

2.0 SAFETY

2.1 COMMITMENT TO SAFETY

Automated Merchandising Systems Inc. is committed to designing and producing a safe product. As with all electrical or mechanical pieces of equipment, potential hazards exist. It is the intent of Automated Merchandising Systems, through this manual and service technician training, to alert individuals who will be servicing our equipment to these potential hazards, and to provide basic safety guidelines.

To reduce the risk of serious injury or death, please read and follow all warnings in this manual. It is important that we point out that these warnings are not comprehensive. Automated Merchandising Systems can not possibly anticipate all of the ways that service may be conducted, nor all of the possible safety hazards that may result from service. Therefore at all times we urge you to beware of hazards such as electrical shock, mechanical entrapment, and tipping a vendor during movement.

Automated Merchandising Systems strongly recommends a commitment to safety on the part of all servicing personnel or organizations. Only personnel properly trained in vendor servicing should attempt any service to the internal components of the vendor. It is important to point out that Automated Merchandising Systems has no control over the vendor once it leaves our factory. **Maintaining the vendor in a safe condition is the sole responsibility of the owner.**

If you have questions concerning safety or service, or would like more information, please contact the Automated Merchandising Systems Service Department at 304-725-6921 or e-mail info@amsvendors.com.

2.2 SAFETY PRECAUTIONS

Below are listed safety precautions and safe practices to follow to avoid injury from selected hazards. This list can not possibly cover all hazards, therefore please remember to THINK SAFETY FIRST.

2.2.1 High Voltage Contact

Each vendor is designed to operate on a specific voltage, either single phase 115VAC 60Hz or 220-240VAC 50-60Hz, depending on the country. The voltage is specified on the serial plate (refer to Section 1.2 Model Identification). High voltage areas include the electrical panel, the refrigeration unit and fans, and the fluorescent lamp. It is important to understand that contact with the high voltage wiring can result in injury or death.

1. Always test the outlet for proper voltage, polarity and grounding before plugging in the vendor.
2. Always disconnect power to the vendor before servicing. Allow only fully trained service technicians to service the vendor if service must be performed with the power on.
3. Always keep electrical connections dry. Do not place the vendor in or near standing water.
4. Never use a worn or damaged power cord.

2.2.2 Improper Grounding

Some electrical components have a green or green/yellow ground wire attached to a grounding point in

the vendor. If it becomes necessary to remove a ground wire during service, note how the wire is attached, including the locations of any washers. After servicing, make sure that the wires and washers are replaced exactly as they were. Note that the vendor will work normally without the ground wires, but there will be a potential shock hazard from ungrounded components.

1. Always test the outlet for proper grounding before plugging in the vendor.
2. Always reconnect ground wires after servicing.

2.2.3 Fan Contact

Vendors are equipped with electric fans which can start automatically. These fans are guarded to prevent accidental contact. However, removal of guards or other components can leave fan blades exposed and create a physical hazard.

1. Always disconnect power to the vendor before servicing.
2. Always keep protective covers in place.
3. Always wear hand and eye protection when servicing the vendor.
4. Always keep hands, hair, loose clothing and tools away from fan blades.
5. Never insert hands or tools into concealed areas.
6. Always replace protective covers after service.

2.2.4 Helix Motion and Jamming

Energized vend motors can turn a helix with considerable torque, creating a possible entrapment hazard. Also, turning helixes may eject tools or other objects left on trays. A helix that is jammed or caught can store energy as it binds, which can cause it to twist or spring outward suddenly even if power is disconnected. Use caution when freeing a jammed helix.

1. Always disconnect power to the vendor or control board before servicing the vend motors.
2. Always check for proper fit when loading products in helixes to avoid jamming.
3. Always restrain the helix before freeing a jammed or caught helix.
4. Always wear hand and eye protection when servicing the vendor.
5. Always keep hands, hair, loose clothing and tools away from moving parts.

2.2.5 Refrigerant Release

The refrigeration system is pressurized and sealed at the factory. Puncturing or cutting any component in the system will cause refrigerant gas and liquid to be propelled out of the system, creating an immediate physical hazard. Use caution to avoid accidentally opening the refrigerant system.

It should also be noted that releasing refrigerant to the atmosphere is a federal crime and is punishable by law. Any service work requiring the system to be opened must be performed by a licensed technician using certified equipment. Unauthorized service to the

sealed refrigerant system may void the warranty.

1. Never puncture or cut any component in the refrigeration system.
2. Always use licensed service technicians to service the refrigeration system.
3. Always wear hand and eye protection when servicing the vendor.

2.2.6 Vendor Tipping

The empty weight of the vendor is approximately 750 pounds (340 kg). A falling vendor can cause serious injury or death. Caution should always be taken to avoid dropping or tipping a vendor.

1. Never rock or tip the vendor. It must be kept horizontal for safe operation.
2. Never place the vendor in an inclined position, such as on a ramp or with all the legs not on the same horizontal surface.
3. Never place the vendor in a moving environment such as on a ship without properly securing it in place.
4. Never place the vendor in a location where it may be struck by a vehicle.
5. Never transport an unsecured vendor.
6. Never attempt to lift or move the vendor by hand. Always use equipment with the proper load rating. Note that the Specification weight listed is empty weight.

2.2.7 Other Improper Conditions

Hazardous conditions can be created by improper use or service of the vendor.

WARNING: Do not use electrical appliances inside the vendor unless recommended by AMS.

1. Always reinstall any parts removed during service to their original locations.
2. Never make unauthorized modifications to any part of the vendor.
3. Always replace components that are worn, broken, or otherwise unfit for use.
4. Never use unauthorized parts, or use parts for anything other than their intended application.
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2.3 TEST STANDARDS

AMS vending machines bearing the ETL mark have been tested for compliance with one of the following standards:

- 2.3.1 Standard for Refrigerated Vending Machines (ANSI/UL 541, 6th Edition, 10/30/03) and the Standard for Refrigeration Equipment (CAN/CSA C22.2 No. 120, 3rd Edition).
- 2.3.2 Standard for Safety for Vending Machines (ANSI/UL 751 6th Edition, 10/3/03 and the Standard for Vending Machines, Consumer and Commercial Products (CAN/CSA C22.2 No. 128-95