

# **Opteva® 760 ATM Operating Guide**

**TP-820720-001G PD 5191**

**July 2016**

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<b>Document Number</b>	<b>Date</b>	<b>Remarks</b>
TP-820720-001A	3/2003	Original Edition
TP-820720-001B	12/2003	<p>Section 2.1.1: added small-format keypad and alphanumeric keyboard information in Consumer Keyboard and Keypads section</p> <p>Figure 2-1: added new card reader position</p> <p>Figure 2-1 and Figure 2-2: added alphanumeric keyboard, small-format keypad and new headphone jack information</p> <p>Section 2.2.1: added graphical printer information</p> <p>Section 2.2.2: added caution on using internal AC outlets and updated Figure 2-21</p> <p>Table A-1: updated manual information</p>
TP-820720-001C	4/2005	<p>Figure 2-1, Figure 2-2, Figure 2-4, and Figure 2-5: added graphical printer information</p> <p>Figure 2-1, Figure 2-2, Figure 2-3, Figure 2-4, and Figure 2-8: added fifth-generation intelligent depositary information</p> <p>Appendix A: updated document information</p>
TP-820720-001D	9/2007	Added Appendix B and general update
TP-820720-001E	4/2008	<p>Section 2.2.1: Added intelligent depositary module bulk document (IDM-BD) and bulk note acceptor information</p> <p>Section 2.2.2: updated with terminal power push button</p> <p>Section 2.3.4: updated with free-fall cassette</p> <p>Added Section 2.3.6, Opteva stacking cassette module (OSC)</p>
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TP-820720-001G	7/2016	Section 2.2, Figure 2-1, Figure 2-12, and Appendix A: updated passbook printer information

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## **Section 1**

### **Introduction**

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The Opteva® 760 ATM is a full service, walk-up, through-the-wall ATM. Consumers can deposit cash and receive dispensed cash and transaction records through openings in the fascia. You replenish supplies from the rear of the ATM and perform maintenance on the ATM from both the front and rear.

#### **1.1 Before Performing Maintenance on the Opteva 760 ATM**

Before performing the maintenance procedures in this manual, you should be familiar with the following information:

- The features and equipment on your Opteva 760 ATM
- The maintenance option your institution has selected for its ATM(s)

#### **Standard and Optional Equipment**

Depending upon your institution's needs, your Opteva 760 ATM may or may not have all the features described in this manual. For specific information about standard and optional equipment, refer to the documents listed in Appendix A.

#### **Maintenance Options**

Your institution may select one of several maintenance options. Before performing any maintenance procedures on the Opteva 760 ATM you should determine which option your institution has selected. Your ATM manager or supervisor can provide this information.

#### **1.2 Maintenance Tasks**

ATM maintenance includes those tasks required to keep the ATM operational on a day-to-day basis. Maintenance tasks include, but are not limited to, the following:

- Retrieving jammed, retained or captured cards from the card reader.
- Replenishing printer paper, clearing paper jams and replacing printer cartridges.
- Removing jammed cash from cash dispensing or accepting modules.

## 1.3 Using this Manual

This manual provides the following maintenance information for the Opteva 760 ATM:

- A description of Opteva 760 ATM devices (Section 2)
- Upper chassis and safe maintenance (Section 3)
- Related documentation (Appendix A).
- Accepted methods of cleaning the exterior of the terminal (Appendix B)

## 1.4 Observing Safety Precautions

### General Safety Precautions

**Strictly** observe the following safety precautions when performing maintenance on the ATM. By following these precautions, you can reduce the risk of equipment damage, severe personal injury, or death.



*You must observe the following precautions when performing maintenance on the ATM to avoid risk of death, severe personal injury, or equipment damage:*

- *Do not wear loose clothing or jewelry that can become caught in the equipment.*
- *Use caution to prevent long hair from getting caught in the equipment.*
- *Never insert screwdrivers, pens, or other instruments into any ATM module or device (unless you are expressly instructed to do so in this document). Severe bodily injury, death from electrical shock, or equipment damage can result.*
- *Always turn off the ATM before removing or installing modules.*

### Warning and Caution Labels

The ATM might have any of the warning or caution labels shown below. ***Strictly*** observe the following safety concerns to reduce the risk of severe personal injury, or death.

Label	Definition	Safety Concern
	Electrical shock hazard	An electrical shock hazard exists in the area of the label. Do not remove covers. Remove power before servicing.
	Warning or danger	A personal injury can occur. Look for nearby warning label (electrical shock, pinch point, moving machinery, high temperature hazard) or refer to the module or ATM operating guide for the specific hazard.
	Pinch point	An area that can pinch (or cut) you exists in the area of this label. Keep your hands and fingers clear of pinch points.
	Moving machinery hazard	Moving parts that can snag or pull clothing, hair, skin, or jewelry into the mechanism are present in the area of this label. Keep clothing, hair, skin, and jewelry out of the mechanism.
	High temperature hazard	High temperatures that can cause pain or burns are present in the area of this label. Do not touch until cooled.

### 1.5 Taiwan Class A Radio Interference Label

A warning label (Figure 1-1) is included on ATMs available in Taiwan to meet Taiwan Class A regulatory requirements for radio frequency interference.

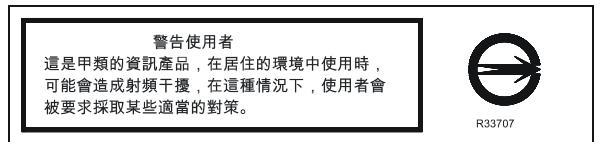


Figure 1-1 Taiwan Class A Label

## 1.6 Terminology

This document uses the following terms:

- *ATM* refers to the complete Opteva 760 terminal.
- *Bill(s)* refers to the individual documents that are loaded into and dispensed from the advanced function dispenser.
- *Consumer* refers to any person who uses the ATM to transact business.
- *Device* refers to the small and large electrical and mechanical components that make up the ATM.
- *Dispenser* refers to the module that takes dispensable media from the cassettes and transports it through a slot in the fascia to the consumer.
- *Fascia* refers to the front portion of the ATM including the area where the consumer transacts business.
- *Institution* refers to any bank or business that might purchase the ATM.
- *Maintenance* refers to the routine operator tasks performed to keep the ATM operational.
- *Media* refers to any type of document (note, bill, ticket, coupon, etc.) loaded into and dispensed from the dispenser.
- *Module* refers to the major electro-mechanical devices that make up the ATM, such as displays, printers, and dispensers.
- *Operator* refers to a person who performs routine ATM maintenance, such as replenishing supplies. An operator may also perform certain problem determination.

## **Section 2**

### **Devices in the ATM**

---

This section describes the devices available on the Opteva 760 ATM. These devices are located in either the upper chassis or in the safe. For more information about individual devices, refer to the documents listed in Appendix A.

#### **NOTE**

Your Opteva 760 ATM may not contain all the devices described in this section. Some devices are optional and some devices cannot be used in combination with other devices (mutually exclusive combinations).

### **2.1 Devices and Access Points on the Fascia**

The consumer selects transactions, specifies amounts, deposits bills and documents, receives dispensable media, coins, and receipts, and requests information at the fascia.

#### **2.1.1 Consumer Interface**

The fascia includes a consumer interface for each consumer device or feature included in the ATM. Many of the consumer interfaces have labels to explain their use and/or lighted indicators to guide the consumer through the transaction sequence. The fascia includes the following features and interfaces (all features might not be included in your ATM):

#### **NOTE**

The locations for some of the following items vary, depending on the devices and features installed on the ATM. See Figure 2-1 and Figure 2-2 for the various fascia configurations.

##### **Fascia Lighting**

A light located near the top of the fascia illuminates the fascia. An optional lighted signage panel (exterior fluorescent light and cover) can be mounted on top of the fascia.

##### **Fascia Mirrors**

Convex mirrors are located at the top of the fascia. Consumers can use these mirrors to monitor their surroundings.

##### **Speakers**

Speakers in the top of the fascia alert consumers to ongoing transaction sequences.

##### **Motorized Card Entry Slot**

For ATMs with motorized card readers, the consumer inserts an ATM card in the card entry slot to begin transactions. The card reader automatically pulls the card into the ATM and returns the card when the transaction is completed.

**Dip Card Reader**

The dip card reader is a manually operated device mounted directly to the ATM fascia. The consumer inserts an ATM card in the card entry slot and then removes the card to begin the transaction. The dip card reader can read magnetic stripe cards and memory chip cards. The dip card reader cannot retract, capture, or retain cards.

**Consumer Bar Code Scanner and Shelf**

The consumer places the bar code of appropriate materials, such as utility bills, on the bar code scanner shelf. The bar code scanner is mounted on the fascia above the shelf and reads the bar code for transaction and account information.

**Consumer Keyboard and Keypads**

During the transaction sequence, the ATM prompts the consumer to use the consumer keyboard or keypad to enter transaction information. Two consumer keyboard and/or keypad options are available on the ATM.

The large-format, 16-key keypad option uses a single, 16-key keypad and an integrated security module (with encrypting PIN pad technology) to secure the transaction information entered by the consumer.

The alphanumeric keyboard option uses a 57-key alphanumeric keyboard along with a separate small-format, 16-key encrypting PIN pad keypad. The alphanumeric keyboard provides the functionality of a standard keyboard and can be used to enter non-sensitive transaction information. The 16-key keypad (with an integrated security module and encrypting PIN pad technology) is used to enter all sensitive transaction information.

**Function Keypads**

The function keypads are made up of four keys mounted on each side of the consumer display. The consumer selects from the choices shown on the consumer display and presses the corresponding function key.

**Consumer Display**

The consumer display welcomes the consumer and provides instructions for performing transactions at the ATM. An optional touch screen display eliminates the need for function keypads.

**Headphone Jack**

Visually impaired consumers can plug headphones into a jack on the fascia to receive voice guidance and response. The fascia speakers are turned off when the headphone jack is used.

**Camera Window**

The fascia contains a window for an optional camera security system.

**Printer Slot(s)**

After the consumer uses the ATM, a printed record of the transaction information is presented through the appropriate printer slot. If the consumer uses a passbook, the passbook must first be inserted in the passbook printer slot to complete the transaction.

**Envelope Depositor Slot**

The consumer obtains envelopes and makes deposits through the envelope depositor slot. The deposited envelopes are transported to a secure cassette inside the safe.

**Intelligent Depositor Module (IDM) Slot**

The consumer deposits single checks (without envelopes) through the intelligent depositor module (IDM) slot. The intelligent depositor module scans the check for account and amount data and stores the checks in an open bin.

**Intelligent Depository Module Bulk Document (IDM-BD) Slot**

The consumer deposits a stack of up to 30 documents through the intelligent depository module bulk document (IDM-BD) slot. Documents can be inserted face up or face down with the short edge first for proper orientation. The intelligent depositor module scans the check for account and amount data and stores the checks in an open bin.

**Dispenser Slot**

Disposable media is presented through the dispenser slot.

**Dispensed Coin Pocket**

Coins are dispensed to the customer in the coin pocket.

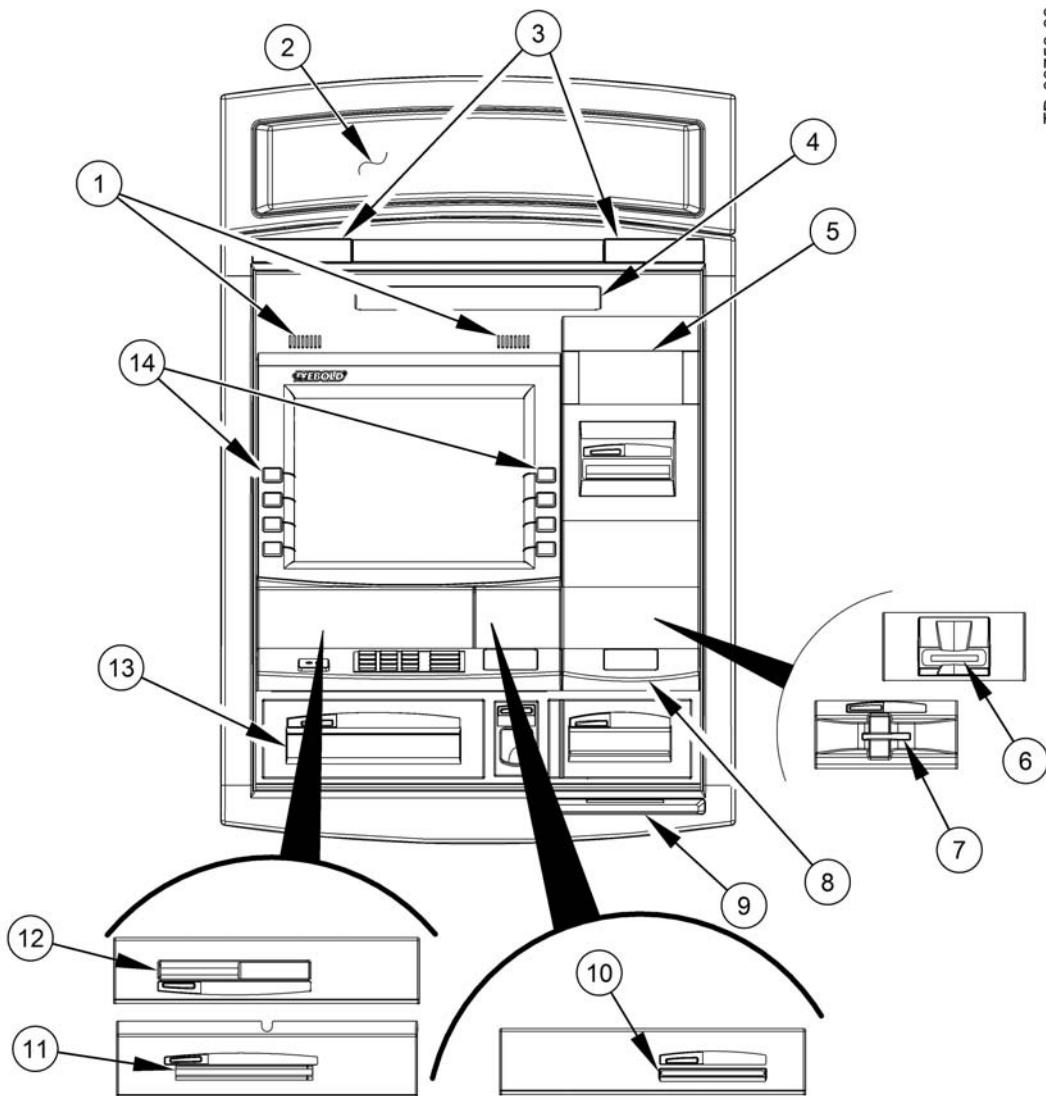
**Bulk Note Acceptor Opening**

The consumer can deposit unbound stacks of notes into the opening for the bulk note acceptor. The notes are first validated and acceptable notes are stored in a secure cassette inside the safe.

**Enhanced Note Acceptor Opening**

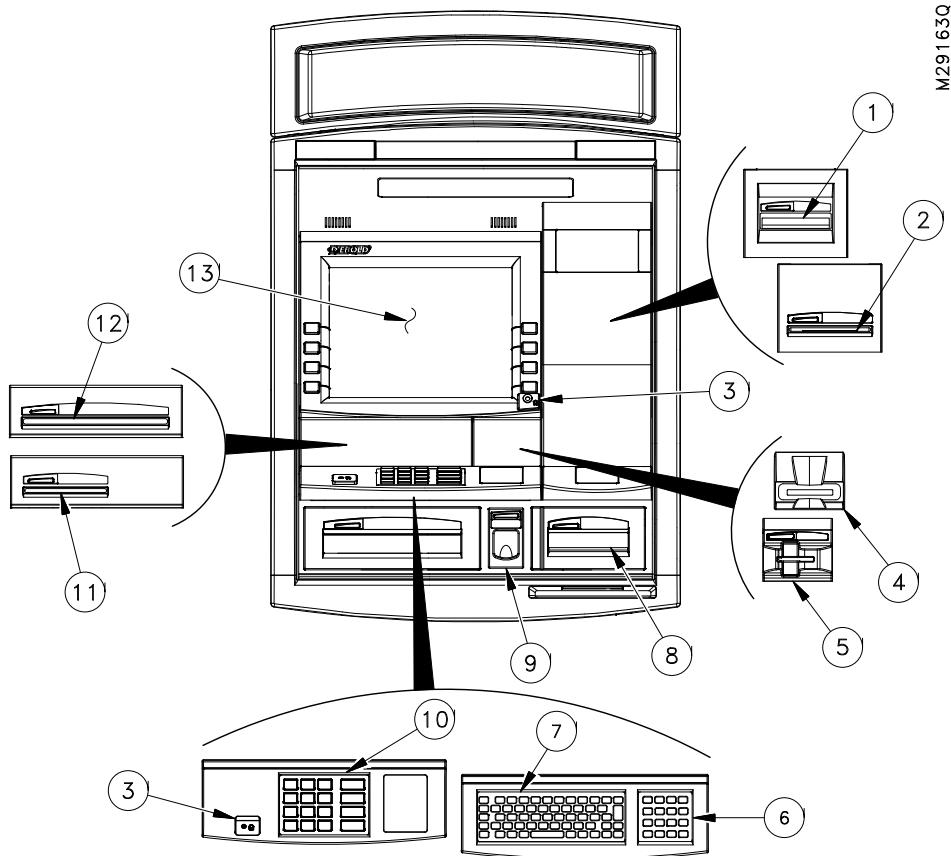
The consumer can deposit unbound stacks of notes into the opening for the enhanced note acceptor. The notes are first validated and acceptable notes are stored in a secure cassette inside the safe.

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1	Speakers	8	Consumer bar code scanner
2	Signage panel	9	Consumer bar code scanner shelf
3	Fascia mirrors	10	Receipt printer or graphical printer slot
4	Fascia light	11	Advanced passbook printer (TTEC) slot
5	Camera window	12	Passbook printer (Hitachi) slot
6	Motorized card reader slot	13	Dispenser slot
7	Dip card reader slot	14	Function keypad

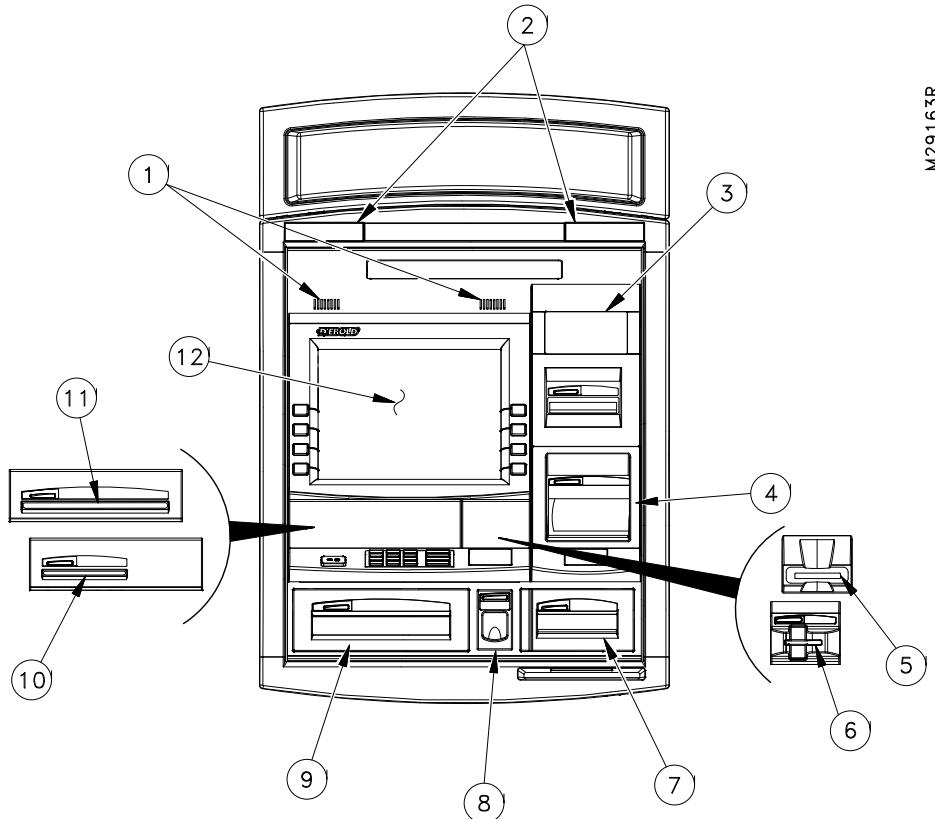
Figure 2-1 OpTeva 760 Fascia Features (without bulk or enhanced note acceptor) (sheet 1 of 2)



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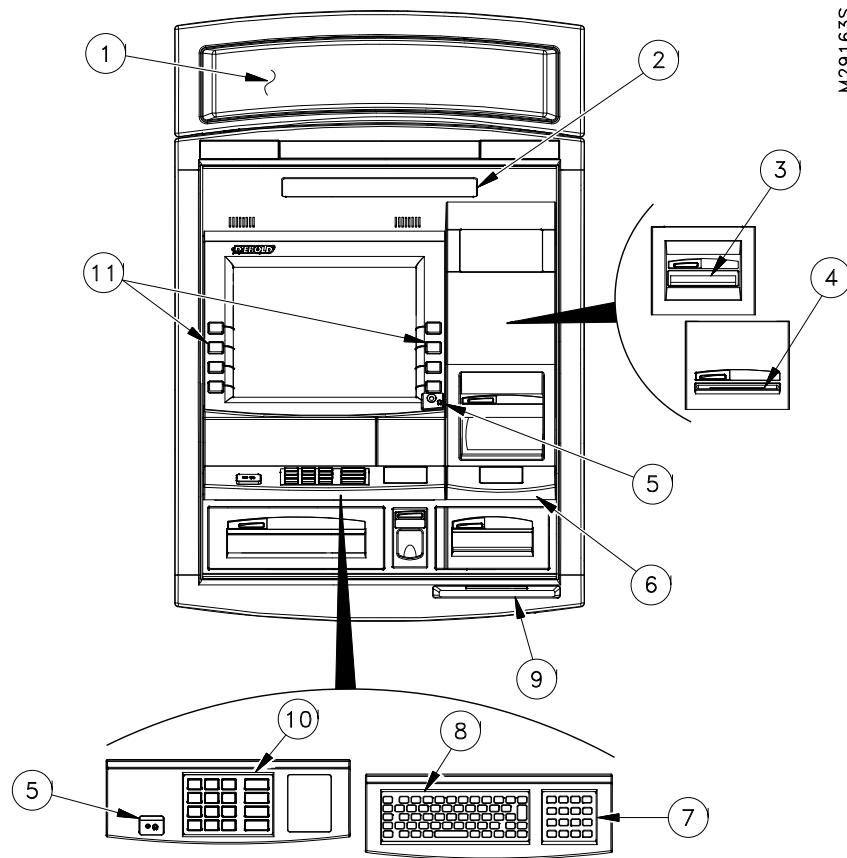
1	Intelligent depository module slot (IDM or IDM-BD)
2	Receipt printer or graphical printer slot
3	Headphone jack (can be in either position, depending on installed components)
4	Motorized card reader slot
5	Dip card reader slot
6	Small-format consumer keypad
7	Alphanumeric consumer keyboard
8	Envelope depositor (with integrated dispenser) slot
9	Coin pocket
10	Large-format consumer keypad
11	Receipt printer or graphical printer slot
12	Statement printer slot
13	Consumer display

Figure 2-1 Opteva 760 Fascia Features (without bulk or enhanced note acceptor) (sheet 2 of 2)



1	Speakers
2	Fascia mirrors
3	Camera window
4	Bulk note acceptor or enhanced note acceptor opening (bulk note acceptor shown)
5	Motorized card reader slot
6	Dip card reader slot
7	Envelope depositor (with integrated dispenser) blank (not used with bulk note acceptor)
8	Dispenser coin pocket
9	Dispenser slot
10	Receipt printer or graphical printer slot
11	Statement printer slot
12	Consumer display

Figure 2-2 Opteva 760 Fascia Features (with bulk or enhanced note acceptor) (sheet 1 of 2)



1	Signage panel
2	Fascia light
3	Intelligent depository module slot (IDM or IDM-BD)
4	Receipt printer or graphical printer slot
5	Headphone jack (can be in either position, depending on installed components)
6	Consumer bar code scanner
7	Small-format consumer keypad
8	Alphanumeric consumer keyboard
9	Consumer bar code scanner shelf
10	Large-format consumer keypad
11	Function keypad

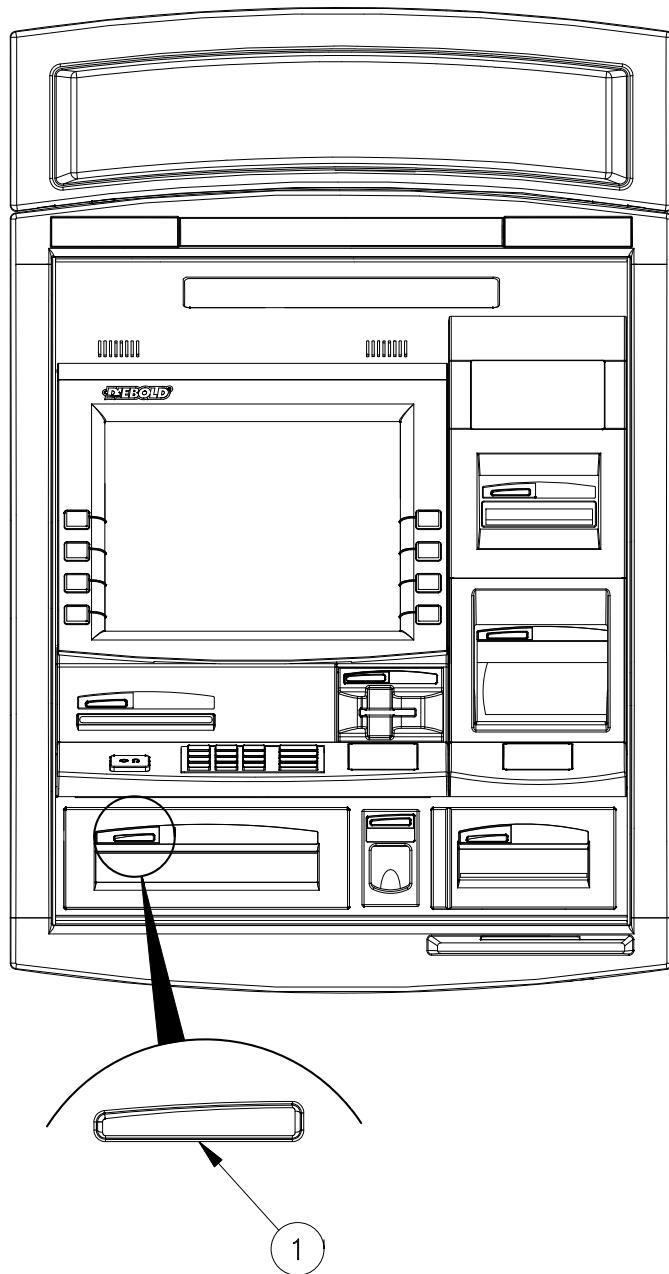
Figure 2-2 Opteva 760 Fascia Features (with bulk or enhanced note acceptor) (sheet 2 of 2)

## **2.1.2 Lead-through Indicators**

Lead-through indicators (Figure 2-3) prompt the consumer through transactions by calling their attention to the next step in the transaction sequence. These indicators are in the shape of a bar, which can display three single colors: red, green, or yellow. Lead-through indicators are provided at the following access points:

- Dip card reader
- Coin dispenser
- Envelope depositor (with integrated dispenser)
- Dispenser
- Passbook printer
- Receipt printer
- Statement printer
- Intelligent depository module (IDM or IDM-BD)
- Bulk note acceptor
- Enhanced note acceptor

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1 Lead-through indicator example

Figure 2-3 Lead-through Indicators

## 2.2 Devices in the Upper Chassis

There are two types of devices in the upper chassis, devices used by the consumer (Section 2.2.1) and devices used by the operator (Section 2.2.2).

### NOTE

Your Opteva 760 ATM might not contain all devices described in this section. Some devices are optional and some devices cannot be used in combination with other devices (mutually exclusive combinations).

### 2.2.1 Devices Used by the Consumer

The following upper chassis devices can be used by the consumer:

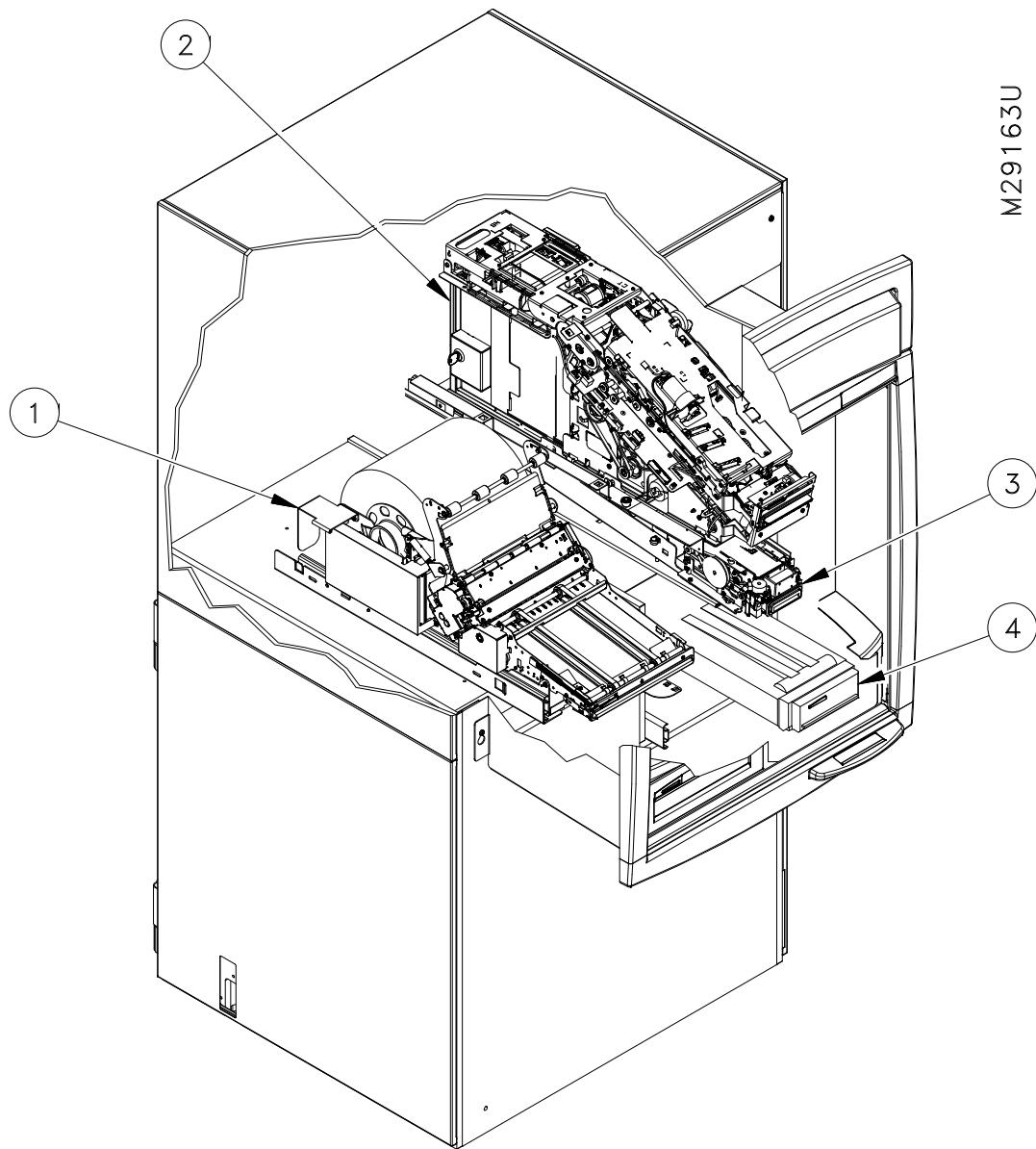
- Coin dispenser
- Motorized or dip card reader
- Intelligent depository module (IDM)
- Intelligent depository module bulk document (IDM-BD)
- Passbook printer
- Receipt printer
- Graphical printer
- Statement printer
- Bulk note acceptor
- Envelope depositor (with integrated dispenser)

The location of these devices is shown in Figure 2-4 and Figure 2-5. The following paragraphs contain a brief description of each device.

### NOTE

Additional consumer interface devices are located on the ATM fascia assembly. Refer to Section 2.1.1 and see Figure 2-1 and Figure 2-2 for information on these devices.

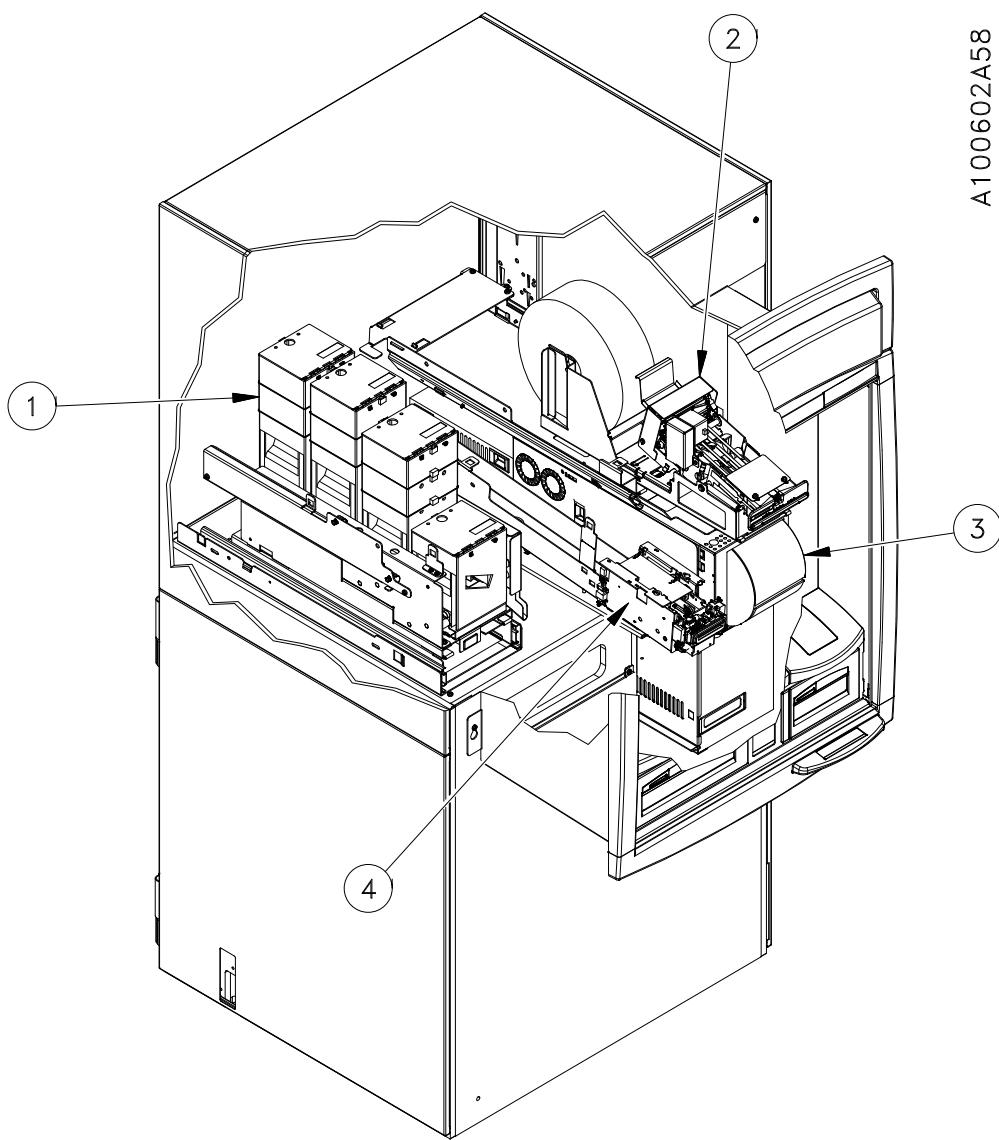
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1	Statement printer, coin dispenser, passbook printer, receipt printer, or graphical printer (statement printer shown)
2	Intelligent depository module (IDM or IDM-BD), receipt printer, or graphical printer (intelligent depository module shown)
3	Motorized card reader
4	Envelope depositor (with integrated dispenser)

Figure 2-4 Devices in the Upper Chassis (without bulk note acceptor)

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1	Statement printer, coin dispenser, receipt printer, or graphical printer (coin dispenser shown)
2	Intelligent depository module (IDM or IDM-BD), receipt printer, or graphical printer (intelligent depository module shown)
3	Bulk note acceptor or enhanced note acceptor (bulk note acceptor shown)
4	Motorized card reader

Figure 2-5 Devices in the Upper Chassis (with bulk note acceptor)

### **Coin Dispenser**

The coin dispenser (Figure 2-6) supports up to four separate denominations of coins or tokens. The coin dispenser dispenses these from refillable coin hoppers to a pocket in the fascia.

The coin dispenser dispenses coins or tokens between 16.25 mm (0.64 inch) and 28.50 mm (1.1 inches) in diameter and between 1.36 mm (0.05 inch) and 3.15 mm (0.12 inch) in thickness. The coin dispenser is tolerant of dirt, rust, or damaged coins.

The coin dispenser's hoppers are refilled with loose coins, not rolled or bagged coins. Each coin hopper has a "hopper low" sensor that tells the host network when the hopper is low on coins. Each coin hopper dispenses only one type of coin and cannot support coins of different denominations inside the same hopper. The hoppers are designated by position such as 1, 2, 3, 4 or by denomination such as A, B, C, D.

Refer to the *Coin Dispenser Operating Guide* (TP-820812-001A)

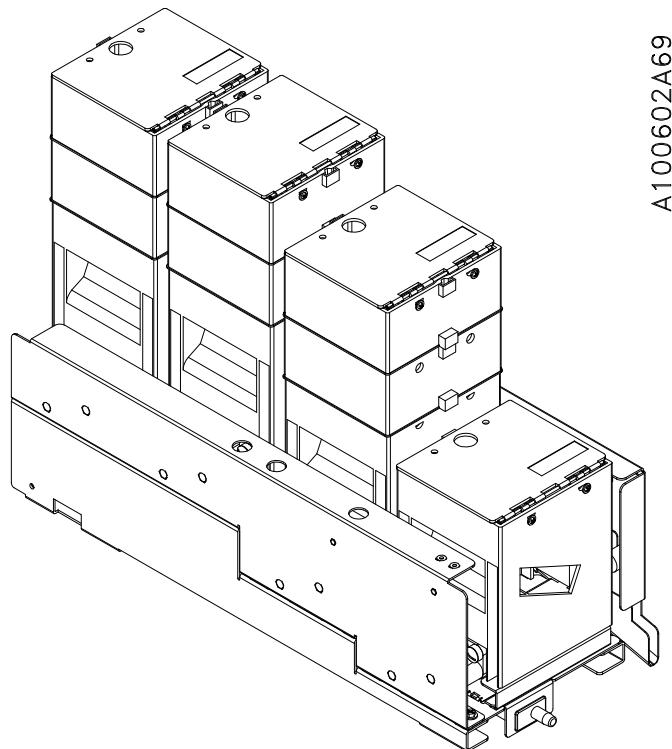


Figure 2-6 Coin Dispenser

**Consumer Bar Code Scanner**

The consumer bar code scanner (Figure 2-7) reads and decodes bar codes (bar codes are generally used in transactions for tracking and routing purposes).

The consumer uses the bar code scanner by resting the bar code of a document on the bar code scanner shelf. The beam from the bar code scanner (located directly above the shelf) reads and processes the bar code information.

Refer to the *Consumer Bar Code Scanner Operating Guide* (TP-820813-001A).

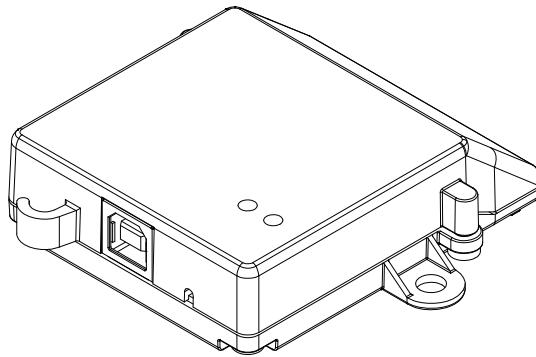
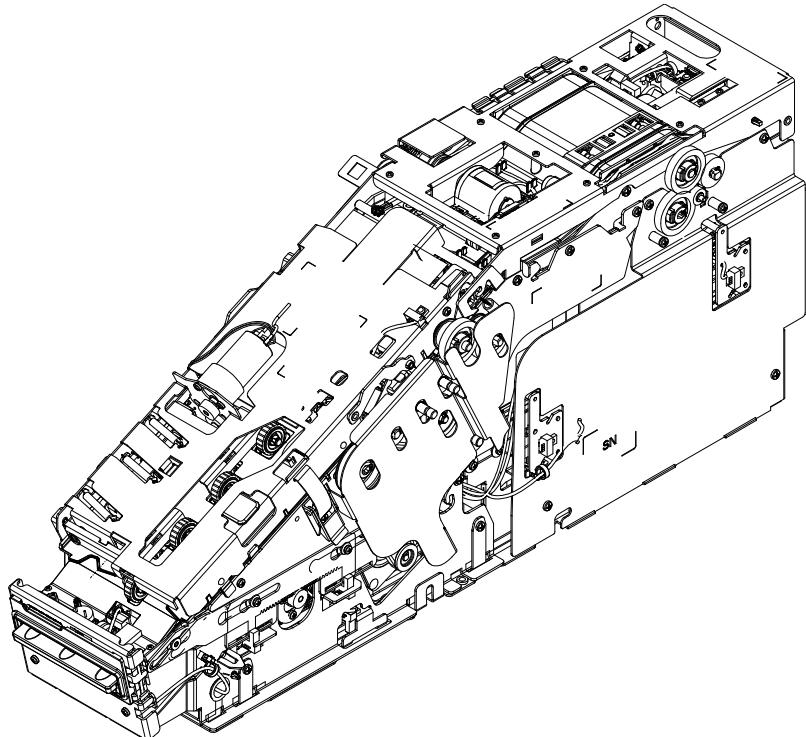


Figure 2-7 Consumer Bar Code Scanner

**Fifth-generation Intelligent Depository Module**

The intelligent depository module (Figure 2-8) reads information from a check and deposits the amount into the consumer's account. The intelligent depository module does not accept envelopes. After the intelligent depository module reads the check, it is transported to a bin at the rear of the module.

Refer to the *Fifth-generation Intelligent Depository Module Operating Guide* (TP-820903-001C).



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Figure 2-8 Intelligent Depository Module

**Intelligent Depository Module Bulk Document (IDM-BD)**

The intelligent depository module bulk document (IDM<sub>BD</sub>) (Figure 2-9) accepts a stack of up to 30 documents and provides MICR data and images of each document. Documents can be inserted face up or face down with the short edge first for proper orientation. At the completion of the transaction, the IDM-BD can print (up to 80 characters) on the bottom of the document and stamp the top of the document with a predefined mark. The IDM-BD deposits the documents into the appropriate bin. Bin 1 can hold approximately 1000 documents, the exception bin holds up to 50 documents.

Refer to the *Bulk Document Intelligent Depository Module (IDM-BD) Operating Guide* (TP-820901-001B).

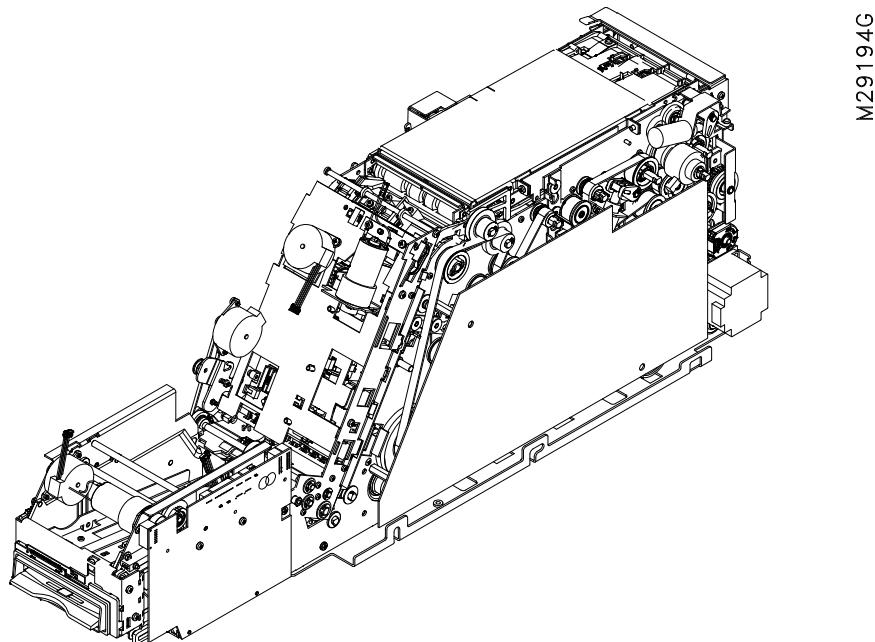


Figure 2-9 Bulk Document Intelligent Depository Module (IDM-BD)

### **Motorized Card Reader**

The motorized card reader (Figure 2-10) reads and writes magnetic stripe cards and memory chip cards (smart or memory cards compliant with ISO 7816). The card reader reads and writes tracks 1, 2 and 3 (or any combination of tracks 1, 2 and 3) of magnetic stripe cards. To minimize errors, the card is held in the transport and the card reader can read tracks with errors again, for corrections (when it is necessary). A gate prevents cards without chips or cards without track 2 from entering the card reader/writer. The gate also prevents incorrect card insertion.

CIM86 or Watermark security systems are available options with the reader/writer

The card reader is equipped with an open card retain bin or a locked card retain bin to hold retained cards. The card retain bin holds all cards that are not returned to consumers. A card may be retained for the following reasons:

- The network commands the ATM to retain the card.
- The card cannot physically be returned.
- The consumer fails to take the card within the time allowed after the transaction session ended.
- A power failure occurs while the card is in the card reader, and the option to return the card on power failure is not present.

Refer to the *Motorized Card Reader (with chip, 123) Operating Guide* (TP-820815-001C).

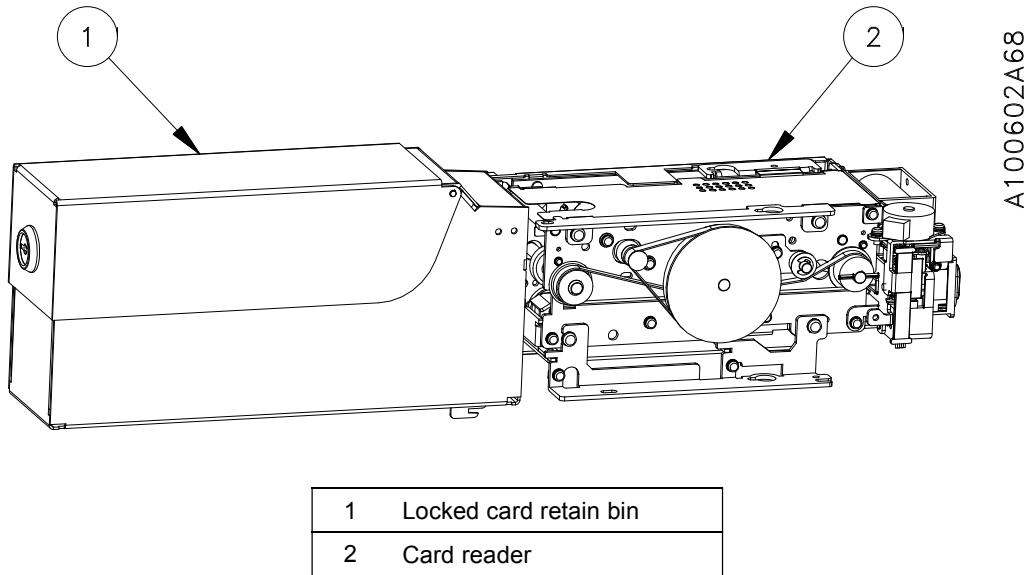


Figure 2-10 Motorized Card Reader

**Dip Card Reader**

The dip card reader is a manually operated device mounted on the ATM fascia. The consumer inserts an ATM card in the card entry slot and then removes the card to begin the transaction. The dip card reader can read magnetic stripe cards and memory chip cards. The dip card reader cannot retract, capture, or retain cards.

Refer to the *Dip Card Reader (with chip, 123) Operating Guide* (TP-820814-001B).

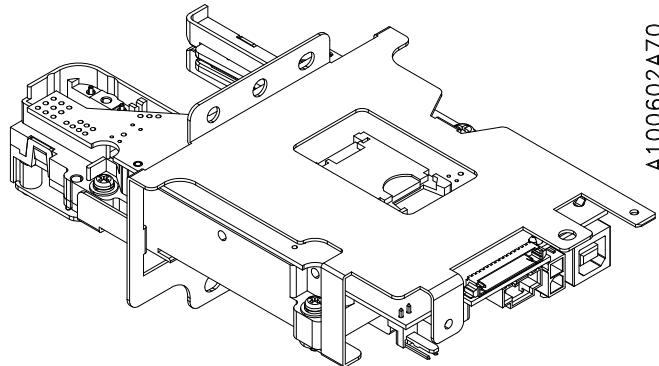
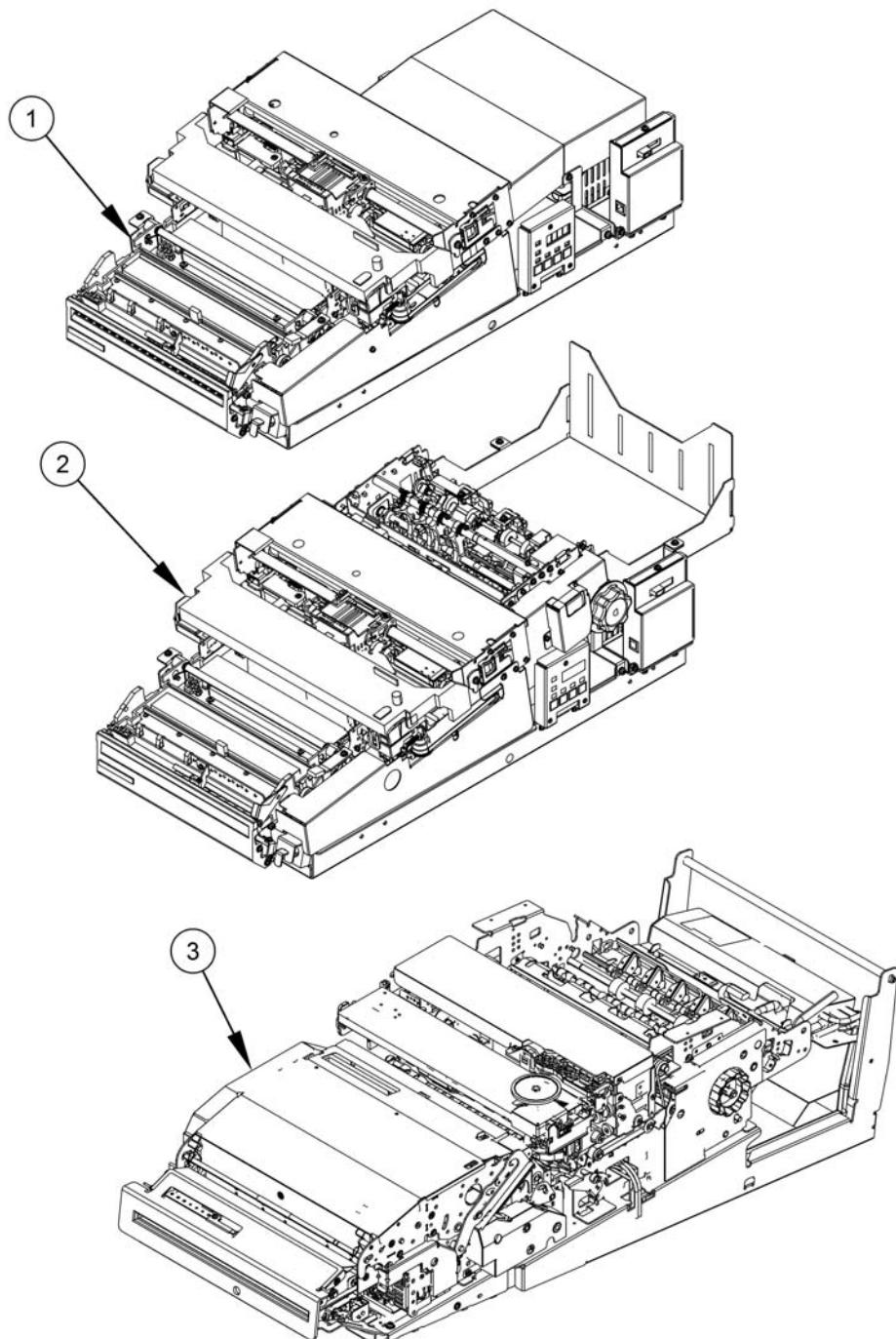


Figure 2-11 Dip Card Reader

**Passbook Printer**

The passbook printer is available in three models: basic passbook printer (Hitachi), advanced passbook printer (Hitachi), and advanced passbook printer (TTEC) (see Figure 2-12). All models print transaction information on a consumer's passbook. The transaction information can include the amount of deposits, withdrawals, transfers, payments, ATM number and location, or other information. The advanced passbook printer also includes a passbook page turning feature, an optical line finding feature (which finds the next available line in the passbook to print on), and a bin for retained passbooks.

Refer to the *Passbook Printer III Operating Guide (Hitachi)* (TP-820816-001A) and the *Advanced Passbook Printer Operating Guide (TTEC)* (TP-821875-001A).



1	Basic passbook printer (Hitachi)
2	Advanced passbook printer (Hitachi)
3	Advanced passbook printer (TTEC)

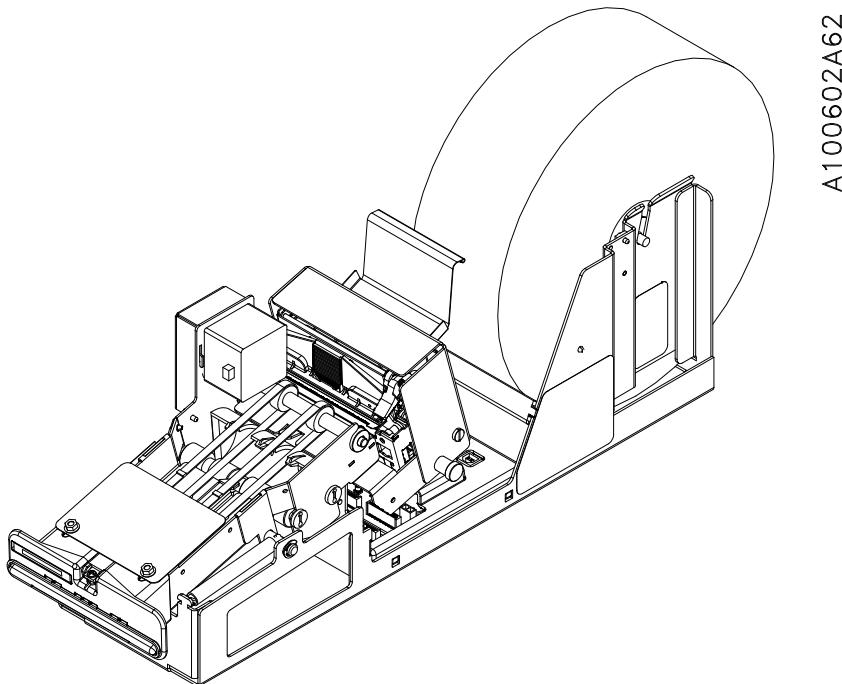
Figure 2-12 Passbook Printers

**Receipt Printer**

The receipt printer (Figure 2-13) provides a printed receipt of the customer's transaction. The transaction information can include the consumer's name, the amount of withdrawals, deposits or transfers, the ATM number and location, and other desired information.

The receipt printer uses rolled paper 80 millimetres (3.15 inches) wide and up to 254 mm (10.0") in diameter. The paper receipt may have optional top-of-form marks. The receipt length is also programmable to suit the needs of the institution.

Refer to the *Two-color Graphical Receipt Printer Operating Guide* (TP-820710-001C).



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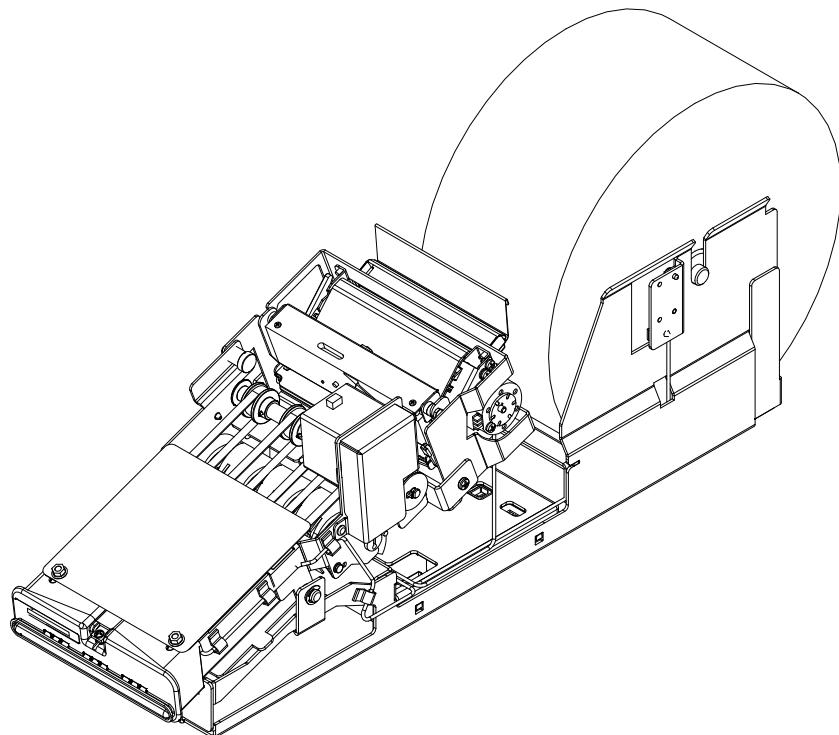
Figure 2-13 Receipt Printer

### Graphical Printer

The graphical printer (Figure 2-14) prints a receipt of the customer's transaction. The receipt can be printed in one or two colors in either portrait or landscape orientation. The transaction information on the receipt can include the consumer's name, the amount of withdrawals, deposits or transfers, the ATM number and location, and other desired information.

The graphical printer uses a paper roll 112 millimetres (4.4 inches) wide and up to 254 mm (10.0") in diameter. The paper may have optional top-of-form marks. The receipt length is also programmable to suit the needs of the institution.

Refer to the *Two-color Graphical Printer (112 mm, 4.4") Operating Guide* (TP-820890-001D).



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Figure 2-14 Graphical Printer

**Statement Printer**

The statement printer (Figure 2-15) prints a detailed record of the transaction using letter quality and high-resolution graphic printing. The transaction information can include the consumer's name, the amount of withdrawals, deposits or transfers, the ATM number and location, and other desired information. The printer uses thermal printing and does not need a ribbon cartridge.

The statement printer uses rolled paper either 210 millimetres (8.27") or 216 millimetres (8.5") wide. The statement length is programmable to suit the needs of the institution.

Refer to the *Two-color Graphical Statement Printer Operating Guide* (TP-820818-001E).

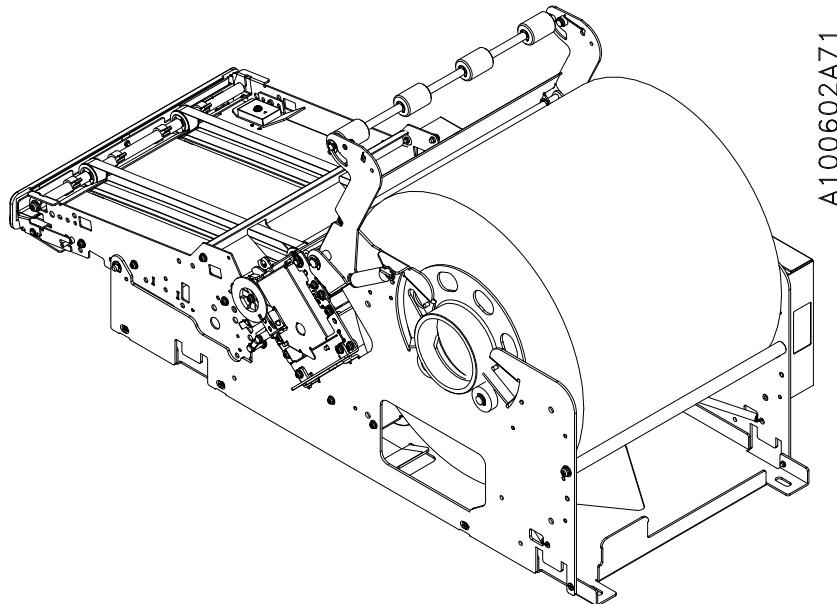


Figure 2-15 Statement Printer

### Bulk Note Acceptor

The bulk note acceptor (Figure 2-16) accepts un-bound stacks of notes through its fascia opening, validates the notes, and stores acceptable notes in a secure cassette inside the safe. The bulk note acceptor accepts notes short-edge first in stacks of 100 notes or less. The notes can be made up of multiple denominations, stacked randomly, and of varying quality (including notes that have holes, tears and bent corners).

If notes cannot be accepted, the bulk note acceptor returns the notes to the customer (except under certain government regulations when the notes are suspected to be counterfeit). In these cases, suspect and counterfeit notes are retained by the module and linked to the corresponding transaction data (cardholder/account holder). The escrow location can hold up to 100 notes.

The bulk note acceptor must be unlatched and retracted for maintenance tasks, such as accessing retracted or counterfeit notes or clearing jams. An optional keylock is also available (see Figure 3-1, View B).

Refer to the *Bulk Note Acceptor Operating Guide* (TP-820811-001A).



*The BNA module's mount can pinch your fingers if you hold the optional keylock while unlatching the mount. To avoid pinching your fingers always release the key before you use the latch.*

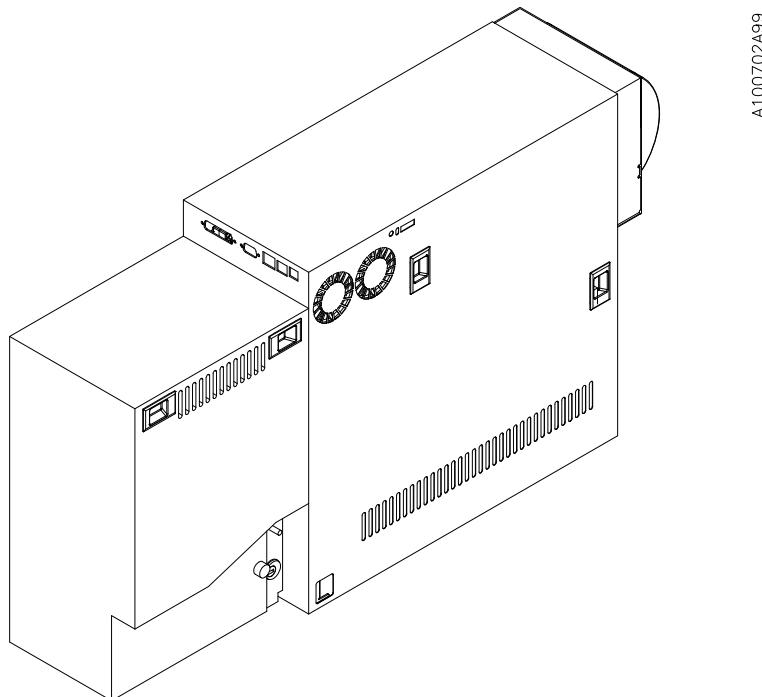


Figure 2-16 Bulk Note Acceptor

**Enhanced Note Acceptor**

The enhanced note acceptor (ENA) (Figure 2-17) is designed to accept either a single bank note or stacks of bank notes in different orientations, then identifies and validates them individually. The notes are held in escrow until the transaction is complete.

If notes cannot be accepted, the enhanced note acceptor returns the notes to the customer (except under certain government regulations when the notes are suspected to be counterfeit). In these cases, suspect and counterfeit notes are retained by the module and linked to the corresponding transaction data (cardholder/account holder).

The enhanced note acceptor must be unlatched and retracted for maintenance tasks, such as accessing retracted or counterfeit notes or clearing jams.

Refer to the *Opteva Enhanced Note Acceptor (ENA) Operating Guide* (TP-821336-001D).

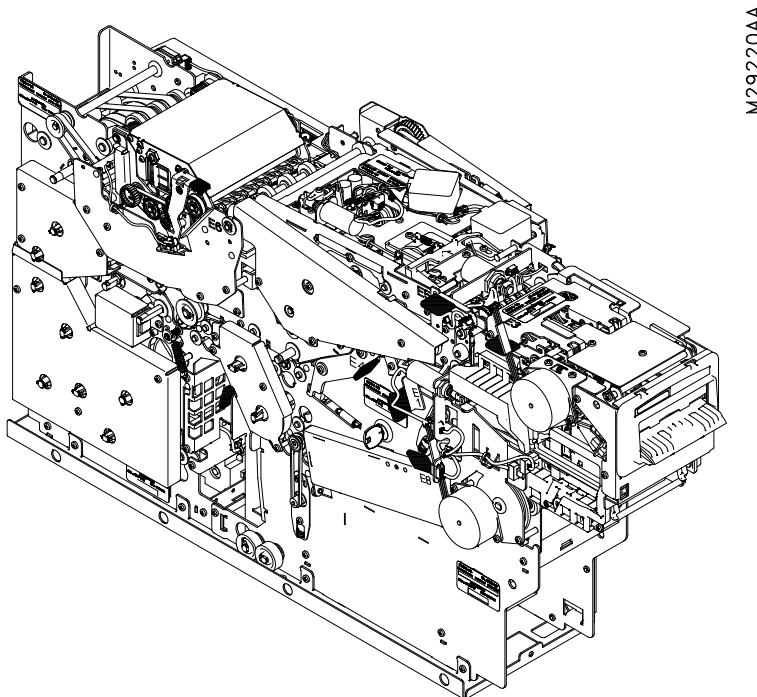


Figure 2-17 Enhanced Note Acceptor

### Envelope Depositor (with integrated dispenser)

The envelope depositor can accept and process deposit envelopes and can issue empty envelopes (with the optional integrated dispenser) . Envelopes are dispensed and accepted short-edge first through the same fascia opening. Envelopes deposited into the envelope depositor must be within the dimensions shown below.

Width	Height	Thickness
163 mm (6.4") to 241 mm (9.5")	92 mm (3.6") to 116 mm (4.5")	0.21 mm (0.008") to 15 mm (0.6")

The envelope depositor (with the integrated dispenser) has a capacity of 300 envelopes and sends a notification when the envelope supply is low or empty. Envelopes not removed by the customer will be retracted and placed in the envelope depositor cassette.

Refer to the *Envelope Depositor with Integrated Dispenser Operating Guide* (TP-820709-001E).

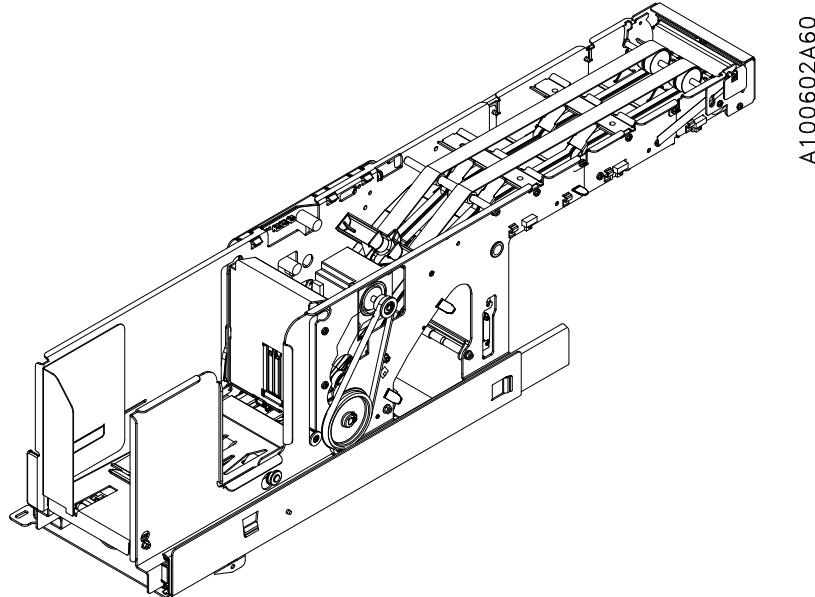


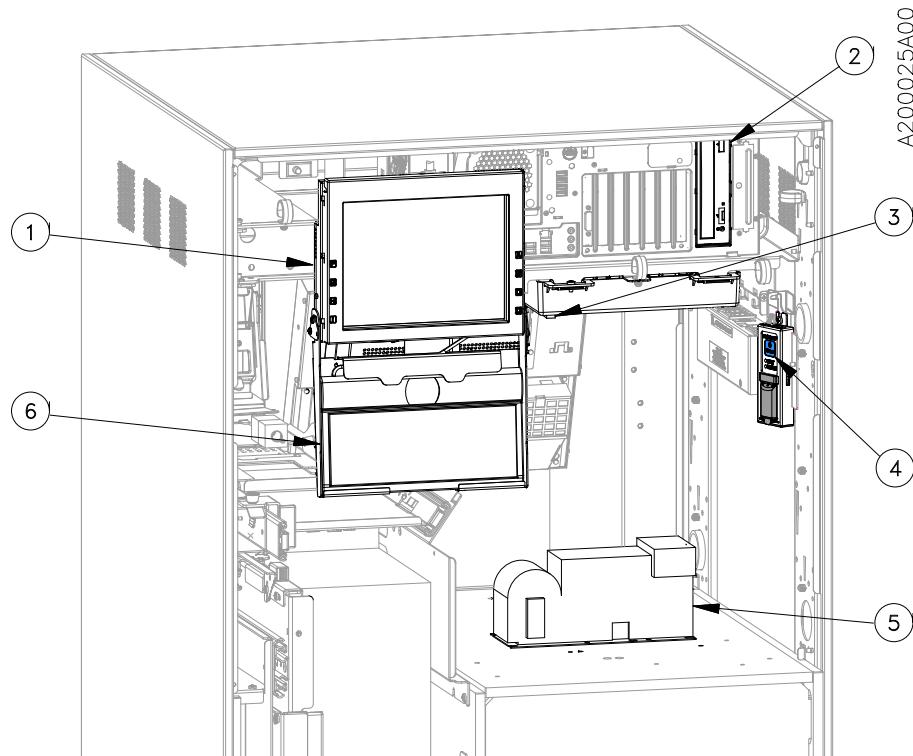
Figure 2-18 Envelope Depositor (with integrated dispenser)

## 2.2.2 Devices Used by the Operator

The operator uses the devices described in this section (Figure 2-19) to perform routine maintenance operations such as daily balancing, supply replenishment, and problem determination. These devices can also be used for occasional operations such as setup and problem diagnosis of the ATM.

The maintenance interface for the Opteva 760 ATM is made up of a rear-mounted color LCD, an alphanumeric keyboard (with integrated pointing device) and an optional pointing device. The operator uses the maintenance mode switch, terminal power (on/off) push button, and status indicator with the operator interface. The following paragraphs describe the operator interface devices listed below:

- Rear operator display
- Maintenance keyboard
- Pointing device (optional)
- Maintenance mode switch
- Terminal power (on/off) push button
- Disk drive assemblies
- Journal printer



1	Rear operator display	4	Terminal power (on/off) push button (see Figure 2-21)
2	Disk drive assemblies	5	Journal printer
3	Maintenance mode switch	6	Maintenance keyboard

Figure 2-19 Devices in the Upper Chassis Used by the Operator

### **Rear Operator Display**

The rear operator display (Figure 2-20) supplies information for routine maintenance, balance, supply and maintenance monitoring. The display can be viewed with the rear upper chassis door either closed (through the rear door window) or open. The display also provides ATM status information using the following three status colors:

- Green light - ATM is available for transactions.
- Yellow light - a device is running low on supplies.
- Red light - ATM is not in service to the consumer.

The display can also be adjusted to different angles and positions to improve legibility. Refer to Section 3.4 for information on adjusting the rear operator display. A color touch screen is available as an optional rear operator display.

### **Maintenance Keyboard and Pointing Device**

The maintenance keyboard (Figure 2-20) is mounted under the rear operator display. The keyboard can be raised and fixed in a typing position to enter information for the maintenance tasks. Refer to Section 3.4 for information on adjusting the keyboard position. The keyboard is available with various language options.

#### **NOTE**

An optional pointing device (with the same functionality as a PC mouse) can be installed and used with the maintenance keyboard.

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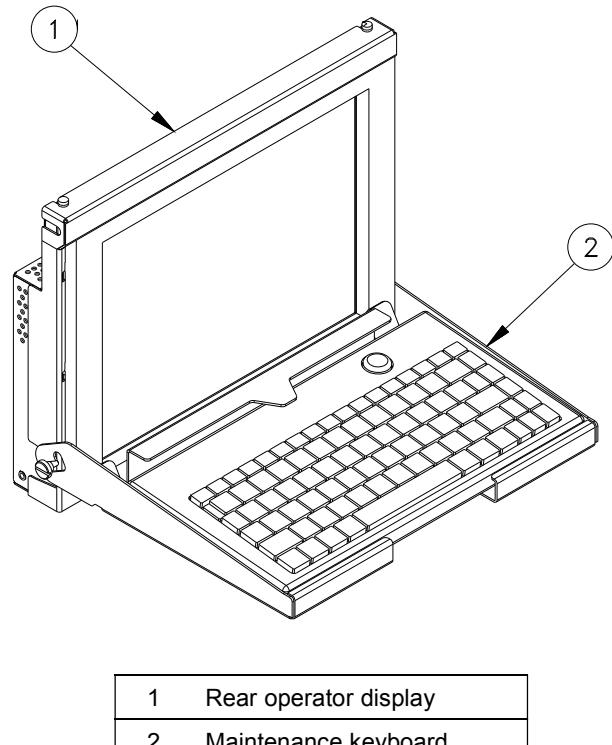


Figure 2-20 Rear Operator Display and Maintenance Keyboard

**Terminal Power (on/off) Push Button**

The terminal power push button (Figure 2-21) allows the operator to turn the ATM on and off.

Press and release the terminal power push button to turn on the ATM. The on/off indicator will light and the wait indicator will flash. After the ATM has completely powered up, the wait indicator will turn off and the ATM's operating system will load. While the wait indicator is flashing, the terminal power push button is deactivated. If the error indicator turns on, call your service provider.

Press and release the terminal power push button to turn off the ATM. The wait indicator will flash while the ATM is turning off. It may take several minutes for the ATM to completely turn off. When the ATM does turn off, the wait LED will stop flashing and the ON/OFF LED will then turn off.



*To completely remove AC power to the ATM, the ATM power cord must be removed from its receptacle or the AC power to the ATM must be removed at the quick disconnect device (such as a circuit breaker) for the ATM.*



**ATM AC power outlets (Figure 2-21) are for service use and limited use of approved devices only. They are not intended for providing a permanent power source for devices that may create electrical interference and affect ATM operation.**



**The service buttons under the rubber cover (Figure 2-21, View B) are not for customer operations. If these buttons are used inappropriately, the ATM will exit service.**

**Maintenance Mode Switch**

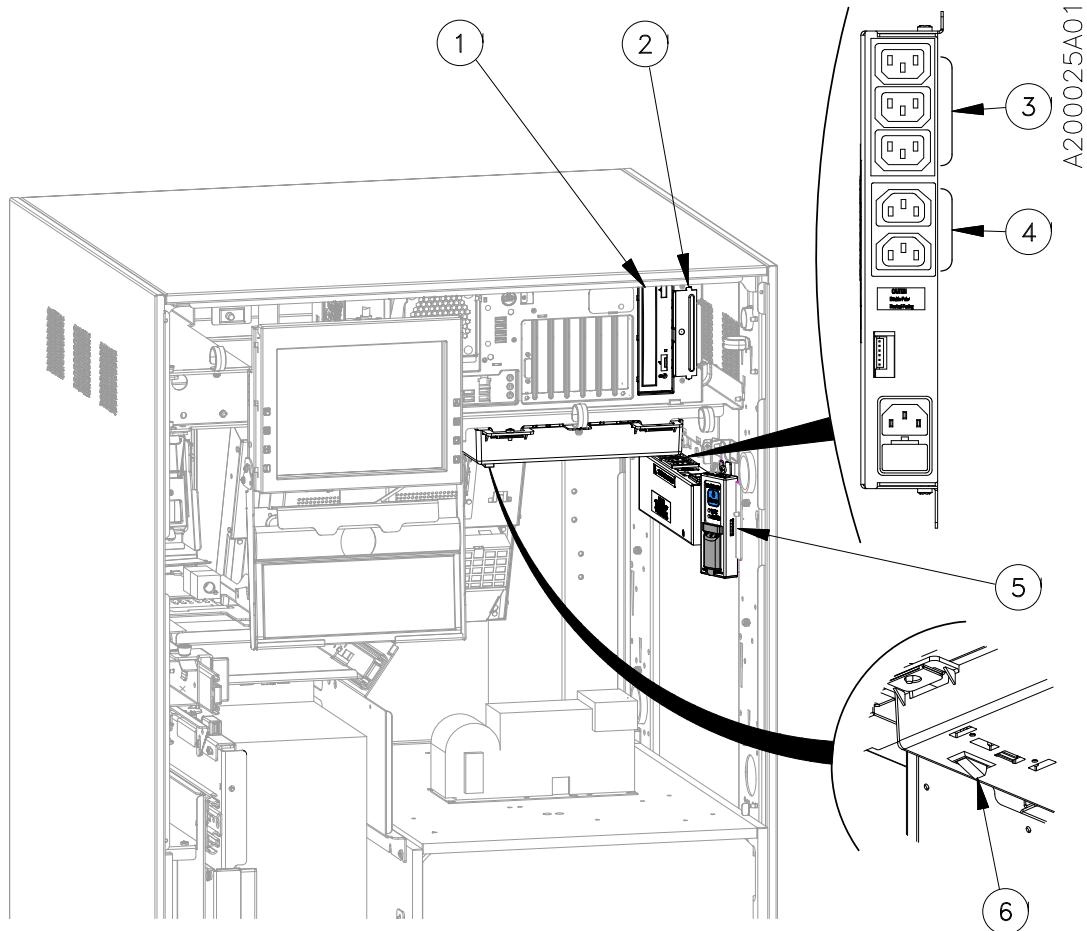
Use the maintenance mode switch located under the ATM processor (Figure 2-21) to remove the ATM from consumer service and place it in the maintenance mode.

When you press the maintenance mode switch, the consumer display may display a message indicating that the ATM is temporarily out-of-service. Refer to the *Agilis 9Ix XV Maintenance Manual* (TP-820744-001F) or your documentation for your control software for information on placing the ATM in the proper mode for maintenance.

**Disk Drives**

The disk drives are located in the ATM processor (Figure 2-21). You may use disk drives to load or store software, images or ATM data. The Opteva 760 ATM is available with three types of disk drives.

- Floppy disk drive (3.5 inch 1.44 MB)
- Compact disk (CD) drive
- Hard disk drive (10 GB minimum), internal to ATM processor (not shown in Figure 2-21)

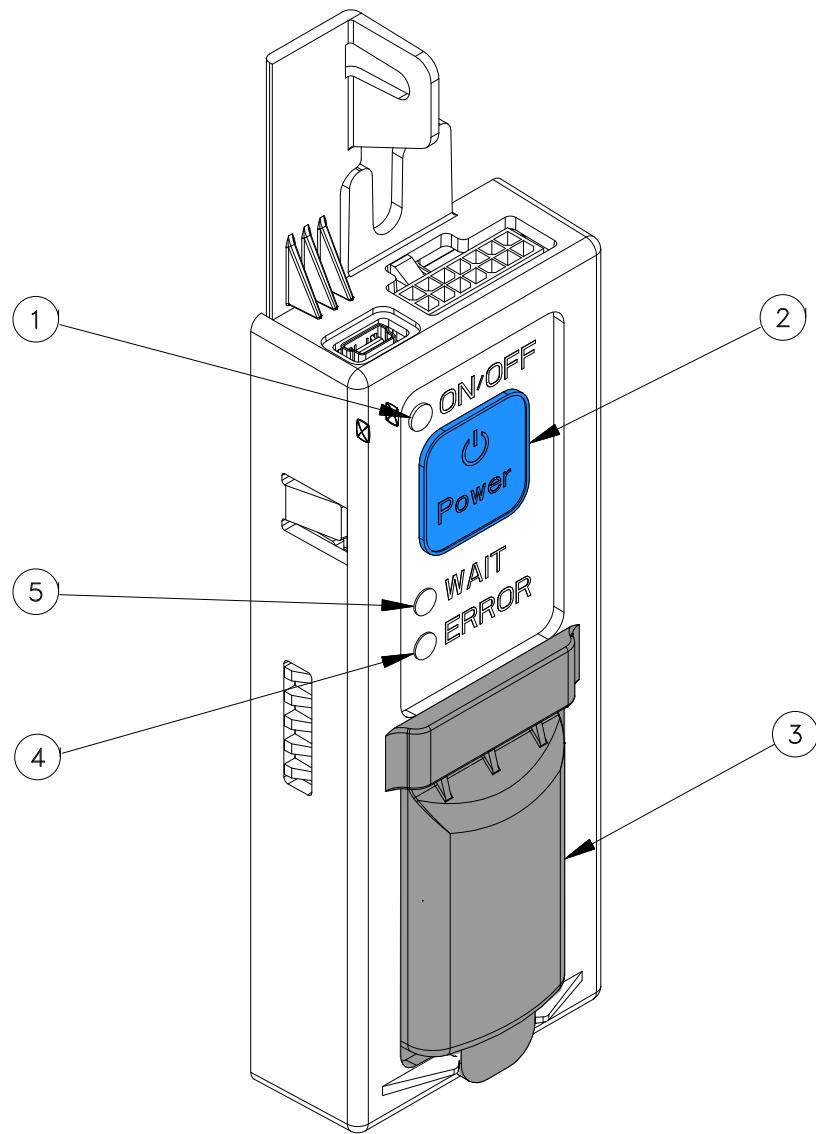


1	Compact disk (CD) drive
2	Floppy disk drive
3	Switched AC outlets [1]
4	Unswitched AC outlets [1]
5	Terminal power (on/off) push button (see Figure 2-21, View B)
6	Maintenance mode switch
[1] AC outlets are for service use and limited use of approved devices only. They are not intended for providing a permanent power source for devices that may create electrical interference which can affect ATM operation.	

View A General Devices

Figure 2-21 Maintenance Mode Switch, Disk Drive Assemblies, Terminal Power Push Button, and AC Outlets.  
(sheet 1 of 2)

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1	Power (On/Off) indicator
2	Power (On/Off) push button
3	Service access cover
4	Error indicator
5	Wait indicator

View B Terminal Power (On/Off) Push Button

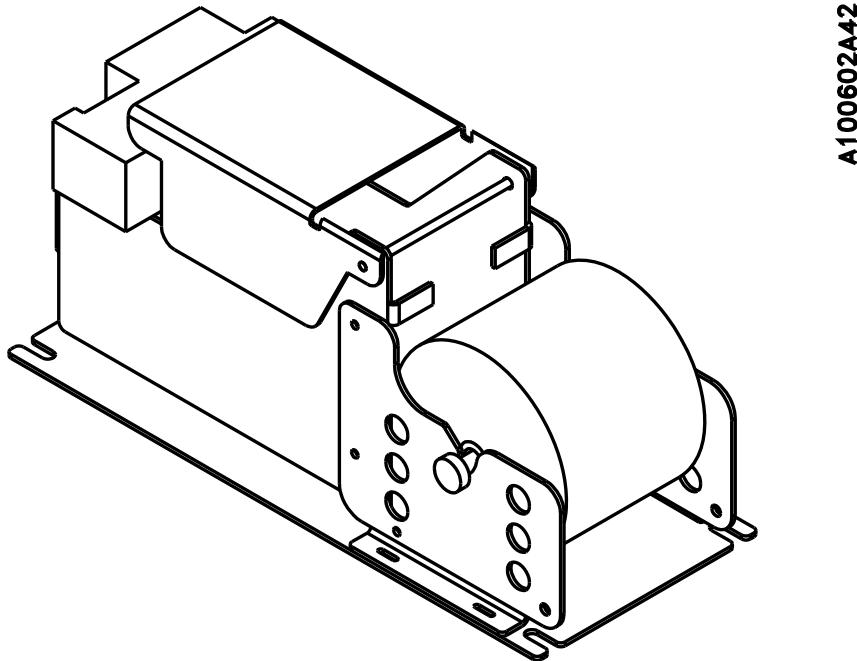
Figure 2-21 Maintenance Mode Switch, Disk Drive Assemblies, Terminal Power Push Button, and AC Outlets.  
(sheet 2 of 2)

**Journal Printer**

The journal printer (Figure 2-22) supplies a detailed audit of all consumer transactions. Typically, the time, date, and type of transaction are printed. The journal printer is capable of printing text and graphics in two colors.

Depending upon the software application, the journal printer can also be programmed to provide a variety of data such as status messages, maintenance actions, commands, and reports.

Refer to the *Journal Printer Operating Guide* (TP-820817-001A).



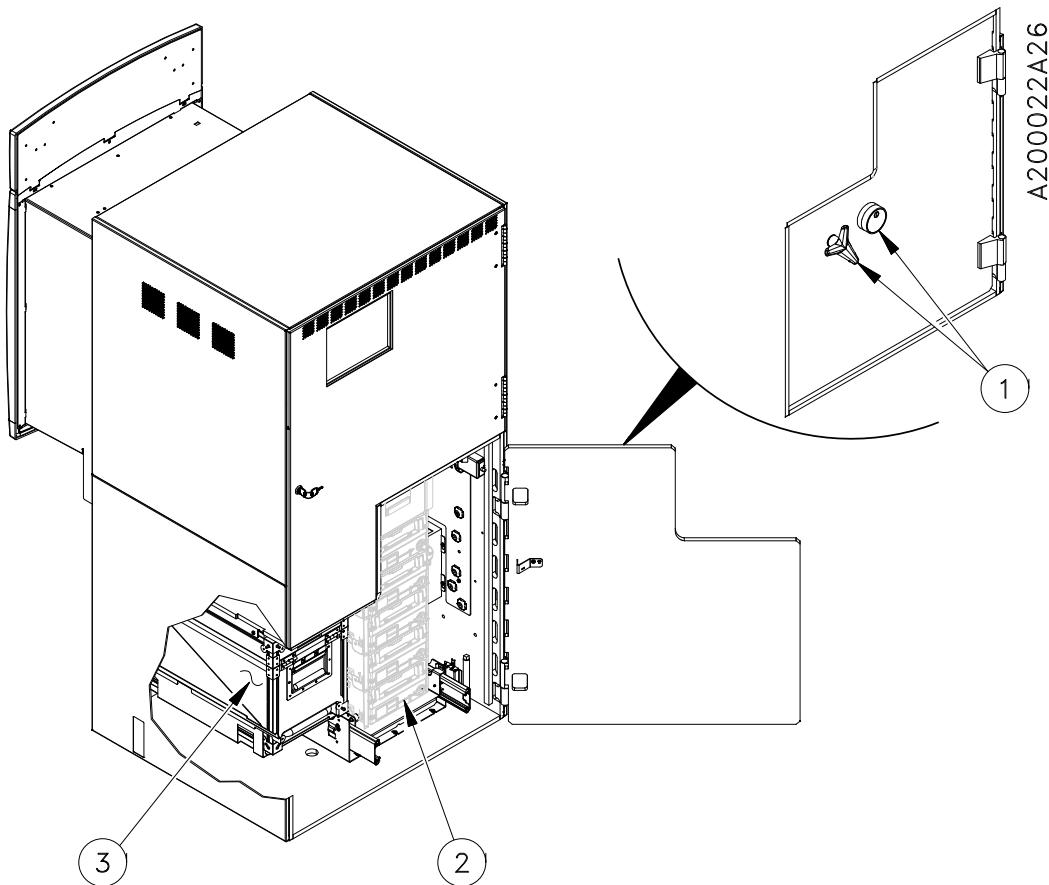
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Figure 2-22 Journal Printer

## 2.3 Devices in the Safe

The following devices are installed inside the safe of the ATM (Figure 2-23). Some devices are optional and may not be installed in your ATM.

- Dispenser (Section 2.3.1)
- Dispenser divert/retract cassette and divert bin (Section 2.3.2)
- Dispenser dispense cassettes (Section 2.3.3)
- Bulk note acceptor free-fall cassette (Section 2.3.4)
- Enhanced note acceptor free-fall cassette (Section 2.3.5)
- Bulk note acceptor and enhanced note acceptor stacking cassettes (Section 2.3.6)
- Envelope depositor deposit cassette (Section 2.3.7)
- Safe door locks (Section 2.3.8)
- Alarm sensors (Section 2.3.9)
- Seismic detectors (Section 2.3.10)
- Heat thermostat (Section 2.3.11)



**NOTE**

For security reasons the location of the alarm sensors, seismic detectors, and heat thermostat are not shown.

1	Safe door lock and handle
2	Dispenser with divert and dispense cassettes
3	Bulk note acceptor cassette, enhanced note acceptor cassette, or envelope depositor cassette (bulk note acceptor free-fall cassette shown)

Figure 2-23 Devices in the Safe

### 2.3.1 Dispenser

After the network or controller processes a withdrawal request, bills (or other dispensable media) are drawn from the dispense cassettes, stacked, and transported through the dispenser (Figure 2-24). The dispenser presents a stack of media to the consumer through the slot in the fascia.

If a bill is unacceptable (too mutilated or crumpled to dispense), or if multiple bills are picked in place of one bill, the dispenser diverts the bill(s) to the divert cassette.

If the consumer fails to remove the stack of media, it is drawn back into the ATM. The dispenser can then be commanded to dump media held in the escrow position. The dispenser performs a dump by moving the stacked media back along the transport from the escrow position and then dumping the media into the divert cassette. Dumping the media prepares the dispenser for the next dispense command.

Refer to the *Advanced Function Dispenser Operating Guide* (TP-820714-001B).

#### NOTE

In some software applications, it may be possible to leave the dispensed media in the presenter, thus making it available (free) to the next consumer. Refer to the software documentation for your ATM for specific details on how this condition may affect your ATM.

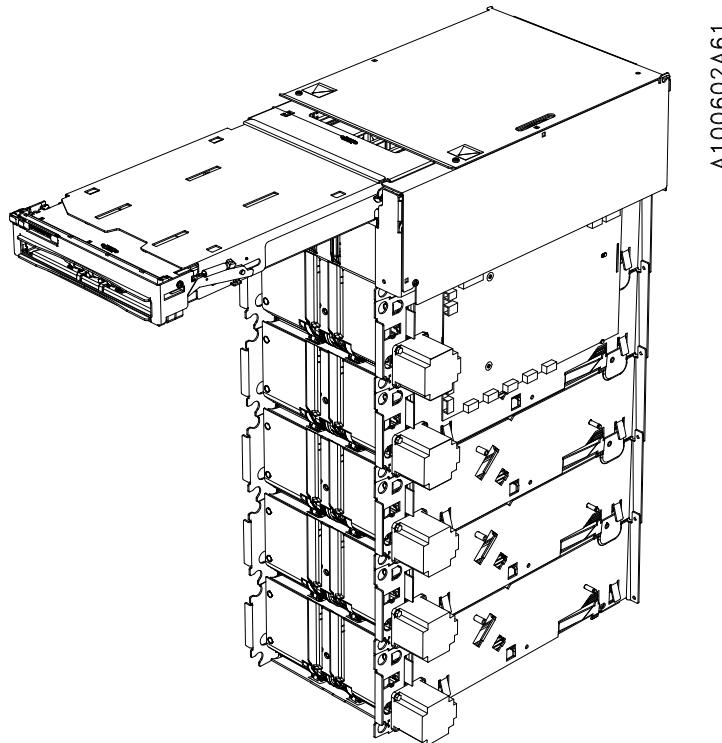
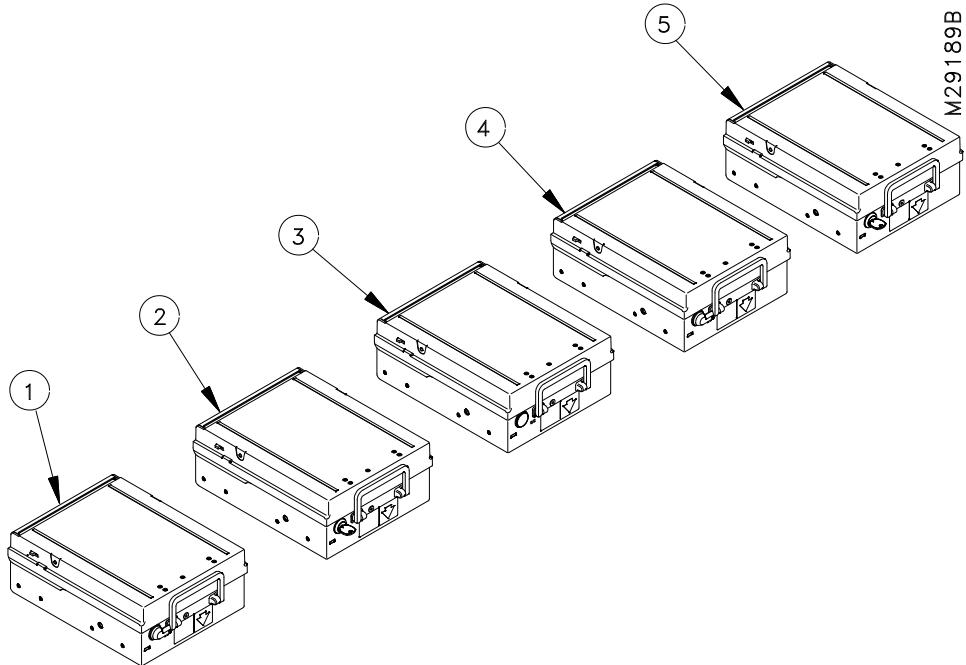


Figure 2-24 Dispenser

### 2.3.2 Dispenser Divert/Retract Cassette and Divert Bin

Both the divert/retract cassette and divert bin (Figure 2-25) store notes diverted from the dispenser. The divert/retract cassette is available as a tamper indicating cassette (with a tamper indicator) or a convenience cassette (without a lock). The divert bin is available without security features.

Refer to the *Advanced Function Dispenser Operating Guide* (TP-820714-001B).



1	Convenience divert/retract cassette
2	Tamper-indicating divert/retract cassette
3	Divert bin
4	Convenience divert/retract cassette (no partition)
5	Tamper-indicating divert/retract cassette (no partition)

Figure 2-25 Divert Cassette Types

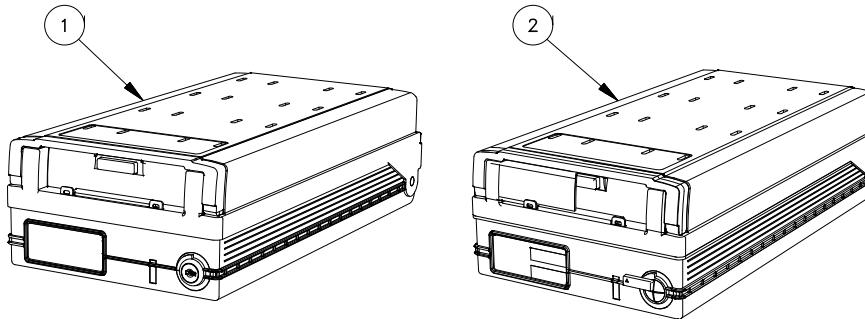
### 2.3.3 Dispenser Dispense Cassettes

Dispense cassettes (Figure 2-26) store bills (or other dispensable media). Dispense cassettes can contain media that meets the following size limitations.

Maximum Size	Minimum Size
95.00 x 182.10 mm (3.74 x 7.17 inches)	45.00 x 85.10 mm (1.77 x 3.35 inches)

Cassettes may contain a stack of media up to 340 mm (13 inches) deep.

Dispense cassettes are available with no lock (convenience) or with standard locks (tamper indicating). Refer to the *Advanced Function Dispenser Operating Guide* (TP-820714-001B).



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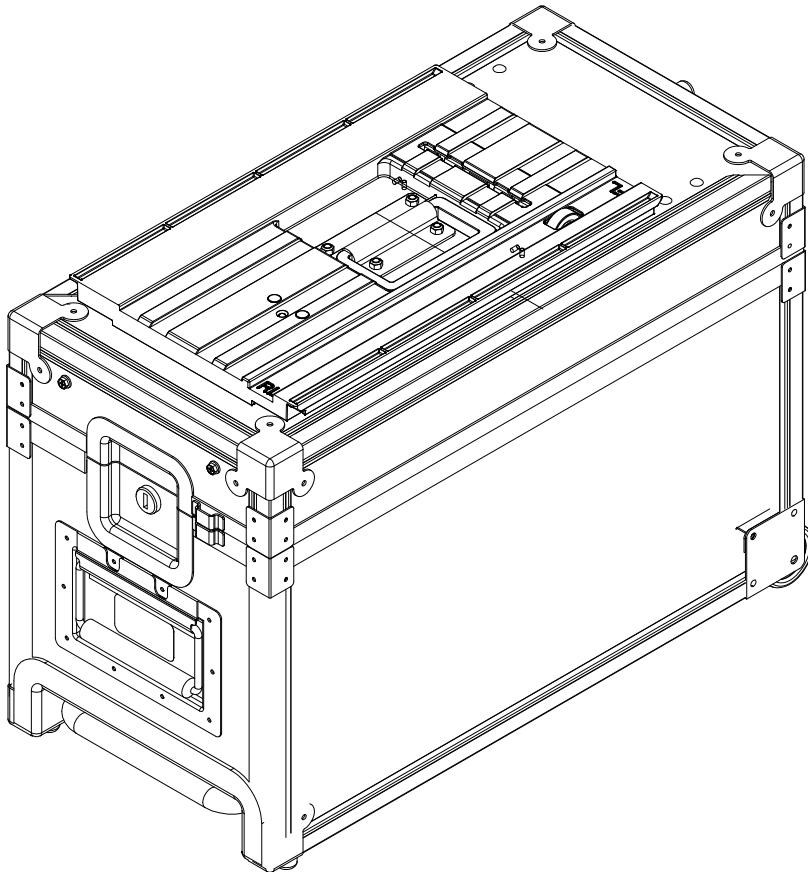
1	Dispense cassette (tamper indicating)
2	Dispense cassette (convenience)

Figure 2-26 Dispense Cassettes

### 2.3.4 Bulk Note Acceptor Free-Fall Cassette

The bulk note acceptor free-fall cassette (see Figure 2-27) is located under the bulk note acceptor module inside the safe. The cassette stores a maximum of 6000 notes accepted by the module and is available as a lockable, tamper-indicating cassette.

Refer to the *Bulk Note Acceptor Operating Guide* (TP-820811-001A).



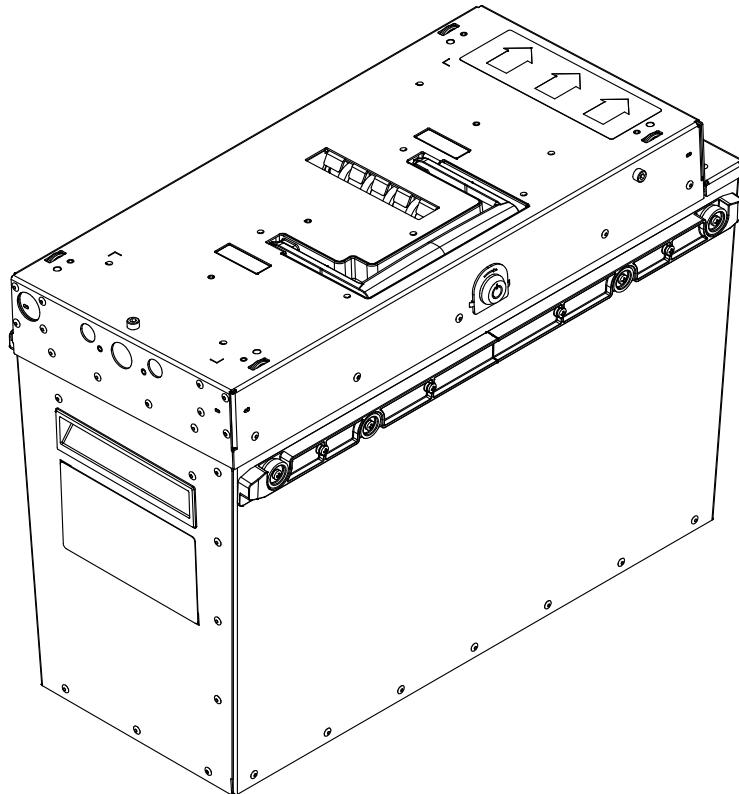
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Figure 2-27 Bulk Note Acceptor Free-Fall Cassette

### 2.3.5 Enhanced Note Acceptor Free-Fall Cassette

The free-fall cassette module for the enhanced note acceptor (ENA) (see Figure 2-28) accepts deposited currency from the ENA and then drops the mixed currency into a removable cassette. The enhanced note acceptor free-fall cassette is located under the enhanced note acceptor module inside the safe.

Refer to the *Opteva Enhanced Note Acceptor Free-fall Cassette Module Operating Guide* (TP-821429-001A).



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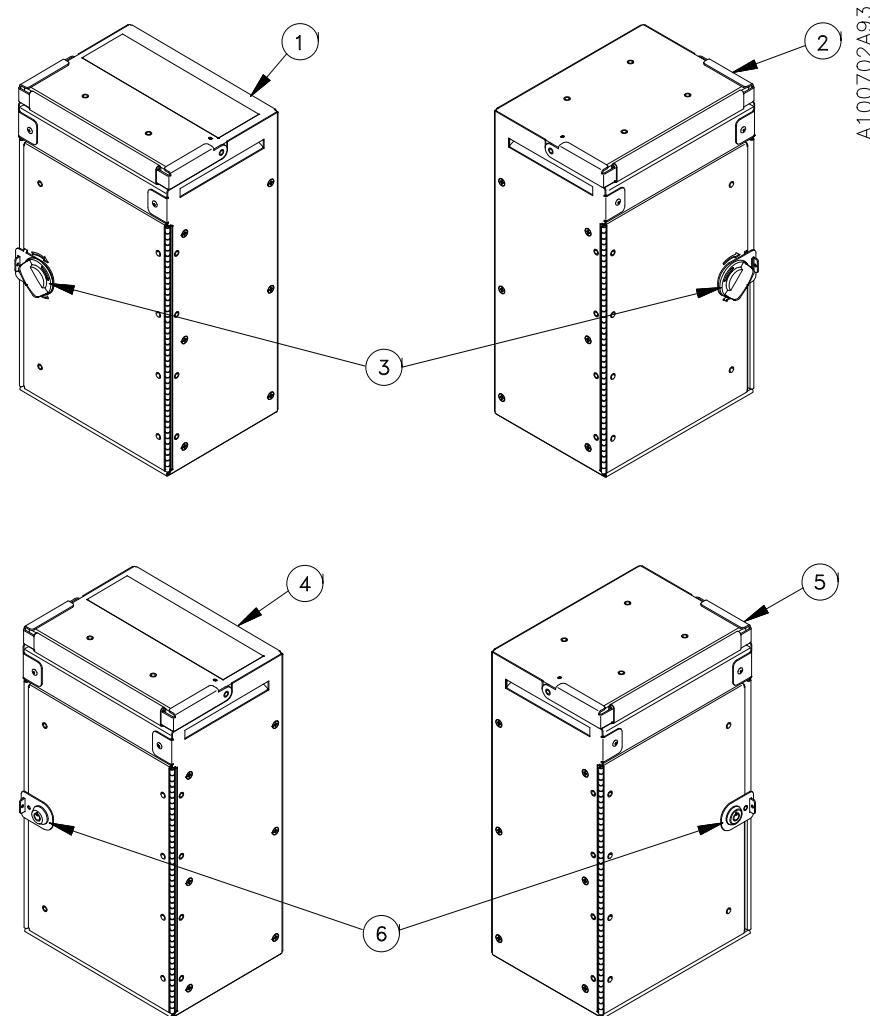
Figure 2-28 Bulk Note Acceptor Free-Fall Cassette

### 2.3.6 Stacking Cassettes for the Bulk Note Acceptor and Enhanced Note Acceptor

Stacking cassettes (Figure 2-29) are an alternative to the free-fall cassette. Stacking cassettes accept deposited currency from the bulk note acceptor or enhanced note acceptor and then neatly stacks the mixed currency into one or two removable cassettes.

Stacking cassettes each have 250 mm of storage capacity or approximately 1500 notes in mixed orientations. The cassettes are available with a keylock (secure cassette) or without (convenience cassette).

Refer to the *Opteva Bulk Note Acceptor Stacking Cassette Module Operating Guide* (TP-821265-001D) or the *Bulk Note Acceptor Stacking Cassette Operating Guide* (TP-821095-001A).



1 Convenience cassette (number 1)	4 Secure cassette (number 1)
2 Convenience cassette (number 2)	5 Secure cassette (number 2)
3 Convenience cassette lever	6 Secure cassette keylock

Figure 2-29 Opteva Stacking Cassette

### 2.3.7 Envelope Depositor Deposit Cassettes

After the deposit envelope is processed by the depositor, the envelope is delivered to a deposit cassette (Figure 2-30). Deposit cassettes can hold between 30 and 300 filled deposit envelopes (depending on thickness) and are available in one of the following configurations:

- Secure deposit cassette (closes and locks automatically when removed)
- Non-secure deposit cassette (self-closing but non-locking when removed)
- Open cassette (interchangeable with the deposit cassette but without a lid, a lock, labels, a tambour door, or security features)

Refer to the *Envelope Depositor with Integrated Dispenser Operating Guide* (TP-820709-001E).

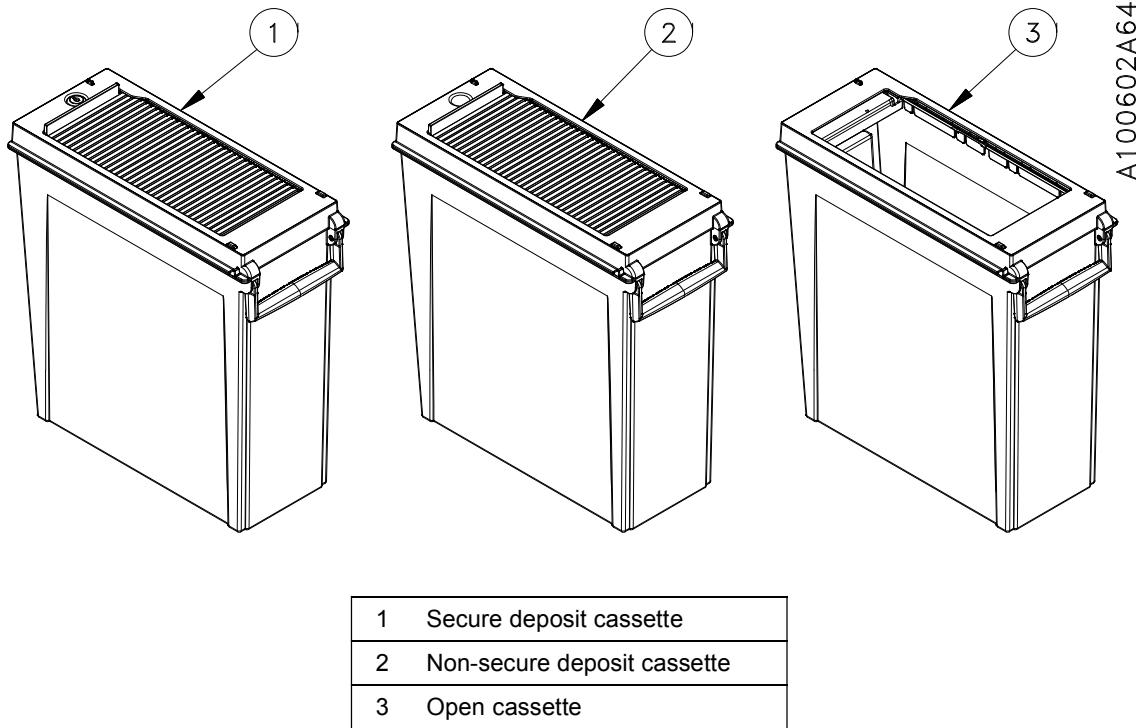


Figure 2-30 Deposit Cassettes

### **2.3.8 Secure Safe Door Lock**

The terminal is equipped with one or more safe locks. The following types of safe locks are available for the ATM:

- Mechanical combination lock
- Electronic combination lock
- Mechanical (non-combination) keylock

See Figure 3-3 for an illustration showing the different types of locks available for the ATM.

Locks can have such features as a single combination, dual combinations, a keylocking dial, a remote access combination, etc.

Refer to Section 3.3 for information on using the safe door lock to open and close the safe door. Refer to the appropriate lock operating instructions listed in Appendix A for additional information on your lock.

### **2.3.9 Alarms Sensors**

#### **Alarms Sensors**

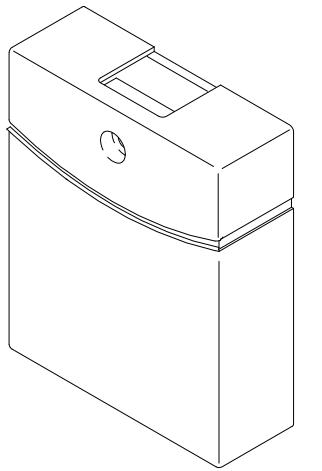
Alarm sensors with a network interface report to a network and send alarm signals to an alarm-monitoring system. Alarm sensors report during or after one of the following events:

- The safe door is opened (door status).
- The safe door is opened, but the combination was not entered (burglary).
- The duress combination is entered (anti-ambush).
- The presence of a blowtorch or similar heat source is detected on the surface of the safe.
- The safe door is closed.

Alarm sensors with a network interface provide their own battery backup. The ATM uses the safe door switch to distinguish between an authorized or unauthorized entry before sending an alarm signal.

### 2.3.10 Seismic Detectors

Seismic detectors (Figure 2-31) sense physical blows to or torch attacks on the ATM safe. Alarm sensors with a network interface must be present for the seismic detectors to function.

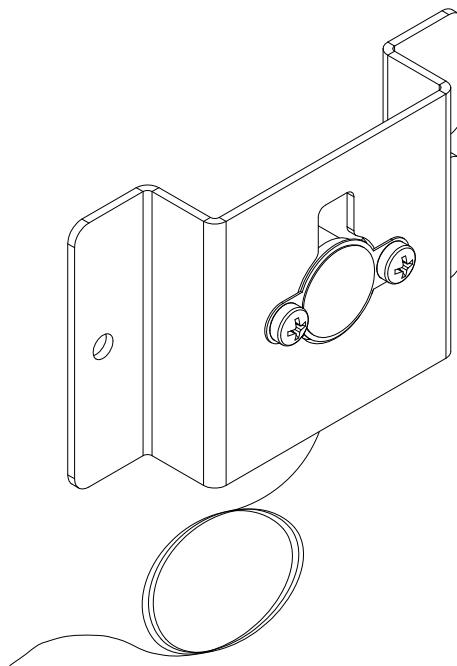


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Figure 2-31 Seismic Detector

### 2.3.11 Heat Thermostat

The heat thermostat (Figure 2-32) senses when the temperature inside the safe exceeds a certain level and initiates an alarm.



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Figure 2-32 Heat Thermostat

## **Section 3**

### **Performing Maintenance on the Upper Chassis and Safe**

---

This section contains the following information.

Description	Refer to...
Touch points on the ATM and devices	Section 3.1
Opening the upper chassis (upper chassis door key required)	Section 3.2
Accessing the safe (safe door lock key [keylocking mechanical combination locks and mechanical keylocks] and the correct lock combination required	Section 3.3
Positioning the rear operator display and maintenance keyboard	Section 3.4



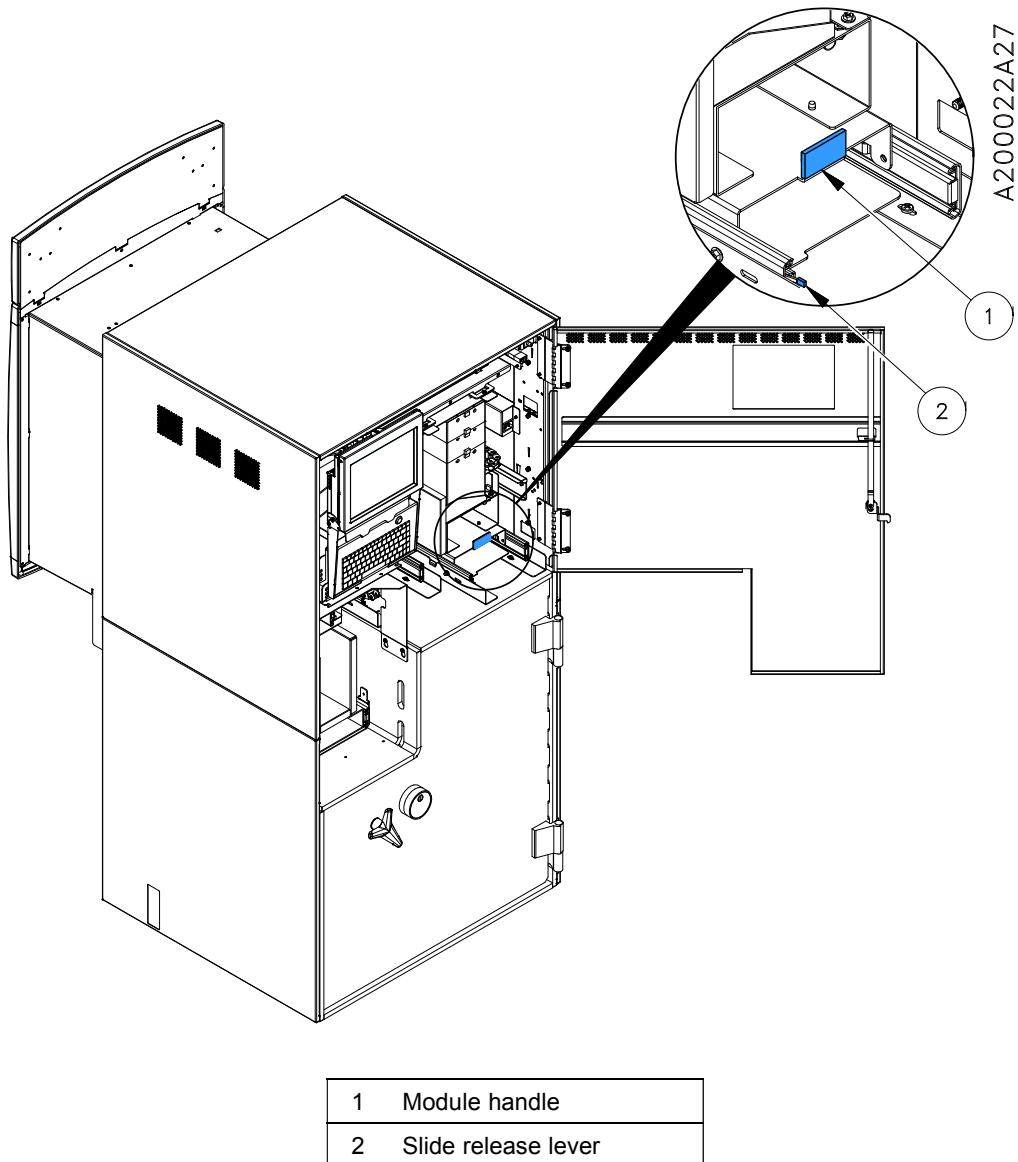
*To avoid risk of death, severe personal injury, or equipment damage, always follow the written maintenance procedures for the ATM and its individual modules.*

#### **NOTE**

For maintenance procedures for the individual ATM modules, refer to the module operating guides listed in Appendix A

### 3.1 Touch Points on the ATM and Devices

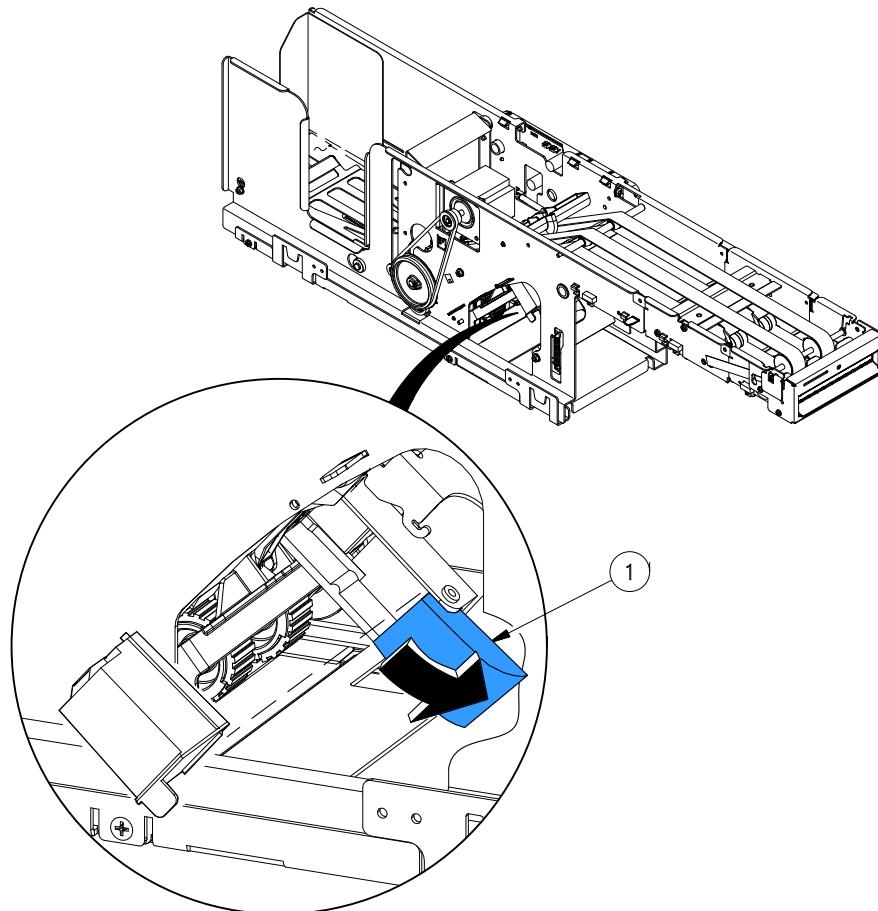
Touch points indicate where to access and handle the ATM during standard maintenance procedures. Touch points are color-coded blue or green and include release levers, handles, device levers, knobs, etc.). Refer to Figure 3-1 for examples.



View A Release Lever for the Slide Assembly and Module Handle

Figure 3-1 Touch Points (sheet 1 of 5)

A1000602A86

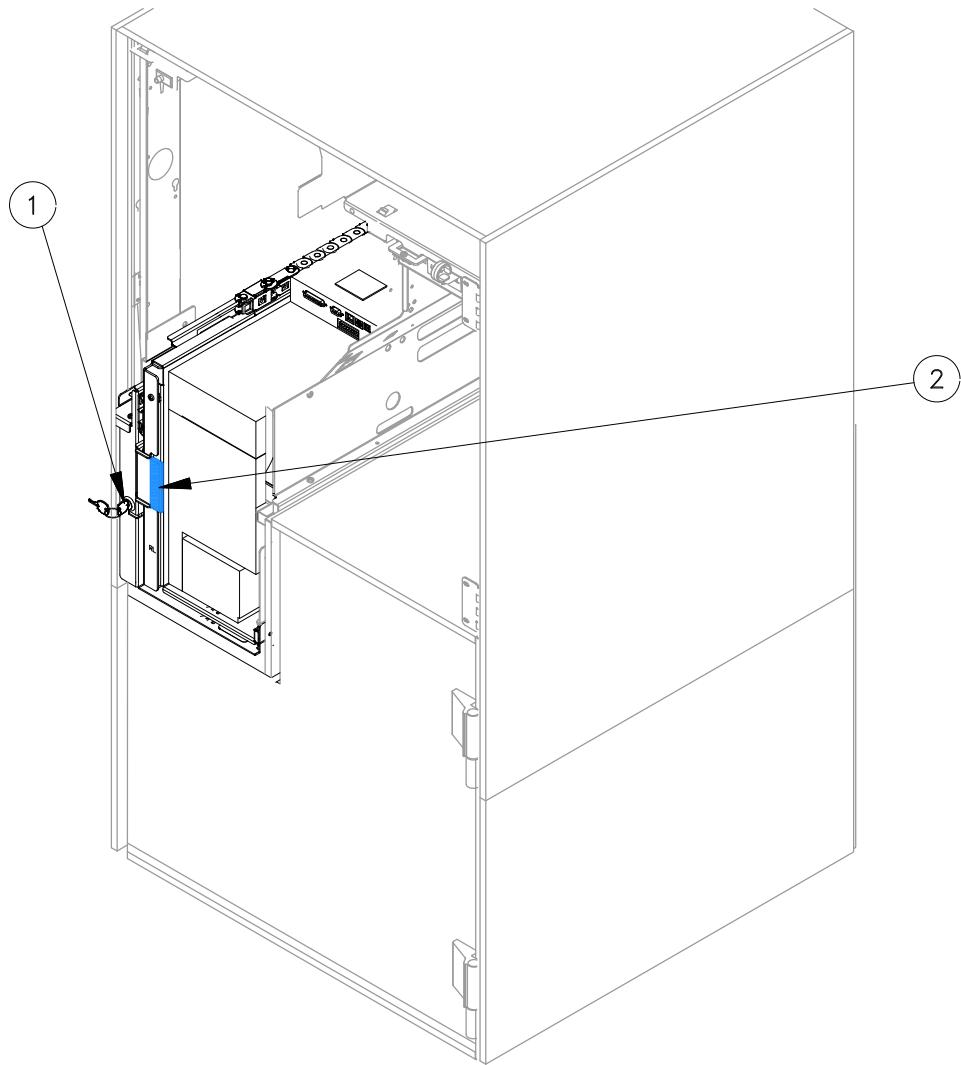


1 Ink cartridge release lever

View B Release Lever for the Ink Cartridge

Figure 3-1 Touch Points (sheet 2 of 5)

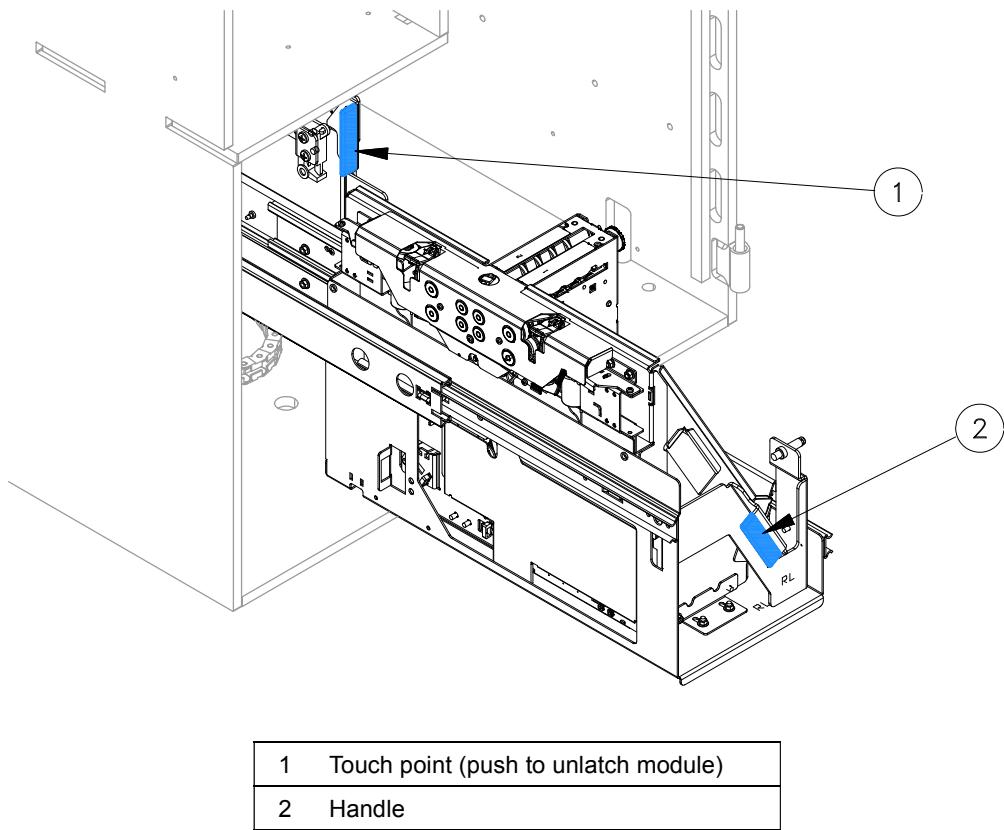
A100702A90



1	Bulk note acceptor optional keylock
2	Bulk note acceptor latch

View C Bulk Note Acceptor Module

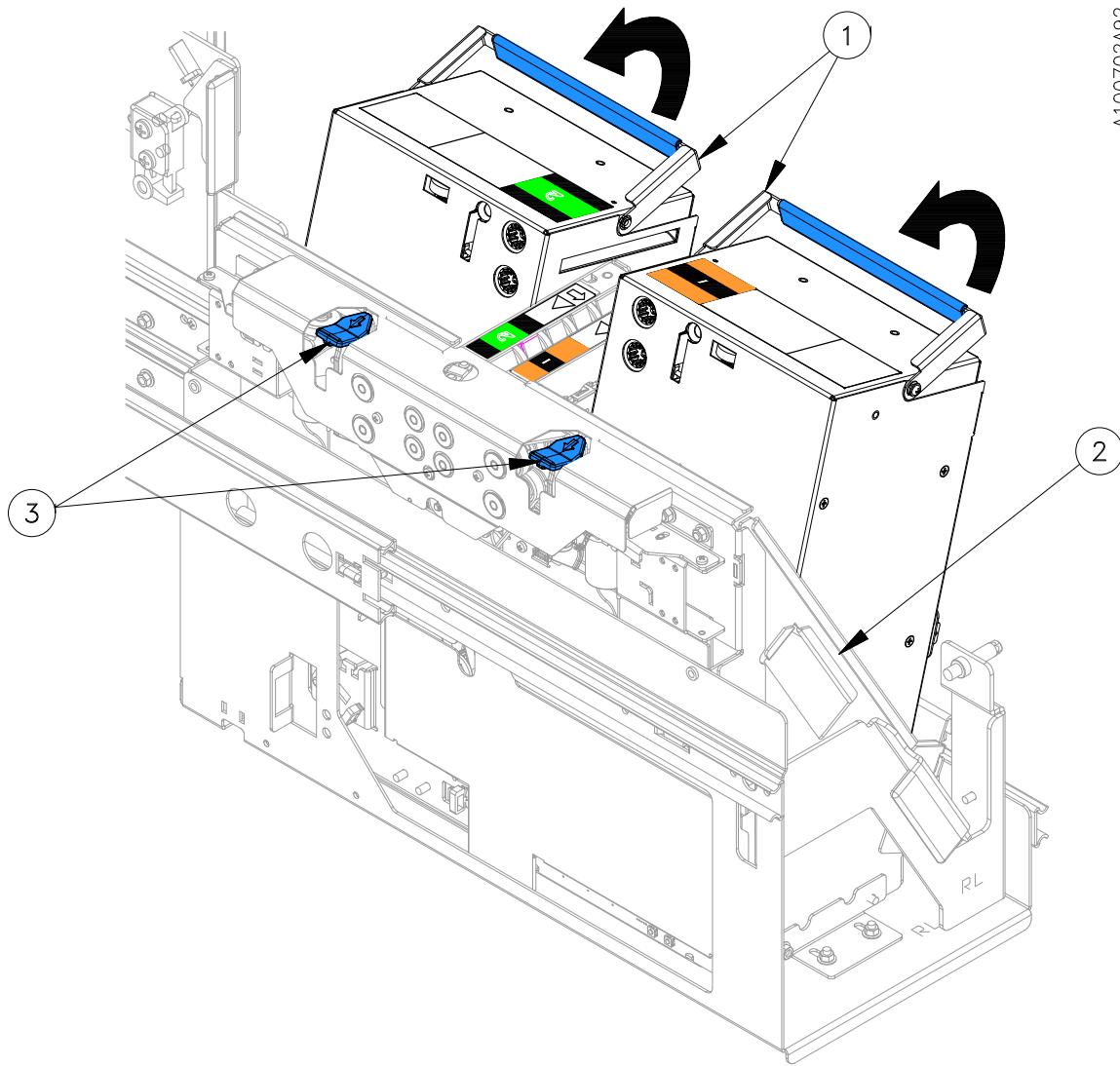
Figure 3-1 Touch Points (sheet 3 of 5)



View D Accessing Stacking Cassettes

Figure 3-1 Touch Points (sheet 4 of 5)

A100702A92



1	Cassettes
2	OSC Module
3	Touch points (push to release cassette)

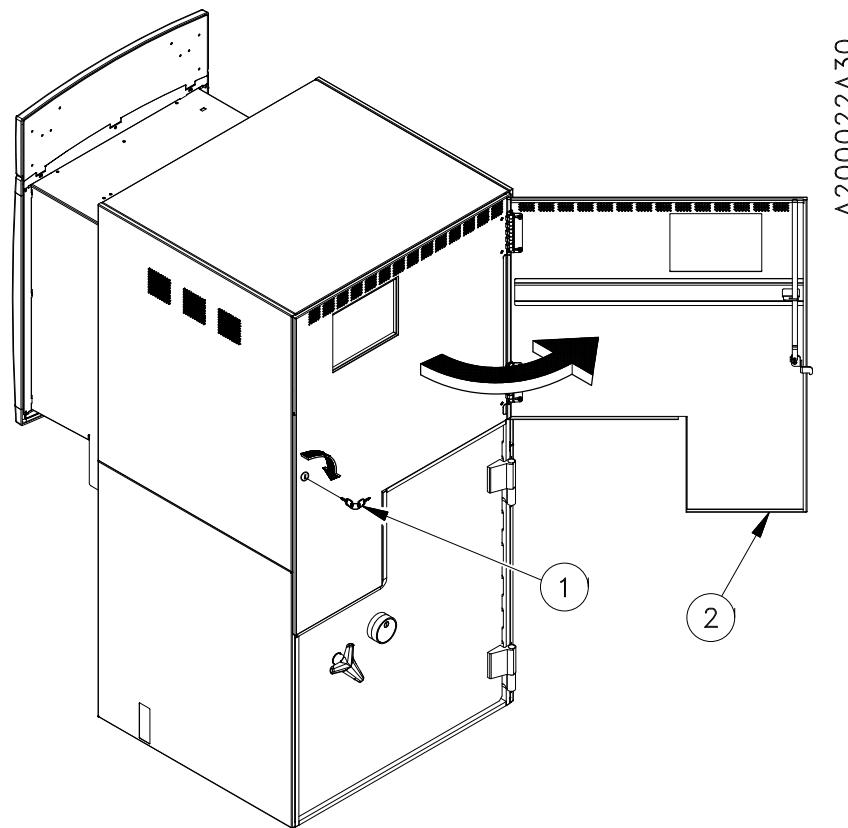
View E Removing Stacking Cassettes

Figure 3-1 Touch Points (sheet 5 of 5)

## **3.2 Opening the Upper Chassis**

The following procedures explain how to open the upper chassis.

1. Insert the key into the lock on the door of the upper chassis (Figure 3-2).
2. Turn the key clockwise.
3. Open the door.
4. Refer to the *Agilis 91x XV Maintenance Manual* (TP-820744-001F) or the documentation for your control software to place the ATM in maintenance mode.
5. Refer to the operating guides in Appendix A to complete the maintenance procedure.

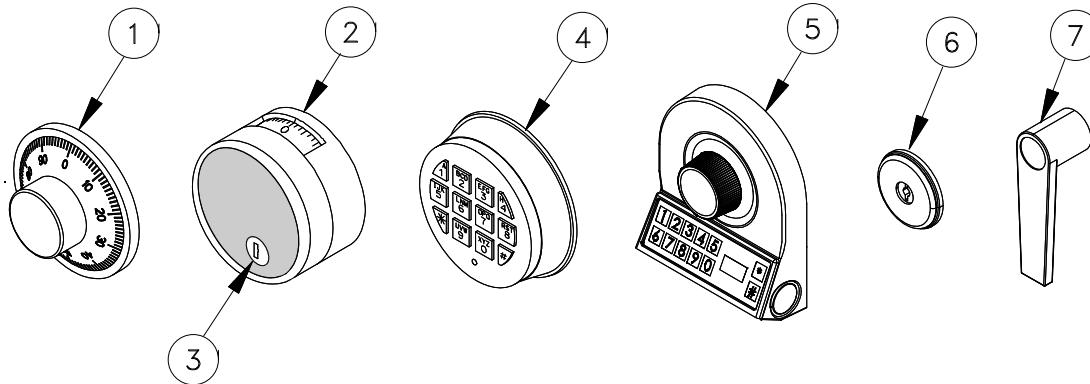


1	Insert and turn key clockwise
2	Swing open upper chassis door

Figure 3-2 Opening the Upper Chassis

### 3.3 Accessing the Safe

The terminal can have one or more safe locks. See Figure 3-3 for the different types of locks and the handle to open the door of the safe.



A100907A56

1	Mechanical combination lock (without keylocking feature)
2	Keylocking mechanical combination lock
3	Keylocking feature
4	ComboGard electronic lock
5	Cencon® system 2000 electronic lock
6	Mechanical (non-combination) keylock
7	Safe opening handle

Figure 3-3 Safe Door Locks and Handles

#### Mechanical Combination Lock

Mechanical combination locks use a rotating dial to enter a predetermined set of numbers to open the safe door. A mechanical combination lock can also have a keylocking feature that prevents the dial from rotating until it is unlocked.

#### Electronic Combination Lock

Electronic locks have a keypad on which you enter the proper combination. Different versions of the lock use a single combination, a dual combination, or a remote access feature to unlock the safe door.

#### Mechanical Keylock

A mechanical keylock is a non-combination lock that uses a key to unlock the lock. A mechanical keylock can be used alone or with a mechanical combination lock or electronic to open the safe.

#### Safe Opening Handle

Safe opening handles are used to release the safe door after the safe lock or locks are unlocked.

Refer to Section 3.3.1 through Section 3.3.5 for the procedures to use these locking systems to unlock and open the safe door.

### 3.3.1 Opening Safe Doors with a Keylocking Mechanical Combination Lock

Perform the following steps and see Figure 3-4 to open safe doors that have keylocking mechanical combination locks.

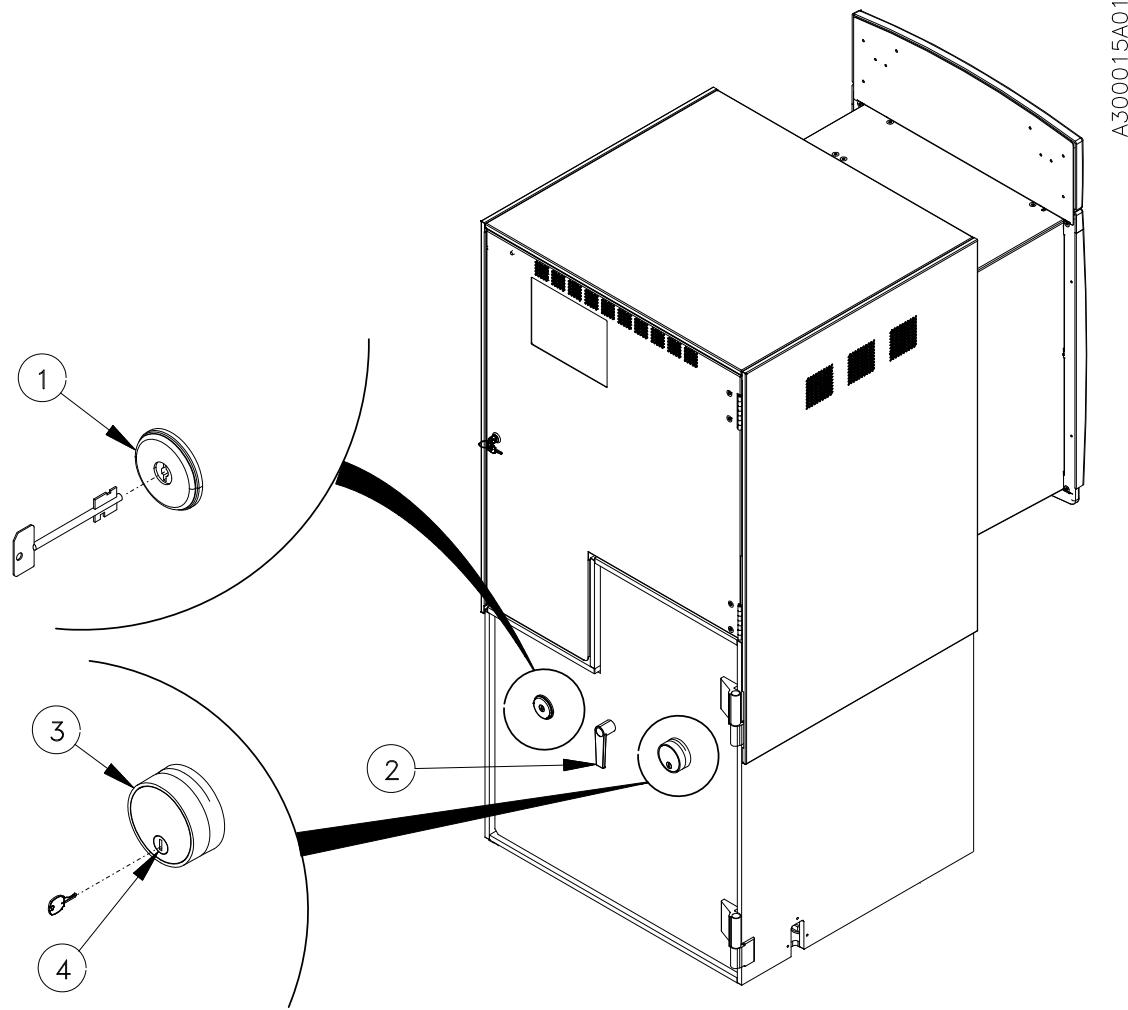
1. If necessary, refer to Section 3.2 for information on opening the top chassis door and placing the ATM in the proper mode for maintenance.
2. If a mechanical keylock is present, insert the key into the mechanical keylock and rotate the key clockwise 180 degrees.
3. Insert the key into the key slot on the combination lock dial and turn it clockwise until the key stops.
4. Remove the key from the combination lock.
5. Dial the combination selected for the ATM (refer to the *ATM Mechanical Combination Lock Operating Instructions* (TP-820610-001A)).
6. Turn the dial clockwise until it stops.
7. Turn the safe opening handle clockwise until it stops.
8. Open the safe door and complete all maintenance (refer to the appropriate operating guides listed in Appendix A for information about the maintenance procedures for your ATM).

### 3.3.2 Closing Safe Doors with a Keylocking Mechanical Combination Lock

Perform the following steps to close a safe door with a keylocking mechanical combination lock. See Figure 3-4 for an illustration of the procedure steps.

1. Close the safe door.
2. Rotate the safe opening handle counterclockwise to lock the door.
3. If a mechanical keylock is present, perform the following steps.
  - a. Turn the key in the mechanical keylock counterclockwise 180 degrees until it reaches the locked position.
  - b. Remove the key from the keylock.
4. Rotate the mechanical combination lock's dial at least three complete revolutions counterclockwise and stop the dial at 0 to scramble the combination.
5. Insert the safe door key into the keylocking feature slot and turn it counterclockwise until it reaches the locked position.

6. Remove the key from the dial.
7. Pull firmly on the safe door to confirm that the safe is secure.



1	Mechanical keylock (not present on all safe types)
2	Safe opening handle
3	Mechanical combination lock
4	Keylocking feature

Figure 3-4 Safe Door with Keylocking Mechanical Combination Locks

### **3.3.3 Opening Safe Doors with a Mechanical Combination Lock (without keylocking feature)**

Perform the following steps and see Figure 3-5 to open safe doors that have mechanical combination locks (without the keylocking feature).

1. If necessary, refer to Section 3.2 for information on opening the top chassis door and placing the ATM in the proper mode for maintenance.
2. Insert the key into the mechanical keylock and rotate the key clockwise 180 degrees.
3. Dial the combination selected for the ATM.
4. Turn the dial clockwise until it stops.
5. Turn the safe opening handle clockwise until it stops.
6. Open the safe door and complete all maintenance (refer to the appropriate operating guides listed in Appendix A for information about the maintenance procedures for your ATM).

### **3.3.4 Closing Doors with a Mechanical Combination Lock (without keylocking feature)**

Perform the following steps to close a safe door with a mechanical combination lock (without the keylocking feature). See Figure 3-5 for an illustration of the procedure steps.

1. Close the safe door.
2. Rotate the safe opening handle counterclockwise to lock the door.
3. Rotate the mechanical combination lock's dial at least three complete revolutions counterclockwise and stop the dial at 0 to scramble the combination.
4. Turn the key in the mechanical keylock counterclockwise 180 degrees until it reaches the locked position.
5. Remove the key from the keylock.
6. Pull firmly on the safe door to confirm that the safe is secure.

A300015A02

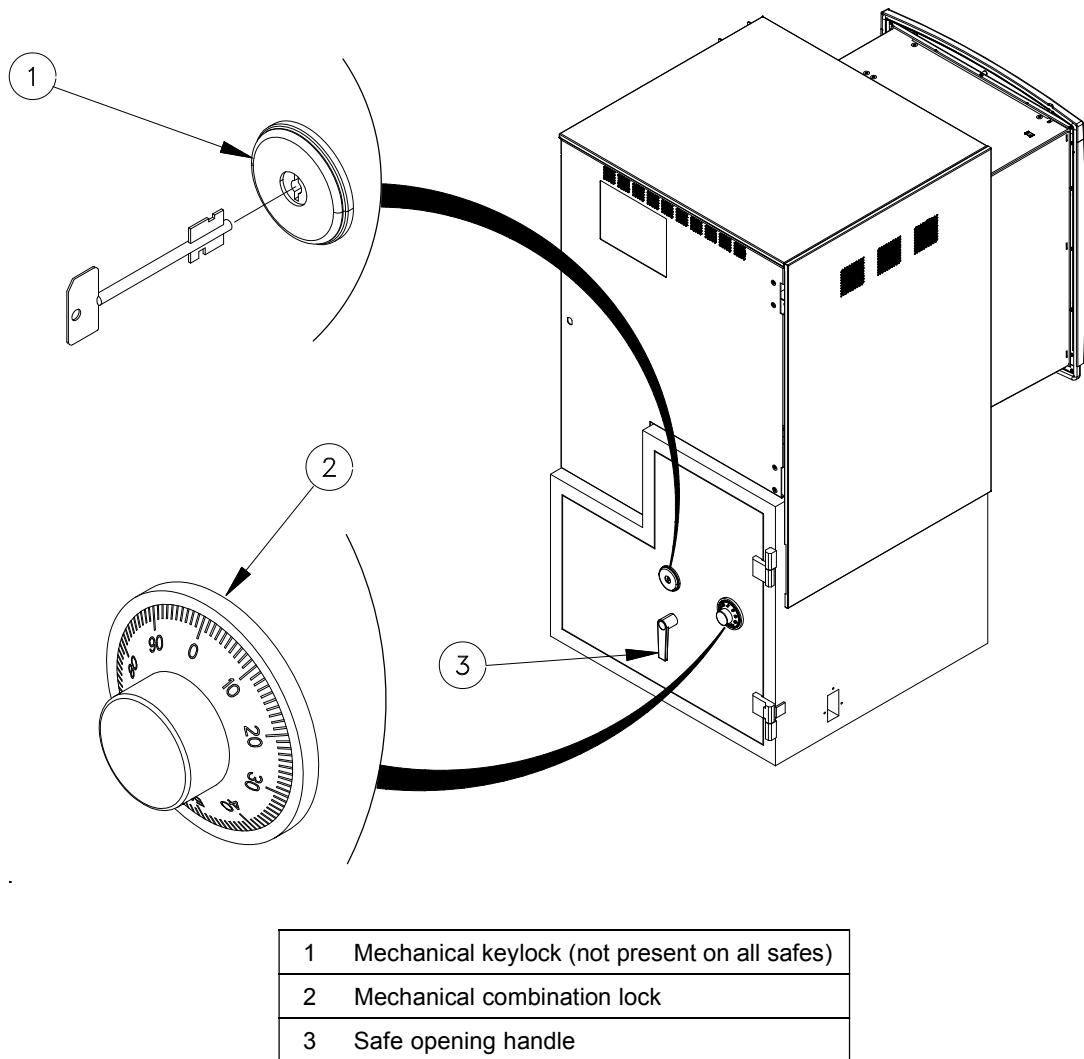


Figure 3-5 Safe Door with Mechanical Combination Locks (without keylocking feature)

### 3.3.5 Opening Safe Doors with an Electronic Combination Lock

Perform the following steps and see Figure 3-6 to open safe doors that have an electronic combination lock.

#### NOTE

If the ATM's electronic lock has the remote access feature, a remote access signal may be required to complete this procedure. Follow your institution's procedures for the remote access feature.

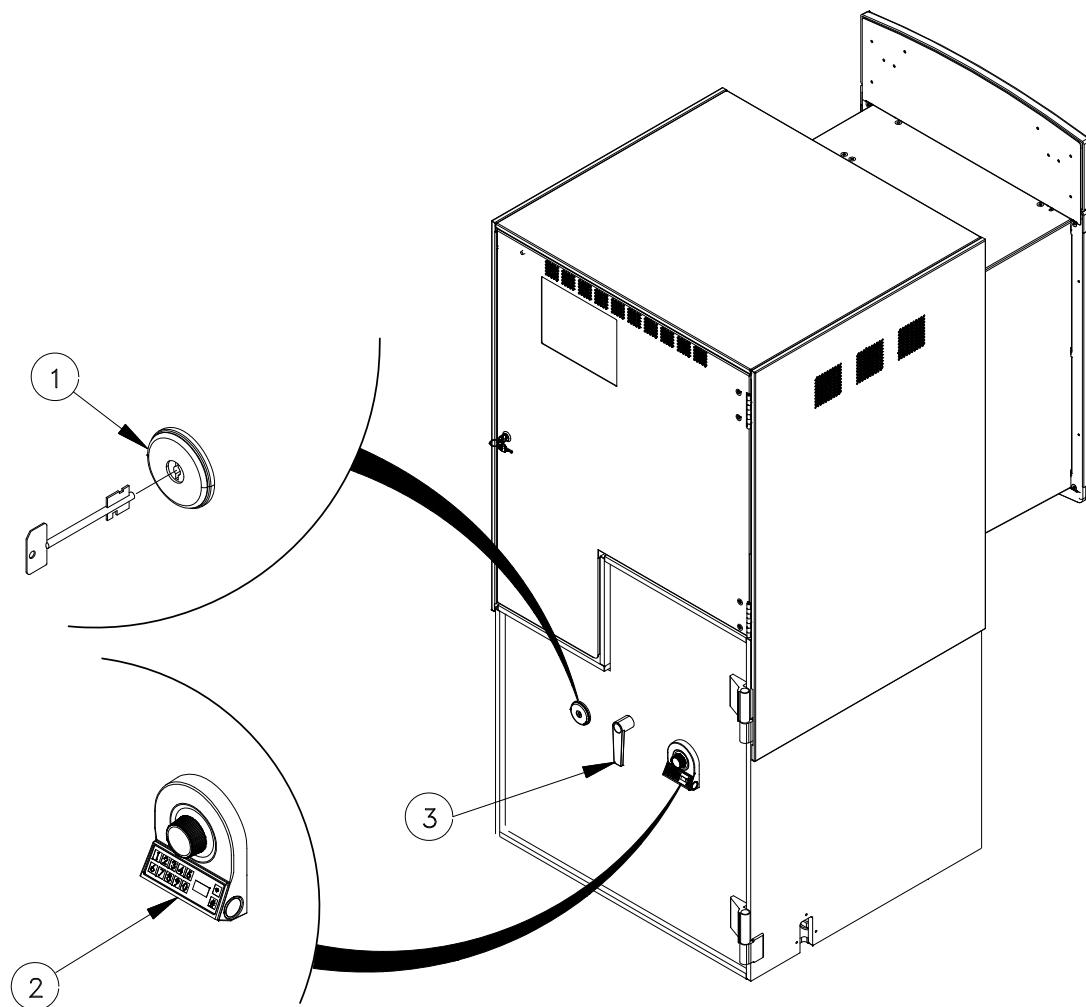
1. If necessary, refer to Section 3.2 for information on opening the top chassis door and placing the ATM in the proper mode for maintenance.
2. If a mechanical keylock is present, insert the key into the mechanical keylock and rotate the key clockwise 180 degrees.
3. Perform the procedure to enter the lock's combination (refer to the appropriate lock operating guide listed in Appendix A or your institution's procedures for information on entering your lock's combination).
4. Turn the safe opening handle clockwise until it stops.
5. Open the safe door and complete all maintenance (refer to the operating guides listed in Appendix A for information about the maintenance procedures for your ATM).

### 3.3.6 Closing Safe Doors with an Electronic Combination Lock

Perform the following steps to close a safe door with an electronic combination lock. See Figure 3-6 for an illustration of the procedure steps.

1. Close the safe door.
2. Rotate the safe opening handle counterclockwise to lock the door.
3. If a mechanical keylock is present, perform the following steps.
  - a. Turn the key in the mechanical keylock counterclockwise 180 degrees until it reaches the locked position.
  - b. Remove the key from the keylock.
4. Perform the necessary steps to secure the electronic combination lock (refer to the appropriate lock operating guide listed in Appendix A or your institution's procedures for information on securing the electronic combination lock).
5. Make sure that the safe opening handle will not rotate.
6. Pull firmly on the safe door to confirm that the safe is secure.

A300015A03



1	Mechanical keylock (not present on all safe types)
2	Electronic combination lock (Cencon 2000 lock shown)
3	Safe opening handle

Figure 3-6 Safe Door with Electronic Combination Locks

### 3.4 Positioning the Rear Operator Display and Maintenance Keyboard

Section 3.4.1 through Section 3.4.2 describe how to place the rear operator display and maintenance keyboard (see Figure 3-7) at various positions and angles. The appropriate position and angle can vary, depending on such factors as the ambient lighting conditions, maintenance operation required, and the operator's personal preference.

#### NOTE

For information on operating the rear operator display and maintenance keyboard to perform specific maintenance procedures, refer to the *Agilis 9Ix XV Maintenance Manual* (TP-820744-001F) or the documentation for your ATM's terminal control software.

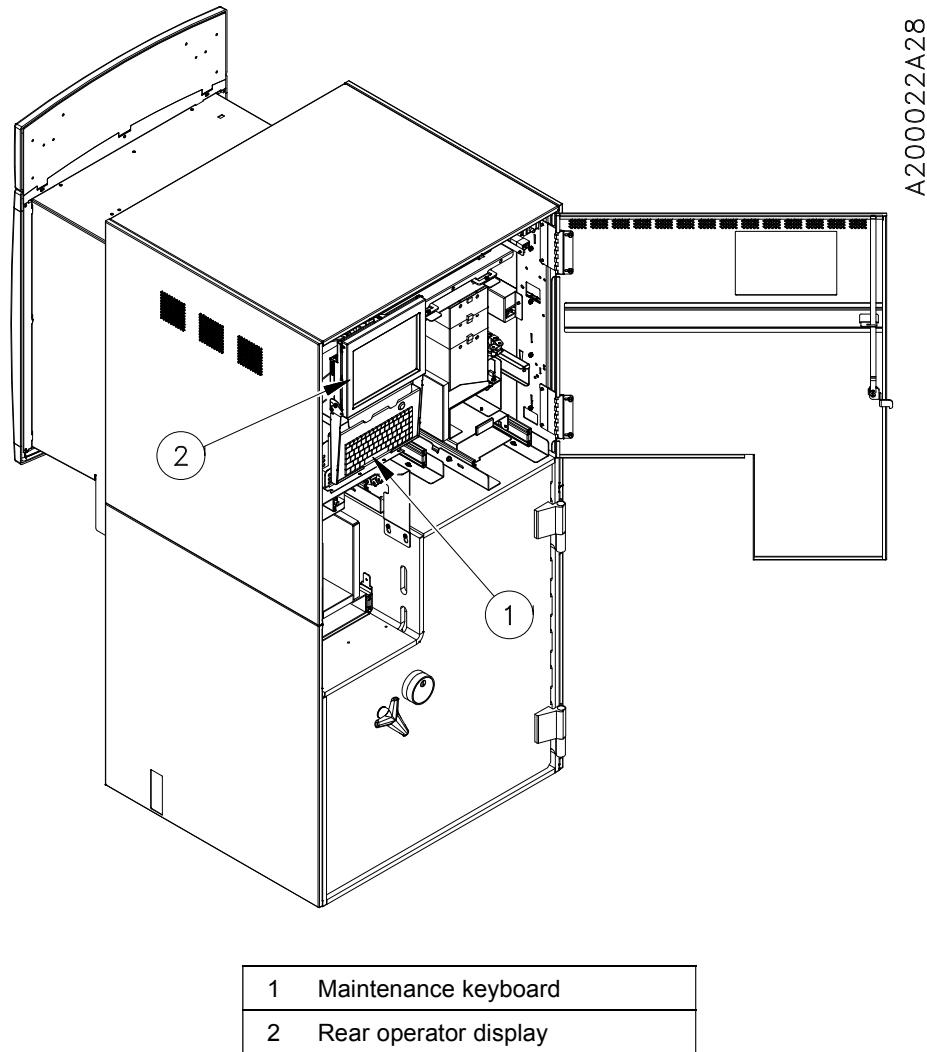
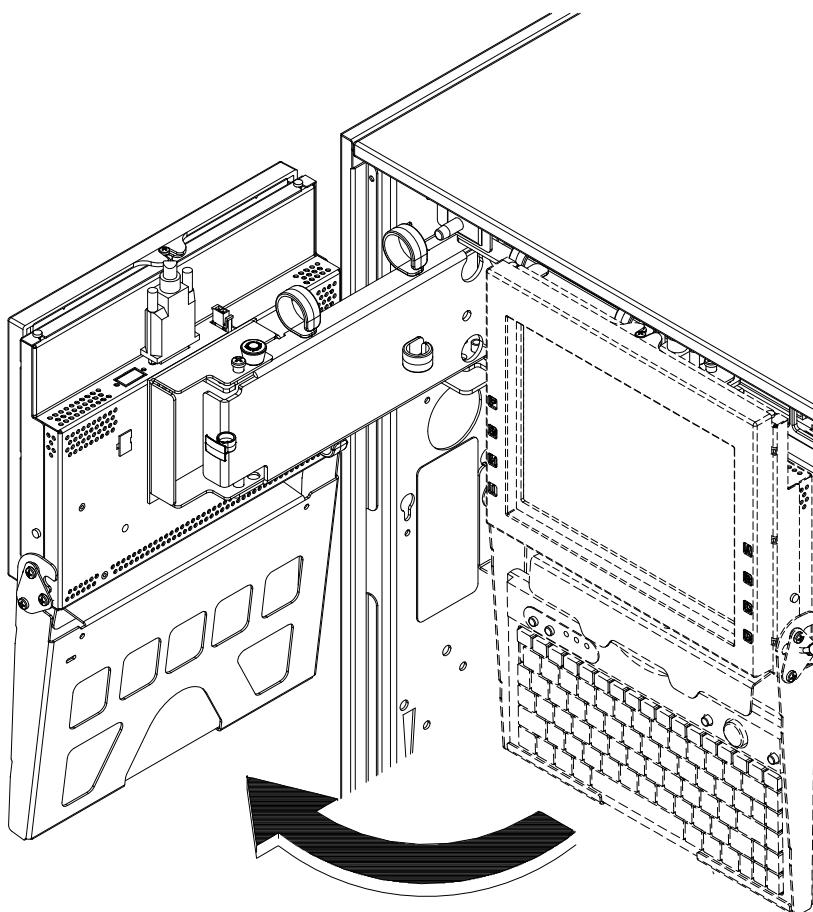


Figure 3-7 Rear Operator Display and Maintenance Keyboard

### **3.4.1 Extending the Rear Operator Display and Maintenance Keyboard**

Extending the rear operator display and maintenance keyboard away from the ATM can provide a more convenient location for operating the display and keyboard or allow access to certain ATM devices. Once in the extended position, the display and keyboard can be further adjusted to either a left-facing, rear-facing, or right-facing position. Perform the following steps to move the rear operator display and maintenance keyboard from their normal retracted position to the extended position.

1. Perform the steps in Section 3.2 to open the upper chassis door.
2. Swing the rear operator display and maintenance keyboard away from the ATM until it locks in place (approximately perpendicular to the rear of the ATM). This is the left-facing extended position (see Figure 3-8).



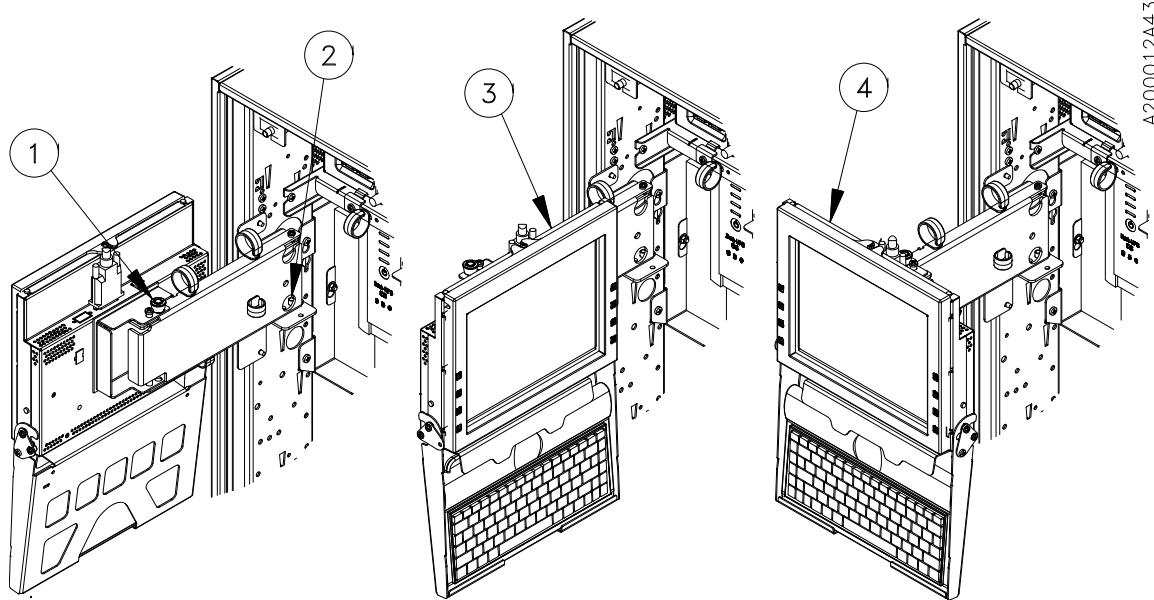
A2000022A45

Figure 3-8 Left-facing Extended Position

3. To rotate the display and keyboard to a rear-facing or right-facing position, lift up on the top release pin (shown in Figure 3-9) and begin to swing the display and keyboard to the right.
4. Let go of the release pin and continue to swing the display and keyboard to the right until it locks in place
5. To return the display and keyboard to its retracted position, first place the display and keyboard in the left-facing position. Then simultaneously pull down on the bottom release pin (shown in Figure 3-9) and swing the display and keyboard back toward the ATM (the display and keyboard do not lock in the retracted position).



**Make sure to completely retract the rear operator display and keyboard into the ATM before attempting to close the upper chassis door. Attempting to close the upper chassis door without placing the display and keyboard in the proper position can damage the display and/or keyboard.**



- |   |  |
|---|--|
| 1 | Top release pin (for left-facing, rear-facing, and right-facing positions) |
| 2 | Bottom release pin (for retracted position)                                |
| 3 | Right-facing position  |
| 4 | Rear-facing position   |

Figure 3-9 Rear-facing and Right-facing Extended Positions

### **3.4.2 Changing the Angle of the Maintenance Keyboard**

The maintenance keyboard is stored in the ATM in a vertical position directly under the operator display. The keyboard can also be placed at two different typing angles to make entering data easier for the operator. Perform the following steps and see Figure 3-10 to change the position of the maintenance keyboard.

1. Open the upper chassis door following the steps in Section 3.2.
2. If desired, place the rear operator display and keyboard in one of the extended positions (refer to Section 3.4.1).
3. Lift up on the front of the maintenance keyboard until the keyboard locks into the first typing position.
4. Lift up on the front of the maintenance keyboard again until the keyboard locks into the second typing position.
5. Perform the following steps to place the keyboard back in the vertical position.
  - a. Lift the keyboard and its mounting bracket up until the slots on each side of the bracket disengage from the pins that lock it in place.
  - b. Move the keyboard and bracket back slightly and rotate them down to the vertical position.
6. If necessary, return the display and keyboard to their retracted positions (refer to Section 3.4.1).



**Make sure to place the maintenance keyboard in the vertical position and completely retract the rear operator display and keyboard into the ATM before attempting to close the upper chassis door. Attempting to close the upper chassis door without placing the display and keyboard in the proper position can damage the display and/or keyboard.**

*Positioning the Rear Operator Display and Maintenance Keyboard*

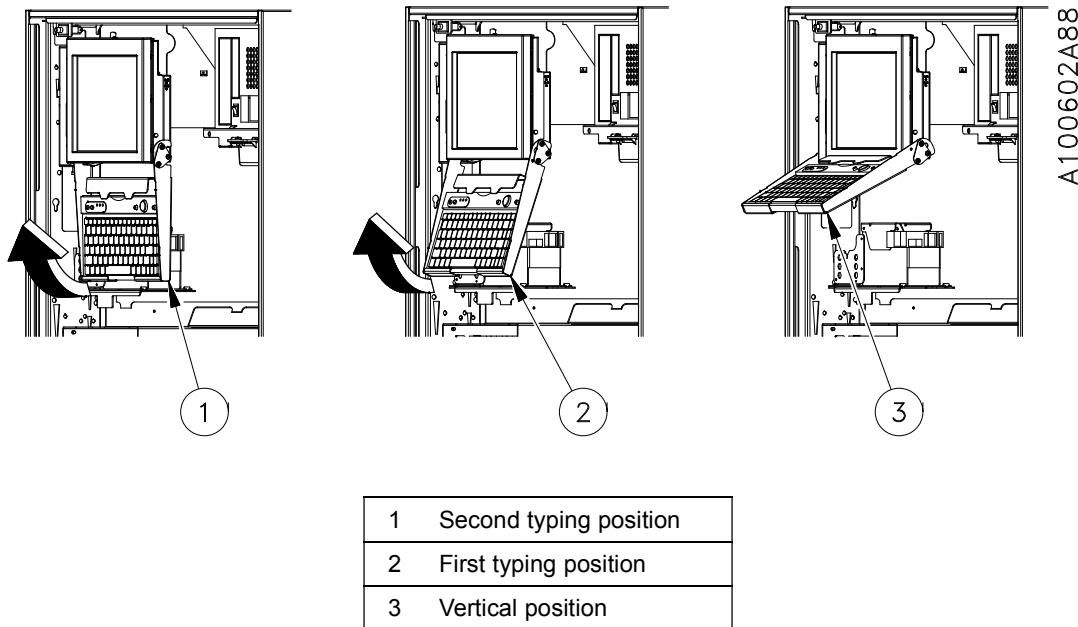


Figure 3-10 Adjusting the Position of the Maintenance Keyboard

## **Appendix A**

### **Related Documentation**

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Refer to the following documents for more information.

**Table A-1 Related Documentation**

<b>Manual Title</b>	<b>Part Number</b>
Advanced Function Dispenser Operating Guide	TP-820714-001B
Agilis 91x XV Maintenance Manual [1]	TP-820744-001F
ATM Mechanical Combination Lock Operating Instructions	TP-820610-001A
Bulk Note Acceptor Operating Guide	TP-820811-001A
Opteva Bulk Note Acceptor Stacking Cassette Module Operating Guide	TP-821265-001A
Bulk Document Intelligent Depository Module (IDM-BD) Operating Guide	TP-820901-001B
Coin Dispenser Operating Guide	TP-820812-001A
Consumer Bar Code Scanner Operating Guide	TP-820813-001A
Dip Card Reader (with chip, 123) Operating Guide	TP-820814-001B
Envelope Depositor with Integrated Dispenser Operating Guide	TP-820709-001E
Fifth-generation Intelligent Depository Module Operating Guide	TP-820903-001C
Journal Printer Operating Guide	TP-820817-001A
Motorized Card Reader (with chip, 123) Operating Guide	TP-820815-001C
Opteva Bulk Note Acceptor Stacking Cassette Module Operating Guide	TP-821265-001D
Opteva Enhanced Note Acceptor (ENA) Operating Guide	TP-821336-001D
Passbook Printer III Operating Guide (Hitachi)	TP-820816-001A
Advanced Passbook Printer Operating Guide (TTEC)	TP-821875-001A
SafeGard Electronic Lock Customer Operating Instructions	TP-820466-001A
Two-color Graphical Receipt Printer (112 mm, 4.4 inch) Operating Guide	TP-820890-001D
Two-color Graphical Receipt Printer Operating Guide	TP-820710-001C
Two-color Graphical Statement Printer Operating Guide	TP-820818-001E
[1] Available in English language only	

## **Appendix B**

### **Cleaning the Exterior of the Terminal**

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Observe the following requirements when cleaning the exterior of the terminal:

- Use only mild soap and water with a soft cloth
- Wipe completely dry with a soft cloth
- Commercial glass cleaners can be used (with a soft cloth) on the consumer display (vandal shield or touch screen), if necessary
- **DO NOT** use harsh chemicals such as solvents or paint thinners
- **DO NOT** use abrasive cleaning compounds
- **DO NOT** use abrasive scouring pads (such as steel wool, Scotch Brite®, and so forth)
- **DO NOT** use high-pressure cleaning systems (such as power washers)
- On terminals not rated for weather exposure, use caution when cleaning exterior surfaces. **DO NOT** use more liquids than necessary.