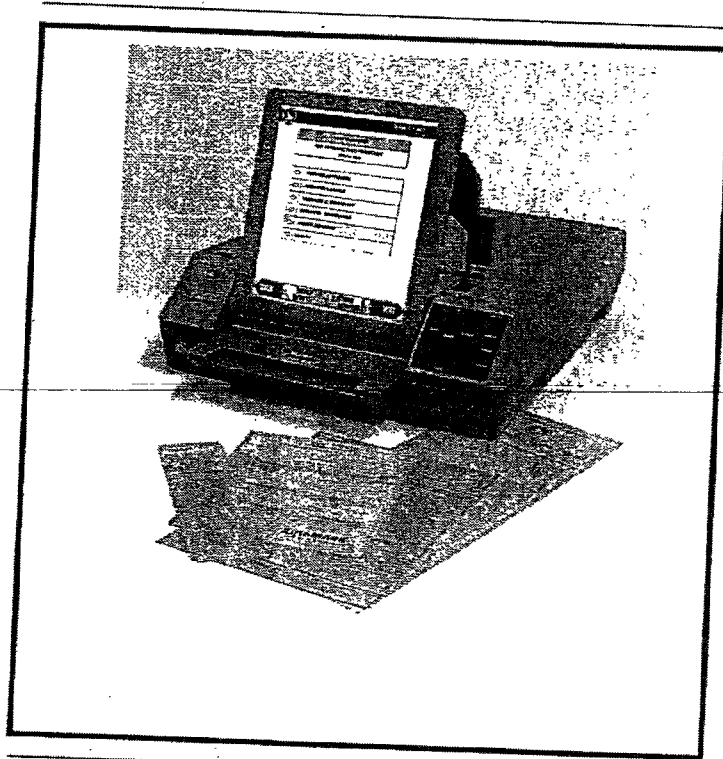**ES&S AutoMARK™**

Poll Worker's Guide
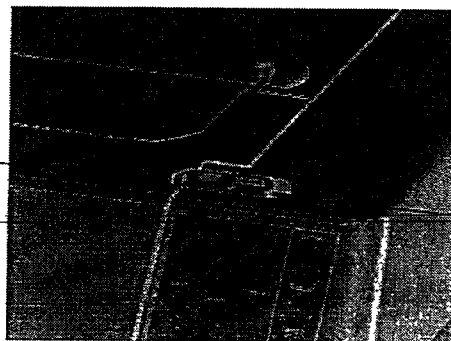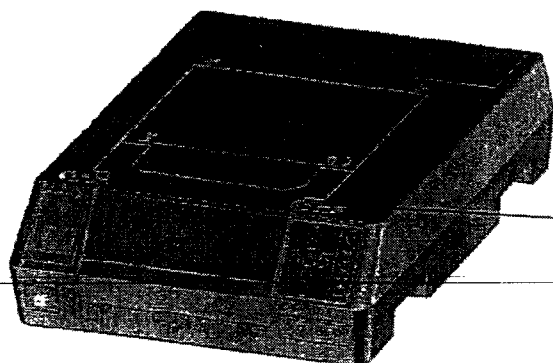
1 Preparing for an Election

Follow the Start Up/Shut Down Procedures below on Election Day.

1.1 Opening the LCD for Use

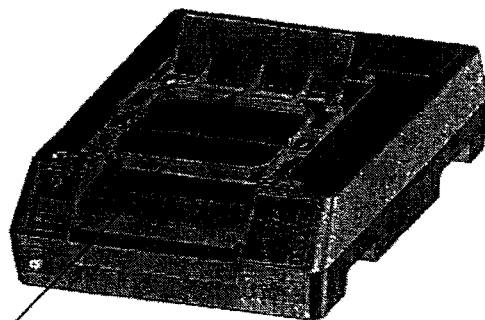To open the AutoMARK LCD for use on Election Day follow the procedure below:

1. Move the left and right sliding latches outward to unlatch the lid.

OPEN

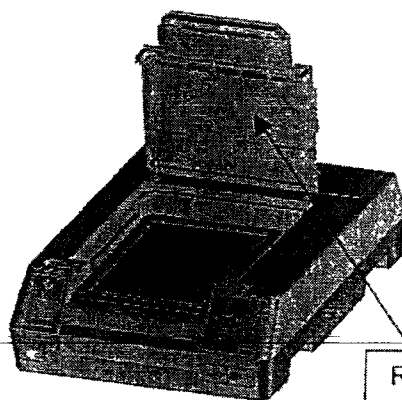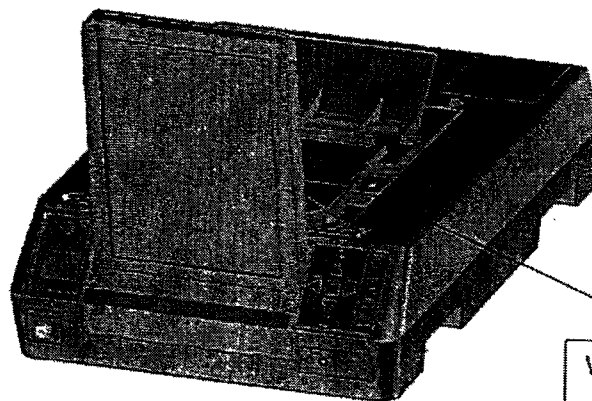2. Fold the front portion of the lid back.

Fold front portion
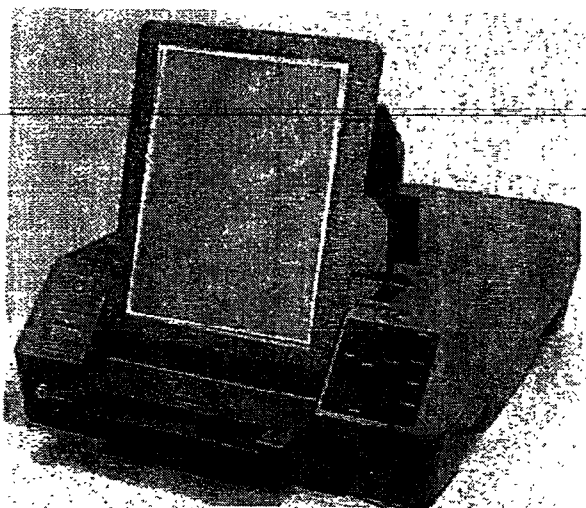of lid back

3. Rotate the lid assembly to vertical.

Rotate lid assembly to
vertical

4.Raise LCD screen, and close the lid behind, leaving the front lid section rotated back.

With the LCD rotated to the vertical position, close the lid leaving the front lid section rotated back

5. Lower the ballot feed tray.

Lower the ballot feed tray

1.2 Start Up/Shut Down Procedure

To start or shut down the AutoMARK follow the procedure below.

1. Open the AutoMARK unit and position the display.
2. Locate the audio headphone jack on the front lower-right panel (below the keypad) and plug in the headphones.
3. Plug the power cord into a power connection in the back of the unit and the other end of the cord into a nearby AC power source. Make sure the cord is not in a position where it would be hazardous to anyone walking nearby.
4. Turn the security key located in the front of the unit to the ON position and remove the key before voters are allowed to use the AutoMARK VAT.
5. To shutdown the unit when the polls are closed, insert the security key located in the front of the unit and turn it to the OFF position, to turn off the electrical power.

1.3 Setting Up the AutoMARK VAT for Voters

The following procedure must be followed to set up the AutoMARK VAT for normal operations.

1. Follow the start up/shut down procedure above to start the AutoMARK VAT.
2. If headphones are being supplied by the polling place, plug the headphones into the audio jack.
3. If the voter needs to use a Puff-Sip device, plug the Puff-Sip device into the ADA access port.
4. For a blind voter, direct him to the AutoMARK VAT, and assist him while he inserts his ballot for scanning. Tell him that the scanning process will take around 30 seconds, and that the VAT will be silent during the scanning process. When the scanning process is complete, the VAT will give him audio instructions for completing his ballot.
5. The AutoMARK VAT is designed for use in conjunction with the AutoMARK Table which provides the voter with a privacy shield, complies with all ADA accessibility requirements, and ensures stability against movement, or overturning during entry occupancy or exit by a voter. Alternatively, the AutoMARK VAT may be used in conjunction with any ADA compliant table that provides adequate structural stability for unit of the AutoMARK VAT's size and weight and a privacy screen. Both of

these items are commercially available from a number of sources.

1.4 Assisting the Blind Voter

For a blind voter, direct him to the AutoMARK VAT.
Show him the keypad, and show him where to insert his ballot.
Assist him while he inserts his ballot for scanning (if he desires assistance). Tell him that the scanning process will take around 30 seconds, and that the VAT will be silent during the scanning process. When the scanning process is complete, the VAT will give him audio instructions for completing his ballot.

1.5 Assisting the Voter who uses an ADA Device

If a voter is using an ADA device, the poll worker should

1. Insert the ballot for the voter,
2. Read these instructions to the voter:

You have plugged in an ADA device. This allows you to navigate through your ballot using YES or NO inputs.

When a screen is displayed, you may select NO to bypass that screen or YES to move to the first selectable choice on that screen. When you are on a selectable item of the screen, the item will be highlighted in yellow. Selecting NO will move on to the next selectable item on the screen. Selecting YES will provide the same results as if you had clicked on that item.

When on a candidate or question choice YES will select or deselect that candidate.

When on a MORE scroll bar, YES will cause the screen to scroll up or down as indicated.

When on a screen button, YES will invoke that action. For example, entering YES when ZOOM is highlighted will cause the screen to ZOOM. Entering YES again, will return the screen to non-zoomed mode.

Pressing NO at any time will move to the next highlighted item.

As you enter NO repeatedly, the highlight will move down the screen, across the bottom from right to left and then loop back to the top.

When you are done making selections on any given screen, enter NO repeatedly until the yellow highlight is

9

on the NEXT button and then enter YES to move to the
next screen.
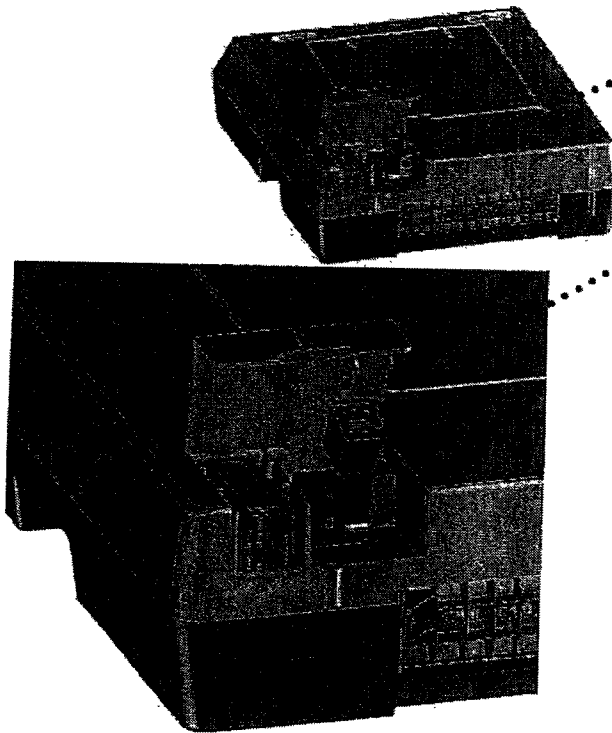
Ink Cartridge

Ink Cartridge Access in Rear of AutoMARK

Follow the steps below to install a new ink cartridge.

1. Open the rear access door to view the holding unit for the ink cartridge (see the picture above.)
2. Open the new ink cartridge package.
3. Insert new ink cartridge into The AutoMARK VAT.
4. Close the access door.
5. With the key switch in TEST mode, choose SERVICE PRINT CARTRIDGE.
6. Select *Yes* to indicate that you have changed the cartridge and to re-set the counter.

2.3 Using Metallic Ink for Infrared Printing

If the ballot tabulation machine in use has an *infrared* scanner, then a special metallic ink must be used in the AutoMARK VAT. (One brand of this special metallic ink is Jumangi, manufactured by Hewlett Packard.) When using this type of ink in the VAT, additional steps must be taken.

The metallic ink dries very fast and the metallic flecks in the ink will cause the nozzles in the ink cartridge to clog and dry out in as little as six minutes after the ink cartridge is unsealed and left unused.

System Maintenance

To prevent the ink from drying in the nozzles, the VAT has a 'spit and wipe' functionality implemented. Every 3-4 minutes, the VAT will move the print cartridge to the side, spit ink into a 'diaper', and then wipe the print-head over a little rubber wiper. For this reason, the VAT should not be turned off during the Election Day. A new ink cartridge must be installed if the VAT is turned off for a significant amount of time (ten minutes or more.)

Follow the steps below to enable the 'spit and wipe' functionality.

1. Go to Test MODE by turning the key switch to the test position.
2. Press the *System Maintenance* button.
3. Enter Password.
4. Click *OK*.
5. In the System Maintenance menu, click *Printer Head Selection*.
6. Make sure *Enable for Infrared Printing* is checked.
7. Click DONE.
8. Exit Menu

Adjusting the rubber wiper blade (Infrared Printing Only)

If the Infrared Printing (spit and wipe) functionality has been enabled, it is also necessary to make sure that the rubber wiper blade is in the proper position to clear the print cartridge nozzles at each pass.

Follow the steps below to adjust the wiper blade.

1. Loosen the torque screw holding the wiper blade in place,
2. Raise or lower the assembly using the Phillips Head screw on top.
3. Re-tighten the torque screw.

Replacing the 'diaper':

The 'diaper' is a foam mat in a removable plastic tray located under the flap that opens in the back of the VAT. A new 'diaper' should be in place prior to a new election.

3 Troubleshooting

This chapter contains common troubleshooting procedures and a description of error messages. Contact a Jurisdiction Official if you have a problem that is not described in this chapter.

3.1 Clearing a Paper Jam

Follow the procedure below to clear a paper jam.

1. Open the top panel or the rear clean-out panel. Top cleanout tray can be removed by pushing in on the round tabs at the sides of the tray and lifting. Rear panel can be removed by pulling tab sideways and out.
2. Remove the ballot.
3. If ballot is not damaged, not folded in any way, and not marked, re-insert the ballot correctly.


Notes

If the machine repeatedly jams, make sure the cleanout tray has the reversible roller in the proper position. The reversible roller needs to be wheels-down for 3"-17" ballots and wheels-up (into the cleanout tray) for 18"-22" ballots. Also make sure the cleanout tray is pressed down firmly so that tabs on both sides are properly fastened in the corresponding slots.


If using Optech style ballots with removable stubs, remove the stub before inserting the ballot into the VAT.

3.1.1 Reversible Roller Guide and Ballot Size

A Reversible Roller Guide allows the AutoMARK unit to be configured for various ballot lengths. It must be configured appropriately to prevent paper jams. The Reversible Roller Guide is located in the Top Cleanout.
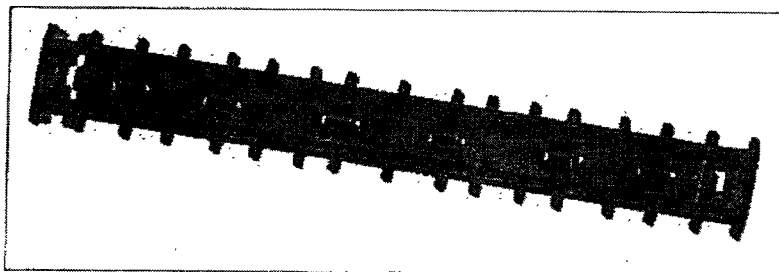
Reversible Roller Guide
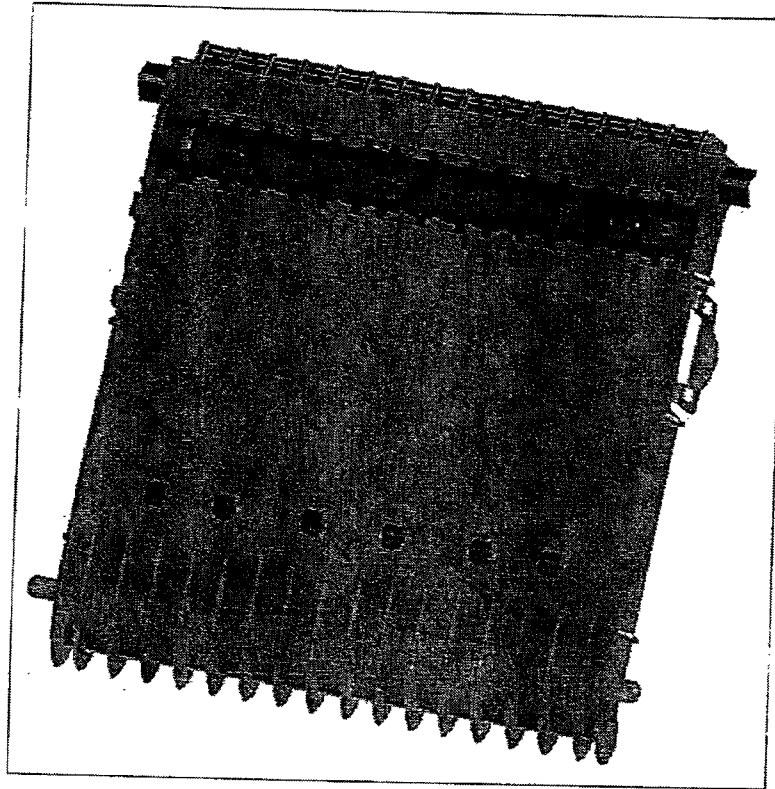
Reversible Roller Guide Installed in Top Cleanout
(Shown in standard ballot configuration)

Ballot Size	Position of Reversible Roller
Under 15 inches	Reversible roller nip active (roller wheels down)
15 inches or more	Reversible roller nip inactive (roller wheels up)

Roller Guide and Ballot Size

To accommodate long ballots (15" or more), the reversible roller guide must be flipped over so that the black plastic rollers are not exposed. To complete this operation, insert a coin into one of the slots on the Reversible Roller Guide as shown in the picture below.

Troubleshooting
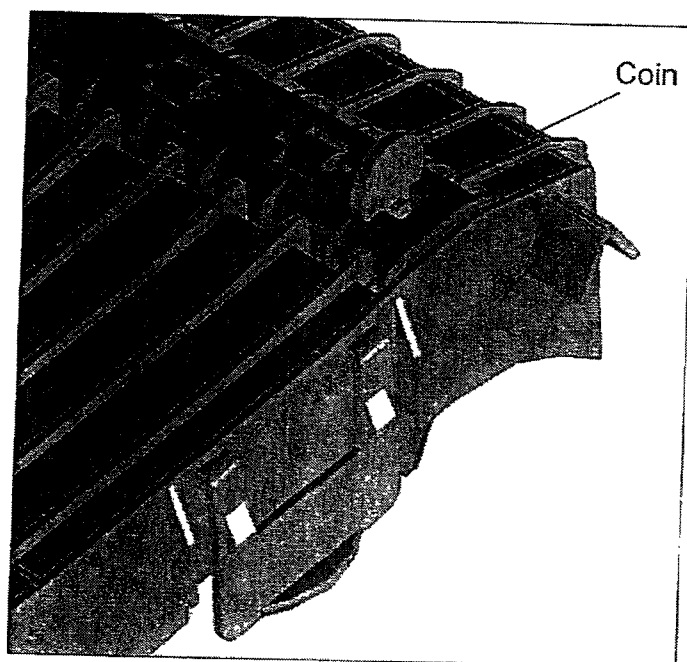
Coin

Removing the Roller Guide

Locate small rectangular window on Top Cleanout opposite to where the coin is inserted. Insert finger through window and push out the Reversible Roller Guide. Repeat removal process for other end of the Reversible Roller Guide.

Using Finger, Push Here
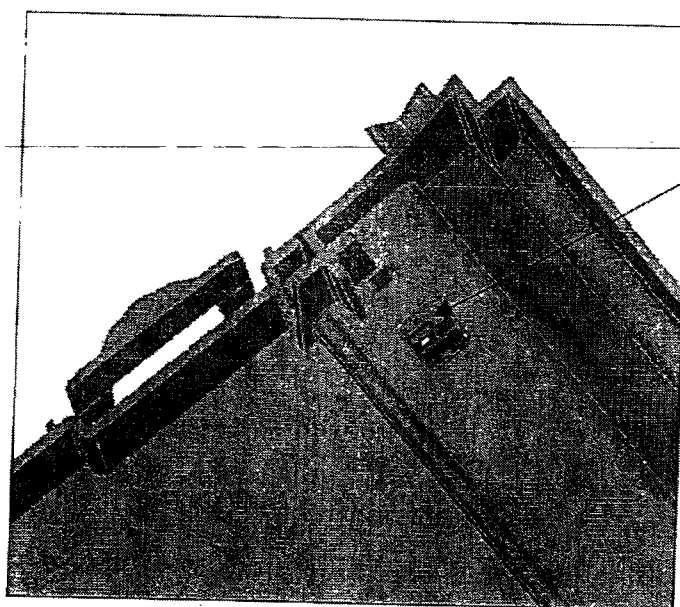
Reversing Roller Guide

3.4 Error Messages

Error messages are displayed on the touch screen monitor when AutoMARK VAT detects a critical condition that requires operator intervention to correct the problem before the selection process can be continued.

The international symbol ⚠ may accompany various error messages. These messages may or may not be translated into the voter's native language. For this reason, the Jurisdiction may wish to place a multi-lingual sign in the polling booth that explains that the symbol means an error has occurred and they should alert one of the election officials.

For example:

Automark Error	OK	X

⚠ NullReferenceException

Please contact an Election Official. An error has occurred.
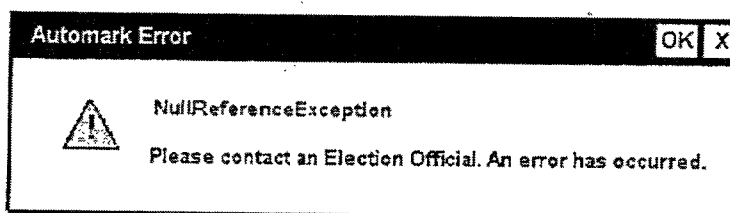
The following table contains a list of error messages that may be displayed, the probable causes and resolutions.

Error Message/Description	Probable Cause	Solution
ERROR – PAPER MISFEED	Ballot was inserted incorrectly and the AutoMARK paper feed mechanism was not able to align the ballot for scanning operations.	1. Open the top panel or the rear clean out panel. 2. Remove the ballot. 3. If the ballot is not damaged, re-insert the ballot correctly.
ERROR – PAPER JAM	Paper ballot was inserted correctly, but the AutoMARK VAT tractor feed mechanism cannot move ballot into the next position.	1. Open the top panel or the rear clean out panel. 2. Remove the ballot. 3. If the ballot is not damaged, re-insert the ballot correctly.

ERROR – Ballot Has Not Been Recognized	System is unable to read election information programmed and/or stored on the compact flash memory card (FMC).	1. Shutdown AutoMARK VAT. 2. Remove compact FMC. 3. Reprogram FMC with correct data. 4. Touch the key switch with one hand to discharge any static build-up 5. Insert FMC in AutoMARK VAT. 6. Startup AutoMARK VAT. Note: If the FMC allows for manually ID ballot, the voter will be allowed to select a ballot format if the AutoMARK VAT does not recognize the ballot upon insertion.
General Error	Probable cause is an error in the software or a low memory condition.	1. Make sure that you have election judges/ pollworkers from both parties present. 2. Turn the keyswitch to the off position. 3. Press the OK button on the message box (if there is one). 4. If the system does not power off within 5 to 10 seconds, try pressing the okay button again if it is still on the screen. 5. (Note: the system may take up to 30 seconds to turn off.) After the system has powered off, turn the keyswitch ON again. 6. The system will reboot. If there is a ballot in the VAT, it will be ejected, and any voting sessions that were in progress will have to be restarted. Note that if the ballot was being marked when the error ocurred, a security cover should be placed over the ballot as it comes out, the ballot should be spoiled, and the voter should be given a new blank ballot.

Troubleshooting

Area	Error message/Description	Probable Cause	Solution
Startup	Waiting for Flash Card to become available... (this may take 30 seconds or more)"	There is either no flashcard inserted or the inserted flashcard is not complying with the export format. Another cause for this in DV2.0 machines is that the system was not powered up properly and the compact flash card reader was not enumerated properly.	Try turning the system off, waiting for 15 solid seconds with the system off, and then turn the system on again. If the problem keeps repeating, then try a different compact flash card or have the machine serviced.
Startup	There are no ballots on the Flash Card and file read error is seen. Turn OFF the machine and check if a valid Flash Card is present.	The Automark VAT library was not able to import the ballots. There are no ballots available for the GUI to process.	Try a different compact flash card.
Startup	AutoMARK Datafile Read Error. Message : <system err. Msg> Filename: <impacted file> Please power-off the system and replace the flash card.	There is either a missing data file or a data file is not formatted right.	Try turning the system off, waiting for 15 solid seconds with the system off, and then turn the system on again. If the problem keeps repeating, then try a different compact flash card or have the machine serviced.
	Touch the OK button after you have turned the keyswitch to the OFF position.		
Startup	Alert! A problem has occurred. Please notify an election official. Files have been tampered with or wrong access code!	The system detected that the flashcard data has been tampered and is not the original data that was exported. An additional cause could be that the pin code that was entered in the unlock screen was not the correct pin code for this particular set of data.	Make sure the pin code is correct. See earlier instructions for unlocking the compact flash card. If possible, get a new compact flash card or data set.
Startup (Win XP)	The ballot could not be loaded.	The system was not able to load the ballot that the user attempted to preview.	Restart the computer.

Area	Error message/Description	Probable Cause	Solution
Scanning	File read error. <Error number>	Displayed when a file error occurred during the scanning process.	Try turning the system off, waiting for 15 solid seconds with the system off, and then turn the system on again. If the problem keeps repeating, then try a different compact flash card or have the machine serviced.
Scanning	Unknown scanner event <event code>	This message and the displayed event code should be reported to the Automark customer service team.	This message and the displayed event code should be reported to the Automark customer service team.
Flash Card	The Flash Card has been removed. Turn OFF the machine and insert a valid Flash Card.	System detected that the flash card was removed or tampered with.	Turn the key switch to the off position. (Touch the key switch with one hand to discharge any static build-up.) Replace the compact flash card, if necessary, and then turn the key switch to the ON position.

3.5 Troubleshooting Checklist

The following table consists of additional troubleshooting suggestions.

Problem	Probable Causes	Solution
Ballot selections not marked	Ink supply is low.	Replace ink cartridge.
Ballot selections marked incorrectly	Election information may be setup wrong on the compact flash memory card (FMC).	Re-program information on FMC and test.
Marked ballot cannot be read	Ballot style is unacceptable or optical cameras in scanner device are not functioning correctly.	If ballot style is unacceptable, have the voter mark an acceptable ballot style. Insert Proper ballot style.
AutoMARK will not start up without plugging it into an AC outlet.	Battery is low.	Recharge battery.
No response when screen images are touched.	Unknown	Shutdown and restart system. If problem still exists, call your service representative for service.
Audio presentation does not correspond with text displayed	Election information may be setup wrong on the compact flash memory card (FMC).	Re-program information on FMC and test.
No response when a key on the keypad is pressed	Unknown	Shutdown and restart system. If problem still exists, call your service representative for service.
No response when remote keypad or Puff-Sip device is used.	Device cable connection is not properly attached to the dual-switch access (DSA) port	Check all connections, then shutdown and restart the system if necessary.
Unable to hear audio presentation	Headphone connection is not properly inserted into the audio jack.	Check all connections, then shutdown and restart the system if necessary.

3.6 Spoiled Ballot Procedure

If you encounter an error that causes a spoiled ballot, eject the ballot to the voter and **do not** look at the voter's selections. Follow your local procedures for a spoiled ballot.

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4 Security Measures

4.1 Access Control

4.1.1 General Access Control Policy

It is the responsibility of the jurisdiction to provide a secure physical and procedural environment for the storage, handling, preparation, and transportation of the system hardware.

The VAT should be kept in a secure location in a manner similar to other voting machines, ballots and other election equipment or records.

Recommended policy for access controls are as follows. The Compact Flash content shall be programmed and verified by County or State election staff. Pre-programmed Compact Flash cards will be delivered to each precinct for installation by local precinct staff.

Security measures which should be taken when preparing the Compact Flash Card are provided in the *AIMS Election Official's Guide*.

4.1.2 Individual Access Privileges

The Election Official or his designee should

- Retain possession of the key to power on the VAT.
- Retain possession of the key to unlock and lock the Compact Flash compartment
- Set the password for the VAT System Maintenance Menu and keep private.

Any time the VAT is put into TEST MODE, pollworkers of both parties must be present

4.2 Access Control Measures

Unauthorized access to the Compact Flash card is prevented by means of a locked compartment. Election officials at the precinct level will use the Compact Flash compartment key to unlock the compartment, insert the Compact Flash card, and lock the compartment prior to opening the polls for voting. No further access to the Compact Flash is necessary until the polls are closed, when it can be removed.

4.3 Polling Place Security

The AutoMARK VAT is powered on and off by use of a key. Removal of this key will prevent unauthorized use when VAT is left unattended.

Physical security measures for the AutoMARK system include a locked compartment to prevent access to the Compact Flash card. The Compact Flash card contains ballot format information. The compartment is locked with a key. The key is held by the precinct staff.

A password is required to access the System Maintenance Menu items on the VAT, such as setting the time and date, or uploading new firmware. The password should be reset by the designated official and kept private.
Headphones can be used to provide audio of the various ballot choices and the display screen can be turned off to prevent unauthorized access to vote information from a voter with visual impairments.