

# 8.0 MAINTENANCE

## 8.1 REPLACING THE PROGRAM CHIP

Occasionally it may be necessary to replace the program chip to take advantage of new software features. Please note that after replacing the chip it will be necessary to reprogram prices and any other variables such as option settings and blocking times that have been changed from the factory settings. The motors will need to be reconfigured. The Product Sensor option, if used, will need to be set to "Y", and if the 1.5" Helix Tray is installed the home switch (in tray setup) will need to be set to "N".

1. Disconnect the power to the control board by using the power switch located on the right rail mount above the refrigeration unit power outlet. The fuse holder for older models can be located in the middle of the service door on the back of the main door.
2. Locate the program chip (refer to Figure 8.1).
3. Insert a chip removal tool in one of the slots located at the corners of the socket and pry the chip from the socket. Note that the chip has one chamfered corner which corresponds to a chamfer in the socket.
4. Press the new chip in place, making sure the chamfer is correctly oriented and the wires on the chip line up with the connections in the socket.
5. Reconnect the power to the board and check the software revision number. The revision number will be displayed for several seconds after connecting the power.
6. Configure the motors, program the prices and re-enter any other desired settings. Refer to Section 6.0, Service Programming.

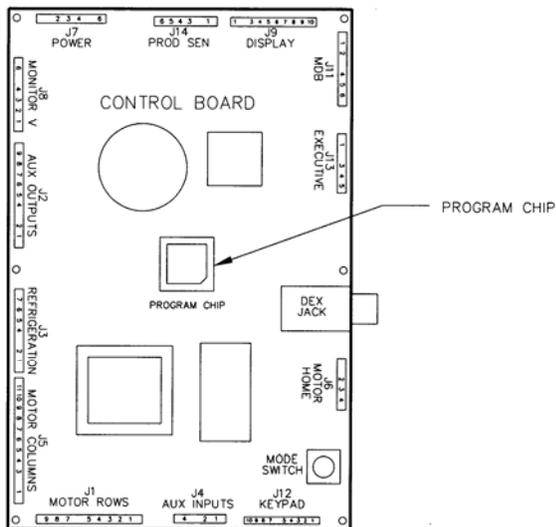


Figure 8.1 Replacing Program Chip

## 8.2 CLEANING THE REFRIGERATION UNIT

AMS recommends cleaning the refrigeration unit at least twice a year under normal conditions, more often in dusty environments.

**CAUTION: Always wear eye protection and gloves when cleaning vendor! Condenser fins are sharp!**

1. Unplug the vendor.
2. Remove the temperature sensor from refrigeration unit housing (refer to Section 7.3).
3. Remove the refrigeration unit housing (refer to Figure 8.2).

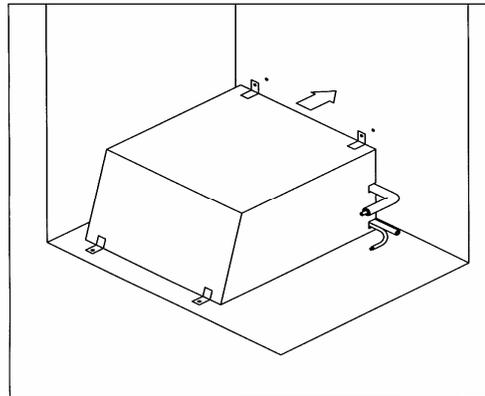


Figure 8.2 Refrigeration Unit Housing

4. Remove dust from the condenser fins and coils with a vacuum or stiff brush.
5. Remove dust from the inside of the rear screen.
6. Remove dust from the outside of the bottom screen.
7. Replace the housing. When reinstalling the refrigeration unit housing, it is important to seal the housing completely to prevent air leaks. Outside air leaking into the cabinet can cause condensation to form, which can lead to water overflowing the drain pan or ice build-up on the evaporator. Follow the procedure below to ensure proper sealing.
  - a. Locate the notches on the back right corner of the housing (refer to Figure 8.2).
  - b. Remove any duct putty from the notches. Do not discard the putty. It will be reinstalled in a later step.
  - c. Set the housing in place, making sure the drain line and power cord pass through the lower notch. The insulated copper tubing should pass through the upper notch.
  - d. Push the housing tightly against the back of the cabinet and visually check that the foam gasket is making contact on all sides.
  - e. Continue to push on the housing while reinstalling the screws through the mounting tabs. Be careful – do not overtighten the screws.
  - f. Remove the screen from the outside back of the cabinet.

- g. Press the duct putty into the notches. Make sure to seal completely around the drain line, power cord, and insulated copper tubing.
  - h. Reinstall the screen.
8. Reinstall the temperature sensor.
  9. Plug in the vendor.

### 8.3 CLEANING THE BOTTOM SCREEN

Obstructions and lint blocking the bottom screen can damage the chiller. Clean the bottom screen weekly to allow air to flow through the chiller condenser.

1. Open the door to the vendor to stop the condenser fan.
2. A vacuum attachment with a brush is preferred; however, a bristle brush may also be used.
3. Do not use water or other liquid chemicals or solvents.
4. Remove any obstructions from the underside of the vendor such as cardboard and wrappers.
5. From the underside of the vendor gently sweep lint from the screen with the brush. Do not push the lint into the screen.
6. Clean the floor under the vendor with the brush.
7. Close the vendor door.

### 8.4 CLEANING THE VENDOR CABINET

Clean the vendor cabinet as necessary using mild household cleaners and water. Apply the cleaning solution to a cloth or sponge and gently wipe the vendor surfaces to clean.

8. Do not use chemicals or solvents. These can damage the paint and plastic trim.
9. Do not use abrasive cleaners.
10. Do not use a water jet.
11. Do not let water or cleaning solutions contact electrical or electronic components.
12. Clean the glass front inside and out with a good window cleaner.

### 8.5 CLEANING THE PLASTIC DOOR LINER

Some vendors use a door liner made from ABS plastic. This liner should be cleaned with a mild detergent diluted in water. Do not use chemical solvents or harsh detergents as these products could crack the liner.

### 8.6 LUBRICATION WITH LITHIUM GREASE

Once a year the bottle tray rail ball bearings and door moving parts should be lubricated with grease.

1. Pull out the tray. The tray rail is constructed of three telescoping channel sections. Apply a light coating of white lithium grease on the outside of the first two sections, along the top and bottom edges.
2. Apply grease on the inside of the last two sections along the top and bottom.
3. Apply grease (or similar lubricant) to the door lock bolt threads and the door hinges as necessary.
4. Wipe off excess grease. No other lubrication is required.

### 8.7 REPLACING FLOURESCENT BULBS

1. Unplug the vendor from the wall.
2. Open the door.

3. If applicable, remove the lamp cover from over the defective bulb.
4. Turn bulb one-quarter turn and, at both ends at the same time, slide out through the slots in bulb sockets.
5. Remove one of the two black end caps from the clear protective tube. Slowly remove defective bulb by sliding it out of the tube.
6. Dispose of bulb properly.
7. Slowly insert new bulb into clear protective tube, turning the bulb so the pins are centered in the opening in the black end cap. Install the second black end cap, centering the opening over the pins.
8. Install the bulb by inserting bulb pins at both ends at the same time through slots in bulb sockets, then turn bulb one-quarter turn.
9. If applicable, reinstall the lamp cover.
10. Plug in the vendor to test the lamp.
11. Close the vendor door.

### 8.8 DEFROSTING THE EVAPORATOR COIL

Excess moisture accumulating inside the cabinet may freeze in the evaporator coil. As the coil becomes blocked all useful chilled air is also blocked.

1. Unplug the vendor
2. Open the door.
3. If the vendor has entered an H&S vending hold, the food products should be disposed of.
4. Place a fan on the floor in front of the vendor to direct room temperature air into the back of the cabinet.
5. Do not use any tools or electrical appliances to chip at, heat up or otherwise 'speed up' the defrosting action around the coil. Do not puncture the coil.
6. Check to see if the base under the evaporator drain pan is the non-freezing type, which has two large rectangular vent holes formed in its longest side. If the base is made without these large holes contact AMS to arrange for a Non-Freezing Evaporator Drain Pan Kit (refer to Kit Drawing 21351).
7. Look for the source of excess moisture.
8. Look for broken or leaking product. Dispose of it and clean up the liquid.
9. Inspect the vend hopper and clean it of liquids and broken containers.
10. Check to make sure the vend hopper door doesn't 'hang open'.
11. Check that the gasket of the chiller housing is securely contacting the cabinet and is sealing it on all sides.
12. Check to ensure the sealing putty is firmly in place around the two openings on the rear, right hand edge of the chiller housing. Use more putty if it is missing or is not enough.
13. Check the door gasket around the cabinet opening. It should be intact.
14. Check to see if the door closes squarely on all four sides and the lock draws the door firmly against the gasket.
15. After the evaporator coil has been defrosted, clean up any water inside the cabinet.
16. Close the door.

17. Plug in the vendor and allow to cool down before loading perishable products.