

7.1 OUT OF SERVICE MESSAGE

Certain critical errors will disable the vendor. When this happens, an “OUT OF SERVICE” message will be displayed. If the error is related to the Health and Safety function of a Visi-Diner or Milk vendor, the “OUT OF SERVICE” message will be followed by an error code beginning with “HS.” Refer to the section on Health and Safety errors below. **Please note that if a Health and Safety error occurs, any food which may have spoiled should be discarded.**

To get the vendor back in service, press the mode switch on the control board. Any errors will be displayed immediately. Refer to the list of error codes and explanations below. Correct the cause of the error, and press “0” to clear the error code. If the error code was generated by an MDB device (CHANGER, BILL VALIDATOR, or CARD READER), press 1 to see more detailed (sublevel) error codes.

7.2 HEALTH AND SAFETY ERRORS

NAMA specifications for perishable food product vendors require that the temperature in the vendor must cool to 41°F within 30 minutes of closing the door (note that Delayed Sales has no effect on this 30 minute cool-down period). This is to allow a recovery period following loading; however, all products should be chilled prior to loading. After this requirement has been met, the temperature in the vendor must never get above 41°F for more than 15 minutes.

For vendors having this software, the H&S function is activated automatically when the temperature is set to 41°F or below. Unless otherwise specified by regulatory agencies, AMS recommends setting the temperature to 40°F when vending perishable food products.

In the event the internal temperature exceeds the NAMA specifications following the recovery period or during normal operation, an error will be generated and the vendor will not allow further sales. This protects the consumer

7.3.3 Error Code Causes and Solutions

ERROR CODES – CAUSES AND SOLUTIONS			
Top Level Error Code	Sub Level Code	Causes	Solutions
JAMMED	XX JAM	Jammed product in helix, broken/jammed helix adapter, helix caught on tray or divider, “frozen” motor or broken gearbox	Remove any jammed products and test the motor using TRAY SETUP in the service mode. Refer to Section 7.5
	ALL OK		
	XX OK		
OUT OF SERVICE HS1	NONE	The internal temperature rose above 41°F for 15 minutes.	The power was disconnected, the door was not closed completely, or the refrigeration system needs service/cleaning. Check/clean screens. Check operation of door switch. Check DATA LOGS in service mode for more information.

from purchasing spoiled food. H&S error codes are detailed in Section 7.3.

The H&S function can be tested by manually warming the temperature sensor to simulate the failure conditions. Refer to the next section for testing the Temperature System (H&S).

7.3 MACHINE ERROR CODES: CAUSES AND SOLUTIONS

7.3.1 Viewing Top Level Error Codes

To view top level error codes, enter the service mode by pressing the mode switch located at the lower right corner of the control board. **ACCT DATA** will be displayed if there are no errors or an error has been cleared (whether corrected or not). If the error message has been cleared, but the cause has not been corrected, the message can be re-displayed by briefly turning off the power. Use the keypad buttons to perform the following:

#. NEXT ERROR – to view the next top level error code in memory.

1. SUBLVL ERRORS – to display any sublevel error codes including MDB devices.

0. CLEAR ERROR – to erase the error code from memory (first correct the error).

7.3.2 Viewing Sub-Level Error Codes

To view the sub-level error codes, press the 1 key while the top level error code is being displayed. Correct the condition which caused the error first, then clear the error code by pressing “0”. Once all errors are cleared, “ACCT-DATA” will be displayed. Refer to the next section for a description of error codes, their causes and solutions.

7.3.3 Error Code Causes and Solutions – Continued

ERROR CODES – CAUSES AND SOLUTIONS			
Top Level Error Code	Sub Level Code	Causes	Solutions
OUT OF SERVICE HS2	NONE	The internal temperature did not reach 41°F within 30 minutes after closing the door.	The door was open too long, warm product was loaded, the door was not closed completely, power was out, or the refrigeration system needs service/cleaning. Check/clean screens. Check data logs in service mode for more information.
OUT OF SERVICE HS3	NONE	The door switch was open more than 30 minutes.	The door was not closed properly or there is moisture inside the door switch. If proper operation is not restored by closing the door, replace the door switch.
X STUCK	NONE	Keypad selection button X has been depressed more than 2 minutes.	Clear any obstructions or dirt from around the selection buttons and make sure they can move freely. If proper operation is not restored, replace the keypad.
CHANGER	A message has been generated by the changer. Press 1 to see changer sub-level error codes.		
	COMMUN	COMMUNICATIONS – Communications error.	Check MDB harness connections.
	SENSOR	SENSOR – Sensor error.	Consult changer manual or manufacturer.
	JAM TUBE	JAMMED TUBE – Jammed coin tube.	Clear any obstructions from the coin tube.
	CHK SUM	CHECK SUM – Check sum error.	Consult changer manual or manufacturer.
	CHUTE	CHUTE – No coins accepted for a period of time.	Clear any obstructions from the coin chute.
BILL VALIDATOR	A message has been generated by the bill validator. Press 1 for bill validator sub-level error codes.		
	COMMUN	COMMUNICATIONS – Communications error.	Check MDB harness connections.
	STK FULL	STACKER FULL – Stacker is full.	Empty stacker.
	MOTOR	MOTOR – Bad stacker motor.	Consult acceptor manual or manufacturer for repair.
	JAM BILL	JAMMED BILL - Bill is jammed.	Clear any jammed bills from the acceptor.
	CHK SUM	CHECK SUM – Check sum error.	Consult acceptor manual or manufacturer.
	OPEN BOX	OPEN BOX – Open box.	Close the bill box.
	SENSOR	SENSOR – Sensor error.	Consult acceptor manual or manufacturer.
CARD READER	A message has been generated by the card reader. Press 1 to see sub-level error codes.		
	CARD ERROR –	Card error	Use a different card.
	INVALID CARD –	Invalid card	Use a different card
	TAMPER	Tamper error.	Consult card reader manual or manufacture
	COMMUNICATIONS 4	Communications error.	Check MDB harness connections
	SERVICE	Unit needs service.	Consult card reader manual or manufacturer.
	READ ERROR	Reader failure.	Consult card reader manual or manufacturer.
	COMMUNICATIONS 9	Communications error	Check MDB harness connections.
JAMMED CARD	Card is jammed.	Clear the jammed card from the card reader.	

3 Error Code Causes and Solutions – Continued

ERROR CODES – CAUSES AND SOLUTIONS			
Top Level Error Code	Sub Level Code	Causes	Solutions
PROD. SENSOR	NONE	The product sensor is blocked or disconnected.	Remove any products or other objects in the bottom, or in sensor openings in ends of the delivery bin. Check sensor harness connections.
SENSIT BLOCKED	NONE	The vend sensor is blocked or lens is fogged.	Remove any obstructions from the path of the sensor.
SENSIT DISCONN'D	NONE	The vend sensor is disconnected.	Check all sensor harness connections.

7.5 CLEARING JAMMED MOTOR

If one or more motors and helixes become jammed, the motor(s) will be displayed as a sublevel error under “Motor Jammed”.

Energized vend motors can turn a helix with considerable torque, creating a possible entrapment hazard. Disconnect power to the vendor or control board before freeing a jammed helix or motor. Always restrain or block the helix before freeing a jammed or caught product.

CAUTION: Use caution when freeing jammed product! Refer to 2.2.4 Helix Motion and Jamming!

Clear any jammed products from the indicated vend columns.

To reset the error, first enter service mode (refer to Section 6.0), then select Tray Setup (refer to Section 6.7.1). Press “1”, then “*”, then “3”. The control will attempt to run the jammed motors. If the motor had been taken out of the motor matrix, it will be re-established in the matrix.

7.6 WATER FORMATION IN THE CABINET

Water formation in the cabinet indicates an air leak which allows moist air to continually enter the cabinet and condense on the evaporator.

1. Make sure the refrigeration unit cover gasket is sealing properly all the way around. In particular, check the openings where the refrigeration lines and drain tube pass through the cover. These openings should be sealed completely around the lines and tube with duct putty.
2. Make sure the door is properly tightened so that it makes contact with the gasket on all sides.
3. Make sure there are no foreign objects interfering with the vend door, and the vend door closes properly.

7.7 MACHINE TROUBLE SHOOTING CHART

The following troubleshooting chart may be used to find quick remedies for electrical and mechanical failures in the vendor.