

M100 Presentation

Description of the Model 100

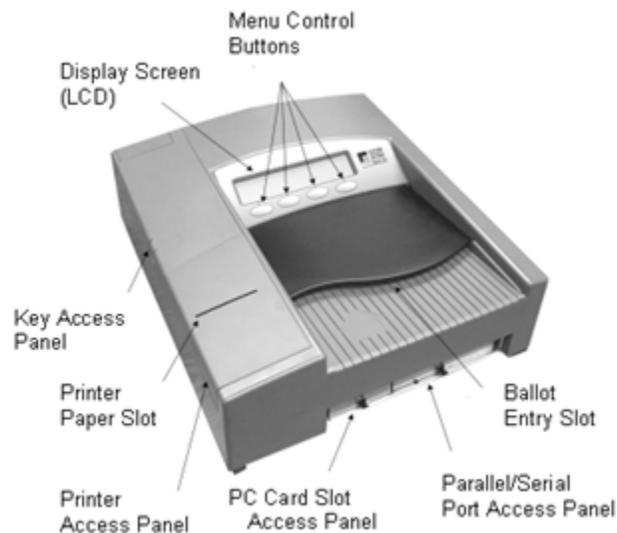
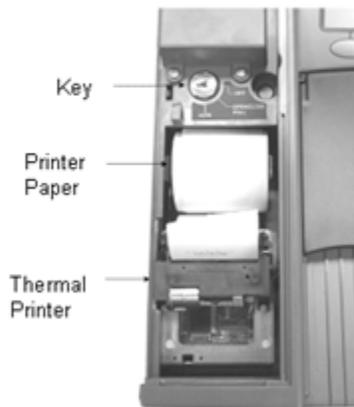
Use the diagrams and descriptions in this chapter to become familiar with Model 100 tabulator components and functions. Always scan a ballot test deck before your election to test the tabulator for accuracy and to correct any functional errors before you count official ballots.

The Model 100 tabulator reads marks on both one and two-sided ballots. Administrators can request custom ballot acceptance criteria, which ES&S programs onto the tabulator's election definition PC card. For example, if a jurisdiction prohibits counting blank ballots, ES&S election coders can program the Model 100 sort blank ballots out of the general ballot count until jurisdiction officials can review the ballots. With each acceptable ballot counted, the Model 100 increases the running vote totals for each race included on the election definition.



Refer to the [Recommended Supplies](#) heading in [Chapter 5: Pre-Election Day Tasks](#) for a list of recommended polling place supplies and instructions for assembling and testing the Model 100.

The Scanner



A standard 120-volt AC power cord supplies electricity to the tabulator. If a power outage occurs, the Model 100 contains an internal back-up battery that can run the tabulator for one to three hours, depending on tabulator activity. The tabulator stores accumulated totals to internal tabulator memory (DRAM) and to a removable PC card.

The Model 100 can generate reports and store election results in the following formats:

- Paper reports produced from the tabulator's internal, thermal printer or by an external printer connected to the tabulator.
- A removable PC card that you can use to transfer tabulator results to Election Reporting Manager after the polls close.
- Data transferred by modem directly from the tabulator to a PC running Election Reporting Manager.



See [Chapter 8: Maintain the Tabulator](#), for instructions on performing routine maintenance on the tabulator.

Ballot Box

Model 100 ballot boxes store ballots and house the tabulator at the polling place. ES&S supplies one of two styles of ballot box (metal or nested) with each Model 100 tabulator. The Model 100 feeds scanned ballots directly into the ballot box, which sorts the ballots according to criteria programmed in the election definition with an internal diverter. The ballot box also has a compartment that poll workers can use to temporarily store uncounted or contested ballots in the event of a power failure or tabulator error.

Metal Ballot Box



Nested Ballot Box



PC Card

The Model 100 uses PC cards to store the tabulator's election definition, audit log and other election-specific information. Data on the PC card exists in one sequential block, which is updated each time the Model 100 scans a ballot. Use PC cards with a memory capacity of 512KB (kilobytes).

NOTE: The PCMCIA card does not require it to be formatted. The card uses a block memory device and does not have to be formatted or erased as it is overlaid with a block of data with a defined length. You will need ES&S proprietary software and hardware to write, modify and read the PCMCIA card.



- ❖ HPM is used to write the election definition onto the PCMCIA card.
- ❖ The M100 reads the election definition from the PCMCIA card, modifies the results and status area as ballots are tabulated and writes log entries as appropriate.
- ❖ ERM is used to read the results from the PCMCIA card



NOTE: Use PC cards with a memory capacity of 4MB or 6MB for early voting.



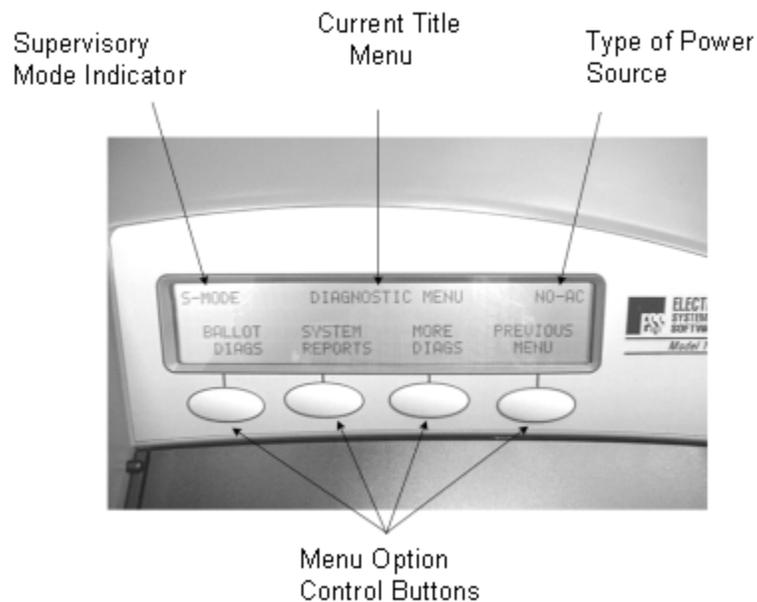
Tabulator Controls

The four external buttons below the Model 100 LCD message screen control all tabulator functions. Push the button below a menu option on the display screen to navigate Model 100 system menus.

Menu Display

The Model 100 display screen contains four message areas.

- ❖ The top-center line of text on the screen identifies the current menu.
- ❖ The message in the top left corner identifies the status of the tabulator. For example, "S-MODE" indicates that the operator has turned the tabulator control key to the OPEN/CLOSE POLL position and the Model 100 is in supervisor mode.
- ❖ The message on the top right of the screen displays the tabulator's battery status. The message "NO-AC" indicates that the tabulator is using battery power.
- ❖ The lower line of text identifies available menu options. Press the button below a command to select a menu option.



Operators access most menu options through a series of sequential steps, while other options are only available while the tabulator key is in the OPEN/CLOSE POLL position. The far right control button usually functions as a “Previous Menu” key that navigates backwards through Model 100 menus.



Refer to [Chapter 11: Understanding System Menus](#) for a list of menu commands and functions.

Operating Modes

The Model 100 operates in three separate modes. Operators open the tabulator in diagnostic mode to calibrate and test the tabulator. In polls open mode, the Model 100 actively scans ballots and tabulates results, and, in polls closed mode, the tabulator prints poll reports and transfers election results.

Diagnostic Testing Mode

Open the tabulator in diagnostic testing mode to load system firmware, calibrate the tabulator and test your election definition.

Election officials should load system programs and test Model 100 election definitions before delivering tabulators to polling places. Complete the following tasks to prepare a tabulator for an election:

1. Load the election definition into the tabulator.



Refer to the [Load the Election Definition](#) heading in [Chapter 5: Pre-Election Day Tasks](#).

2. Test the election definition and the tabulator to ensure accuracy.



Refer to the [Prepare the Tabulator](#) heading in [Chapter 5: Pre-Election Day Tasks](#) for more information on testing the tabulator.

3. If necessary, lock out system functions after testing the tabulator.



Refer to the [Prepare the Tabulator](#) heading in [Chapter 5: Pre-Election Day Tasks](#) for more information about locking down the system.



NOTE: Locking out system functions keeps protects the Model 100 from tampering but still allows access to election testing functions.

Polls Open Mode

Open the polls to begin regular Election Day functions such as scanning ballots and tabulating vote totals.

Poll workers should monitor the tabulator during an election, but the Model 100 requires minimal operator involvement during voting. The operator's main responsibility during voting is responding to system messages.

Polls Closed Mode

Close the polls at the assigned time to print reports or transfer tabulator totals to election headquarters. Available Model 100 reports include Status Reports, Poll Reports, Precinct Reports, Certification Reports and the Audit Log report. After the polls close, operators can also transfer results to a central site using the tabulator's modem.

Election Definition

Election coders program a custom election definition onto a PC card for each Model 100 used in your jurisdiction. An election definition contains all of the candidates, contests and ballot variations that the tabulator will process at the polling place. The election definition also contains customizable program options that control how the tabulator operates and reports results. Customizable options include (but are not limited to):

- ❖ Automatic Election Day results transferred by modem. Early voting results cannot be transferred by modem.
- ❖ Ability to re-open the polls
- ❖ Grouping of undervotes and overvotes on reports
- ❖ Automatic certification report printing when polls are closed
- ❖ Automatic results report printing when polls are closed
- ❖ Rejection, acceptance or query the voter when a tabulator detects an overvoted, cross-voted or blank ballot

Pre-Election Day Tasks

Use the equipment list and the procedures included in this chapter to prepare your Model 100 tabulator for a live election. Always perform routine maintenance on your voting equipment and test your ballot tabulators before you open the polls on Election Day.



Refer to [Chapter 6: Election Day Tasks](#) for instructions for opening and closing the polls, operating the tabulator during an election and printing or transferring results.

Recommended Supplies

ES&S recommends maintaining a supply of the following items for each Model 100 used in your jurisdiction. All of the listed items are available for order from ES&S. Contact ES&S customer service at (877) 377-8683 with any questions or orders. Allow four weeks for delivery.

Paper Spools

The printer uses NRC 2.25" by 165' thermal paper rolls. The NCR part number is 856704.

Recommended Quantity: 1 full roll per tabulator

PC Cards

Battery backed PC cards that store the tabulator's election definition and ballot count. The standard memory capacity for Model 100 PC cards for Election Day is 512k. The standard memory capacity for Model 100 PC cards for early voting is 4MB.

Recommended Quantity: 1 per tabulator

Marking Devices

ES&S recommends and supplies the Bic Round Stic (Black) medium point pen for voters to mark ballots. The Bic pen is the only marking device approved by ES&S for the use with the Model 100.

Pressurized Air Cans

Use pressurized air to clean the tabulator.

Recommended Quantity: 2 cans per tabulator

Assemble the Ballot Box

ES&S delivers each Model 100 tabulator with either a nested ballot box (made of hard plastic) or a metal box. The metal ballot box does not require assembly. If your jurisdiction uses metal boxes, skip to the [Attach the Model 100 to the Ballot Box](#) heading of this chapter.

Use the instructions in the following paragraphs to prepare ballot boxes at your polling places if your jurisdiction uses nested ballot boxes.

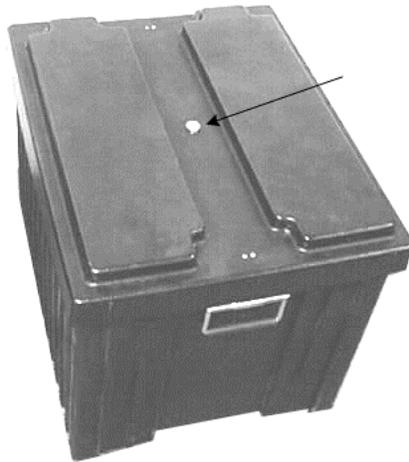
Assemble the Nested Ballot Box

ES&S delivers the nested ballot box and tabulator in two containers. A carrying case that holds the tabulator and power cord and a cube that assembles into the ballot box. Keys for the tabulator and ballot box accompany the equipment. Completely assemble the ballot box before you mount the tabulator.

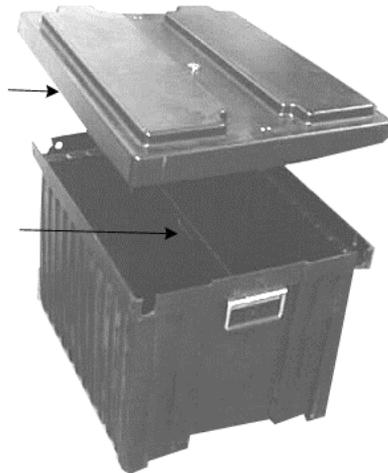


NOTE: Although the ballot box can be assembled by only one person, ES&S recommends a second poll worker assist with separating the top half of the box from the bottom half and with attaching the two halves during assembly.

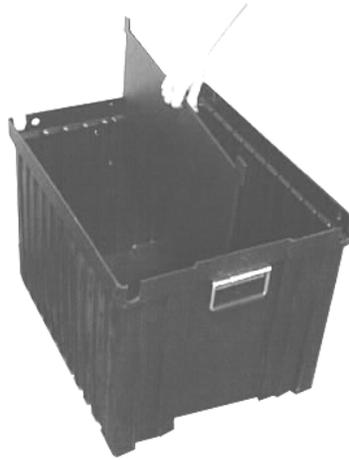
1. Unlock the cover of the ballot box with the key provided (one key fits the lock for all nested boxes).



2. Lift the box cover straight up and off the box and then set the cover aside.



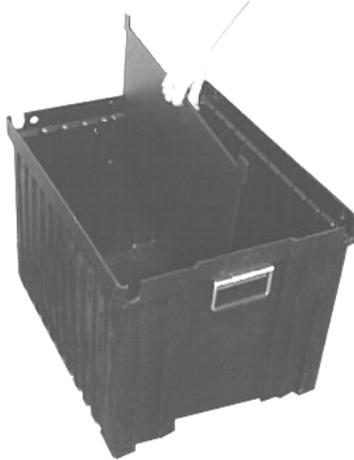
3. Remove the divider, which looks like a flat piece of plastic with a cutout handle, from inside the box and set the divider aside.



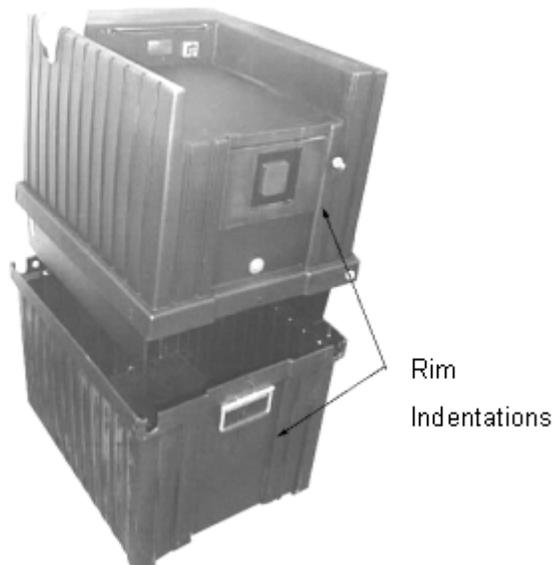
4. Swing the two handles up from inside the ballot box. Pull up on the handles until the top section of the box separates from the bottom section and then set the top section to the side.



5. Align the edges of the divider with the vertical grooves inside the bottom section of the box. Insert the divider until it locks into the tab at the bottom of the box.



6. Flip the top section of the box upside down so that the swinging handles hang down. Position the top section of the box over the bottom section. Make sure that the indentations on the front of both boxes face the same direction.



7. Lower the top section of the box until it fits inside the bottom. The handles on the top section should fit snugly inside of the bottom section. Use your ballot box key to lock the two locks on the front and the back of the box.
8. Slide the latch on the top section of the ballot box through the hole in the side of the bottom section.

Attach the Model 100 to the Ballot Box

The metal box and nested box are equipped with different types of tabulator access doors. Other than the access door, the process for mounting the tabulator to either ballot box is the same.

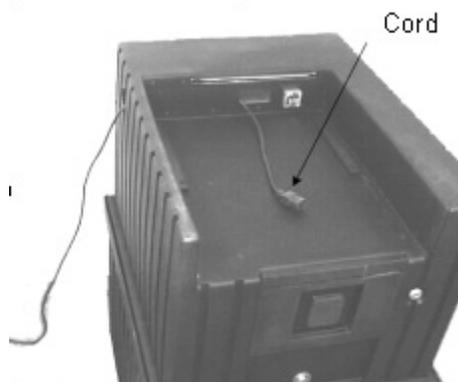
Set Up the Power Cord

1. Before you mount your tabulator to the top of a ballot box, inspect the power cord for damage.



Warning: If the cord appears damaged, discard it and contact ES&S for a new cord.

2. Insert the female end of the cord through the opening on the outer left side of the ballot box.
3. Thread the cord through the outside opening on the back of the box until the cord appears on the inside of the opening at the top recessed area.



4. Pull the cord through the opening until it extends a few inches into the recessed area of the ballot box. Then, remove the tabulator from the carrying case.
5. Place the tabulator about one-third of the way into the recessed area and slide it onto the mounting rails until it sits about four or five inches from the back of the recessed area.

Mounting
Rails

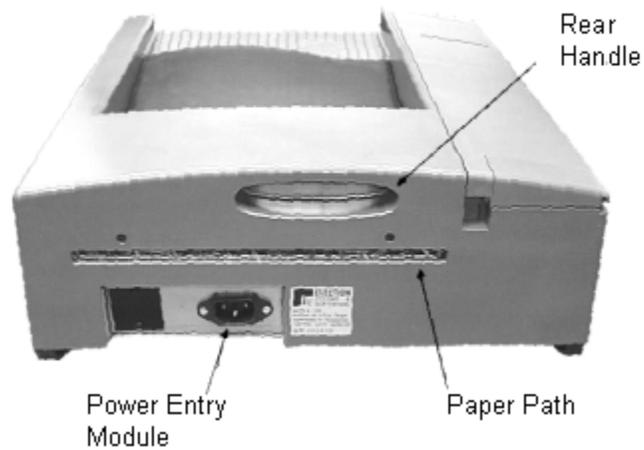


Warning: Only plug the Model 100 tabulator into a grounded, three-pronged electrical outlet. Plug only one tabulator into each available outlet. ES&S does not recommend using an extension cord.

6. Plug the female end of the power cord into the Power Entry Module on the back of the tabulator and then plug the male end of the cord into a wall outlet. Arrange your voting equipment to make sure that no one trips on the cord or accidentally unplugs the tabulator on Election Day.



NOTE: The message, “NO-AC,” appears on the tabulator’s display screen if the tabulator is not receiving power through the power cord. Check your connections and the wall outlet if this message appears on your tabulator’s display screen.



Attach the Tabulator to the Ballot Box



NOTE: The front access door on the nested ballot box slides up and down, while the door on the metal box is a hinged panel. Both doors lock to limit access to the tabulator's PC card. See [M100 Security Locks and Seals](#) for more information on locks and seals.

1. Swing the Front Hinged Door downward. Ensure that the Ballot Exit Flap is unlocked and up to prevent ballot jams.
2. Slide the tabulator against the back of the ballot box. Make sure the diverter connector at the back of the tabulator locks into the slot on the ballot box.
3. Lock the M100 into place then lift the Front Hinged Door

Metal Ballot Box



Nested Ballot Box



4. If you use a nested ballot box, align the bottom arrow on the door with the center of the lock and lock the door into place.

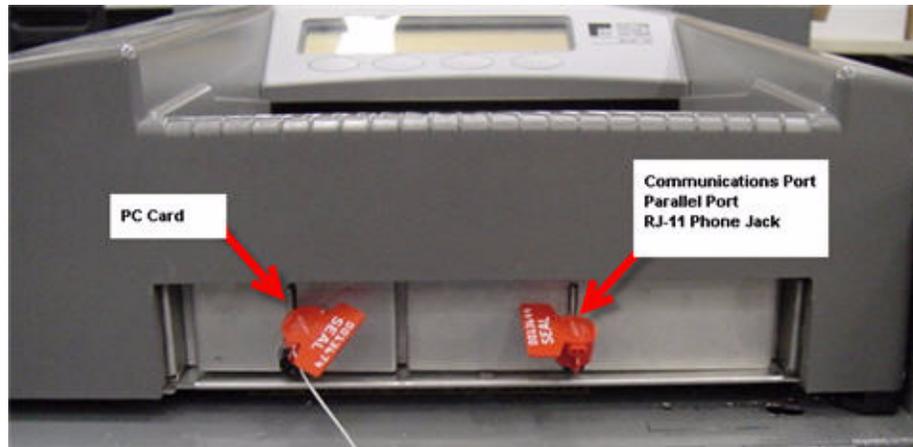
OR

If you use a metal ballot box, align the hole in the access door with the bracket on the box and lock the hinged panel into place. Test the door to make sure the lock properly engages.

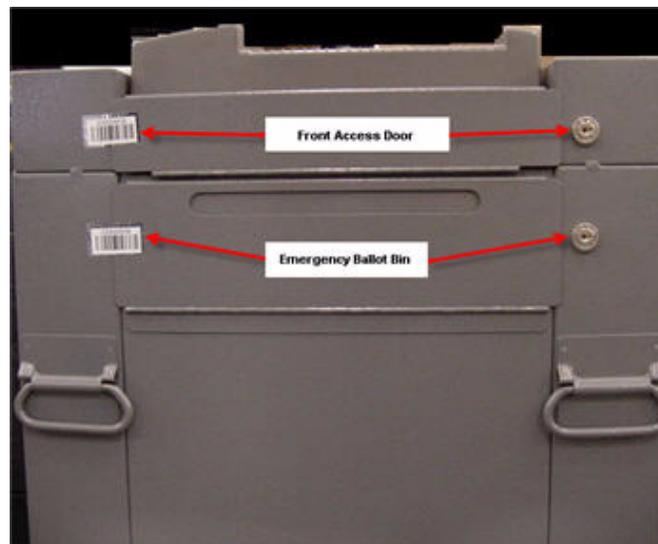
5. Insert the tabulator key into the control panel turn it to OPEN/CLOSE POLL position to start the Model 100 and generate an Initial State Report.

M100 Security Locks and Seals

There are a variety of security methods than can be used for the M100.



After you have inserted the PC Card the front of the M100 must be secured to prevent access to the PC Card slot. Place a seal as shown through the latch and secure tightly. A lock or seal must be placed to prevent access to the additional external ports.



Close and lock the access door. Then place a tamper evident seal on the front access door. The emergency ballot bin must also be locked and sealed until it is needed. Please see the [Uncounted Ballots](#) section for further information.



A tamper evident seal must be placed on the Key Access Panel after the M100 has been opened for voting and the key removed.



The side doors of the ballot box must be locked and a tamper evident seal placed on it.

Prepare the Tabulator

After you mount the tabulator to the ballot box, there are a number of tasks that you must complete before you open the polls. Because the proper operation of the counter depends on performing the following tasks, it is important to carefully review this section before every election.

Check the Battery Charge

The Model 100 uses a backup battery to ensure that tabulator operations continue without interruption during a power failure. Plug the tabulator in and turn the power on for twelve hours to fully charge the battery. If you charge multiple Model 100 precinct counters, do not connect more than 40 tabulators per 15-amp circuit.

1. Turn the tabulator key to the OPEN/CLOSE POLL position to power up the tabulator and open the **DIAGNOSTIC-TEST** menu. Select **DIAGS** to open the DIAGS menu and select **MORE DIAGS**.
2. From the **MORE DIAGS** menu, select **BATTERY STATUS** to check your tabulator's battery charge.



Refer to the [Battery Maintenance](#) heading in [Chapter 8: Maintain the Tabulator](#) for more information about the battery.

Load the Election Definition

Model 100 precinct tabulators use election definitions programmed on PC cards to recognize ballot marks and tabulate results. Make sure the tabulator key is in the OFF position when you load an Election Definition.

1. Lift the access door on the front left of the tabulator to access the Model 100 PC card slots. Insert the card programmed with your election definition into either card slot.
2. Turn the key to the OPEN/CLOSE POLL position to start the tabulator. The Model 100 automatically loads the election definition and prints an initial state report. The **S-MODE** prompt should appear in the upper left corner of the Model 100 display screen.



NOTE: An arrow on the PC card label shows which end of the card you should insert into the tabulator. After the card is inserted, the eject button to the right of the card slot sticks out. Install the card in either the top or the bottom slot. If one slot does not accept the card, try the other. Do not force the card into a slot.

Check the Election Definition for Accuracy

The Model 100 automatically generates an Initial State report when you start the tabulator. Check the report for the following information:

- ❖ **System Values:** Make sure the date and the time appear correctly on the report. If the information is not correct, change date and time from the **DIAGNOSTIC-TEST** menu.



Refer to the [Change Date and Time Settings](#) heading in this chapter for more information about changing the date and time settings for the tabulator.

- ❖ **Election Information:** Make sure that the jurisdiction name, polling place, and the number of precincts listed on the report are correct.

Diagnostic-Test Menu

After you insert an election definition and start the tabulator, the message, “ELECTION CARD INSERTED, OPEN POLLS NOW?” appears on the display screen. Press the first and third buttons on the control panel to access the tabulator’s diagnostic test options.



Press both buttons at once to select the Diagnostic -Test menu

Access the following menus from the **DIAGNOSTIC-TEST** menu:

- ❖ **DIAGS:** Select **DIAGS** to open the **DIAGNOSTIC** menu. Select **MORE DIAGS** to access the **BATTERY STATUS** and **PEB SETUP** options and check the charge for the backup batter.

Only ES&S technicians should select the **MOTOR CONTROL**, **BALLOT DIAGS** and **SYSTEM REPORTS** commands.

- ❖ **SYSTEM SETTINGS:** Access the **SYSTEM SETTINGS** and select **THRHLDS** to perform system tests such as the multi-sheet test



Refer to the [Test the Multi-Sheet Sensor](#) heading in this chapter for information about how to perform the multi-sheet test.

Select **DATE TIME** to change the tabulators date and time settings



Refer to the [Change Date and Time Settings](#) heading in this chapter for information about how to change the date and time.

Only ES&S technicians should select **CALIBRATE DACS**.

- ❖ **ELECTION TEST:** Select the **ELECTION TEST** menu to test your tabulator and election definition.



Refer to the [Test the Election Definition](#) heading in this chapter for information about testing your tabulator.



NOTE: The Model 100 does not allow you to open the tabulator for voting unless you install a PC card programmed with an election definition. If you start the Model 100, without installing a PC card first, only the diagnostics menu will be accessible.



Refer to [Chapter 11: Understanding System Menus](#) for a description of the menu options available without an election definition.

Change Date and Time Settings

Daylight savings or a power failure can throw off Model 100 date and time settings. Use the **DATE/TIME** option from the **SYSTEM SETTINGS** menu to reset the tabulator's date and time settings.

1. Access the **SYSTEM SETTINGS** menu from the **DIAGNOSTIC-TEST** menu and select **DATE TIME**.
2. Select **SET DATE** or **SET TIME**, depending on which setting you want to change.
3. In either mode, press **SELECT** to scroll through number positions and then select **PLUS** or **MINUS** to increase or decrease the values.



NOTE: The **SET ZONE** option is the time zone setting based on Greenwich Mean Time. The **DAYLIGHT SAVINGS** option sets the date that the internal clock automatically changes for daylight savings. ES&S sets the **TIME ZONE** and **DAYLIGHT SAVINGS** options before shipping the tabulator, and you should not adjust them.

4. After you correct the tabulator's date and time settings, select **PREVIOUS MENU** twice to return to the **DIAGNOSTIC-TEST** menu. The message, "LOCK OUT SYSTEM SETTINGS?" appears.
5. Select **YES** to remove the **SYSTEM SETTINGS** option from the **DIAGNOSTIC-TEST** menu. Select **NO** to retain access to the tabulator's system settings. If you lock out the tabulator's system settings, the option will not be available unless you install new election definition PC card into the tabulator.

Connect the Internal Modem

If your Model 100 tabulator is equipped with an internal modem, use the telephone cord that came with your tabulator to connect the Model 100 to a telephone jack.

1. Connect one end of the telephone line to the RJ-11 telephone jack behind the front, right access door on the tabulator.
2. Connect the other end of the telephone line to a telephone jack at the polling place.

Test the Election Definition

Test the election definition for each of your tabulators before you deliver Model 100s to your polling places. To test a Model 100 election definition, scan the ballot test deck supplied by ES&S with your election definition PC card and compare the results to the test reports supplied by ES&S.

Test the tabulator only after you install the election definition and configure the Model 100. If your jurisdiction programs its own election definitions, create a test deck that includes at least one ballot for each precinct enabled for your tabulator and maintain accurate records of your test ballot selections. After you scan the test ballots, generate a results report and compare the tabulator report to your ballot records. If the results do not match, make sure that the marks on your test ballots are dark and clean and then scan the test ballots again.



NOTE: The following ballot test is not accurate if you modify the **TARGET COUNT** setting from the **AUTOREAD SETTINGS** menu.

Scan a Ballot Test Deck

1. Start the tabulator and access the **DIAGNOSTIC-TEST** menu, select **ELECTION TEST** to open the **ELECTION TEST** menu.
2. From the **ELECTION TEST** menu, select **TEST BALLOT** to open the **BALLOT TEST** menu.

3. From the **BALLOT TEST** menu, select **FEED BALLOTS** to open the **ELECTION TEST INSERT BALLOT** menu.
4. Insert test ballots into your tabulator one at a time. The public counter on the Model 100 message display screen should increase by one for each ballot the tabulator processes. The Model 100 can scan ballots inserted in any orientation.



NOTE: If you programmed the Model 100 to tabulate ballots for multiple precincts, you must enable the additional precincts before scanning your ballots.



Refer to the [Enable Multiple Precincts for Testing](#) heading in this chapter for more information about scanning ballots for multiple precincts.

Print Ballot Test Reports

1. After you finish scanning test ballots, select **PREVIOUS** to open the **BALLOT TEST** menu. From the **BALLOT TEST** menu, select **PREVIOUS MENU** to return to the **ELECTION TEST** menu.
2. From the **ELECTION TEST** menu, select **REPORTS** to open the **ELECTION REPORTS** menu.
3. From the **ELECTION REPORTS** menu, select **REPORTS** to open the **PRINT REPORTS** menu.
4. From the **PRINT REPORTS** menu, access the following reports to view test results for your tabulator:
 - Select **STATUS REPORT** to generate a report that includes the number of ballots processed by your tabulator. Verify that the number of ballots counted matches the number of ballots in your test deck.
 - Select **PRECINCT REPORT** or **POLL REPORT** to generate test results reports. Compare the tabulator reports to your test ballot records to make sure that the totals match.
5. Verify your results and then select **PREVIOUS MENU** three times to exit the **ELECTION TEST** menu. The third time you select **PREVIOUS MENU** the message “Clear Election Test Results and Leave Election Test Menu?” appears. Select **YES** to clear test results and return to the **DIAGNOSTIC TEST** menu. If your tabulator results and test records do not match, review your test ballots for errors and repeat the test.

Election Day Tasks

This chapter contains instructions for the following Election Day tasks:

- ❖ [Open the Polls](#)
- ❖ [Scan Ballots](#)
- ❖ [Close the Polls](#)
- ❖ [Reopen the Polls](#)
- ❖ [Uncounted Ballots](#)
- ❖ [Print Election Reports](#)
- ❖ [Transfer Results](#)

Open the Polls

Before your polling location opens for voting, retest and check the system configuration for each of your tabulators.



Refer to [Chapter 5: Pre-Election Day Tasks](#) for more information about testing and configuring tabulators.



See [M100 Security Locks and Seals](#) for more information about securing the tabulator and ballot box.

After you test and configure your tabulators, load the PC cards with the tabulator election definitions and turn the Model 100 control key to the OPEN/CLOSE POLL position on each tabulator at the polling location. Then, use the instructions in this section to prepare the tabulators for voting.

1. Turn the control key to the **OPEN/CLOSE POLL** position. The Initial State Report will print.



NOTE: The Machine ID listed on the Initial State Report represents the motherboard ID and is not related to the serial number on the back of the M100. The poll worker should record the M100 serial number on the Initial State Report or maintain a separate equipment log that associates the Machine ID to the M100 serial number.

2. After you start the tabulator with the control key, the system initializes and the message “ELECTION CARD INSERTED: OPEN POLLS NOW?” appears. Select **YES** to open the polls
3. After you open the polls, the message “PLEASE TURN KEY/SWITCH TO VOTE” appears on the tabulator display screen. Turn the key to the VOTE position to initialize the following tabulator functions:
 - The tabulator checks available memory and scans election definition for errors.
 - Depending on options set for your election definition, the Model 100 prints a Status Report, a Zero Totals Report and/or a Zero Certification Report on activation. Select **CANCEL** at any time during printing to cancel the current report and all following reports.



Important: If you are using the Model 100 for early voting, you will receive the following message when you turn the key to the VOTE position when you open the poll: Which zero report do you wish to print?

- Select **Totals Only** to print a summary report that will only contain the grand totals.
- Select **All Precincts** to print a summary precinct-by-precinct breakdown report.



Caution: Depending on the number of precincts in your district, it may take several hours to print the **All Precincts** report.

4. After the Model 100 finishes printing the startup reports, make sure the tabulator key is in the VOTE position, and then remove the key and close the access panel.

5. After you remove the key, you can open the tabulator for live voting. Make sure that the public counter on the Model 100 display screen increases by one with each ballot cast but do not make any further adjustments to the tabulator unless a system message appears.

If you need to review a tabulator's function history, you can print a system audit report at any time while the polls are open. Take the following steps to print an audit report.

1. Open the tabulator's access panel.
2. Insert the control key and turn the key to the OPEN/CLOSE POLL position.
3. Select **AUDIT LOG REPORT** from the tabulator control panel to print the report.

You can cancel the report at any time by pressing **CANCEL**.

4. After you finish printing, turn the key to the **VOTE** position and close the key access panel to re-open the tabulator for voting.

Scan Ballots

The Model 100 can scan ballots inserted in any direction or orientation. Depending the options set for your election definition, the Model 100 will use one of the following methods for accepting or rejecting blank ballots, overvotes, and crossover votes:

- ❖ **Unconditional acceptance:** The tabulator accepts and tabulates results for all ballots. The tabulator automatically sorts questioned ballots without storing results from those ballots. While scanning the ballot, the message PROCESSING BALLOT - PLEASE WAIT... will appear. Once the ballot is scanned, the message THANK YOU FOR VOTING appears. Then the message INSERT BALLOT - NUMBER OF VOTERS: appears.
- ❖ **Unconditional rejection:** The Model 100 automatically rejects crossover, overvoted or blank ballots. Voters must review and correct ballot selections before the tabulator will accept the ballot.

- ❖ **Query the voter for correction:** The Model 100 returns a questioned ballot to the voter and displays a screen message that describes the problem and prompts the voter to either review and edit the ballot or cast the ballot as it is. The voter presses **RETURN BALLOT** to correct the ballot or presses **COUNT AS MARKED** to cast the ballot without editing selections. Once **COUNT AS MARKED** is pressed, the message PROCESSING BALLOT - PLEASE WAIT... will appear. Once the ballot is scanned, the message THANK YOU FOR VOTING appears. Then the message INSERT BALLOT - NUMBER OF VOTERS: appears.

Poll workers should closely monitor system messages during voting.



Refer to [Chapter 10: Understanding System Messages](#) for descriptions of system messages and recommended actions.



Contact election headquarters or ES&S technical support if you encounter a problem that you cannot correct.

Close the Polls

Close your polling place for voting at the assigned time and then, use the Model 100 control key to prepare tabulator results for processing. You cannot print reports, transfer results or process vote totals from the tabulator's PC card until you properly close the polls.

You can print election, event, and audit log reports after you close the tabulator for voting. You can also transfer results to combine your tabulator totals with the final vote tallies from other polling places at a central counting location.

If you are using iVotronic terminals with Model 100s, connect the PEB reader to the Model 100 when you are ready to close polls.



Refer to the [Enable or disable the PEB reader](#) heading in [Chapter 13: Combining Model 100 and iVotronic Results at the Precinct](#) for more information about connecting the PEB reader to the Model 100.

1. Check the ballot auxiliary bin for sorted, uncounted ballots.

Study your jurisdiction's procedures for handling uncounted ballots before Election Day.



Refer to the [Uncounted Ballots](#) heading in this chapter for information about removing and processing sorted ballots.

2. Open the Model 100 Key Access Panel, insert your control key and turn the key to the OPEN/CLOSE POLL position to access the **CLOSE POLLS** command.
3. Press **CLOSE POLLS** to officially close the polls. Depending on your election configuration, the tabulator may automatically print one or more of the following reports: Status report, Race Results report, Certification report and/or Audit Log report. Select **CANCEL** to stop printing a report at any time. The **POLLS CLOSED** menu appears after the tabulator finishes printing.



NOTE: If you configured the Model 100 election definition to automatically transmit results over a network connection to a central PC, the data transfer begins at this time.

An early voting station will not be able to use a modem to transmit totals.

4. To print additional Audit Log Reports, select **AUDIT – LOG REPORT** from the tabulator control panel. Select **CANCEL** to stop printing at any time.
5. From the **POLLS CLOSED** menu, select **SEND RESULTS** to manually transmit election results over a network connection. After the Model 100 attempts to send results, the tabulator displays a message that indicates whether data transfer was successful. If the transfer fails, the Model 100 automatically attempts to send results again. Deliver the PC card to election headquarters if the transfer fails.



Refer to the [Transfer Results](#) heading in this chapter for more information about transferring Model 100 results.

Reopen the Polls

If you discover voted ballots mistakenly left in voting booths after the polls close or, if you must close the tabulator for voting before the assigned time, you can reopen the Model 100 to scan uncounted ballots.



NOTE: Some jurisdictions do not allow reopening of the polls after the assigned closing time. Your jurisdiction must specifically request the option to reopen the polls from ES&S election programmers or include the option on the election definition PC card in order to reopen polls.

1. Turn the tabulator control key to the OPEN/CLOSE POLL position to access the **POLLS CLOSED** menu. Select **MORE** to open the **MORE SELECTIONS** menu. From the **MORE SELECTIONS** menu, press **RE-OPEN POLLS**, to open a password selection screen.
2. Contact your election administrator or ES&S customer support for the tabulator password. Press the outside-left button on the control panel to cycle through the numeral positions. Use inside-left button to increase the selected number and inside-right button to decrease the number.
3. Press the button labeled **ENTER** after you input the password. The message, “CLEAR ELECTION DAY TOTALS,” appears if your password is correct. Select **YES** to clear tabulator totals or **NO** to add the totals from any scanned ballots to the stored results.



NOTE: Do not select **YES** under the “CLEAR ELECTION DAY TOTALS” heading unless you want to erase *all* vote totals from tabulator memory. If you accidentally press **YES**, you must rescan all of the ballots cast on the tabulator.

4. The message, “ELECTION CARD INSERTED, OPEN POLLS NOW?” appears after you clear or retain tabulator results. Simultaneously press the first and third buttons on the control panel to access the **DIAGNOSTIC-TEST** menu from this screen. Select **YES** and then turn the key back to the **VOTE** position to re-open the polls.

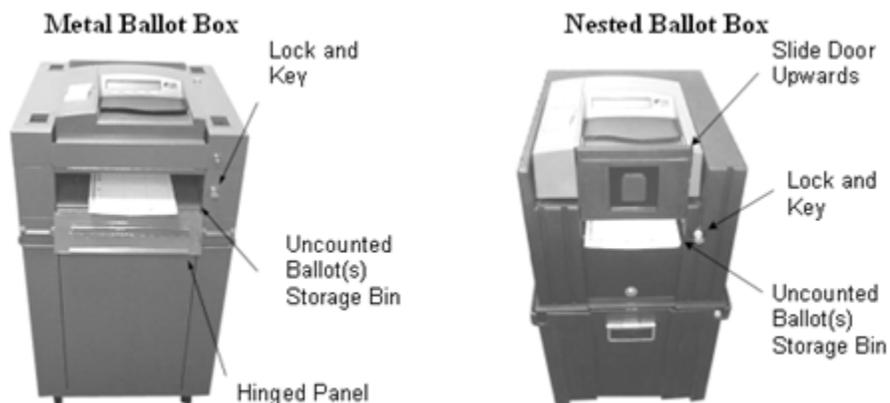
Uncounted Ballots

Save any ballots that were uncounted during voting due to, sorting, power failure or tabulator problems in the temporary ballot storage bin. After you close the polls, remove and scan the uncounted ballots to add the totals to your tabulator's memory. Study your jurisdiction's regulations for handling uncounted ballots before you remove and scan stored ballots.

If your jurisdiction uses metal ballot boxes, unlock the ballot access panel on the left side of the ballot box to remove stored write-in ballots.

Access the Emergency Ballot Storage Bin

1. Unlock the sliding door on the front of the nested ballot box or the bottom door on the front of the metal ballot box.
2. If you use the nested ballot box, slide the bin door upward and away from the storage bin to access your uncounted ballots. If you use the metal ballot box, swing the hinged door on the front of the box down to access the uncounted ballot storage bin.



3. Inspect the uncounted ballots and then feed them into the tabulator.



NOTE: Double-check the back of the bin to make sure that no ballots remain uncounted.

Print Election Reports

The Model 100 generates a variety of results reports after the polls close. Depending on the options configured for your election definition, the tabulator may automatically print reports when you close the polls or you can manually select reports from the **POLLS CLOSED** menu.

1. Close the polls to access the **POLLS CLOSED** menu and select **RESULTS REPORT** to reprint any automatic reports generated by the polls closed. The types of reports generated depend on your election definition settings.
2. To print additional reports, return to the **POLLS CLOSED** menu and select **MORE** to access additional commands. Press **MORE REPORTS** to access additional report formats.



NOTE: You can configure your election definition to require a password to access the report menus.

3. Select **CHANGE TYPE** to toggle between Media and Summary report formats.



Refer to [Chapter 9: Reports](#) for descriptions and examples media and summary reports.

4. From the **REPORT SELECTION** menu, select a report to begin printing. Press **CANCEL** to stop printing at any time.



Refer to [Chapter 9: Reports](#) for descriptions and examples of each Model 100 report.

Transfer Results

If your jurisdiction uses Election Reporting Manager to generate election reports, transfer results from your precinct counters to the PC running the reporting software.

Disassemble and Pack the Ballot Box

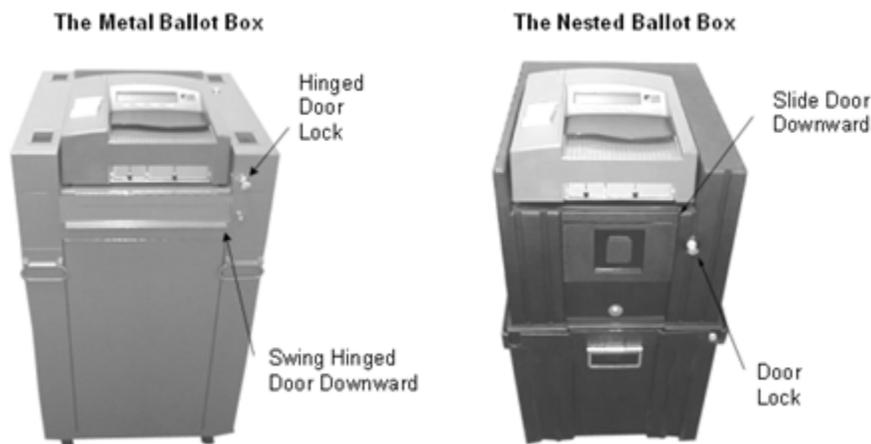
Carefully pack the tabulator and ballot box for storage. Disassemble the Nested Ballot Box after you remove uncounted ballots from the ballot storage bin. The Metal Ballot Box requires no disassembly.

Remove the Tabulator from the Ballot Box

1. If you use the nested box, unlock the small sliding door on the front ballot box and slide the door down until it no longer covers the front of the tabulator.

OR

If you use the metal box, unlock the top hinged panel on the front of the ballot box and swing it down to expose the front of the tabulator.



2. Turn the tabulator control key to the **OFF** position, remove the key, and give it to the Election Administrator.



NOTE: Close the Key Access Panel and Printer Access Panel before you continue.

3. Pull the tabulator forward about four to five inches and disconnect the power cord from the back of the terminal. Thread the cord through the back of the ballot box and unplug it from the wall outlet.

4. Slide the tabulator forward until it clears the mounting rails and remove the tabulator from the ballot box.

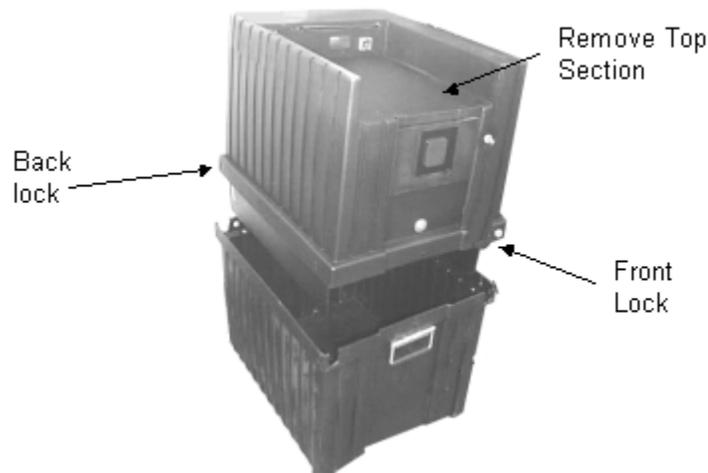


NOTE: Lock and secure all of the ballot box doors before you place the metal box in storage.

5. Place the tabulator and its power cord into the tabulator carrying case.

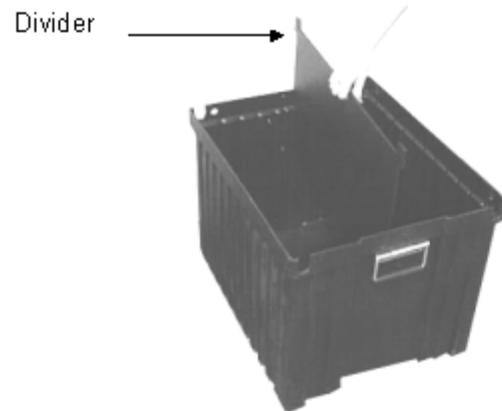
Dismantle the Nested Ballot Box

1. Unlock the front and back locks that secure the two halves of the ballot box. Then, remove the top section of the box and set it aside.

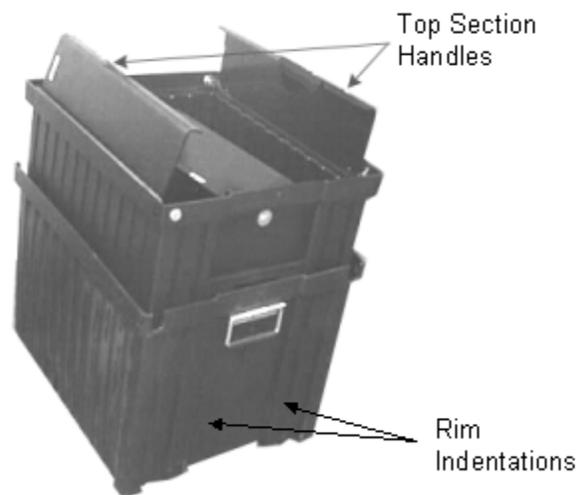


2. A plastic divider separates write-in ballots from the rest of the stored ballots in the box. The Model 100 diverts write-in ballots to the right side of the box and sends regular ballots to the left side. Keep the write-in ballots separated and remove all of the ballots from the box.
3. Pack the regular and write-in ballots into separate, secure cases and transport them to your election headquarters.

4. Remove the plastic divider from inside the box.



5. Turn the top section of the box so that the tabulator compartment rests on the floor.
6. Lift the top section and align the indentations on the front of the top and bottom of the ballot boxes.



7. Lower the top half of the box into the bottom half.

Clean the Ballot Box

Clean your Model 100 ballot boxes either before or after each election. You must disassemble the nested box for cleaning. The metal box requires no disassembly.

1. If you use the nested ballot box, separate the box into its two halves.



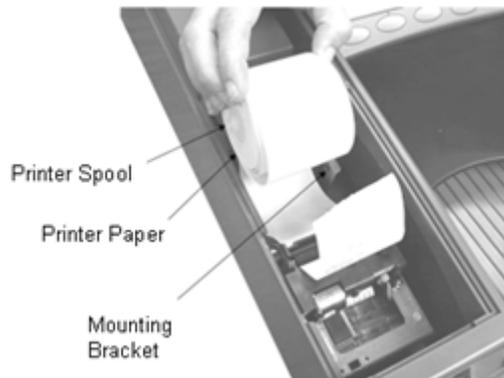
Refer to [Chapter 7: Disassemble and Pack the Ballot Box](#) for instructions for disassembling the nested ballot box.

2. Use a cloth dampened with cleaning solution to clear dust and debris from the ballot box.



Refer to the [Clean the Tabulator](#) heading in this chapter for mixing the cleaning solution.

3. Remove the divider from the lower ballot bin before you clean the bottom section of the ballot box.
4. Clean the inside of the bin first and then the outside. Wipe down the interior ballot divider and the box cover. Remember to periodically rinse the cleaning cloth.



2. Remove the white plastic paper spool from the center of the empty paper roll and insert it into a new roll.
3. Press out on the paper mounting brackets and insert the new roll into the printer.



4. Manually feed the paper or select **PAPER FEED** from the **ELECTION TEST** menu to position the printer paper.

Advance the Paper

Use the following instructions to place blank space on the paper between reports or to advance the paper if the printer jams.

1. From the **DIAGNOSTIC-TEST** menu, select **ELECTION TEST**.
2. Select **REPORTS** in the **ELECTION TEST** menu.
3. Select **PAPER FEED** to advance the printer paper.

OR

1. From the **POLLS CLOSED** menu, select **MORE**.
2. Press **PAPER FEED** to advance the printer paper.

Battery Maintenance

The Model 100 uses a 12-volt, 7-amp lead acid battery to power the tabulator in case of an electrical power failure. Depending on the age of your tabulator, the battery is either an *Exide NP7-12* or *Powersonic PS-1270*. A fully charged battery can power an “active” tabulator for up to one hour and an “idle” tabulator for up to three hours. The machine is “active” when counting ballots or printing reports. Estimated battery life is five years.

To check the charge for your backup battery, open the **DIAGNOSTIC-TEST** menu and select **DIAGS**, then **MORE DIAGS**, and then select **BATTERY STATUS**. Refer to the following instructions for more information.

Battery Cautions



Important: You can use the backup battery under normal operating conditions, in any orientation without danger of leaking. Removing the battery from the tabulator exposes it to risks that are not present under normal operating conditions.



Warning: Shorting the battery terminals together is especially hazardous even if the battery is “discharged” or “dead.” Shorting the terminals can create sparks, melt wires, and possibly start a fire. Use extreme caution when handling the backup battery.



NOTE: The Model 100 battery may be recycled. Please dispose of the battery properly.

Troubleshooting

Use the following procedures if there is a power outage or tabulator failure.

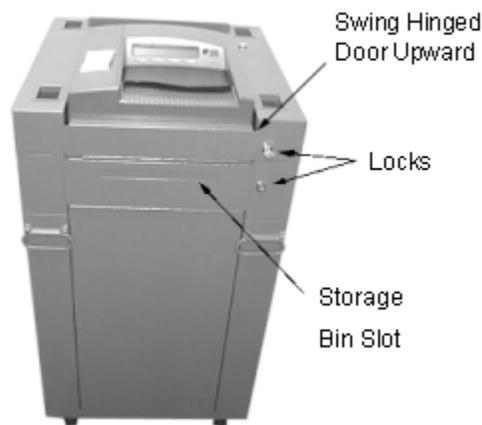
Using the Temporary Ballot Storage Bin

If the Model 100 fails during an election, use the following procedure to store ballots in the temporary bin until you can repair or replace the tabulator.

To store ballots in the temporary bin

1. Unlock the sliding door on the front panel of the ballot box.
2. If your jurisdiction uses nested ballot boxes, slide the door down until it no longer holds the tabulator in place. Lock the sliding door open.
3. If your jurisdiction uses metal ballot boxes, open the door to the emergency bin and lock the top hinged panel on the front of the ballot box in the raised position. Open the lower hinged panel and rotate the inside cover on the lower hinged panel to gain access to the storage bin slot. Swing the panel back up and lock in place.

The Metal Ballot Box



The Nested Ballot Box



4. Voters may now insert ballots into the newly exposed slot for temporary storage. Store uncounted ballots in the emergency bin until you can repair or replace the tabulator.