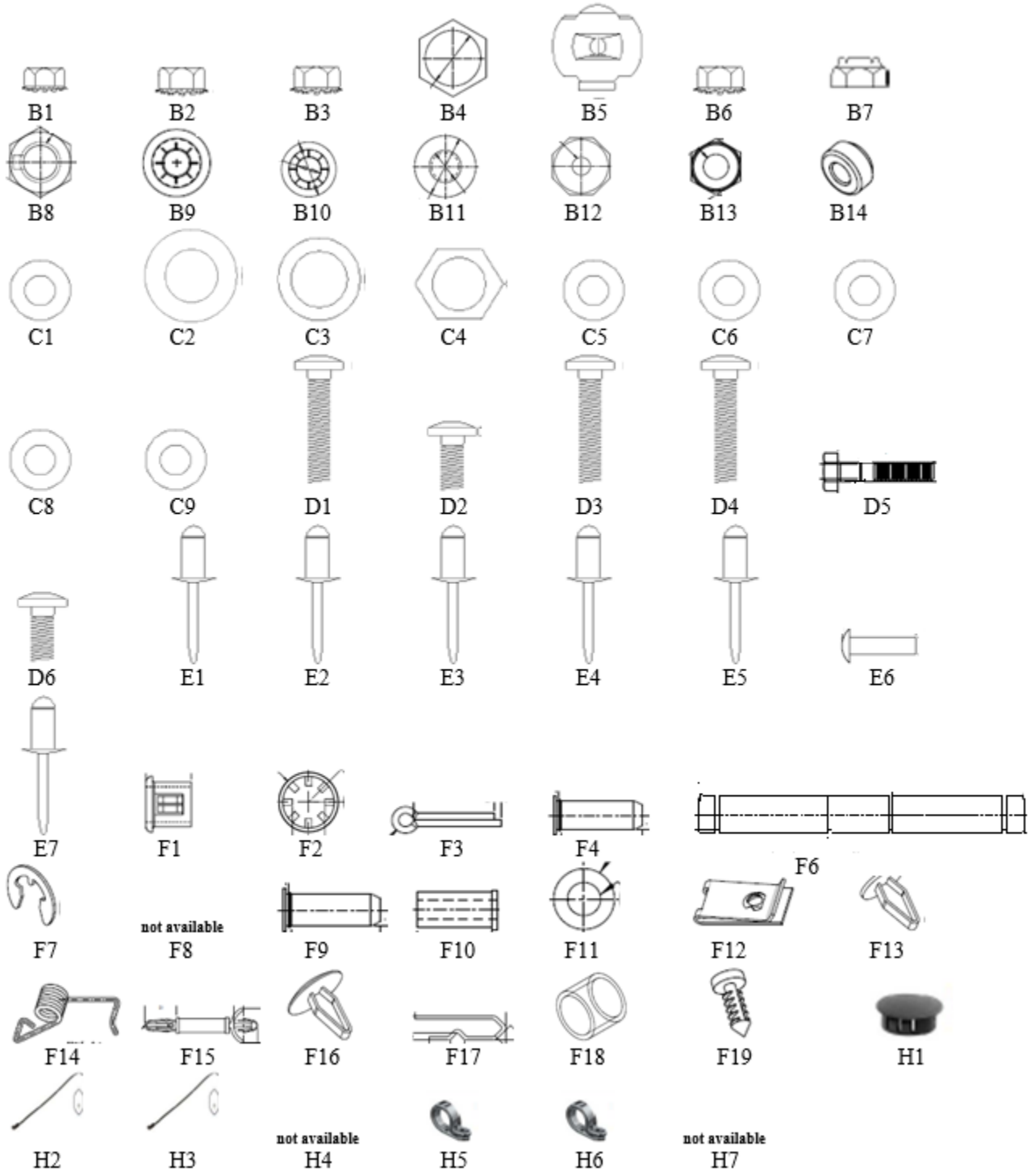


Screws

| ITEM # | PART NUMBER | PART NAME AND DESCRIPTION |
|--------|-------------|------------------------------------------------------------------|
| A1 | NLA | Screw, Phil Pan Head 1/4 - 20 x 1 1/4" |
| A2 | 100266 | Screw, Phil Pan #8 - 32 x 3/8" |
| A3 | 100265 | Screw, Phil Pan w/out washer self-drilling, #8 - 18 x 1/2" |
| A4 | 100318 | Screw, Phil Pan Swage Form #8 - 32 x 1/4" |
| A5 | 100327 | Screw, Phil Pan #2-32 x 3/8" |
| A6 | 100280 | Screw, Phil Pan, #2-32 x 1/2" |
| A7 | 100278 | Screw, Phil Pan #4-24 x 1/2" |
| A8 | 100258 | Screw, Pan Head 8 - 32 |
| A9 | 100259 | Screw, Hex Head 1/4-28 X .5 |
| A10 | 100325 | Screw, Phil Pan #8 - 32 x 5/8" |
| A11 | 100268 | Screw, Phil Pan Form #10 - 32 x 1 1/4" |
| A12 | 100257 | Screw, Round Slotted Shoulder #10 - 32 x 1/4" |
| A13 | 100267 | Screw, Phil Pan Sems with washer, #8 - 18 x 1/2" |
| A14 | 100319 | Screw, Self-Tapping, 1/4 - 20 x 5/8" |
| A15 | 100277 | Screw, Hex Washer 8x5/8" |
| A16 | 100307 | Screw, Phil Truss #10 - 32 x 3/8" |
| A17 | 100328 | Screw, Phil Pan with lock washer #4 - 40 x 3/8" |
| A18 | 100253 | Screw, Shoulder #4-40 |
| A19 | 100316 | Screw, Phil Pan #8-18x1/2" |
| A20 | 100276 | Screw, Hex Head 10-16x .50 |
| A21 | 100273 | Screw, Hex Tapping .250-20 |
| A22 | 100273 | Screw, Hex Washer Head 1/4-20 (A22 has been replaced by A21) |
| A23 | 100326 | Screw, Phil Pan #8-18x.375" |
| A24 | 100281 | Screw, Phil Pan #8-18x5/8" |
| A25 | 100264 | Screw, 4-24 Hi-Lo |
| A26 | 100311 | Screw, Phil Pan Swage Form #8-32x1/2" |
| A27 | 100275 | Screw, Hex Washer Head #8-18x1/2" |
| A28 | 100255 | Screw, Pan Head #6-32 X 1/4 |
| A29 | 100263 | Screw, Nylock #8-32x1/2" |
| A30 | 100332 | Screw, Wing 1/4 - 20 x 1 1/4 molded nylon (for shipping bracket) |
| A31 | 100341 | Screw, Nylon (Circuit Board Support – Display) |
| A32 | 100287 | Screw, TEK Zinc #20 X .750 |
| A33 | 100298 | Screw, Fl. Torx Tap 1/4-20 X 1/2 |
| A34 | 100321 | Screw, Hex w/ washer 8-32 x 3/8 |
| A35 | 100317 | Screw, Phillips Flat 10-32 X .5 |
| A36 | 100289 | Screw, Shoulder 1/4-20 X .35 |
| A37 | 100334 | Screw, Machine w/ lock 10-24 X 3/8 |
| A38 | 100241 | Screw, Hex w/ Head, Hi-Lo #6 X 1/2 |
| A39 | 100256 | Screw, Hex Button Head 10-32 X 5/8 |
| A40 | 100260 | Screw, 10-32 X 1.375 |

CRANE MERCHANDISING SYSTEMS

NUTS, WASHERS, BOLTS, & MISC. HARDWARE (diagrams are for shape reference only)



Washers, Bolts, & Misc. Hardware

| ITEM # | PART NUMBER | PART DESCRIPTION | ITEM # | PART NUMBER | PART DESCRIPTION |
|--------|-------------|--------------------------------------|--------|-------------|--------------------------------------|
| B1 | 100155 | Hex Nut, #10 - 32 | E1 | 100235 | Pop Rivet, Black 1/8" |
| B2 | 100156 | Hex Nut, 1/4 - 20 | E2 | 100229 | Pop Rivet, Steel (Zinc Plated) 1/8" |
| B3 | 100153 | Hex Nut, #8 - 32 | E3 | 100228 | Pop Rivet, Steel (Zinc Plated) 3/16" |
| B4 | 100162 | Hex Nut, Dex Plug | E4 | 100226 | Pop Rivet, Aluminum 1/8" White |
| B5 | 100185 | Speed Nut | E5 | 100224 | Pop Rivet, SS 187 |
| B6 | 100163 | Hex Nut with washer, #10 - 24 | E6 | 100224 | Rivet, Bulbex 3/16 Black (E6 rb E5) |
| B7 | 100154 | Elastic Stop Nut, #8 - 32 | E7 | 100227 | Pop Rivet, Steel 3/16 Black |
| B8 | 100152 | Nut Jam Lock 5/16 | | | |
| B9 | 100183 | Push Nut .187 X .437 | F1 | 100043 | Nylon Bushing, Heyco 2867 |
| B10 | 100173 | Push Nut ID .250 | F2 | 100221 | Retaining Ring |
| B11 | 100150 | Push Nut Washer Cap Type | F3 | 100210 | Cotter Pin .076 diameter .5 long |
| B12 | 100148 | Nylon Insert Lock Nut ¼ - 20 | F4 | 100199 | Pin Self Clinching .250 x ¼ |
| B13 | 100170 | Nut, 10-32 Nylock | F5 | 100256 | Screw, Button Head Cap 10-32 x 5/8" |
| B14 | 100164 | Nut, ¼-20 Pem nut C420-1 | F6 | 100196 | Pin Belt Tensioner Idler PVT |
| | | | F7 | 100106 | E Ring Ext ¼ #E-25 |
| C1 | NLA | Washer, Lock .261 ID | F8 | 101171 | Standoff Richo RLCBSR401SR |
| C2 | 100508 | Washer, Nylon .189 x .375 x .031 | F9 | 100200 | Pin Self Clinch .250 x 1 |
| C3 | 100503 | Washer, .260 ID x .687 OD Flat | F10 | 101169 | Standoff, Clinch 8 – 32 5/8 |
| C4 | 100504 | Washer, Hex #29-34 (T-Handle) | F11 | 100391 | Nylon Spacer #8 ID, .312 OD, .5 |
| C5 | 100509 | Washer, .191 ID x .5 OD x .054T Flat | F12 | 100076 | Tinnerman Clip, U-Nut ¼ - 20 |
| C6 | 100487 | Washer, SS Flat #10 | F13 | 100077 | Clip, Canoe 254-12020-99 |
| C7 | 100488 | Washer, Flat 18 Ga 17/64 ID x 5/8 OD | F14 | 100403 | Belt Tensioner Spring |
| C8 | 100488 | Washer, Flat 3/8 Steel (C8 rb C7) | F15 | 101173 | Standoff, Circuit Board |
| C9 | 100489 | Washer, Flat 15/32ID X 59/64OD | F16 | 100082 | Clip, Canoe Natural (Lens) |
| | | | F17 | 100088 | Clip, Retainer Compressor |
| D1 | 100009 | Bolt, Carriage ¼ - 20 x 2.5 | F18 | 100384 | Spacer, 1/4ID X .275 |
| D2 | NLA | Bolt, Carriage 10-24 x .82 | F19 | 100225 | Clip, Pine Tree Rivet |
| D3 | 100012 | Bolt, ¼-20 X 1.75 | | | |
| D4 | 100010 | Bolt, Carriage ¼-20 X 2 | H1 | 100218 | Plug, Dome Black .50 |
| D5 | 100011 | Bolt, Hex ¼-20 X 1.25 | H2 | 100514 | Wire Tie, 7 1/2" |
| D6 | 100015 | Bolt, Carriage 10-24 X .82 | H3 | 100513 | Wire Tie, 4" |
| | | | H4 | 100516 | Wire Tie, Twist |
| | | | H5 | 100056 | Clamp, Nylon 5/16" White |
| | | | H6 | 100064 | Clamp P 1" Heyco 3390 |
| | | | H7 | 100068 | Clamp, .250 Push Fin Base |
| | | | | | |