

6

Pre-Election Procedures for the Election Official

This document guides the Election Official in preparing the VAT for use in an election in the State of California.

The following steps must occur – an exact time line is not given, but the VAT preparation should be completed and verified well before the election day.

1	Prepare the actual ballots which will be used in the election, and the Election data files, using ballot preparation software.	See the manual which comes with the ballot preparation software for details
2	Import the data files created in Step 1 into AIMS	See the <i>AutoMARK Information Management System (AIMS) Election Official's Guide</i> for details
3	Test that the ballots are set up correctly and that the data was imported correctly by using the AIMS Preview function	
4	Create Flash Memory Card	
5	Set the current time and date on the VAT:	
6	Install a New Ink Cartridge	
7	Charge the battery (if installed).	
8	Install correctly programmed Flash Memory Card	
9	Test the AutoMARK VAT operations to ensure full functionality of the system	
10	Using new Flash Memory Card and ballots, print test ballot(s) on VAT to verify that the data is correct.	This should be completed at least one week prior to the election.
11	Install VAT at polling place before polls open	

The instructions for performing the procedures are described in the rest of this chapter.

Note

If you need more information about the Flash Memory Card, or information on how to program a Flash Memory Card, see the *AutoMARK Information Management System (AIMS) Election Official's Guide* documentation. This documentation is provided with the AIMS Software, which is used to program the Flash Memory Card.

6.1 Prepare the actual ballots which will be used in the election, and the Election data files

This is done with Ballot Preparation Software which is not covered in this document. See the documentation which is provided with the ballot preparation software.

6.2 Import the data files created in Step 1 into AIMS

See Chapter 5 of the [AutoMARK Election Official's Guide](#) for information.

6.3 Test that the ballots are set up correctly and that the data was imported correctly by using the AIMS Preview function

See Chapter 6 of the [AutoMARK Election Official's Guide](#) for information. .

6.4 Create Flash Memory Card

See Sections 14.1 and 14.2 of Chapter 14 of the [AutoMARK Election Official's Guide](#) for information. .

6.5 Setting the Date and Time on the AutoMARK VAT

You can set the date and time that the Automark uses for logging operations in the various operations and diagnostic logs. See Section 9.2 of this document for details.

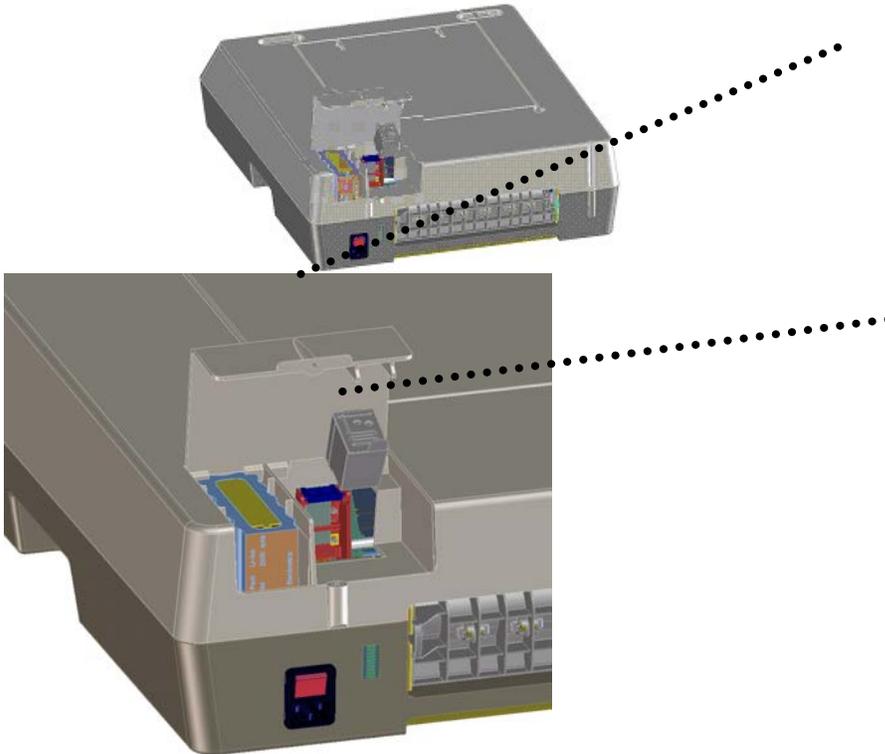
6.6 INSTALLING A NEW INK CARTRIDGE

The AutoMARK VAT system is shipped without the ink cartridge installed. The ink cartridge should be installed prior to using the system for voting. The system

writes with an Inkjet print cartridge from Hewlett Packard. This is a black-only ink cartridge. A new print cartridge should be installed prior to each election.

The access to the print cartridge is provided by a door in the right rear corner of the unit. With the door off, the rechargeable battery is also accessible. Refer to the picture below.

As a standard practice, a new printer cartridge should be installed into the AutoMARK VAT prior to each election.



Ink Cartridge Access in Rear of AutoMARK VAT



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 AutoMARK VAT.
4. Close the access door.
5. When the system is operating in TEST mode, choose **SERVICE PRINT CARTRIDGE**.
6. Select **Yes** to indicate that you have inserted a new ink cartridge and to re-set the counter.
7. Click **DONE**.

6.7 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.

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. Press **OK**.
5. In the System Maintenance menu, press **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.

6.8 CHARGING THE BATTERY (IF INSTALLED)

Follow the steps below to charge the battery.



1. Plug the power cord into the rear panel of the AutoMARK VAT (see the picture below.)



AutoMARK VAT Power Cord Plug-In

2. Plug other end of power cord into your local power outlet.
3. The power meter on the rear panel of the AutoMARK VAT indicates the battery power level. The battery can be fully charged in approximately 2-3 hours.

6.9 INSTALLING THE FLASH MEMORY CARD

You must provide a compact Flash Memory Card (FMC) that contains the data pertaining to your election (contests, candidates or choices and setup instructions).

The FMC must be correctly programmed before it is inserted into the AutoMARK VAT. See the AutoMARK Election Official's Guide for information about programming the FMC.



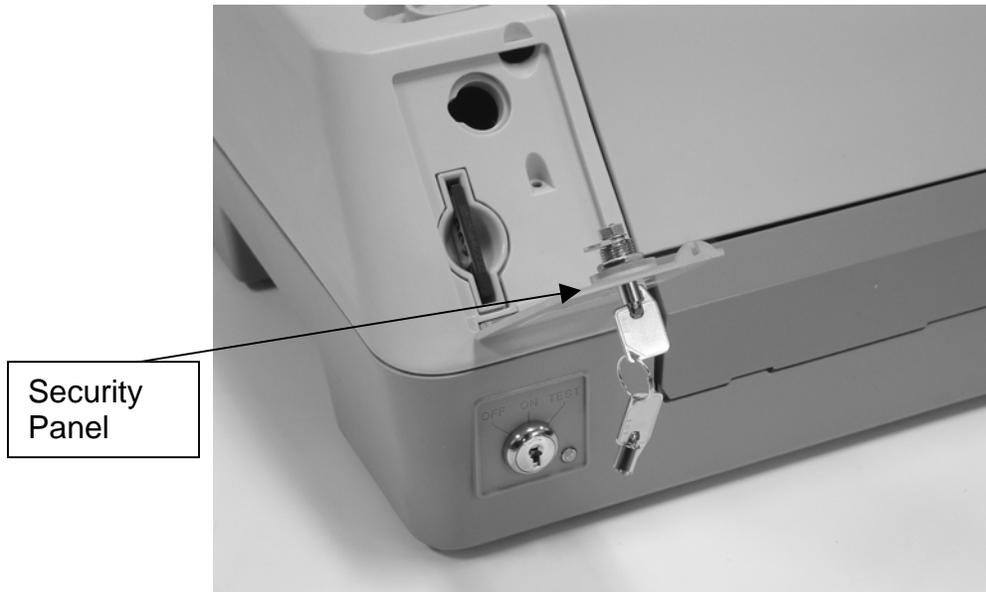
Follow the steps below to install the FMC.

1. Verify the key switch is in the OFF position.



AutoMARK VAT

2. Use the security key to open the security panel.
3. Touch the key switch with one hand to discharge any static buildup.
4. Insert the FMC into the AutoMARK VAT and lock the security panel (see the picture on the following page.)
5. Place a nonmetallic security seal over the security panel.
(STEVE W TO GIVE ME MEMPACK OR PCMCIA CARD LANGUAGE.)



Installing the FMC

6.10 TESTING the AUTOMARK VAT OPERATIONS

The AutoMARK VAT operations should be tested when the system is operating in the TEST mode.



Follow the steps below to test The AutoMARK VAT operations.

1. First, lift the display screen to an upright position and turn the key switch to ON (see page 16).

In TEST mode

2. Turn the key switch to the TEST mode position.
3. Select **Test Ballot Print** using the touch screen button.
4. If using an Optech style ballot with a removable stub, remove the stub before inserting the ballot
5. Insert an unmarked ballot. The AutoMARK VAT will fill all ovals and print the name of each candidate next to the oval. Verify that each oval is filled and each candidate name is printed in the proper place on the ballot. If the marks appear off due to rotation, x, or y offset errors, then the printer may need to be re-calibrated (see Maintenance Section – this document).

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Display Screen Test

In ON mode



1. Turn the key switch to the ON mode position.
2. The **Insert Your Ballot** screen should be displayed. If not, check all power connections to ensure power is being supplied to the AutoMARK VAT.

Ballot Insert Test



1. If using a ballot with a removable stub, remove the stub before inserting the ballot.
2. Insert an unmarked ballot (corresponding to the FMC currently installed) into the AutoMARK VAT paper tray
3. The paper feed mechanism should feed your ballot into the AutoMARK VAT. If the test is successful, the AutoMARK VAT scans the ballot and displays a new screen. If the test is not successful, the AutoMARK VAT attempts to eject the ballot or displays an error message.

Audio Test



Plug in your headphones and use the audio keys on the keypad to test the audio operations as follows:

1. Press the round Audio **Repeat** key to repeat the presentation.
2. Press and hold the round Audio **Repeat** key to change the sex of the audio presenter.
3. Press the left side of the Audio **Tempo** key to decrease the audio speed.
4. Press the right side of the Audio **Tempo** key to increase the audio speed.
5. Press the left side of the Audio **Volume** key to decrease the audio volume.
6. Press the right side of the Audio **Volume** key to increase the audio volume.

Ballot Print Test



1. Turn the key switch to **Test Mode**.
2. Press the **Test Ballot Print** button on the touch screen.
3. If using an Optech style ballot with a removable stub, remove the stub before inserting the ballot
4. Insert a ballot that is recognized by the currently inserted compact flash card. Use a spare ballot that is not needed, because the AutoMARK VAT will print on this ballot.
5. If the ballot is not recognized, repeat a few times. If it still does not recognize, then press **Done** and go to **Select Available Precincts**.
6. Confirm that the ballot races on the currently inserted compact flash card are the ones that are shown on the screen and match the ballot that you were trying to insert. If they do not match then you need to replace your compact flash card or your ballot.
7. Scrutinize the placement of the marks in relation to the ovals/voting locations on the ballot. If there is any discernable rotation of the marks with respect to the voting locations, uniform across all marks, that is an error greater than 0.05 degrees, or a couple millimeters, Calibrate the printer. See Calibrating the Printer in the Maintenance section (Section 9.5).
8. Once the marks are printing correctly in all orientations (right-side up, upside down, inserted front-wards, inserted backwards), the printing is working properly.
9. As a final check, move the key switch into test mode and check the ink level. (On the bottom left portion of screen.) If it is lower than 10%, replace the ink cartridge. If you do, make sure to reset the ink level meter using the Replace Ink Cartridge button from the test mode menu.

Ballot Read Test



1. Insert a marked ballot into the AutoMARK VAT paper tray.
2. The paper feed mechanism should feed your ballot into the AutoMARK VAT. If the test is successful, The AutoMARK VAT scans the ballot and displays the **Language Selection** screen (if your jurisdiction is programmed for more than one language) followed by the Verification Summary Screen. If the test is not successful, The AutoMARK VAT attempts to eject the ballot or displays an error message.

6.11 LOGIC AND ACCURACY TESTING: Verifying the AutoMARK Correctly Records Votes and Prints Ballots

For each ballot style programmed into an AutoMARK unit:

- Insert, vote and print sufficient ballots so that every valid voting position on the ballot, including write-ins, is voted at least once
- For each contest, attempt to overvote to verify overvoting is prohibited.
- Vote and print an entirely blank ballot to verify that the undervote warning is active for each contest and that no vote positions are marked on the ballot.

Each printed ballot must be visually inspected to verify all votes were accurately recorded and printed correctly.

The above testing process must be repeated on each AutoMARK VAT used in an election.

6.12 Install Optional Signage in the Polling Booth for Voters whose Native Language is not English

The AutoMARK VAT provides its instructions in a number of languages. The exception to this is that the “OK” button appears the same for all. If the translators in your Jurisdiction believe that this may cause confusion, then you might want to include additional instructions in the polling booth.

Also, the international symbol  may accompany various error messages which may not be translated into the voter’s native language. For this reason, the Jurisdiction should 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:

