4.0 VENDOR PREPARATION AND INSTALLATION

Setting up a vendor has been divided into three stages. Step 4.1 confirms power availability. Step 4.2 is accomplished in the customer's shop. Step 4.3 is accomplished on-site, where the vendor is to be located.

4.1 CONFIRMING POWER AT OUTLET

4.1.1 Checking the Outlet (US and Canada)

Using a volt meter set to AC VOLTS, check the voltage between the positive (smaller) lug entry and the ground lug entry (or center screw on two-lug outlets). The reading should be **between 103 volts and 126 volts**. Next, check the voltage between the negative (larger) lug entry and the ground. The reading should be **0 volts**. If your results vary, contact a qualified electrician to correct the outlet wiring before plugging in the vendor. **Abnormal voltage, reversed polarity or improper grounding may cause the vendor to malfunction or create hazardous conditions in the vendor, resulting in possible injury, damage to the vendor, or fire.** Never use an extension cord with the vendor.

The power cord is shipped in the hopper on the inside of the door. The cord is supplied with a standard NEMA 3-wire plug. If there are no 3-wire outlets available for powering the vendor, a grounding adapter may be used to convert a 2-wire outlet to accept the 3-wire plug. **The adapter must have a ground tab or wire which must be fastened to the center screw of the outlet**.

4.1.2 Checking the Outlet (Outside the US and Canada)

Consult a qualified electrician to check the outlet for proper polarity, voltage, and grounding. Check the serial plate on the side of the door to confirm the vendor is rated for the outlet voltage.

4.1.3 Electrical Service Requirement for CE Compliance

The following requirement applies only to models using ½ HP compressors and displaying the CE mark on the serial plate. If this requirement applies to your vendor, you will see a similarly worded decal on the back of the vendor near the power cord.

This requirement does not apply to any vendor using 120V service.

ELECTRICAL SERVICE REQUIREMENT FOR CE COMPLIANCE:

THIS EQUIPMENT IS INTENDED FOR USE ONLY IN PREMISES HAVING A SERVICE CURRENT CAPACITY OF AT LEAST 100A PER PHASE, SUPPLIED FROM A DISTRIBUTION NETWORK HAVING A NOMINAL VOLTAGE OF 400/230V. THE USER SHOULD DETERMINE IN CONSULTATION WITH THE SUPPLY AUTHORITY, IF NECESSARY, THAT THE SERVICE CURRENT CAPACITY AT THE INTERFACE POINT IS SUFFICIENT FOR THIS EQUIPMENT.

4.1.4 Requerimiento de Servicio Eléctrico para Certificación CE

El siguiente requerimiento se aplica solamente a los modelo utilicen compresores de ½ HP y que muestren la marca CE en la placa de serie. Si este requerimiento se aplica a su dispensadora, verá una calcomanía con una terminología parecida en la parte posterior de la dispensadora, cerca del cordón de corriente.

Este requerimiento no se aplica a dispensadoras que utilizan un servicio de 120V.

REQUERIMIENTO DE SERVICIO ELECTRICO PARA CERTIFICACION CE:

ESTE EQUIPO SE PUEDE UTILIZAR SOLAMENTE EN ESTABLECIMIENTOS QUE CONTENGAN UNA CAPACIDAD DE CORRIENTE DE SERVICIO DE POR LO MENOS 100A POR FASE, Y SUMINISTRADOS POR UNA RED DE DISTRIBUCION QUE CONTENGA UN VOLTAJE NOMINAL DE 400/230V. EL USUARIO DEBERA CONSULTAR CON UNA AUTORIDAD DE SUMINISTRO, SI ES NECESARIO, PARA VERIFICAR QUE LA CAPACIDAD DE CORRIENTE DE SERVICIO EN EL PUNTO DE INTERFASE ES SUFICIENTE PARA ESTE EQUIPO.

4.1.5 Les Utilites Electriques Necessaire Pour Conformement Aux Regles CE

Le suivant condition applique seulement à modèle en utilisant ½ HP compresseur et montrer le CE sur l'en série plaque. Si cette condition s'applique à votre vendeur, vous verrez un decal de même exprimé sur le dos du vendeur près du cordon d'alimentation.

Cette condition ne s'applique pas au service de 120V d'utilisation de vendeur.

LES UTILITES ELECTRIQUES NECESSAIRE POUR CONFORMEMENT AUX REGLES CE:

CET EQUIPEMENT NE DOIT UTILISER QUE SUR LES LIEUX AVEC UNE CAPACITE DU COURANT AU MOINS 100A LA PHASE, FOURNIE A UN RESEAU DE DISTRIBUTION AVEC UN VOLTAGE NOMINAL DE 400/230V. LA PERSONNE QUI SE DETERMINER PENDANT UNE CONSULTATION AVEC L'ADMINISTRATION DU SECTEUR, S'IL FAUT, QUE LA CAPACITE DE COURANT AU POINT D'INTERFACE EST ASSEZ POUR CET EQUIPEMENT.

4.2 VENDOR PREPARATION

4.2.1 Inspection

Inspect the vendor carefully for shipping damage prior to signing the carrier's delivery receipt. Check for dents on the top or sides of the vendor, bent legs, broken glass, or other damage on the exterior of the machine. Check the interior for components that may have been knocked loose or other damage.

4.2.2 Installing the Power Cord and Protective Cover

TOOLS REQUIRED:
1/4" nut driver or socket wrench (Always wear eye protection when servicing vendor)

1. Plug the power cord into the vendor's IEC receptacle but do not plug into a wall outlet at this time.
2. Place the cover over the power cord and the IEC receptacle (refer to Figure 4.1), with the open side to the left or down as shown (according to what direction the power cord should exit). The cover will help prevent the power cord from being accidentally unplugged.
3. Align the holes in the cover with the holes on the back of the machine, install self-drilling screws through the 6 holes in the cover. Do not over-tighten the screws.
4. Install the wire tie that is attached to the power cord, by inserting the locking tab into the hole in the cover.
5. Plug the power cord into the wall outlet or grounding adapter.

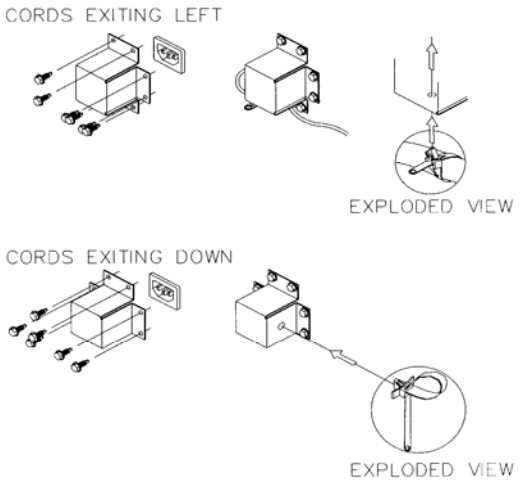

Figure 4.1 Power Cord and Protective Cover

4.2.3 Mounting and Connecting Bill Validators and Card Readers

The AMS vendor will support any NAMA-approved Multi-Drop Bus (MDB) bill validator or card reader. Please read the device manufacturer's literature before proceeding.

1. **Always disconnect power to the control board before servicing.**
2. On the inside of the main door, locate and open the access doors on the left side. Locate the white plastic coin chute which leads from the coin slot on the front of the door. Above the coin chute are (2) metal plates, each fastened to a set of (4) threaded mounting studs which correspond to the mounting holes in the bill validator. Either set of mounting studs may be used for a bill validator or card reader. The lower mounting position is ADA approved for consumers with disabilities.
3. Remove the four nuts that retain the steel cover panel. Remove the steel cover panel, then press out the plastic cover panel in the escutcheon.
4. Refer to the manufacturer's literature for instructions on accessing the mounting holes in your device. Place the mounting holes over the threaded studs and reinstall the nuts. Some devices may require spacers, which are available from AMS (Part Number 20258).
5. Connect the wiring harness to the MDB harness from the control board. If two devices are installed, connect the second device to the validator.
6. If a coin mechanism has been previously installed, disconnect it from the control board MDB harness and connect it to the validator or second device if installed.
7. Reconnect power to the control board.

4.2.4 Mounting and Connecting Coin Mechanism (Changer)

The AMS vendor will support any NAMA-approved Multi-Drop Bus (MDB) Coin Mechanism. On some export models, the Mars-type Executive Mechanism is supported. Please read the coin mechanism manufacturer's literature before proceeding.

1. **Always disconnect power to the control board before servicing.**
2. On the inside of the main door, locate and open the access doors on the left side. Locate the white plastic coin chute which leads from the coin slot on the front of the door. Below the coin chute are (3) screws which correspond to slots on the back of the changer. Do not adjust these screws.
3. Install the changer by placing the large round opening at the bottom of each slot over a screw head. Be careful to hold the wiring harnesses in this area out of the way. Once each of the round openings are over the screw heads, the changer is lowered to engage the narrow portion of the slot with the shank of each screw.
4. Tighten the mounting screws (reference manufacturer's literature).
5. Connect the wiring harness to the bill validator (if applicable) or to the MDB connector from the control board.
6. Adjust the white plastic coin chute as required to align the chute with the changer.
7. Reconnect power to the control board.

4.2.5 Test Loading and Configuration

Before putting the vendor on location, it is a good idea to determine the placement of products on the trays. Place at least one product in each helix to check for fit.

1. Remove the cardboard spacers and ties securing the trays.
2. Refer to Section 5.3 for tray vertical adjustments, and Section 5.4 for tray column configuration when configuring your vendor to suit your product.
3. Make sure the product can slide in and out of the helix easily. If the product is too snug, it may cause the helix to jam during vending. Place it in a helix with a larger opening.
4. Likewise, if the product is too loose in the helix, it may not vend properly. Use a helix with the smallest opening that will allow the product to slide in and out freely. Refer to Sections 5.6 and 5.7.
5. Place tall, narrow products in a column with a candy pusher bar, which is an adjustable bar used to push the product to one side of the column. Typically these are installed in columns 9 and 0 on the candy trays.
6. Make sure there is adequate clearance between the tops of the packages and the trays above when sliding the trays in and out, and when the product is being vended.
7. This is also a good time to set the end position of the helix to make sure the first product is held securely in the helix. To do this, vend a product from each column. The end position of the helix will automatically be set to the correct position when a product is vended. The control stops the helix the instant the sensor detects a product falling in the hopper.
8. If desired, the end position can be set manually by pulling the helix out of the motor, rotating it, and reinserting it in the motor. Note that this position is reset automatically after the first vend.
9. Test vend the product and add a helix ejector if necessary. The helix ejector is a plastic device installed on the front end of the helix to kick out the product (refer to Section 5.9 Helix Ejector).

4.2.6 Configuring Motors

You will need to configure the motors if you have changed the arrangement or number of motors.

1. Press the mode switch on the control board (refer to Figure 3.1, or the decal inside the access door, for the location of the mode switch).
2. Using the **#** key, scroll through the menu to "**TRAY SETUP**".
3. Press **6** to configure the motors. If the number of motors displayed does not match the number of motors in the vendor, press **1 * 0** to jog all the motors in the vendor.
4. Watch the display for missing motors that should be connected.

4.2.7 Installing Price Labels

After determining the product placement, install the price labels. The labels are shipped in the envelope with this manual.

1. Insert the bottom edge of the label in the lower groove of the extrusion on the front of the tray.
2. Carefully press in on the the label until it bows enough to snap into the top groove of the extrusion.
3.

4.2.8 Setting Prices

After product placement and installation of the price labels, set the prices into the vendor (refer to Section 6.6 Price Settings).

1. To enter the service mode, press the mode switch on the control board (refer to Figure 3.1, or the decal inside the access door, for the location of the mode switch).
2. Using the **#** key, scroll through the menu to "**PRICE SETTINGS**".
3. Press the selection for which you want to set the price (example: **A 2**).
4. Press 9 to edit/change price.
5. Enter the price and press *** *** to save the new price. Tip: press *** 1** to set the whole tray to that price, or *** 2** to set that price for the entire vendor.
6. Press the mode switch, or close the door, to exit service mode.
7. The prices as set will be maintained by the vendor even if there is a power failure or if the machine is unplugged: however, prices will need to be reset if the program chip is changed or if the configuration of motors or trays is changed.

4.3 ON-SITE INSTALLATION

4.3.1 Remove the Shipping Boards

1. Split the shipping boards by inserting a crowbar into the slots at either end.
2. If necessary, lift the vendor to remove the broken boards using properly rated equipment. Do not tilt the vendor. Do not attempt to lift the vendor with a 2-wheel hand truck.

4.3.2 Placing the Vendor in Location

1. Place the vendor within 5 feet of the designated power outlet. The power outlet should be accessible when the vendor is in position, and the ventilation opening in the back of the vendor must be clear of obstructions.
2. For refrigerated models, allow at least 4 inches between the wall and the back of the vendor for air circulation.
3. Make sure the vendor does not block walkways or exits.
4. Do not place the vendor in a location where it can be struck by vehicles.
5. Leave at least 18 inches between a wall and the hinge side of the vendor to prevent the door hitting the wall when opened, or use a protective wall bumper. At a minimum, the door must open wide enough to allow the trays to be pulled out.
6. The vendor is designed to meet ADA guidelines for persons in wheelchairs using a parallel approach (side of wheelchair adjacent to front of vendor). Make sure there is adequate room to maneuver a wheelchair into this position in front of the vendor.

4.3.3 Leveling the Vendor

For safe operation the vendor must be level.

1. On the bottom of the vendor are four (4) threaded leveling legs located at the corners of the cabinet and a fifth support screw under the door. Before beginning, be sure that all five leveling legs are screwed in completely.
2. With the door closed and locked, check the four main legs and adjust any leg that is not contacting the floor. Make sure the support screw under the door is all the way up and is **not** contacting the floor at this time.
3. Place a level on top of the cabinet and check for horizontal from side-to-side.
4. Adjust the leveling legs on the low side one turn at a time until the cabinet is level.
5. Repeat the last two steps to level the vendor front-to-back.
6. After the vendor is level, adjust the support screw under the door until it contacts the floor.

4.3.4 False Leg Installation

WARNING

The False Leg helps to prevent the machine from tipping forward when the vendor door is open and one or more bottle trays are extended. Failure to install the false leg on vendors with bottle trays may result in serious injury (refer to Figure 4.2).

Figure 4.2 Tip-Over Warning

CAUTION: Wear gloves-edges may be sharp! Always wear eye protection when servicing vendor!

TOOLS REQUIRED:

1/4" Nut driver or socket wrench

1. Align the holes in the top of the false leg with the 1/8" holes on the left side of the bottom of the door (refer to Figure 4.3). The closed end of the false leg should be facing forward.
2. Install screws through the holes and tighten until snug. Do not over tighten.

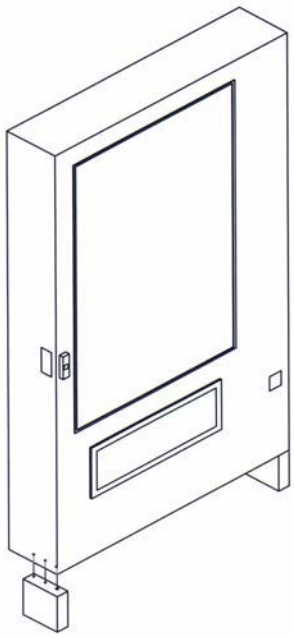

Figure 4.3 False Leg Installation

4.3.5 Initial Power-Up and Cool-down

When placing a refrigerated machine on a new location it is important to allow the machine to cool to the operating temperature **prior to placing products** in the machine. **All food products are to be pre-packaged.** Depending upon the machine's initial temperature and ambient conditions, it will take about 4 to 5 hours to accomplish this. Normal practice is to place a machine on location and come back the next day to load it**. Do not load warm bottle/milk and food products into vendor. All bottle/milk and food products are to be pre-chilled.**

1. Plug in the vendor.
2. Check that the lights inside the door come on: the chiller may or may not be running in its cycle at this time.
3. Enter the service mode and check that all settings are correct.
4. Check error codes for problems.
5. Load product after the vendor has cooled. Load one tray at a time, preferably from the bottom up.
6. Insure vendor is operating properly. If the Health and Safety option is being used, check vendor again 30 minutes after closing door to ensure NAMA requirements are being met.