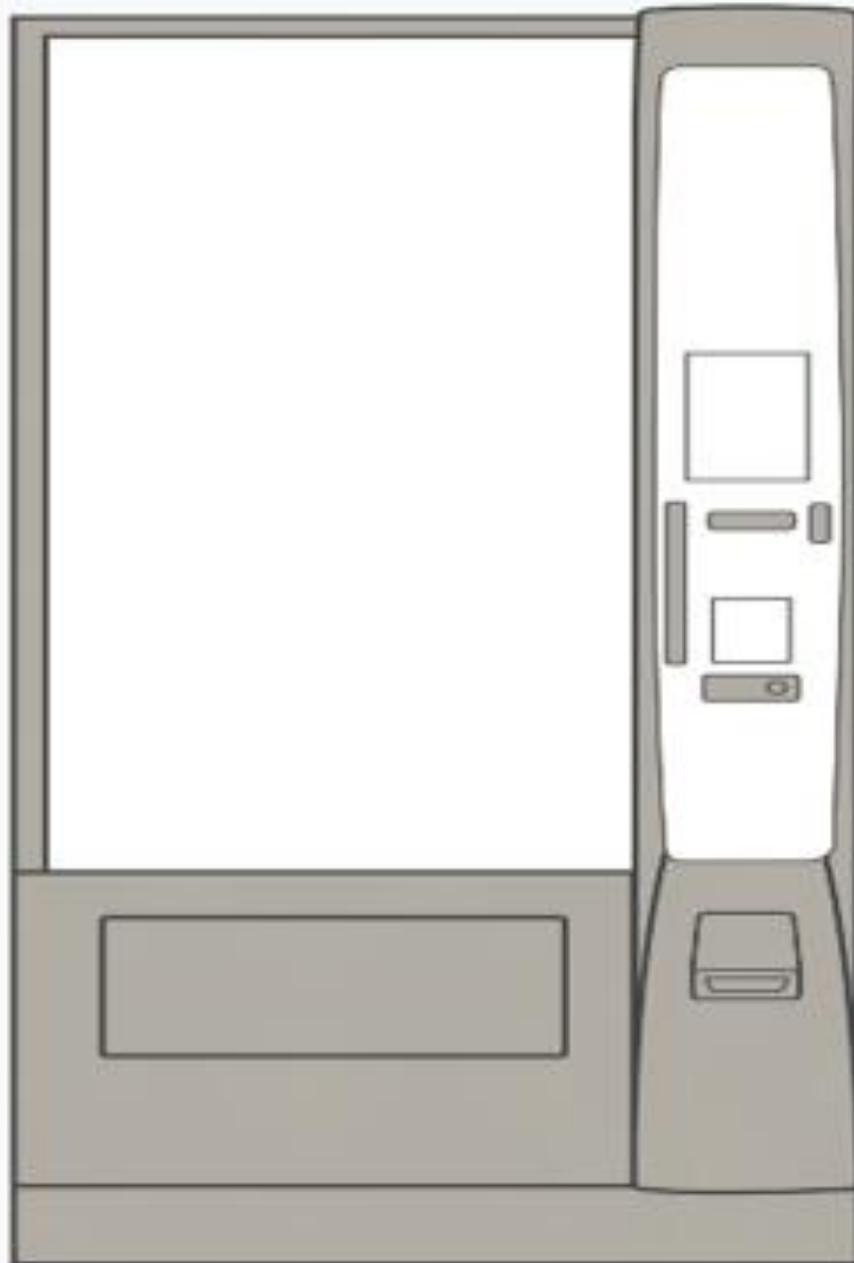


Merchant Media 2 Combo

Users Guide

Models 471D-HC / 471E-HC
472D-HC / 472E-HC



403489 Rev 0.0



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Compliance Requirements

LOCATION OF MANUFACTURER:

All machines are built at the Crane Merchandising Systems manufacturing facility, located at 3330 Crane Way, Williston SC 29853, USA

DATE OF MANUFACTURE:

Date of manufacture can be determined by viewing the Manufacturing Date on the Serial Number decal, located on the top left rear corner of the back of the machine cabinet.

PERMITTED & NON PERMITTED USES OF THIS MACHINE

This machine is designed to dispense pre-packaged food, candy, beverage, snack and similar products. Use of unwrapped food products is not permitted.

It is not permitted to use this machine outdoors, or in an environment where flammable or explosive vapors are present.

This machine is not designed, nor should it be used to dispense flammable or explosive items, nor any other item that could not be safely dispensed by dropping it into the delivery bin.

This machine is not suitable for installation in an area where a water jet could be used.

This appliance is not to be used by persons (including children) with a reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction. Children must be supervised and are not to play with the appliance.

Nutritional Content Information

Crane Merchandising Systems is providing the nutritional content information, based on information provided by the product manufacturers, and Crane MS cannot accept responsibility for content created by others.

All models are built to meet or exceed all applicable standards, including but not limited to:

International (CE) Approvals to meet or exceed the below listed standards:

83/23/EEC (93/68/EEC) Low Voltage Directive.

89/336/EEC EMC Directive

EN 60335-1 Safety of household and similar electrical appliances.

DIN VDE 0700 T224 Safety requirements for Automatic and coin-operated machines and control devices for commercial use.

EN 55022 Class B Limits and methods of measurements of Radio interference characteristics of information technology equipment.

IEC 801-1 Electromagnetic compatibility for industrial-processing measurement and control. Part 1: General.

IEC 801-2 Part 2; Electrostatic discharge requirements for industrial process measurement control equipment.

IEC 801-3 Part 3; Radiated electromagnetic field requirements.

IEC 801-4 Part 4; Electrically fast transient.

IEC 801-5 Draft; Surge immunity requirement.

IEC 801-6 Draft; Immunity to conducted disturbances induced by radio frequency.

EN 50082-1 Generic immunity requirements; Residential, Commercial, Light industry.

Machines built for the US Market meet or exceed the requirements for UL751 for ambient machines, and UL541 for chilled machines, and have also been reviewed and passed the NAMA Construction Standard, and are permitted to bear the NAMA Mark.

NOISE LEVEL

This machine operates at less than 65 db.

ACCEPTABLE AMBIENT OPERATING TEMPERATURE RANGE.

This equipment was designed and tested to work properly in a temperature range of 10°C to 32°C (50°F to 100°F) (45% Relative Humidity, non-condensing). Usage at ambient conditions outside the range of the testing may cause unacceptable appearance or performance.

STORAGE CONDITIONS

The machine capable of being stored in a temperature range of -18°C to 68°C (0°F to 155°F). Storage temperatures below 0°C (32°F) require that the operator to take the required precautions to ensure that any water is removed from the condensate system prior to storage.

INDOOR USE ONLY

This machine is designed to be used in an Indoor Setting only. Indoor Setting is defined as inside a structure constructed with four walls and a roof, and sufficiently protected from ambient conditions and not subjected to the effects of weathering. Any other usage is in direct violation of these instructions, and will void the warranty of the machine and its components

Specifications

Specifications	Model 471D-HC Domestic 4 Wide	Model 471E-HC Export 4 Wide	Model 472D-HC Domestic 6 Wide	Model 472E-HC Export 6 Wide
Height	72 inches	183 cm	72 Inches	183 cm
Width	32.8 inches	83.312 cm	45.5 inches	115.57 cm
Depth	32.5 inches	82.55 cm	35.5 inches	82.55 cm
Floor Space	7.4 Sqare feet	.69 Square Meter	10.3 Square Feet	.96 Square Meter
Container Size	44.4 Cubic Feet	1.26 Cubic Meter	61.6 Cubic Feet	1.75 Cubic Meter
Shipping Weight	629 lbs	285 kg	729 lbs	330 kg
Voltage (AC)	120V	230V	120V	230V
Running Amp	6.0	6.0	6.0	6.0
Refrigerant Charge	114 gram	114 gram	114 gram	114 gram
Compressor Size	1/3+ HP	1/3+ HP	1/3+ HP	1/3+ HP
HS Pressure	326 psig	23 Bar	326 psig	23 Bar
LS Pressure	129 psig	-	129 psig	-

PRODUCT IDENTIFICATION

The production date of CPI Vending products is determined by the date code incorporated in the serial number. The Machine serial number incorporates the build date, in the format:

21yymmddxxxx

21 indicates the Merchant Combo model, yymmdd is the year, month, & date of production, and xxxx is a sequential build number.

Cautions & Definitions

It is critical that all cautions and warnings be reviewed and complied with during the unpacking, installation, operation, and repair of this machine



CAUTION: This machine is designed for indoor usage only. Any other usage will void the Manufacturer's Warranty



CAUTION: Any procedure marked with the symbol at left requires that the Machine have the power applied and a shock hazard exists. Only a trained and authorized person should



CAUTION: It is important that this machine is hooked up to the proper voltage and polarity for your country. Use a Voltmeter to verify voltage and polarity. Should the reading be any different than a normal reading or if you are unsure of what the reading



CAUTION: Different countries may have unique plug arrangements. Ensure that the machine is properly grounded



CAUTION: The power cord for all machines are of a type X attachment. If the power cord is damaged, it should be replaced by a trained service agent, or a similarly qualified person in order



DANGER: Propane gas (R290) is flammable, odorless gas. While working on a machine, no smoking and no open flames should be permitted.



CAUTION: Propane gas (R290) is heavier than air and odorless. It may displace oxygen and cause rapid suffocation. In the event of an accidental release, evacuate, then ventilate the area. Do not permit any ignition sources to approach until the area has been safely ventilated.

The charge amount in this machine is 114 grams of R290 refrigerant. The lower flammability limit (LFL) of R290 is 38 grams. At three times the LFL ($3 \times 38\text{g} = 114\text{g}$), this machine meets all applicable UL and ASHRAE placement conditions



Use caution when handling, moving, and use of the vender to avoid either damaging the refrigerant tubing, or increasing the risk of a leak. Do Not Puncture Refrigerant Tubing or use any tools in the vicinity of the exposed tubing.



CAUTION: This machine is designed to dispense pre-packaged food, candy, beverage, snack and similar products. Use of unwrapped food products is in direct contradiction to these cautions.



CAUTION: If this machine is used to dispense perishable food, and local health codes require that the machine monitor the cabinet temperature, and prevent vending when the temperature exceeds a defined limit for a period of time, then the Health Code function must be enabled for those affected selections – see Health Code Setup



CAUTION: The electronic system components in this machine utilize static sensitive components. Precautions for handling sensitive devices should be observed when handling these items.



CAUTION: The machine is a heavy item. Ensure that sufficient personnel are available for lifting and transporting the machine. Use proper lifting procedures and equipment.

Servicing shall be done by factory authorized service personnel who have been properly trained so as to minimize the risk of possible ignition due to incorrect parts or improper service, including the use of proper parts.

This guide contains detailed information surrounding the components, installation and operation of the the Merchant Media 2. For detailed Programming information, refer to the **Programming Guide**.

Inspection and Unpacking

The Merchant Media is assembled and packed so that a minimum amount of time is necessary for preparation to install it on location. The following steps are recommended to ensure correct unpacking.

Shipping Damage: Thoroughly inspect the exterior of the carton for damage which may have occurred during shipment. Report any damage to delivering carrier and follow their instructions.

Remove the remainder of the packing material. On machines shipped with the lock in place, the keys are taped inside the coin return.

Removal of shipping boards: There are 2 methods available for removal of the shipping boards on the bottom of the machine, and they are dependent upon the style of packaging used: 2 flat shipping boards (Style A), or 2 L shaped assemblies (Style B).

Style A

- a) Using a motorized lifting device (i.e. a forklift) raise the machine to a comfortable working height and remove the leg levelers with the use of a socket or wrench (1 5/16"). Do this on one side at a time. After the front and rear leg levelers are removed, the shipping board can then be removed. Replace the leg levelers in the legs of the machine before lowering to the ground, OR
- b) When using a pallet jack (non-motorized) insert a pry bar into the slit on the front and rear of the wooden boards, and twist the bar to force the boards to split apart, and remove from the machine. Screw the leg levelers all the way in before lowering the machine to the ground.

Style B

- a) Each of the 4 legs has a hex head screw securing the leg to the wooden pallet. Remove the screw from each leg, then using either a motorized lifting device, or a pallet jack, raise the machine sufficiently to slide the 2 assemblies out from under the machine and lower it to the floor.

NOTE: On the machine, the weight concentration is toward the back of the cabinet. Trucking and lifting should be done from the back. CAUTION should be taken when trucking from side.

On machines with lock in place, first unlock and turn handle to open door. When no lock is furnished, remove clip and turn handle. Swing door to its full open position.

Remove all additional packing material from the machine.

Unpacking - ADA Bin

Attention!

To avoid damage to the ADA delivery bin mechanism, remove the SHIPPING Clips from the bin sides prior to operating the ADA delivery bin!!!

The Shipping Clips must be installed any time the machine is moved or transported. Failure to do so could result in damage to the delivery bin

To tilt the bin down to access the shipping clips, swing the small latches on the top corners of the bin to release the bin.

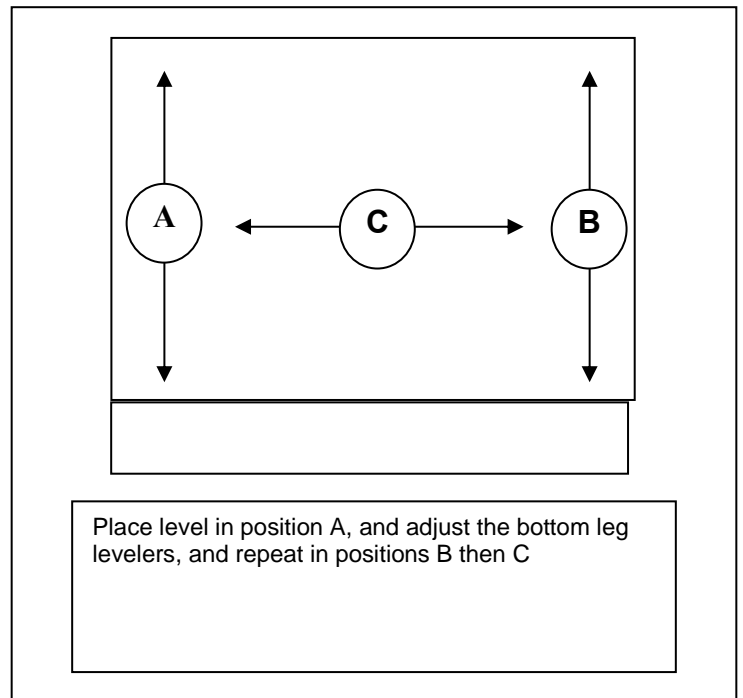
Make sure you latch the bin after removing the shipping clips.



Installation

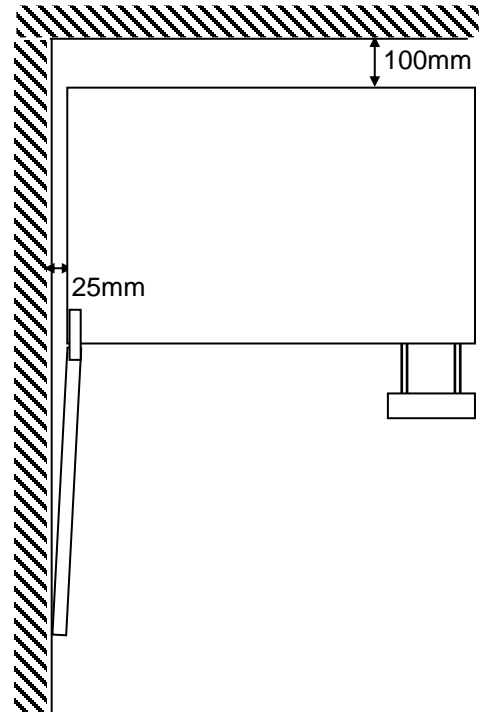
Leveling the Machine

Leveling the machine on location is important for the proper function of the machine. There are four leveling screws in the legs of the machine to make any necessary adjustments. After positioning the machine, level it from front to rear and right to left directions. After leveling, turn front right (lock side) leveling screw in about one-half turn to drop this corner slightly to make the door easier to close and lock.

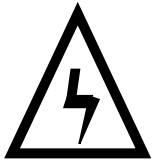


Clearance Requirements

It is necessary on all machines to have 25mm (1") clearance on the left side of the machine for the door to properly open to access the shelves. All chilled or refrigerated machines require 100mm (4") of clearance behind the machine for air circulation.



Power Requirements



CAUTION: It is important that this machine is hooked up to the proper voltage and polarity for your country. Use a Voltmeter to verify voltage and polarity. Should the reading be any different than a normal reading or if you are unsure of what the reading should be, contact an electrician.

The merchandiser is supplied with a service cord for the country of use, and is terminated in a grounding type. The wall receptacle used for this merchandiser must be properly polarized, grounded and of the correct voltage. Operating the merchandiser from a source of low voltage will void the warranty. Each machine should have it's own circuit, and that circuit should be protected with a circuit breaker or fuse to conform to local regulations.

1. **Voltage Check** - Place the leads of the voltmeter across the Line and Neutral sockets of the wall receptacle. The voltmeter should indicate a stable voltage in a range of 110 to 130Vac for 120V 60Hz locations, or 220 to 240Vac for 230V 50Hz locations.
2. **Polarity Check** - Place the leads of the voltmeter across the Line and Ground sockets of the wall receptacle. The voltmeter should indicate a stable voltage in a range of 110 to 130Vac for 120V 60Hz locations, or 220 to 240Vac for 230V 50Hz locations.
3. **Noise Potential Check** - Place the leads of the voltmeter across the Neutral and Ground sockets of the wall receptacle. The voltmeter should indicate zero voltage. A measurement greater than 1.5V could result in operational issues for the merchandiser's electronics caused by electrical noise.

Note: Any deviation from these requirements could result in unreliable performance from your merchandiser.

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.

Major Components

24v 150 W Power Supply



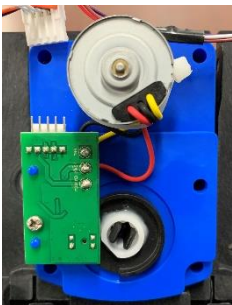
The New OMRON 24V 150W Power Supply is located inside the service area, mounted to the back wall below the AC Distribution Box. It has 3 outputs with each one being capable of 150W. Two of the outputs are wired into the AC Distribution Box. Each of the outputs are fused at 75W by the circuit breakers in the AC Distribution Box Assembly. It contains a Board with Green Status Light that illuminates when power is present. This OMRON 24V 150W Power Supply is common across Domestic, Export, The OMRON Power Supply receives AC voltage via the AC Distribution Box. The OMRON Power Supply converts the AC voltage to the main operating DC voltages of the machine (24VDC).

AC Power Box

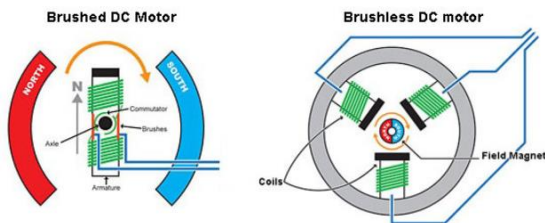


The redesigned AC power box is located inside of the service area, mounted above the 24V power supply. All 120VAC and 220VAC components are isolated within this box for improved safety. The power box standardizes the application for both Domestic and Export machines. There are two resettable 24VDC circuit breakers to provide protection in the 24VDC circuit, one for the cabinet and the other for the door electronics.

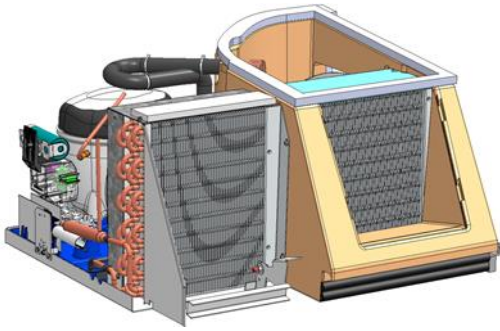
Brushless DC Motors



Brushless DC (BLDC) Motors replace the conventional snack/candy motors. They are R290 compliant, intrinsically safe, longer life than brushed motors because there is no friction with the commutator. The motor is driven by a board located inside the motor housing.



R290 Refrigeration Deck



The Merchant Combo is equipped with a refrigeration deck that utilizes R290 (propane) gas to cool the product. The environmental board located in the AC box supplies the compressor and fan power. Because this is a new system design, *if there are any problems with the refrigeration system, contact Crane Customer Service to arrange for a replacement unit, and shipping instructions for the inoperable unit to Crane for evaluation.* There are no serviceable parts on the refrigeration system.

Initial Setup

After unpacking and installing the machine on location the Key steps to setting up the machine the first time are:

1. Load a change fund into the coin mechanism.
2. Set the selection prices in the machine.
3. Test vend at least one selection on each shelf to verify:
 - a. Pricing is correct, and coin mech, bill acceptor and credit card device are working correctly.
 - b. Product and nutrition information are correct.
 - c. Selection delivers products.
 - d. Delivery bin delivers product to customer.

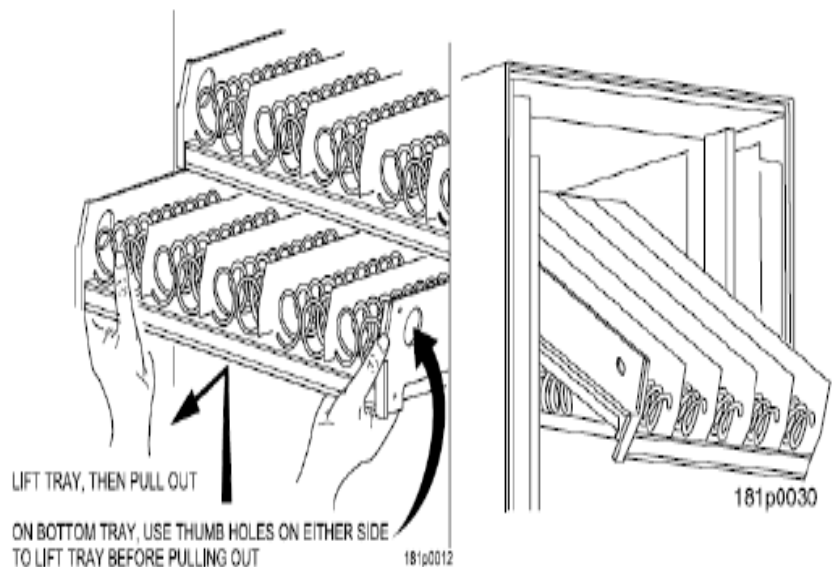
Loading Product in the Machine

Lift the front edge of the shelf and pull the shelf forward until it stops

Insert products into spirals

Once the shelf is loaded, push the shelf back into the machine until you feel front edge raise up over the ramp.

Note: If tall product hits the shelf above when restoring the shelf to the normal vend position, raise the upper shelf to provide clearance



Preventive Maintenance

Daily Cleaning

Before leaving the machine each visit, the machine should be inspected and cleaned as follows:

1. Glass – inside and out – use glass cleaner and disposable towels
2. Front of monetary panel – do not use ammonia based cleaners as it may cause premature crazing of the polycarbonate surface. We recommend the use of Novus #1 plastic cleaner & polish.

For units equipped with a touch screen, never spray any cleaner directly on the touchscreen, nor permit liquids to flow onto the screen. Apply cleaner to a disposable towel and then apply to the pill or touchscreen. Treat the touchscreen as you would any sensitive electronic device and never use abrasive cleaning materials.

3. Delivery Bin – Inside and out – clean any spills or residue with a mild soap and water solution, and wipe dry.



Cashless Devices

If your machine is equipped with a cashless device, whether it is a credit card reader, or a proprietary closed system pre-paid card, the magnetic head used to read the payment cards needs to be cleaned regularly to insure proper operation.

The defined tool for cleaning a magnetic head is a pre-saturated cleaning card, which are commercially available from various sources.

Based on credit card industry standards, the busier a machine is, the more frequently the magnetic head should be cleaned

For cashless uses more than 100 times per day – clean it every day

For cashless uses between 50 and 100 times per day – clean it every other day

For cashless uses between 10 and 50 times per day – clean it one time per week.

Actual conditions may vary, and be affected by site conditions, for example a machine located outdoors should be cleaned more frequently.



Follow the instructions provided with the cleaning card, and slide it past the magnetic head as directed.

Payment Systems

All payment devices are mounted on the slide out assembly. The front of this slide out assembly is called a Pill. There are multiple configurations of the Pill available should you need to add or take away payment peripherals in the future.

If your payment peripherals were installed at the factory they should already be enabled in the electronics. Currently we enable only \$1 and \$5 bills (notes) in manufacturing. Instructions from the manufacturer for all peripherals installed at the factory are

included in the bag assembly in the machine. Please refer to these instructions for information on filling coin tubes, adding bills to recyclers or other pertinent information.

If your payment peripherals were not installed in manufacturing, please refer to the instructions that came with payment system for set up and installation.

See the service modes section of this document for information on enabling or disabling different bills and/or additional peripherals.

Initial Start-Up

Features and Benefits

MEDIA2 is the most advanced electronics platform and shopping experience ever created by Crane; designed to attract more consumers, and take same-store sales to a completely new level.

- New level of consumer attraction and engagement to increase same store sales.
- The new user interface is designed to influence consumer behavior with suggestive selling through a patent-pending recommendation engine. . . Operators can specify the suggested products, or let MEDIA2 do it for them through different algorithms, like new products, low movers, complementary products or just random selections.
- Takes digital advertising to a new level with full motion video enhanced by Crane Media Net's sponsored advertising campaigns.
- Remote management of Crane Media features including Price Change, Planograms, Advertising, and Firmware
- Crane's Intelligent Store Remote Services Suite is also available with MEDIA2. It allows operators manage their machines remotely, keeping content fresh and relevant for customers.
- All MEDIA products come with fully integrated payment systems (optional), accepting credit cards, mobile payments, campus cards, and loyalty pay – everything in your customer's wallet, which makes purchasing products easy and convenient.

Benefit:

- Attract more consumers with larger touch screen option and rich animated shopping experience
- Convert traffic to sales by influencing consumers purchase decisions
- Increase sales by ALWAYS suggesting more products
- Deliver 41% higher same-store sales vs. non-MEDIA Retrofit Cashless
- Create additional revenue with new digital video advertising
- Decrease service costs with Remote Management (Price Change, Planograms, Advertising, Firmware)

Key Features:

- 7" or 9" Touch Screen Option
- New and Improved Consumer Shopping Experience
- Full Motion Video Advertising
- Featured Products for Undecided Consumers
- Enhanced Shopping Cart with Suggestions
- More areas to Advertise
- Remote Machine Management
- Improved Serviceability and Quicker Boot Times

Programming Tips

- This Programming Guide is based on Firmware version 11.4.1
- The software version is shown on the bottom of the screen anytime you are in the Service mode. The software version can also be displayed by pressing the Firmware Information menu bar in the service mode.
- Earlier or later versions of software may not contain all the same menus and/or options. Some Menu items may also be in different places within the menus and may program differently.
- This programming guide is specific about what icons or menu bars to touch within the Modes. When certain Menu items are enabled and disabled additional menu items may appear or disappear. Most of the time this guide will be correct but rely on the display for the correct icons or menu bars to touch.

Below is a list of Menus that should be set up or checked before operating the Machine:

1. When opening the service door on the machine you will be prompted for a PIN, enter 3333 on the touchpad.
2. Set the Prices by selecting button Price Menu Bar in the service mode.
3. Make sure the Shopping Cart Size (max 3) and Shopping Cart Max Value is set to three times the highest price in Product Configuration. Touch: Product Configuration > Shopping Cart Setup.
4. If you have added, moved or removed any motors touch: Product Configuration > Selection Configuration > Perform Auto Configuration.
5. If any motors are being coupled on the candy tray or squat tray, Touch: Product Configuration>Couple Motors.
6. Verify your Coin Mechanism, Bill Validator and Card Reader are enabled in the Monetary Menu.
7. Verify the bills you want to accept are enabled in the Monetary Menu > Bill (Note) Acceptance.
8. Set the Time and Date in the System Setting Menu > Set Time and Date.
9. Verify or set the Machine Configuration, go to System Settings > The top menu is the current machine configuration.
10. To change the Configuration type touch the Machine Configuration menu bar, your options are Ambient, Refrigerated, European Control, Non-perishable and Chilled. Do not choose European Control unless your area is within the region covered by these requirements.
11. Press Accept to save your choice.
12. Next select Refrigeration Settings, this menu does not appear if the machine is set to Ambient.
13. Touch Adjust Temperature if required and press Accept to lock in any changes or Cancel to exit without making changes.
14. If set to Refrigerated or European Control, Touch Health Control to assign the selections to work with Health Control. The health control menu will not appear if you machine is set to anything other than Refrigerated.
15. If Refrigerated or European Control is selected, all selections in the machine are enabled for Health Control. If you are not using perishable products in all selections, non-perishable products should have the Health Code disabled.

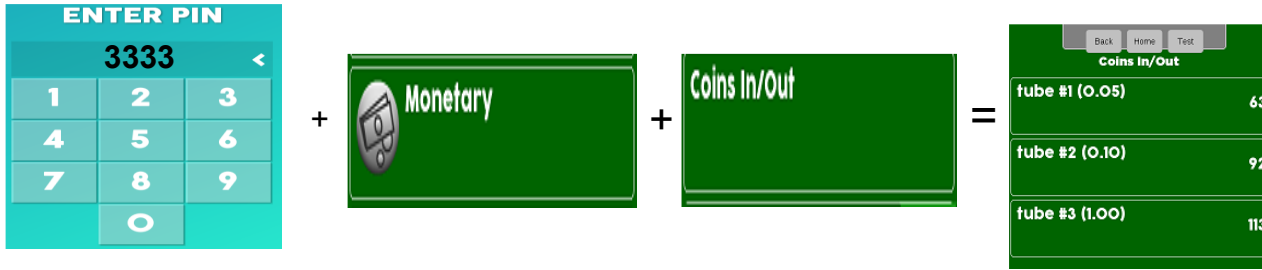
Loading the Coin Mechanism

Prior to placing the machine in service, you must add an initial amount of change to the coin mechanism to prevent a “Use Correct Change” condition. Initial loading of coins should be done through the menu provided to insure the coin mech accurately counts all change available for payback to the customer. *Recommended minimum amount is \$17.00 (1 roll each of 5¢, 10¢, 25¢ coins).* This minimum amount of change should remain in the machine at all times.

Adding Initial Change Load

1. Enter the required PIN: 3333,
2. Touch the Monetary menu bar on the screen.
3. Touch the Coins In/Out menu Bar

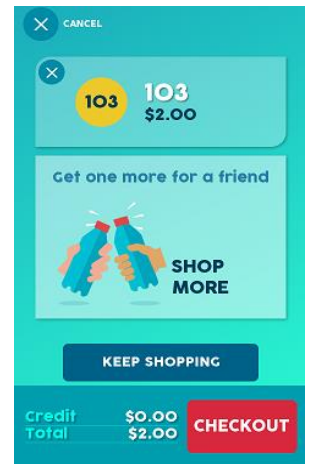
- Increase the amount of Change Available by inserting coins to thru the chute on the top of the coin mech. Totals (count and value) for each coin should increase as coins are added.
- Press the left arrow to exit and return to the main menu.



The Touch Screen

The Touch Screen

- Offers the latest capacitive touch screen technology providing scratch resistance, high durability and a rich consumer experience.
- Is an industrial screen that can withstand medium hard hits w/ hammer similar to gorilla glass used in mobile phones
- Has full motion video Capability
- Self Calibrating
- Provides instructions and information required by the customer to make a purchase.
- Is utilized in the service mode to set up the machine.



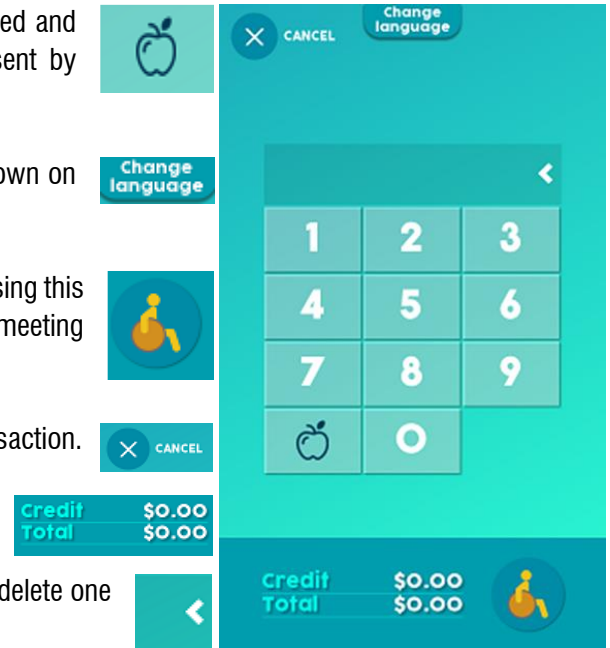
Idle Loop Screens

When the machine is not being used, the Touch Screen is showing the Idle loop. The Idle Loop screens will vary depending on what peripherals you have installed and the promotions that are enabled. To enable or disable specific Idle Screens and credit card logos, see System Settings > Advertisements. Touching any of these screens will take you to the Main Menu.



Touch Screen Features and Functions

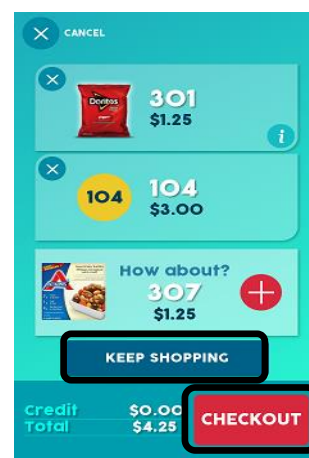
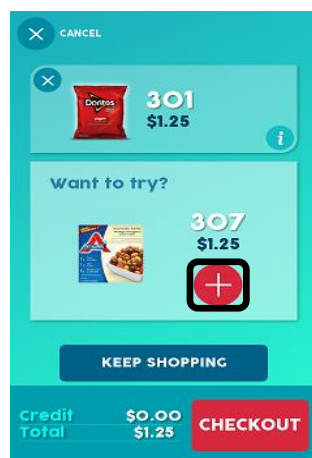
- The Main Menu allows your customer to view promotions when enabled and view nutritional facts when a Product Library or Planogram is present by pressing
- If multiple Languages are enabled a change Language icon will be shown on the top of the section screen.
- On the bottom right corner of the screen there is a Handicap Icon. Pressing this icon will move the selection keypad down the the bottom of the screen meeting the wheelchair accessibility requirements.
- There is an X icon on the top right corner allowing you to cancel a transaction.
- The bottom of the screen will show both the Credit and Cash Price.
- When entering a selection there is a backspace key that allows you to delete one character at a time if a mistake is made entering a selection number



The Selection Process

Use the Keypad to make a selection. Your selection will be placed in a shopping cart. The Media 2 will suggest another product (programmable if desired) allowing you to select the + key to add that selection. Choose Keep Shopping to add additional selections (maximum 3) to your cart. Press Check Out when finished.

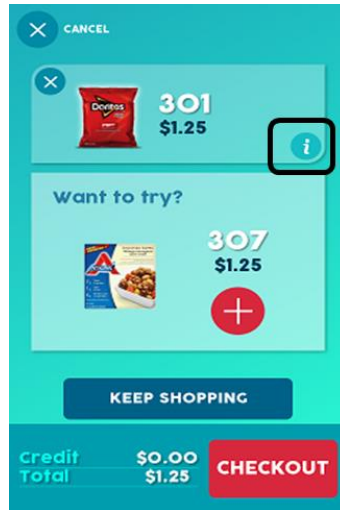
Note: The shopping cart can be disabled by enabling Rapid Vend under the Special Vend Modes menu and the machine will immediately go to checkout after making a selection.



The Selection Process (continued)

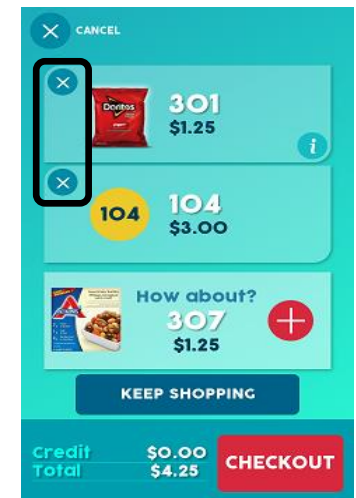
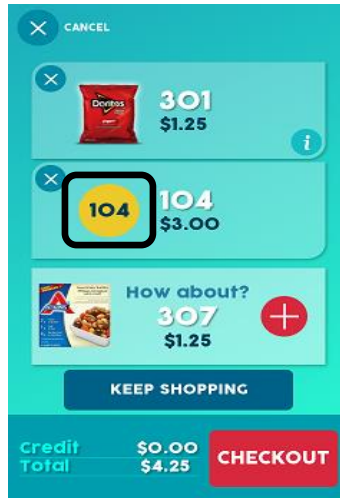
If you have a UPC code associated with that selection an image of the product will appear on the screen

Pressing the information icon next to the product image will show a popup with nutritional information for that product



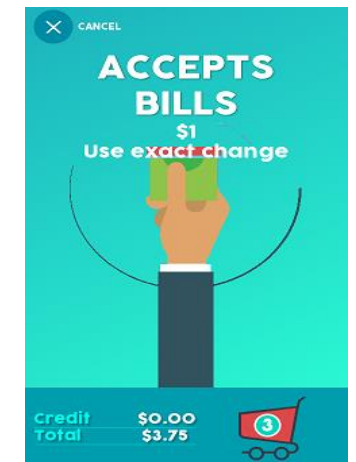
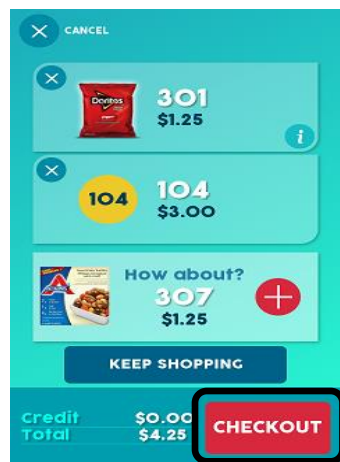
If you do not have a planogram installed, or a UPC code assigned, an image of a generic product will appear on the screen

To remove a product from the shopping cart press the X as shown



Any type of payment, cards, coin or bills can be inserted any time during the transaction. Pressing checkout will cause the settlement screen to appear if money has not already been inserted

The settlement screen(s) will communicate to the customer their payment options





Accessing the Service Modes

When the monetary compartment is opened, the display will prompt the operator to enter a PIN number on the Touch Screen to gain access to the service modes.

The default PIN for route driver access is 1111 (limited menu options).

The default PIN for the Technician access is 3333.

If errors exist, an  will appear on the bottom right corner of the screen. Pressing the  allows the user to view the existing errors without entering a pin number.

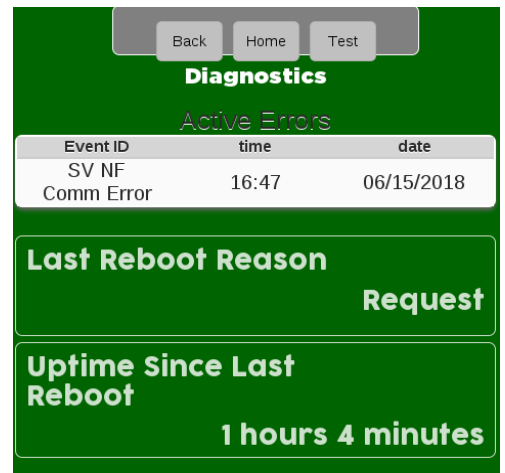


If Active Errors Exist, an error list will be shown on the display that includes the time and date of each error.

The errors do not need to be cleared, once corrected the error will be erased automatically.

To escape to Error list press the Back or Home Icon

The reason for last reboot and the uptime since last reboot are also shown for informational and troubleshooting purposes.



Service Mode Menu

Monetary

- MDB Level
- Bill Validator
- Stack Bills
- Bill Acceptance
- Coin Mechanism
- Coins In/Out
- Card Reader A
- Card Reader B
- Onboard Cashless Enable
- MDB Cashless Cart
- MDB Cashless Postpay Only
- Show Currency Symbol
- Decimal Separator
- Correct Change Parm
- Cash Discount

Price

- Entire Machine
- Tray #1
- Tray #2
- Tray #3
- Tray #4
- Tray #5
- Individual Prices

Data Recall

- Non Resettable Sales Data
- Resettable Sales Data
- Events
- Identification Numbers
- SureVend Corrected Vends

System Settings

- Machine Configuration
- Refrigerated Settings
- UI Theme
- Machine Information
- Time and Date
- Language
- Custom Message
- Idle Timeout
- Start Screen Renewal
- Software Updates
- Backup/Restore
- Clone Configurations
- Clone Board
- CAB Lights When OOS
- Advertisements
- High Contrast Service Mode
- DTS
- Screen Brightness
- Automatic Reboot Settings
- LED Color

Test

- Screen Test
- Touchscreen Test
- Refrigeration System
- Coin Return Motor
- NFC/MagTek Head Test
- Test Vend
- Motor Test Summary
- SureVend Calibration
- Detailed Motor Test
- Cabinet Lighting Test
- Surround Lighting Test

Product Configuration

- Selection Configuration
- Remove Product Library
- UPC/EAN Codes
- Shopping Cart Setup
- Space to Sales (FIFO)
- View Planogram
- Edit Planogram
- Browse Categories
- SureVend
- Couple Motors
- Update Planogram

Service Mode Menu (Screen 2)

Special Vend Modes

- Alternative Vending
- Free Vend
- Token Enabled
- Winner Mode
- Combo Vends
- Trade Show Vend Bypass
- Rapid Vend
- Skip Main Menu
- MultiVend Discount

Security Codes

- Enter PIN
- Change Drive PIN
- Change Operator PIN
- Change Engineer PIN
- Change Manufacturer PIN
- Route Driver Price Menu

Firmware Information

- Monetary
- OTA/USB Activity
- Cashless
- Machine Information

Telemetry

- Get Network Status
- Ping Server
- Assign Unit
- Load Network Config
- Show Network Configuration

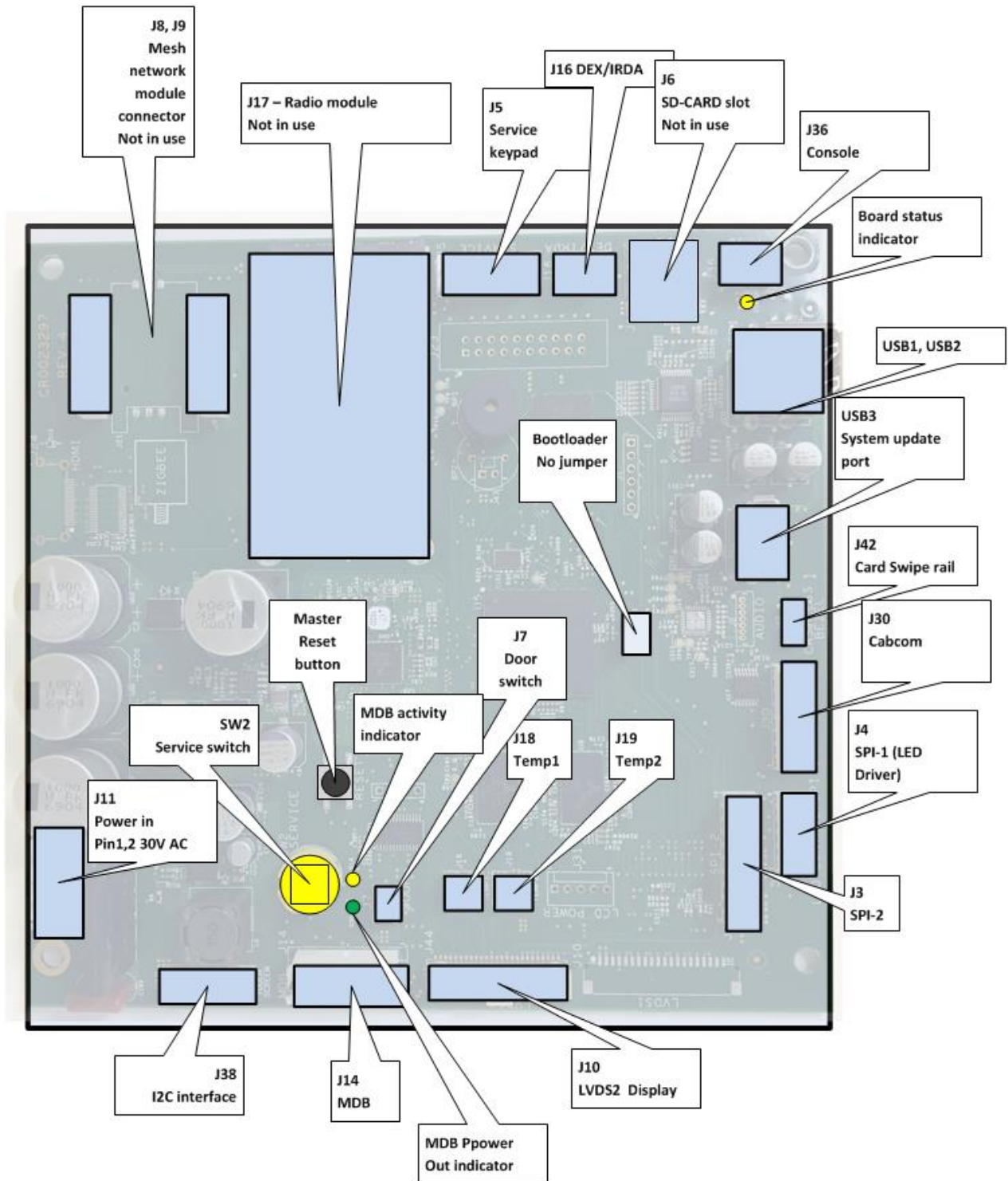
Diagnostics

- Active Errors
- Last Reboot Reason
- Uptime since Last Reboot

Timed Events

- Time of Day Events
- Backup Events
- Power Saving Events
- Refrigeration Storage Mode
- Suggestion Engine Events

Atlas Board Connections



Troubleshooting Coin Acceptance Issues

Problem	Cause	Solution
Coins Returned to Customer with no credit issued	<ul style="list-style-type: none"> • Coin Jam in the Coin Mech • Flight Deck Dirty • No Power to the Mech • Coin Return Lever activated • Machine in Test Mode • Inhibit time Set • Defective Coin Mech 	<ul style="list-style-type: none"> • Clear Jam and Test • Clean Flight Deck • Check harness from Mech to Media Atlas H Board • Adjust the Coin Return Lever • Close the service door • Disable Inhibit time • Replace the Mech
Will Not Payback Coins	<ul style="list-style-type: none"> • No Power to the Mech • No Coins in the Tubes • Tubes Programmed incorrectly • Defective Coin mech 	<ul style="list-style-type: none"> • Check Harness from the Mech to the Media Atlas H Board. • Fill Coin Tubes with Coins • Reprogram per Manufacturers recommendations • Replace the Coin Mech

Bill Acceptance Issues

PROBLEM	CAUSE	SOLUTION
Bill Acceptor will not cycle.	<ul style="list-style-type: none"> • Prices / tube cash conditions. • No Power to Bill Acceptor. • Vender in Test Mode. • Inhibit Time Set. • Defective Bill Acceptor. 	<ul style="list-style-type: none"> • Check Mech Tubes. • Check Harness from Acceptor to MDB Harness to Media Atlas H Board. • Close Service Door and test bill acceptance. • Disable Inhibit Time. • Replace Bill Acceptor.
Takes Bill in then rejects it.	<ul style="list-style-type: none"> • Acceptor Stacker full. • Defective Acceptor. 	<ul style="list-style-type: none"> • Remove bills from Stacker. • Check Bill Acceptor. • Replace Bill Acceptor.
Stacks Bill while in Escrow Mode.	<ul style="list-style-type: none"> • Max Price Not Yet Reached. • Bill Acceptor not capable of escrowing bills. 	<ul style="list-style-type: none"> • Working as designed. • Replace Bill Acceptor with one that allows escrow of bills.
Bill Error listed in Diagnostics.	<ul style="list-style-type: none"> • Communication Error with Bill Acceptor. • Bill Acceptor Reported Error. 	<ul style="list-style-type: none"> • Check Harness from Bill Acceptor to MDB Harness to Media Atlas H Board. • Replace Bill Acceptor.
Takes Bill, gives No Credit	<ul style="list-style-type: none"> • Harness • Acceptor • Media Atlas H Board 	<ul style="list-style-type: none"> • Check Harness from Bill Acceptor to MDB Harness to Media Atlas H Board, replace as needed. • Replace Media Atlas H Board.

Merchant Media Atlas H Board Issues

PROBLEM	CAUSE	SOLUTION
No Power to Media Atlas H Board.	<ul style="list-style-type: none"> • Wall electrical outlet. • Power Supply Cord. • AC Distribution Lighted On/Off Rocker Switch is Off. • AC Distribution Box. • OMRON Power Supply 	<ul style="list-style-type: none"> • Check AC Voltage at the wall outlet. • If Power Supply Cord has a GFCI, check it is not tripped. Check AC Voltage going in to the AC Distribution Box. Replace Power Supply Cord as necessary. • Turn Lighted Rocker Switch On. • Check all of the above steps, replace the AC Distribution Box. • Check OMRON Power Supply Green Status Light is On solid. Check AC Voltage going from AC Distribution Box 8 Pin connector to the OMRON Power Supply 5 pin connector. Check 24VDC from OMRON Power Supply 6 pin connector to the AC Distribution Box 4 pin connector. Check AC Distribution Box Environmental Board Green Status Light is rapidly flashing. If Off replace the Environmental Board.
Out of Order or other Error Codes showing on Display.	<ul style="list-style-type: none"> • RAM Error. 	<ul style="list-style-type: none"> • Refer to Programming guide, Diagnostics, for specific Error Codes and troubleshoot issues listed.
Temporarily Out of Service.	<ul style="list-style-type: none"> • No Vendible Selections. 	<ul style="list-style-type: none"> • Add product, clear Errors, test for proper operation. • Check Inhibit time is Off/Disabled.
Product disabled	<ul style="list-style-type: none"> • No Vendible Selections. 	<ul style="list-style-type: none"> • Check Inhibit time is Off/Disabled.

Refrigeration System Troubleshooting Ice / Frost on the Evaporator

PROBLEM	FIX
Ice/Frost on the Evaporator	Check Location of the Machine
Condensate Drain plugged	Clear the drain located between the evaporator box and the condensate pan
Air Leak	Check product door and delivery pan seals

Condensate on the Outside of the Product Door

PROBLEM	FIX
Machine in Direct sunlight or near a heat source	Relocate machine to a more suitable location
Machine in a location with humidity above 65%	Relocate the machine to a more suitable location
Air Leak	Check product door and delivery pan seals

Refrigeration System Troubleshooting (Continued)

Compressor will not Stop

PROBLEM	FIX
Defective Temp Sensor	Verify the Temp sensor is plugged in Replace the temp Sensor
Defective Environmental Board	Replace the environmental Board

Compressor will not start

PROBLEM	FIX
Service door is open	Close Service door
Compressor is unplugged	Check harness from compressor to AC box
Defective Door Switch	Replace the door switch
Low Voltage	Check power source at the outlet
Defective Temp sensor/probe	Replace the sensor/probe
Defective Start Components-relay/overload	R290 Refrigeration deck must be replaced and returned to Crane. Contact customer service for instructions
Defective Compressor	R290 Refrigeration deck must be replaced and returned to Crane. Contact customer service for instructions
Defective Environmental Board	Replace the defective environmental board

Machine not Cooling

PROBLEM	FIX
Dirty or clogged condenser	Clean condenser
Defective Temp sensor/probe	Replace the sensor/probe
Restricted airflow	Clear rear screen of obstructions. Ensure rear of Cabinet is at least 4" (10cm) from the wall.
Machine in direct sunlight or near a heat source	Move machine to a more suitable location out of direct sunlight and away from any heat source.
Machine in location with relative humidity in excess of 70%	Move machine to a more suitable location with less relative humidity
Faulty gaskets/seals	Replace all faulty or damaged seals
Condenser fan or Evaporator fan not operating	Check fan blades for obstructions Check fan circuit R290 Refrigeration deck must be replaced and returned to Crane. Contact customer service for instructions
Evaporator is iced up	Check for air leaks Check for clogged drain tube

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Version 2, June 1991

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In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

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The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

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If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

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However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

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c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

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R290 Service Notes:

The serial tag on an R290 machine will identify it as containing R290 refrigerant.

Multiple warning labels describing **Cautions** and **Warnings** have been placed on various locations on and within the machine.

The process tubes on the refrigeration deck are **red** indicating it contains R290.

The drain pan on R290 refrigeration decks are **green** identifying it as using a Green refrigerant.

All motors within the refrigerated space are brushless motors and are **not** interchangeable with motors from Merchant machines using alternate refrigerants.

TECHNICIAN WORK PROCESS IN THE EVENT OF A REFRIGERANT LEAK IN AN R290 UNIT

Note: If any component of the R290 refrigeration deck fails, the entire deck must be replaced and the failed unit returned to the factory.

If a complaint is received that a refrigerated unit containing R290 (Propane) is not chilling, any service work requires the proper precautionary steps in advance of approaching or servicing the machine.

Servicing shall be done by factory authorized service personnel who have been properly trained so as to minimize the risk of possible ignition due to incorrect parts or improper service, including the use of proper parts.

The following steps outlined here should be followed in the order in which they are provided. No steps should be skipped.

If any component of the R290 refrigeration deck fails, the entire deck must be replaced and the failed unit returned to the factory

- 1) Advise the location owner/operator that you will be on site performing service on the machine.
- 2) Scan the area for any potential sources of ignition and disable or eliminate them.
- 3) A plainly visible placard advising "No Smoking or Open Flame" should be positioned to be readily seen and obeyed by any local foot or vehicle traffic, including forklifts.
- 4) A properly rated fire extinguisher should be present, and available.
- 5) Turn on an appropriate leak detection unit for use w/ flammable gases. The detection device should remain functional for entire duration of the service event. If the service event requires removal of the refrigeration unit, the leak detector should remain operational until the refrigeration unit has been removed from the building.
- 6) As you approach the machine, sweep the lowest level of the floor, as propane is heavier than air, and will sink. Be aware of depressed pockets or spaces that might have collected residual gas after it has escaped.
- 7) If no gas is detected, the leak detector must remain operational, while the machine and/or unit is subjected to the troubleshooting process.
- 8) If minimal refrigerant gas is detected, a properly rated, ignition proof fan to circulate the air should be placed to provide ventilation or exchange of the air in the area around the machine, or bank of machines.
- 9) Using extreme caution, open the doors on the machine, one at a time, while continuing to hold the leak detector close to the floor. If a leak has occurred in the evaporator portion of the refrigeration units, any gas that has escaped, would be circulating in the chilled compartment. Exercise caution when opening the glass door as any gas will rapidly drop to the level of the floor.

THE REFRIGERATION UNIT IN THIS MACHINE DOES NOT CONTAIN ANY USER SERVICEABLE PARTS.

In the event of any failure, the entire unit must be returned complete to Crane Merchandising Systems. Due to the presence of flammable refrigerant, ground shipment must be used for transportation only.

Onsite repair of the sealed system, including evacuation of the unit, recharging, brazing, soldering or any other heat producing method, is strictly prohibited. These tasks must only occur in a facility specifically equipped to handle flammable refrigerants.