



# COMBI COLD/FROZEN SATELLITE FOOD VENDOR



## **MODELS:**

**3530 & 3530M – MULTI-ZONE**  
(Cold and Frozen Food)

**3530C – SINGLE-ZONE**  
(Cold Food)

**3530F – SINGLE-ZONE**  
(Frozen Food)

## **SERVICE**

**MANUAL**



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Record the Model Number and Serial Number of your machine below.

The Model and Serial numbers are needed to obtain quick service and parts information for your machine. The numbers are available on the identification plate located on the backside of the cabinet of the machine.

**MODEL NUMBER:** \_\_\_\_\_

**SERIAL NUMBER:** \_\_\_\_\_

# INTRODUCTION

Read this manual thoroughly to become familiar with the functions and features of all components. The initial set-up of a vending machine is a very important step in assuring that the equipment operates in a trouble-free manner. Follow the instructions for the initial installation of the machine to avoid service problems and minimize setup time.

**NOTE: UNLESS OTHERWISE SPECIFIED IN THIS MANUAL, THE TERM SATELLITE FOOD VENDOR REFERS TO FEATURES AND/OR SPECIFICATIONS FOR THE COLD FOOD SATELLITE VENDOR, FROZEN FOOD SATELLITE VENDOR, AND COMBI FOOD SATELLITE VENDOR.**

All models are multiple select, consisting of six trays, and operate on the “first-in, first-out” vending principle. Selections can be individually priced. Pricing is set at the host vendor controller. It utilizes the electronics of the host vendor for credit accumulation and refund of change when required.

The **Single Zone Cold Food Satellite Vendor** is designed to vend cold food products that require storage temperatures of 41°F (5°C) or lower.

The **Single Zone Frozen Food Satellite Vendor** is designed for the following:

- Vending frozen foods that require storage temperatures of 0°F (-18°C) or lower.

The **Combi Cold/Frozen Satellite Vendor** is designed for the following:

- Vend cold foods that require storage temperatures of 41°F or lower, AND vend frozen foods that require storage temperatures of 0°F or lower.

The model and serial numbers of the machine are found on the **Serial Number Plate** attached to the inside or back of the vendor. Record these numbers in the spaces provided on the inside front cover and keep for your records. All inquires and correspondence pertaining to this vendor should include the model and serial numbers.

Should you have any questions pertaining to the information in the manual, replacement parts, or operation of the vendor, contact your machine supplier.

# SPECIFICATIONS

<b>INDOOR USE ONLY</b>		
	<b>MZF 2010</b> <b>FROZEN <u>AND</u> COLD FOOD</b> <b>SATELLITE VENDOR</b>	<b>SZF 3010</b> <b>FROZEN <u>OR</u> COLD FOOD</b> <b>SATELLITE VENDOR</b>
<b>MODEL</b>	<b>3530 &amp; 3530M</b>	<b>3530F &amp; 3530C</b>
<b>Food Type / Temperature Range</b>		
<b>COLD FOOD</b>	Upper Zone 41°F/5°C or lower	41°F/5°C or lower
<b>SLACKING PRECOOKED FROZEN FOOD</b>	Not Recommended	
<b>FROZEN FOOD</b>	Lower Zone 0°F/-18°C or lower	

<b>Refrigeration</b>				
	1/2 HP Hermetically Sealed		1/2 HP Hermetically Sealed	
<b>REFRIGERANT</b>	R-404a		R-404a	
<b>CHARGE</b>	32 Oz. (Danfoss)		32 Oz. (Danfoss)	
<b>DESIGN PRESSURE</b>	265HS/14LS PSIG		265HS/14LS PSIG	
<b>Electrical</b>				
<b>VOLTAGE</b>	115 VAC	230 VAC	115 VAC	230 VAC
<b>HERTZ</b>	60 Hz	50 Hz	60 Hz	60 Hz
<b>PHASE</b>	1 Ph	1 Ph	1 Ph	1 Ph
<b>RUNNING AMPS</b>	9 Amps	4.5	9 Amps	4.5 Amps
<b>General</b>				
<b>HEIGHT</b>	72 inches (183 cm)			
<b>WIDTH</b>	22 inches (56 cm)			
<b>DEPTH</b>	33.5 inches (85 cm)		37 inches (94 cm)	
<b>WEIGHT</b>	513 pounds (233 kg)		523 pounds (237 kg)	
<b>Pricing</b>	Multi-Pricing			
<b>Selections</b>	Factory Standard 16 Selections - Maximum 30 Selections			

## UNPACKING

This machine was thoroughly inspected before leaving the factory and the delivering carrier has accepted it as their responsibility. Any damage or irregularities should be noted at the time of delivery and reported to the carrier. Request a written inspection report from the claims inspector to file any claim for damage. File the claim with the carrier (not the manufacturer) within 15 days after receiving the vendor.

Carefully remove outside packing material, taking care not to damage the finish or exterior of the machine. Inspect the machine for concealed shipping damage. Report any damage hidden by the shipping material directly to the delivering carrier on a **Hidden Damage Report**.

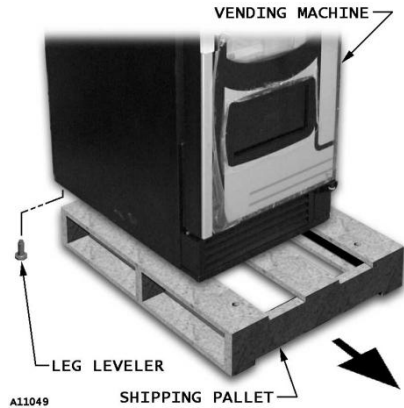
Record the model number and serial number of the vendor for your records. These numbers are on the **Serial Number Plate** on the back of the cabinet and/or inside the vendor. Refer to these numbers in all correspondence and inquiries pertaining to this vendor.

## REMOVE SHIPPING PALLET

### CAUTION:

**THIS MACHINE IS HEAVY!** As a safety precaution, removing the vending machine from the shipping pallet may require at least two (2) persons. This is to prevent possible bodily injury and/or damage to vending equipment or property.

1. Remove all four (4) leg levelers. Discard the washers. See **Figure 3.1**.
2. Slide the vending machine towards the back of the shipping pallet, exposing the rear leg leveler mounting holes for easy access. Install both rear leg levelers. Keep the leg levelers slightly extended.
3. Continue sliding the vending machine to the rear and let the rear leg levelers touch the floor.
4. Carefully tilt the vending machine back. Slide the shipping pallet forward and use it to block the front of the vending machine. Install both front leg levelers.
5. Tilt the vending machine back and remove the shipping pallet. Adjust all four (4) leg levelers so that machine is level and stable.



**Figure 3.1. Remove the Shipping Pallet**

## INSTALLATION

### CHECKLIST

- All shipping brackets, packing material and tape are removed.
- Vendor is properly leveled from left to right and front to back.
- Vendor is positioned no more than six feet from the power outlet.
- There is a space of at least four inches between the back of the machine and any wall or obstruction, to allow proper air circulation.
- Machine is plugged directly into a properly polarized and grounded (earthed) dedicated circuit.
- Machine has been properly loaded.
- The correct vend prices have been programmed into the controller.
- Each price scroll agrees with the vend price.
- The vendor door is closed tightly and locked.

## LOCATE NEXT TO THE HOST

Place the Satellite Food Vendor to the right side of the host vendor. If host vendor is to the right of the Satellite Food Vendor, then replace existing “left” label with “right” label. Refer to Figure 4.1

Place satellite to right of host machine. If host is on the right, replace “LEFT” label with “RIGHT” label.



Figure 4.1. Suggested Placement

## INSTALLATION (Continued)

Consult local, state and federal codes and regulations before installation of the vendor.

To minimize installation time and to avoid service problems due to improper installation, follow the instructions outlined in this manual.

Position the vendor in its place of operation in such a way that the vendor's power cord easily reaches the power outlet or receptacle (DO NOT USE AN EXTENSION CORD), and check that the door will open fully without interference. Leave at least four inches of space between the back of the machine and any wall or obstruction for proper air circulation.

**CAUTION: Do not block the ventilating screens in front or in the rear of the vendor. Always allow free ventilation behind a bank installation, so that exhaust air is not trapped. Failure to do so could result in a refrigeration failure.**

Level the vendor, making sure all levelers are touching the floor. The vendor must be level for proper operation. If it is properly leveled, it should not “rock” or “teeter” on any of the levelers. When the vendor is level, the door can be opened to any position and not move by itself. Try the door half-closed, straight out and in a wide-open position before deciding that the machine is level.

Remove all shipping brackets, tape and inner packing material from the vendor. Operating the vendor without removing the tape and packing material could result in damage to the vendor.

## SAFETY GUIDELINES

### INTRODUCTION

The safety precautions outlined within this manual are intended to alert the users of this equipment of potential dangers and hazards involved in the installation, maintenance, servicing and operation of our equipment. The warnings and precautions contained within this manual **do not** in any way cover all of the possible dangers or hazards that could be encountered, however it is intended to provide basic safety guidelines for proper maintenance and servicing.

It is important to understand the function and operation of the equipment. Hazards to both those servicing the equipment and to the users of the equipment can occur as a result of improper



installation, poor or improper maintenance and improper servicing of the equipment. **Carefully read all Service Manuals** pertaining to the equipment to become familiar with all areas and functions. **Follow all warnings and cautions** referred to in the Service Manuals of the equipment along with the warnings and information outlined herein. This will minimize the potential hazards and reduce the risk of personal injury to service personnel. **Only properly trained service personnel should have access to the interior of the machine.**

## INITIAL INSTALLATION

Read and follow all instructions outlined in the vendor Service Manual. Listed below are the basic rules or steps that should be followed at the initial installation of any vending equipment.

1. Carefully plan the route to be taken to the vendor operation site, making sure that you have adequate manpower and proper equipment to safely handle the product. Vending machines are relatively large and bulky and may be very heavy. Improper handling can result in injury.
2. Remove all exterior packing material from the vendor in a manner that does not damage the finish.
3. Remove the wooden shipping pallet or base. Make sure the leveling screws for the vendor are in place and functional.
4. Position the vendor in its place of operation on a flat, smooth surface in such a way that the vendor's power cord easily reaches the power outlet or receptacle (DO NOT USE AN EXTENSION CORD), and check that the door will open fully without interference.
5. Leave at least 4 inches (10 cm) of space between the back of the vendor and any wall or obstruction for proper circulation.
6. Level the vendor to compensate for any irregularities of the floor, making sure **all levelers** are touching the floor. When the vendor is level, the door can be opened to any position and not move by itself. Try the door half-closed, straight out and wide-open before deciding the vendor is level.
7. Remove all tape and shipping material used to secure interior parts during transit.

## GROUNDING & ELECTRICAL

**WARNING! Always check and verify proper grounding prior to installation to reduce risk of electrical shock and fire. DO NOT USE EXTENSION CORDS**

Refer to the vendor Service Manual for the recommended electrical requirements. To insure safe and proper operation the electrical power source must be a properly polarized, grounded, isolated and/or dedicated noise-free circuit. Check the power supply before connecting the vendor. Any power supply not coinciding to the perimeters outlined below could cause the vendor to malfunction.

**115 Volt Vendors:** Power Source must be 120 VAC ( $\pm 10\%$ ) 60 Hz

**230 Volt Vendors:** Power Source must be 230 VAC ( $\pm 10\%$ ) 50 Hz

## 230 VOLT VENDORS

1. **Voltage Check:** With a Volt-Meter set to check AC line voltage, insert one connector to the **HOT** terminal and the other connector to the **NEUTRAL** terminal. The voltmeter should indicate 207 to 253 Volts AC. See Figure 1.
2. **Polarity and Ground Check:** With a Volt-Meter set to check AC line voltage, insert one connector to the **HOT** terminal and the other connector to the **GROUND** terminal. The voltmeter should indicate 207 to 253 Volts AC. See Figure 1.
3. **Amperage Check:** At the fuse box or circuit breaker panel, locate the proper circuit, and ensure that the amperage reading of the fuse or breaker protecting the circuit, is at the minimum or greater of that specified in the vendor Service Manual.

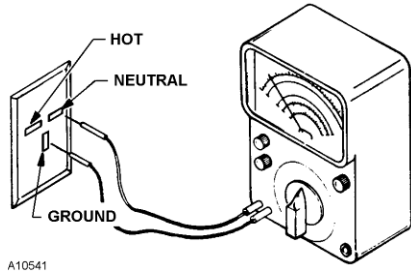


Figure 1. 230 Volt Outlet

**NOTE:** The **GROUND** pin is the slot that is positioned perpendicular to the other two slots. In a standard three (3) prong 230 volt wall outlet the **NEUTRAL** pin is located counter-clockwise from the ground pin and the **HOT** pin is located clockwise from the ground pin. See Figure 1.

## 115 VOLT VENDORS

1. **Voltage Check:** With a Volt-Meter set to check AC line voltage, insert one connector to the **HOT** terminal and the other connector to the **NEUTRAL** terminal. The voltmeter should indicate 103 to 126 Volts AC. See Figure 2.
2. **Polarity and Ground Check:** With a Volt-Meter set to check AC line voltage, insert one connector to the **HOT** terminal and the other connector to the **GROUND** terminal. The voltmeter should indicate 103 to 126 Volts AC. See Figure 2.
3. **Amperage Check:** At the fuse box or circuit breaker panel, locate the proper circuit, and ensure that the amperage reading of the fuse or breaker protecting the circuit is at the minimum or greater of that specified in the vendor Service Manual.

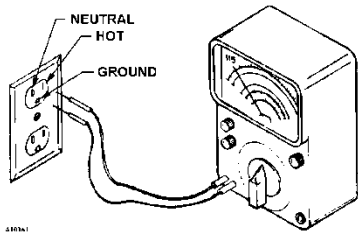


Figure 2. 115 Volt Outlet

**NOTE:** The “**HOT**” side of the outlet should always be counter-clockwise from the “**GROUND**” terminal, with the ground terminal at the bottom. The “**NEUTRAL**” terminal will be clockwise from the “ground” terminal. See Figure 2.

If you find that the receptacle is not properly grounded or polarized and the above electrical specifications are not met, **contact a licensed electrician** and have the necessary corrections made.

# ELECTRICAL HAZARDS

**WARNING: Check and verify proper voltage, grounding and polarization before connecting vendor to power source.**

Careless or improper handling of electrical circuits or components can result in injury or death. Anyone installing, repairing, loading, opening, or otherwise servicing a vending machine should be aware of this.

Machine should be connected to the proper power source. Refer to service manuals on the specific machine for the power source required. The procedures for checking the power source for proper voltage, grounding and polarity is described in the Installation section of this manual. Follow these procedures along with the procedures outlined in the machine Service Manual before connecting the vendor to the electrical power source.

Included in the construction of the vendor will be grounding wires, color coded green for 115 volt machines and green/yellow for 230 volt machines. During the maintenance and servicing of the vendors, it may become necessary to disassemble these grounding wires. **Always** reassemble these wires before reconnecting power to the vendor.

**Listed below are some basic precautions that should be followed, however, all normal precautions should be taken when servicing or repairing electrical circuits:**

- Refer all servicing to qualified personnel only.
- Use only power supplies that are properly polarized and grounded.
- Power supplies should be protected with fuses or circuit breakers.
- Replace any grounding wires if removed during servicing or repair.
- Unplug the vendor from the power source before servicing or repair.
- Replace any wiring if there is evidence of fraying or other damage.
- Keep protective covers in place.
- All electrical connections must be dry (moisture-free!) before applying power.

## SERVICING & MAINTENANCE WITH “POWER OFF”

Remove the power cord from the wall outlet before servicing or repairing the vendor. This will remove all power from the equipment. Turning the “Power Switch” to the off position on some vendors does not guarantee that the power is removed from all components.

Service personnel should remain aware of possible mechanical hazards and hazards from hot components even though the electrical power has been removed.

## SERVICING & MAINTENANCE WITH “POWER ON”

**WARNING: SERVICING WITH POWER ON SHOULD BE PERFORMED ONLY WHEN NECESSARY AND ALWAYS WHILE MAINTAINING MAXIMUM CLEARANCE FROM BOTH LIVE CIRCUITS AND MOVING PARTS.**

Servicing the machine with the power on is not recommended, however, in some instances it may be necessary. **This type of servicing should be performed by fully qualified and trained service personnel only.** Extreme caution should be taken when performing any service or repair on the vendor with the power “on”. Do not remove any protective covers when servicing with power on except when absolutely necessary. **Exposure to live circuits and mechanical moving parts create potential hazards.** After servicing is complete, replace all tubing, sleeves, insulating materials, and protective covers to their original position.

## REFRIGERATION HAZARDS

**WARNING: SERVICING SHOULD BE PERFORMED BY QUALIFIED PERSONNEL ONLY. ALWAYS WEAR EYE PROTECTION WHEN WORKING WITH REFRIGERATION SYSTEMS.**

Refrigerated equipment present potential hazards or dangers in both the electrical and mechanical sections outlined within this manual.

Caution is required when servicing and repairing refrigeration systems. **The pressures contained within the components represent a potential hazard if suddenly released. Always wear protective glasses** when working with or near refrigeration systems. **The release of refrigerant gases can result in eye injuries.** Use proper tools and equipment when performing maintenance and pressure tests. All testing should be performed by trained personnel who are familiar with the systems and pressures involved. **Repair and servicing should be performed by fully qualified and trained service personnel only.** Servicing by unqualified personnel can be dangerous.

## **MECHANICAL HAZARDS**

**WARNING: REMOVE POWER FROM MACHINE BEFORE ATTEMPTING TO CLEAR PRODUCT JAMS TO PREVENT POSSIBLE INJURY. STAY CLEAR OF ALL MOVING PARTS WHILE SERVICING AND LOADING.**

**Keep fingers, hands, tools, hair, loose clothing and any foreign material clear of all moving parts or components.** Moving parts create the risk of entrapment and possible injury. Care should be taken while loading and servicing this equipment. Remove power from the machine before attempting to remove or clear product jams.

Use caution and follow instructions outlined in the machine Service Manual along with the warnings outlined in this manual to reduce the risk of potential hazards and possible injury.

Some components are large and/or bulky in both size and weight. Improper handling can result in injury. Care should be taken to assure that adequate manpower and equipment are available to accomplish the task safely.

## **TEMPERATURE HAZARDS**

Heating elements, used in hot beverage machines, involve potential hazards to service personnel. High temperatures may be present on components even though the power has been removed. Service and maintenance personnel should be alerted to potential hazards from hot liquids and/or hot metal.

## **SUBSTITUTIONS & MODIFICATIONS**

Unauthorized substitutions and/or modifications, or altering the original design, of this equipment can create unsafe conditions or malfunctioning. This could result in or create potential hazards to either service personnel or equipment users.

Refer to the Service Manual and Parts Catalog pertaining to the equipment for recommended replacement components and servicing instructions. Use only factory authorized replacement parts. If there are questions contact:

**VendNet™**

**Phone: 515-274-3641**

**Parts Fax: 515-987-4447**

**Sales Fax: 515-274-0390**

**E-Mail: [VendNet@VendNet.com](mailto:VendNet@VendNet.com)**

**or your local Service Representative for guidance.**

When servicing the equipment always reassemble all components to their original position. **Do not** eliminate any covers, protective devices or circuits.

## USER WARNING

**IF SUFFICIENT FORCE IS APPLIED, THIS EQUIPMENT CAN BE OVERTURNED AND MAY RESULT IN SERIOUS INJURY OR DEATH.**

A decal is available and will be provided with each machine to warn of the potential danger in shaking, rocking, or tipping this equipment. This machine will not dispense free product if tipped, however there have been incidents, including fatalities, when vending machines have been vandalized in an attempt to obtain free product or money.

This decal should be placed on the equipment in full view, and at eye level, of the equipment user.

Additional decals are available from VendNet™ P.O. Box 488 165 North 10th Street Waukee, IA 50263-0488 or from your local Service Representative.



# CONNECTING TO THE HOST

**WARNING: ALWAYS DISCONNECT THE POWER BEFORE SERVICING.**

1. Disconnect power to the host vendor.  
**DO NOT connect power to the Satellite Food Vendor.**
2. Find the three harnesses inside the **Satellite Food Vendor**. Connect the power cord and the umbilical MDB harness to the back of the **Satellite Food Vendor**.
3. Remove the cover over the power box located on the back of the **Host Vendor**. Look and see if there is a six (6) pin connector already mounted in the power box. Plug the umbilical MDB harness into it. See Figure 4.5
4. If there was not a six (6) pin connector in the power box, install the MDB extension harness as explained in steps 5 and 6.
5. Open the door of the **Host Vendor**. Loosen the two nuts that hold the cover on over the control board. Remove the cover. Locate the MDB plug on the right side of the control board. Unplug the MDB machine harness and plug in the “Y” harness. Plug the machine’s MDB plug to the “Y” harness. See Figure 4.6.

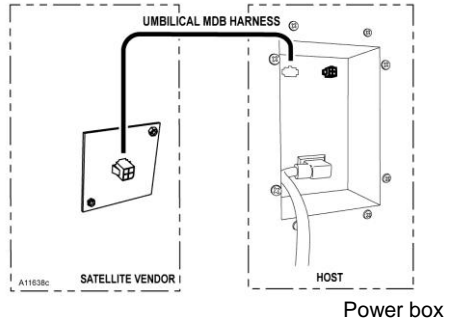
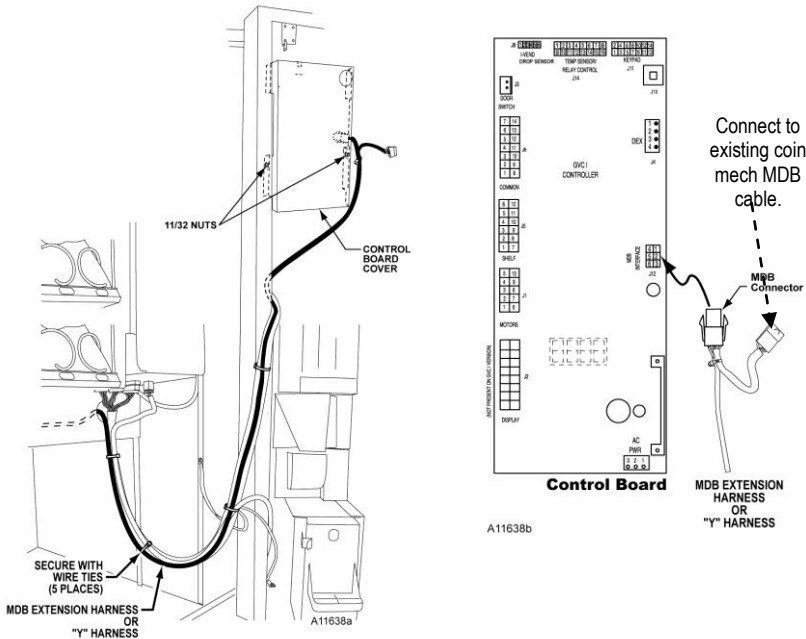


Figure 4.5. Umbilical MDB Harness

6. Route the long leg of the “Y” harness down the door and over to the cabinet. Use cable ties to fasten the MDB harness to the motor harness. Locate the power box in the bottom right hand corner of the cabinet. Press the end through the hole in the power box. See Figure 4.6.

**NOTE:** Do not allow harnesses to lie on the floor where they could be damaged.

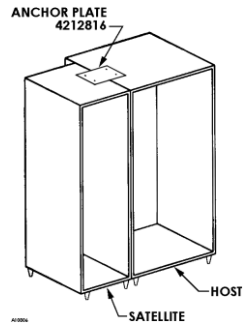


**Figure 4.6 Install 'Y' Harness**

Note: for machines with control board mounted on the host machine door.

## ANCHOR PLATE INSTALLATION

1. Unplug both the Satellite Food Vendor and Host Vendor from electrical outlet.
2. Anchor the Satellite Food Vendor to the host vendor. See **Figure 4.12**.
3. Plug in the host and the Satellite Food Vendor.



**Figure 4.12. Anchor Plate Installation**

# POWER SWITCH & SERVICE MODE BUTTON

1. Open the door
2. Find the kick panel at the bottom of the machine
3. Pull on the kick panel. The door switch is in the top of the kick panel
4. Pull the drawer out as far as possible.
5. The power switch is on the right hand side.
6. The service mode switch is located on the left side under the control board cover.
  - a. Locate the hole in the left side of the drawer
  - b. Insert your left hand index finger through the hold to locate the service mode switch
7. Press drawer all the way back in by hand. **Use both hands to make sure that the drawer slides straight and does not bind.**

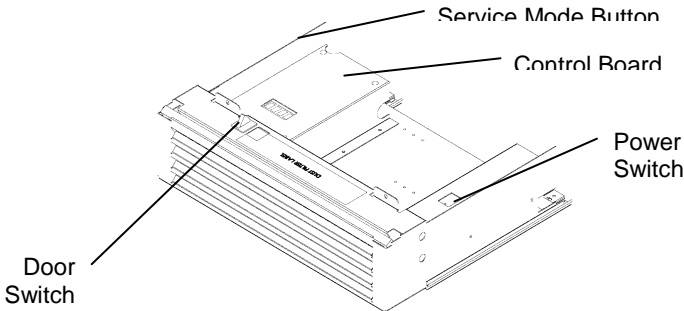


Figure 4.7

# SERVICE MENU FOR THE MZF/SZFF/SZCF

## ENTER SERVICE MODE

1. Open machine door—
  - a. Compressor and fan should turn off
  - b. Pull out drawer
2. Access the Service Mode Button through slot in the left hand side of the drawer.
  - a. Press the Service Mode Button
  - b. The display will show the word “DONE”

## SET REFRIGERATION

**WARNING: CHANGING THIS SETTING CAN CAUSE LOSS OF PRODUCT. IT IS VERY IMPORTANT TO KNOW THE TYPE OF MACHINE YOU HAVE.**

1. Press the Service Mode Button repeatedly until the current refrigeration setting is displayed
  - a. Display will identify refrigeration setting (**note that though they may appear, not all settings are applicable for all machines.**)  
**FrZn**—(Not used in Combi) Frozen Food set point (-10F)  
**dual**— (Not used in Combi) Dual Zone set point 36F on bottom  
**chLL**— (Not used in Combi) Chilled set point (61F)



- nFF – **Combi ONLY** (3530 & 3530M) Frozen set point (-10F)
  - nF 2 – **Combi ONLY** (3530 & 3530M) Frozen set point (-12F)
  - nF 5 – **Combi ONLY** (3530 & 3530M) Frozen set point (-15F)
  - SFF – **Single Zone Frozen** (3530F or 3530 converted) set point (-10F)
  - SF 5 – **Single Zone Frozen** (3530F or 3530 converted) set point (-15F)
  - SF 2 – **Single Zone Frozen** (3530F or 3530 converted) set point (-12F)
  - SCF – **Single Zone Cold** (3530C or 3530 converted) set point (36F)
  - SCF1 – **Single Zone Cold** (3530C or 3530 converted) set point (35F)
  - SnAc—(Not used in Combi) Snack – no set point
  - CoLd—(Not used in Combi) Cold Food set point (36F)
  - SLAC—(Not used in Combi) Slacken set point (15F)
- b. Change the refrigeration setting
    - i. Press and hold Service Mode Button until display begins to flash
    - ii. Press Service Mode Button repeatedly to step through different settings
    - iii. When desired setting is displayed, Press and hold Service Mode Button until display stops flashing. The machine is now functioning in the chosen mode.
    - iv. This returns the display to the general service menu. You are now ready to set other options.

## ALL MOTOR TEST

1. Press the Service Mode Button repeatedly until the display shows “ALL”.
  - a. This is an **all motor test service mode**
  - b. Press and hold the Service Mode Button to start the test
  - c. Press and hold the Service Mode Button to stop the test and return to the general service mode

## MOTOR COUNT

Press the Service Mode Button repeatedly until the number of motors is displayed.

1. Press and hold the Service Mode Button to conduct a motor count until “ZERO” is displayed
2. The actual number of motors running will be displayed at the count conclusion

## SELF DIAGNOSTIC TEST

Press the Service Mode Button repeatedly until “tEst” is displayed

1. Press and hold the Service Mode Button and the board will perform a self diagnostic test
2. After a successful test is finished “tEst” will display

## MOTOR CONFIGURATION

Press the Service Mode Button until “SnAc” is displayed.

1. Press and hold the Service Mode Button until the display starts flashing
2. Press the Service Mode Button repeatedly to step through the different settings
  - a. **Can** (can) the board will look for a drop sensor to stop the motor cycle
  - b. **boLt** (bottle) the board will look for a drop sensor to stop the motor cycle

- c. **SnAc** (snack) the board will look for the home switch on the motor to stop the vend cycle  
**Note:** if the machine has I-Vend, the board will check for the I-Vend sensor
3. When the desired setting is displayed, Press and hold the Service Mode Button until the display stops flashing

## USD ADDRESS

CAUTION: Changing the USD address in the satellite vendor changes the customer selections. This should only be changed if 2 satellite vendors will be connected, under which conditions a change of address is REQUIRED.

Press the Service Mode Button until “**USD1**” is displayed.

1. Press and hold the Service Mode Button until display starts flashing
2. Press the Service Mode Button repeatedly to step through the different settings
  - a. **USD1**—the selections in the host machine will start with the \*(star) button, or with numbers in the 100s (for example:110)
  - b. **USD2**—the selections in the host machine will start with the # (pound) button, or with numbers in the 200s (for example: 210)
  - c. **USD3**—this is for use in other types of vendors
3. When the desired setting is displayed, Press and hold the Service Mode Button until the display stops flashing

## RELAY TEST

Press the Service Mode Button until “**rLY**” is displayed.

1. Press and hold Service Mode Button to enter the relay test
  - a. **rL1 n** —Press and hold Service Mode Button to test relay 1
  - b. Press Service Mode Button to turn on or off.
  - c. Press and hold Service Mode Button to exit relay 1
2. Repeat these steps for relays 2 – 6
3. After completing any relay test, press and hold the Service Mode Button to exit back to the general service menu

## MACHINE CONFIGURATION

Press the Service Mode Button until “**cnF**” is displayed.

1. Press and hold Service Mode Button to enter configuration mode
2. **OPTIONS AVAILABLE IN THIS MENU:** *DOOR OPEN ALERT, HEALTH SAFETY, OPTICAL VEND SENSORS, REFRIGERATION LOGGING, DEX LOG, MANUAL DEFROST.*
3. Press Service Mode Button to enter first option:

### DOOR OPEN ALERT

1. “dorn” will be displayed. This indicates that Door Open Alert is not turned on.  
**(NOTE: To immediately move on through the Configuration Options, press the Service Mode Button repeatedly until you reach the desired option.)**
2. To turn on the Door Open Alert, Press and hold Service Mode Button until the “n” is flashing.
3. Press the Service Mode Button to toggle the “n” to “y”. Press and hold the Service Mode Button to save the new setting and exit Door Open Alert.

## HEALTH SAFETY

1. Press the Service Mode Button again and HS Y will be displayed. This indicates that Health Safety is on
2. To shut off Health Safety, Press and hold the Service Mode Button until the “y” is flashing
3. Press the Service Mode Button to toggle the “y” to “n”
4. Press and hold the Service Mode Button to save the setting and exit out of Health Safety

## OPTICAL VEND SENSORS

1. Press Service Mode Button to move to “oPty”. This indicates Optical Vend sensors are on.
2. To shut off Optical Vend sensors, Press and hold the Service Mode Button until the “y” is flashing
3. Press the Service Mode Button to toggle the “y” to “n”
4. Press and hold the Service Mode Button to save the setting and exit out of Optical Vend Sensors.

## REFRIGERATION LOGGING

1. Press Service Mode Button to move to “rFon”. This indicates that Refrigeration Logging is off.
2. To turn off the Refrigeration Logging, Press and hold the Service Mode Button until the “n” is flashing
3. Press the Service Mode Button to toggle the “n” to “y”
4. Press and hold the Service Mode Button to save the setting and exit out of Refrigeration Logging

## DEX LOG

1. Press Service Mode Button to move to “LOG”. This will download the DEX LOG
2. To do a DEX LOG download, Press and hold Service Mode Button until you hear a beep
3. When the download is done the display will go to “cnF”

## MANUAL DEFROST

1. Press the Service Mode Button until “dEF” is displayed.
2. Press and hold Service Mode Button to enter and start a manual defrost
3. Press and hold the Service Mode Button to exit (Service Menu)

## EXIT

1. Press the Service Mode Button until “DONE” will be displayed.
2. Press and hold the Service Mode Button to complete your exit out of service mode

# PRICING THE SATELLITE

1. Open the door of the host machine
2. Press the Service Mode Button
3. Press **2** [on the keypad]
4. The machine will do a motor count  
**NOTE:** Wait until both USD satellite and host machine have finished.
5. Press **5** [on the keypad]—the display will show “Price”
6. **Price Individual Selection:** Press **1**. “Item---” will be displayed
  - a. Enter the selection you want to price. Use only a 3-digit number
    - i. Selections for a satellite with the address of USD1 are numbered 110 to 164

- ii. Selections for a satellite with the address of USD2 are numbered 210 to 264
  - b. Using keypad, enter desired price (the following are examples)
    - i. For a price of fifty cents, Press **5**, **0**, **#**.
    - ii. For a price of \$1.75, Press buttons **1**, **7**, **5**, **#**.
  - c. Press **\*** to exit. Keep Pressing **\*** to exit service mode.
7. **Price by Row:** Press **2**. Display will show "Row--"
- a. Using the numerical keypad, enter a 2-digit row number
    - i. The row numbers in a satellite with the address of USD1 are 11 to 16
    - ii. The row numbers in a satellite with the address of USD2 are 21 to 26
  - b. Using the numerical keypad enter desired price (the following are examples)
    - i. For a price of fifty cents, Press **5**, **0**, then **#**.
    - ii. For a price of \$1.75, Press **1**, **7**, **5**, then **#**.
  - c. Press **\*** to exit. Keep Pressing **\*** to exit service mode

## HEALTH SAFETY

The **HEALTH SAFETY** feature prevents the sale of perishable food if the air temperature inside the Satellite Food Vendor compartment rises above the Health Safety temperature limit for more than 15 minutes. The factory default for health safety limit is automatically set when the refrigeration configuration is set. The perishable products being vended must match the refrigeration configuration.

**NOTE:** The time requirements for FROZEN or SLACK levels do not apply for a period of 75 minutes immediately following filling the machine (door open state), servicing (Service Mode Button pressed or door open detected), or a defrost cycle. The time requirements for the COLD setting do not apply for 30 minutes immediately following filling or servicing the machine.

**NOTE:** The operator is responsible for setting the refrigeration configuration to the correct setting for the product being vended.

## HEALTH SAFETY TEST

1. **Disable door switch.**
  - a. Open the door of the Satellite Food Vendor
  - b. Pull out the drawer
  - c. Place a piece of tape over the door switch.
  - d. Close the door and wait 75 minutes for the temperature stabilize
2. **Simulate Warm Temperature**
  - a. Open the door
  - b. Locate the sensor at the back of the cabinet above the top tray.
  - c. Remove the mounting screw; place the sensor in a cup of warm water.
  - d. Close the door.

### 3. Perform Test

- a. Press **0** on the host machine numerical keypad to check the temperature.
- b. Wait until the temperature is above the upper health safety limit-- Frozen 0°F, Slack 25°F, Cold 41°F-- (about 15 minutes)
- c. Try to vend a product from the Satellite Food Vendor.
- d. If the health safety is working properly the vend should fail; the machine should have automatically been disabled by the controller board.

### 4. After Test is Completed

- a. Open the Satellite Food Vendor door
- b. Remove the sensor from the cup of water and put the sensor back in place.
- c. Remove the tape from the door switch.
- d. Close the door and time how long it takes for the Satellite Food Vendor to get below the refrigeration set point. Frozen and Slack should be below the set point within 75 minutes. Cold should be below the set point within 30 minutes.

## REFRIGERATION CONTROL

### REFRIGERATION SET POINTS

<u>Refrigeration</u>	<u>Display Shows</u>	<u>Set Point</u>	<u>Health Safety Limits</u>
Single Zone Frozen	SF5	-15F	10F
Single Zone Cold Food	SZF	36F	41F
Multi-Zone FF/CF	nF5	36F (top) - 15F (bottom)	41F (top) 10F (bottom)

### REFRIGERATION CYCLE

If the refrigeration unit has had a power interruption, the compressor will remain off for three (3) minutes **AFTER** the power has been restored. The compressor will turn on if the sensor shows the cabinet temperature to be three (3) degrees above the temperature set point. The compressor will turn off when the temperature falls three (3) degrees below the set point. (Allowing a 6° variation in temperature)

The evaporator fan on the frozen food will not start until the evaporator temperature is at or below thirty degrees (30°) F **and** the door is closed.

### DOOR OPEN

Opening the door on the satellite food vendor will shut off the compressor and the evaporation fan (and upper zone blower on the Combi. It will also let the board go into service mode by pressing the Service Mode Button.

If the door is open for thirty (30) minutes or more, the controller will assume the door is closed and turn on the compressor and the evaporation fan.

Closing the door will reset motor errors and sold-out conditions and take the board out of service mode.

### DEFROST CYCLE

The frozen food satellite vendor has a defrost cycle every eight (8) hours. The length of the defrost cycle is thirty (30) minutes or when the evaporator temperature sensor reaches fifty (50) degrees F.

# LOADING INSTRUCTIONS

To load products, lift the tray slightly and pull forward until the tray stops and tilts down. All trays tilt down for easier loading.

Load products from front to back, making sure all items fit freely between the augers (also called helices). See **Figure 5.1**.

After loading each tray, make sure it is returned to its proper position. Assure that all trays are properly seated in their “detent” position by pressing each to the rear.

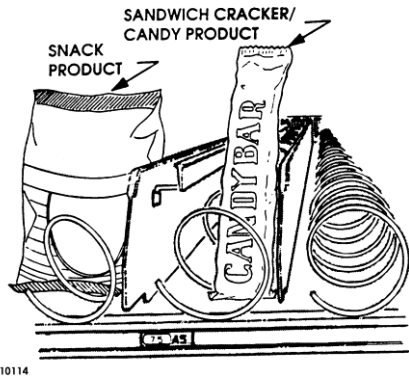
## SPECIAL PRODUCTS

Place special care (potentially fragile) products in tray 6 (bottom tray) so that they are closer to the delivery box, and orient the products so that they fall bottom first.

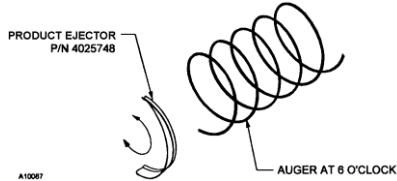
## PRODUCT EJECTORS

Product ejectors can be added to the end of the augers to help move the product out of the tray area. See **Figure 5.2**.

**IMPORTANT: DO NOT ATTEMPT TO FORCE OVER-SIZE ITEMS OR PACKAGES INTO THE SPACES. DO NOT SKIP A SPACE.**



**Figure 5.1. Product Loading**



**Figure 5.2. Product Ejectors**

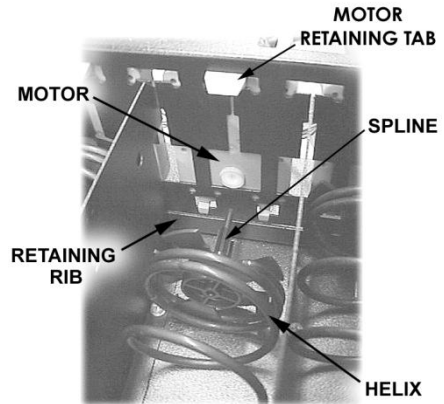
## AUGER TIMING

Each auger can be rotated in 20-degree increments. Changing the auger position changes the product “drop-off” point at the front of the tray.

For dual-drive augers, the ideal timing is for the auger ends to meet at the center of the tray (left auger at 3 o'clock, right auger at 9 o'clock).

Should you have trouble in vending odd-sized or odd-shaped items, auger re-timing can be accomplished on a trial and error basis as follows:

1. Disconnect power before servicing.
2. Pull the tray containing the auger to be re-timed forward to its stop.
3. Remove products from the tray.
4. Press down on motor retaining tab to release motor from tray.
5. Tilt motor back and lift up approximately 1/2" to disengage the auger hub from the retaining rib in the bottom of the tray. See **Figure 5.3**.
6. Separate the hub from the motor by pulling forward on the hub to disengage its spline from the motor's internal gear.
7. Rotate the hub and re-install by pressing the spline into the internal gear motor.
8. Replace the motor back to its original position on the rear of the tray while making sure that hub is correctly installed behind the hub retaining rib.
9. Press motor retaining tab into slotted hole
10. Load product and press tray into its detent position.
11. Re-connect power and test vend.



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**Figure 5.3. Auger Timing**

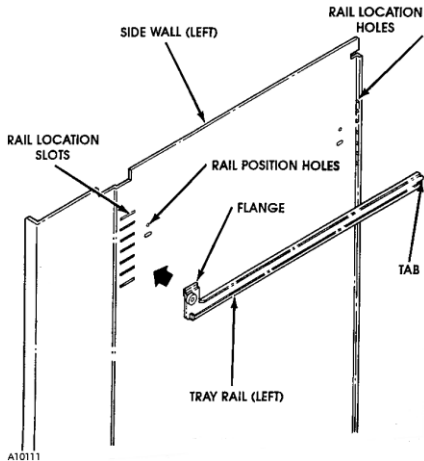
## TRAY SPACING

The trays may be raised or lowered in 1/2-inch (12.7 mm) increments to provide additional headroom for vending taller items.

**NOTE: When increasing the space between two trays, a corresponding decrease in space of an adjoining tray will result.**

To change spacing, follow the steps outlined below:

1. Disengage the tray harness from the harness retaining clamp on the right side wall.
2. Disconnect the tray plug from its receptacle on the right side of the back wall.
3. Lift up on the front of the tray and pull slightly forward (approximately 1/2-inch/13 mm) to clear the tray stop.
4. Pull the tray forward until it stops. Lift up on the rear of the tray and remove it from the machine.
5. Disengage both left and right tray rails from their corresponding slots on the left and right side walls; pull inward on the bottom front of each rail and pull its flange out of the slot.
6. Pull each rail forward to disengage its rear tab from the hole in the rear wall. See **Figure 5.4**.
7. Relocate both left and right walls by reversing steps 5 and 6.



**Figure 5.4. Changing Tray Spacing**

**NOTE: RAILS MUST BE LEVEL FROM FRONT TO BACK AND FROM RIGHT TO LEFT.**

8. Replace the tray by placing its rear rollers on the left and right rails and lifting up on the front of the tray as you press it back.
9. Install the tray harness plug into its receptacle on the right side wall.
10. Press the tray harness into its harness clamp.
11. Test vend the tray in its new position to assure that the tray harness plug is properly connected.



# REFRIGERATION

To change the refrigeration control settings see **Refrigeration Control** on page 20 of this manual. Also, refer to **Health Safety** feature on page 19 of this manual.

## MOISTURE & LIQUID INDICATOR (FROZEN FOOD ONLY)

A sight glass (located on the rear of the FF2000 Frozen Food Model 3514, and MZF/SZF 240) is used for viewing the condition of the liquid refrigerant. See **Figure 6.2**. A moisture indicator is in the center of the sight glass. The plastic cover is used to keep the sight glass clean.

- ◆ Bubbles in the sight glass indicate refrigerant shortage or a restriction in the liquid line.
- ◆ The moisture indicator within the sight glass changes color according to the moisture content (relative saturation) in the refrigerant. It changes color at moisture levels generally accepted as within the safe operating range.
  - Dark green indicates the refrigerant is DRY.
  - Chartreuse indicates CAUTION.
  - Yellow indicates the refrigerant is WET.

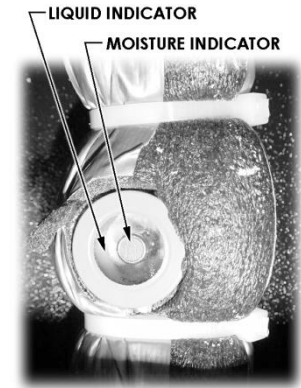


Figure 6.2. Sight Glass

## REFRIGERATION TROUBLESHOOTING

Know and understand how to service the unit and how it operates. Units may vary, but the basic operation is the same. Never guess at the problem; find the symptom before attempting any repair.

**NOTE: MOST REFRIGERATION PROBLEMS ARE ELECTRICAL**

**CAUTION: BREAKING THE REFRIGERANT JOINTS OR SEALS ON THIS SYSTEM VOIDS THE UNIT WARRANTY.  
FAILURE TO KEEP THE CONDENSER COIL CLEAN AND FREE OF DEBRIS VOIDS THE UNIT WARRANTY.**

The sealed hermetic system should not be worked on outside the Factory Service Center. The three things that can go wrong with a sealed system, and that should be repaired at the Factory Service Center are:

- Low Charge - usually caused by leaks; look for oil around seals and welds. Unit will not cool properly. The capillary tube will be frosted before it enters the evaporator inlet tube.
- Restriction in Systems (unit frosts, then melts) - not cooling properly.
- Bad valves - unit does not cool properly; noisy compressor.

## COMPRESSOR WILL NOT START

### Compressor has no power:

1. Machine not plugged in.
2. Tripped breaker or blown fuse.
3. Faulty wall outlet.
4. Short or tear in power cord.
5. Thermistor circuit is open. Check with the Multi-Meter.
6. Improper wiring.
7. Low voltage: 5 % below. Check the power source with the Multi-Meter.
8. Overload defective: Trips too fast. Check overload with the Multi-Meter.
9. Start relay defective: Check start relay with the Multi-Meter.
10. Compressor has open windings. Check compressor windings with a Multi-Meter.
11. Start capacitor defective: Check capacitance with meter and compare to nameplate rating.
12. Defective refrigeration relay. Unplug power to the machine; remove the relay plate. Use an insulated jumper wire to short the wires on relay terminals 2 and 4 or 6 and 8; then restore power to the machine. The compressor should start, indicating a problem in the control circuit. Check relay terminals 1 to 0 with a Multi-Meter. Should have 24VDC applied to them. No DC voltage: Check control board output terminal for a loose connection.

## COMPRESSOR TRIPS ON OVERLOAD

1. Improper voltage: 5-10% above, 5% below. Check power source with Multi-Meter.
2. Overload defective: Trips too fast. Check overload with Multi-Meter.
3. Relay defective: Won't open after starting. Check relay with Multi-Meter.
4. Compressor has shorted windings: Check compressor windings with Multi-Meter.
5. Short in other component: Isolate and eliminate each electrical component until short is found.
6. Compressor is too hot.
  - Dirty condenser.
  - Faulty condenser motor or blade.
  - Restricted air flow.

**CAUTION: CONDENSER MUST BE KEPT CLEAN OF DIRT AND DEBRIS TO ALLOW PROPER AIR CIRCULATION.**

## NOISY OR VIBRATING UNIT

1. Components rubbing or touching each other.
  - Check fan blades and motor.
  - Loose shrouds and harness.
  - Copper tubing.
  - Loose or unsecured parts.
2. Worn or aged grommets.
3. Compressor
  - Bad valves
  - Slugging
  - Bad windings (See **Figure 7.1**)
  - Low voltage

## UNIT SHORT CYCLES

1. Thermistor defective or not mounted in the return air duct.
2. Defective control board.
3. Temperature setting set too warm. See "Temperature Mode" in the host vendor Service Manual. Also refer to Health Safety feature in this manual.

## **UNIT OPERATES LONG OR CONTINUOUSLY**

1. Thermistor defective or not mounted in the return air duct.
2. Refrigeration relay shorted.
3. Air flow restricted.
4. Faulty evaporator motor or blades causing coils to ice over.
5. Loose connections on evaporator motor. (One motor not running.)
6. Air flow blocked by product in front of evaporator or air duct openings
7. Gasket leak around door.
8. Excessive load: After loading, unit will run longer to pull out excessive heat from product.
9. Shortage of refrigerant or restriction.
10. Bad controller.

## **REFRIGERATED SPACE TOO COLD**

1. Thermistor defective. Check with Multi-Meter.
2. Refrigeration control setting too cold. See "Temperature Mode" in the host vendor service manual. Also refer to Health Safety feature in this manual.
3. Refrigeration relay bad. Check with Multi-Meter.
4. Faulty control board.

## **REFRIGERATED SPACE TOO WARM**

1. Thermistor defective. Check with Multi-Meter.
2. Refrigeration control setting too warm. See "Temperature Mode" in the host vendor Service Manual. Also refer to Health Safety feature in this manual.
3. Refrigeration relay bad
4. Faulty control board
5. Restricted evaporator space
6. Evaporator motor or blades faulty, causing the coils to ice over the evaporator
7. Condenser air flow restricted
  - Plugged or dirty condenser
  - Condenser motor or blades bad
  - Blade stuck
8. Condensing space restricted
9. Compressor - bad valves
  - Capillary tube will start frosting 8 to 10 inches past evaporator connection tube.

## **MULTI-ZONE FOOD SATELLITE VENDOR**

### **UPPER ZONE TOO WARM**

1. Foil Heater Relay not working
2. Upper Fan not functioning

### **UPPER ZONE TOO COLD**

1. Foil Heater not functioning. Check with multi-meter
2. Insulation Barrier not sealing properly. Check installation.
3. Air Curtain under Tray 4 not functioning. Check installation.

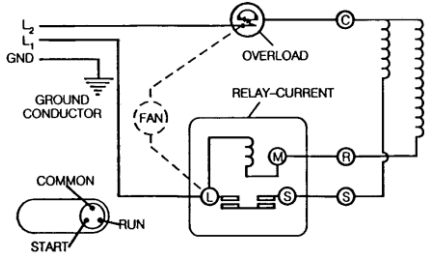
# TROUBLESHOOTING CIRCUITS WITH MULTI-METER

See **Figure 7.1**

**WARNING: WIRING DIAGRAMS MUST BE FOLLOWED AS SHOWN. ANY MISWIRING CAN CAUSE SERIOUS ELECTRICAL HAZARD AND POTENTIAL DAMAGE OR RUPTURE COMPONENT ELECTRICAL PARTS.**

- Check the power source.
- Use the voltage section of the Multi-Meter. Should measure within 5-10% above, 5% below.
- Check overload.

**NOTE: POWER MUST BE OFF AND FAN CIRCUIT OPEN.**



A10233  
**Figure 7.1. Compressor Schematic**

Using the resistance section of the Multi-Meter, check terminals 1 and 3 for continuity. If no continuity is measured (infinity), overload may be tripped. Wait 10 minutes and try again. If still no continuity, overload is defective.

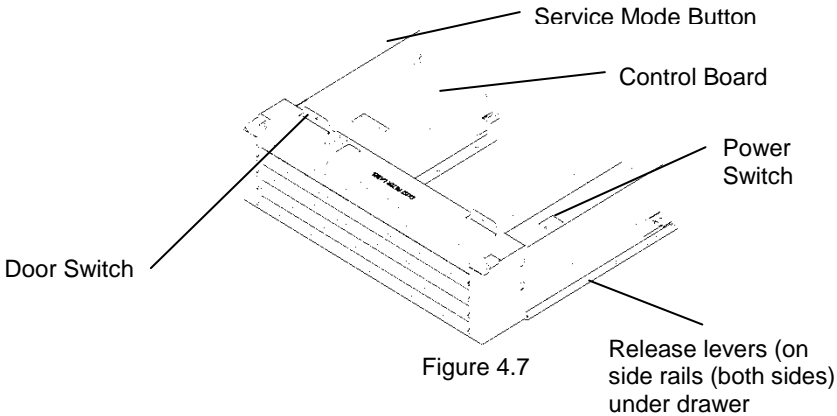
**Table 1. Winding Resistance**

Approximate resistance reading across terminals - use RXI scale:	
MEASURE BETWEEN	OHMS Ω (Frozen Food)
COMMON To START	4.3
COMMON To RUN	1.0

- Check winding
- and S, or L and S with the Multi-Meter. Replace relay if continuity exists Check thermistor with the Multi-Meter. resistance with the Multi-Meter. If readings are not within 2 Ohms, the compressor is faulty.
- Check relay (See **Figure 7.1**). Unscrew lead terminals and remove relay from compressor. (NOTE: keep relay upright).
- Check terminals 1
- Check compressor windings as shown in **Figure 7.1**.

# REMOVING THE COMPONENT DRAWER

1. Open the door
2. Pull out drawer
3. Turn the power off
4. Unplug the harnesses from the relay/power box
5. Remove the three screws that hold the control board cover in place
6. Unplug the harnesses from the control board and the circuit breaker
7. the rails mounted under the drawer have a release lever
  - a. reach underneath the right and left sides of the drawer
  - b. While Pressing on the levers, pull the drawer out
8. The drawer is free to be put out of the way to allow access to the bottom of the machine
9. When replacing, Press drawer all the way back in by hand. **Use both hands to make sure that the drawer slides straight and does not bind.**

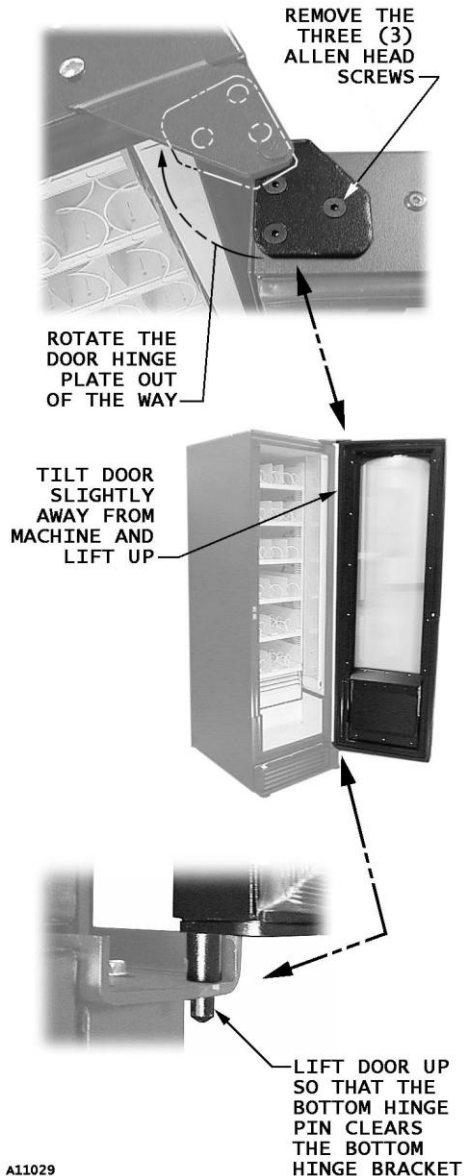


# DOOR REMOVAL

## CAUTION:

Removal and handling of the door may require at least two (2) persons to prevent personal injury or damage to your vending machine.

1. Open the door until you can see all three (3) Allen Head Screws of the Top Hinge Door Plate (as viewed from the top of the machine). See **Figure 8.1**.
2. One person should hold on to the door to prevent it from tipping while another person removes all three (3) Allen Head screws from the Top Hinge Door Plate.
3. Swing the Top Hinge Door Plate out of the way.
4. Tilt door slightly and lift door up until Bottom Hinge Pin clears Bottom Hinge Bracket.
5. Carefully set door aside and protect it from damage.
6. Reverse the procedure when re-installing the door.



A11029

Figure 8.1. Removing the door

# REPLACING THE REFRIGERATION MODULE

## Removing Old Refrigeration Module

1. Turn power switch off
2. Remove bottom tray to access refrigeration system
3. Remove louvered grill located in front of evaporator
4. Disconnect evaporator sensor from cabinet harness.
  - The evaporator sensor clip is on the left side of the evaporator on the top tube, and is routed across the front of the evaporator connecting to the cabinet harness that is routed up through second floor on right side. (Fig.1)
5. Remove rear electrical box cover by removing two cover screws, and unplugging the power cord and refrigeration harness
6. Remove rear screen and base support bracket (See Figure
7. Remove screws from perimeter of evaporator mounting plug in rear of machine. (NOTE: It is important to remove all screws to prevent possible damage to the cabinet back as the module is removed.)
8. Loosen the four screws connecting evaporator mounting plug to refrigeration base.
9. Slide refrigeration base and evaporator plug out the rear of the cabinet about 4 inches to access and free the condensate hose routed through a hole on the right side of the compressor housing. (Fig. 2) (NOTE: You may need to press from the front on the evaporator assembly to get it started.)

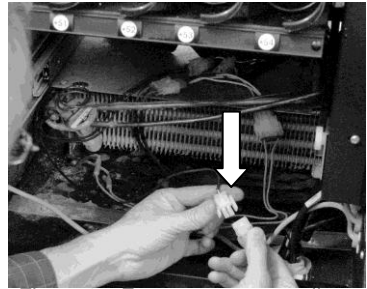


Figure 1 – Evaporator sensor clip



Figure 2 – Sliding out refrigeration base

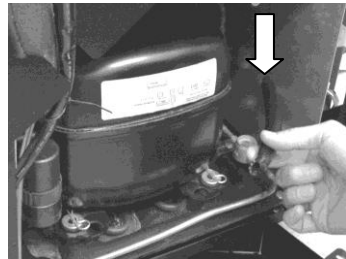


Fig. 3 – Condensate hose

10. With the module half way out of the machine (Fig. 4) go around to the front, remove the drain tube heater from the drain by pulling up on braided wire (Fig. 5), check around evaporator to be sure it is disconnected and will not catch on harnesses or other objects as it slides out.
11. To free evaporator from slide rails you will need to press release levers located on each side of where smaller rail mates with larger cabinet rail. Press up on the right side and down on the left side. (See Figure ( NOTE: You may need to lift up on the evaporator section to get the defrost heater over the bottom lip of the cabinet opening and you may need to press down on refrigeration lines to get them under the top lip of the cabinet opening)
12. Once the unit is out of the cabinet, tighten the four evaporator screws to secure to base. Unpack new module, keeping the foam evaporator support block and other packing materials to prepare old module for shipping

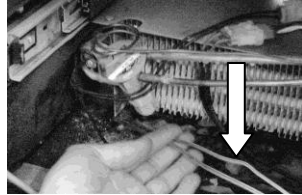


Fig. 5 – Drain tube heater wire

### Installing New Refrigeration Module

1. Position the new module into the cabinet so the slide rails on the side of the evaporator line up with slide rails in the cabinet opening.
2. Loosen the 4 screws connecting evaporator mounting plug to the refrigeration base.
3. Slide module into cabinet a couple inches and check clearances around bottom compartment and position condenser Drain Tube to go into right side of module.
4. From the front, Press Drain Heater Wire (Fig. 5) down the drain and check clearances before sliding the unit in completely.
5. From the back, finish sliding the module in while routing the condenser drain tube (Fig. 3) through the hole into the drain pan and the power harness to the connector on the left side.
6. Make sure the foam evaporator mount is pressed completely into the cabinet opening and the gasket seals around the perimeter after all the screws are replaced.
7. Install screen, base support bracket, and power box cover.
8. From the front, connect the evaporator temperature sensor to the cabinet harness and install the louvered grill.
9. Check to assure that the rubber shroud is positioned correctly around the evaporator fan.
10. Install bottom tray.



# CONVERTING FROM SINGLE ZONE TO MULTI-ZONE MODE

(REQUIRED: Optional Multi-Zone Conversion Kit P/N 1217361)

1. Turn power switch off.
2. Remove top four trays from machine by unplugging tray harness and pulling trays out of tray rails.
3. Install turning vane with air holes in bottom opening
4. Move existing turning vane located at top of machine to center opening and install along with the second turning vane provided in kit
5. Install upper blower fan and plug into existing harness(Fig. 6)
6. Install upper zone temperature sensor
7. Assemble and install insulating barrier, locate existing harness in air duct and connect to upper zone foil heater
8. Install air curtain on bottom side of tray four (Fig. 7)
9. Replace trays to proper locations, it is critical that the curtain is installed properly on the fourth tray down to insure proper airflow.
10. Turn power switch on and reconfigure control board to multi-zone mode. (See Configuration Instructions)

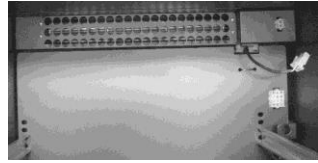


Figure 6 – Upper blower fan

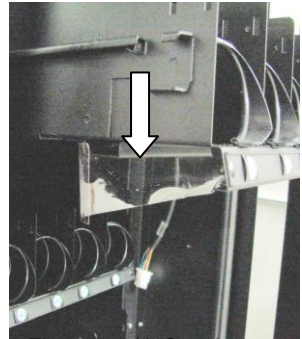


Figure 7 – Air Curtain

# CONVERTING FROM MULTI-ZONE MODE TO SINGLE ZONE

1. Turn power switch off
2. Remove top four trays from machine by unplugging tray harnesses and pulling trays out of Tray Rails
3. Remove insulating barrier by removing screws
4. located on each side underneath front edge and unplugging foil heater.
5. Unplug harness and remove upper zone blower fan (Fig. 6)
6. Remove turning vane with air holes from bottom opening
7. Remove one of two existing Turning Vanes (see Fig. 8) located in center opening and move second turning vane to top
8. Remove air curtain from bottom side of tray four (Fig. 7)
9. Replace trays to proper locations and connect harnesses
10. Turn power switch on and reconfigure control board to either single zone cold food or single zone frozen mode (See Configuration Instructions).

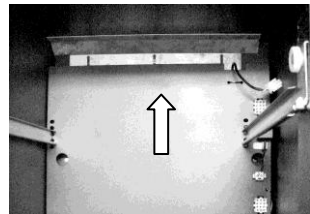


Figure 8: Turning Vane

# CARE & CLEANING

**WARNING: ALWAYS DISCONNECT THE POWER BEFORE CLEANING.**

## CABINET EXTERIOR

Wash with a mild detergent and water, rinse and dry thoroughly. Wipe occasionally with a quality car wax. Plastic exterior parts may be cleaned with a quality plastic cleaner.

## CABINET INTERIOR

Wipe clean with a cleaning solution of mild detergent and water. To eliminate odors, include baking soda or ammonia in the cleaning solution.

The vend mechanisms must be kept clean. Use soap and water with great care so as not to get water into the electrical components. To insure proper vending keep delivery slide area free of dirt and sticky substances.

**All product contact surfaces must be sanitized once a month.** Wipe clean using a 100-ppm chlorine solution or equivalent chemical sanitizer that is approved for use on food contact surfaces. Sanitizer/cleaner packets can be purchased from VendNet parts department.

## REFRIGERATION SYSTEM

Clean dust from condenser and screen in the front door with a soft bristle brush or vacuum cleaner. Remove any dirt or debris from the refrigeration system compartment. Remove and clean the condensation pan.

Do not block the evaporator or any area of the airflow with product or supplies.

# STORING THE SATELLITE FOOD VENDOR

Before storing the Satellite Food Vendor:

- Clean and sanitize the interior of the vendor to prevent the possibility of bacterial growth and/or bad odor. See **Care & Cleaning** instructions above.
- Before closing the door, prop a block of wood or something similar against the front of the delivery door to keep the delivery door open. This allows for air to circulate inside the vendor to keep it dry.
- Use a drop cloth or tarp over the machine to keep it clean during storage.

# BEFORE CALLING FOR SERVICE

Please check the following:

- Does your machine have at least 4" of clear air space behind it?
- If the power is turned on at the fuse box, is the machine the only thing that doesn't work?
- Is the machine plugged directly into the outlet?

**WARNING: EXTENSION CORDS CAUSE PROBLEMS. DO NOT USE EXTENSION CORDS.**

- Is the evaporator coil free of dust and dirt?
- Is the condenser coil free of dust and dirt?
- Is the compressor free of dust? (A blanket of dust can prevent the compressor from cooling off between workouts).
- Is the circuit breaker at the fuse box reset?
- Are evaporator fans running? Fold a sheet of 8 1/2" x 11" paper in half from top to bottom so it is now 8 1/2" x 5 1/2". Place the paper in front of the evaporator coil and see if the evaporator fans will blow the paper away.
- Is the condenser fan running? Fold a sheet of 8 1/2" x 11" paper in half. Place the paper in front of the condenser coils. The paper should draw to them.
- Is the shelf in front of the evaporator coil clear? (No tools or other air-restricting items placed on the shelf).

**NOTE: Setting the cold control lower does not accelerate cooling of product.**

If you have any questions, call **VendNet™**  
Ask for the Service Department. We will be happy to assist you.  
International Service & Parts 515-274-3641  
USA & Canada: Service 800-833-4411 • Parts 888-259-9965  
Email: [VendNet@VendNetusa.com](mailto:VendNet@VendNetusa.com) • Web Site: [www.VendNetusa.com](http://www.VendNetusa.com)

# NOTES:

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