



Personas M Series

5887 Operator Manual

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1204

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Address correspondence to:

NCR Financial Solutions Group Ltd
Information Solutions
Discovery Centre
3 Fulton Road
Dundee, Scotland
DD2 4SW

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This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

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Information to User

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Revision Record

Date	Change to:	Description of Change
May 03	All	Revision A: New publication
May 04	Chapter 1 Chapter 11, 12, 13	Revision B: Instructions for accessing new modules. New chapters for Cash Acceptor, Cheque Acceptor and Coin Dispenser.
Dec 04	Chapters 1 and 2	Revision C: Incorporate new PC Core.

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User Feedback Form

Purpose and Audience

This publication is intended for NCR customer personnel who are responsible for the day-to-day operation and maintenance of Personas M Series 5887 Automated Teller Machines (ATMs).

The function of this manual is to allow them to maintain an ATM in an operational state by showing them how to replenish the devices which make up the ATM.

Support Information

If you have a problem using the ATM, contact your local Helpdesk or Customer Engineer. For any other information, contact your local Account Team.

What This Manual Contains

This manual is divided into chapters as follows:

- Chapter 1 - “Getting Started” - Introduces the 5887, shows the locations of modules, and describes the basic procedures required to access and start using the ATM and its component modules. This includes a description of ‘racking’ the modules in and out of the ATM, which is not described in detail in the relevant module section.
- Chapter 2- "Error Reporting" - Describes how to read the ATM’s error reporting systems.

The following chapters describe how to carry out the various replenishment and jam clearance operations, and how to remove any media which have been captured by each module. Details of how to access the modules are covered in Chapter 1 “Getting Started”.

- Chapter 3 - “Currency Dispenser”
- Chapter 4 - “Receipt Printer”
- Chapter 5 - “Journal Printer”
- Chapter 6 - “Letter Quality Document Statement Printer”
- Chapter 7 - “Statement/Passbook Printer”
- Chapter 8 - “Page Turn Passbook Printer”
- Chapter 9 - “Enhanced Page Turn Passbook Printer”
- Chapter 10 - “Motorised Card Reader”
- Chapter 11 - “Cash Acceptor”
- Chapter 12 - “Cheque Acceptor”
- Chapter 13 - “Coin Dispenser”
- Chapter 14 - “Cleaning and Maintenance” - Describes the preventive maintenance procedures for 5887 ATMs.

Note: This manual has been written for use with ATMs which run either S4I or APTRA™ Self-Service Support system software.

If your ATM uses S4I, it will use State Of Health (SOH) and the supervisor interface described in the “Supervisor Functions” manual, (B006-4718).

If your ATM uses APTRA Self-Service Support, it will use the error reporting system and supervisor interface programs described in the “APTRA Self-Service Support System Application User Guide” (B006-6167).

Note: To make the most efficient use of this manual, each copy can be customised to the configuration of the ATM for which it is to be used. If you decide to remove a chapter, do not destroy it as your ATM may be upgraded later.

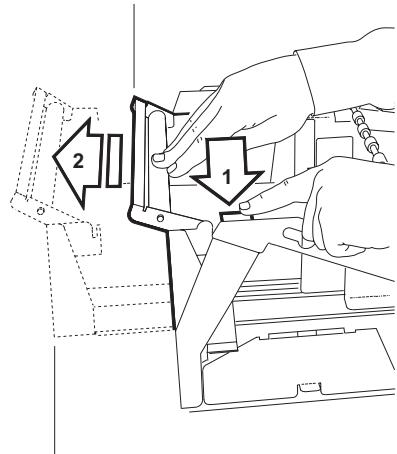
Guide to Illustrations Used in This Manual

The illustrations are used as follows:

- Solid or black outlined objects (highlighted) are the objects on which an action is to be performed
- Outlined arrows indicate the direction of movement for the closest highlighted object. Numbered arrows indicate the sequence of actions to be taken
- Insets, or zoom boxes, show detail of a specific action or area of interest
- Dotted lines indicate the final position of a highlighted object after the operator has completed the required action.

The following illustration provides an example of the illustrations as explained.

Symbol	Definition	Example
	Movement direction Start & End	Black outline indicates object on which action is to be performed.
	Movement direction	
	Movement direction Order of sequence	
	Correct	
	Incorrect	
	Not required	
	Light	Dotted lines indicate final position of outlined object
	Dark	



Chapter 1
Getting Started

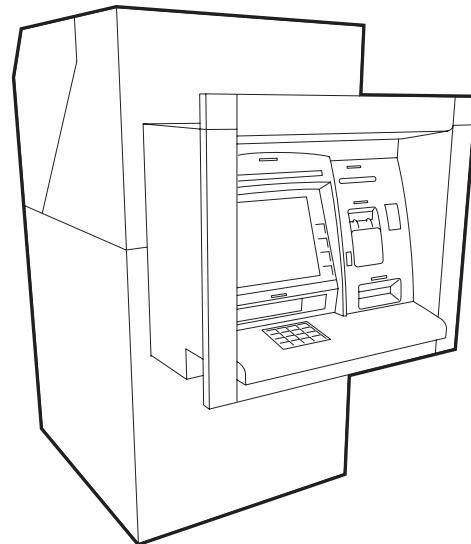
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Introduction to the 5887

The Personas M Series 5887 is a PC-based multi-function Automated Teller Machine (ATM). It is installed through-the-wall and is serviced and replenished from the rear. There are two types of 5887: the 5887 Walk-Up and the 5887 Drive-Up. The procedures contained in this manual are identical for both types.

A PC, running self-service application software, is the heart of the ATM. This self-service software manages transactions and controls the various devices, such as printers, card readers, monitor screens and keyboards.



The main functions of the 5887 are listed below.

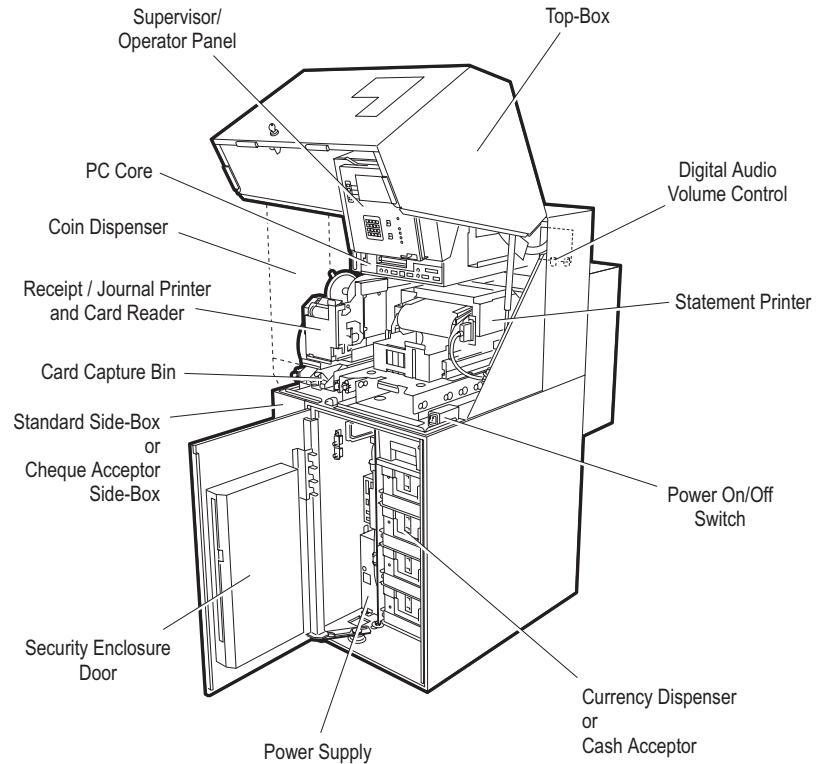
- Dispensing:
 - Notes
 - Coins (5887 Walk-Up only)
- Cash Security
- Depositing:
 - Notes
 - Cheques
- Receipt printing
- Journal printing
- Statement printing
- Mini-statement printing
- Passbook updating (5887 Walk-Up only)
- Coupon printing

- Account transactions:
 - Transfers
 - Order cheque book
- Account enquiries:
 - Account balance
 - Next loan payment
 - Credit card limit
 - Interest rates
- Screen advertising and marketing.

Your ATM may not have all the functions in the list, as some are provided by optional features and some are dependent on the application that the ATM runs.

5887 Module Location

The following illustration shows the locations of the various modules which comprise a 5887 ATM.

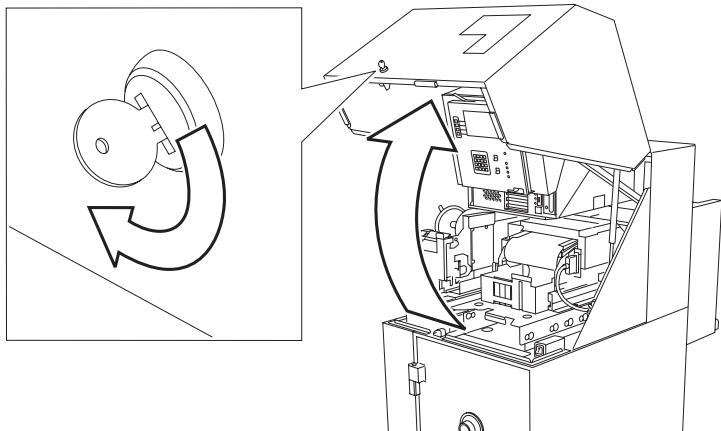


How to Open and Close the Exterior of Your ATM

How to Open the ATM Top-box

To open the top-box proceed as follows:

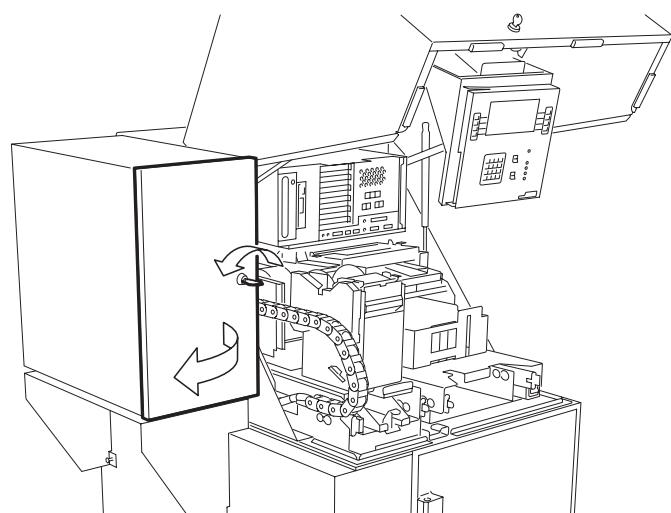
- 1 Turn the top-box key clockwise.
- 2 Open the top-box door upwards, until the gas struts are fully extended.



- 3 To close your ATM, follow the procedure above in reverse, pushing the top-box shut to lock it.

How to Open the Coin Dispenser Door

To open the coin dispenser door, insert the key and turn it counter-clockwise, then open the door.

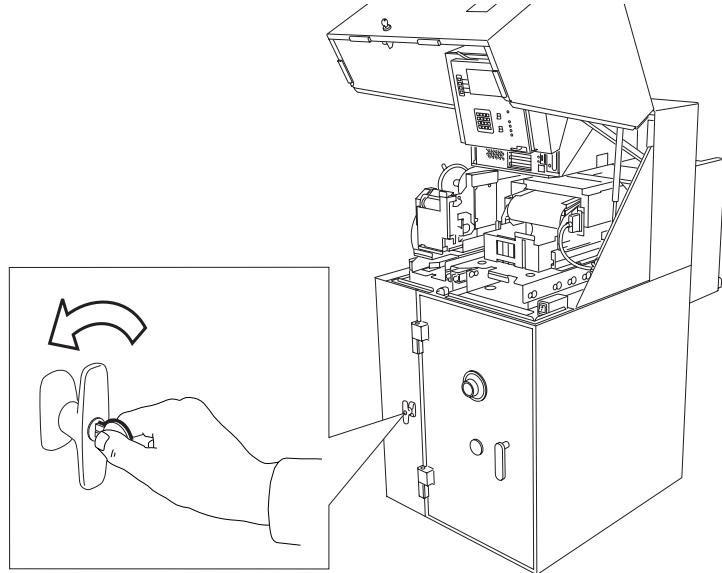


How to Open the Cheque Acceptor Side-box

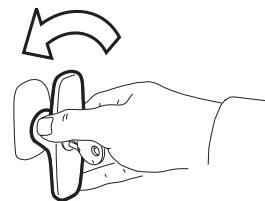
The cheque acceptor side-box has a locking handle and may also have a controlled access electronic lock. For instructions on how to open the controlled access electronic lock, refer to the section “How to Unlock and Lock a Controlled Access Electronic Lock”.

To open the cash acceptor side-box with locking handle only, proceed as follows:

- 1 Insert the key into the keylock on the locking handle and turn it counterclockwise.



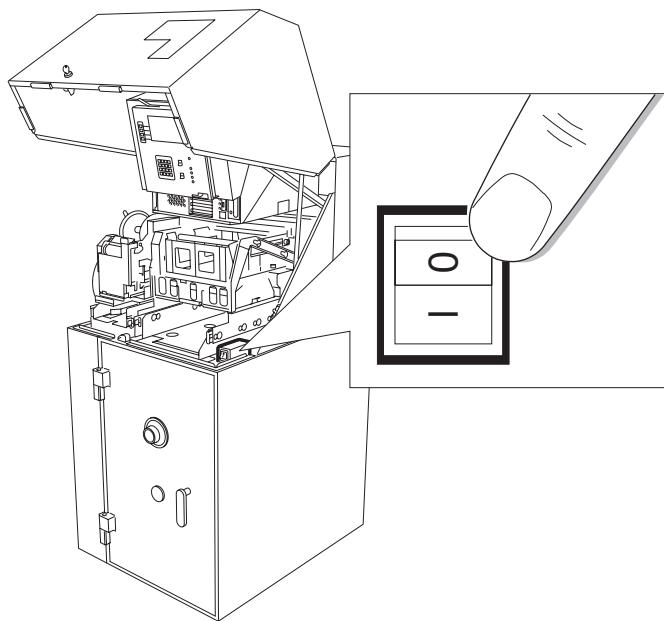
- 2 Turn the locking handle counterclockwise and open the door.



How to Switch Your ATM Power On and Off

To switch the mains power to your ATM on or off, proceed as follows:

- 1 Open the top-box of your ATM.
- 2 Shut down the ATM as described in your in-house procedures.
- 3 Press the switch to the required ON (pressed in at the "1" side) or OFF (pressed in at the "0" side) position.



Note: After you have switched your ATM power on, it will take several minutes for the ATM to load all its software and start displaying your application.

Do not attempt to load paper into the printers until the ATM has completed its power up procedures and started displaying either your application or the supervisor menu.

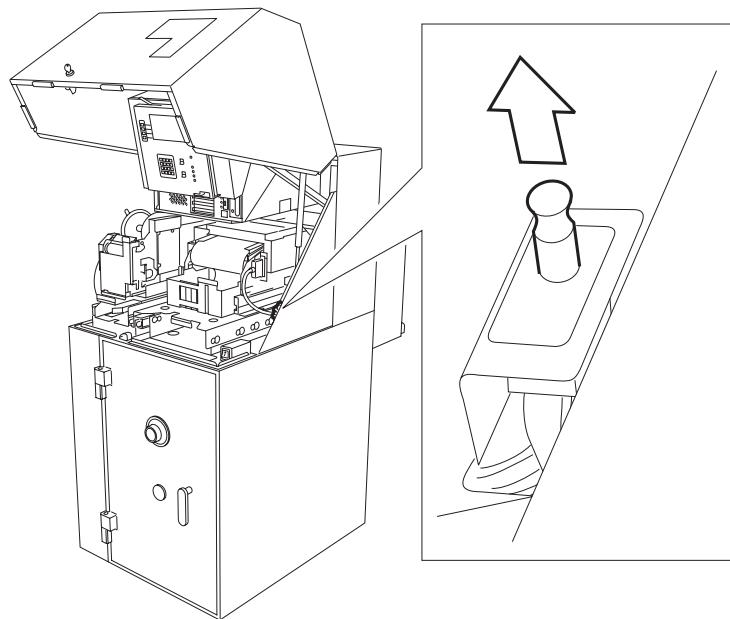
- 4 Close your ATM.

How to Enter Supervisor Mode

Auto-Supervisor

If your ATM is fitted with the auto-supervisor facility, opening the top-box or the security enclosure of your ATM will automatically enter the ATM into Supervisor Mode. From Supervisor Mode, follow your in-house procedures for device status information (see Chapter 3, "Error Reporting"). When you close your ATM it will automatically return to the Normal Mode.

If you want to return the ATM to Normal Mode whilst keeping the exterior of the ATM open, pull out the button shown in the following illustration.



Supervisor Mode

If your ATM is not fitted with the auto-supervisor facility, your ATM will continue to run your application when the exterior of the ATM is open. In this case you must use the switch on the operator panel to manually enter your ATM into Supervisor Mode.

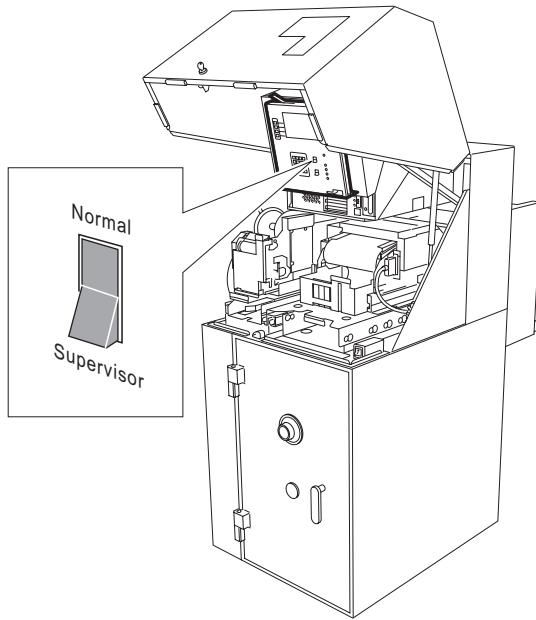
If you do not have the auto-supervisor option, then you will have to enter the Supervisor Mode manually.

- 1 Open the top-box of your ATM.

Getting Started

How to Enter Supervisor Mode

- 2 Press the switch on the operator panel to the **supervisor** position.



- 3 After you have completed the task, press the switch on the operator panel to the **normal** position.
- 4 Close and lock the top-box of your ATM.

In-service Replenishment

If your application supports In-service Replenishment you will be able to replenish most of the terminal's modules while the ATM remains in service. These modules include the:

- Magnetic Card reader/Writer
- Currency Dispenser
- Receipt printer
- Journal Printer
- Document, Statement and Passbook Printers.

Individual transactions or components of transactions will be de-configured while the device they rely on is being replenished. For example, no receipt will be available while the receipt printer is being replenished.

Depending on your application, when you attempt to enter the Supervisor Mode you will be prompted through the Operator Panel to select either the Supervisor Mode (taking the ATM out of service) or to enter the In-service Replenishment Mode.

When in the In-service Replenishment Mode, depending on your application, the menu will:

- Prompt you to select the device, or part of device, to be serviced
- Tell you when the device is available for In-service Replenishment
- Tell you when the device replenishment is complete.

The remainder of this manual is written for terminals which do not have In-service Replenishment. However, other than the entering of the In-service Replenishment Mode, the procedures for replenishing of all devices is exactly the same whether the ATM supports In-service Replenishment or not.

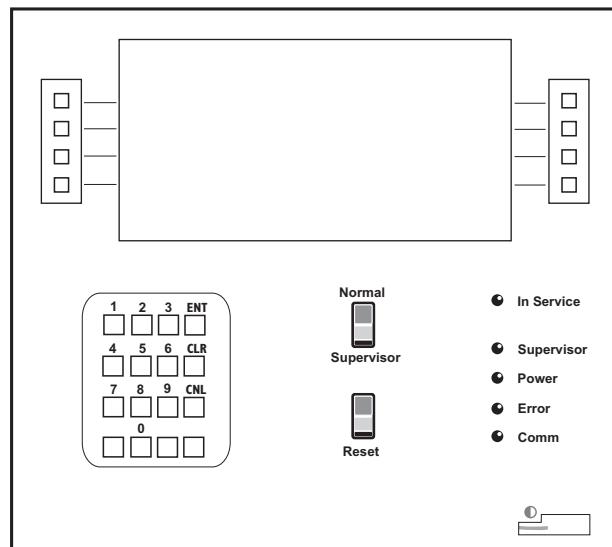
How to Use the Enhanced Operator Panel

The Enhanced Operator Panel (EOP) is located on the rear of the ATM and can be viewed through the clear panel on the top-box door. The operator panel is used to display any error messages and to access the various System Application or State of Health (SOH) options.

System Application options are described in the NCR publication '*APTRA™ Self-Service Support System Application User Guide*', (B006-6167).

State of Health options are described in the NCR publication '*Supervisor Functions*' manual, (B006-4718).

The following illustration shows the layout of the EOP.



The five indicators on the EOP have the following meanings:

- IN-SERVICE - this is illuminated to show that the ATM is available for transactions
- SUPERVISOR - this is illuminated to show that the ATM is in the Supervisor Mode and not available for transactions
- ERROR - this is illuminated to indicate a fatal software error
- POWER - this is illuminated to show that the EOP is receiving power from the ATM
- COMM - this flashes to indicate that the ATM is communicating with a host system.

When the door is closed, and the ATM is in normal mode the EOP will be blank.

The Supervisor switch is used to enter the System Application or State of Health, from where error messages can be accessed.

The reset switch will cause a reset of the whole ATM.

The contrast control is used to adjust the brightness of the display panel.

Note: To run a program, or a program from any of the subsequent menus which will be displayed, press the number key or the Function Display Key (FDK) on the EOP which corresponds to the option you wish to select.

It is possible to transfer the operator functions from the operator panel to the front of the ATM using the TRANSFER INTERFACE option. This procedure is described in either the NCR publication, '*APTRA Self-Service Support System Application User Guide*', (B006-6167) or '*Supervisor Functions*', (B006-4718) depending on which software system your ATM is running.

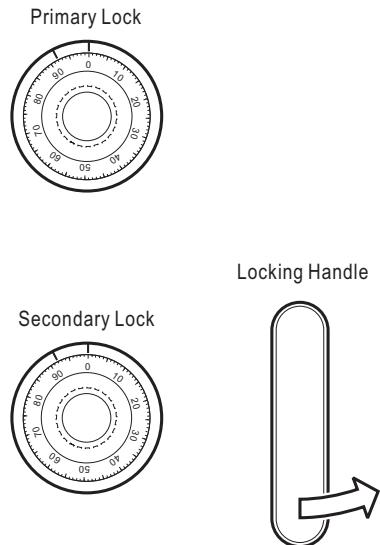
How to Unlock and Lock a Standard Security Enclosure

The standard security enclosure of your ATM will have a locking handle plus one lock (a primary lock), or two locks (a primary and a secondary lock). The possible lock types for primary and secondary locks are as follows:

- Primary lock types:
 - Keylock
 - Combination lock
 - Combination lock with silent alarm
 - Combination lock with integral keylock
- Secondary lock types:
 - Keylock
 - Combination lock
 - Combination lock with silent alarm
 - Combination lock with electronic override.

Note: The make of lock fitted (Standard or Sargent and Greenleaf) depends on the configuration of the ATM. The procedures for opening and closing the locks are the same for both makes.

The following illustration shows the relative positions of primary and secondary locks.



If you have both primary and secondary locks fitted to your security enclosure, they must be unlocked in the following order: unlock the secondary lock, followed by the primary lock and then use the handle to retract the bolt and open the door. To lock the security enclosure: close the door and use the handle to operate the bolt, then lock the primary lock, followed by the secondary lock.

Keylocks

The pair of keylock keys supplied with your ATM have been pre-cut to a random factory-set combination. If one key should get lost, then you should get a new pair of keys and then change the keylock setting.

How To Unlock A Keylock

To unlock a keylock, insert the key into the lock and turn it clockwise as far as it will turn.

How To Lock A Keylock

To lock a keylock, turn the key counterclockwise as far as it will turn and then remove the key.

Combination Locks

Three variants of combination lock may be fitted to your ATM:

- Basic combination lock
- Combination lock with integral keylock
- Combination lock with a silent alarm option.

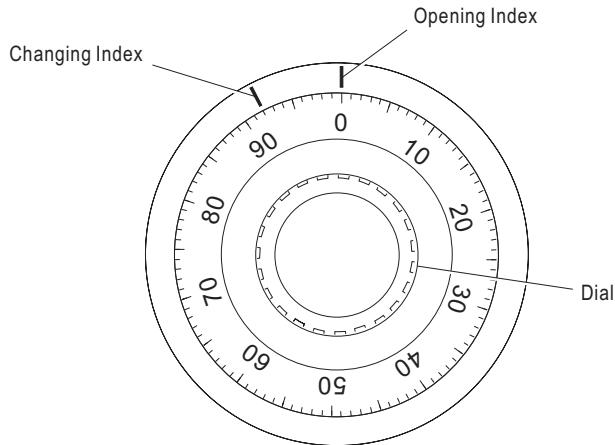
All the variants of the combination lock are three-number combination locks.

The locks are precision locks, therefore extreme care must be taken to align combination numbers with the index.

Turn the dial slowly and steadily. If, after turning the dial the correct number of revolutions, any number is turned beyond the index, the entire series of combination numbers must be re-dialled.

Do not turn the dial back to regain a proper alignment of the number and index, because each time a selected number is aligned with the index, a revolution is counted.

The procedures for unlocking and changing the combination on a combination lock are the same regardless of whether the lock is a primary or secondary lock.



Factory Setting

If the combination lock is set at the original factory setting of 50, you unlock it as follows, dialling on the opening index:

- 1 If a keylock is fitted to the combination lock, insert the key into the lock and turn it clockwise.
- 2 Turn the dial a minimum of four turns counterclockwise and stop on 50.
- 3 Turn the dial slowly clockwise until the bolt retracts. The lock is now open. Use the handle on the door to retract the door bolt and open the door.

Customer Setting Combination

If the combination has been set at a three-number combination, for example 36-82-44, unlock it as follows:

- 1 If a keylock is fitted to the combination lock, insert the key into the lock and turn it clockwise.
- 2 Turn the dial counterclockwise, passing the first number (36) three times, stop on the first number (36) the FOURTH time.
- 3 Turn the dial clockwise, passing the second number (82) twice, and stop on the second number (82) the THIRD time.
- 4 Turn the dial counterclockwise, passing the third number (44) once, and stop on the third number (44) the SECOND time.

- 5 Turn the dial clockwise until the bolt retracts. The lock is now open. Use the handle on the door to retract the door bolt and open the door.

How To Operate The Silent Alarm

The silent alarm is triggered, if fitted, by adding 10 to the first number of the combination. For example if the first number was 34, dial 44 to trigger the silent alarm. Dial the next two numbers of the combination as normal, the combination lock will open as normal but the alarm will have been triggered.

How To Lock The Combination Lock

To lock the combination lock, turn the dial at least four complete turns counterclockwise. If a keylock is fitted to the combination lock, turn the dial until 0 is in line with the opening index and then turn the key counterclockwise and remove it from the lock.

How To Change The Combination

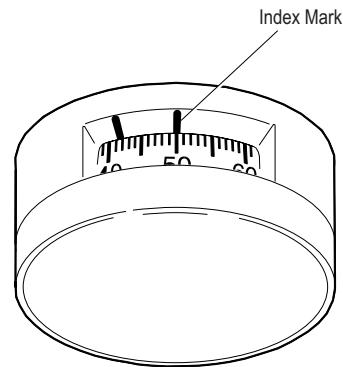
Detailed instructions on how to change the combination of a lock are inside the security enclosure.

Combination Lock and Separate Keylock

Unlocking

On arrival at the site, the combination lock is set at the original factory setting of 50. To unlock the security enclosure, proceed as follows:

- 1 Turn the dial of the combination lock until 0 is under the index mark.
- 2 Turn the dial of the combination lock counterclockwise until 50 is under the index mark for the FOURTH time.

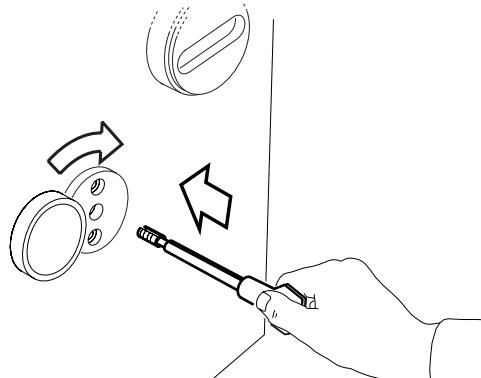


Note: Combination locks are precision locks, therefore, extreme care must be taken to align combination numbers with the index. Turn the dial slowly and steadily. If any of the numbers in the combination is turned beyond the index, the entire series of numbers must be re-dialled.

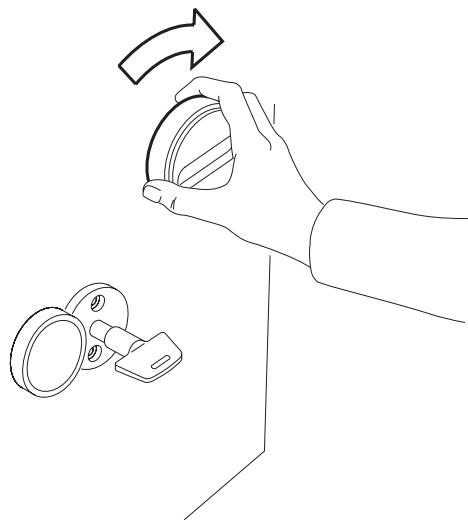
Getting Started

How to Unlock and Lock a Standard Security Enclosure

- 3 Turn the dial clockwise until 0 is under the index mark or until it stops. The combination lock is now open.
- 4 Insert the key into the keylock and turn it clockwise to unlock the keylock.



- 5 Turn the locking handle clockwise through approximately 45° to retract the door bolt. The door is now unlocked.

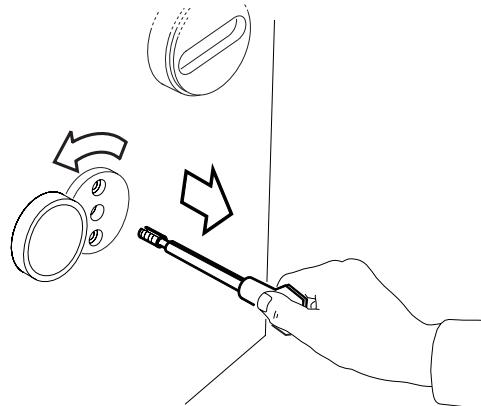


Locking

To close and lock the security enclosure proceed as follows:

- 1 Close the door.
- 2 Turn the locking handle counterclockwise through approximately 45° to the vertical position to engage the door bolt.

- 3 Turn the key in the keylock counterclockwise and then remove the key.



- 4 Lock the combination lock by turning the dial at least four complete turns counterclockwise.

Customer Setting Combination

If the combination has been set at a three-number combination, for example 36-82-44, unlock it as follows:

- 1 If a keylock is fitted to the combination lock, insert the key into the lock and turn it clockwise.
- 2 Turn the dial counterclockwise, passing the first number (36) three times, stop on the first number (36) the FOURTH time.
- 3 Turn the dial clockwise, passing the second number (82) twice, and stop on the second number (82) the THIRD time.
- 4 Turn the dial counterclockwise, passing the third number (44) once, and stop on the third number (44) the SECOND time.
- 5 Turn the dial clockwise until it stops. The lock is now open. Use the handle on the door to retract the door bolt and open the door.

How To Lock The Combination Lock

To lock the combination lock, turn the dial at least four complete turns counterclockwise. Turn the dial until 0 is in line with the opening index and then turn the key counterclockwise and remove it from the lock.

How To Change The Combination

Detailed instructions on how to change the combination of a lock are inside the security enclosure.

How to Unlock and Lock an Electronic Lock

Unlocking

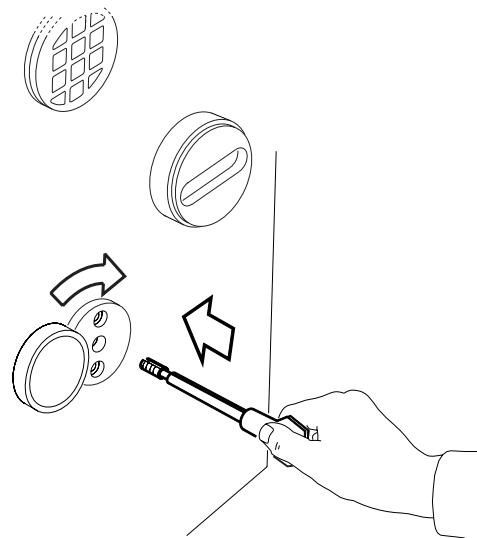
To unlock the security enclosure proceed as follows:

- 1 With the keypad in its vertical position, enter the first six digits of the combination (set to 123456 when shipped from factory). If the sequence is entered correctly, the lock will beep and the led flash. If the lock has been set to operate on a single combination, proceed to step 3.



- 2 If the lock is set to operate on a dual combination, enter the second six digits of the combination (set to 456789 when shipped from factory). If the sequence is entered correctly, the lock will beep and the led flash.
- 3 Turn the keypad clockwise to unlock the lock.

- 4 Turn the keylock clockwise to unlock the lock.



- 5 Turn the safe handle counterclockwise to open the door.

Note: If when entering a combination you enter the wrong combination 4 times, a 5 minute time delay period is activated. During this time the led on the lock will flash red at 10 second intervals. You must wait until the end of the 5 minute period before attempting to enter the correct combination.

Note: If fitted, the silent alarm may be activated by entering one number higher or lower for the last digit of a combination. For example, if the combination was 1-2-3-4-5-6, entering 1-2-3-4-5-5 or 1-2-3-4-5-7 would activate the silent alarm.

Note: Repeated beeping of the lock during an opening sequence indicates that the lock battery requires replacing. If the lock keypad is completely "dead", that is, it makes no sound or flashes, follow the emergency opening procedure to open the lock prior to having the battery replaced.

Locking

To lock the security enclosure proceed as follows:

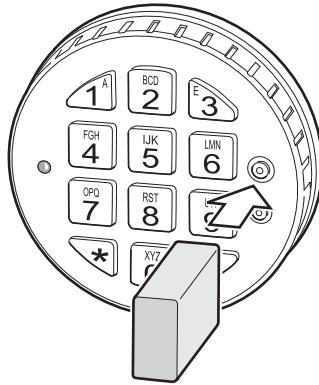
- 1 Close the security enclosure door and turn the handle clockwise.
- 2 Turn the keylock counterclockwise
- 3 Turn the keypad counterclockwise until the keypad is vertical. The door should now be locked.

Getting Started

How to Unlock and Lock an Electronic Lock

Emergency Opening Procedure

If the keypad is completely “dead”, that is it does not flash or beep, it is an indication that the lock battery requires replacing. To open the lock when it is in this condition you must hold a new 9 volt alkaline battery against the terminals of the lock. The larger battery terminal must be against the larger of the lock terminals. The battery must be held in place while carrying out the normal procedures for opening the lock.



How to Unlock and Lock a Controlled Access Electronic Lock

Note: For ATMs with security enclosures fitted with a Kaba Mas (Mas-Hamilton) controlled access electronic lock, refer to the following Kaba Mas Corporation publications for details of how to set up and manage the operations of the lock:

- CENCON System 2000 Access Control System
- Getting Started Guide
- Supervisor Guide
- Special Supervisor Guide
- FLM Dispatcher Guide
- Route Dispatcher Guide
- CENCON 2000 System Guide.

These publications can be purchased from the following order point:

Kaba Mas Corporation
749, W.Short Street
LEXINGTON, Kentucky
40508
Tel: (1) 859 253 4744
Toll Free: (1) 888 959 4715
Fax: (1) 859 225 2655

Note: For the attention of Customer Service Manager.

The controlled access electronic lock, called the master lock, can be fitted with or without a sub-lock on the Cheque Acceptor door. To unlock a security enclosure with a master lock and one sub-lock, you will require the following:

- Personal Identifier key (PI key)
- 6-digit access code - obtained from the Key Management Centre (KMC).

To open the master lock, proceed as follows:

- 1 Contact the KMC.
- 2 Give requested details to verify your identity to the KMC.
- 3 Specify which areas on the ATM you want to access.

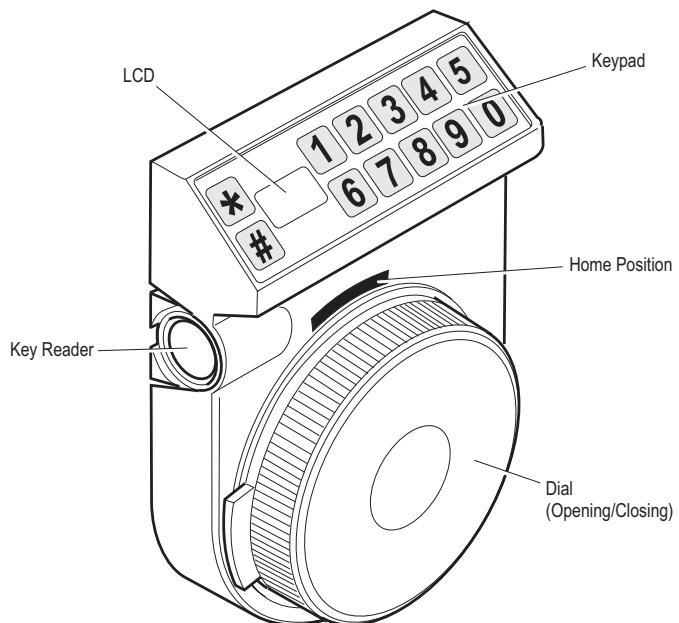
Unlocking the Master Lock

Getting Started

How to Unlock and Lock a Controlled Access Electronic Lock

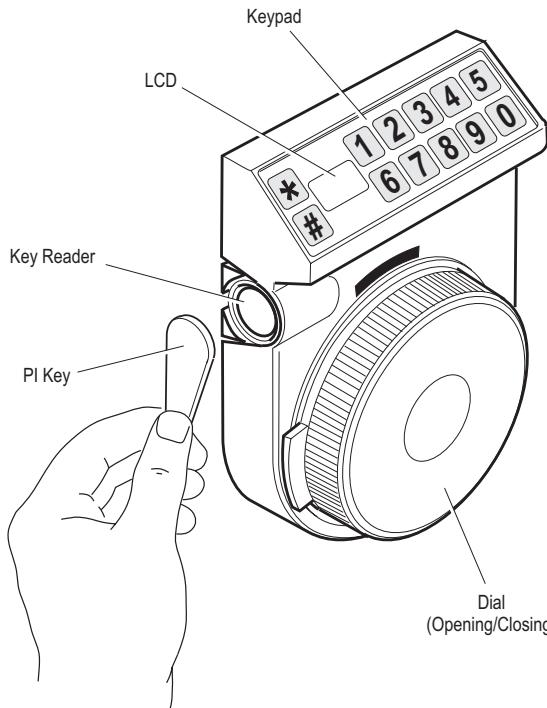
- 4 Take note of the 6-digit access code (three pairs of two), allocated by the KMC.
- 5 Unlock and open the exterior of the ATM.
- 6 Spin the lock dial counterclockwise to charge the lock, until EC is displayed on the LCD.

Note: If DL (Dial Left) is displayed, you must only turn the dial to the left (counterclockwise).



- 7 Turn the dial to the home position.
- 8 Enter the 6-digit access code provided by the KMC on the keypad.
- 9 IPI should be displayed on the LCD.

- 10 Hold the PI key against the key reader to verify a valid user identity. If sub-lock access is required, the appropriate authority is passed to the PI key at this stage.



- 11 If the correct 6-digit code has been entered and a valid PI key has been pressed against the key reader, OPr will be displayed on the LCD.

Note: If an incorrect code or PI key is used or there is a bad PI key contact, a lightning bolt symbol will be displayed on the LCD, indicating an error condition.

If the error condition was caused by a bad PI key contact, YOU HAVE ONE MORE ATTEMPT AT OPENING THE LOCK. If the error condition occurs after the 2nd attempt, contact the KMC immediately.

- 12 Turn the lock dial a quarter turn (90°) clockwise to release the bolt.
- 13 Open the security enclosure.

Locking the Master Lock

To lock the master lock, proceed as follows:

- 1 Close the security enclosure.

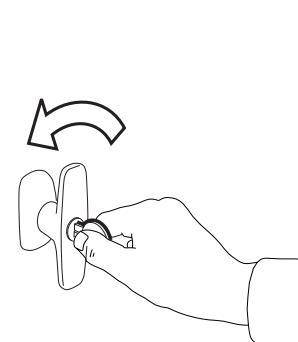
- 2 Turn the lock dial counterclockwise to activate the bolt and charge the lock until IPI is displayed on the LCD.
- 3 Hold the PI key against the key reader.
- 4 Take a note of the unique 4-digit close code that is displayed, as it will be required by the KMC.
- 5 Close the exterior of the ATM.
- 6 Contact the KMC.

Note: Ensure that **all** the locks and doors on the ATM are closed and locked before contacting the KMC.
- 7 Verify identification.
- 8 Provide the 4-digit close code to the KMC.
- 9 The KMC will inform you that either the code is correct or give you the correct procedure to follow if the close code is wrong.

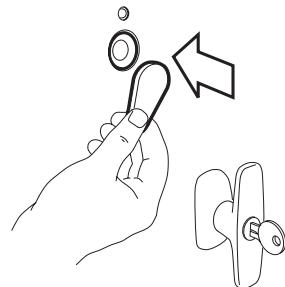
Unlocking the Sub-Lock

If a sub-lock is configured on your Cheque Acceptor door, proceed as follows:

- 1 Carry out Steps 1 to 10 of “Unlocking the Master Lock”.
- Note:** The code displayed on the LCD will depend on which area of the ATM you requested access to.
- 2 Insert the key into the keylock on the locking handle and turn it counterclockwise.



- 3 Hold the PI key against the key reader of the sub-lock.



- 4 The LED flashes three (3) times. You have eight (8) seconds to unlock the sub-lock by turning the locking handle counterclockwise to release the catch. If the locking handle cannot be moved, contact the KMC for another access code.

Note: The locking handle cannot be turned before the LED flashes. After turning, the catch remains in position until the lock is closed.

- 5 Open the cheque acceptor side-box door.

Locking the Sub-Lock

To lock the sub-lock, if configured, proceed as follows:

- 1 Close the cheque acceptor side-box door and turn the locking handle clockwise to hold the catch.
- 2 Turn the key in the keylock clockwise and remove the key.
- 3 Hold the PI key against the key reader of the sub-lock until the LED flashes four (4) times. This indicates the lock is closed.
- 4 On the master lock, turn the lock dial counterclockwise and charge the lock until **IPI** is displayed on the LCD.
- 5 Hold the PI key against the key reader of the master lock.
- 6 Take a note of the unique 4-digit close code that is displayed, as it will be required by the KMC.
- 7 Close the exterior of the ATM.
- Note:** Ensure that all the doors and locks on the ATM are closed and locked before contacting the KMC.
- 8 Contact the KMC.

- 9 Verify your identification.
- 10 Provide the 4-digit close code to the KMC.
- 11 The KMC will inform you that either the code is correct or give you the correct procedure to follow if the close code is wrong.

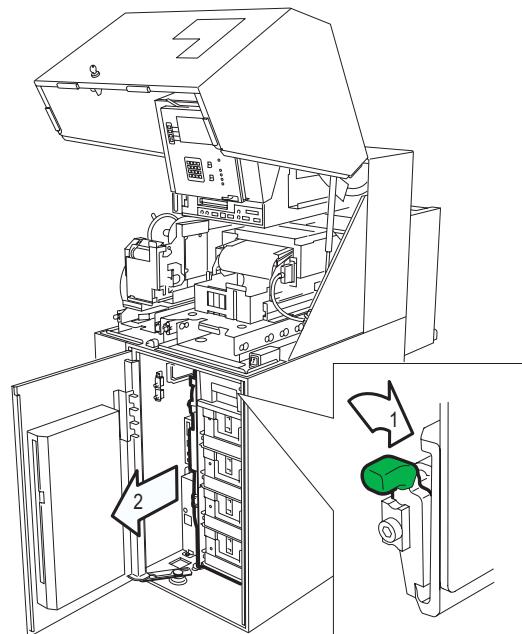
How to Access the Modules

The following sections describe in detail how to gain access to each of the modules within the 5887, once the exterior of the ATM is open. You should ensure that you are familiar with the access procedure for a module before you carry out the procedures described in its operator guide.

Currency Dispenser

To gain access to the currency dispenser, release the green latch and pull the dispenser out of the ATM until its slides are fully extended.

You do not need to pull the dispenser out of the ATM to replenish cassettes or empty the purge bin, but will need to do so to clear jams.



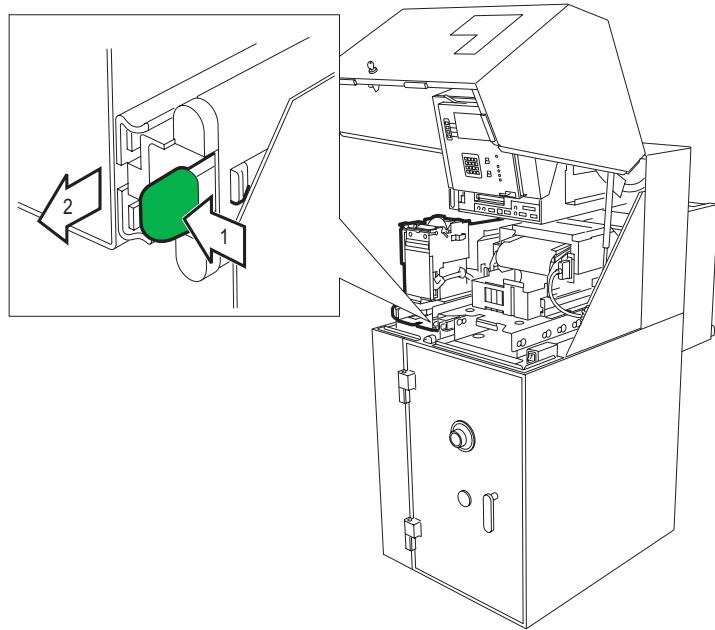
Note: The position and appearance of the latch handle may differ from that shown.

To return the dispenser, simply push it back into the ATM until it clicks into place.

Receipt Printer and Journal Printer

To gain access to the receipt printer or the journal printer, press the green latch and use the green handle to pull the module tray out of the ATM until its slides are fully extended.

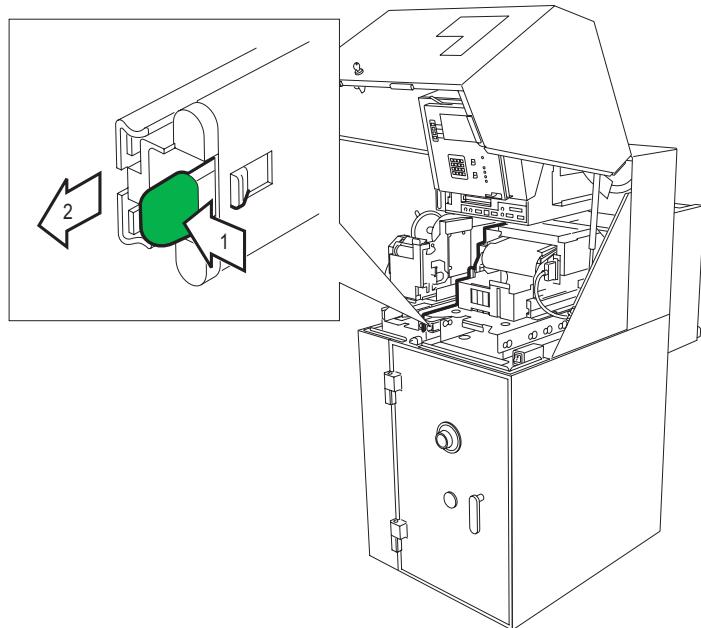
The journal printer is the printer nearest to you, and the receipt printer is the furthest away.



To return the printers, simply push the module tray back into the ATM until it clicks into place.

Statement Printer and Passbook Printer

Your ATM may be configured with either the Letter Quality Document Statement printer, the Statement/Passbook printer, the Page Turn Passbook Printer or the Enhanced Page Turn Passbook printer. To gain access to the statement or passbook printer press the green latch and using the green handle, pull the printer out of the ATM until its slides are fully extended.

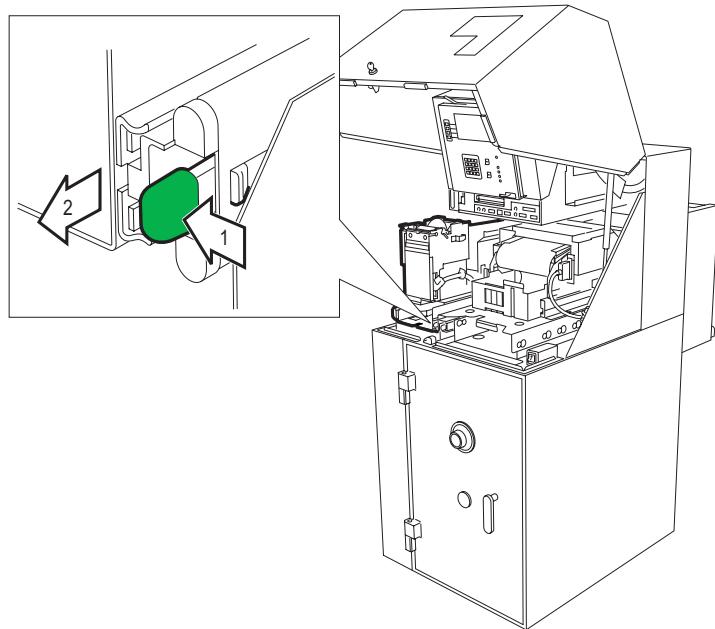


Note: The Letter Quality Document Statement printer is shown here.

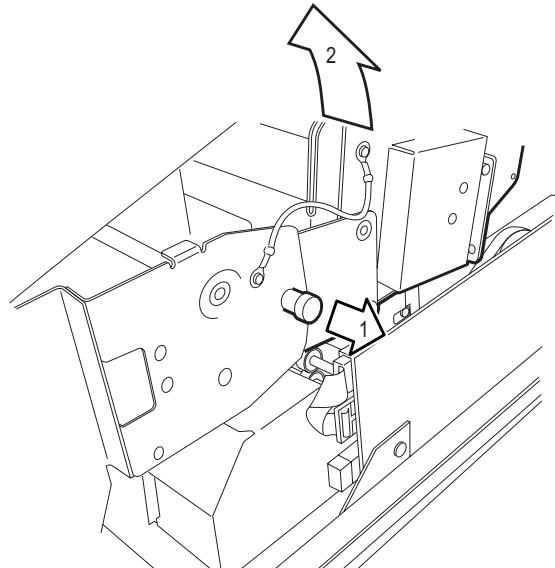
To return the printer, simply push it back into the ATM until it clicks into place.

Motorised Card Reader

To gain access to the card reader, press the green latch and use the green handle to pull the module tray out of the ATM until its slides are fully extended. The receipt and journal printers will also slide out.



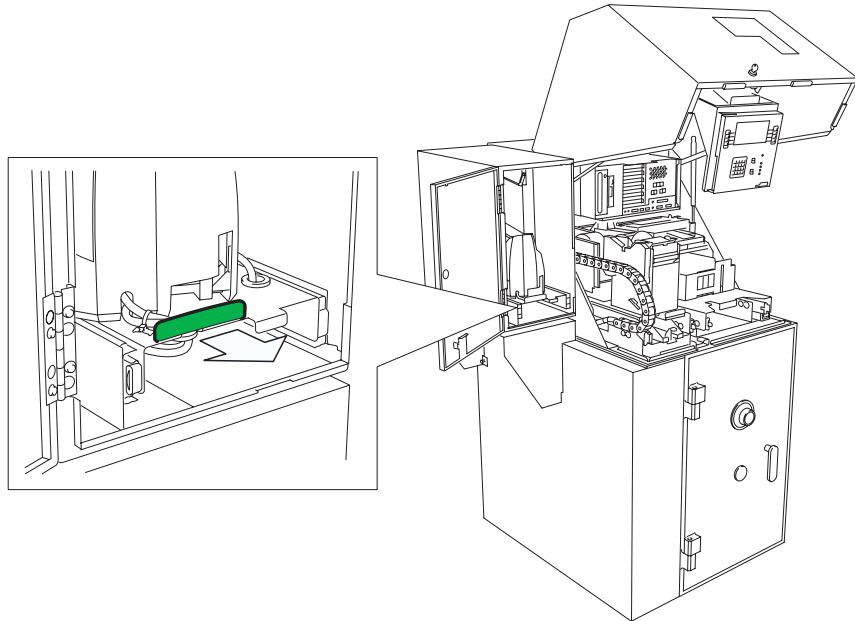
The card reader is located underneath the receipt printer, at the back of the module tray. Pull out the receipt printer transport locking plunger, as shown below, and then raise the receipt printer transport.



To return the card reader, pull out the receipt printer transport locking plunger and then lower the printer transport to its normal operating position, then push the module tray back into the ATM until it clicks into place.

Coin Dispenser

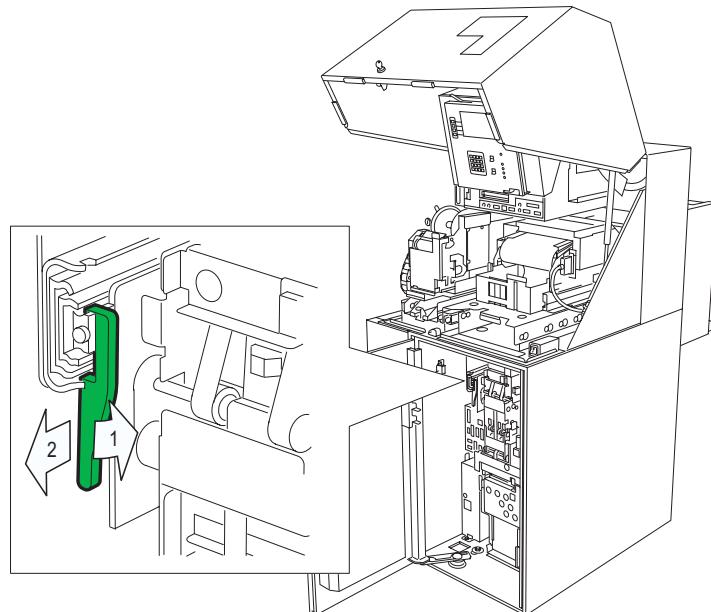
To gain access to the coin dispenser, use the green handle to pull the dispenser out until its slides are fully extended.



To return the coin dispenser, simply push it back in, then close and lock the door.

Cash Acceptor (UD-686)

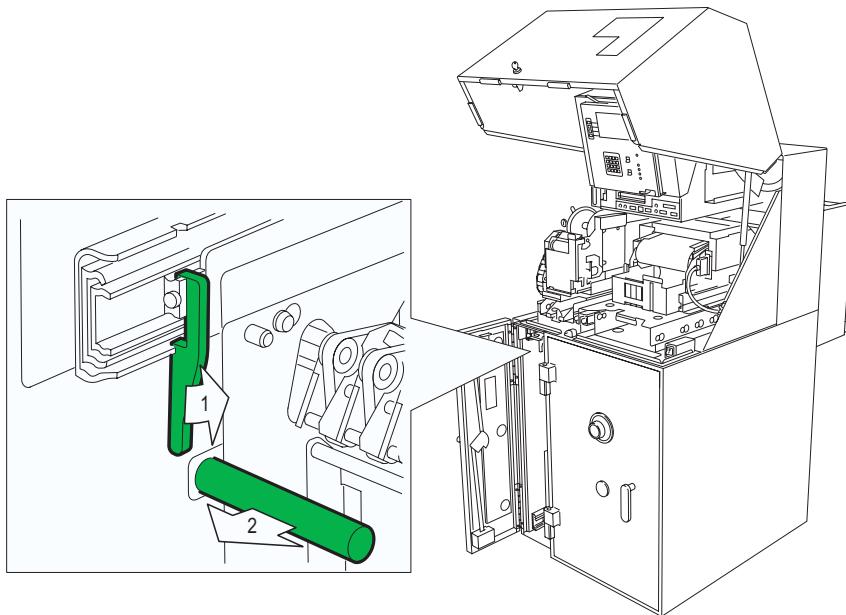
To gain access to the cash acceptor, release the green latch, and use it to pull the cash acceptor out of the ATM until its slides are fully extended.



To return the cash acceptor, simply push it back into the ATM until it clicks into place.

Cheque Acceptor (Type 3)

To gain access to the cheque acceptor, release the green latch and using the green handle, pull the cheque acceptor out of the ATM until its slides are fully extended.



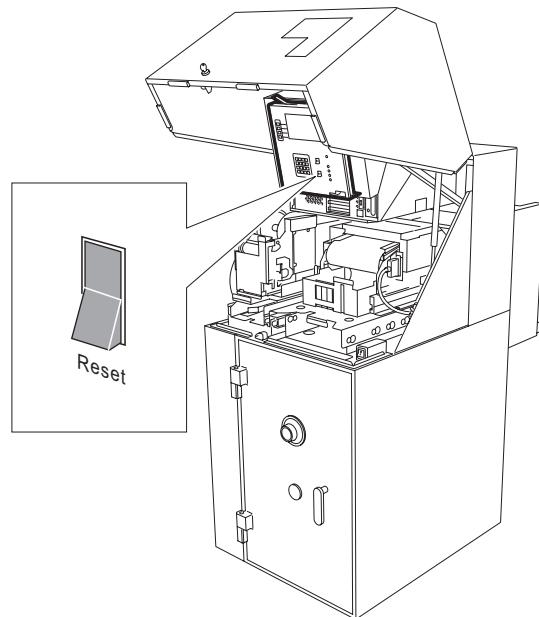
To return the cheque acceptor, simply push it back into the ATM until it clicks into place.

How to Do a Hardware Reset of Your ATM

A reset switch is provided on the operator panel. When the reset switch is pressed the ATM executes its diagnostic procedures, reloads the system software and initialises the user application program.

To reset the ATM, proceed as follows:

- 1 Open the top-box of your ATM.
- 2 Press the reset switch on the operator panel.

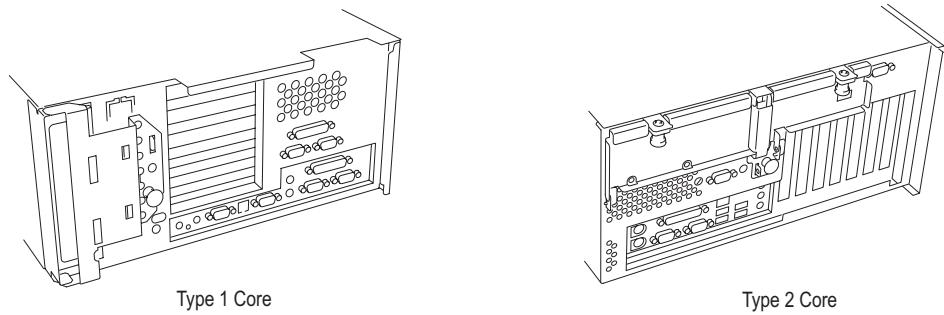


- 3 Close and lock the ATM.

Note: After you reset your ATM it will take several minutes for the ATM to load all its software and to start displaying your application.

How to Insert and Remove Disks

The procedure for inserting and removing disks depends on the type of PC core in the ATM. There are two types of PC core. The difference between them is shown below:



The following procedures are detailed below:

- Inserting and removing a flex disk in a Type 1 core
- Inserting and removing a CD-ROM in a Type 1 core
- Inserting and removing a flex disk in a Type 2 core
- Inserting and removing a CD or DVD-ROM in a Type 2 core.

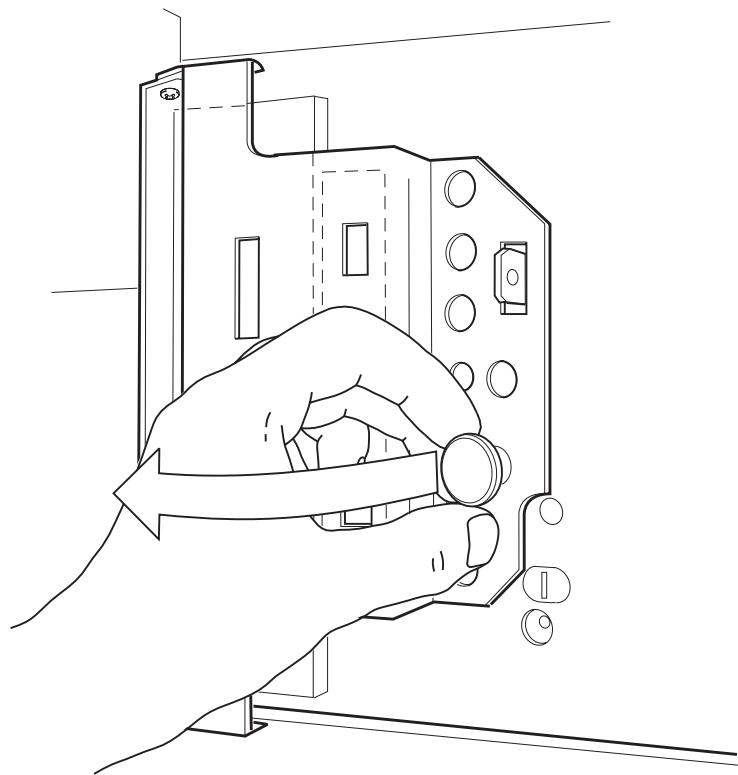
Flex Disk in a Type 1 Core

To insert and remove a flex disk from the drive in a Type 1 core proceed as follows:

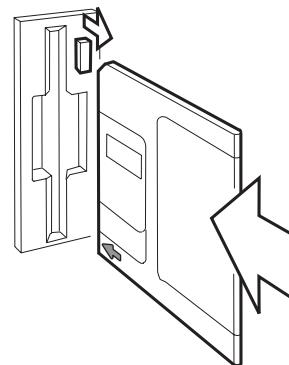
- 1 Open the top-box of your ATM.
- 2 If a disk drive security cover is fitted, unlock or remove the lock or seal supplied by your organization, then pull out the popper and pull out the cover as far as it will go.

Note: If your ATM has an enhanced alarm system fitted, the disk drive security cover may be alarmed. If this is the case, you

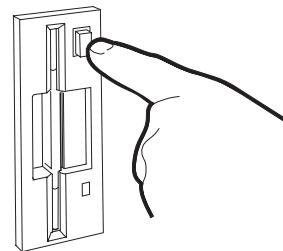
should follow your organization's procedures for accessing an alarmed area.



- 3 To insert a disk, firmly push the disk into the disk drive as shown below until the small button ejects slightly.



- 4 To remove a flex disk from the disk drive, fully press in the eject button on the drive. This will eject the disk allowing you to remove it.



- 5 If fitted, close the disk drive security cover then lock or seal it as required by your organization.
- 6 Close and lock the ATM.

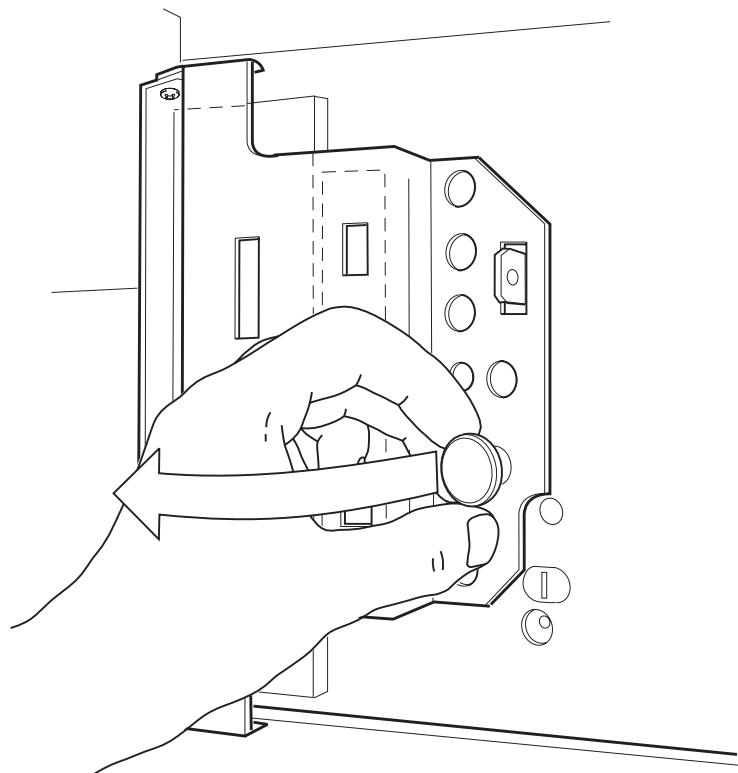
CD-ROM in a Type 1 Core

To insert and remove a CD-ROM from the drive in a Type 1 core proceed as follows:

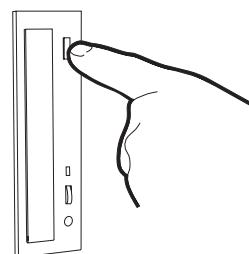
- 1 Open the top-box of your ATM.
- 2 If a disk drive security cover is fitted, unlock or remove the lock or seal supplied by your organization, then pull out the popper and pull out the cover as far as it will go.

Note: If your ATM has an enhanced alarm system fitted, the disk drive security cover may be alarmed. If this is the case, you

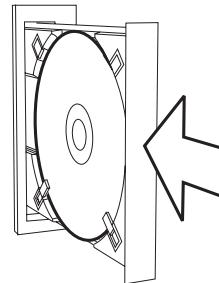
should follow your organization's procedures for accessing an alarmed area.



- 3 To insert a CD-ROM, press the eject button to bring out the motorized tray.



- 4 Place the CD-ROM in the tray with the printed label visible and the machine readable surface next to the tray. Press the eject button to retract the tray into the drive.



- 5 To remove a CD-ROM from the drive, press the eject button on the drive to bring out the motorized tray. Remove the CD-ROM from the tray and press the eject button to retract the tray into the drive.
- 6 If fitted, close the disk drive security cover then lock or seal it as required by your organization.
- 7 Close and lock the ATM.

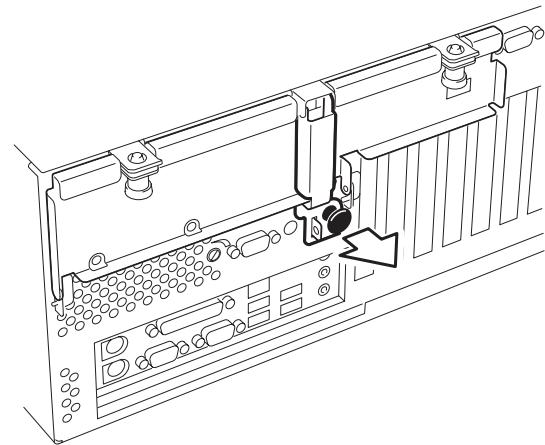
Flex Disk in a Type 2 Core

To insert and remove a flex disk from the drive in a Type 2 core proceed as follows:

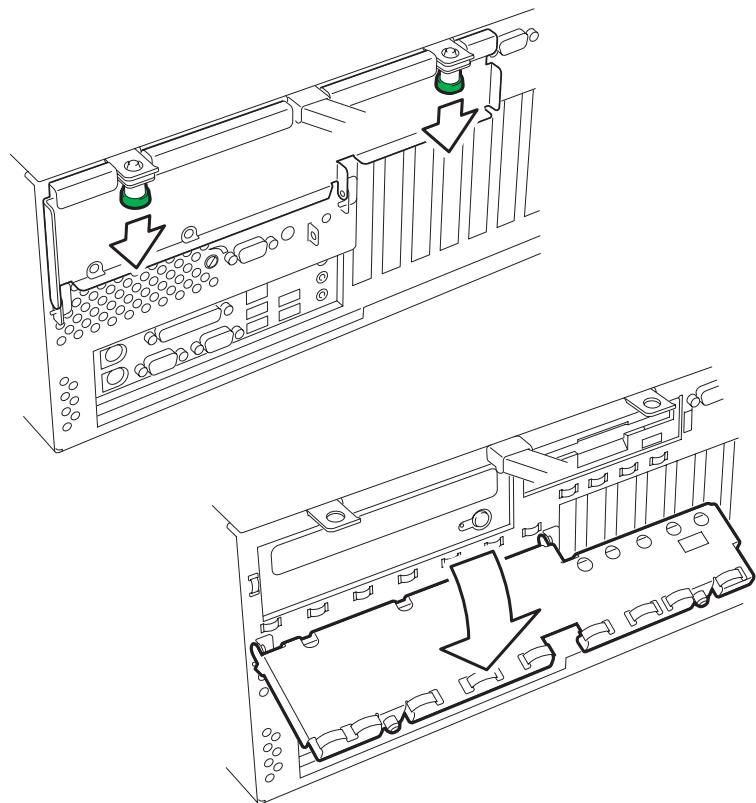
- 1 Open the top-box of the ATM.
- 2 If a disk drive security latch is fitted, unlock or remove the lock or seal supplied by your organization, then pull out the popper and pull out the latch as far as it will go.

Note: If your ATM has an enhanced alarm system fitted, the disk drive security latch may be alarmed. If this is the case, you

should follow your organization's procedures for accessing an alarmed area.



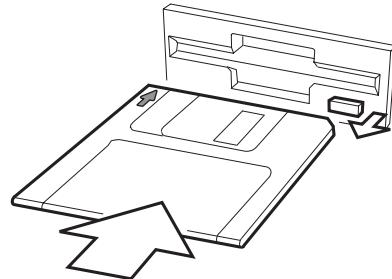
- 3 Pull the two spring loaded pins out of their latches and pull open the drive bay cover.



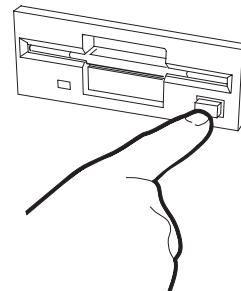
Getting Started

How to Insert and Remove Disks

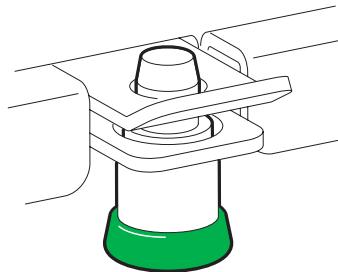
- 4 To insert a disk, firmly push the disk into the disk drive as shown below until the small button ejects slightly.



- 5 To remove a disk from the disk drive, fully press in the eject button on the drive. This will eject the disk allowing you to remove it.



- 6 Close the drive bay cover by pushing it firmly so that the spring loaded pins fully locate in their latches as shown below.



Caution This is an ESD (electrostatic discharge) sensitive device, therefore, after any maintenance or service actions the drive bay cover **must** be closed and fully latched home.

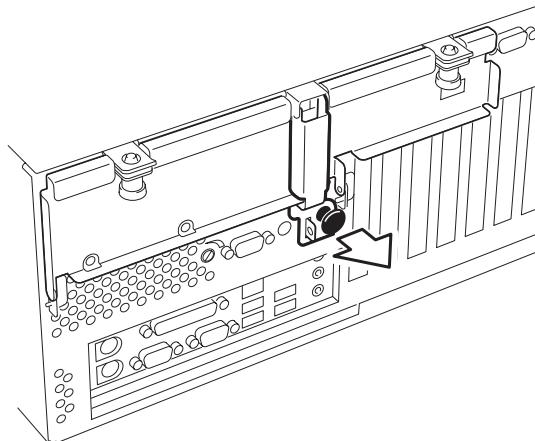
- 7 If fitted, close the disk security latch then lock or seal it as required by your organization.
- 8 Close and lock the ATM.

CD or DVD-ROM in a Type 2 Core

To insert and remove a CD or DVD-ROM from the drive in a Type 2 core proceed as follows:

- 1 Open the top-box of the ATM.
- 2 If a disk drive security latch is fitted, unlock or remove the lock or seal supplied by your organization, then pull out the popper and pull out the latch as far as it will go.

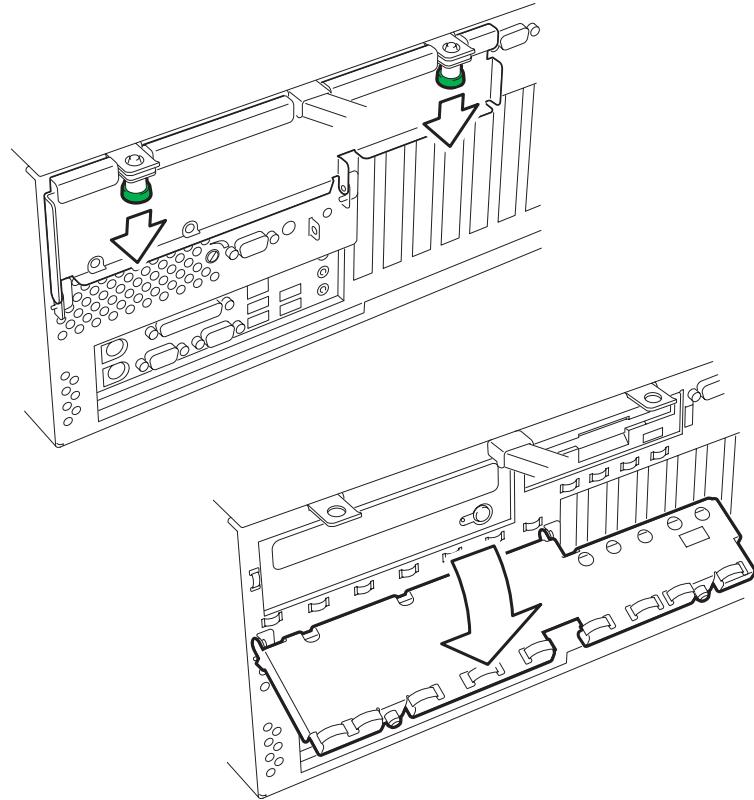
Note: If your ATM has an enhanced alarm system fitted, the disk drive security latch may be alarmed. If this is the case, you should follow your organization's procedures for accessing an alarmed area.



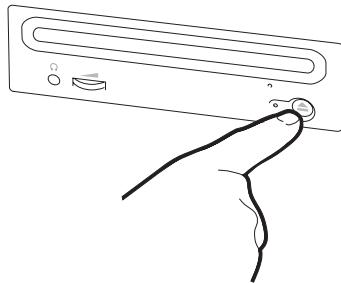
Getting Started

How to Insert and Remove Disks

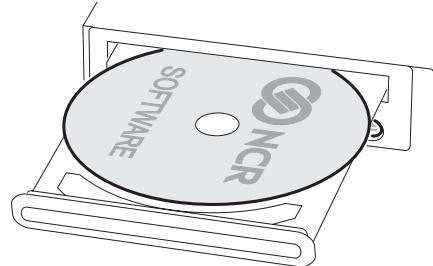
- 3 Pull the two spring loaded pins out of their latches and pull open the drive bay cover.



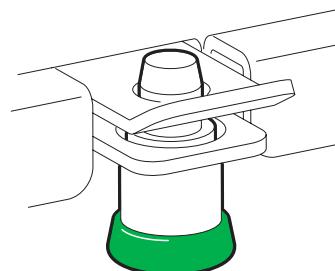
- 4 To insert a CD or DVD-ROM, press the eject button to bring out the motorized tray.



- 5 Place the CD or DVD-ROM in the tray with the printed label visible and the machine readable surface next to the tray. Press the eject button to retract the tray into the drive.



- 6 To remove the CD or DVD-ROM from the drive, press the eject button on the drive to bring out the motorized tray. Remove the CD or DVD-ROM from the tray and press the eject button to retract the tray into the drive.
- 7 Close the drive bay cover by pushing it firmly so that the spring loaded pins fully locate in their latches as shown below.



Caution This is an ESD (electrostatic discharge) sensitive device, therefore, after any maintenance or service actions the drive bay cover **must** be closed and fully latched home.

- 8 If fitted, close the disk security latch then lock or seal it as required by your organization.
- 9 Close and lock the ATM.

Digital Audio

To change the digital audio volume, use the volume control dial, as shown in the ‘Module Location’ section.

Chapter 2
Error Reporting

How Errors Are Reported	2-1
System Application	2-1
Clearing a Device State	2-1
State of Health	2-2
How Errors in the PC Module Are Reported	2-3
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Error Reporting

How Errors Are Reported

The 5887 uses error reporting systems, which are designed to tell you how "healthy" your ATM is. The systems not only report error conditions, but also report when a module, for example the card reader or printer module, requires to be replenished or replaced.

The error reporting system you have will depend on the System Software running on your ATM. Your ATM will run either System Application or State Of Health (SOH).

System Application

To check if all the modules in your ATM are healthy, you must follow your in-house procedures to run the System Application. From the System Application Main Menu, select the Device Status List function. A list of all the modules which require attention is displayed.

The following information is provided for each module or device requiring attention:

- Device name - This is the name of the module or device that requires attention.
- Description - This is a short description of the state.
- Attention - This shows whether the state requires attention 'now' or will require attention 'soon'.
- User category - This specifies what type of user is able to deal with the state - Operator or Customer Engineer (CE). A user category of 'CE may be required' indicates that an operator can attempt to deal with the state, but if the operator fails to clear it, a CE should be called.
- Self-clearing - This shows whether the state is self-clearing or not.
- Status ID - This is a unique number which identifies the state. You can use the Status ID, together with the product class number, to give to a help desk when reporting faults.

For more information refer to NCR publication, 'APTRA™ Self Service Support, System Application User Guide' (B006-6167).

Clearing a Device State

To clear a device state, follow your in-house procedures.

State of Health

To check if all the modules in your ATM are healthy, you must follow your in-house procedures to run State Of Health (SOH).

From the Enhanced Operator Panel, the ATM will display SOH messages constantly.

If all the modules in your ATM are healthy, a TERMINAL HEALTHY message will be displayed. If there is a module that requires attention, a message stating the module name and a description of the problem is displayed. If there is more than one message to be displayed, each message will be displayed in turn for a few seconds.

The 4-digit number which appears alongside the SOH message is a message identification number. If you have to call a customer engineer at any time, quote the SOH message identification number as well as the message text.

The asterisks (*) indicate the skill level required to fix whatever problem is generating the current SOH message, and also indicate which VERIFY SOH option should be selected to clear the SOH message. For more information refer to NCR publication, 'Supervisor Functions' (B006-4718).

Some SOH messages require that you act upon them immediately, while others indicate that you should be prepared to carry out a replenishment/replacement procedure in the near future. If required, use the relevant VERIFY SOH option as described in the 'Supervisor Functions' manual to clear the SOH message.

Note: If a SOH message is displayed which indicates that a module needs to be replaced, contact your local service centre.

How Errors in the PC Module Are Reported

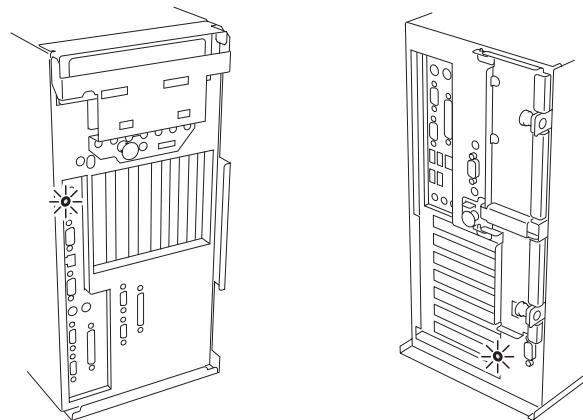
The reporting system does not report on the operator panel if a fault has occurred on one of the boards in the PC module.

The boards in the PC module are tested during power-up and at reset. If a fault is detected on one of the components of the PC module, the Light Emitting Diode (LED) will be illuminated red. The following table gives a summary of the LED colour code.

LED Colour	Result Of Test
AMBER	TEST STILL EXECUTING
RED	TEST FAILED
GREEN	TEST PASSED
UNLIT	NO POWER TO MODULE

The location of the LED is different in the two types of PC module as shown in the following illustration:

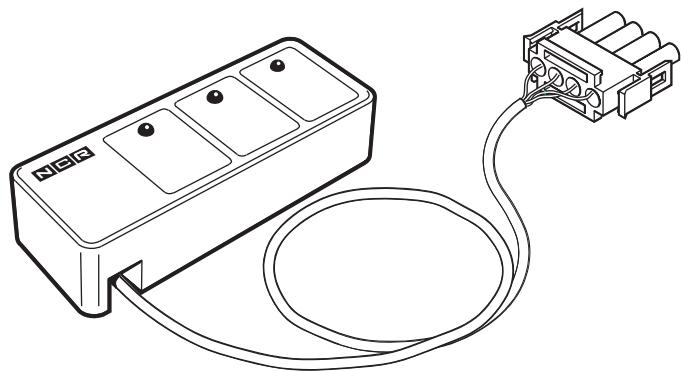
Note: In some designs of ATM the PC module is fitted in a horizontal position.



If the LED is unlit or illuminated red after power-up or system reset, call your customer engineer.

How to Read the Remote Status Indicator

The meaning of each Light Emitting Diode (LED), when illuminated, is marked clearly on the remote status indicator.



Chapter 3

Currency Dispenser

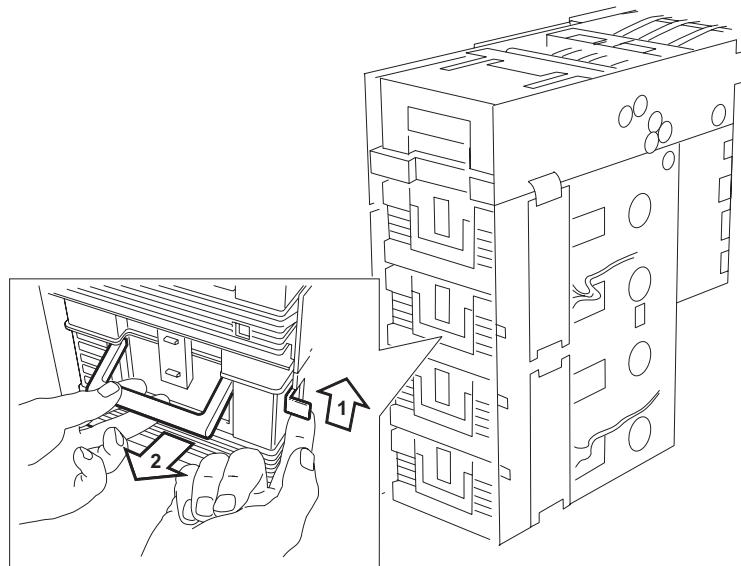
How to Replenish Currency Cassettes	3-1
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Latch Fast Currency Purge Bin	3-4
How to Clear Currency Dispenser Jams	3-7

Table of Contents
Currency Dispenser

How to Replenish Currency Cassettes

To replenish the currency cassettes in your ATM proceed as follows:

- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor function, press the switch on the operator panel to the **supervisor** position.
- 3 Open the security enclosure.
- 4 Lift the catch on the right-hand side of the currency cassette you wish to replenish and pull the cassette out of the ATM.



- 5 If the cassette is to be sent to a secure area for refilling, do so in accordance with your institute's rules. Refer to the NCR publication "*H-8015-STD1-01/02-08 Currency Cassette Owner's Manual*", B006-1297, for details of how to open and replenish the currency cassette.
- 6 Push the full cassette firmly into the ATM until the cassette latch clicks into place.
- 7 Repeat Steps 3, 4 and 5 for all cassettes which require to be replenished.

- 8 Close and lock the security enclosure.
- 9 Follow your in-house procedures for indicating that the currency cassettes have been replenished.
- 10 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 11 Close and lock the exterior of the ATM.

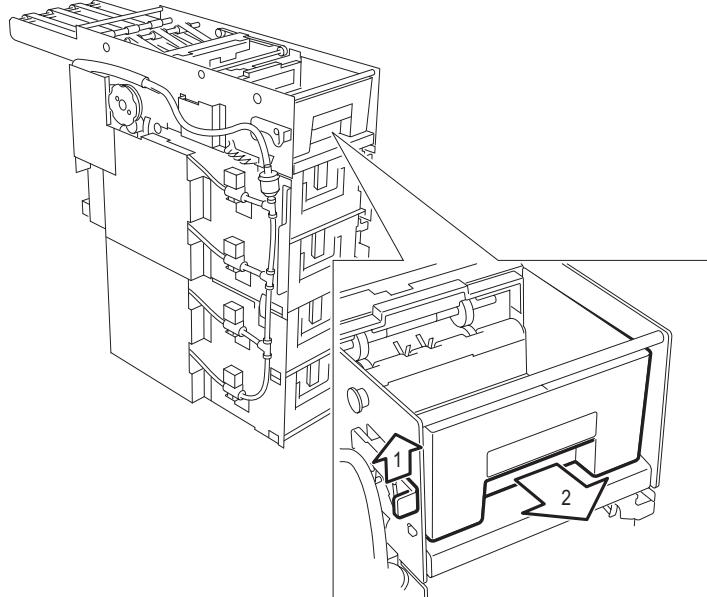
How to Empty the Currency Purge Bin

The procedure for removing purged currency depends on whether the purge bin is Latch Fast or Standard.

Standard Currency Purge Bin

To empty the standard currency purge bin in your ATM proceed as follows:

- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor function, press the switch on the operator panel to the **supervisor** position.
- 3 Open the security enclosure.
- 4 Lift the catch on the left-hand side of the currency purge bin and pull the bin out of the ATM.



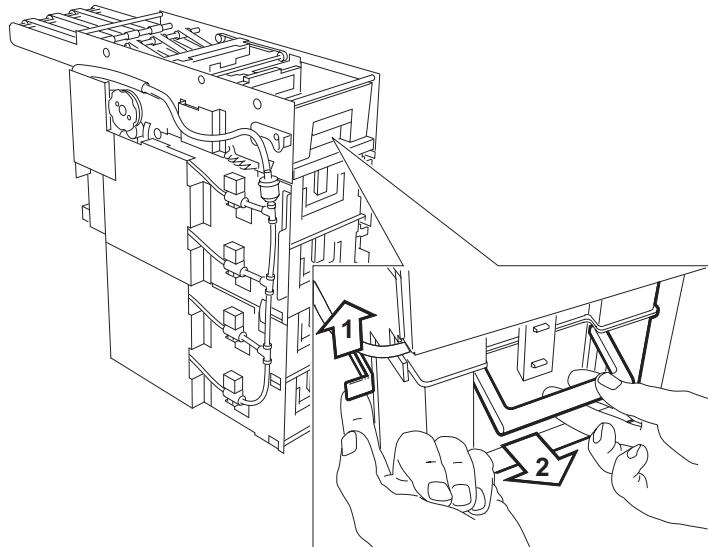
- 5 Remove the purged currency from the bin.
- 6 Slide the empty purge bin into the ATM until it clicks into place.
- 7 Close and lock the security enclosure.

- 8 Follow your in-house procedures for indicating that you have emptied the currency purge bin.
- 9 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 10 Close and lock the exterior of the ATM.

Latch Fast Currency Purge Bin

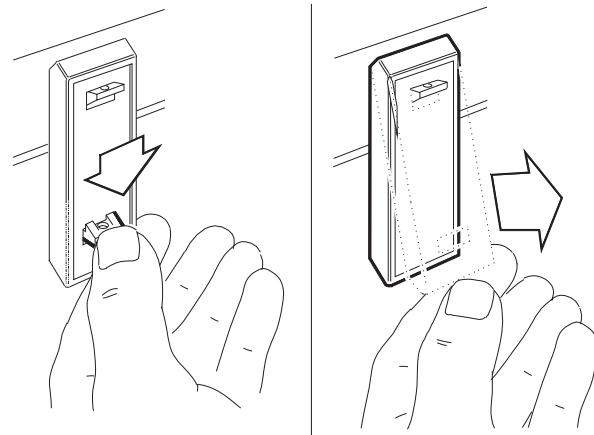
To empty the latch fast currency purge bin in your ATM proceed as follows:

- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor function, press the switch on the operator panel to the **supervisor** position.
- 3 Open the security enclosure.
- 4 If the purge bin is to be removed from the ATM, lift the catch (to the left of the currency purge bin) and pull the bin out of the ATM.

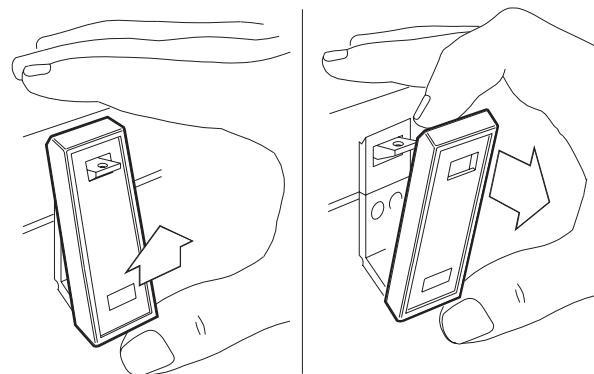


- 5 To empty the purge bin either in or out of the ATM, remove the lock/seal from the bin.

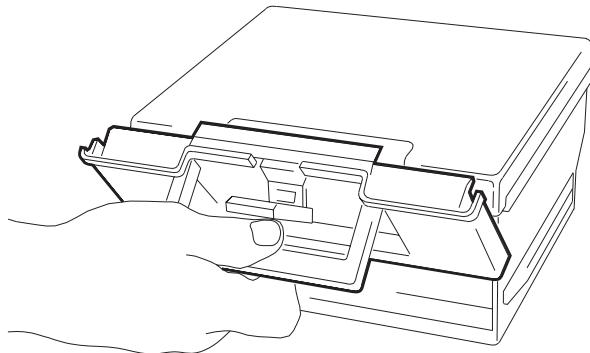
- 6 Press the latch hasp down and pull the bottom of the latch towards you.



- 7 Lift the latch up to free it from the top block. Pull the top of the latch towards you and hinge it down.



- 8 Using the handle, pull the door towards you and up to remove it from the bin.



- 9 Remove the purged currency from the bin.
- 10 Locate the door between the sides of the bin and slide the door down.
- 11 Close the door and lift the latch up and forwards to hook it on to the top block.
- 12 Press the latch down until the latch hasp clicks and locks the latch.
- 13 Secure the bin with a lock/seal.
- 14 If the bin was removed from the ATM, slide the empty purge bin into the ATM until it clicks into place.
- 15 Close and lock the security enclosure.
- 16 Follow your in-house procedures for indicating that you have emptied the currency purge bin.
- 17 If your ATM does not have the auto-supervisor option, press the switch on the operator panel the **normal** position.
- 18 Close and lock the exterior of the ATM.

How to Clear Currency Dispenser Jams

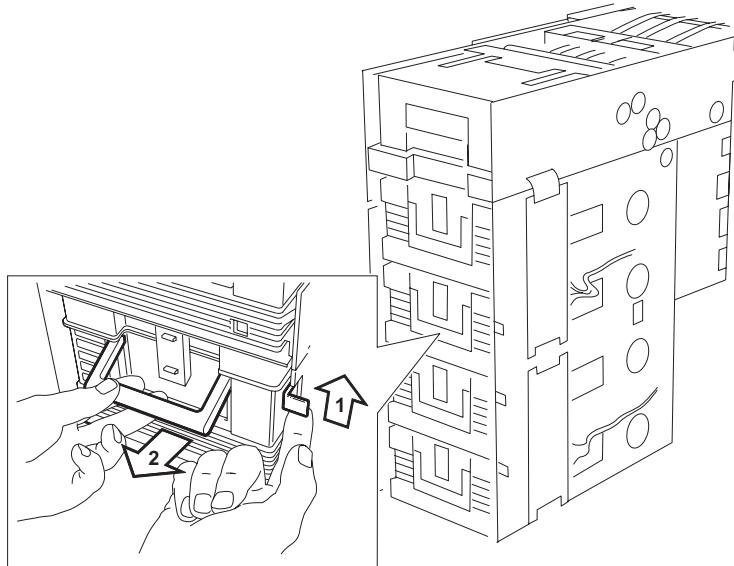
The indication of a currency dispenser jam will be an error message.

To clear a currency jam proceed as follows:

- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor function, press the switch on the operator panel to the **supervisor** position.
- 3 Open the security enclosure.
- 4 Access the currency dispenser, as described in Chapter 1, 'Getting Started'.
- 5 The procedures for clearing a jam depend on where the jam is within the dispenser. An error description will indicate where the jam is. The following table describes the procedure to follow for each error message.

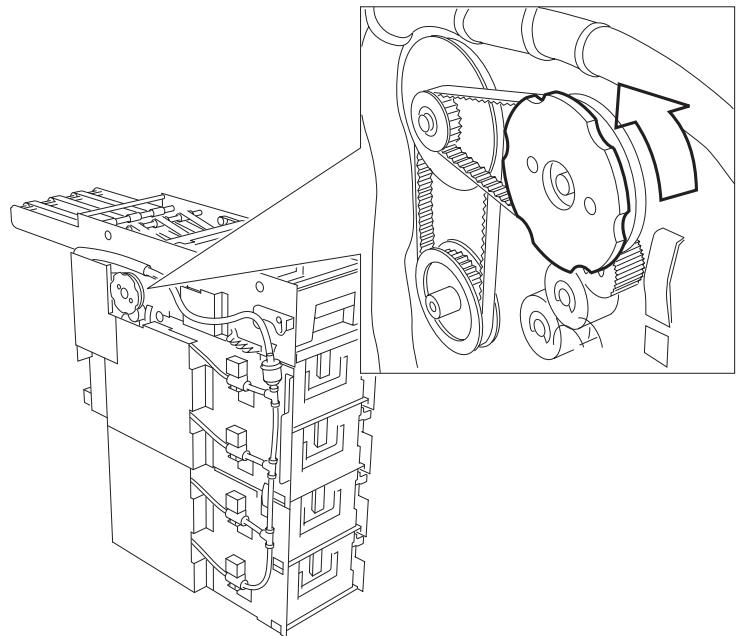
Error Description	Go To
Bill jam at the pick sensor/module or a gulp feed failure	Step 6
Bill jam in the main transport	Step 9
Bill jam at sensor 2	Step 12
Bill jam at sensor 1 or a purge bin overfill	Step 12
Bill jam at sensor 3, 4, or 5	Step 15

- 6 Lift the green catch on the right-hand side of the currency cassette indicated by the error description (cassette position 1 is the top cassette), and pull the cassette out of the ATM.

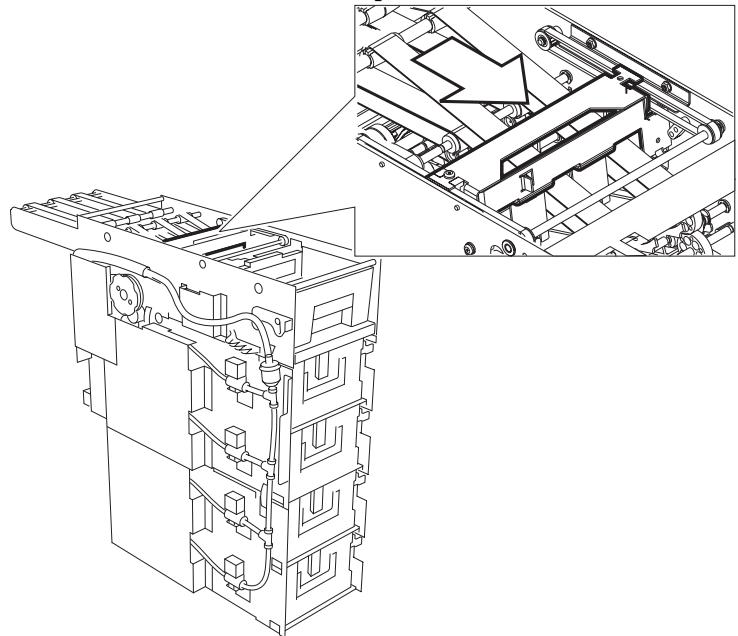


- 7 Reach inside the hole vacated by the cassette and remove any jammed bills.
- 8 Push the cassette back into the ATM until the cassette latch clicks into place. Proceed to Step 16.

- 9 Turn the green handle on the side of the dispenser counterclockwise until the bills enter the stacking area on the top of the main transport.

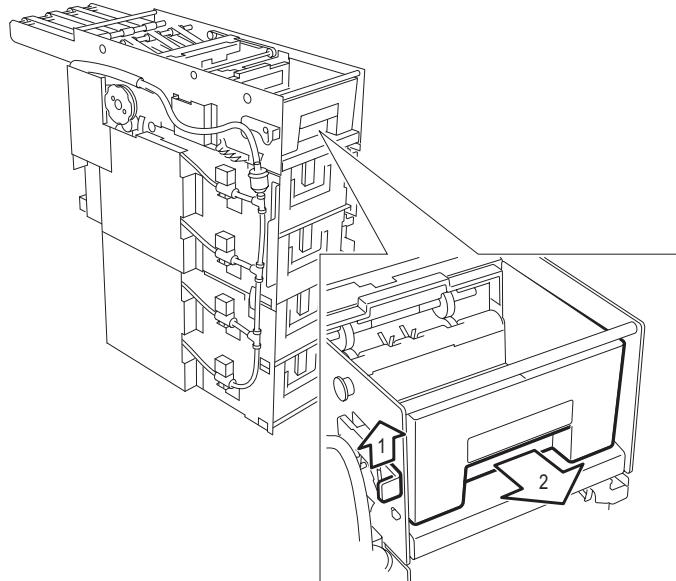


- 10 If your dispenser has a bill alignment mechanism as shown, move it backwards until it stops.



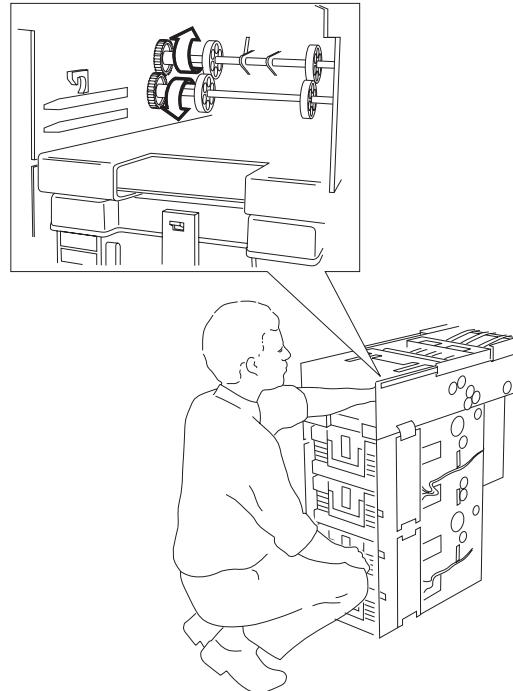
- 11 Insert your hand through the hole in the side or the top of the dispenser, and remove any jammed bills. Proceed to Step 18.

- 12 Lift the latch on the left-hand side of the purge bin and pull the purge bin out of the dispenser.



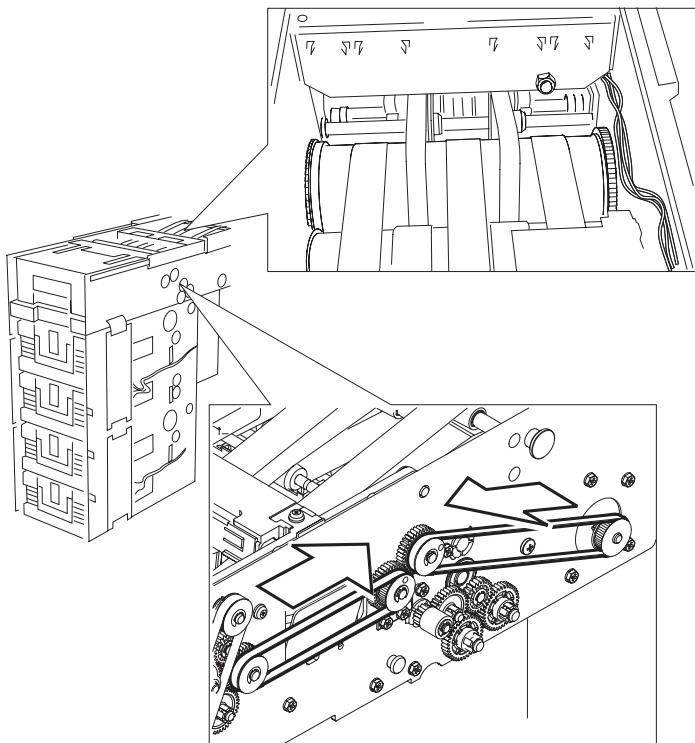
Note: If the purge bin is a latch fast bin, and the jam is caused by an overfill, it may be impossible to remove the bin from the ATM. In this case you can empty the purge bin whilst it is in position. Remove the door (see latch fast replenishment section) and then remove the jammed cash. Replace the door and go to Step 16.

- 13 Reach inside the hole vacated by the purge bin and remove any jammed bills. If you cannot reach the bills, turn either of the shaft wheels as indicated below, until the bills are in an accessible position. Remove the jammed bills.



- 14 Push the purge bin back into the ATM until it locks in place. Proceed to Step 16.

- 15 Turn the drums on the top of the transport until the bills are in an accessible position. If your dispenser does not have drums on the top, pull the timing belts on the right hand side of the transport. Reach into the transport and remove the bills.



- 16 Push the dispenser back into the ATM.
- 17 Close and lock the security enclosure.
- 18 Follow your in-house procedures for indicating that you have fixed, without replacing, the faulty module in the currency dispenser.
- 19 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 20 Close and lock the exterior of the ATM.

Chapter 4
Receipt Printer

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Receipt Printer

Overview

There are two types of receipt printer possible in your ATM. The main difference between them is material: the first type is made with yellow coloured metal, the second type is grey. There are also small differences in operation between the two types of printer. Where differences occur, the illustrations in the following sections show both printers, with the yellow coloured printer at the top and the grey coloured printer at the bottom of each illustration.

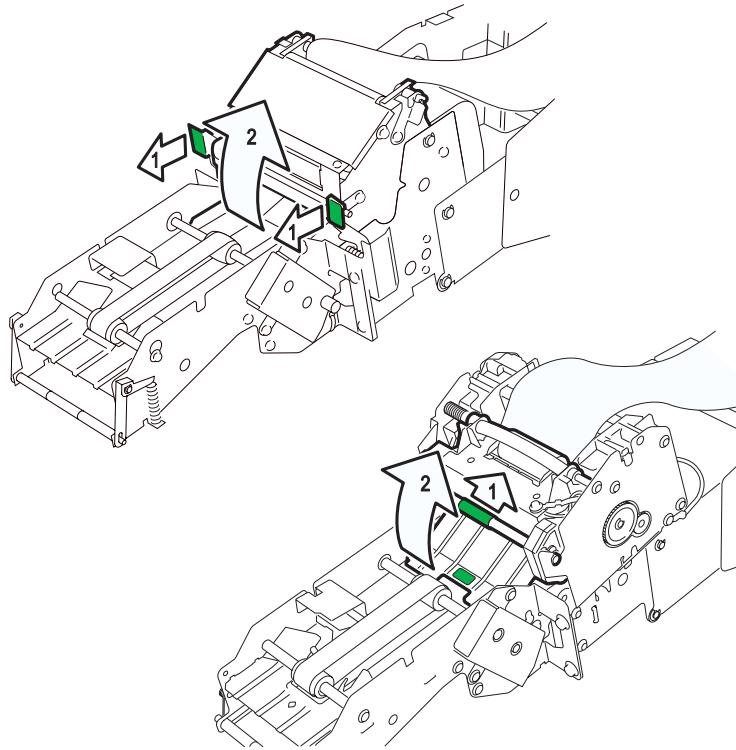
Note: The angle of the receipt transport on your printer may differ from those in the illustrations. This does not affect the instructions that follow.

The paper used in your printer must conform to the specification given in NCR publication B006-4992, *Consumable Items for Self-Service*. The manual also provides details of the ATM consumables which can be ordered from NCR Systemedia.

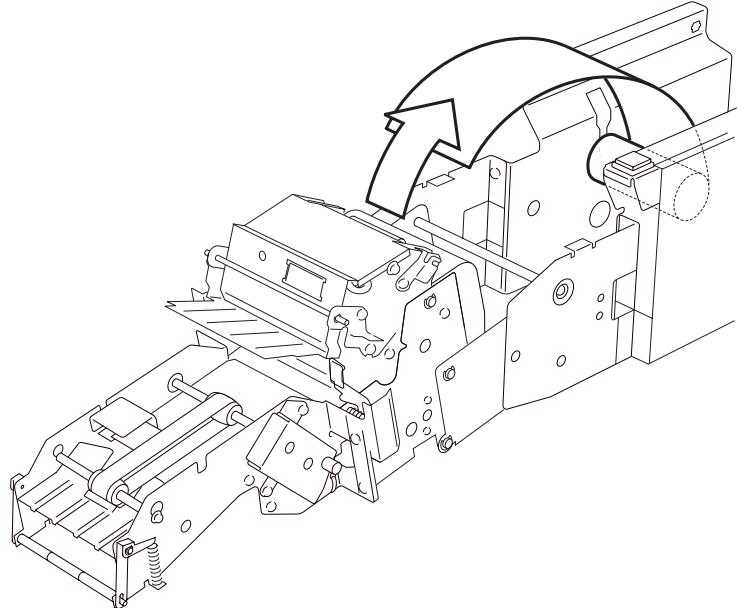
How to Replenish Your Receipt Printer Paper

To replace the printer paper proceed as follows:

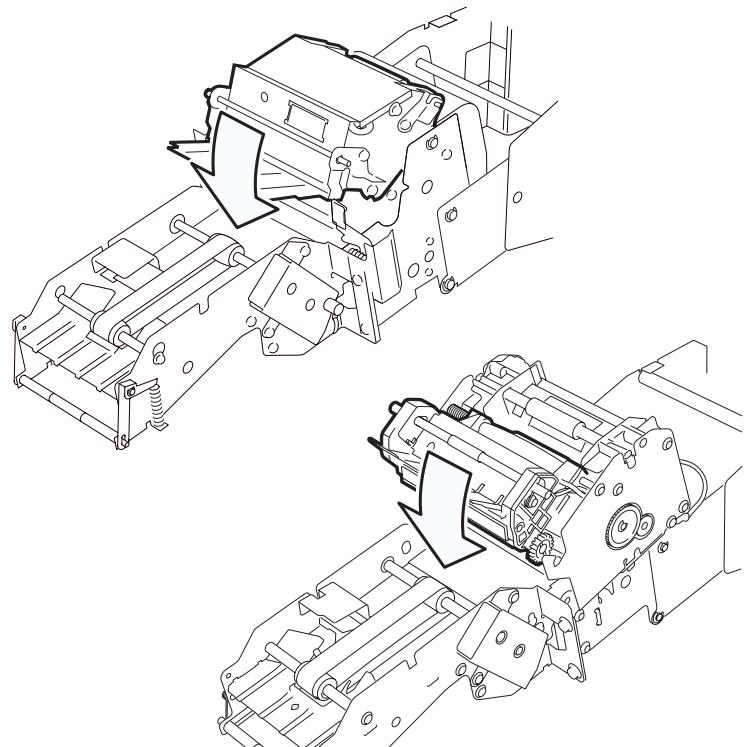
- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor function, press the switch on the operator panel to the **supervisor** position.
- 3 Access the receipt printer as described in Chapter 1, 'Getting Started'.
- 4 Open the print mechanism cover either by pulling out one of the green locking levers, or by pressing on the lock shaft, depending the type of receipt printer you have. The cover will spring open.



- 5 Lift out the paper roll core, spindle and any remaining paper. Pull out any paper from the paper entry slot (you may have to partially close the print mechanism to see this). Discard the paper and paper roll core but retain the spindle.



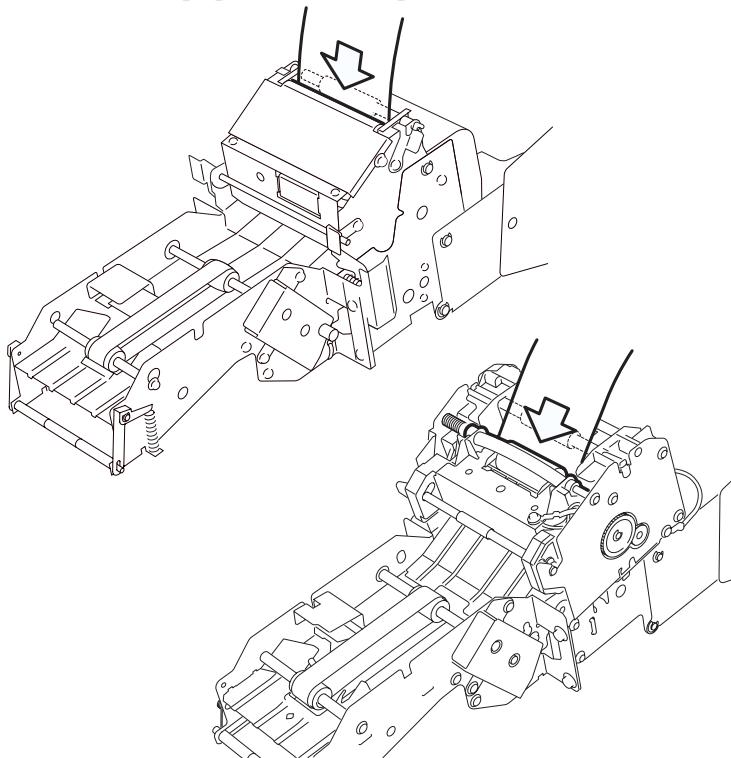
- 6 Close the print mechanism cover by pushing it down until it clicks shut.



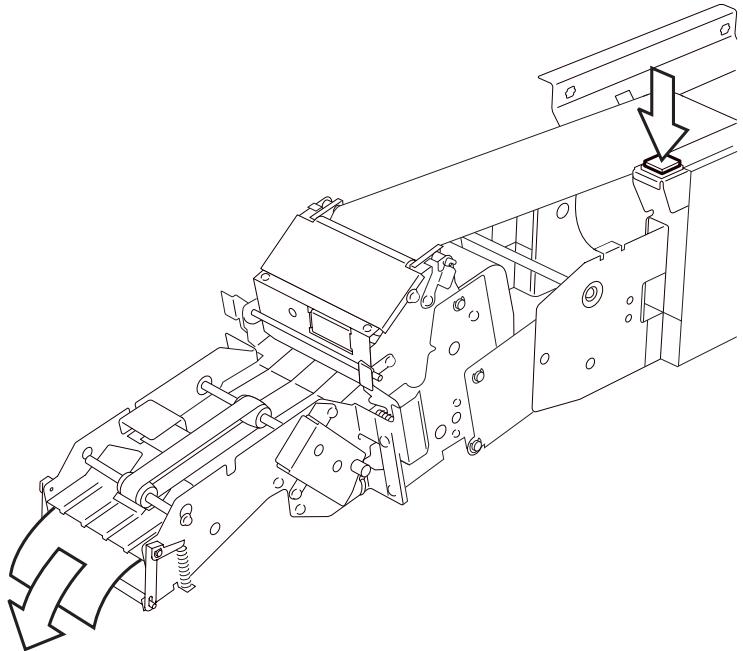
Receipt Printer

How to Replenish Your Receipt Printer Paper

- 7 Remove sufficient paper from the new supply roll so that no traces of glue or tape remain on the roll. Fold and tear off the end of the paper to leave a clean, straight edge.
- 8 Insert the spindle into the core of the new paper roll. Lower the paper roll into the printer so that the spindle drops into the slots. The paper should feed from the top of the roll.
- 9 Guide the paper into the paper entry slot. Manually feed in about **75 mm (3 in.)** of paper until it stops.



- 10 Press the paper feed button and continue to feed in the paper by hand until it is gripped by the print mechanism. The paper will start to feed automatically, and the printer will produce a sample receipt, printed with a test graphic. This confirms that the printer is operating correctly.



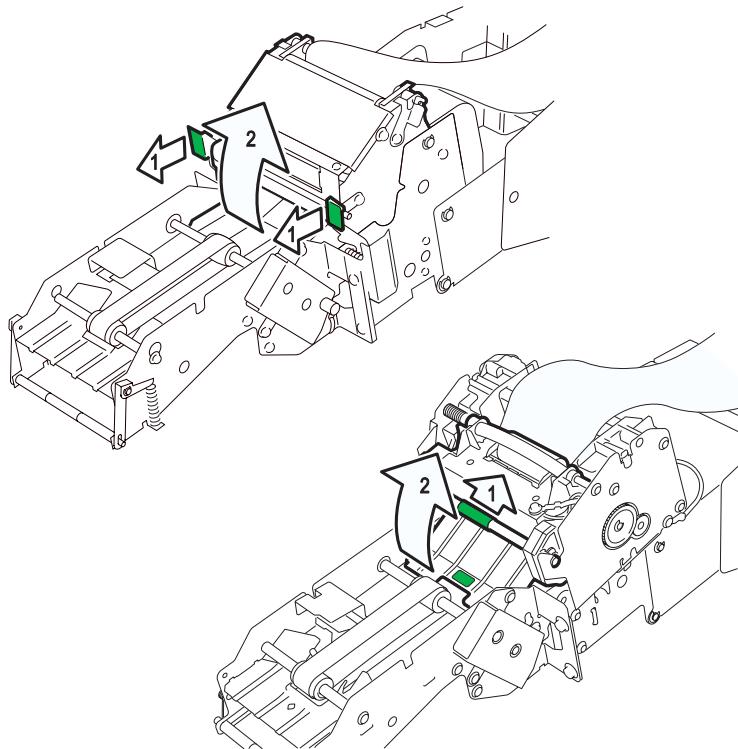
- 11 If nothing happens when the feed button is pressed, the paper may not have been loaded correctly. Check the paper is feeding from the top of the roll. Open the print mechanism, rotate the paper roll backwards to pull the paper clear and try loading the paper again starting at Step 9.
- 12 Make sure that you remove the sample receipt and any other paper from the exit slot or receipt transport.
- 13 Push the printer back into the ATM until it clicks into place.
- 14 Follow your in-house procedures for indicating that the paper has been replaced in the receipt printer.
- 15 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 16 Close and lock the exterior of the ATM.

How to Clear Receipt Printer Jams

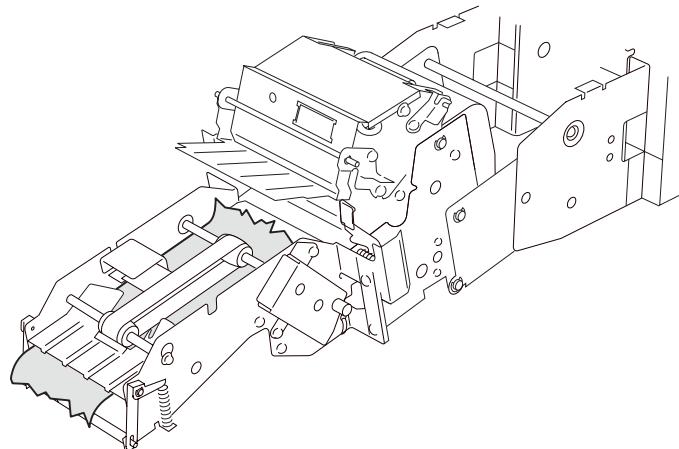
A receipt printer jam will be indicated by an error message.

To clear a jam within the receipt printer, proceed as follows:

- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor function, press the switch on the operator panel to the **supervisor** position.
- 3 Access the receipt printer as described in Chapter 1, ‘Getting Started’.
- 4 Inspect the printer to see if you can identify the cause of the paper jam.
- 5 If necessary, tear the paper to separate the roll from the paper entering the print mechanism.
- 6 Open the print mechanism cover either by pulling out one of the green locking levers, or by pressing on the lock shaft, depending the type of receipt printer you have. The cover will spring open.



- 7 Carefully remove any torn or crumpled paper from the print mechanism. Check under the cover and at the paper entry slot. You may have to partially close the print mechanism to do this.
- 8 If there is any paper jammed in the receipt transport, remove it carefully.



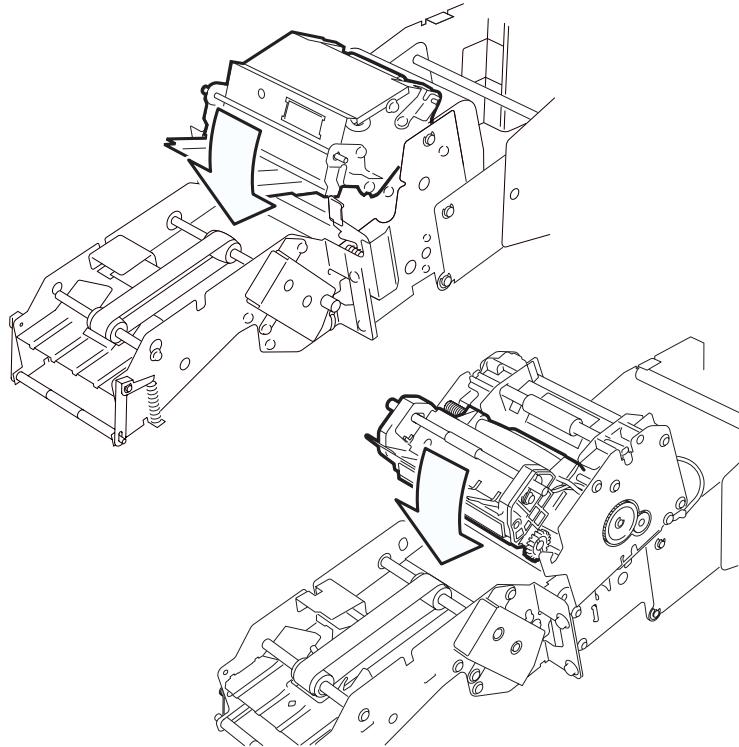
Caution: Do not pull on transport belts to remove paper.

- 9 Make sure the paper roll can turn freely by rotating it backwards (away from the print mechanism). If the roll does not turn freely, remove it from the printer and check that there is nothing jamming the paper roll or spindle.
- 10 Before reloading the paper, fold and tear off the end of the paper to leave a clean, straight edge.

Receipt Printer

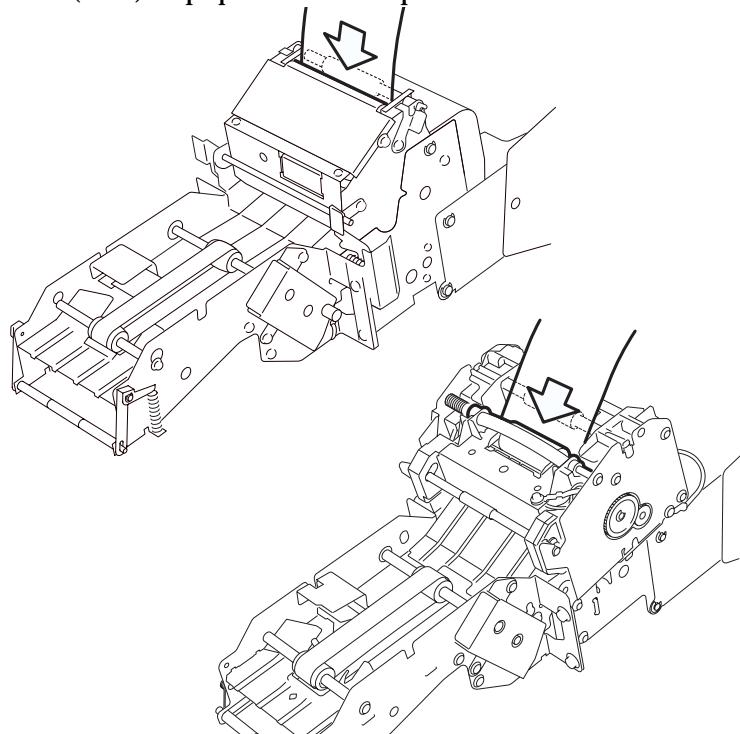
How to Clear Receipt Printer Jams

- 11 Close the print mechanism cover by pushing it down until it clicks shut.

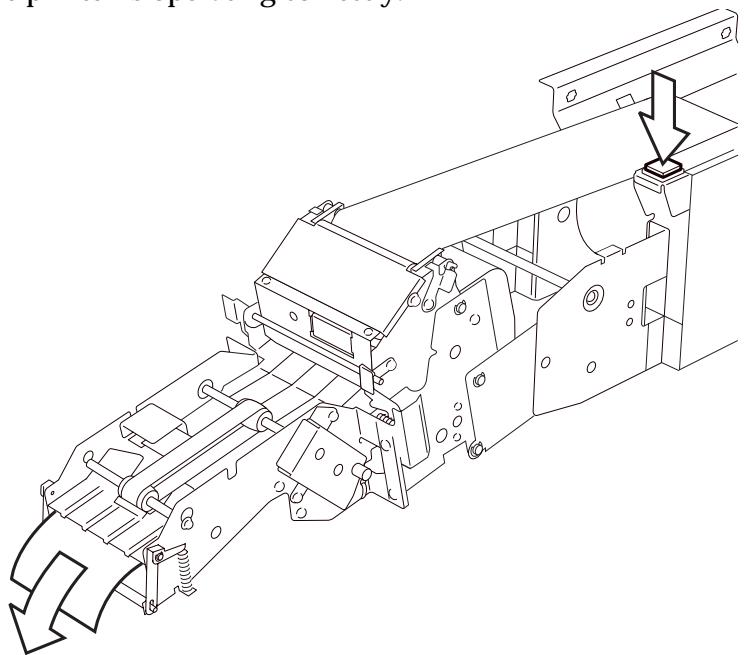


- 12 Lower the paper roll into the printer so that the spindle drops into the slots. The paper should feed from the top of the roll.

- 13 Guide the paper into the paper entry slot. Manually feed in about **75 mm** (3 in.) of paper until it stops.



- 14 Press the paper feed button and continue to feed in the paper by hand until it is gripped by the print mechanism. The paper will start to feed automatically, and the printer will produce a sample receipt, printed with a test graphic. This confirms that the printer is operating correctly.



- 15 If nothing happens when the feed button is pressed, the paper may not have been loaded correctly. Check the paper is feeding from the top of the roll. Open the print mechanism, rotate the paper roll backwards to pull the paper clear and try loading the paper again starting at Step 13.
- 16 Make sure that you remove the sample receipt and any other paper from the exit slot or receipt transport.
- 17 Push the printer back into the ATM until it clicks into place.
- 18 Follow your in-house procedures for indicating that you have fixed, without replacing, the receipt printer mechanism.
- 19 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 20 Close and lock the exterior of the ATM.

Chapter 5
Journal Printer

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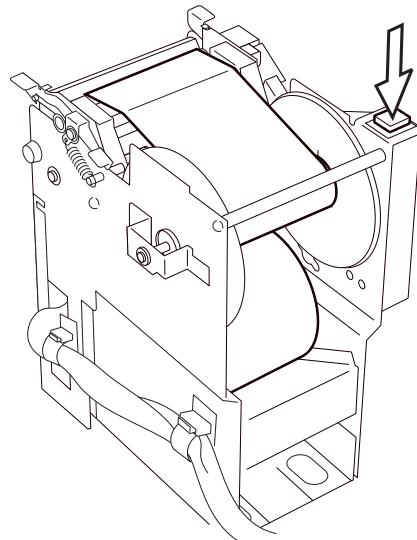
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How to Replenish the Graphics Journal Printer Paper

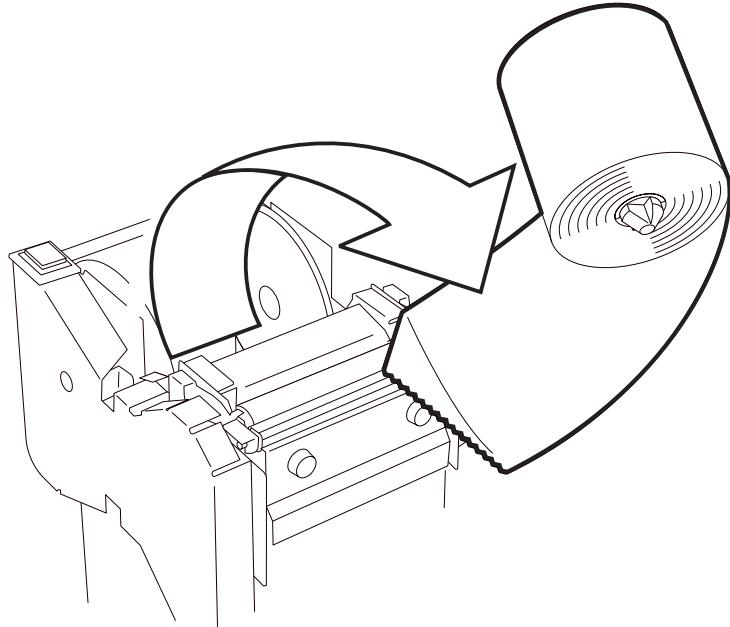
ATM consumables can be ordered from the NCR Systemedia ATM Consumables Group. Please contact your NCR account Manager for more information.

To replace the journal paper roll proceed as follows:

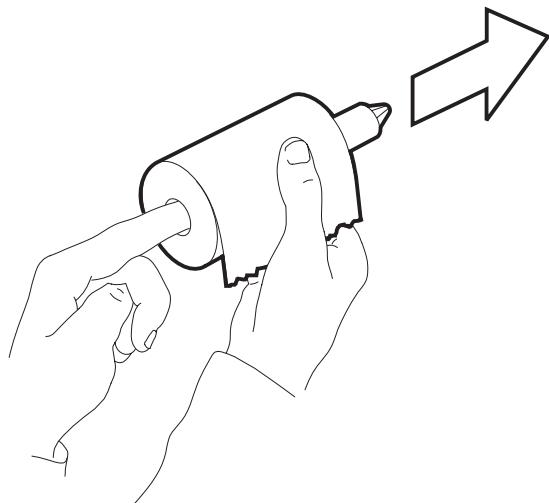
- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor function, press the switch on the operator panel to the **supervisor** position.
- 3 Access the journal printer as described in Chapter 1, 'Getting Started'.
- 4 If there is any paper left on the supply roll, press the paper feed button to wind on a few turns of blank paper to protect the printed journal roll.



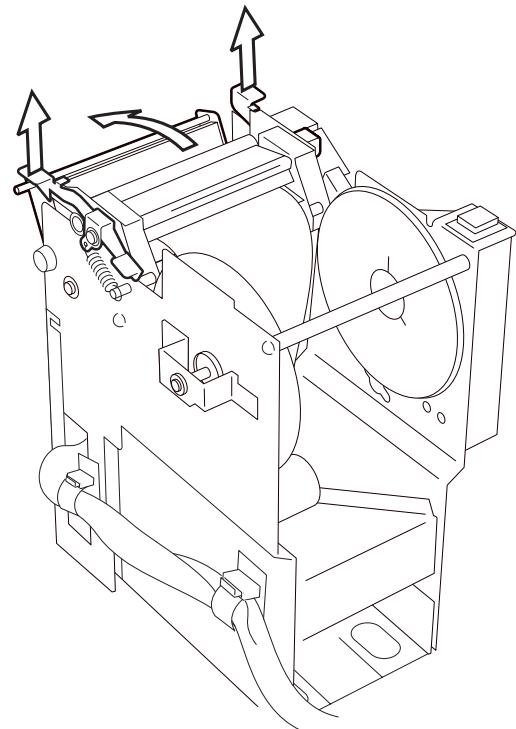
- 5 Pull the printed journal roll out of the printer. The spindle is spring loaded, so you will need to tilt the roll as you pull it out. If necessary, tear off the paper against the serrated cutter.



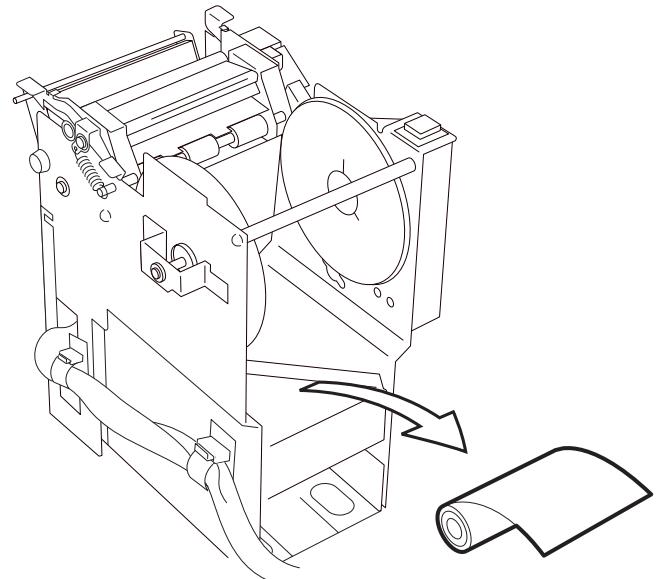
- 6 Remove the take-up spindle from the paper roll



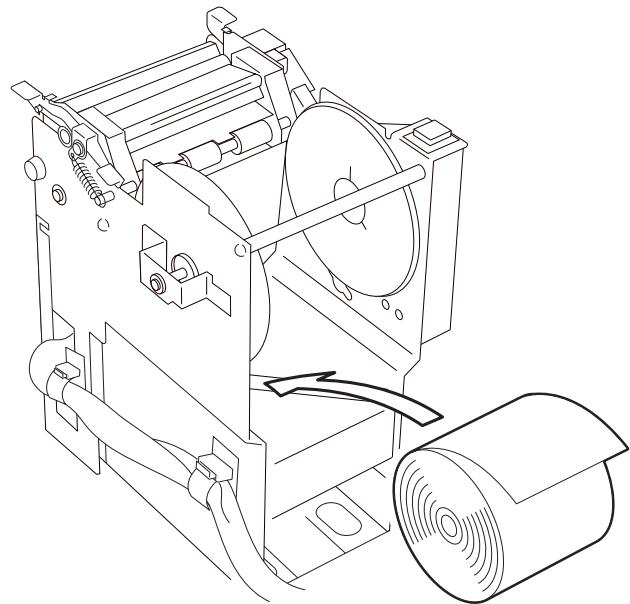
- 7 Lift one of the green locking levers to open the print mechanism.



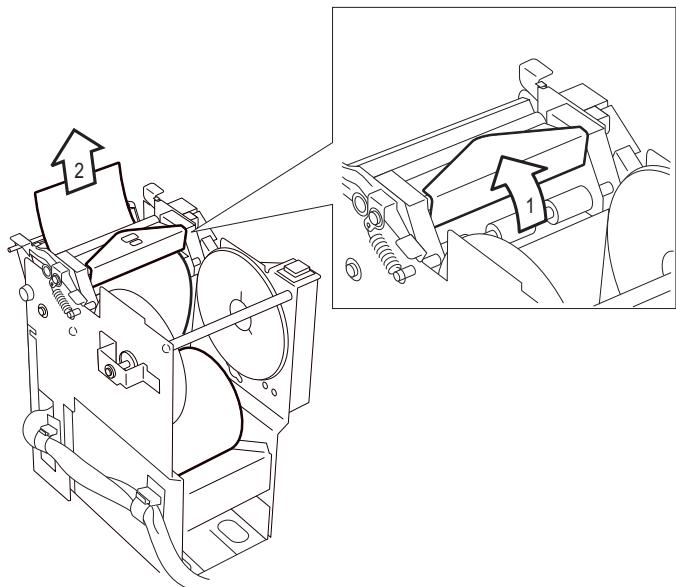
- 8 Remove the paper roll core and any remaining paper from the printer.



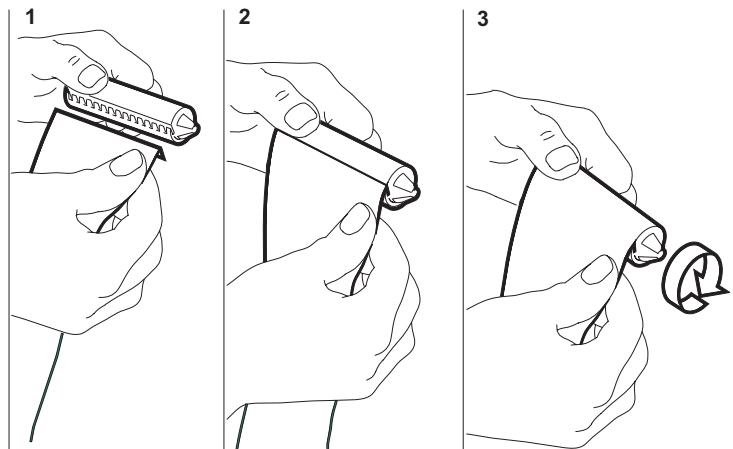
- 9 Remove sufficient paper from the new journal roll so that there are no traces of glue or tape. Place the new roll in the journal printer as shown.



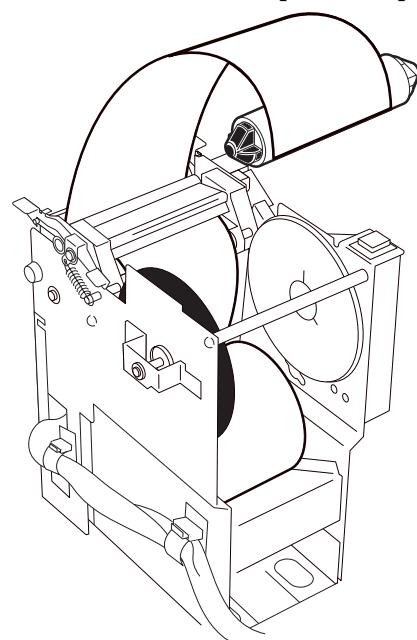
- 10 Tear the end of the paper to leave a clean straight edge.
- 11 Lifting the paper entry cover with one hand, feed the paper through until the end is visible. Release the paper entry cover.



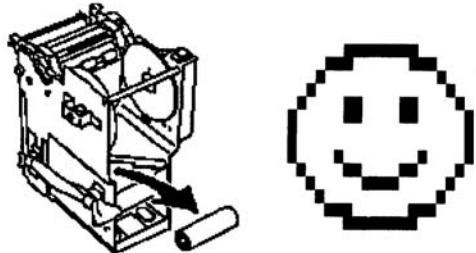
- 12 Pull about **300 mm** (12 in.) of paper through the print mechanism. Fold the end of the paper back on itself to form a clean, square end.
- 13 Hold the take-up spindle so that the black end is at the same side of the printer as the black roll guide. Insert the folded edge of the paper into the slot on the take-up spindle and wind the paper around the core two or three times in the direction shown. Keep the paper central on the spindle.



- 14 Making sure that the black end of the spindle is against the black roll guide, push the take-up spindle down between the roll guides until it clicks into place. Starting with the spindle at an angle will make it easier to fit between the roll guides. The paper should wind over the top of the spindle.

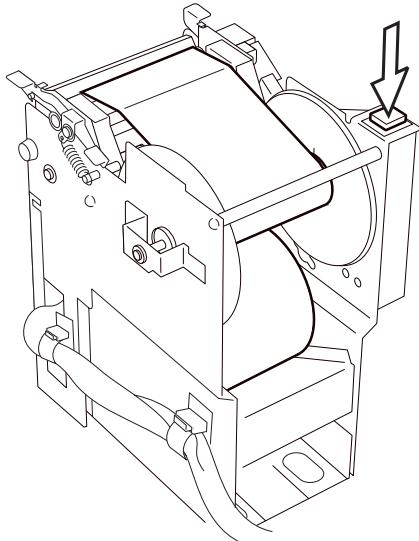


- 15 Close the print mechanism, making sure that it clicks shut. A test graphic will be printed automatically:



- A "smiley" graphic indicates correct operation.
- A picture of the printer with a paper core being removed indicates that the empty paper core was left in the printer and is still under the new paper roll. Lift out the paper, remove the empty core and replace the paper.

- 16 Press the paper feed button to wind on the paper until all slack is taken up and the test graphic has disappeared onto the take-up roll.



- 17 If nothing is printed on the paper when the print mechanism is closed, the paper has probably been loaded incorrectly. Check the orientation of the paper supply roll as shown in Step 9 and try Steps 10 through to 16 again.

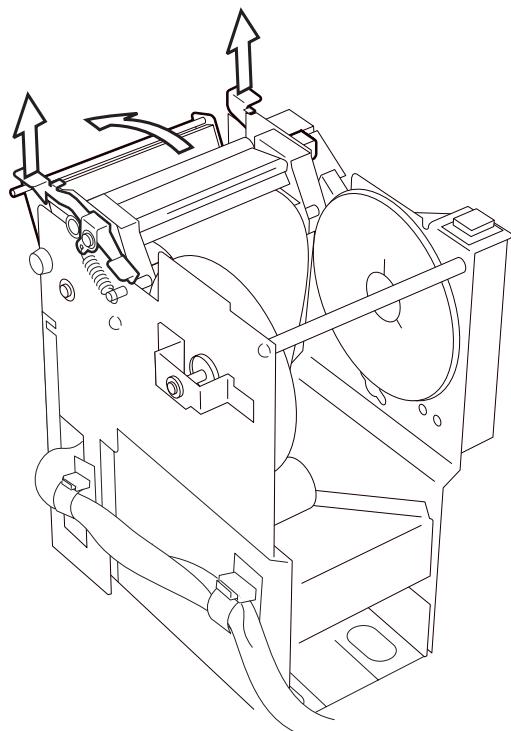
- 18 Check that the paper is not too close to one side or it may crumple against the roll guides and cause a jam. Open the print mechanism and slide the paper until it is centred between the guides. Close the print mechanism. The “smiley” graphic should be printed again.
- 19 Push the printer back into the ATM until it clicks into place.
- 20 Follow your in-house procedures for indicating that the paper has been replaced in the journal printer.
- 21 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 22 Close and lock the exterior of the ATM.

How to Clear Graphics Journal Printer Jams

The indication of a journal printer jam will be a state of health message or overprinting on the journal.

To clear a paper jam within the journal printer, proceed as follows:

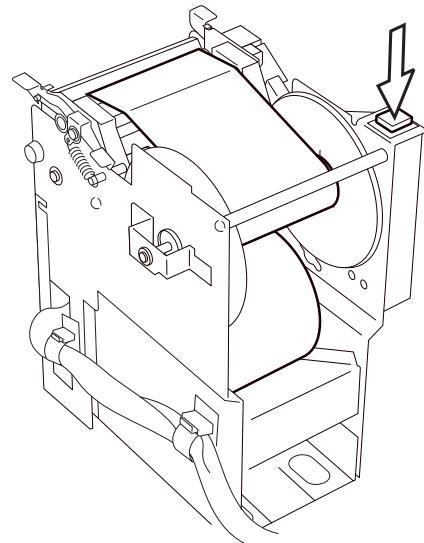
- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor function, press the switch on the operator panel to the **supervisor** position.
- 3 Access the journal printer as described in Chapter 1, 'Getting Started'.
- 4 Inspect the printer to see if you can identify the location of the paper jam.
- 5 Lift one of the green locking levers to open the print mechanism.



- 6 Remove any torn or crumpled paper from within the print mechanism. If anything is printed on this paper, keep it with the printed take-up roll.

Warning: Take care when clearing the print mechanism as the serrated cutter may cause injury.

- 7 Check the supply roll to see that it is positioned correctly. It should sit in the base of the printer with the paper free to feed upwards from the end of the roll nearer the print mechanism.
- 8 Check that the printed take-up roll is winding on evenly and that it is not being crumpled against one of the roll guides. If you cannot move the paper away from the guide, you should replace the journal roll as explained in the previous section.
- 9 If you are able to straighten out the paper – close the print mechanism cover, pushing it until it clicks shut. A “smiley” graphic should be printed. Press the paper feed button until the paper has smoothed out and appears to be feeding through without problems.



- 10 If the paper is badly crumpled or torn across, you should replace the journal roll as described in the previous section.
- 11 Push the printer back into the ATM until it clicks into place.
- 12 Follow your in-house procedures to indicate that you have fixed, without replacing, the journal printer mechanism.

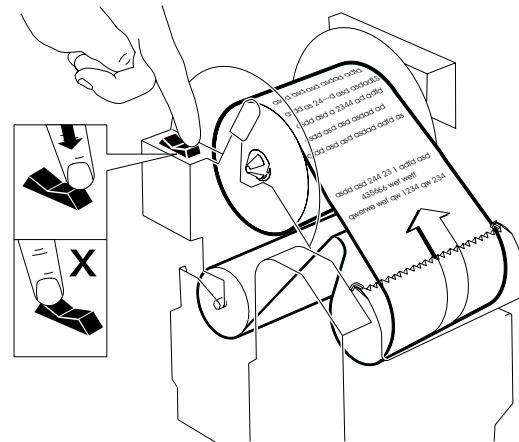
- 13 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 14 Close and lock the exterior of the ATM.

How to Replenish the Dot-Matrix Journal Printer

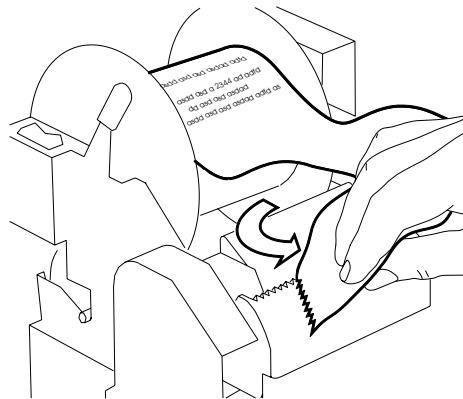
ATM consumables can be ordered from the NCR Systemedia ATM Consumables Group. Please contact your NCR account Manager for more information.

To replace the journal paper roll proceed as follows:

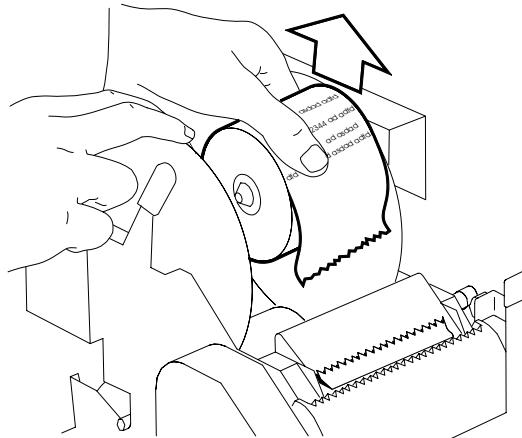
- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor function, press the switch on the operator panel to the **supervisor** position.
- 3 Access the journal printer as described in Chapter 1, 'Getting Started'.
- 4 Push down the paper feed switch on the top of the printer, and hold it down until all records are on the take-up roll.



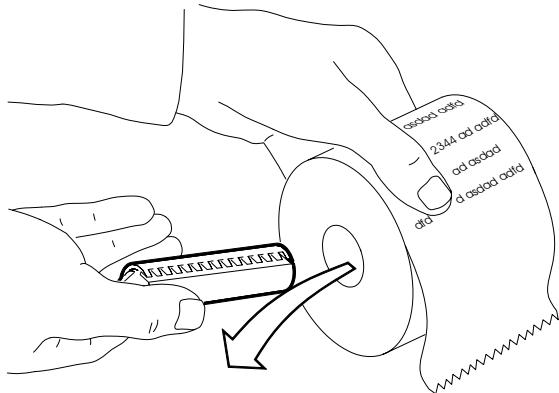
- 5 Tear the paper over the serrated edge provided on the printer.



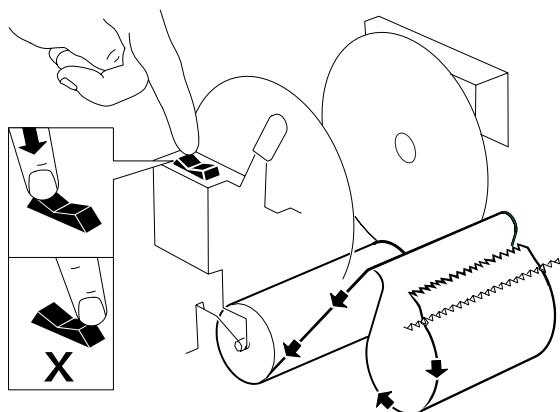
- 6 Lift the take-up spindle with the journal roll out of the printer.



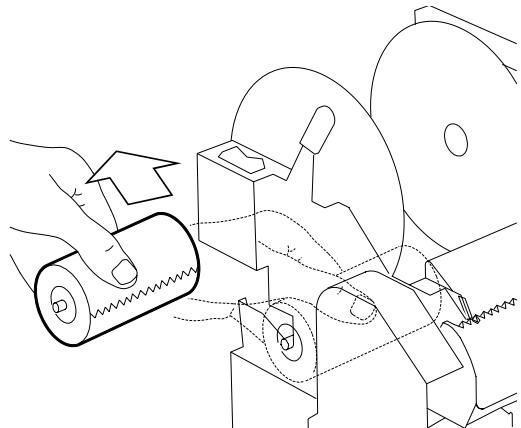
- 7 Remove the journal roll from the take-up spindle.



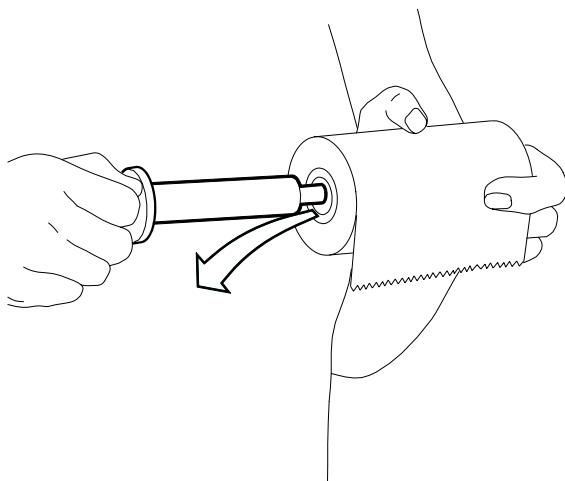
- 8 If, once the existing journal entries are on the take-up spindle, you want to continue to use the existing supply roll, proceed to Step 16.
- 9 Press down the paper feed switch and hold down until the end of the paper is released from the printer.



- 10 Lift the spindle and the remains of the paper roll out of the printer.

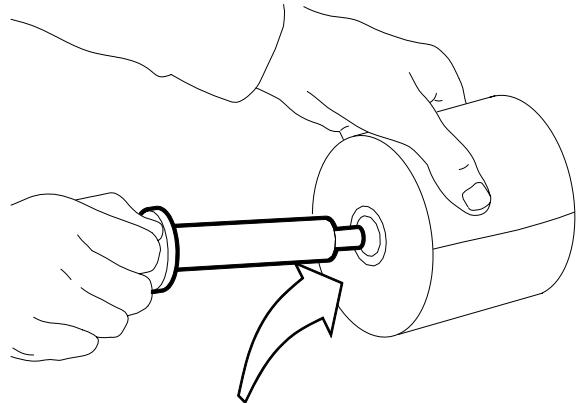


- 11 Discard the remaining paper roll but retain the spindle.

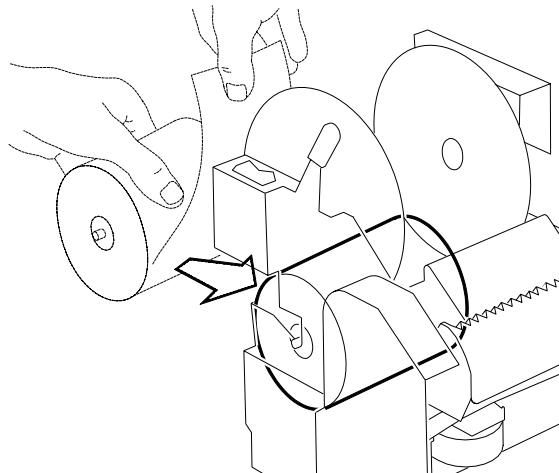


- 12 Tear off the end of the new journal roll to remove the tape and make a clean straight edge.

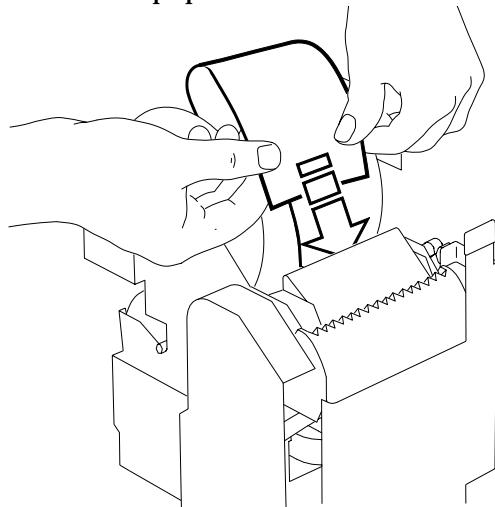
- 13 Slide the spindle through the core of the new paper roll, in the same orientation that it was removed.



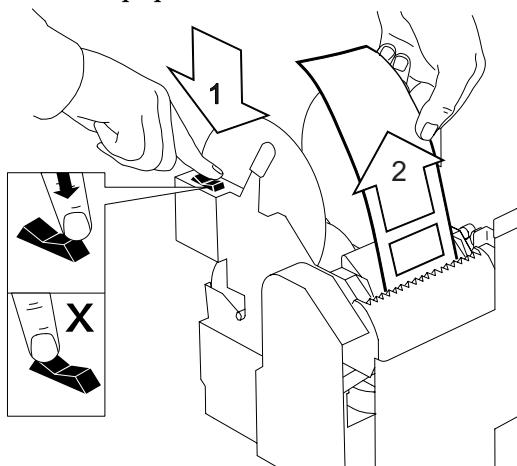
- 14 Lower the paper roll into the printer so that the paper feeds forwards from the bottom of the printer roll. Ensure that the spindle engages in the slots in the sides of the printer.



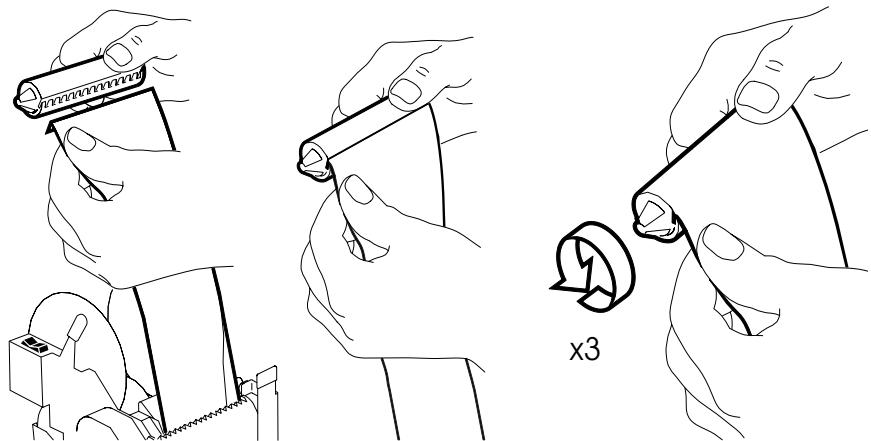
15 Insert the end of the paper roll into the slot shown below.



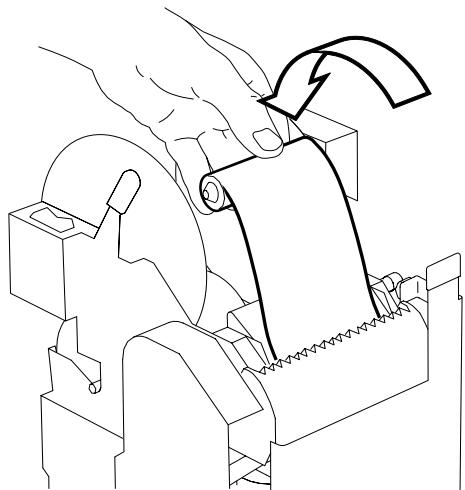
16 Push down the paper feed switch and the paper should be fed through the printer. Hold down the switch until approximately **254 mm** (10in.) of paper is free of the exit slot.



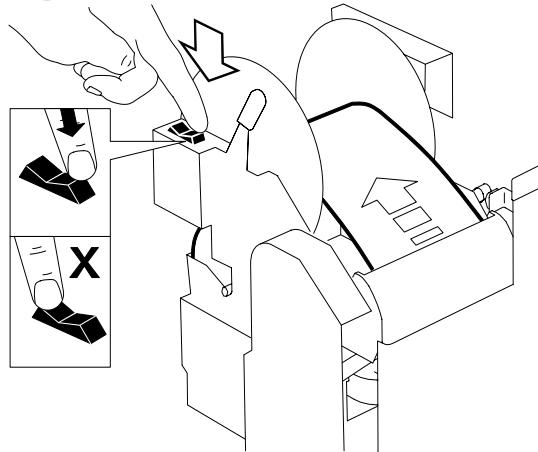
- 17 Fold the end of the paper to form a clean, square edge and insert it into the slot in the take-up spindle. Rotate the spindle so that the paper wraps around it at least 3 times.



- 18 Push the take-up spindle down between the paper guides on the printer until it clicks into position in the centre of the guides. The spindle is spring loaded so you will need to tilt it as you push.



- 19 Press the paper feed switch so that the paper wraps around the journal take-up roll another 2 or 3 times.



- 20 Push the printer back into the ATM until it clicks into place.
- 21 Follow your in-house procedures for indicating that the journal paper has been replaced.
- 22 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 23 Close and lock the exterior of the ATM.

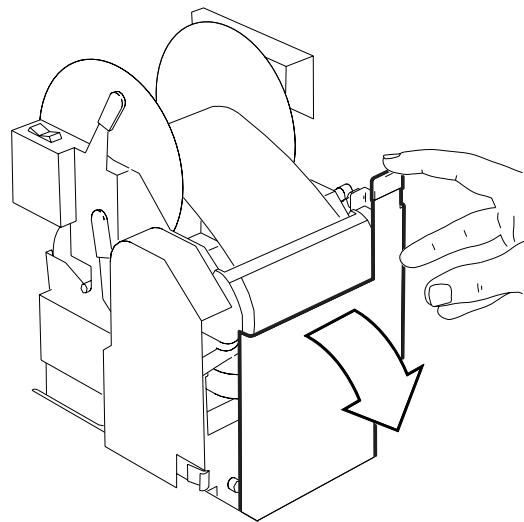
How to Replace the Dot-Matrix Journal Printer Ribbon

When the printer characters become faint, it may be because:

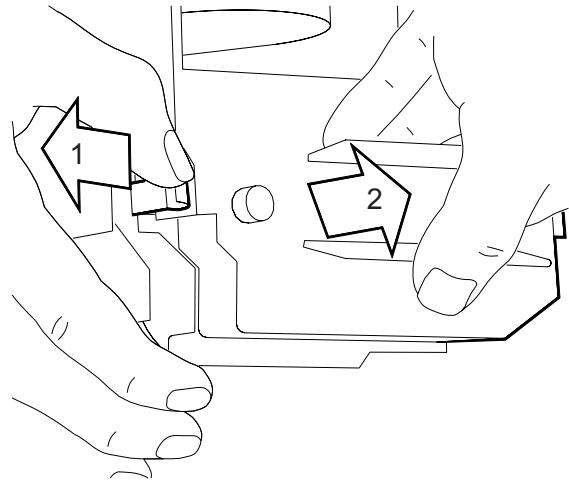
- The ribbon is jammed
- The ribbon has dried out
- The ribbon character life has been exceeded (an error message will report when the ribbon character life has almost expired).

To replace the printer ribbon proceed as follows:

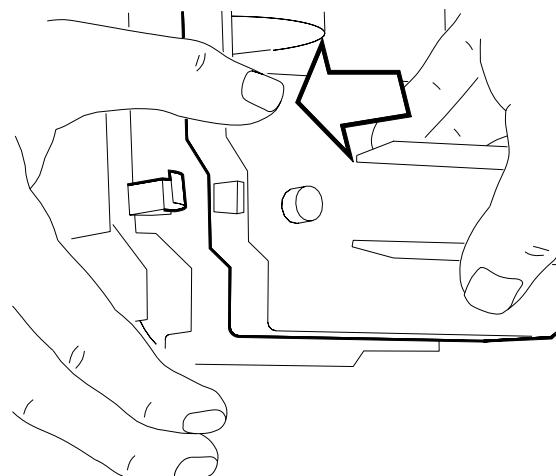
- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor function, press the switch on the operator panel to the **supervisor** position.
- 3 Access the journal printer as described in Chapter 1, 'Getting Started'.
- 4 Pull down the protective cover on the rear of the printer.



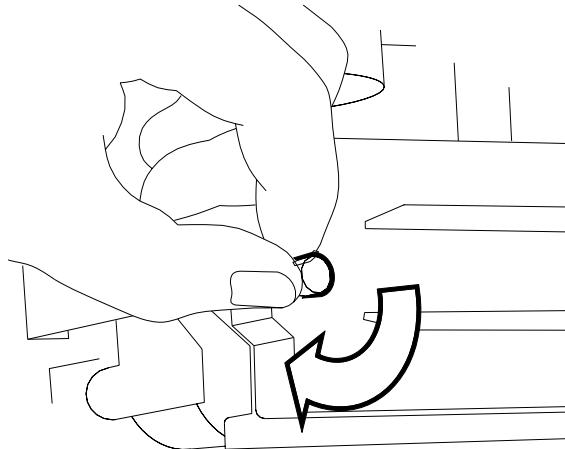
- 5 Push apart the clips which secure the ribbon cassette in the printer and pull the cassette upwards and out of the printer.



- 6 Push the new ribbon cassette into the printer ensuring that the ribbon locates between the print head and the plastic guide.



- 7 Turn the knob on the cassette in the direction of the arrow to tighten the ribbon.



- 8 Replace the protective cover on the rear of the printer.
- 9 Push the printer back into the ATM until it clicks into place.
- 10 Follow your in-house procedures for indicating that you have replaced the journal printer ribbon.
- 11 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 12 Close and lock the exterior of the ATM.

How to Replace the Dot-Matrix Journal Printer Print Head

The indications that the print head needs to be replaced are:

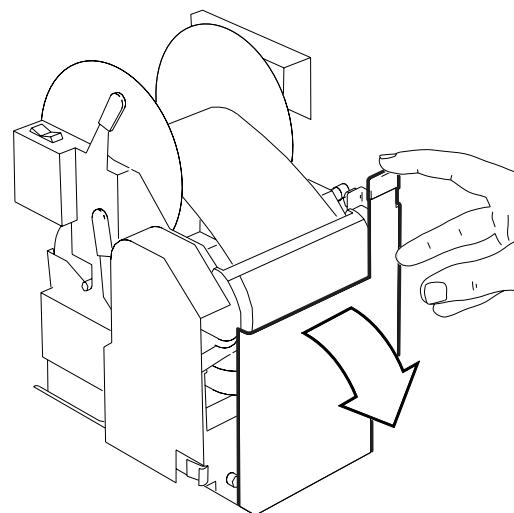
- An error message that print head life expectancy has been reached
- Visual check of the journal shows that the print head is not operating correctly.

To replace the print head proceed as follows:

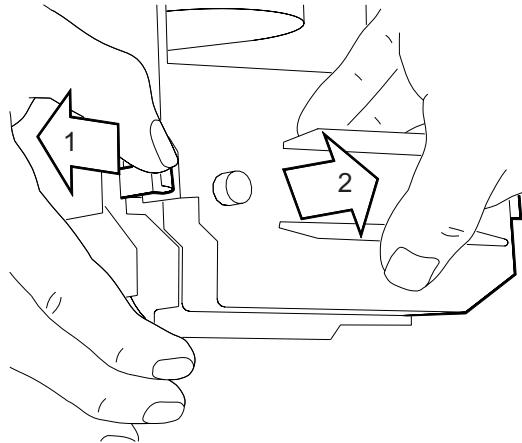
Warning

The print head becomes hot when in operation. After operation, leave print head to cool for three minutes before touching it.

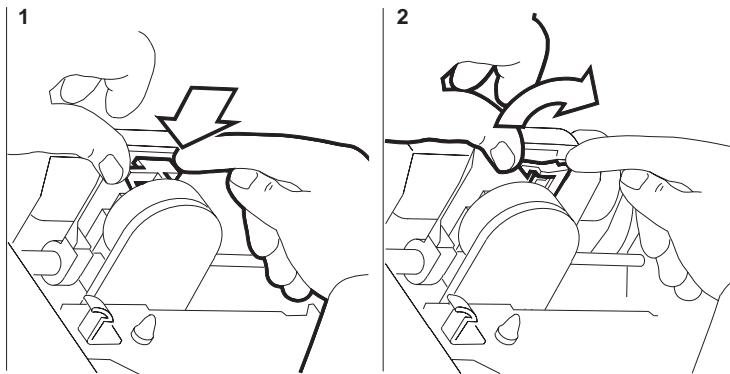
- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor function, press the switch on the operator panel to the **supervisor** position.
- 3 Switch off the ATM power. Press in the power button at the "0" side.
- 4 Access the journal printer as described in Chapter 1, 'Getting Started'.
- 5 Pull down the protective cover on the rear of the printer.



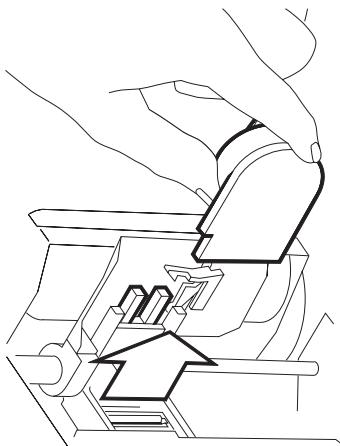
- 6 Push apart the clips which secure the ribbon cassette in the printer and pull the cassette upwards and out of the printer.



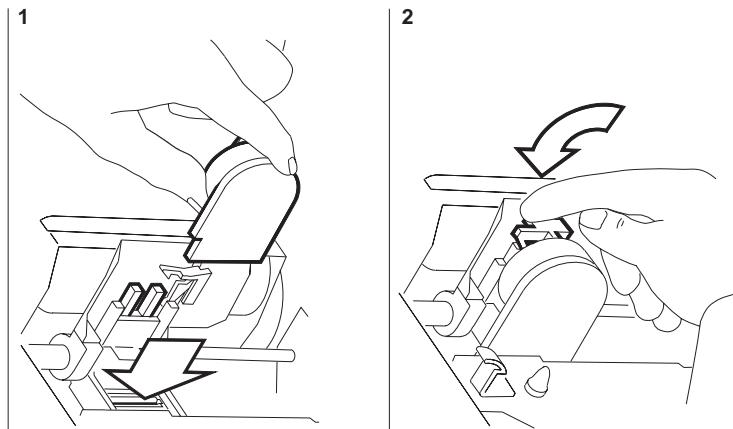
- 7 Press gently down on the centre of the print head locking lever, while at the same time lifting the end of the lever until it is clear of its latch.



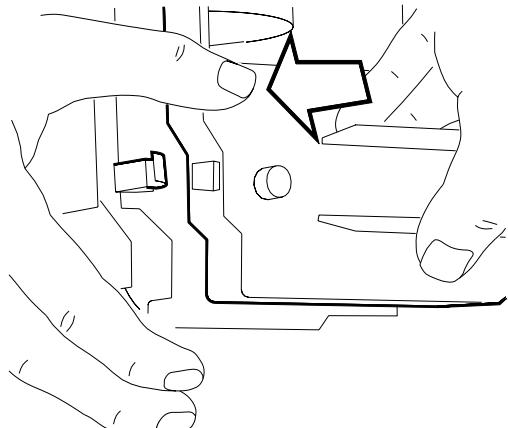
- 8 Pull the print head out of the printer.



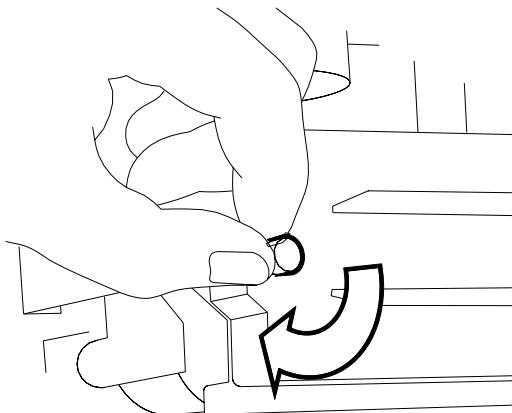
- 9 Push the new print head into the printer so that the printed circuit board locates into the connector in the printer, and the print head neck locates in the guide. Lock the print head in position using the plastic locking lever.



- 10 Push the ribbon cassette into the printer ensuring that the ribbon locates between the print head and the plastic guide.



- 11 Turn the knob on the cassette in the direction of the arrow to tighten the ribbon.



- 12 Replace the protective cover on the rear of the printer.
- 13 Switch on the ATM power.
- 14 Wait for the operator display to come back on (this may take up to 5 minutes after switching the power on).
- 15 Push the printer back into the ATM until it clicks into place.
- 16 Follow your in-house procedures to indicate that you have fixed, without replacing, the journal printer mechanism.
- 17 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 18 Close and lock the exterior of the ATM.

How to Clear Dot-Matrix Journal Printer Paper Jams

The indication of a journal printer paper jam will be a state of health error message or overprinting on the journal roll.

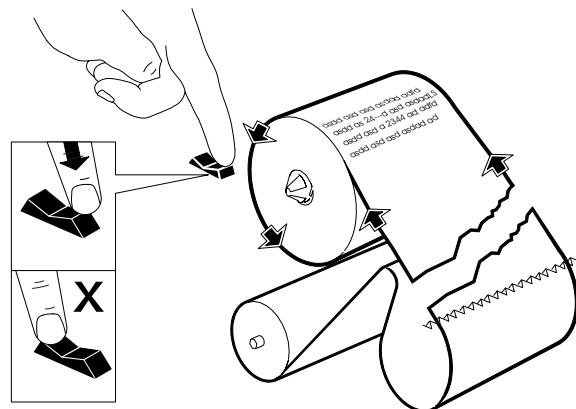
To clear journal printer jams proceed as follows:

- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor function, press the switch on the operator panel to the **supervisor** position.
- 3 Access the journal printer as described in Chapter 1, 'Getting Started'.
- 4 Look at the journal paper roll to see where the jam has occurred and if the paper has torn.
- 5 Try to identify the reason for the paper jam. The jam may have been caused by the paper being stuck to the core.

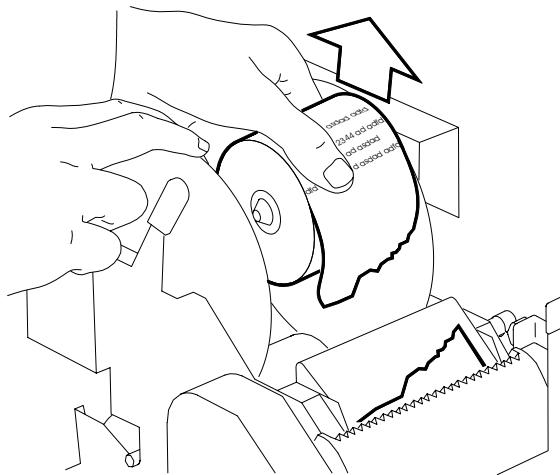
How to Clear a Paper Jam When the Paper Has Torn

If the journal paper has torn, proceed as follows:

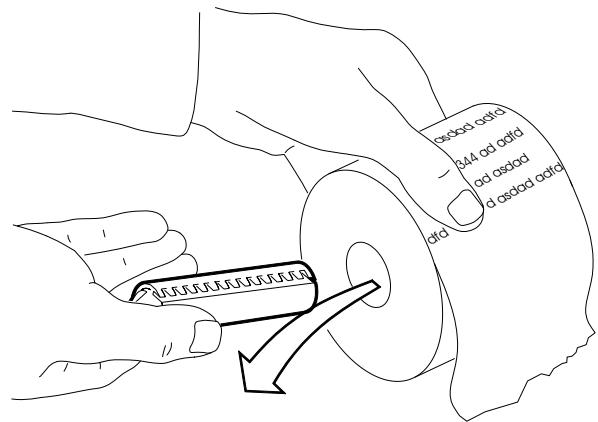
- 1 Press and hold the paper feed switch until the end of the journal roll wraps onto the take-up spindle.



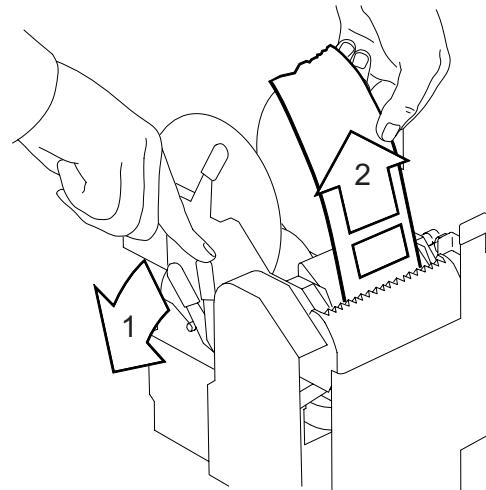
2 Lift the take-up spindle with the journal roll out of the printer.



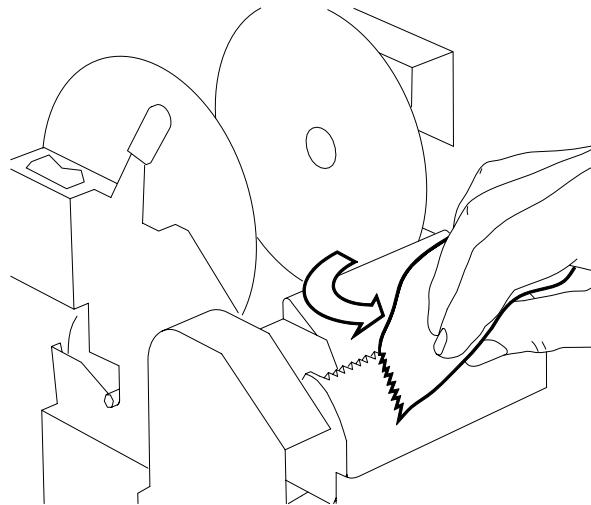
3 Remove the journal roll from the take-up spindle.



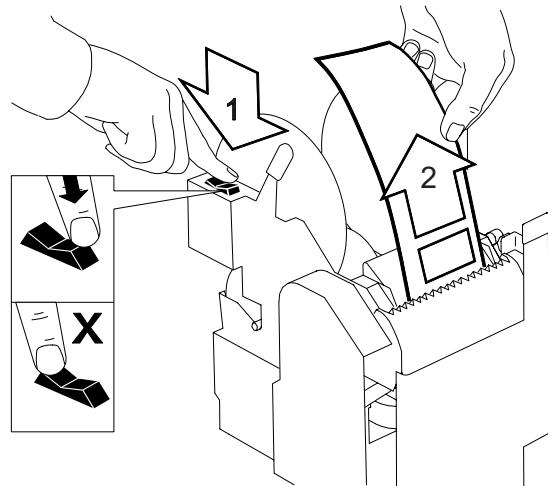
4 Press the green lever on the side of the printer and pull any jammed paper from within the printer.



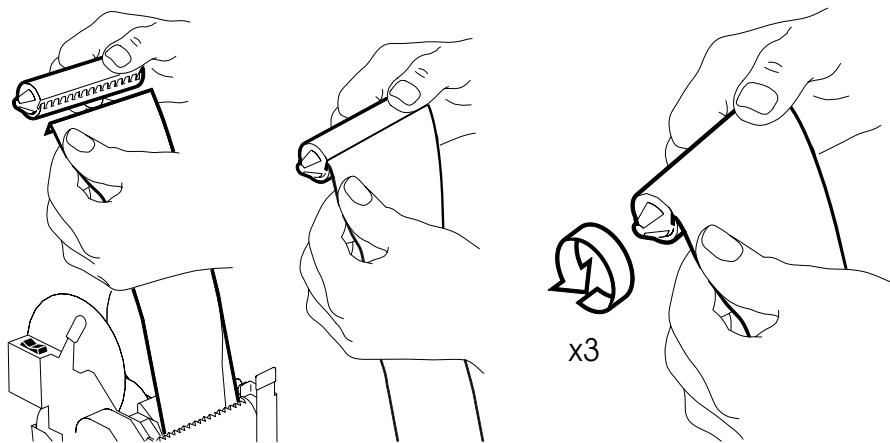
- 5 When the jammed paper is free of the printer, rip the paper on the serrated edge provided.



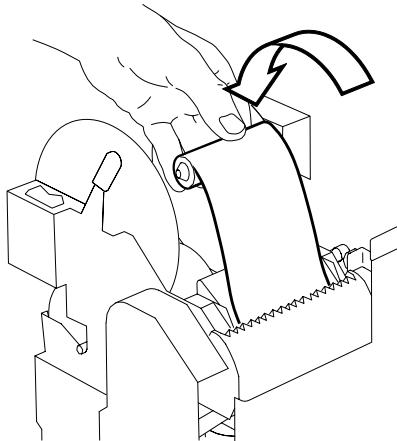
- 6 Push and hold down the paper feed switch until approximately **254 mm** (10 in.) of paper is free of the exit slot.



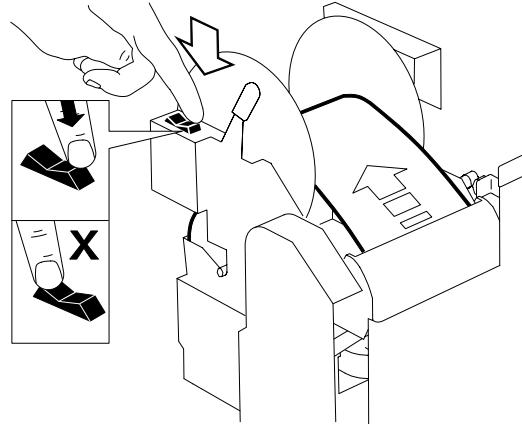
- 7 Insert the end of the paper in the take-up spindle and rotate spindle so that the paper wraps around it at least 3 times.



- 8 Push the take-up spindle down between the paper guides on the printer until it clicks into position in the centre of the guides.



- 9 Press the paper feed switch so that the paper wraps around the journal take-up spindle another 2 or 3 times.

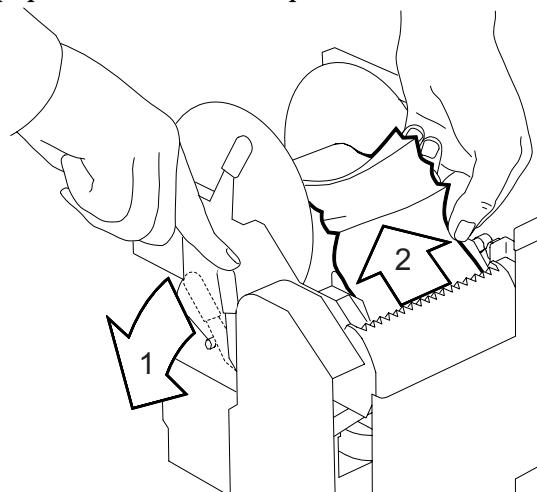


- 10 Push the printer back into the ATM until it clicks into place.
- 11 Follow your in-house procedures for indicating that you have fixed, without replacing, the journal printer mechanism.
- 12 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 13 Close and lock the exterior of the ATM.

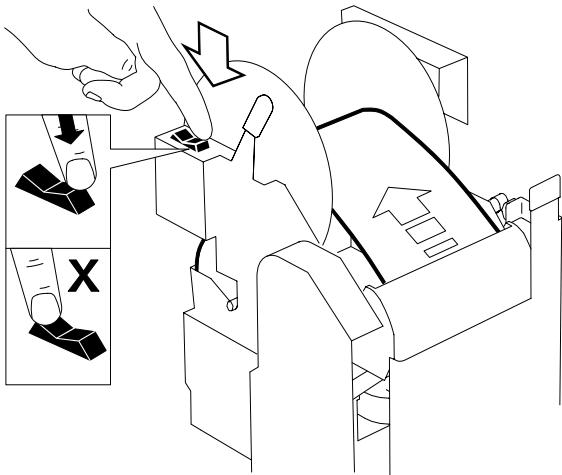
How to Clear a Paper Jam When the Paper Has Not Torn

If the paper has not torn, proceed as follows:

- 1 Press the green lever on the side of the printer and pull any jammed paper from within the printer.



- 2 Press the paper feed switch to rotate the take-up spindle until excess paper is taken onto the spindle.



- 3 Try to identify the reason for the paper jam. The jam may have been caused by the paper being stuck to the core.
- 4 Push the printer back into the ATM until it clicks into place.
- 5 Follow your in-house procedures for indicating that you have fixed, without replacing, the journal printer mechanism.
- 6 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 7 Close and lock the exterior of the ATM.

Chapter 6

Letter Quality Document Statement Printer

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Table of Contents
Letter Quality Document Statement Printer

Important Information for the User

Letter Quality Document (LQD) printers use direct thermal line printing technology rather than printer ribbons to print data, as dot-matrix printers do. However, error messages on ATMs fitted with some LQD printers are reported in the same way as dot-matrix statement printers. If your ATM is fitted with an LQD printer but displays a replace ribbon error message, select the option that confirms ribbon replacement in a dot-matrix statement printer. This will resolve the error condition and clear the message.

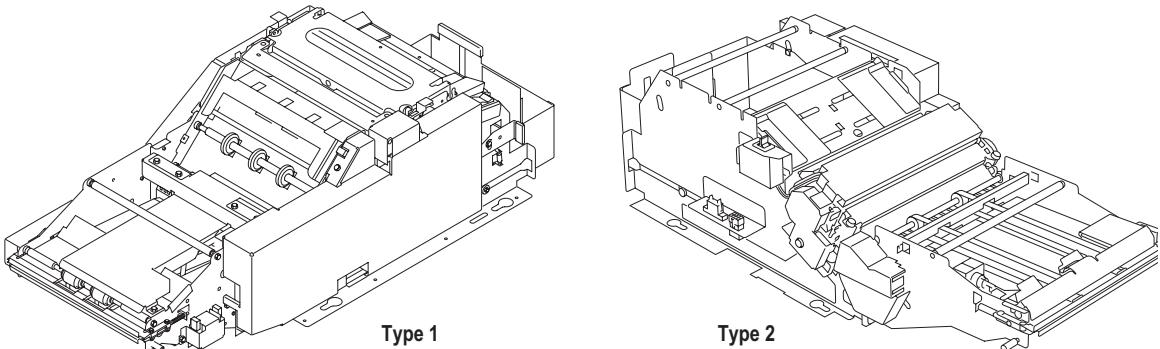
If a fault occurs on your LQD printer while running the dot-matrix statement printer customer confidence test (CCT) or VERIFY SOH, do not try to run the menu item again, but proceed as follows to avoid the fault re-occurring:

- 1 Select PRINT SOH with the Statement Printer as the target printer.
- 2 Select the Statement Printer CCT or VERIFY SOH.

Overview

There are two types of statement printer possible in your ATM. They can be differentiated by the appearance of the front transport: type 1 has a cover over the transport rollers, and type 2 has an open transport, as shown in the following illustration.

There are some differences in the operating instructions between the two types of printer. Refer to the appropriate type in the following sections for the instructions specific to your printer.



The paper used in your printer must conform to the specification given in NCR publication B006-4992, Consumable Items for Self-Service. The manual also provides details of the ATM consumables which can be ordered from NCR Systemedia.

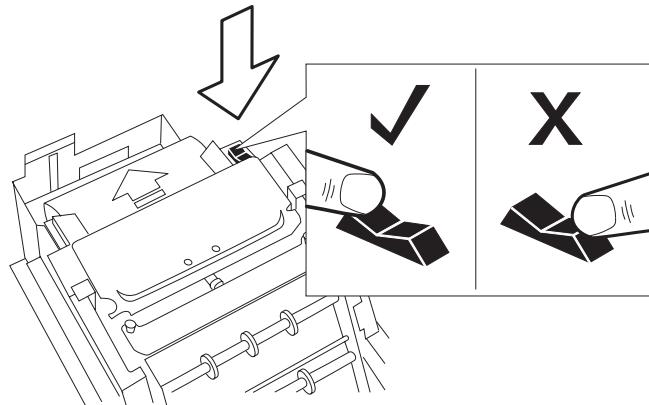
Caution It is very important to the operation of the printer that all paper used is free of tears and creases, and that the paper lies flat in the paper hopper.

How to Replenish the Statement Printer Paper

Type 1

To replace printer paper, proceed as follows:

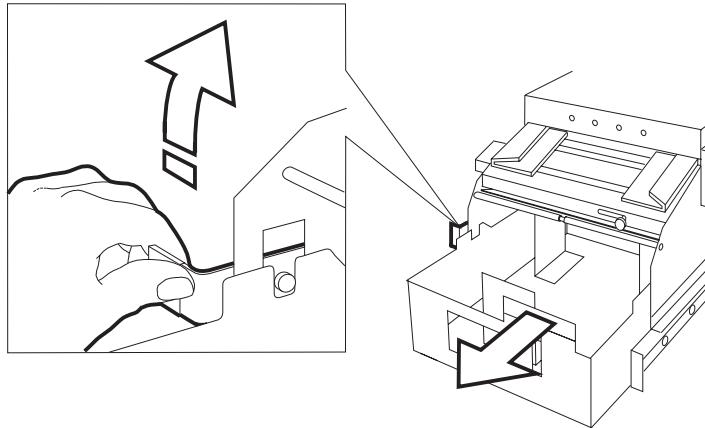
- 1 Open the exterior of your ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the statement printer as described in Chapter 1, ‘Getting Started’.
- 4 If there is still some paper left in the printer, push down the paper feed switch on the top of the printer as shown below, to unload the paper. When the paper stops moving, pull the end of the paper out of the printer.



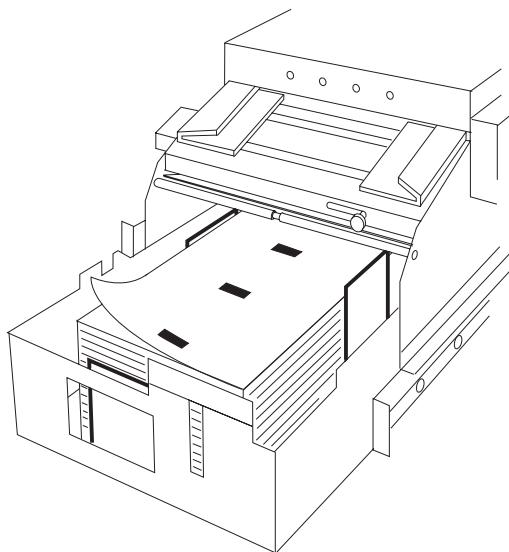
Note: If the feed button does not function, it could be because there is a fault condition that has not been cleared. Clearing the condition(s) should allow the paper to be unloaded.

Letter Quality Document Statement Printer
How to Replenish the Statement Printer Paper

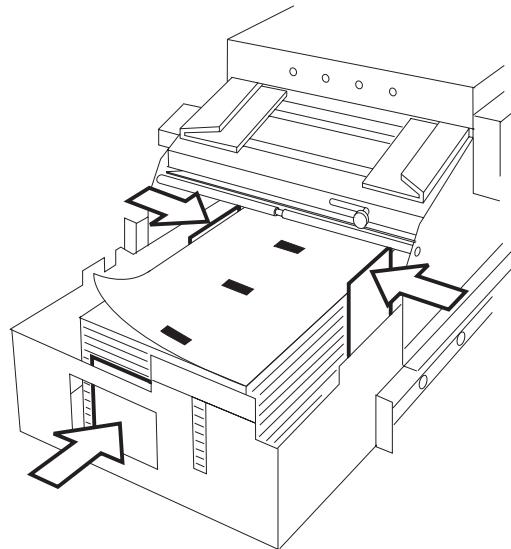
- 5 Lift the hopper latch and slide the hopper back. Remove the remains of the paper stack from the hopper.



- 6 You may need to empty the capture bin. For more information, refer to the section 'Removing Captured Media'.
- 7 Place the new paper stack into the hopper. The black dots must be facing downwards and be closer to the leading edge **as it loads into the printer**.

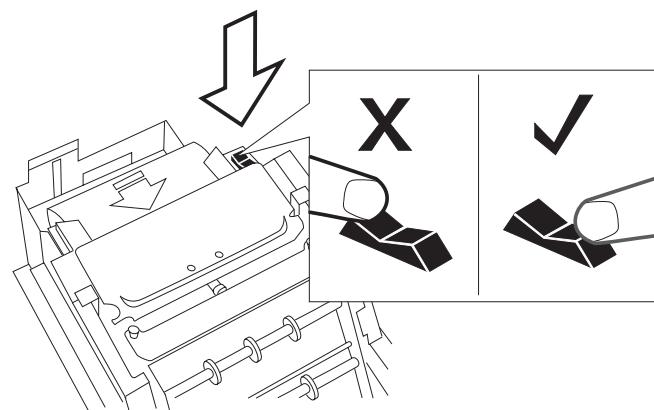


- 8 Slide the paper guides in the hopper to fit the stack.



Note: The rear guide is secured by a thumbscrew on the underside of the hopper.

- 9 Slide the hopper forward to its operating position.
- 10 Slide the end of the paper between the guides on top of the printer. Press the paper feed switch as shown below, to load the paper into the printer. The paper should feed through the printer.



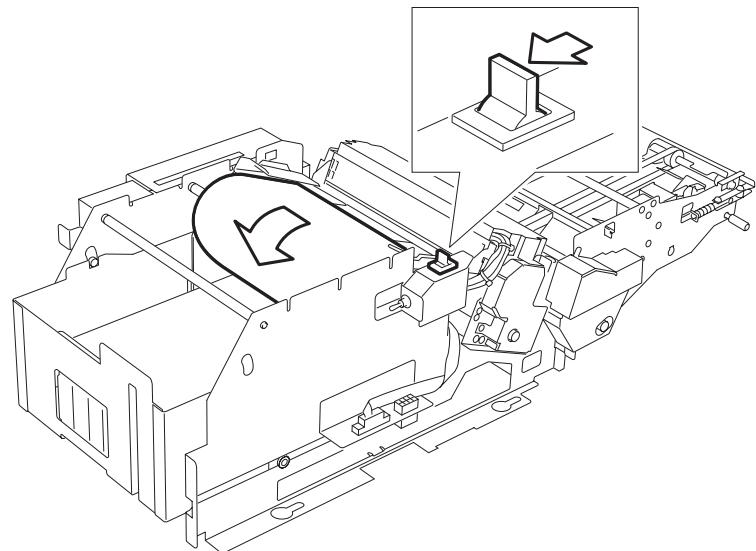
- 11 If the printer cuts the statement, remove it from the capture bin.
- 12 Push the printer back into the ATM until it clicks into place.

- 13 Follow your in-house procedures for indicating that you have replenished the statement paper.
- 14 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 15 Close and lock the exterior of the ATM.

Type 2

To replace printer paper, proceed as follows:

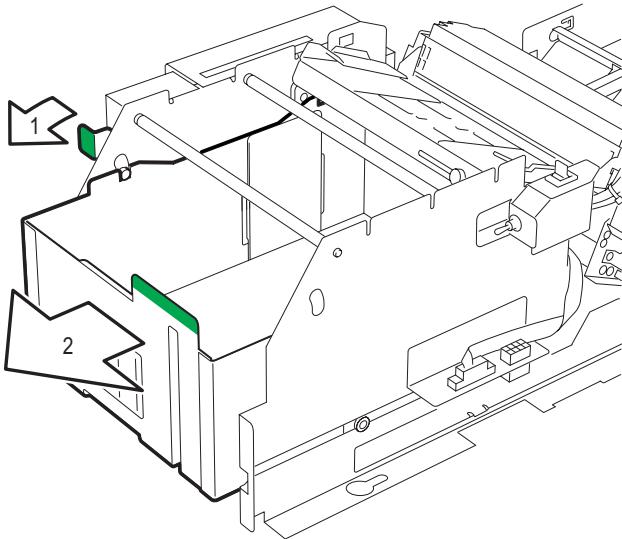
- 1 Open the exterior of your ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the statement printer as described in Chapter 1, ‘Getting Started’.
- 4 If there is still some paper left in the printer, push the paper feed switch on the top of the printer as shown below, to unload the paper. When the paper stops moving, pull the end of the paper out of the printer.



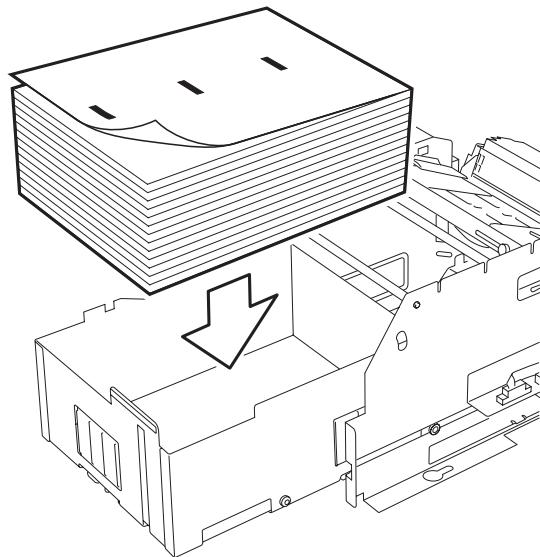
Note: If the feed button does not function, it could be because there is a fault condition that has not been cleared. Clearing the condition(s) should allow the paper to be unloaded.

Letter Quality Document Statement Printer
How to Replenish the Statement Printer Paper

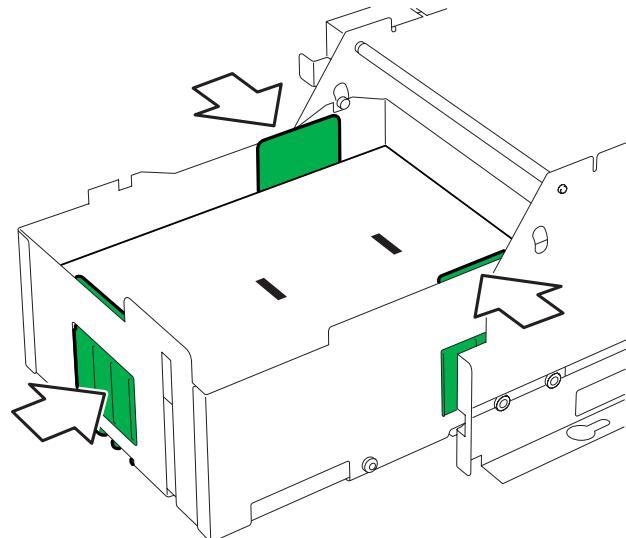
- 5 Press the hopper latch and slide the hopper back. Remove the remains of the paper stack from the hopper.



- 6 You may need to empty the capture bin. For more information, refer to the section 'Removing Captured Media'.
- 7 Place the paper stack into the hopper. The black dots must be facing downwards, and be closer to the leading edge **as it loads into the printer**.



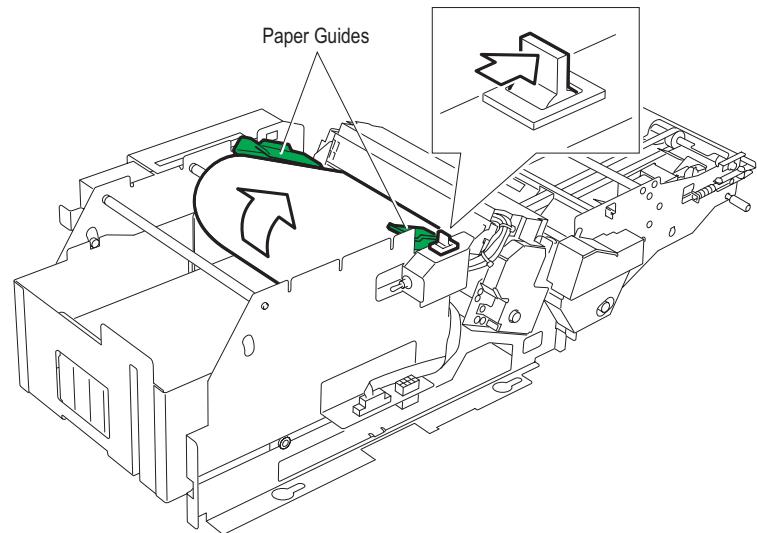
8 Slide the paper guides in the hopper to fit the stack.



Note: The rear guide is secured by a thumbscrew on the underside of the hopper.

9 Slide the hopper forward to its operating position.

10 Slide the end of the paper between the guides on top of the printer. Press the paper feed switch as shown below, to load the paper into the printer. The paper should feed through the printer.



11 If the printer cuts the statement, remove it from the capture bin.

12 Push the printer back into the ATM until it clicks into place.

- 13 Follow your in-house procedures for indicating that you have replenished the statement paper.
- 14 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 15 Close and lock the exterior of the ATM.

Clearing Printer Jams

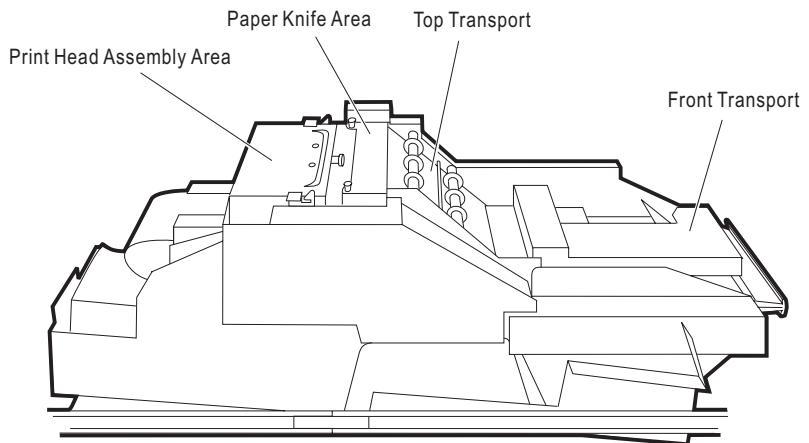
A paper jam in the printer will be indicated by an error message.

Type 1

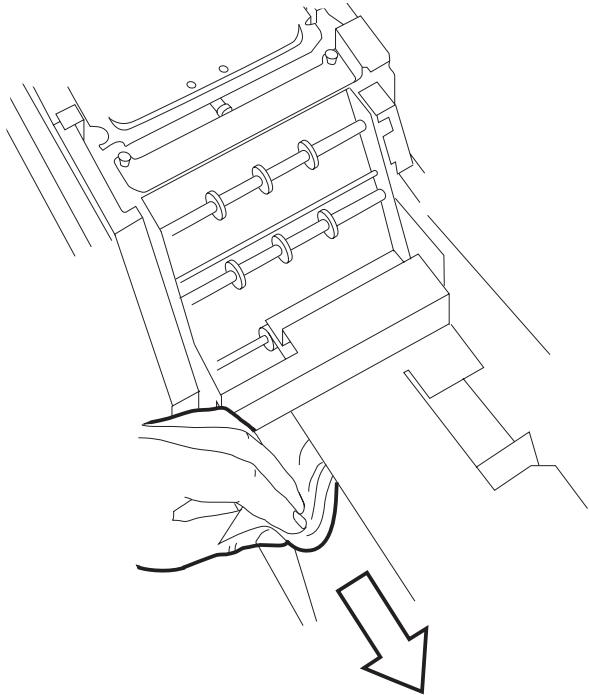
To clear a jam, proceed as follows:

- 1 Open the exterior of your ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the statement printer as described in Chapter 1, ‘Getting Started’.

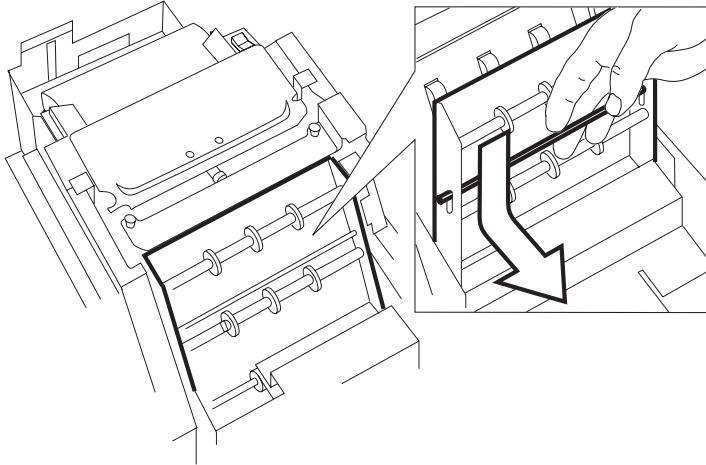
Paper jams in the printer could occur in the areas identified in the illustration below.



- 4 To clear a jam in the front transport area, gently free the paper and ease it out. Jams in this area will be clearly visible and can be easily removed.

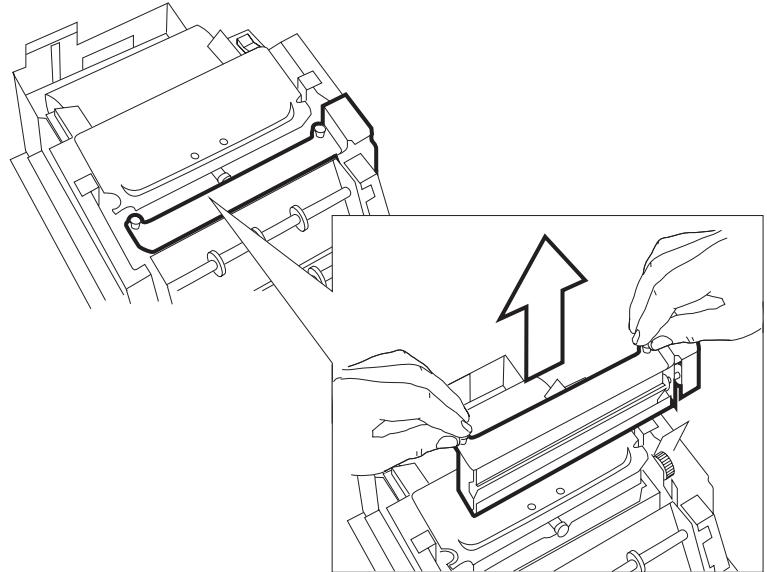


- 5 To clear a paper jam in the top transport, push the green handle down and forward, to lift the plate and access the transport area.

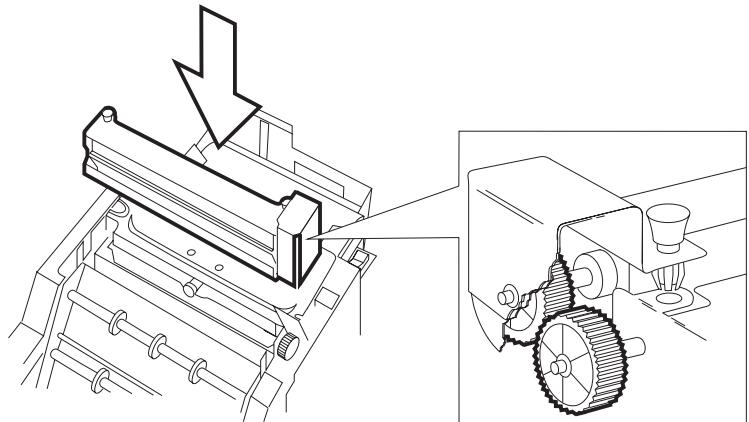


- 6 Remove any crumpled or jammed paper.
- 7 Lower the plate until it latches into place.

- 8 To clear jams in the paper knife area, pull out the two poppers on the knife assembly and lift it out.

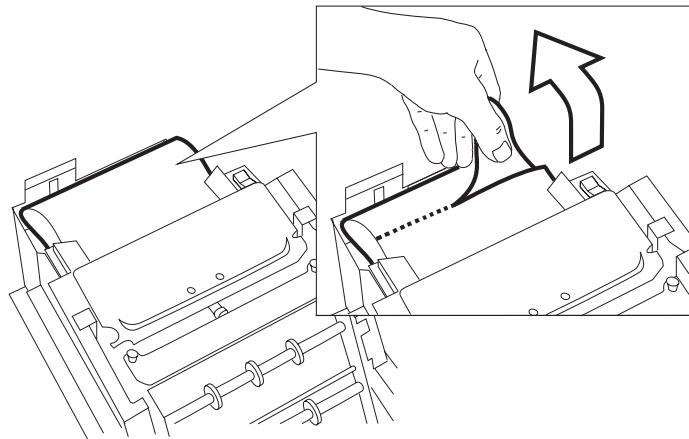


- 9 Remove any crumpled or jammed paper.
- 10 Replace the knife assembly. The rollers must mesh before the knife assembly latches into place.

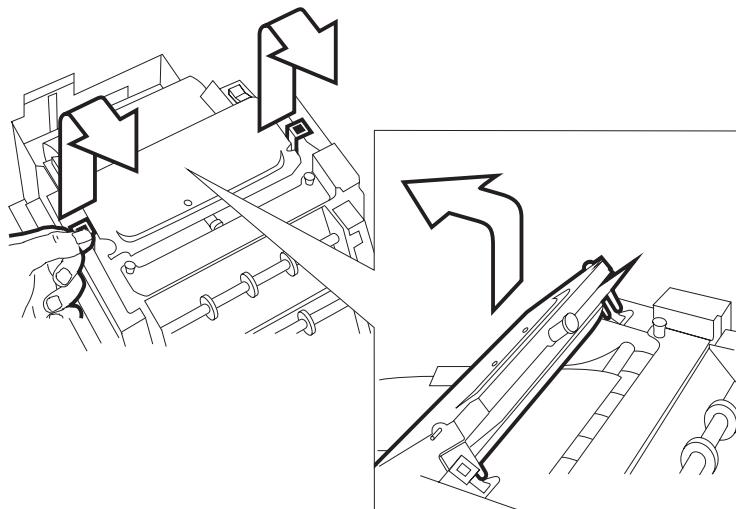


- 11 Press in the two poppers.

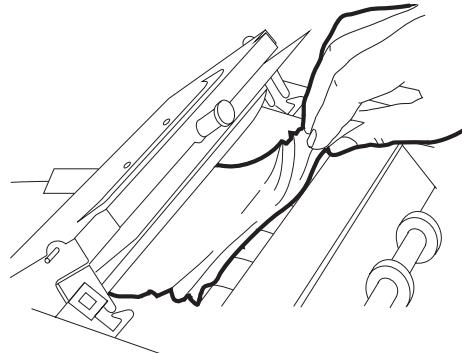
- 12 To clear jams in the print head assembly area, tear the paper across the perforations immediately prior to the paper entering the paper guides.



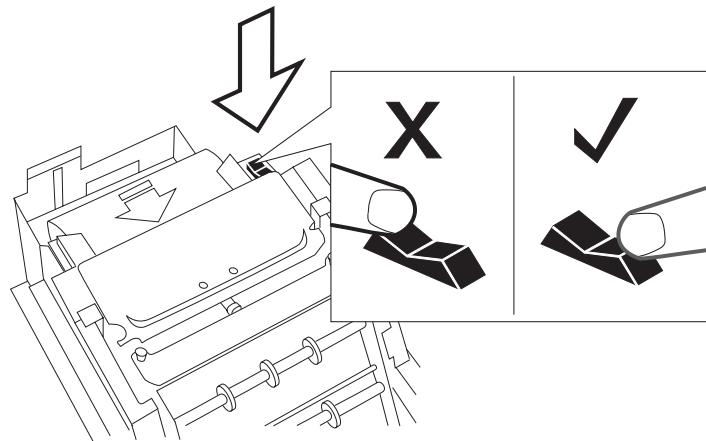
- 13 Lift up the latches to open the print head assembly.



- 14 Remove any crumpled or jammed paper from the front of the print head assembly. Do not pull any paper back through the guides.



- 15 Close the print head assembly and press the latches down firmly to secure the assembly.
- 16 Slide the end of the paper between the guides on top of the printer. Press the paper feed switch as shown below to load the paper. The paper should feed through the printer.



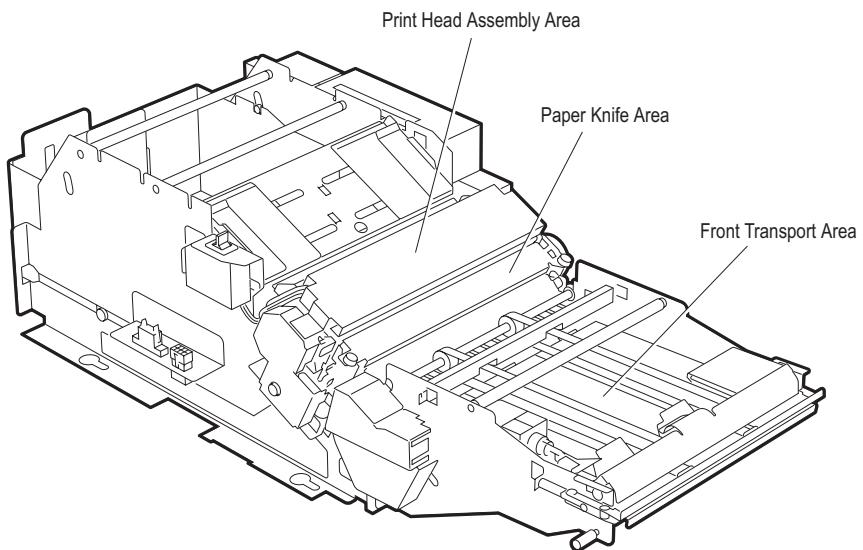
- 17 If the printer cuts the statement, remove it from the capture bin.
- 18 Push the statement printer back into the ATM until it clicks into place.
- 19 Follow your in-house procedures for indicating that you have fixed, without replacing, the statement printer mechanism.
- 20 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 21 Close and lock the exterior of the ATM.

Type 2

To clear a jam, proceed as follows:

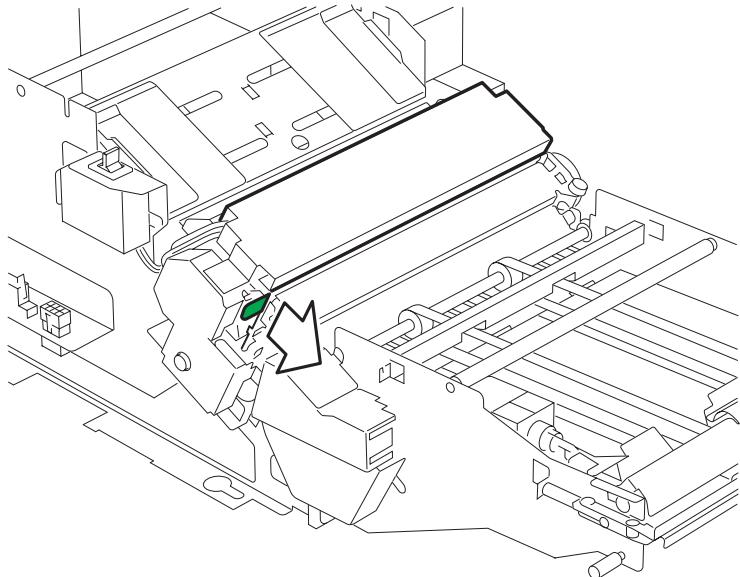
- 1 Open the exterior of your ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the statement printer as described in Chapter 1, 'Getting Started'.

Paper jams in the printer could occur in the areas identified in the illustration below

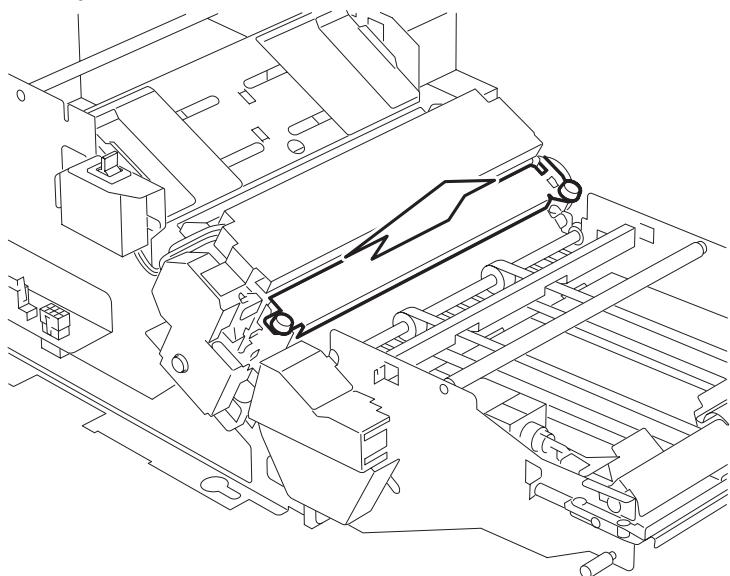


- 4 To clear a jam in the front transport area, gently free the paper and ease it out. Jams in this area will be clearly visible and can be easily removed.

- 5 To clear a paper jam in the print head assembly area, press down on the green lever to release the assembly cover.



- 6 Remove any crumpled or jammed paper.
- 7 To clear jams in the paper knife area, unscrew the two white screws, making sure that you retain the screws. Lift the knife assembly out.



Note: The print head cover must be open when removing the knife assembly.

- 8 Remove any crumpled or jammed paper.

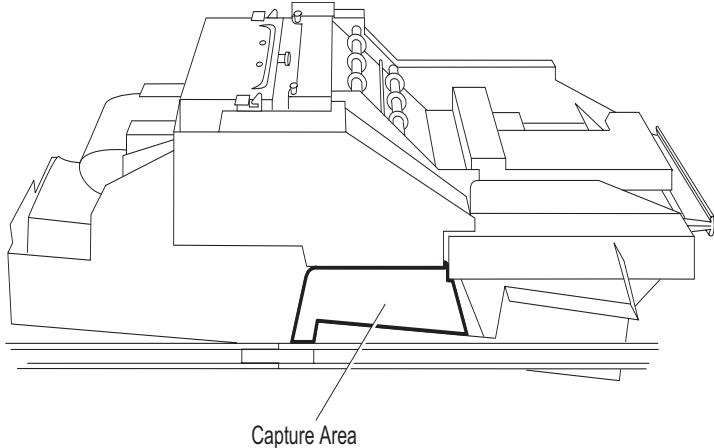
- 9 Replace the knife assembly and secure it with the two white screws.
- 10 Push the assembly cover back down until it clicks into place.
- 11 Push the statement printer back into the ATM until it clicks into place.
- 12 Follow your in-house procedures for indicating that you have fixed, without replacing, the statement printer mechanism.
- 13 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 14 Close and lock the exterior of the ATM.

Removing Captured Media

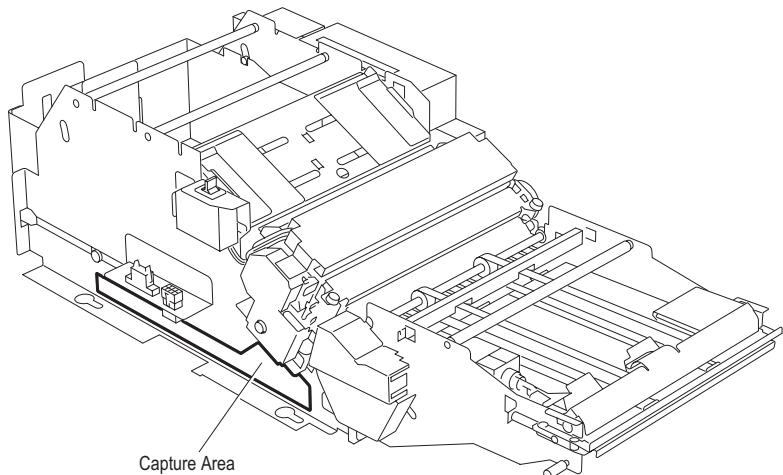
Statements which are retracted from the printer transport are placed in the capture area. To remove captured statements, proceed as follows:

- 1 Open the exterior of your ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the statement printer as described in Chapter 1, 'Getting Started'.
- 4 Remove any captured statements from the capture area. Check that there are no statements stuck to the roof of the area.

Type 1



Type 2

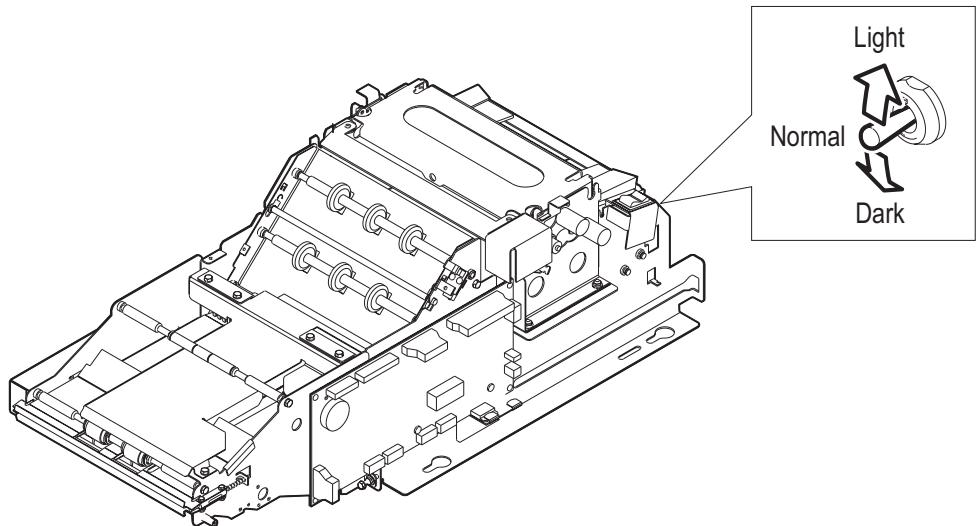


- 5 Push the printer back into the ATM until it clicks into place.
- 6 Follow your in-house procedures for indicating that you have emptied the capture area.
- 7 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 8 Close and lock the exterior of the ATM.

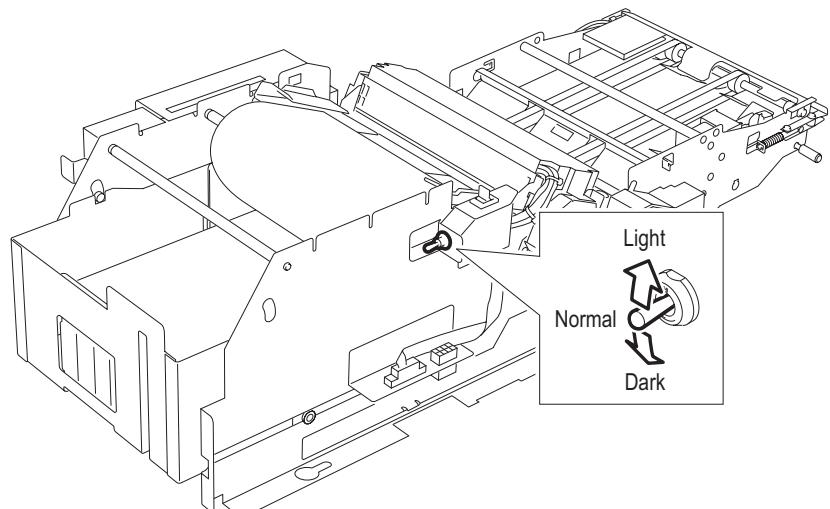
Adjusting The Contrast

It may sometimes be necessary to change the contrast to improve print clarity on statements. The contrast control switch (located near to the paper feed switch, as shown in the following illustrations) allows you to adjust the printer contrast.

Type 1



Type 2



For both types of printer, to darken the image, set the switch to the **Down** position. The contrast is increased by applying more heat to

Letter Quality Document Statement Printer
Adjusting The Contrast

the paper, however, if the image is too dark, the print may blur slightly.

To lighten the image, set the contrast switch to the **Up** position. If the contrast is too light, the print image may fade over time.

Note that the ATM must be re-started for the new contrast settings to take effect.

Chapter 7

Statement/Passbook Printer

How to Replace the Paper

7-1

How to Replace the Ribbon

7-5

How to Replace the Print Head

7-8

How to Clear Paper and Passbook Jams

7-13

How to Remove Captured Statements and Passbooks

7-18

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Statement/Passbook Printer

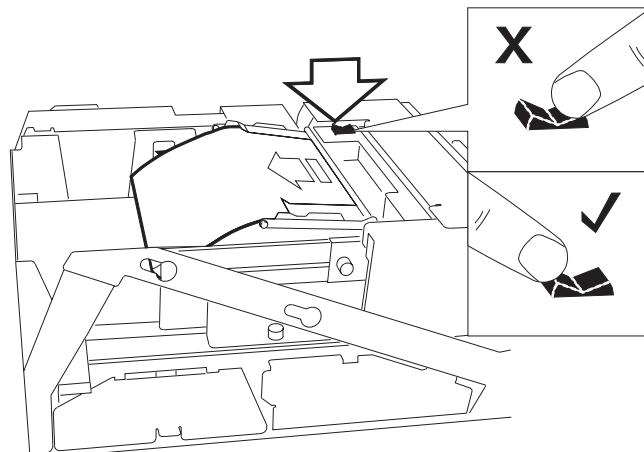
How to Replace the Paper

ATM consumables can be ordered from the NCR Systemedia ATM Consumables Group. Please contact your NCR account Manager for more information.

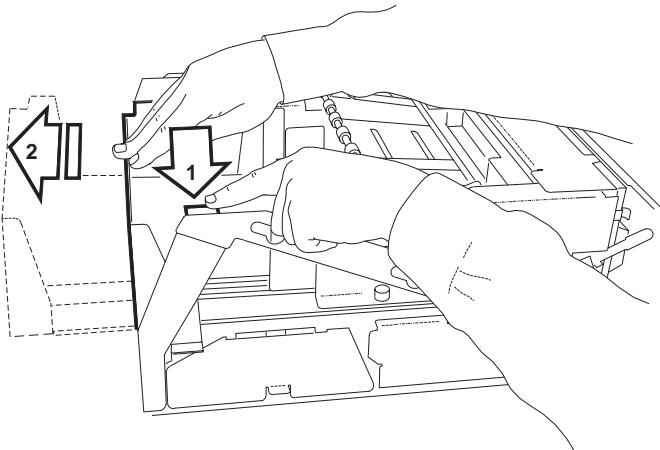
Note: It is very important to the operation of the printer that all paper used is free of tears and creases, and that the paper lies flat in the paper hopper.

The following steps detail how you should replace the printer paper.

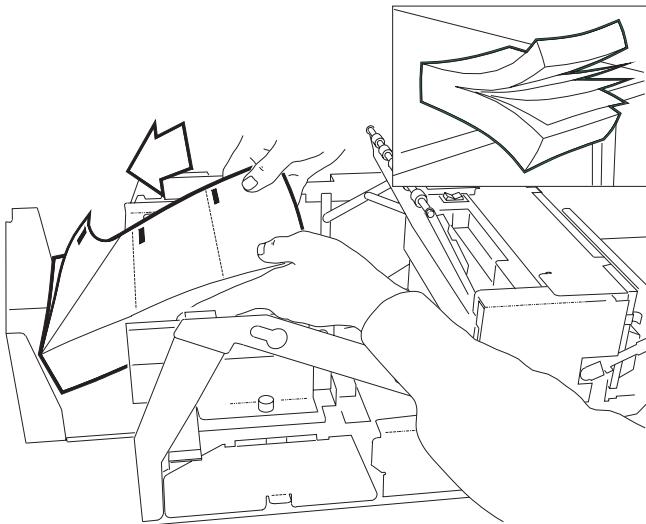
- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the statement/passbook printer as described in Chapter 1, 'Getting Started'.
- 4 If the paper is not completely exhausted, push down the paper feed switch on the top of the printer as shown below. When the paper stops moving, pull the end of the paper out of the printer.



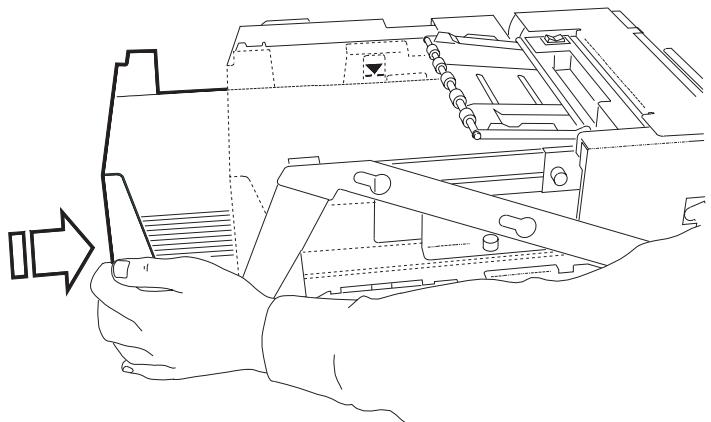
- 5 Push down the paper hopper lever and slide the hopper backwards as indicated. Remove the remains of the paper stack from the hopper.



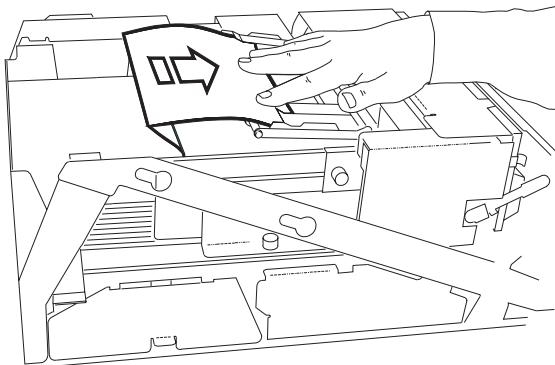
- 6 Place the new paper stack on a table and fan the stack from both ends to make sure that the sheets are not stuck together. Check that the paper is free of tears, folds and creases. Make sure that the black marks on the paper are positioned as shown, and then place the paper stack in the hopper.



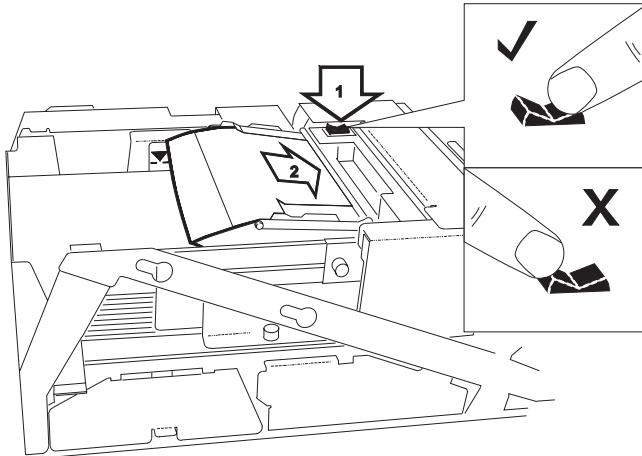
7 Slide the hopper forward to its operating position.



8 Slide the end of the paper between the guides on top of the printer and down into the slot as shown.



- 9 Push down the paper feed switch on the top of the printer and slide the paper forward slightly. The paper should be fed through the printer and cut. If the paper is not fed through the printer when the switch is pressed, push the paper further into the slot and press the switch again.



- 10 Remove the statement from the end of the printer transport.
- 11 Push the printer back into the ATM until it clicks into place.
- 12 Follow your in-house procedures for indicating that you have replenished the paper.
- 13 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 14 Close and lock the exterior of the ATM.

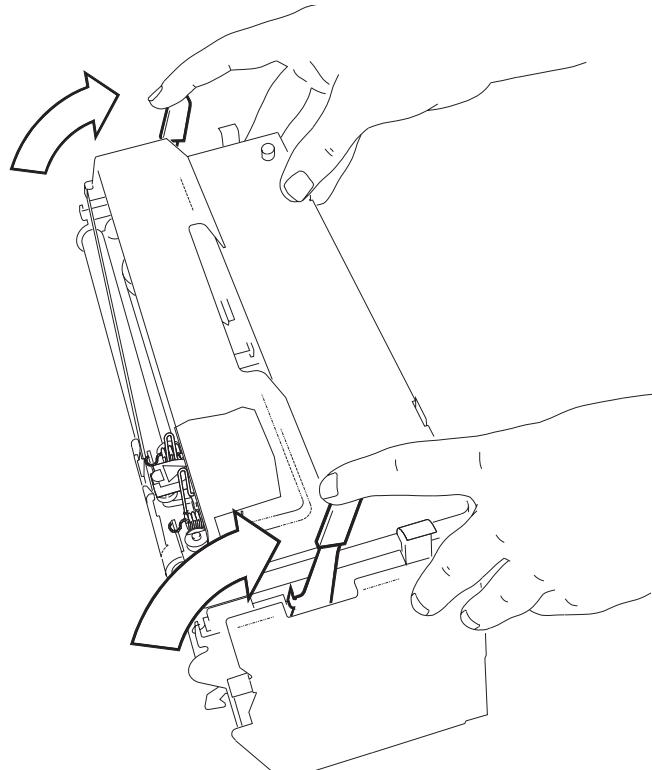
How to Replace the Ribbon

When the printer characters become faint it may be because:

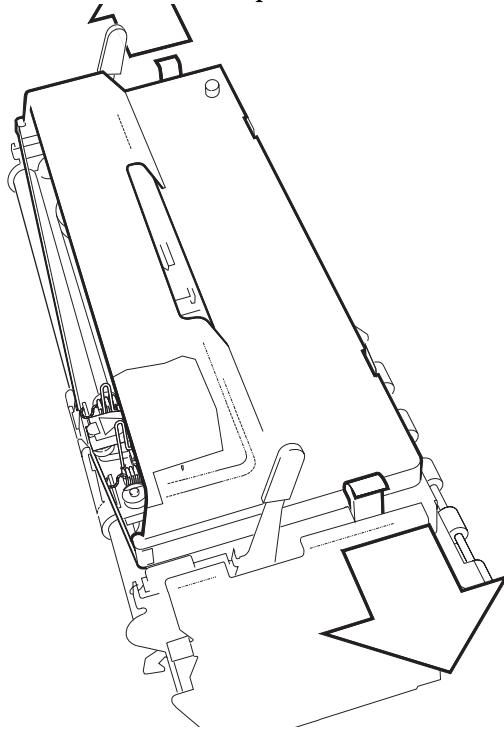
- The ribbon has jammed
- The ribbon has dried out (possibly because the cassette has been stored in the wrong conditions - see Chapter 12.)
- The ribbon character life has been exceeded (error message will report when the ribbon character life has almost expired, or when it has completely expired.)

To replace the printer ribbon proceed as follows:

- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the statement/passbook printer as described in Chapter 1, 'Getting Started'.
- 4 Pull up the green levers on either side of the printer to raise the print head and ribbon cassette carrier.

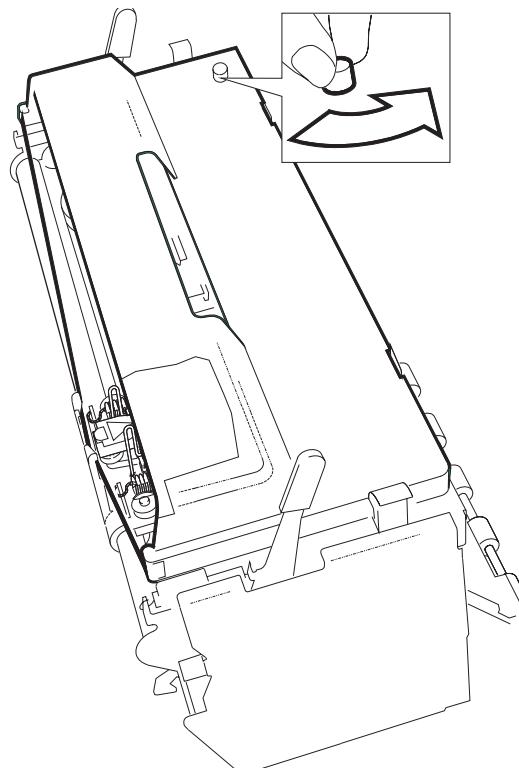


- 5 Push apart the clips securing the ribbon cassette in the printer and pull the cassette out of the printer.



- 6 Insert the new ribbon cassette into the printer. Make sure that the ribbon passes between the print head and the ribbon guide.

- 7 To tighten the ribbon turn the knob on the cassette in the direction of the arrow.



- 8 Push down the print head and ribbon cassette carrier until it clicks in position. The printer will be reset when the carrier is pushed down.
- 9 Push the printer back into the ATM until it clicks into place.
- 10 Follow your in-house procedures for indicating that you have replaced the statement printer ribbon.
- 11 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 12 Close and lock the exterior of the ATM.

How to Replace the Print Head

The indications that the print head needs to be replaced are:

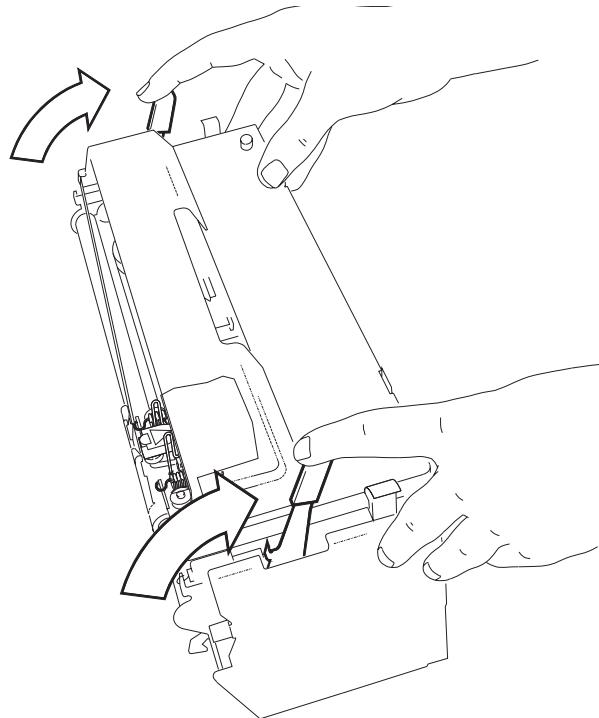
- An error message that the print head life expectancy has been reached
- A visual check of statements/passbooks shows that the print head is not operating correctly.

Warning	The print head becomes hot when in operation. After operation, leave the print head to cool before touching it.
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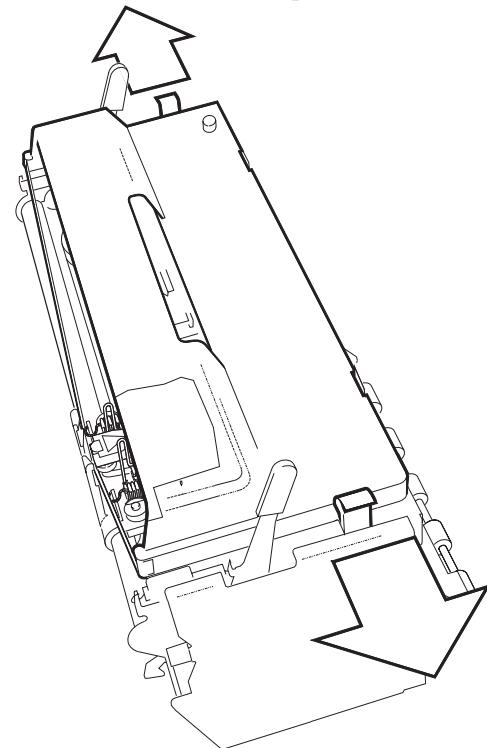
To replace the print head proceed as follows:

- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** option.
- 3 Switch off the ATM. Press the power button in at the “0” side.
- 4 Access the statement/passbook printer as described in Chapter 1, ‘Getting Started’.

- 5 Pull up the green levers on either side of the printer to raise the print head and ribbon cassette carrier.

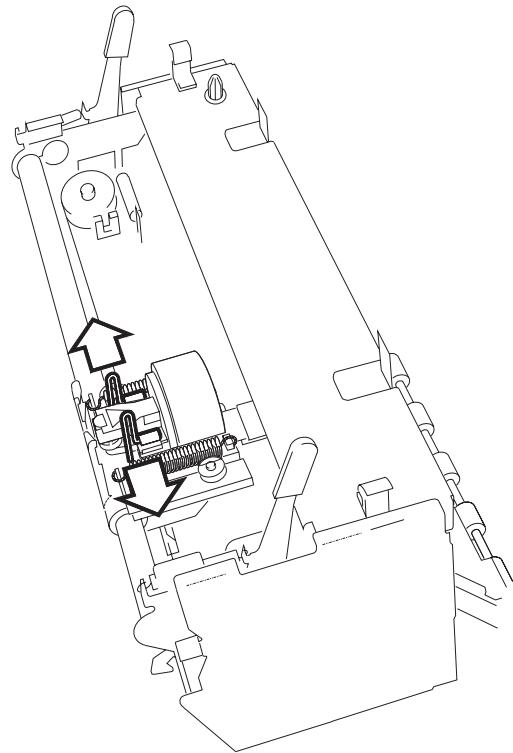


- 6 Push apart the clips which secure the ribbon cassette in the printer and pull the cassette out of the printer.

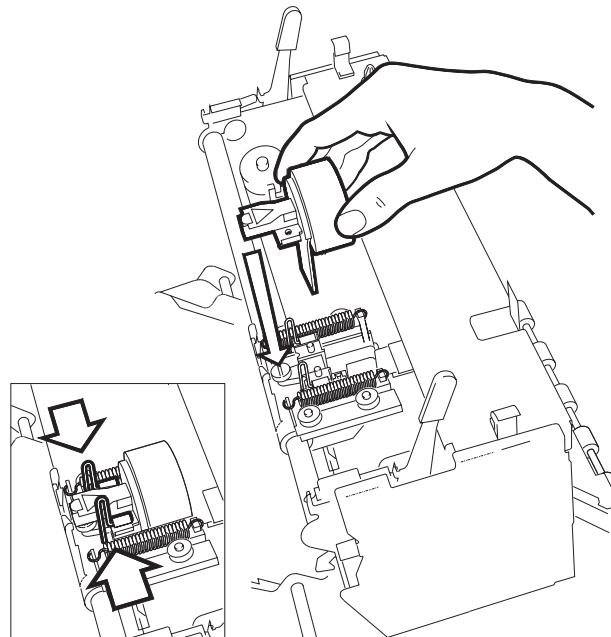


Statement/Passbook Printer
How to Replace the Print Head

- 7 Push apart the clips which hold the print head in the printer and then pull the print head out of the printer.

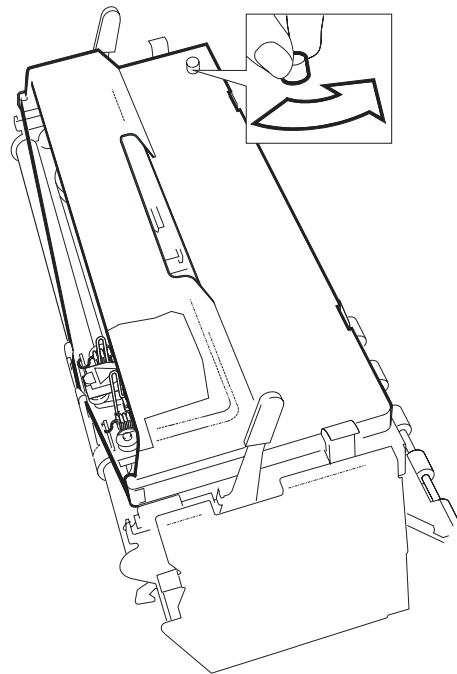


- 8 Push the new print head into the printer so that the circuit board locates into the connector in the printer and the print head neck locates in the guide on the printer. Push together the clips on either side of the print head until they clip into the recesses on the sides of the print head.



- 9 Insert the ribbon cassette into the printer. Make sure that the ribbon passes between the print head and the ribbon guide.

- 10 To tighten the ribbon, turn the knob on the cassette in the direction of the arrow.



- 11 Push down the print head and ribbon cassette carrier until it clicks in position.
- 12 Push the printer back into the ATM until it clicks into place.
- 13 Switch on the ATM power.
- 14 Wait for the operator display to display status messages (this may take up to 5 minutes).
- 15 Follow your in-house procedures for indicating that you have replaced the statement printer print head.
- 16 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 17 Close and lock the exterior of the ATM.

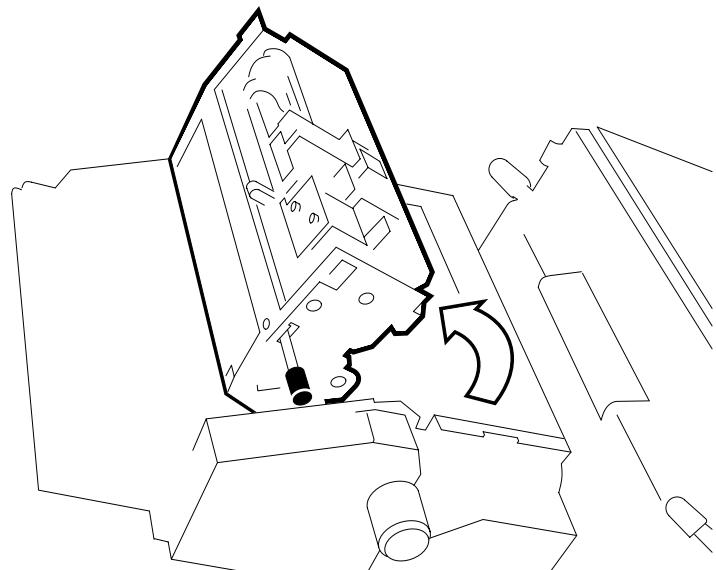
How to Clear Paper and Passbook Jams

The indication of a jam within the printer can be either or both of the following:

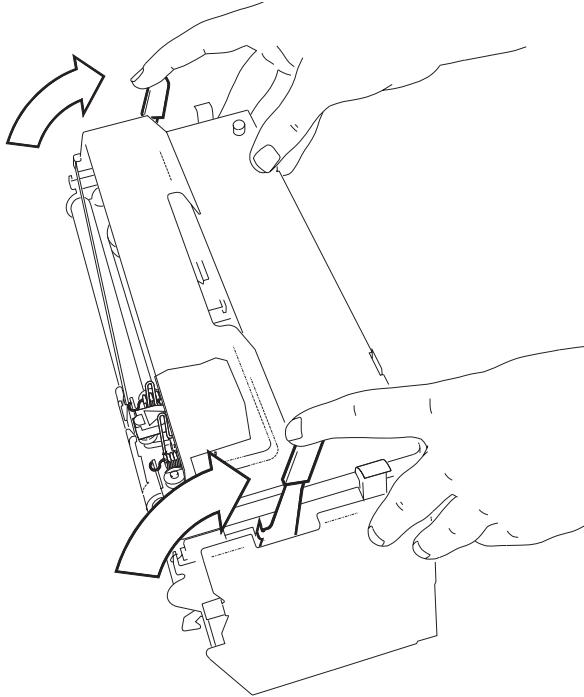
- Cardholder complaint that statement/passbook did not come out
- An error message that a jam is present.

To clear a jam proceed as follows:

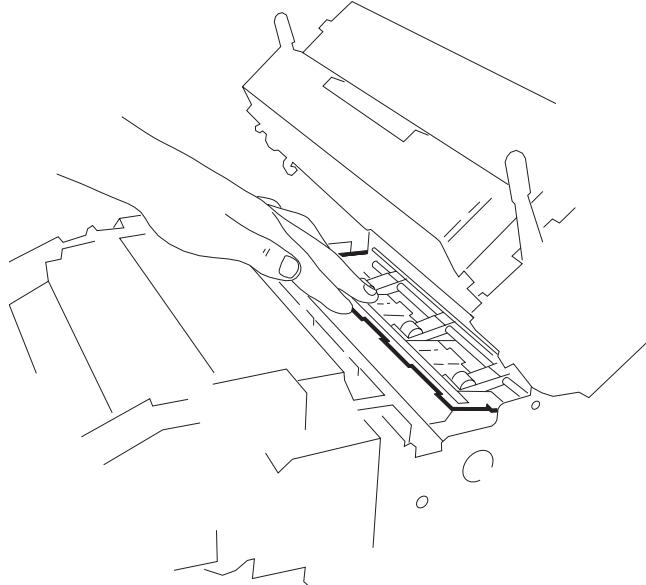
- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the statement/passbook printer as described in Chapter 1, 'Getting Started'.
- 4 Push back the two levers on the top of the passbook transport and raise the top of the transport.
- 5 Remove any jammed paper or passbooks and then press down the top of the transport. Proceed to Step 16. If there was nothing jammed in the transport proceed to Step 6 to locate the jam.



- 6 Push up the green levers on either side of the printer to raise the print head and ribbon cassette carrier.

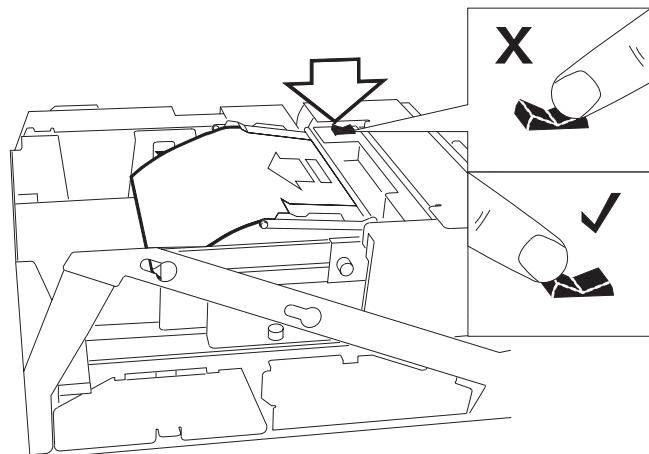


- 7 Lift up the flap shown below and remove any paper/passbooks jammed under the flap. Release the flap.

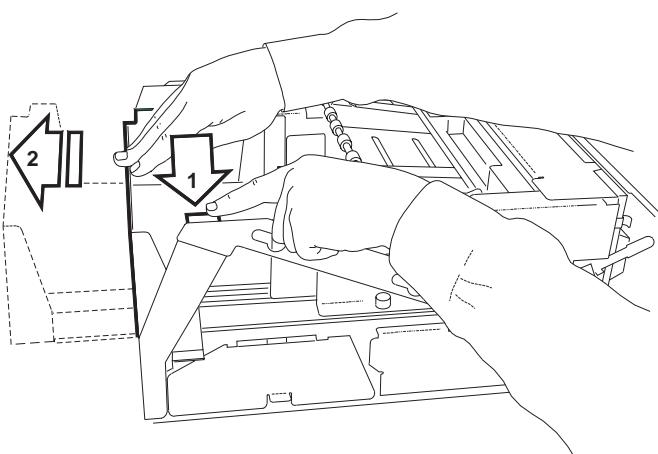


- 8 Push down the print head and ribbon cassette carrier until it clicks into position. The printer will be reset when the carrier is pushed down.

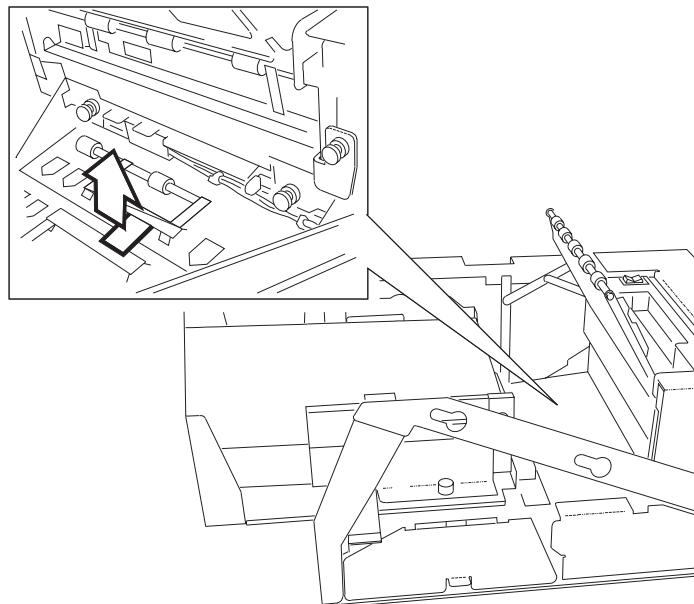
- 9 If a paper jam was found under the flap, proceed to Step 16. If there was nothing jammed under the flap proceed to Step 10 to locate the jam.
- 10 Push down the paper feed switch on the top of the printer as shown below. When paper stops moving, pull the end of the paper out of the printer.



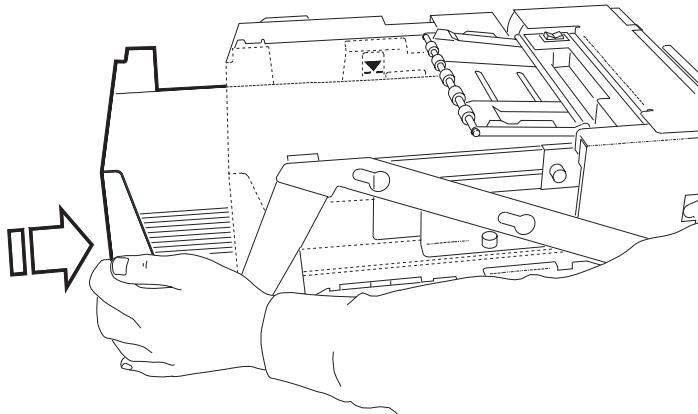
- 11 Push down the paper hopper lever and slide the hopper backwards as indicated.



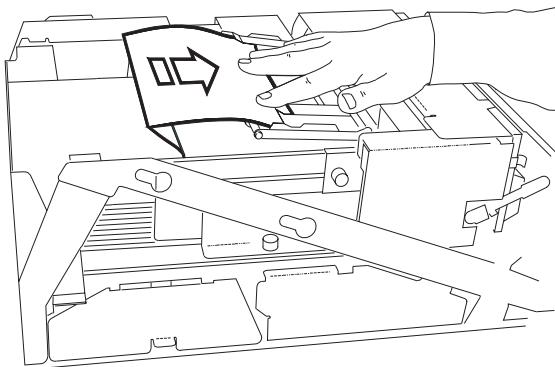
- 12 Lift up the flap located below the printer paper guides and remove any paper/passbooks. Release the flap.



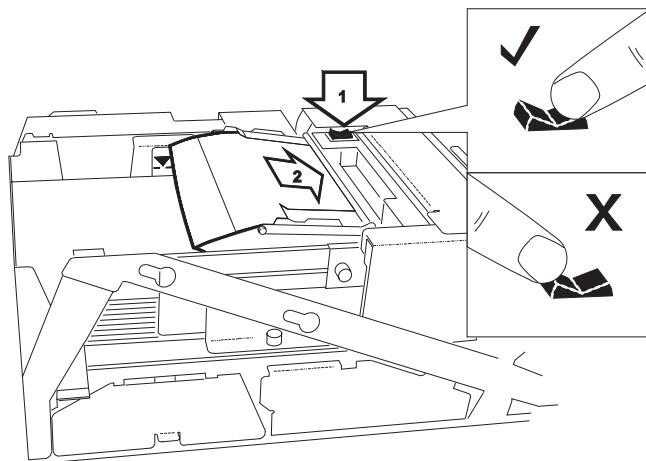
- 13 Slide the hopper forward to its operating position.



- 14 Slide the end of the paper between the guides on top of the printer and down into the slot as shown.



- 15 Push down the paper feed switch on the top of the printer and slide the paper forward slightly, the paper should be fed through the printer and cut. If the paper is not fed through the printer when the switch is pressed, push paper further into the slot and press the switch again.

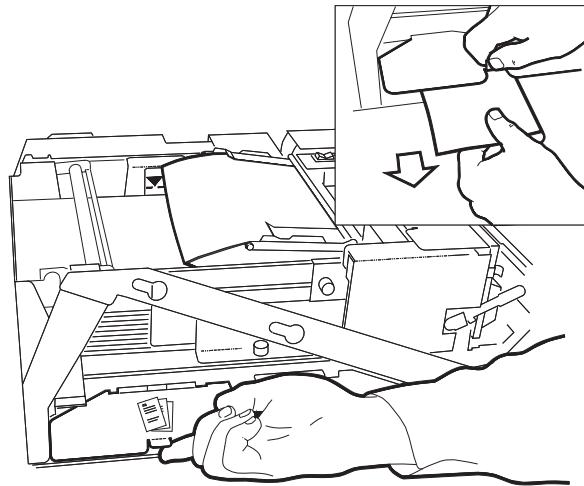


- 16 Remove the statement from the end of the printer transport.
- 17 Push the printer back into the ATM until it clicks into place.
- 18 Follow your in-house procedures for indicating that you have fixed, without replacing, the statement printer mechanism.
- 19 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 20 Close and lock the exterior of the ATM.

How to Remove Captured Statements and Passbooks

To remove any statements or passbooks which have been retracted from the printer transport and placed in the capture bin proceed as follows:

- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the statement/passbook printer as described in Chapter 1, 'Getting Started'.
- 4 Lift the flap in the side of the printer and remove the captured media from within the bin. Lower the flap.



- 5 Push the printer back into the ATM until it clicks into place.
- 6 Follow your in-house procedures for indicating that you have emptied the capture bin.
- 7 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 8 Close and lock the exterior of the ATM.

Chapter 8

Page Turn Passbook Printer

How to Replace the Ribbon

8-1

How to Clear Jams

8-5

How to Remove Captured Passbooks

8-8

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Page Turn Passbook Printer

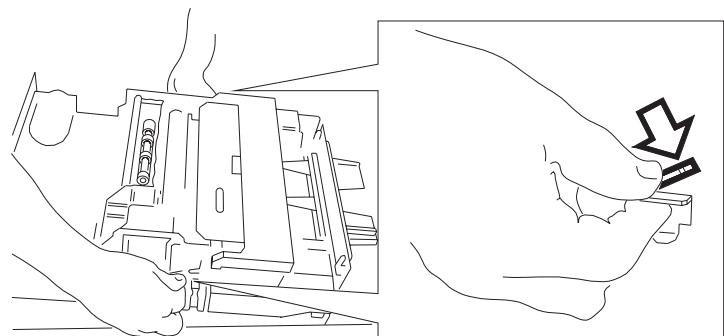
How to Replace the Ribbon

When the printer characters become faint it may be because:

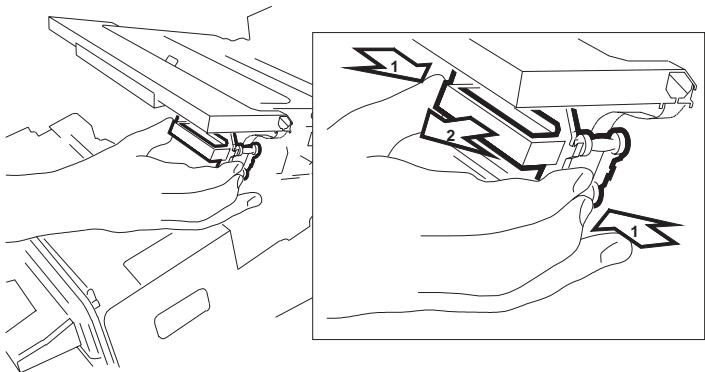
- The ribbon has jammed
- The ribbon has dried out (possibly because the cassette has been stored in the wrong conditions - see Maintenance section.)
- The ribbon character life has been exceeded (error message will report when the ribbon character life has almost expired or has completely expired).

To replace the printer ribbon proceed as follows:

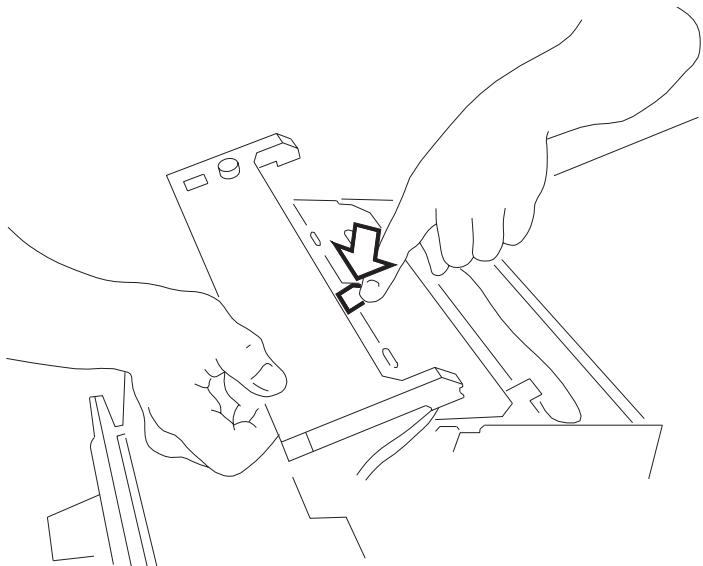
- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the passbook printer as described in Chapter 1, 'Getting Started'.
- 4 Press down the green tabs on either side of the ribbon carrier and then raise the ribbon carrier.



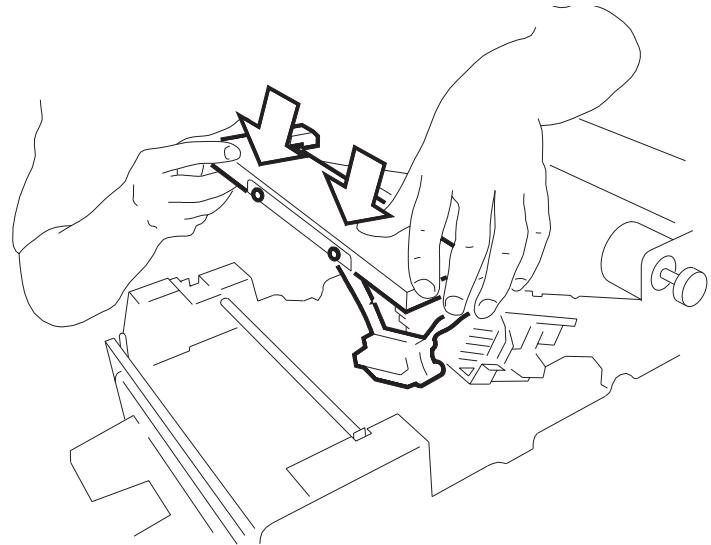
- 5 Gently squeeze on each side of the ribbon carriage mount and pull the mount off the print head as shown.



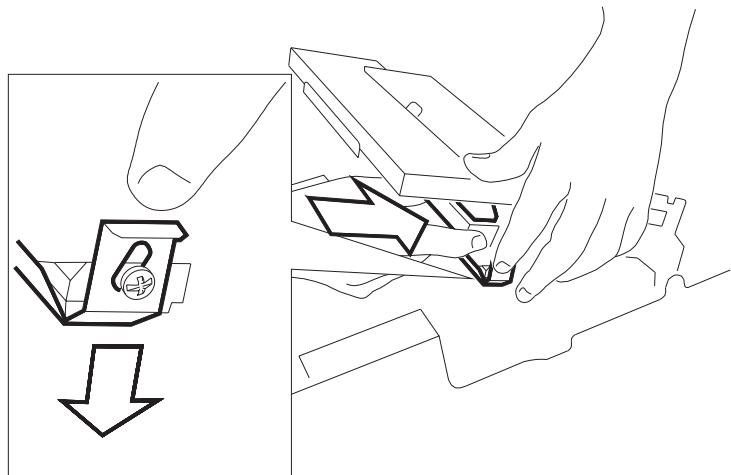
- 6 Press down the green clip on the top of the ribbon cassette carrier and lift the ribbon off the carrier as shown.



- 7 Place the new ribbon cassette on top of the carrier, making sure that the plastic studs on the front of the cassette locate through the holes in the carrier. Press the ribbon down into place on the carrier.



- 8 Gently pull down the metal ribbon guide over the face of the print head and clip the ribbon carriage mount over the print head. Make sure that the ribbon is not twisted and that it lies between the ribbon guide and the print head.



- 9 Tighten the ribbon by turning the black knob on the top of the cassette one or two turns in the direction of the arrow marked on the cassette.
- 10 Close the ribbon carrier by lifting it up slightly and then lowering it to its closed position. Press down on the carrier until it clicks into place.

- 11 Push the printer back into the ATM until it clicks into place.
- 12 Follow your in-house procedures for indicating that you have replaced the passbook printer ribbon.
- 13 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 14 Close and lock the exterior of the ATM.

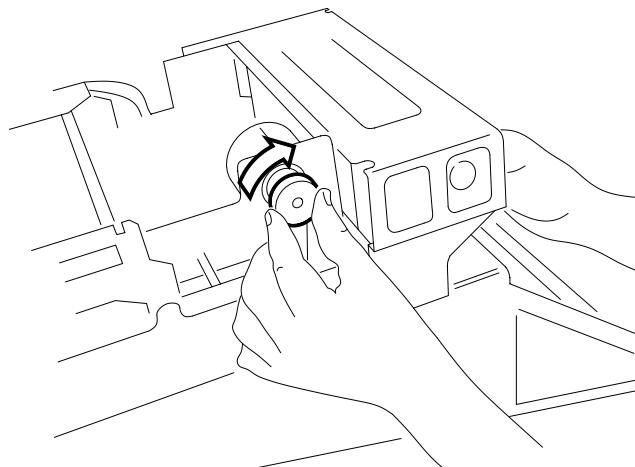
How to Clear Jams

The indication of a jam within the printer can be either or both of the following:

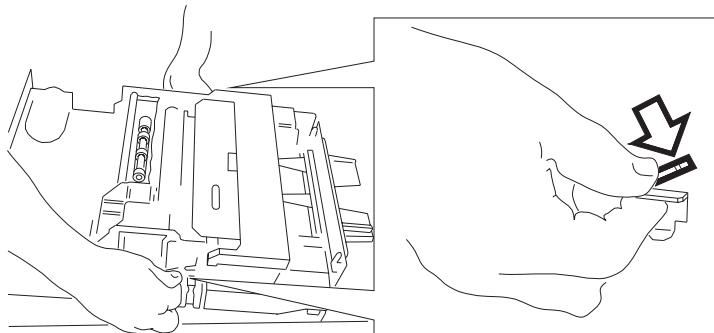
- Cardholder complaint that a passbook did not come out
- State Of Health message that a jam is present.

To clear a jam proceed as follows:

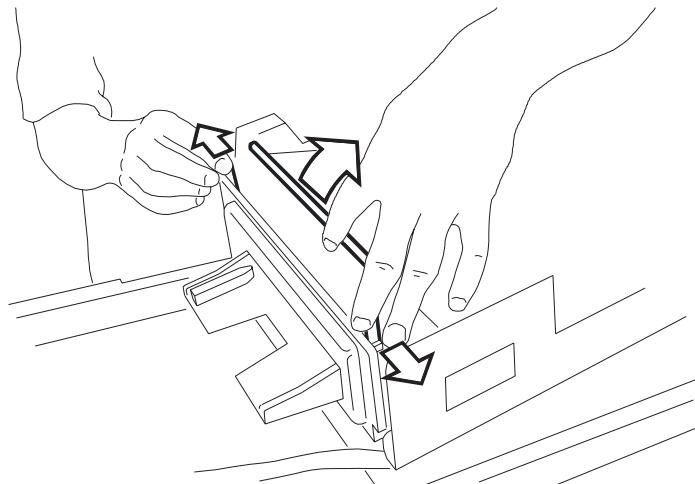
- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the statement/passbook printer as described in Chapter 1, 'Getting Started'.
- 4 If the passbook is jammed in the rear section of the transport, turn the green knob clockwise to move the book towards the rear of the printer. Remove the book from the capture tray.



- 5 If the book is not in the rear section of the transport, press down the green tabs on either side of the ribbon and then raise the ribbon carrier.



- 6 Gently pull apart the green clips located behind the printer mouth and lift up the clear plastic transport cover using the green edge.



- 7 Remove the book from the transport. Lower the clear plastic transport cover and press down until it clicks into place.
- 8 Close the ribbon carrier by lifting it up slightly and then lowering it to its closed position. Press down the ribbon carrier until it clicks into place.
- 9 Push the printer back into the ATM until it clicks into place.
- 10 Follow your in-house procedures for indicating that you have fixed, without replacing, the passbook printer mechanism.

- 11 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 12 Close and lock the exterior of the ATM.

How to Remove Captured Passbooks

To remove any passbooks which have been retracted from the printer transport and placed in the capture bin proceed as follows:

- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the passbook printer as described in Chapter 1, ‘Getting Started’.
- 4 Remove the captured passbooks from the rear of the printer.
- 5 Push the printer back into the ATM until it clicks into place.
- 6 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 7 Close and lock the exterior ATM top-box.

Chapter 9

Enhanced Page Turn Passbook Printer

Overview

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How to Clear Jams

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 How to Clear a Jam in the Printer Transport

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 How to Clear a Jam in the Page Turning Unit

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How to Remove Captured Passbooks

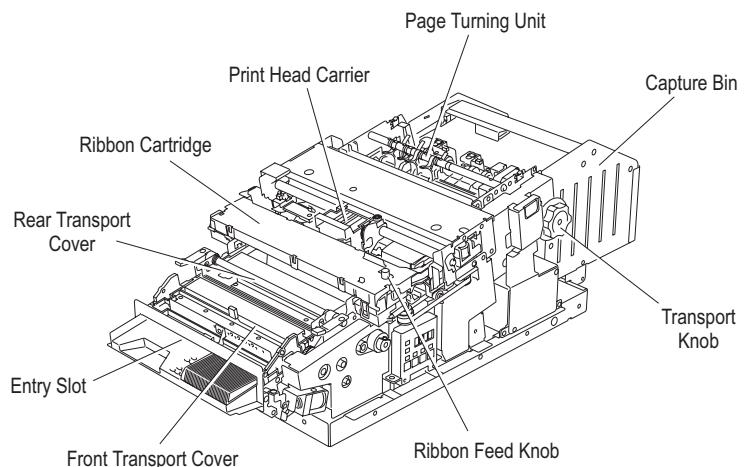
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Enhanced Page Turn Passbook Printer

Overview

Dependent upon application and configuration, the Enhanced Page Turning Passbook printer can update both horizontally and vertically stitched passbooks. The magnetic stripe contained in the passbook is read by the printer and any transaction recorded by printing on the correct page. Additionally, if the card-holder enters the passbook at the wrong page, the integral page turning functionality can turn the pages forward or backward to the correct page.

The following illustration shows the main components of the printer.



How to Replace the Ribbon

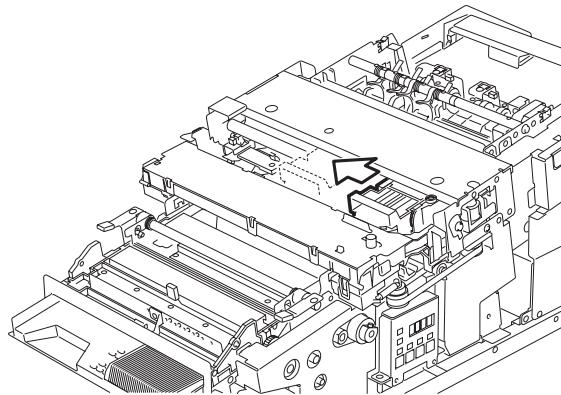
When the printed characters become faint it may be because:

- The ribbon is jammed
- The ribbon is dry (see chapter on “Maintenance” for details on storage conditions)
- The ribbon character life has been exceeded (an error message will report when the ribbon character life has almost expired or has already expired).

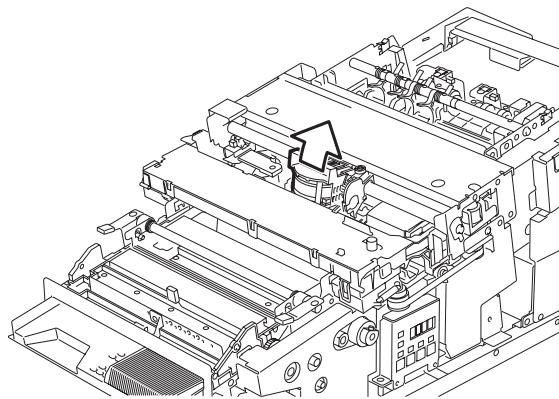
Note Please refer to NCR publication “*Consumable Items for Self Service, B006-4992*” for ordering details and specification of the printer cartridge.

To replace the printer ribbon, proceed as follows.

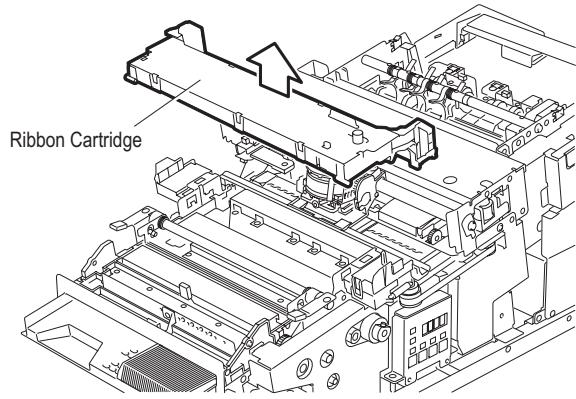
- 1 Open the exterior of the ATM.
- 2 If your terminal does not have auto-supervisor, press the switch on the operator panel to the **supervisor** option.
- 3 Access the printer as described in Chapter 1, 'Getting Started'.
- 4 Move the print head carrier to the middle by holding the green tab area and **firmly** pushing.



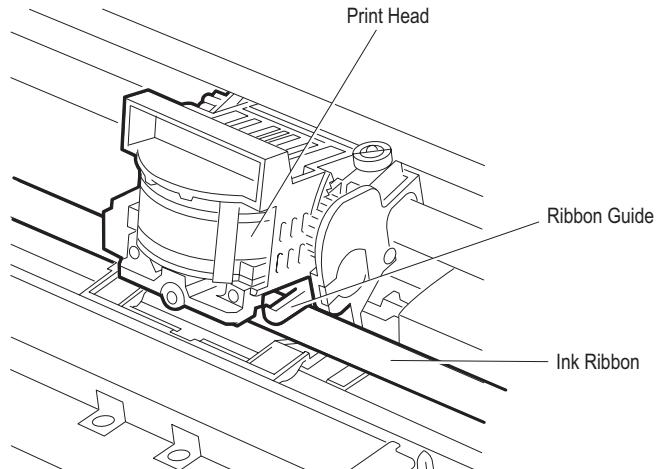
- 5 Lift the print head carrier until it locks in the upward position.



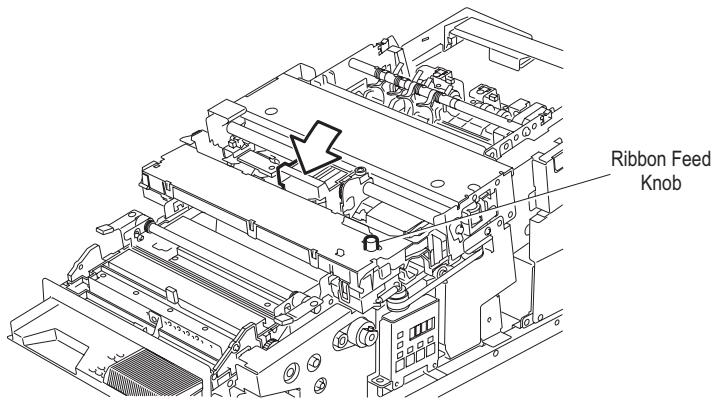
- 6 Remove the ribbon cartridge by holding both ends and slowly lifting upwards, ensuring the ribbon also comes out of the ribbon guides.



- 7 Attach the new ribbon cartridge by threading the ribbon through the ribbon guide of the print head carrier, then push the cartridge down to its home position.



- 8 Push down the print head carrier to its home position.



- 9 Tighten the ribbon by turning the ribbon feed knob on the ribbon cartridge in the direction of the arrow marked on the cartridge.
- 10 Firmly push the print head carrier left and right several times to make sure the ribbon does not come out of the ribbon guide.
- 11 Push the printer back into the terminal until it clicks into place.
- 12 Follow your in-house procedures for indicating that you have replaced the printer ribbon.
- 13 If your terminal does not have auto-supervisor, press the switch on the operator panel to the **normal** position.
- 14 Close and lock the exterior of the ATM.

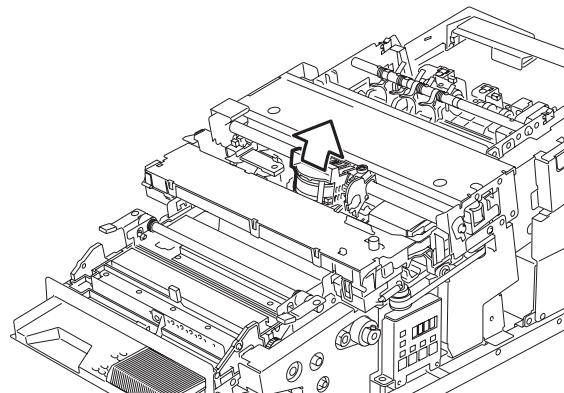
How to Clear Jams

The indication of a jam in the printer can be either or both of the following:

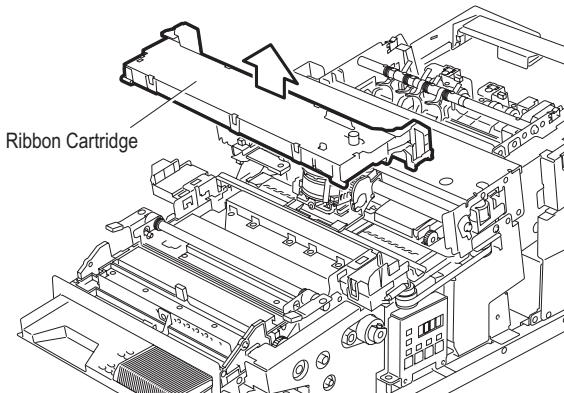
- A customer complaint that a passbook was not returned
- A state of health message that a passbook jam has occurred.

To clear a jam, proceed as follows:

- 1 Open the exterior of the ATM.
- 2 If your terminal does not have auto-supervisor, press the switch on the operator panel to the **supervisor** option.
- 3 Access the printer as described in Chapter 1, 'Getting Started'.
- 4 Lift the print head carrier until it locks in the upward position.



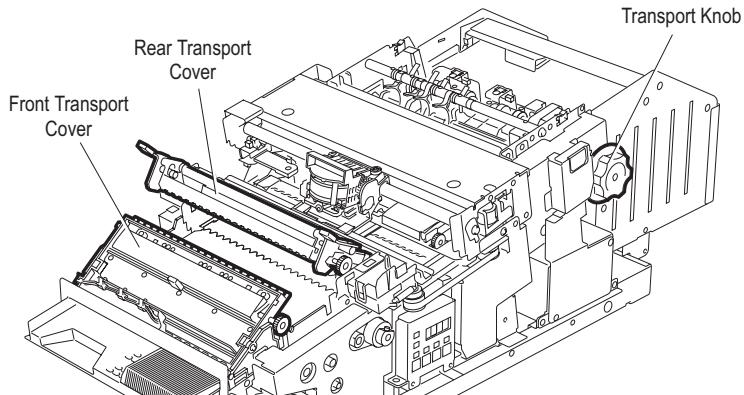
- 5 Remove the ribbon cartridge by holding both ends and slowly lifting upwards, ensuring the ribbon also comes out of the ribbon guides.



6 Examine the printer to establish where the jam has occurred.

How to Clear a Jam in the Printer Transport

- 1 Open the rear transport cover by lifting up the green levers until it clicks and locks in the upward position as shown.**

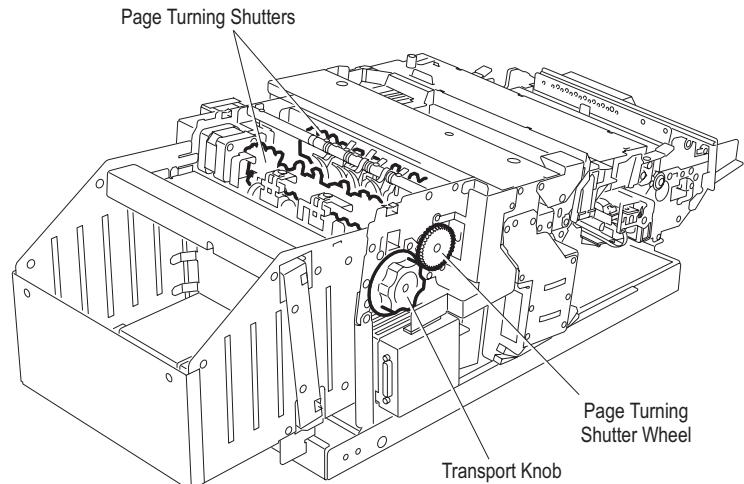


- 2 Open the front transport cover by lifting up the centre green handle as shown above. If possible, carefully remove the passbook.**
- 3 If the passbook is still jammed, turn the transport knob backwards or forwards until the passbook becomes accessible. (The transport knob can move the passbook between the entry slot at the front of the printer and the capture bin at the back.)**
- 4 Once the jam has been removed, proceed to Step 7 to close the transport covers and place the terminal in-service.**

How to Clear a Jam in the Page Turning Unit

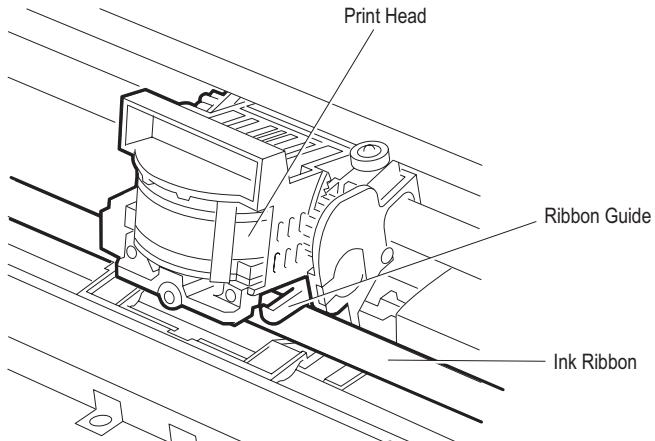
If the passbook is jammed in the page turning unit, proceed as follows:

- 1 Turn the page turning shutter wheel to open the page turning shutters.

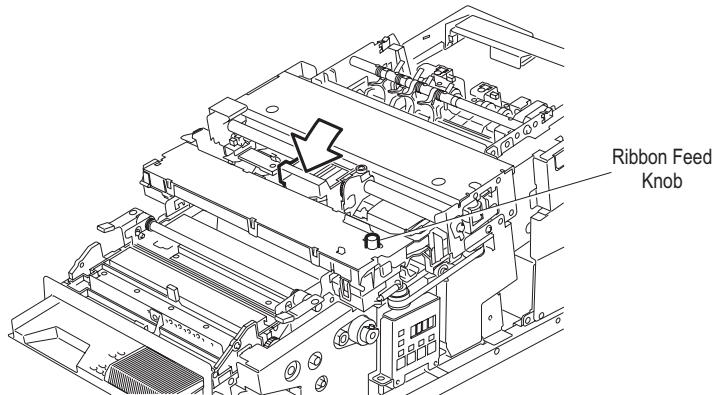


- 2 Turn the transport knob backwards or forwards to move the jammed passbook, supporting both of the shutters with your other fingers. When possible, remove the passbook.
- 3 Once the jam has been removed, proceed to Step 7 to close the transport covers and place the terminal in-service.
- 7 Close the front transport cover by pushing down until it clicks into its home position.
- 8 Close the rear transport cover by **firmly** pushing down. Make sure the green levers at each side click into their home positions. You should not be able to move the cover at this stage.

- 9 Attach the ribbon cartridge by threading the ribbon through the ribbon guide of the print head carrier, then push the cartridge down to its home position.



- 10 Push down the print head carrier to its home position.

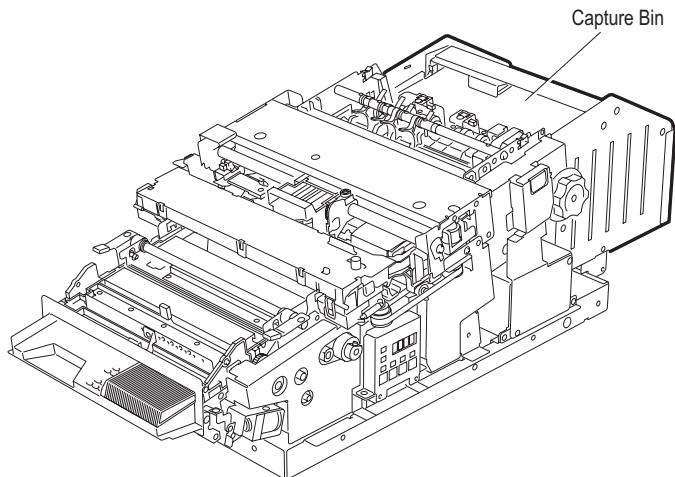


- 11 Tighten the ribbon by turning the ribbon feed knob on the ribbon cartridge in the direction of the arrow marked on the cartridge.
- 12 Firmly push the print head carrier left and right several times to make sure the ribbon does not come out of the ribbon guide.
- 13 Push the printer back into the terminal until it clicks into place.
- 14 Follow your in-house procedures for indicating that you have fixed, without replacing, the passbook printer mechanism.
- 15 If your terminal does not have auto-supervisor, press the switch on the operator panel to the **normal** position.
- 16 Close and lock the exterior of the ATM.

How to Remove Captured Passbooks

To remove any passbooks which have been captured from the printer transport and placed in the capture bin, proceed as follows:

- 1 Open the exterior of the ATM.
- 2 If your terminal does not have auto-supervisor, press the switch on the operator panel to the **supervisor** option.
- 3 Access the printer as described in Chapter 1, 'Getting Started'.
- 4 Remove the passbook from the capture bin.



- 5 Push the printer back into the terminal until it clicks into place.
- 6 Follow your in-house procedures for indicating that you have removed the captured passbook(s).
- 7 If your terminal does not have auto-supervisor, press the switch on the operator panel to the **normal** position.
- 8 Close and lock the exterior of the ATM.

Cleaning

The magnetic head in the printer should be cleaned weekly using a cleaning sheet specially made for this purpose. The terminal and printer should be in-service whilst this activity is conducted.

Note: Refer to NCR publication *Consumable Items for Self Service, B006-4992* for ordering details of the cleaning sheet.

To clean the magnetic head, proceed as follows:

- 1 Apply the correct size of cleaning sheet to the printer entry slot and allow the printer to perform the read operation.

The magnetic print head will be cleaned automatically when the printer tries to read a magnetic stripe.

- 2 Depending on your application, the cleaning sheet will be rejected or captured. If the sheet is rejected, remove it from the entry slot. The cleaning activity is now complete.
- 3 If the sheet is captured, retrieve it from the capture bin. The cleaning activity is now complete.

Note: For instructions on how to retrieve the cleaning sheet, please refer to the Enhanced Page Turn Passbook Printer chapter in this manual.

Chapter 10

Motorised Card Reader

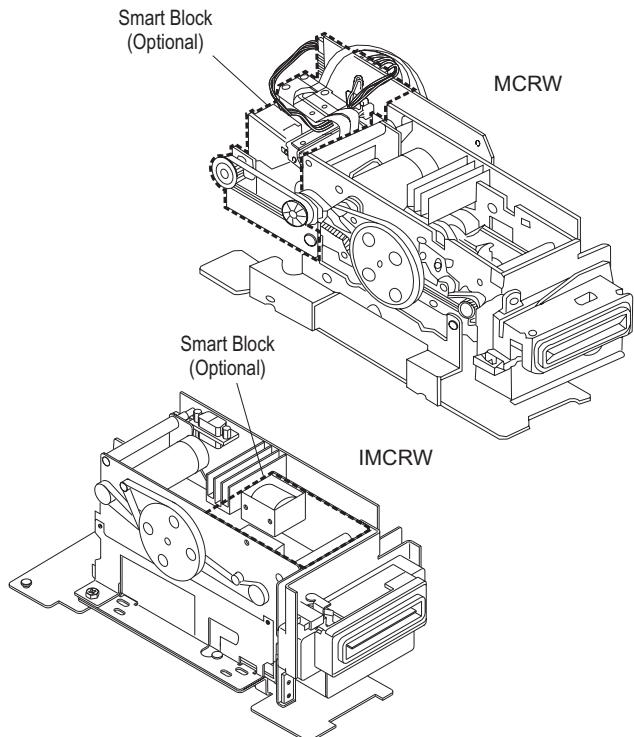
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Motorised Card Reader

How to Clear Motorised Card Reader Jams

Your ATM may be configured with a standard Motorised Card Reader (MCRW) or with an Integrated Motorised Card Reader (IMCRW). The following diagram distinguishes between the two types of card reader.



A card reader jam will be indicated by one or both of the following:

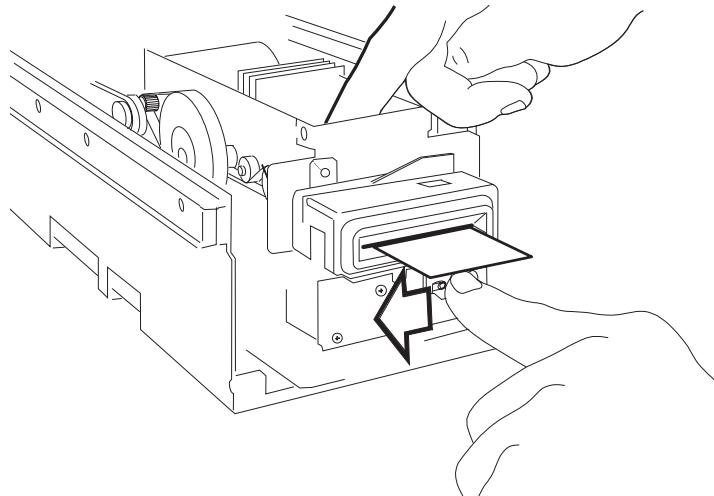
- A card holder complaint that a card has jammed
- An error message that a card has jammed.

The card may be jammed anywhere along the card transport: from just inside the facia (with too little of the card left outside to grip and pull it out), to beyond the last roller, on the way to the card capture bin.

The jam clearance procedures are identical for both types of card reader, except that the MCRW can require jams to be cleared from the optional smart block.

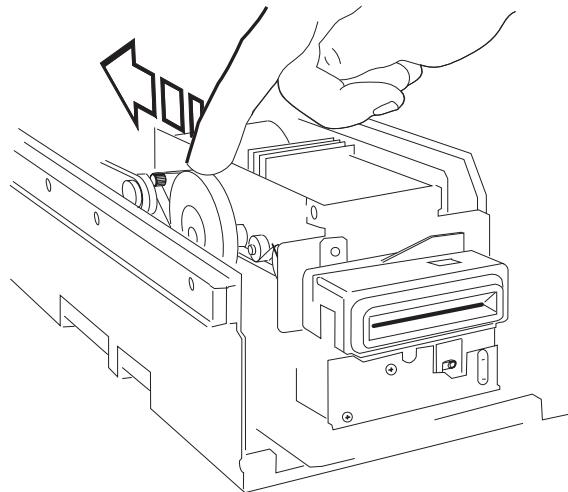
To clear a jam proceed as follows:

- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** option.
- 3 Access the card reader as described in 'Getting Started'.
- 4 Examine the card reader to find out where the card has jammed.
- 5 If the card is jammed under the shutter, raise the shutter by pushing the small button shown below to the side and push the card back out the front of the card reader. When the card has been freed, proceed to step 9.

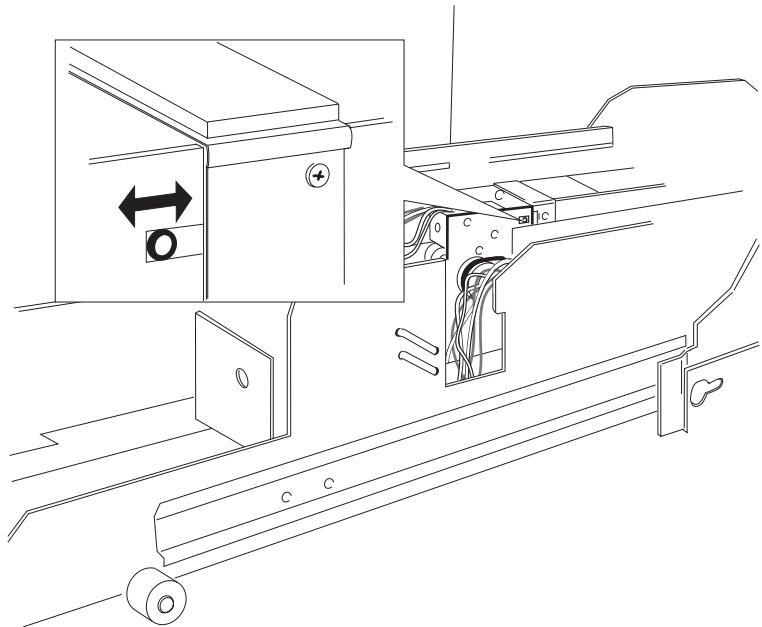


Note: If it is not possible to access the shutter button, on some rear access machines for example, turn the large pulley (see the following diagram) to move the card through the card reader. Turning it towards the front of the card reader will drive the card out of the entry slot. Turning it backwards will drive the card into the card capture bin

- 6 If the card is jammed in the transport, turn the large pulley, or use your fingers, to push the card through the transport and into the card capture bin. When the card has been freed, proceed to step 9.



- 7 If the ATM is configured with a smart card enabled MCRW, the card may be jammed in the smart block at the rear of the card reader. Check that the stopper pin has not jammed by moving the pin backwards and forwards as shown below.



- 8 Use your fingers to turn the belt pulleys and move the card through the transport into the capture bin.

- 9 Once the card has been freed, slide the card reader back into the ATM.
- 10 Follow your in-house procedures for indicating that you have fixed, without replacing, the card reader.
- 11 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 12 Close and lock the ATM door or facia.

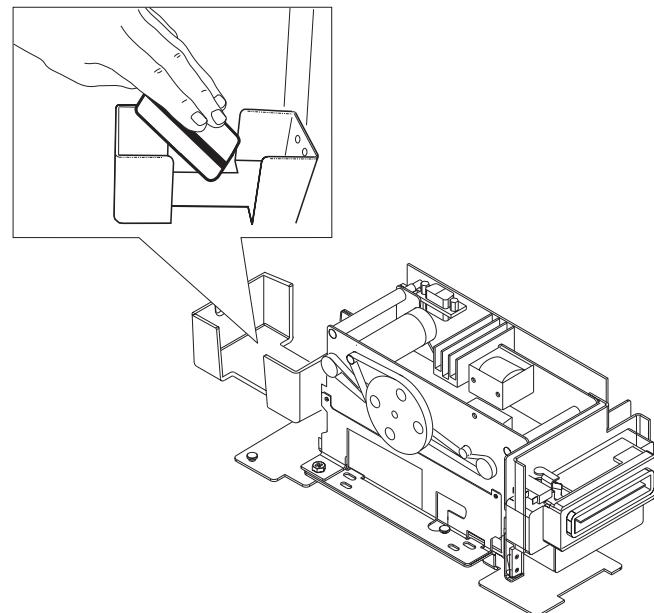
How to Remove Captured Cards from a Motorised Card Reader

The procedure for removing captured cards will vary depending on the type of card capture bin with which your ATM is configured. The instructions relate to both the Motorised and the Integrated Motorised Card Reader.

Standard Card Capture Container

To remove captured cards, proceed as follows:

- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the card reader as described in 'Getting Started'.
- 4 Remove the cards from the card capture container, which is positioned behind the card reader, and slide the card reader back into the ATM.



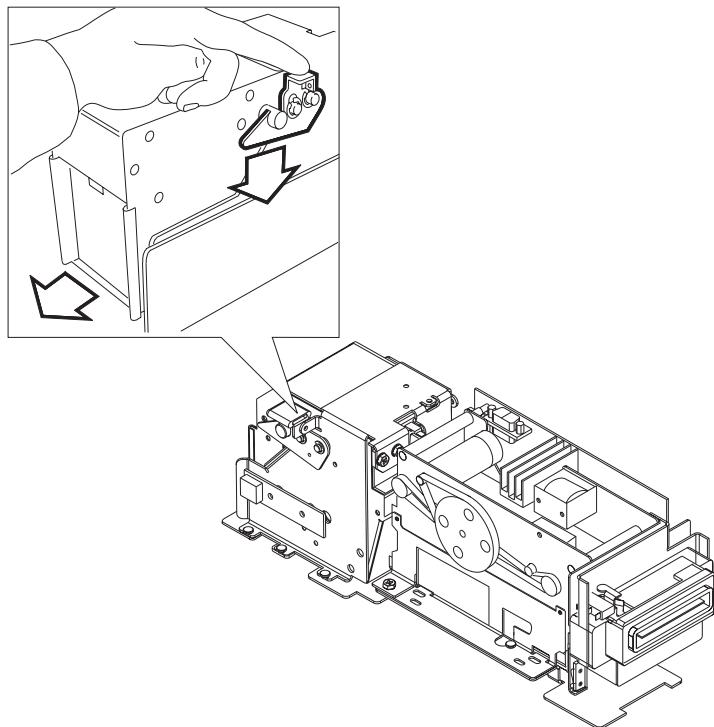
- 5 Follow your in-house procedures for indicating that you have emptied the card capture container.

- 6 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 7 Close and lock the exterior of the ATM.

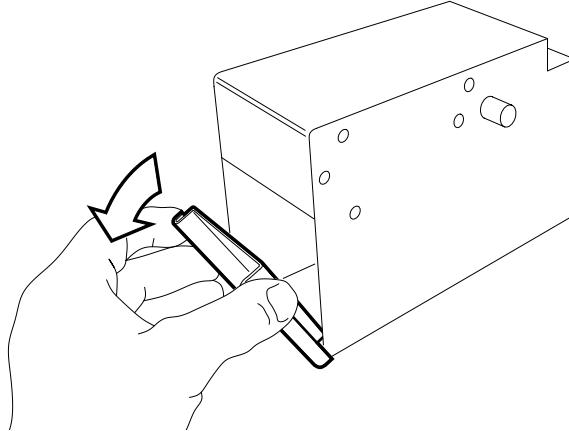
Latch Fast Card Capture

To remove captured cards, proceed as follows:

- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** option.
- 3 Access the card reader as described in 'Getting Started'.
- 4 Push down the latch on the side of the card capture cradle, which is positioned behind the card reader, and pull the card capture container out of the cradle.



- 5 If your in-house procedures state that the card capture container should be emptied elsewhere, remove the sealed container and replace it with a new one. Otherwise, remove the lock or seal from the rear of the card capture container and take off the back panel of the container. Remove any captured cards.



- 6 Inspect the interior of the card capture container, and remove any cards jammed inside.
- 7 Refit the back panel on the card capture container. Make sure that the top edge of the panel locates under the edge on the container. Fit the lock or seal to the container.
- 8 Fit the card capture container back into the card reader cradle.
- 9 Slide the card reader back into the ATM.
- 10 Follow your in-house procedures to indicate that you have emptied the card capture container.
- 11 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 12 Close and lock the exterior of the ATM.

Cleaning

It is recommended that the magnetic heads on the card reader are cleaned on a weekly basis. To do this, you will require a cleaning card (NCR part number 998-0052929 or equivalent).

For ATMs with *APTRA Self-Service Support system* software

To clean the heads, proceed as follows:

- 1 Open the exterior of your ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **Supervisor** position.
- 3 Follow your in-house procedures for instructions on how to run the System Application.
- 4 Select the **Maintenance** option from the System Application Main Menu.
- 5 To run the MCRW Maintenance option, select the **MCRW** option from the Maintenance Menu.
- 6 Select the **Cleaning Cycle Test** option.
- 7 A prompt is displayed asking you to enter a cleaning card. Insert the card to start the cleaning cycle.
- 8 When the cycle is finished, a prompt is displayed requesting you to remove the cleaning card. If you do not remove the card, it is captured.
- 9 From the Main Menu, select **Exit** to return control to the software which was running beforehand.
- 10 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **Normal** position.
- 11 Close and lock the ATM.

For ATMs with *S4I* system software

To clean the heads, proceed as follows:

- 1 Open the exterior of your ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **Supervisor** position.

- 3 The Supervisor Mode Executive (SME) menu will be displayed on the operator display.
- 4 Press the key on the keyboard that corresponds to the TERMINAL UTILITIES option. The Utilities menu will be displayed.
- 5 Press the key which corresponds to the TRANSFER INTERFACE option then go to the front of the ATM. The front display will be blank.
- 6 Press the **Enter** (or equivalent) key on the customer keyboard. Enter the password **2468** and then select **Enter** again. The Utilities menu will be displayed.
- 7 Press the key on the keyboard which corresponds to the MAINTENANCE option. The maintenance menu will be displayed.
- 8 Press the key which corresponds to the CARD READER option. The Card Reader menu will be displayed.
- 9 Prepare the cleaning card according to the instructions provided with it.
- 10 Press the key on the keyboard which corresponds to the CLEANING CYCLE option. When instructed to do so, insert the cleaning card into the card reader.
- 11 When instructed to do so, remove the cleaning card. A screen will be displayed giving the results of the cleaning cycle.
- 12 Select the FDK to return to the TEST menu. If the cleaning card you are using has only one cleaning side on it, turn the card over and run the CLEANING CYCLE a second time. When the test is complete, select the FDK to return to the TEST menu.
- 13 Select the FDK to return to the DEVICE menu.
- 14 Select the FDK to return to the UTILITIES menu.
- 15 At the UTILITIES menu, press the key on the keyboard which corresponds to the TRANSFER INTERFACE option. The control will be transferred to the rear operator panel with no password necessary. The UTILITIES menu will be displayed.
- 16 Select the FDK to EXIT and return to the SME menu.

Motorised Card Reader
Cleaning

- 17 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **Normal** position.
- 18 Close and lock the ATM.

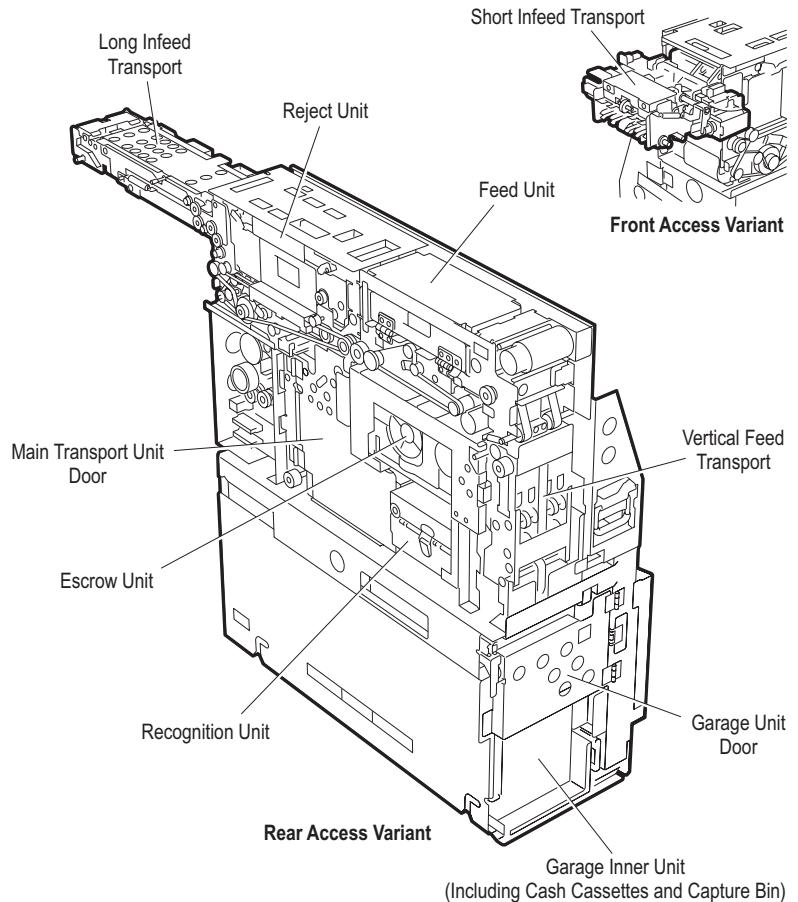
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Cash Acceptor

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Cash Acceptor

Cash Acceptor

The cash acceptor module (model UD-686) is located inside the safe (security enclosure) of the terminal and contains the components shown below. The cash acceptor is sometimes referred to as the cash deposit module, personal cash deposit or the bunch note acceptor.



Note: The cash acceptor is available with long, mid or short infeed transports depending on the terminal in which it is installed. Long and mid infeed transports, which are very similar, are for rear access terminals. The short infeed transport is designed for use in front access terminals only.

This chapter contains the following sections:

- Removing cash from the cassettes and the capture bin
- Clearing jams.

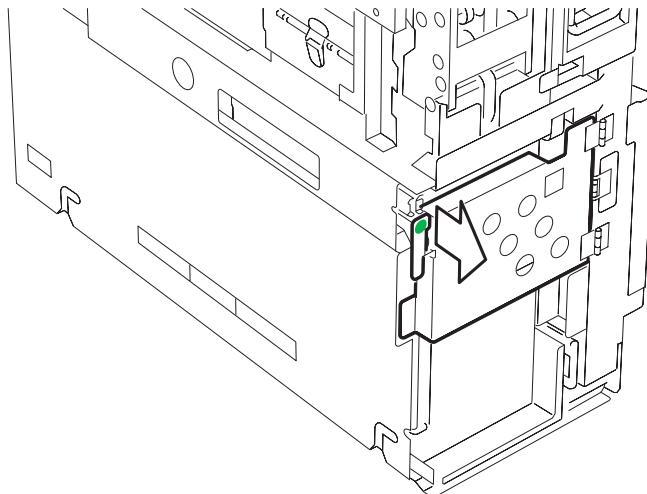
Removing Cash from the Cassette(s) and Capture Bin

An error message will indicate that the capture bin or cash cassettes (called ‘note bin’ in error messaging) need to be emptied, as shown below.

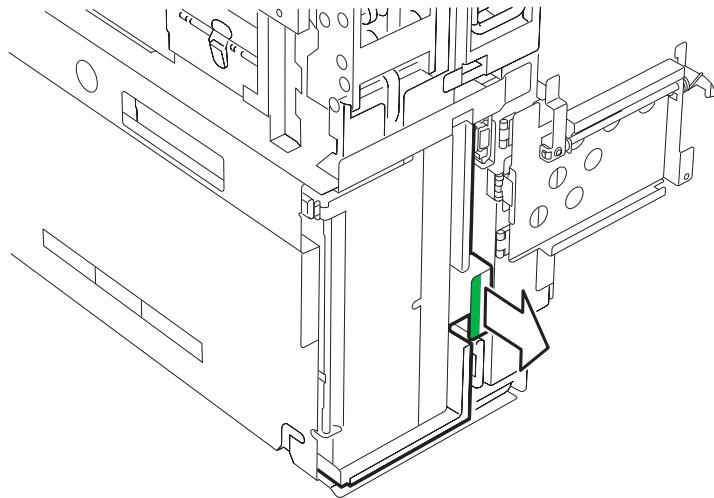
- Note Bin Full
- Note Bin Full Soon
- Capture Bin Full
- Capture Bin Full Soon

To remove cash from the cassettes or capture bin proceed as follows:

- 1 Open the exterior of the terminal.
- 2 If your terminal does not have the auto-supervisor function, press the switch on the operator panel to the **supervisor** position.
- 3 Open the garage unit door by pulling the top of the green metal latch. Do not pull out the main module at this time.

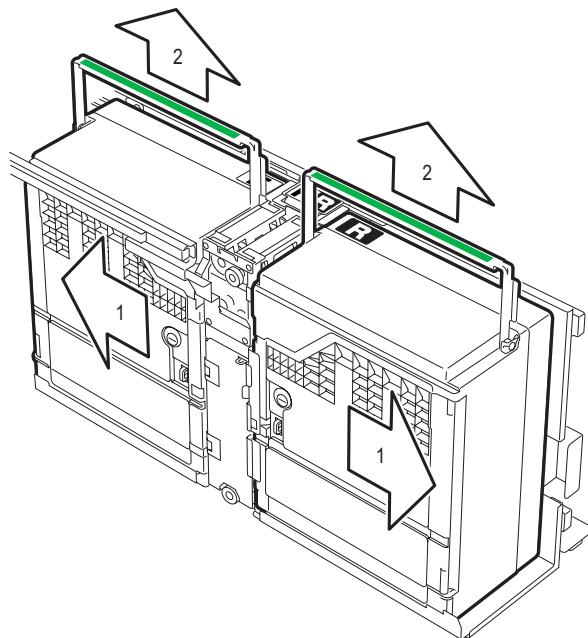


- 4 Using the green handle pull out the garage inner unit.



Warning: To avoid injury, take special care when handling the cassettes as they can be heavy.

- 5 The cassettes should be removed by using the handle to slide outwards and lift up.

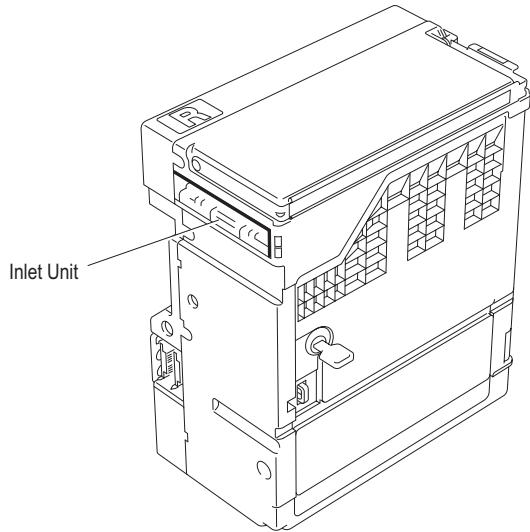


Caution: Do not apply excessive force to the parts inside the cassette. Damage to or deformation of these parts can cause problems with the operation of the module. Do not place any items on top of the cassettes. Additionally, to avoid damage to the electronic parts/circuits, the cassettes should not be dropped - handle with

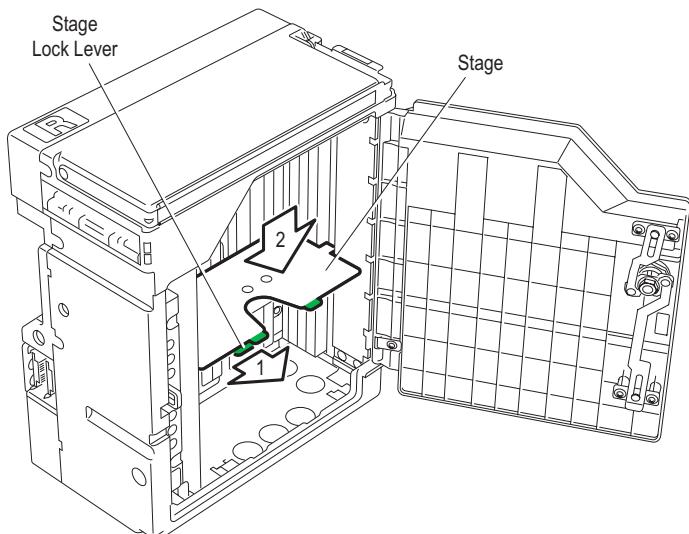
Cash Acceptor

Removing Cash from the Cassette(s) and Capture Bin

care. If the cassette drops or falls, check that the inlet unit is not damaged (illustrated below).



- 6 If the cassette is to be emptied in a secure area, refer to your in-house procedures.
- 7 Tilt the cassette backwards slightly to prevent the cash falling out. Unlock the cassette with the key provided.
- 8 Release the lever for locking the stage and then lower the stage as shown below.



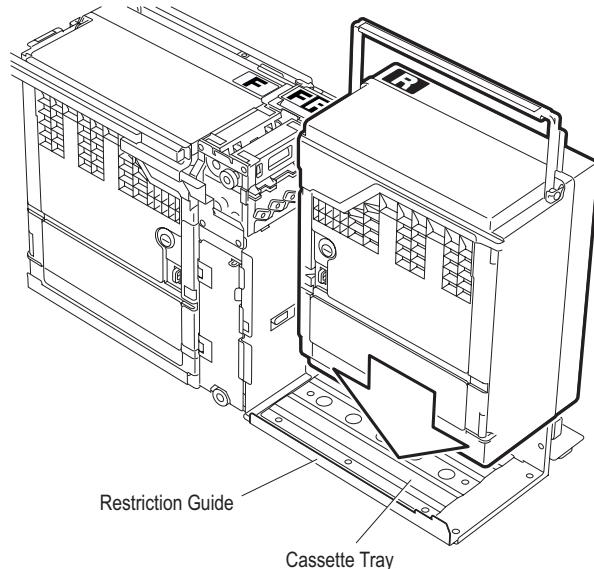
- 9 Remove all of the cash. Take care not to damage the stage or internal mechanical parts.

Note: When closing the cassette, the stage can be left at the lower position. When the cassette is replaced, the stage will automatically return to the correct position. A noise may sound from inside the cassette when the stage springs up - this is normal.

- 10 Close and lock the cassette using the key provided. **Remove the key from the lock to avoid causing any damage when replacing the garage inner unit.**

Caution: Take special care when replacing the cassettes. If they are not replaced correctly, or if the front or rear cassettes are in the wrong positions, the cassettes can become damaged.

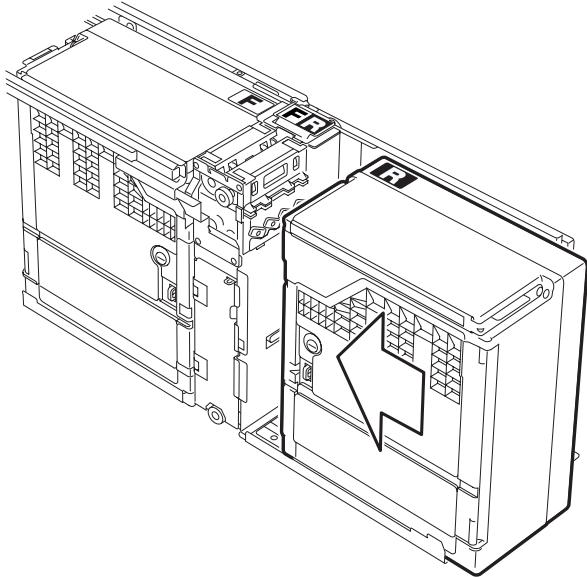
- 11 To replace a cassette, carefully lower it onto the correct section of the cassette tray. Ensure that the bottom edges of the cassette are held securely within the restriction guide.



Cash Acceptor

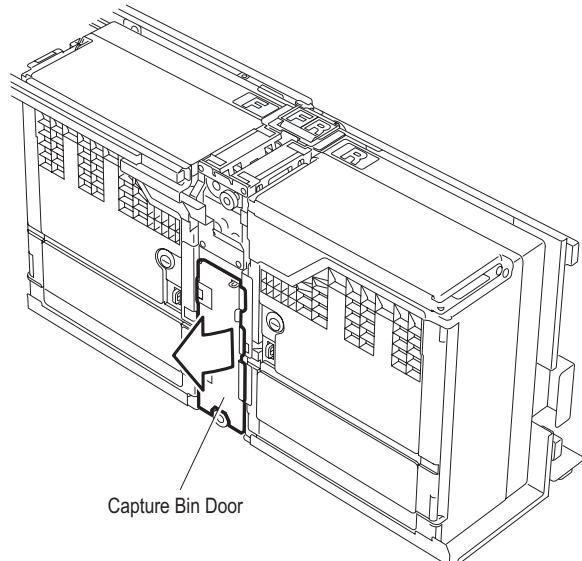
Removing Cash from the Cassette(s) and Capture Bin

- 12 Slide the cassettes inwards until they stop in their correct home positions against the central transport area. Make sure the handle drops down after replacing the cassettes.

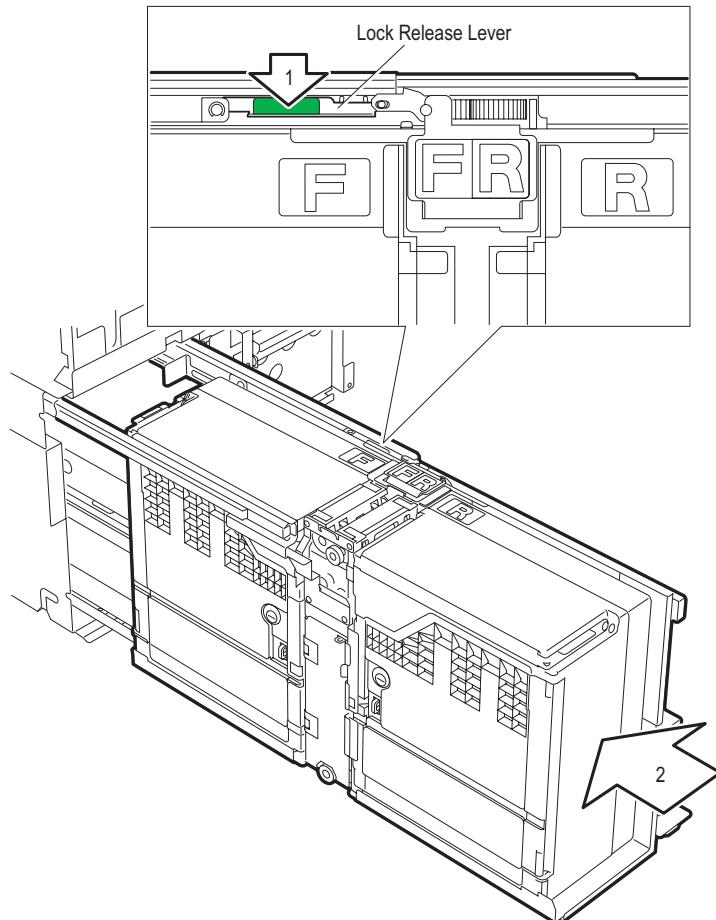


Note: The cassette should push in easily without excessive force. If it does not, remove, re-align and try again. If a cassette is not replaced, or incorrectly replaced, an error message (*Note Bin Removed*) will be displayed.

- 13 If cash has been sent to the capture bin, open the capture bin door, remove the cash and close the door.



- 14 To replace the garage inner unit, first push in on the lock release lever and then **firmly** push in the garage inner unit until it reaches its home position.



Warning: **To avoid pinching your fingers, take care when operating the lock release lever and when pushing in the cassettes or garage inner unit.**

- 15 Close the garage unit door until the latch clicks. If the door is not closed properly, an error message (Note Bin Removed) will be displayed.
- 16 Follow your in-house procedures for indicating that the capture bin or cassettes have been emptied.
- 17 If your terminal does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 18 Close and lock the exterior of the terminal.

Clearing Jams in the Cash Acceptor

The indication of a cash acceptor jam will be an error message. The module should be examined and any notes present should be removed from all accessible areas. Jams can occur in the following areas:

- Main Module
 - Infeed transport (long, mid or short)
 - Reject unit
 - Feed unit
 - Vertical feed transport
 - Recognition unit
 - Escrow unit
 - Main transport unit
 - Between reject unit and main transport unit
 - Between escrow unit and main transport unit
- Garage Unit
 - Cash cassettes
 - Between main transport unit and cassettes
 - Between the cassettes.

To clear jams within the cash acceptor, proceed as follows:

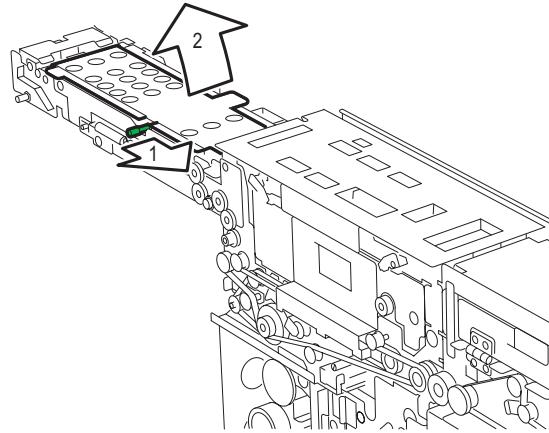
- 1 Open the exterior of the terminal.
- 2 If your terminal does not have the auto-supervisor function, press the switch on the operator panel to the **supervisor** position.
- 3 Access the module as described in Chapter 1, ‘Getting Started’.

- 4** Refer to the error message on the operator panel and then go to the relevant section indicated below. After all jams are cleared, proceed to the section 'Completing the Jam Clearance Procedures' to clear any error messages and close the terminal.

Error Message	Go to this section:
Feed Unit Jam	Infeed Transport (Long Or Mid)
Feed Unit Jam	Infeed Transport (Short)
Reject Unit Jam	Reject Unit
Feed Unit Jam	
Feed Unit Jam	Feed Unit
Transport Jam	Vertical Feed Transport
Validator Jam	Recognition Unit
Transport Jam	Main Transport Unit
Escrow Jam	Escrow Unit
Note Bin Jam	Between the Main Transport Unit and the Garage Unit or Cash Cassettes Includes the following areas: <ul style="list-style-type: none">● cassettes● capture bin● central transport area (garage unit)● between cassettes in the garage unit
Escrow Jam Transport Jam	Between Escrow And Main Transport Unit
Reject Unit Jam Feed Unit Jam Transport Jam	Between Reject Unit And Feed Unit Or Main Transport Unit

Infeed Transport (Long or Mid)

- 1 If the jam is located in the long or mid infeed transport, pull the green bar-latch to unlock the transport cover.



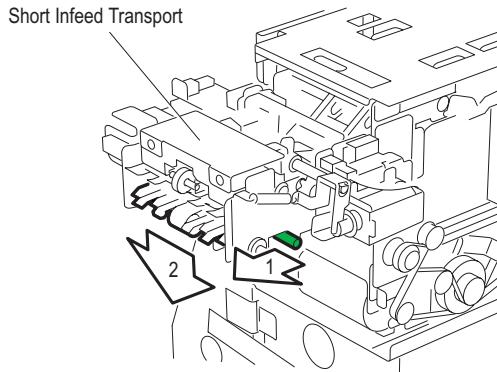
- 2 Lift and hold up the transport cover to access the jammed cash. Remove the cash and close the cover by pushing down. Ensure it locks into the home position.

Sensor Cleaning Reminder

This is a good time to clean the reject unit sensor. For details, refer to the section 'Cleaning Sensors' later in this chapter.

Infeed Transport (Short)

- 1 If the jam is located at the front section in the short infeed transport, pull forward the pin-latch and then pull and hold down the transport.



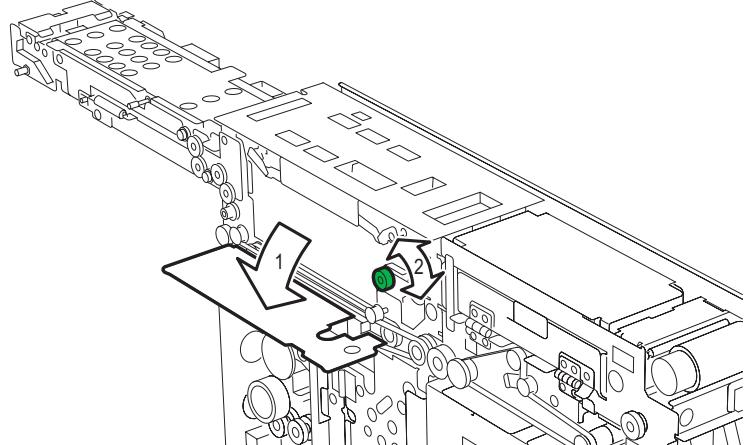
- 2 Remove the cash from the front entry slot and close the transport by pushing it up until it locks into the home position.
- 3 If the jam is located at the rear section of the short infeed transport, the cash can be removed by opening the reject unit door as described in reject unit section.

Sensor Cleaning Reminder

This is a good time to clean the reject unit sensor. For details, refer to the section 'Cleaning Sensors' later in this chapter.

Reject Unit

- 1 If the jam is located in the reject unit, pull open and hold down the metal door.

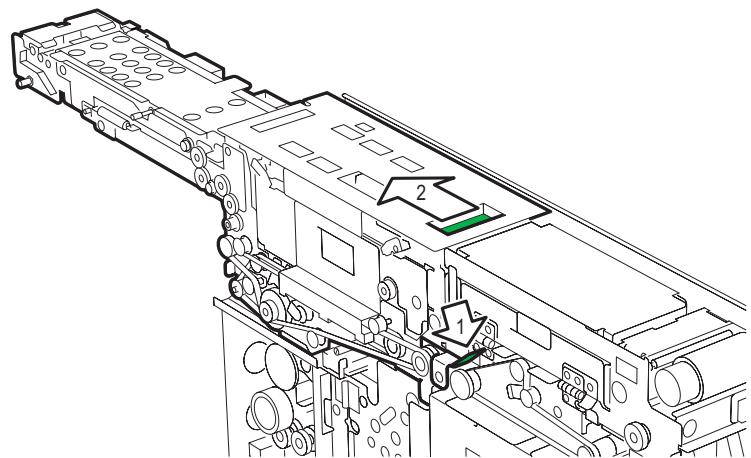


- 2 Turn the green knob to move the jammed cash backwards or forwards. Remove the cash and close the metal door.

Between the Reject Unit and the Feed Unit or Main Transport Unit

If the jam is located at the connection between the reject unit and the feed unit or main transport unit, the reject unit must be moved forward to gain access to this area.

- 1 Push down on the latch and then push forward the reject unit. It can move forward by approximately **10 cm** (4 in.).



- 2 Turn the green knob to move the jammed cash backwards or forwards.

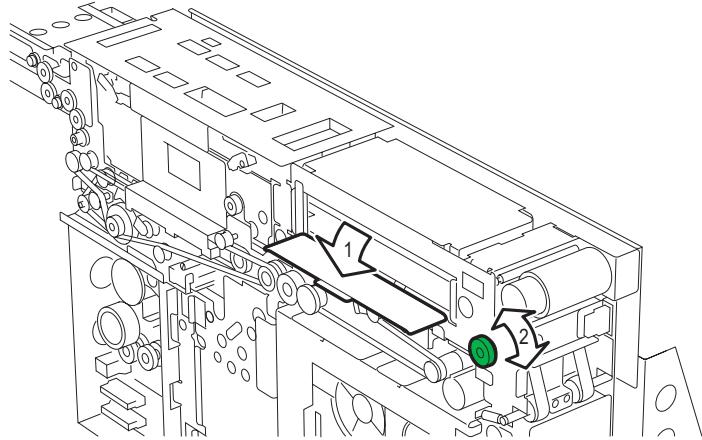
Cash Acceptor

Clearing Jams in the Cash Acceptor

- 3 Remove the cash and then close the reject unit by pushing backwards until the latch clicks and locks into its home position.

Feed Unit

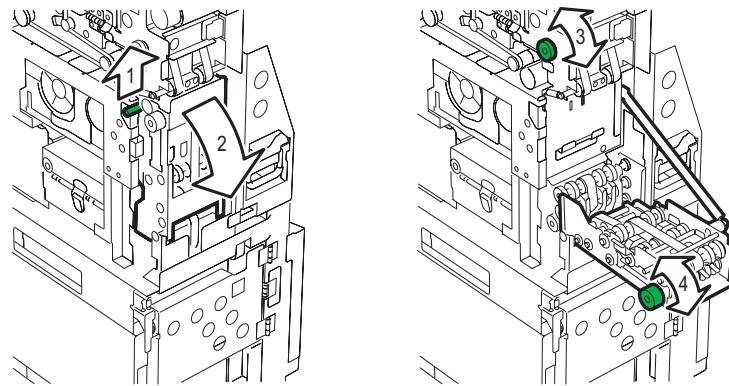
- 1 If the jam is located in the feed unit, pull open and hold down the metal door.



- 2 Turn the green knob to move the jammed cash backwards or forwards.
- 3 Remove the cash and close the door. The cash may move down into the vertical feed transport. See next section.

Vertical Feed Transport

- 1 If the jam is located in the vertical feed transport, lift up the green pin-latch and pull down the transport.



Note: The illustration above shows where the pin-latch is located on the module. In some terminal variants the pin-latch may not be clearly visible because of the rails and slides which support the cash acceptor.

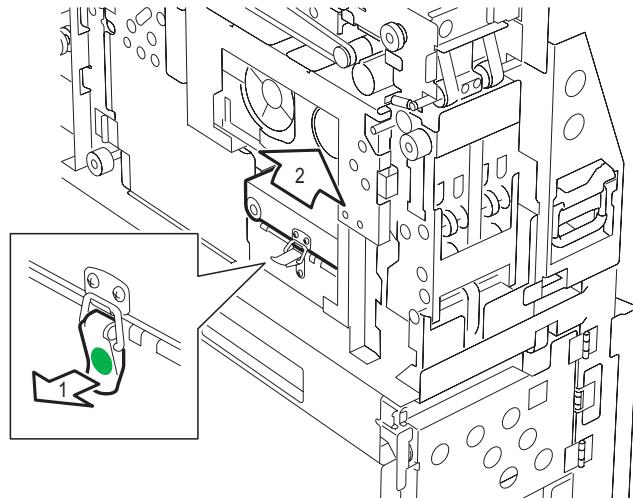
- 2 Turn the green knobs to move the jammed cash backwards or forwards. Watch out for torn or crumpled notes.
- 3 Remove the cash using the tweezers supplied if required.
- 4 Close the transport ensuring it is locked in the home position.

Sensor Cleaning Reminder

This is a good time to clean the recognition unit sensors. For details, refer to the section 'Cleaning Sensors' later in this chapter.

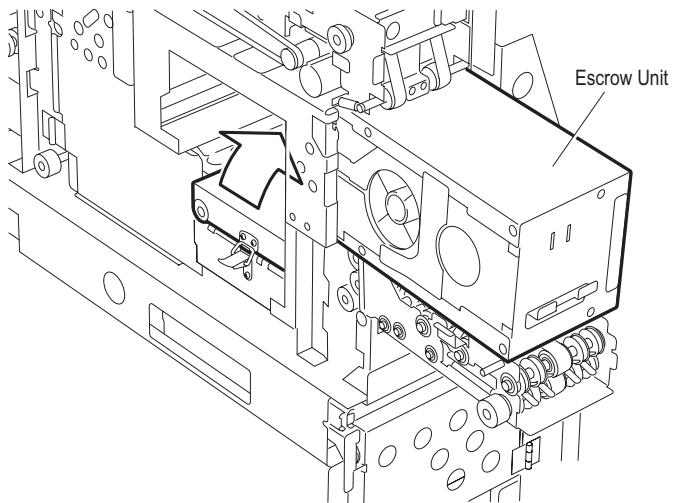
Recognition Unit

- 1 If the jam is located in the recognition unit, release the locking latch on the recognition unit and pull up the cover slightly.



- 2 Remove the jammed cash, using the tweezers supplied if required, and then close and lock the cover.
- 3 if the jammed cash is further inside, open the recognition unit further, by removing the escrow unit first.
- 4 To do this, open the vertical transport as described in the vertical feed transport section, then pull out the escrow unit until it rests on top of the opened vertical transport.

- 5 The recognition unit cover can now open further. Remove any jammed cash and then carefully close and lock the cover.



- 6 Push the escrow unit fully home and close the vertical transport until it clicks into place.

Escrow Unit

Cash can be held inside the escrow unit during a normal transaction or when a jam occurs in another part of the module. When an error message is cleared, the held cash should be sent to the cash cassette or refunded to the infeed transport. If the cash remains in the escrow unit, call your service representative. Do not try to remove cash from the escrow unit.

Between Escrow Unit and Main Transport Unit

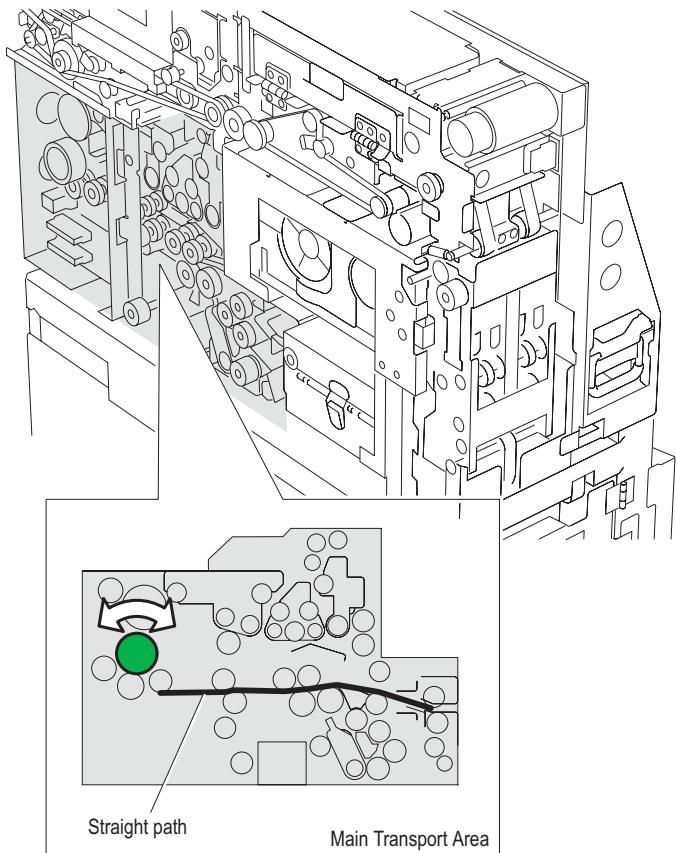
If the jam is located between the escrow unit and the main transport unit, pull out the escrow unit as described in the previous section. Follow the steps in the main transport section to manually drive the jammed cash through to the straight path.

Main Transport Unit

- 1 If the jam is located in the main transport unit, use the green latch to open the main transport unit door.

Note: Do not try to remove jammed cash from bent or curved paths as this may cause belt misalignment.

- 2 Turn the green knob to move the jammed cash to the area of the straight path as shown in the following illustration. When the cash is visible, carefully remove it.



Sensor Cleaning Reminder

This is a good time to clean the main transport unit sensors. For details, refer to the section 'Cleaning Sensors' later in this chapter.

- 3 If the jammed cash cannot be moved to the straight path, try to move it further towards the connection between the main transport unit and the garage unit or cassettes using the same green knob.

Note: If the cash cannot be moved or the belts become misaligned, call your service representative.

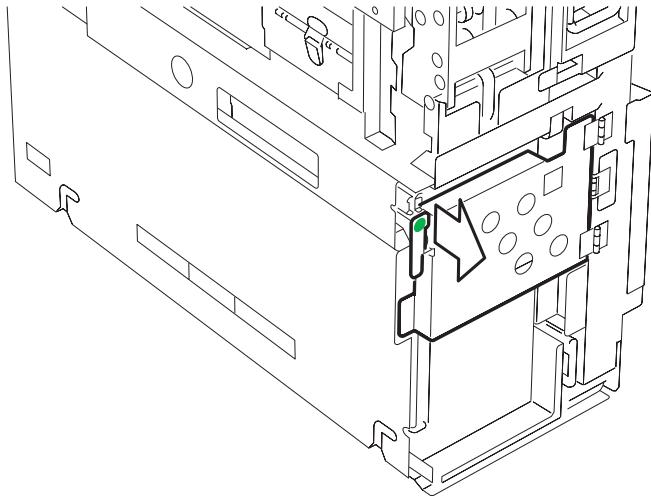
- 4 Close the main transport door and push the cash acceptor back in to the terminal.
- 5 Proceed to next section to clear the jam in the garage unit.

Between the Main Transport and the Garage Unit or Cash Cassettes

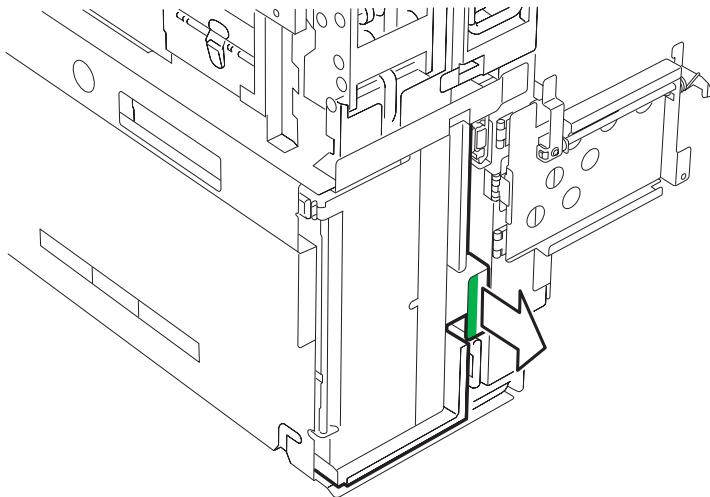
If the jam is located at the connection between the main transport unit and the garage unit or cassettes, proceed as follows:

Note: Do not try to rack out the garage unit when the main cash acceptor module is racked out. The main module must be pushed in first.

- 1 If a jam is located between the cassettes in the garage unit, open the garage unit door by pulling the top of the green metal latch.

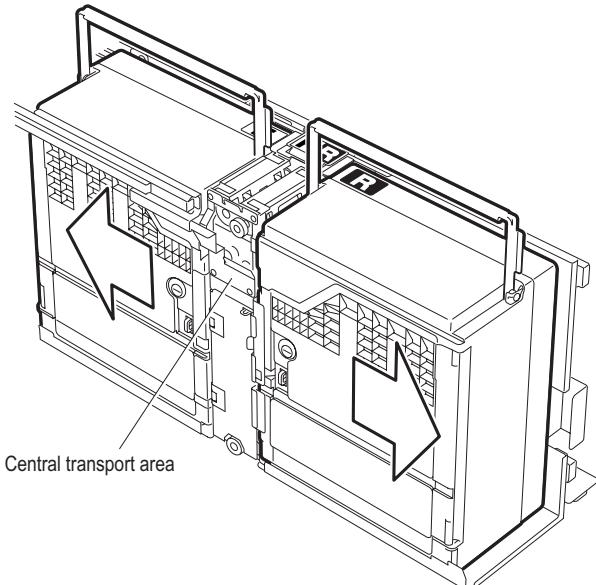


- 2 Using the handle at the end of the garage inner unit, fully pull out the cassette tray until the lock release lever clicks and locks it open.

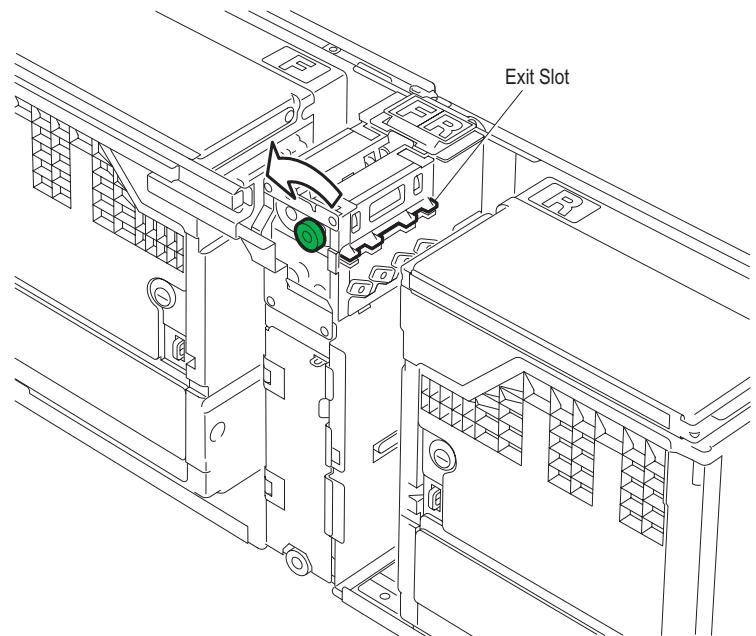


Warning: To avoid injury, take special care when handling the cassettes as they can be heavy.

- 3 Move the cassettes away from the central transport area by lifting each cassette handle and pushing outwards. There is no need to remove the cassettes at this stage.



- 4 Remove the jammed cash from the central transport area.

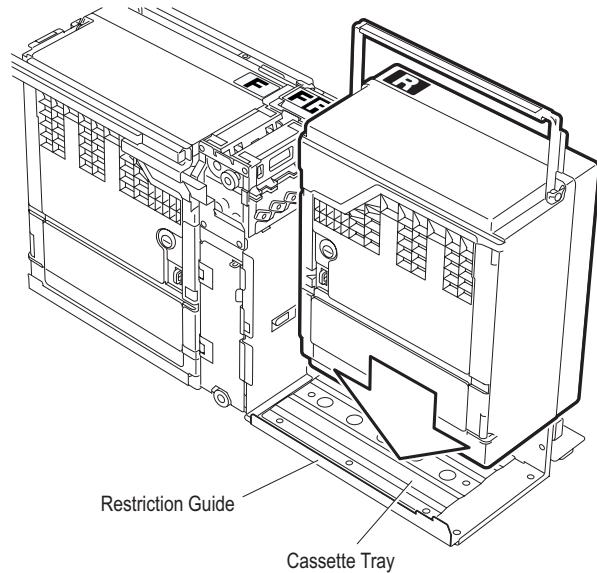


- 5 Turn the green knob to manually drive the cash out of the transport.

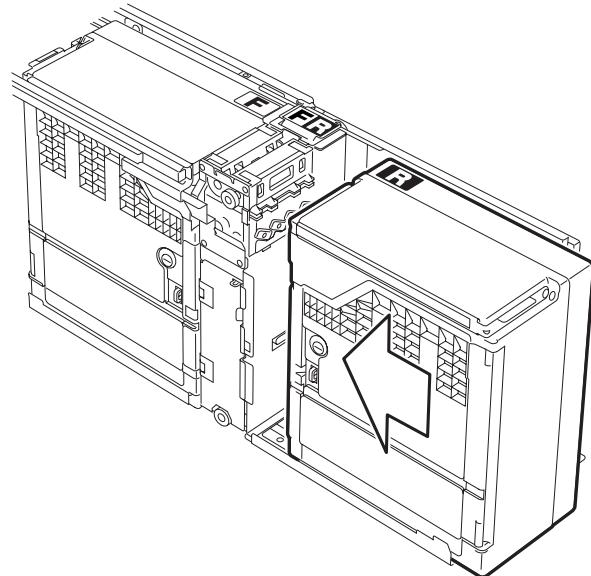
- 6 If the cash has entered the cassette, try to remove it from the entry slot without tearing. If this is not possible, the cassette may need to be removed and opened. For details, refer to the section earlier on removing cash from the cassette(s) and capture bin.
- 7 The jammed cash may be stuck at the end of the cash acceptor main transport unit on the ceiling of the garage unit. First, remove the cassette nearest the terminal by lifting out.
- 8 Reach in approximately **50 cm** (20 in.) to the ceiling of the garage unit and remove any jammed cash from the small transport exit slot. Be sure to remove all crumpled or torn pieces of paper that may have fallen down.

Caution: Take special care when replacing the cassettes. If they are not replaced correctly, or if the front or rear cassettes are in the wrong positions, the cassettes can become damaged.

- 9 To replace a cassette, carefully lower it onto the correct section of the cassette tray (**front** or **rear**). ensure the bottom edges of the cassette are held securely within the restriction guide.

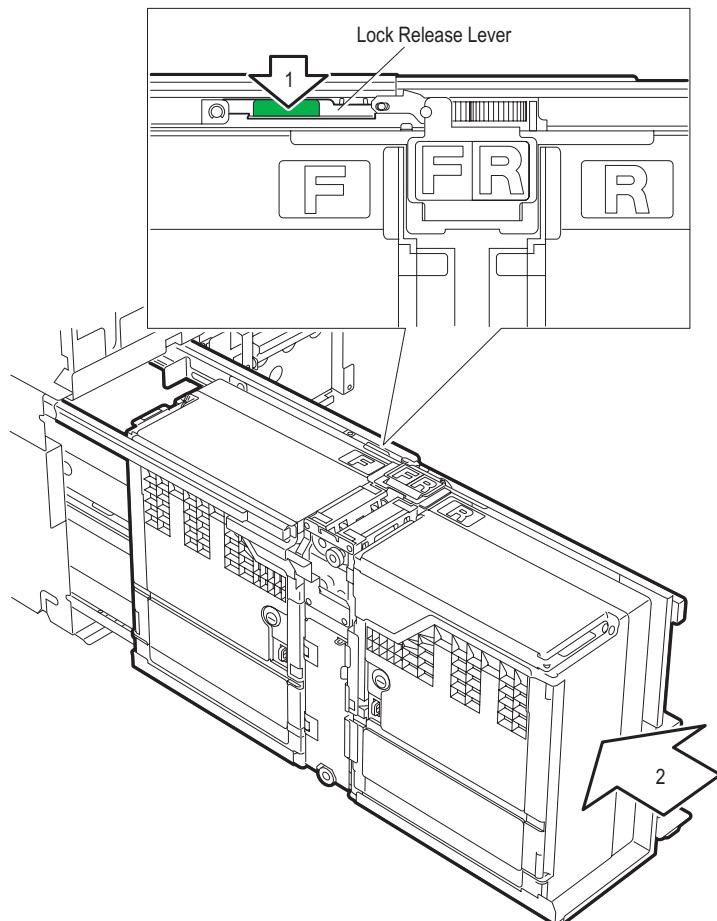


- 10 Slide the cassettes inwards until they stop in their correct home positions. Make sure the handle drops down after replacing the cassettes.



Note: The cassette should push in easily without excessive force. If not, remove, re-align and try again.

- 11 To replace the garage inner unit, first push in on the lock release lever and then firmly push in the garage inner unit until it reaches its home position.



Warning: **To avoid pinching your fingers, take care when operating the lock release lever and when pushing in the cassettes or garage unit.**

Completing the Jam Clearance Procedures

- 1 Close the garage inner unit door and make sure the cash acceptor is fully racked in.
- 2 Follow your in-house procedures for indicating that a jam has been cleared.
- 3 If your terminal does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 4 Close and lock the exterior of the terminal.

Cleaning Sensors

Routinely, it is important that any build-up of dust and debris be removed from around the cash acceptor sensors. The sensors are grouped together across the path of the cash and their function is to detect the movement of the cash around the module. Dirty sensors can have an adverse effect on the module's performance. **For this reason, it is recommended that every time a jam is cleared, the sensors should be cleaned at the same time.**

Additionally, certain error messages, incorrect error reporting or an increase in the cash rejection rate can indicate that sensor cleaning is required.

Cleaning Materials

You must take care not to damage the sensors during cleaning. NCR recommends that compressed air is used but a soft, thin brush or cotton-bud could be used to gently clear away any dust or debris.

Refer to NCR publication *Consumable Items for Self Service, B006-4992* for ordering details and specification of canned/compressed air.

Caution

Do not use abrasive material or cleaning fluid as these may damage the sensors.

Identifying the Sensors

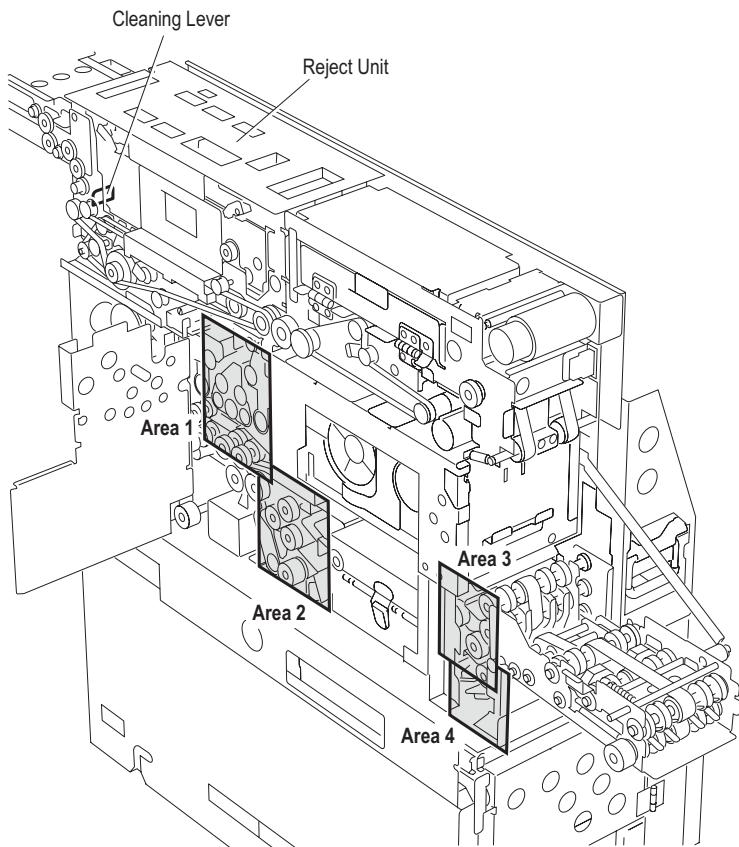
There are two types of sensor in the cash acceptor. Both types comprise an emitter and lens at one end, and a receiver and lens at the other end. The lenses are the areas that need to be cleaned. Additionally, some sensors have prisms, the ends of which also need to be cleaned.

The sensor areas identified in this section each have eight (8) lenses or eight (8) lenses and prism ends to clean.

Some sensors are located very close together where the space between the emitter lens and the receiver lens (or prism end) may be as small as **0.5 cm** (0.2 in). In this case it may be difficult to see along the full row of four lenses or prism ends. The space between other sensors could be as much as **7.5 cm** (3 in.) or more. In this case it may be difficult to identify exactly where each set of emitter lenses or receiver lenses is located as belts and wheels also occupy this space.

Locating the Sensors

The following illustration shows the areas which contain sensors for cleaning.



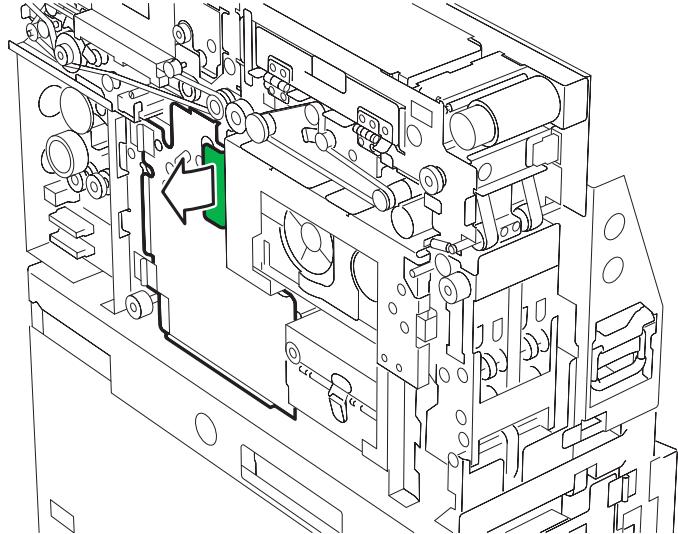
To clean the sensors in the cash acceptor, proceed as follows:

- 1 Open the exterior of the terminal.
- 2 If your terminal does not have the auto-supervisor function, press the switch on the operator panel to the **supervisor** position.
- 3 Access the cash acceptor as described in Chapter 1, 'Getting Started'.

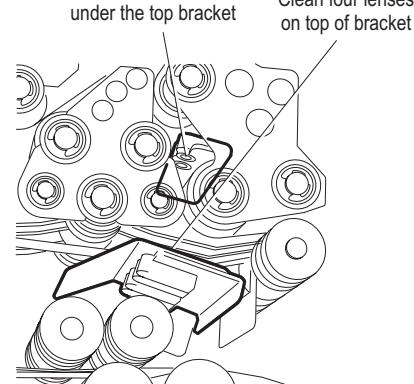
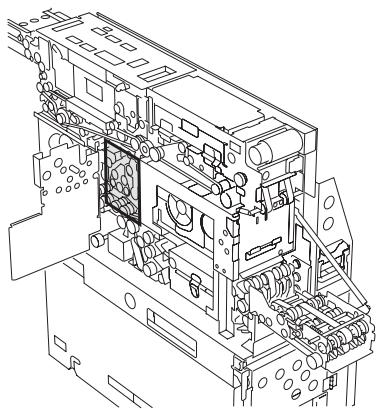
Main Transport Unit (Area One)

To clean the sensors in this area of the main transport unit, proceed as follows:

- 1 Use the green latch to open the main transport unit door.



- 2 Using the compressed air and tube attachment, insert the tube approximately **10 cm** (4 in.) into the areas shown below.

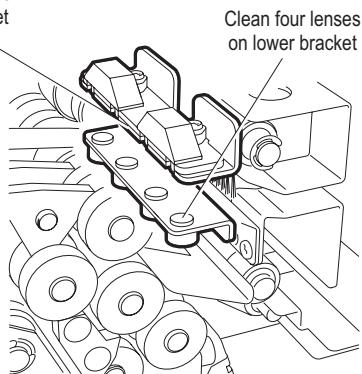
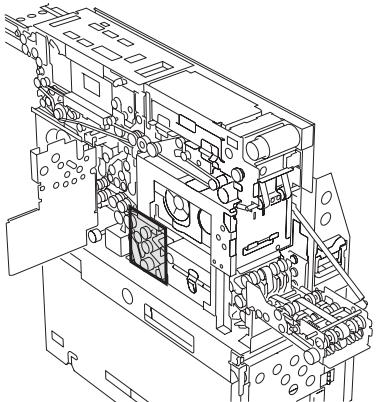


- 3 Apply compressed air to the four sensor lenses under the top bracket.
- 4 Apply compressed air to the four sensor lenses along the top surface of the lower bracket. **There are eight lenses to clean in total.**

Main Transport Unit (Area Two)

To clean the sensors in this area of the main transport unit, proceed as follows:

- 1 Using the compressed air and tube attachment, insert the tube approximately **10 cm** (4 in.) into the areas shown below.

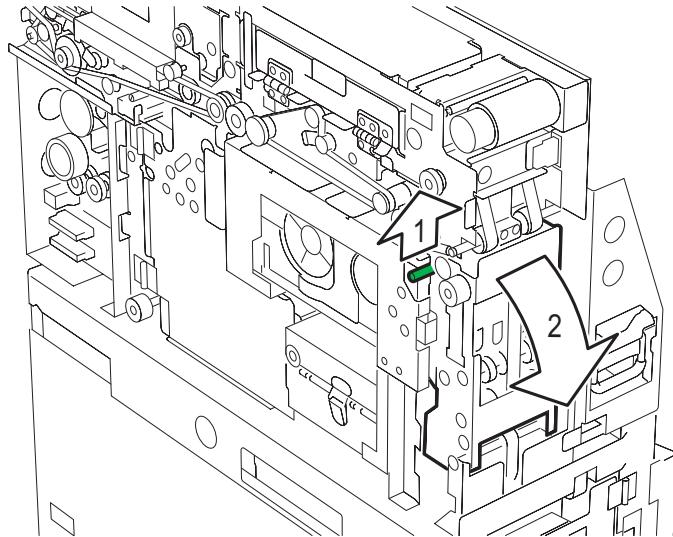


- 2 Apply compressed air to the four prism ends under the top bracket.
- 3 Apply compressed air to the four sensor lenses along the top surface of the lower bracket. **There are eight lenses/prism ends to clean in total.**
- 4 Close the main transport unit door.

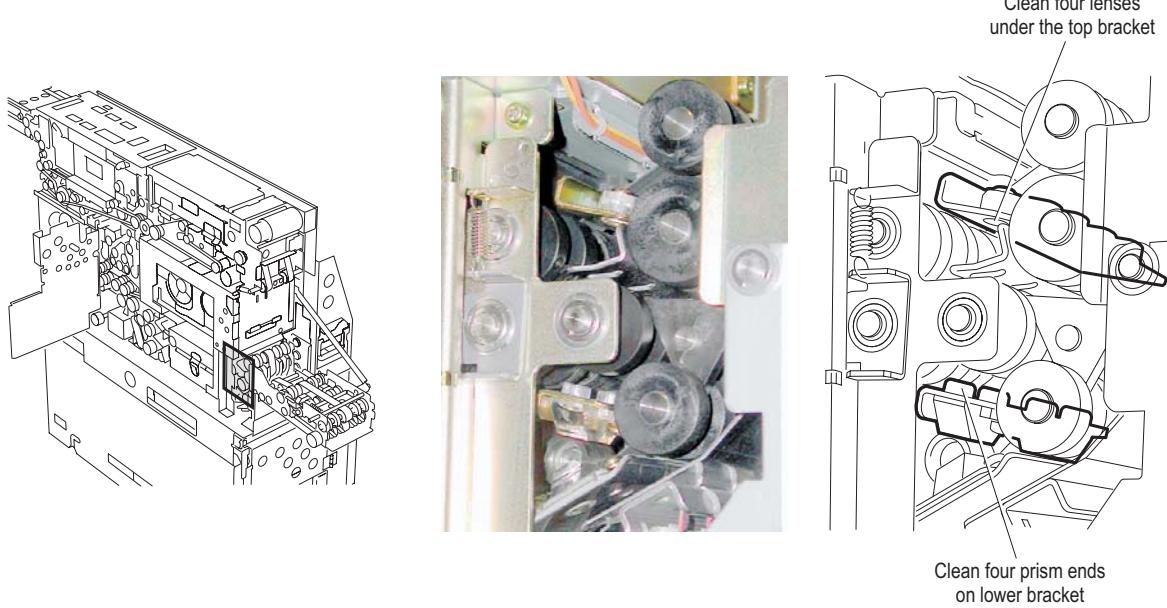
Recognition Unit (Area Three)

To clean the sensors in this area of the recognition unit, proceed as follows:

- 1 Open the vertical feed transport. Lift up the green pin-latch and pull down the transport.



- 2 Using the compressed air and tube attachment, insert the tube approximately **10 cm** (4 in.) into the areas shown below.



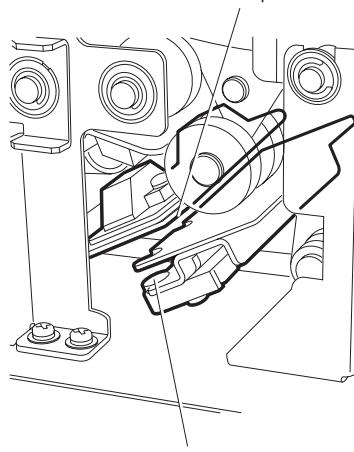
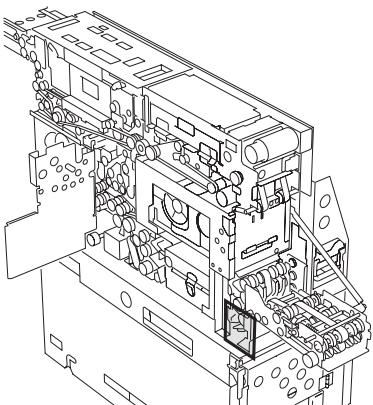
- 3 Apply compressed air to the four sensor lenses under the top bracket.

- 4 Apply compressed air to the four prism ends along the top surface of the lower bracket. **There are eight lenses/prism ends to clean in total.**

Recognition Unit (Area Four)

To clean the sensors in this area of the recognition unit, proceed as follows:

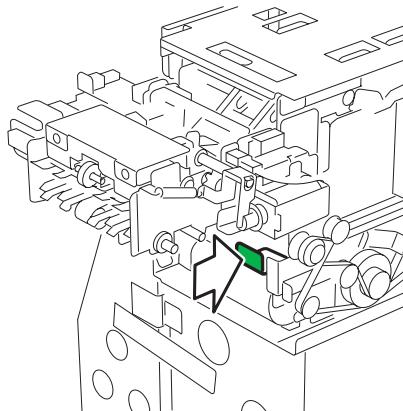
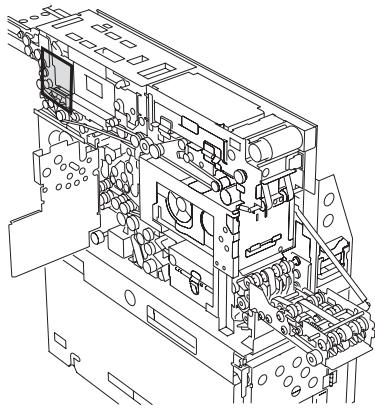
- 1 Using the compressed air and tube attachment, insert the tube approximately **10 cm** (4 in.) into the area shown below.



- 2 Apply compressed air to the four prism ends under the top bracket.
- 3 Apply compressed air to the four sensor lenses along the top surface of the lower bracket. **There are eight lenses/prism ends to clean in total.**
- 4 Close the vertical feed transport, ensuring it locks into place.

Reject Unit - Cleaning Lever

To clean the sensors in the reject unit area, push in the cleaning lever three or four times, as indicated below.



Completing the Sensor Cleaning Procedures

To complete the process after cleaning the sensors, proceed as follows:

- 1 Ensure all units and doors are pushed back into their home positions.
- 2 Push the cash acceptor back into the terminal until it clicks into place.
- 3 Follow your in-house procedures for indicating that the sensors have been cleaned.
- 4 If your terminal does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 5 Close and lock the exterior of the terminal.

**Cash Acceptor
Cleaning Sensors**

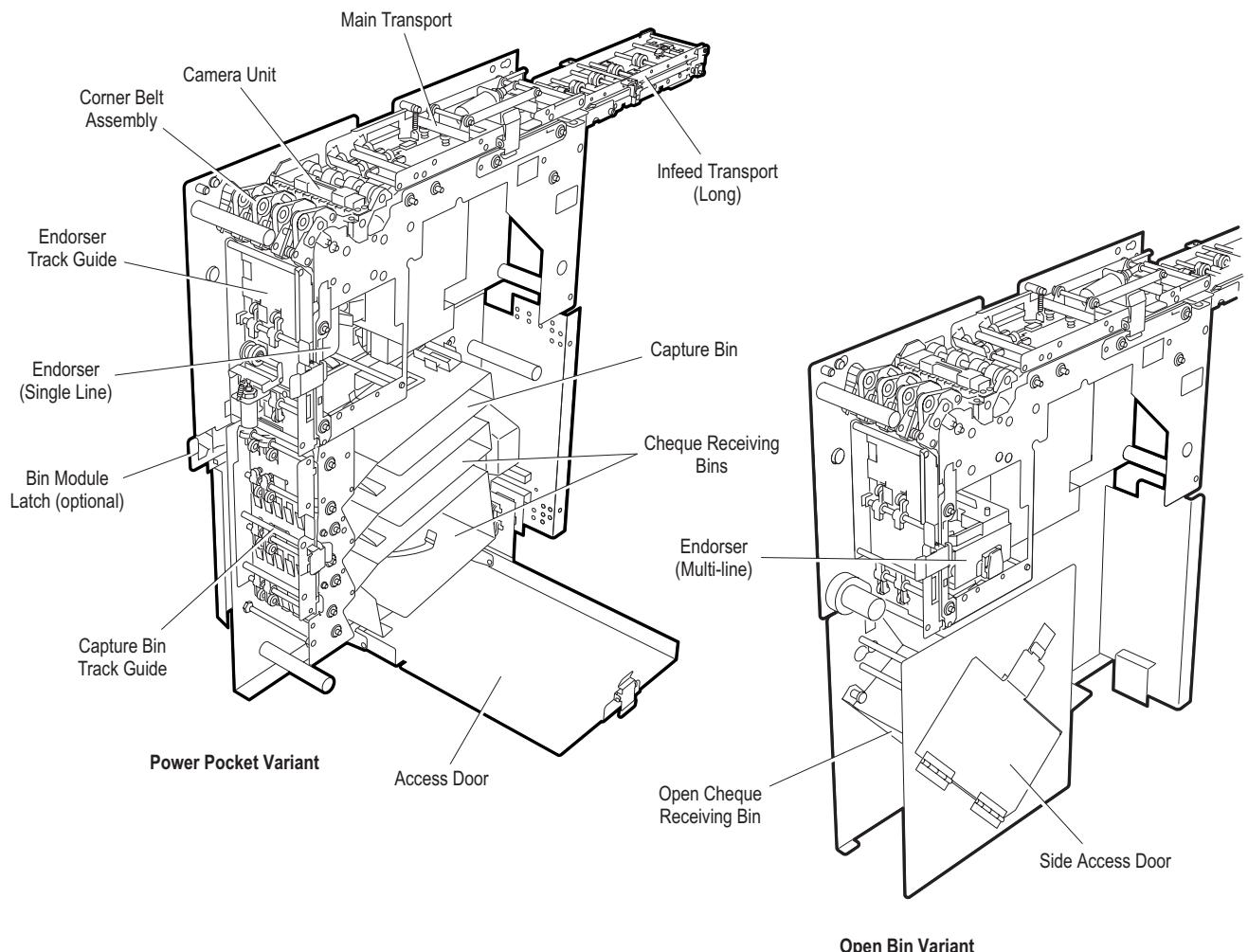
Chapter 12
Cheque Acceptor

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Table of Contents
Cheque Acceptor

Introduction

The cheque acceptor (type 3) is available with a variety of infeed transports (long, mid or short) and bin options (power pockets or open bin) depending on the terminal in which it is installed. Also, it can be fitted in both front and rear access ATMs and contains the components shown below. Most of the illustrations in this guide are based on the rear access, long infeed variant. Your cheque acceptor may look slightly different from that shown, however the following instructions apply to all variants, except where stated otherwise.



This guide contains the following sections:

- Emptying the cheque bin (capture bin, cheque receiving bins or open bin)
- Clearing jams
- Removing and replacing the ribbon cassette.

Emptying the Cheque Bins

The cheque acceptor has two types of cheque deposit bin: the open bin or power pockets. Both are situated in the same area of the cheque acceptor. The open bin stores all cheques in one open storage container whether captured or as a result of successful transactions. The power pocket variant has three separate storage containers, one of which can store captured cheques independently of successfully transacted cheques (depending on your organization's specification and business rules). The cheques are driven to the correct pocket by powered track guides.

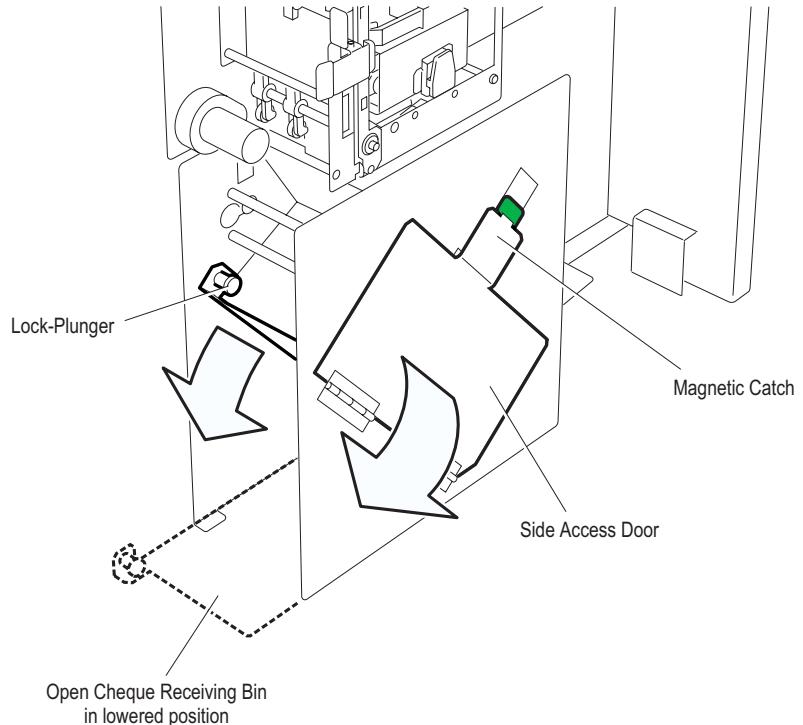
If a cheque has been captured and cannot be returned to the cardholder, it will be stored in the open bin or in the capture bin of the power pocket variant. Following a successful transaction, cheques are stored in the open bin or in the cheque receiving bins of the power pocket variant. Sensors in these areas may initiate an error message when the bins need to be emptied.

Open Bin

To remove cheque(s) from the open bin, proceed as follows:

- 1 Open the exterior of the terminal.
- 2 If your terminal does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the module as described in 'Getting Started'.

- 4 Front access operators: Pull down the magnetic side access door to gain access to the open cheque receiving bin.
Rear access operators: Pull out the lock-plunger and lower the open bin or open side access door as above.

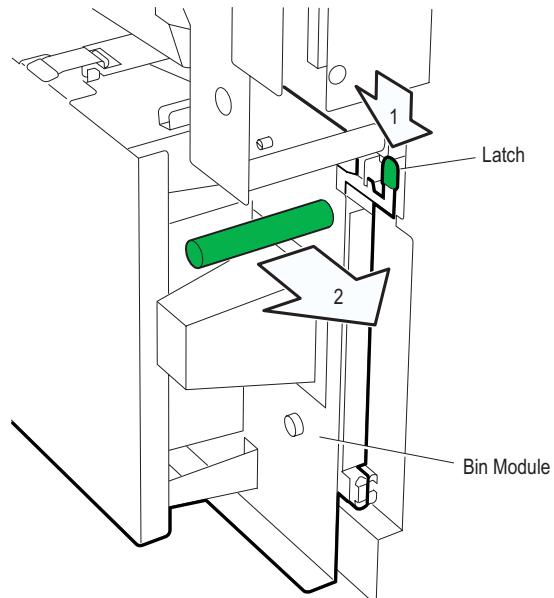


- 5 Carefully remove any cheques from the open cheque receiving bin.
- 6 Front access: To close, pull up the side access door until the magnetic catch holds the door closed.
Rear access: Push up the open bin until the lock-plunger holds the bin in its home position or close the side access door as above.
- 7 Rack in the module ensuring the latch clicks into the home position.
- 8 Follow your in-house procedures for indicating that the open bin has been emptied.
- 9 If your terminal does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 10 Close and lock your terminal.

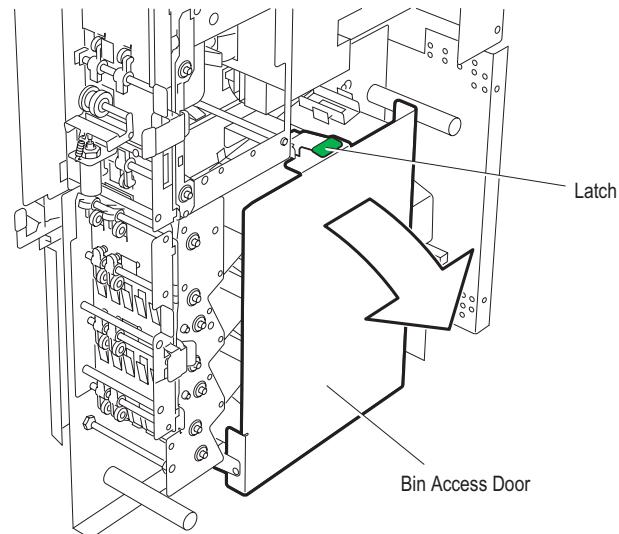
Power Pockets

To remove cheque(s) from the capture bin or cheque receiving bins in the power pocket variant, proceed as follows:

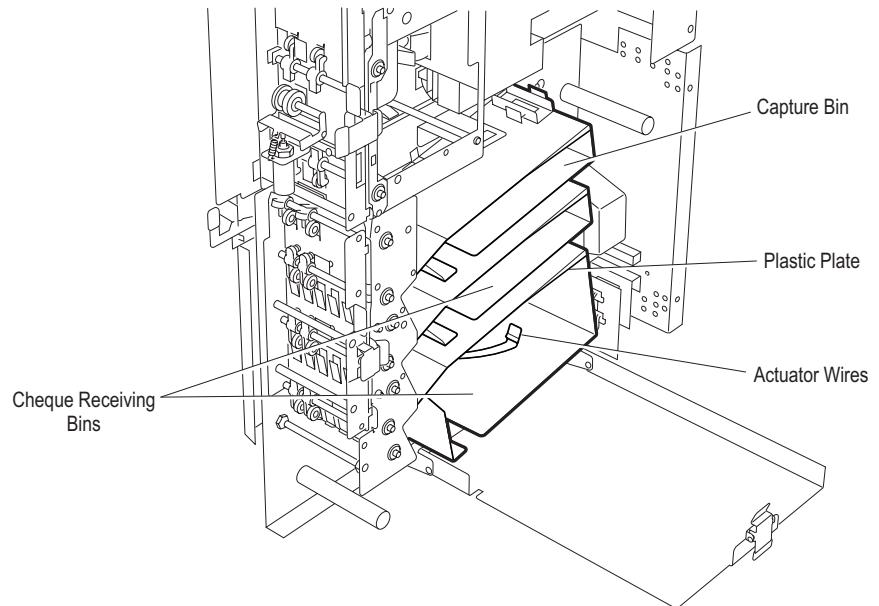
- 1 Open the exterior of the terminal.
- 2 If your terminal does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the module as described in 'Getting Started'. Proceed to Step 5. If you have a cheque acceptor with a racking bin module, proceed to Step 4.
- 4 **Racking Bin Module (front access view shown):**
To access the areas in the bin module only, push down the bin module latch as shown below, and pull out the entire bin module until the slides are fully extended.



- 5 Push down the latch and pull down the access door.



- 6 Carefully remove any cheques from the capture bin or cheque receiving bins. **Take care not to damage the actuator wires and plastic plates in each bin.**



- 7 To close, push up the access door ensuring the latch clicks into the home position.
- 8 Rack in the module and/or power pocket bin module ensuring the latch clicks into the home position.

Cheque Acceptor
Emptying the Cheque Bins

- 9 Follow your in-house procedures for indicating that the capture bin or cheque receiving bins have been emptied.
- 10 If your terminal does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 11 Close and lock your terminal.

Clearing Jams in the Cheque Acceptor

The indication that a jam has occurred is an error message or the module going off-line. Jams can occur in the following areas:

- Infeed transport (long, mid or short)
- Main transport
- Corner belt assembly
- Endorser track guide
- Capture bin track guide
- Open cheque receiving bin
- Power pockets cheque bins.

To clear a jam in the cheque acceptor, proceed as follows:

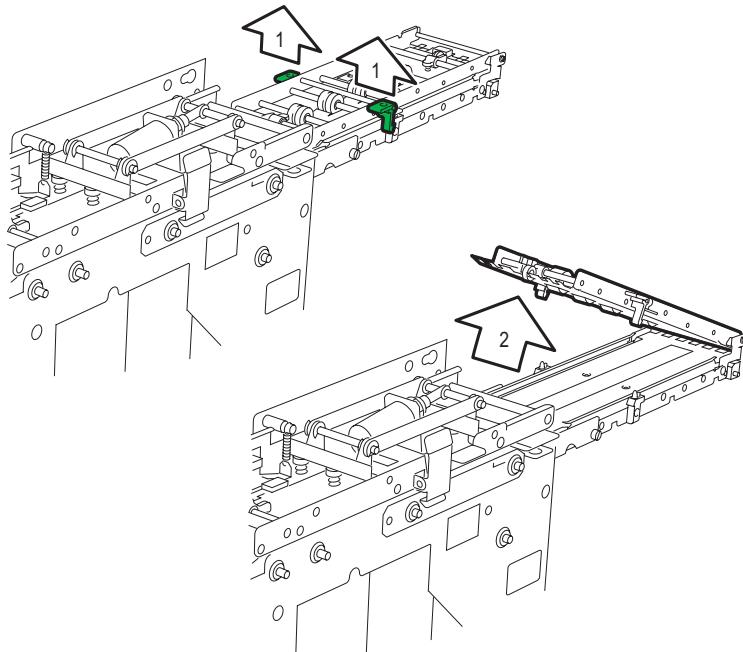
- 1 Open the exterior of the terminal.
- 2 If your terminal does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the module as described in 'Getting Started'.

- 4 Look at the module to see if you can find the exact location of the jam. If not, refer to the error message on the operator panel and then go to the relevant section indicated below. After all jams are cleared, proceed to the steps in 'Completing Jam Clearance procedures' to clear any error messages and close the terminal.

Error Message	Go to this section:
Transport jam at in-feed	Infeed transport (long or mid) Infeed transport (short)
Transport jam at de-skew	Main transport
Transport jam at MICR	Main transport
Transport jam at endorser	Endorser track guide
Transport jam at Camera	Endorser track guide
Transport jam at Outfeed	Endorser track guide Capture bin track guide Cheque bins Transport jam at outfeed (all of above)
Transport jam	Check all sections

Infeed Transport (long or mid)

- 1 If a cheque is jammed in the infeed transport (long infeed shown), pull up the green latches on the top of the transport.

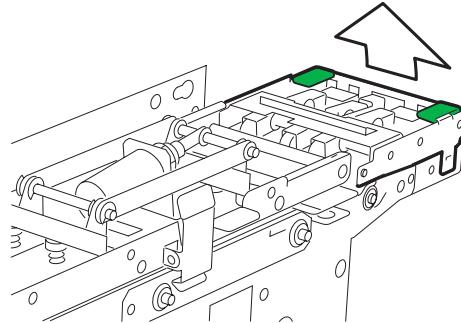


- 2 Fully pull up and hold the infeed transport.

- 3 Remove any jammed cheque(s).
- 4 To close, lower the transport and then firmly push down until the latches click and lock into position.

Infeed Transport (short)

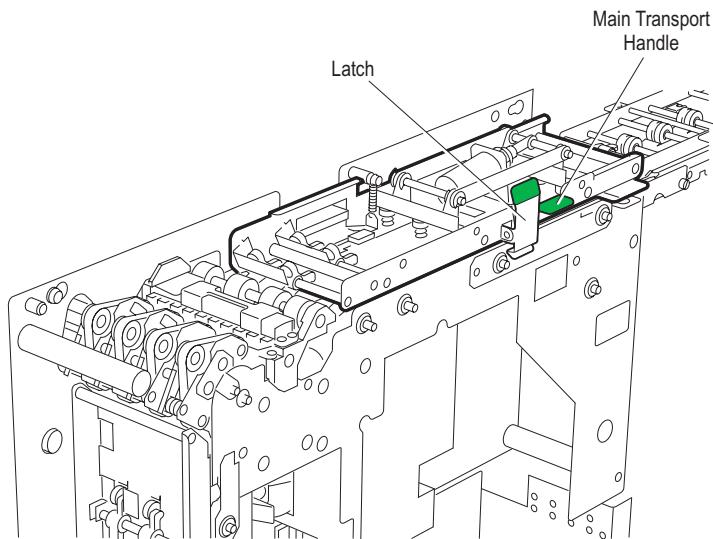
- 1 If a cheque is jammed in the short infeed transport, pull up and hold the green handles on the top of the transport.



- 2 Remove any jammed cheque(s).
- 3 To close, lower the transport and then firmly push down into the home position.

Main Transport

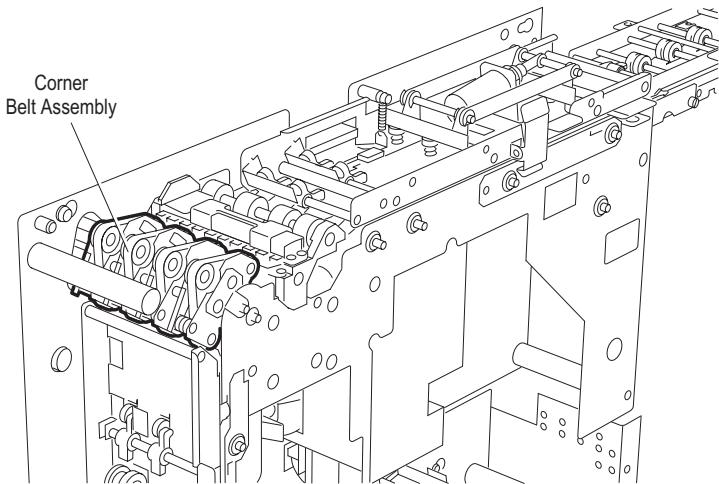
- 1 If a cheque is jammed in the main transport, push in the latch and pull up the transport.



- 2 While holding up the transport, remove any jammed cheque(s).
- 3 To close, push down the transport ensuring it clicks into the home position.

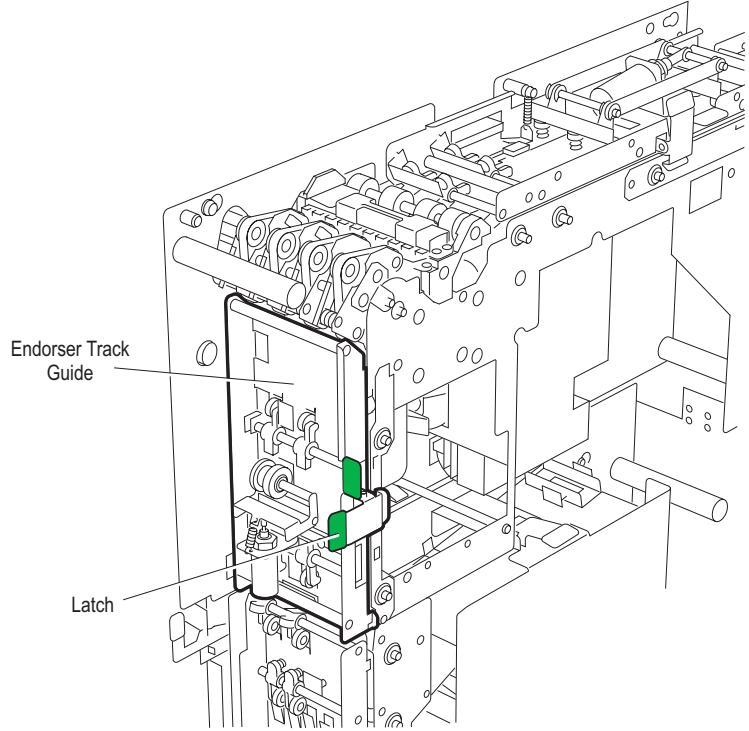
Corner Belt Assembly

If a cheque is jammed in the corner belt assembly, and cannot be accessed or removed, call your local NCR Customer Engineer.



Endorser Track Guide

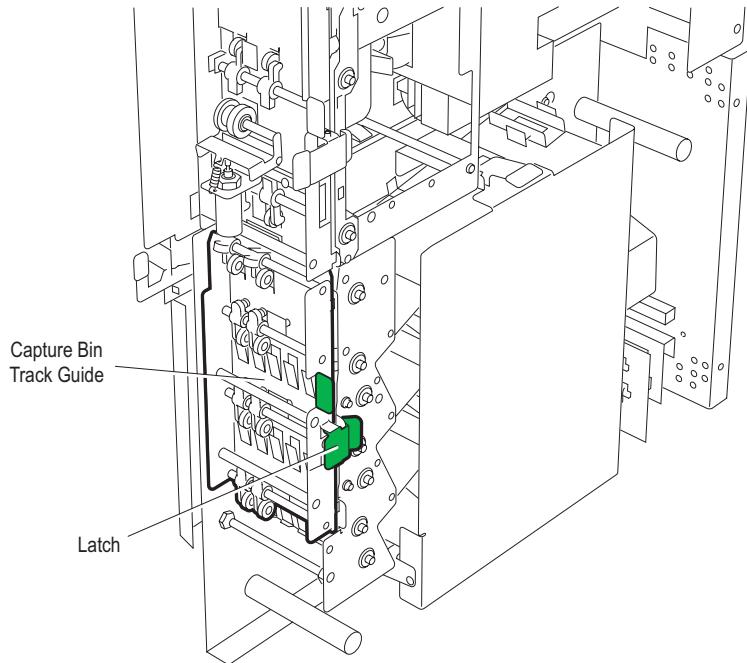
- 1 If a cheque is jammed in the endorser track guide, push in the latch and open the guide.



- 2 Remove any jammed cheque(s).
- 3 Close the guide ensuring the latch clicks into the home position.

Capture Bin Track Guide

- 1 If a cheque is jammed in the capture bin track guide, push in the latch and open the guide.



- 2 Remove any jammed cheque(s).
- 3 To close, push in the track guide ensuring the latch clicks into the home position.

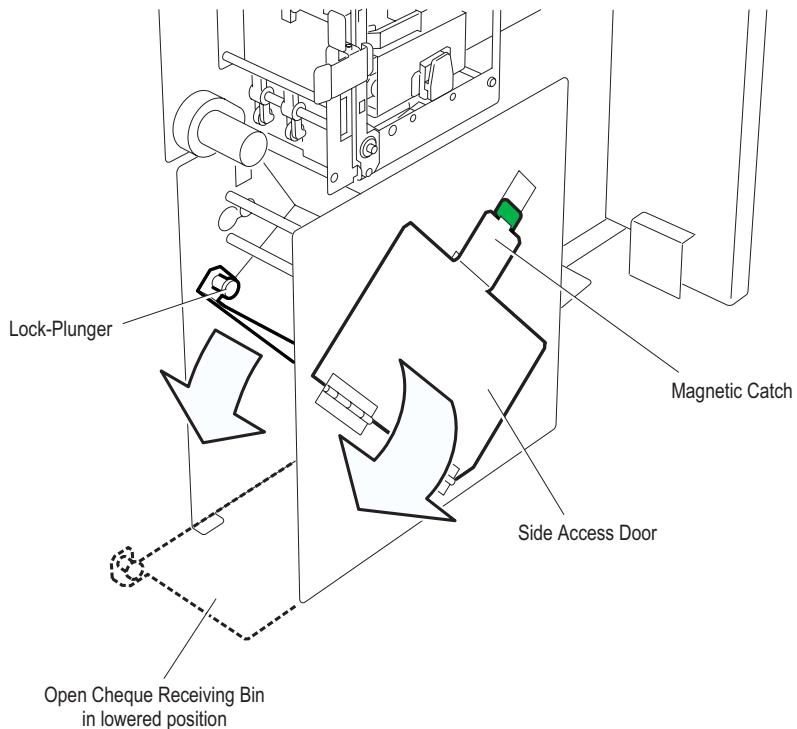
Cheque Bins

If a cheque is jammed in the cheque bin area, proceed as follows.

Open Bin

- 1 Front access operators: Pull down the magnetic side access door to gain access to the open cheque receiving bin.

Rear access operators: Pull out the lock-plunger and lower the open bin or open the side access door as above.



- 2 Remove any jammed cheque(s).

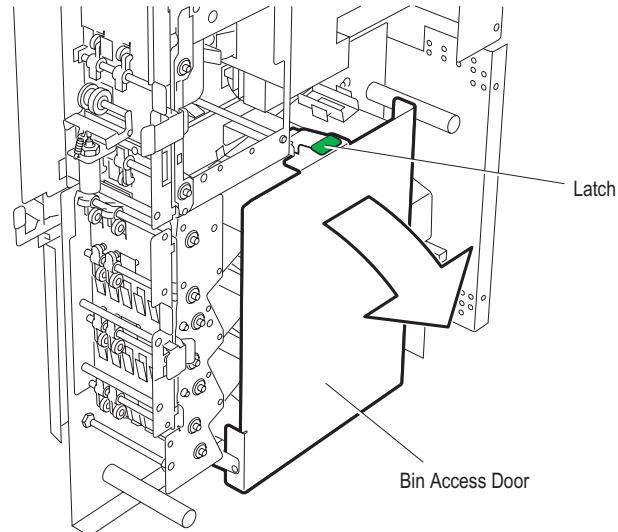
Note: It may be necessary to open the endorser track guide if a cheque is jammed between the guide and the bin.

- 3 Front access: To close, pull up the side access door until the magnetic catch holds the door closed.
Rear access: Push up the open bin until the lock-plunger holds the bin in its home position or close the side access door as above.

- 4 Close the endorser track guide if required.

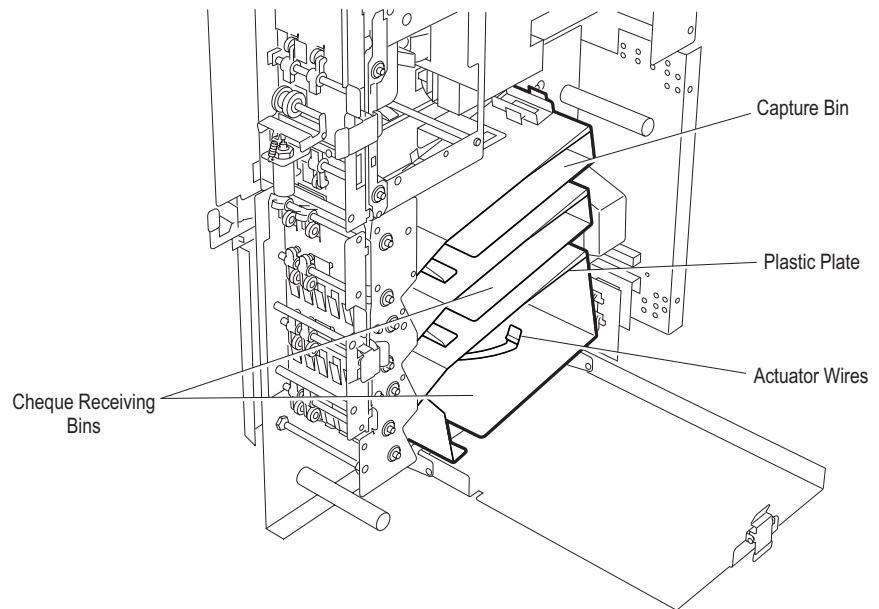
Power Pockets

- 1 Push down the latch and pull down the access door.



- 2 Carefully remove any jammed cheques. **Take care not to damage the actuator wires and plastic plates in each bin.**

Note: It may be necessary to open the capture bin track guide if a cheque is jammed between the guide and the bin.



- 3 To close, lift up access door ensuring the latch clicks into the home position.
- 4 Close the capture bin track guide if required.

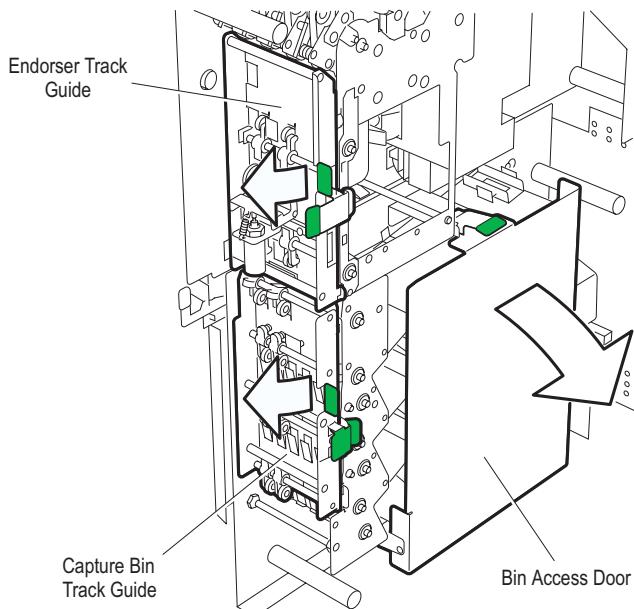
Transport Jam at Outfeed

If this error message is displayed, a cheque could be jammed in the following areas:

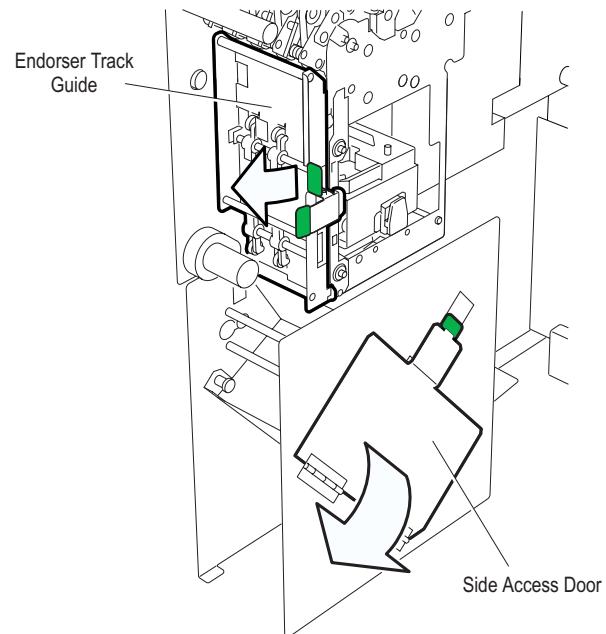
- Between the endorser track guide and the capture bin track guide
- In the capture bin track guide
- At the entry to the power pocket bin
- Between the endorser track guide and the open bin
- At the entry to the open bin.

If a cheque is jammed in these areas, proceed as follows.

- 1 Depending on configuration, open the endorser track guide, the capture bin track guide and the cheque bin as described in previous steps.



Power Pocket Variant



Open Bin Variant

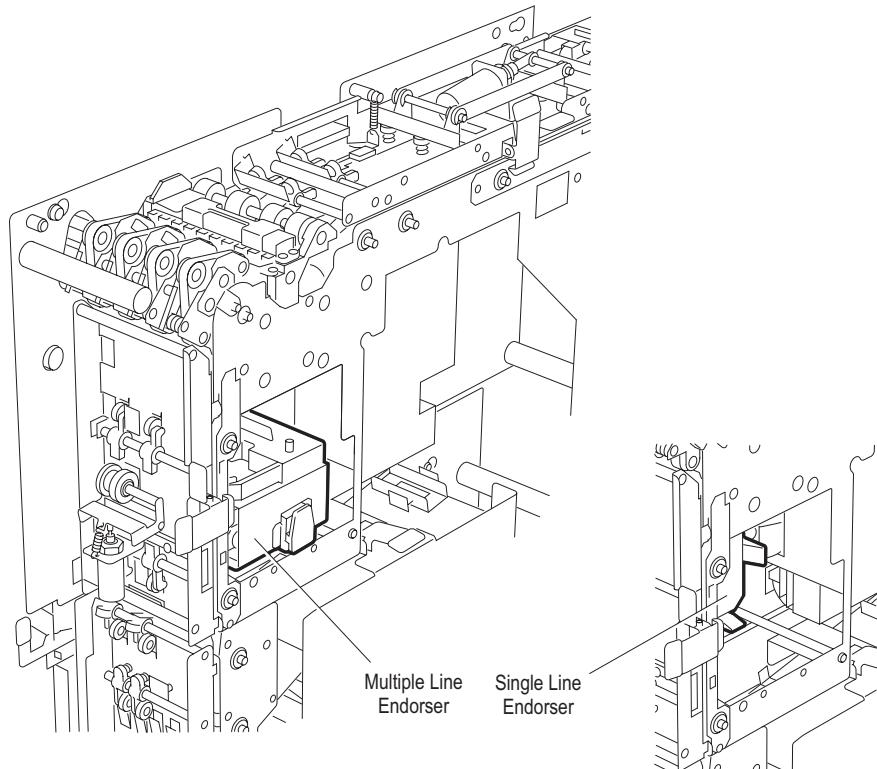
- 2 Remove any jammed cheques.
- 3 Close the endorser track guide, the capture bin track guide and the cheque bin as described in previous steps.

Completing Jam Clearance Procedures

- 1 Rack in the module and/or power pocket bin module ensuring the latch clicks into the home position.
- 2 Follow your in-house procedures to indicate that a jam has been cleared.
- 3 If your terminal does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 4 Close and lock your terminal.

Removing and Replacing the Ribbon Cassette

The position of the ribbon cassette depends upon the type of endorser guide unit contained in the cheque acceptor. The two types are a single line endorser or a multiple line endorser as shown below.

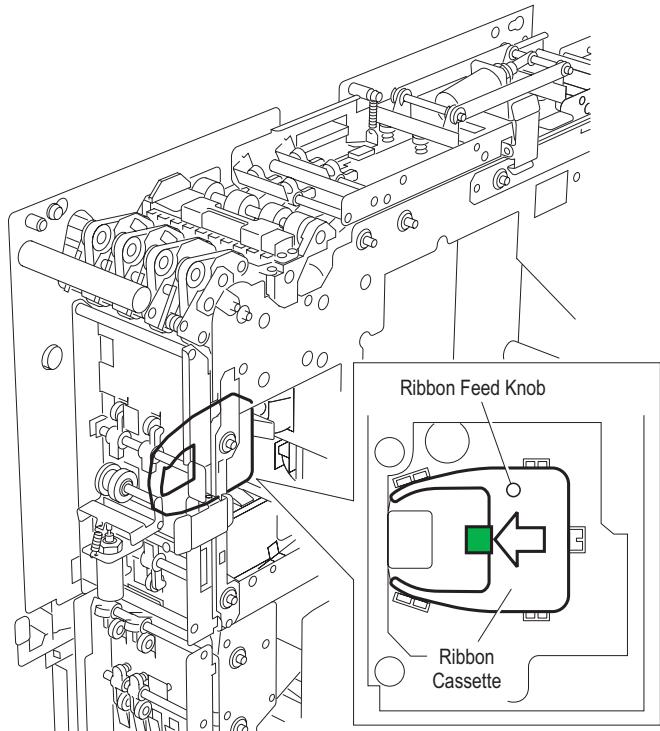


Single Line Endorser

To replace the ribbon cassette in the single line endorser, proceed as follows:

- 1 Open the exterior of the terminal.
- 2 If your terminal does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the module as described in 'Getting Started'.

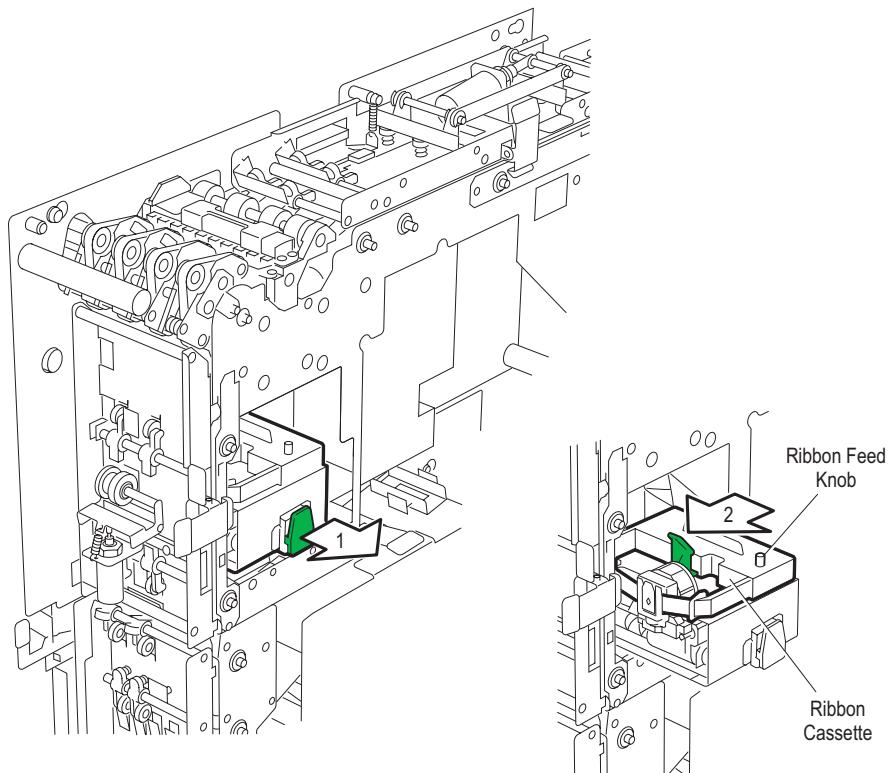
- 4 Push the green plastic latch left to release the ribbon cassette.



- 5 Remove and discard the used ribbon cassette.
- 6 Remove the packaging from the new ribbon cassette including a red tab or clip if there is one.
- 7 Insert the new ribbon cassette by pushing it into the endorser unit until the green plastic latch clicks and holds the cassette in position. Ensure ribbon is around the print head.
- 8 Check that the new cassette has been replaced correctly by turning the ribbon feed knob on the left side of the cassette. This action will also tighten the ribbon.
- 9 To close, firmly push in the module until the latch clicks and locks into position.
- 10 Follow your in-house procedures to indicate that the ribbon cassette has been replaced.
- 11 If your terminal does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 12 Close and lock your terminal.

Multiple Line Endorser

- 1 Open the exterior of the terminal.
- 2 If your terminal does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** position.
- 3 Access the module as described in 'Getting Started'.
- 4 Pull down the green latch and pull out the endorser unit.



- 5 Pull out the green plastic latch to release the ribbon cassette.
- 6 Remove and discard the used ribbon cassette.
- 7 Remove the packaging from the new ribbon cassette including a red tab or clip if there is one
- 8 Insert the new ribbon cassette by pushing in to the endorser unit until the green plastic latch clicks and holds the cassette in position. Ensure ribbon is around the print head.
- 9 Make sure the ribbon feeds through the guides correctly and does not feed along the outside edge of the guides.

- 10 Check that the new cassette has been replaced correctly by turning the ribbon feed knob on the right side of the cassette. This action will also tighten the ribbon.
- 11 Push in the multiple line endorser unit until the latch clicks and locks into position.
- 12 To close, firmly push in the module until the latch clicks and locks into position.
- 13 Follow your in-house procedures to indicate that the ribbon cassette has been replaced.
- 14 If your terminal does not have the auto-supervisor option, press the switch on the operator panel to the **normal** position.
- 15 Close and lock your terminal.

Cleaning and Maintenance

The cheque acceptor sensors are self-cleaning. No other cleaning or maintenance is required by the operator.

Chapter 13
Coin Dispenser

Replenishing Coin Cassettes

13-1

Clearing Jams

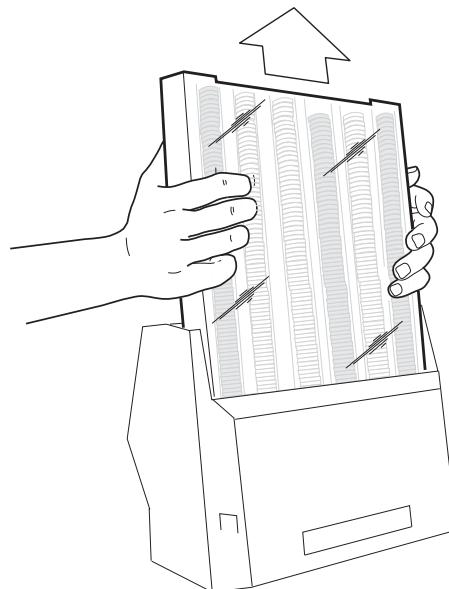
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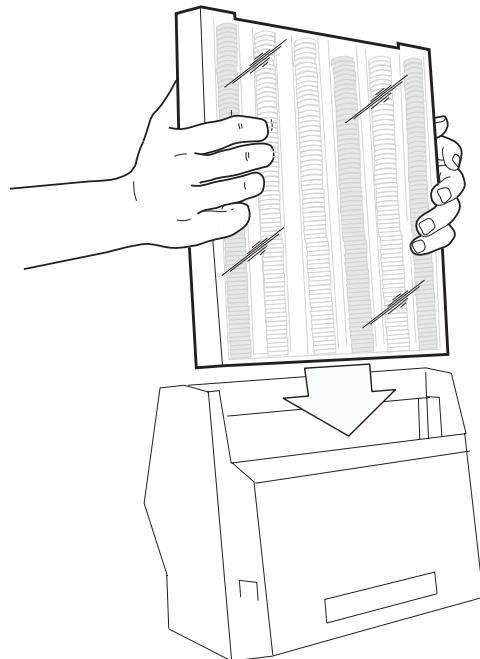
To replenish the coin dispenser proceed as follows

- 1 Open the coin dispenser door.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** option.
- 3 Access the coin dispenser as described in Chapter 1, 'Getting Started'.
- 4 Remove the empty coin cassette.



Coin Dispenser
Replenishing Coin Cassettes

- 5 Insert a new coin cassette. Care should be taken when handling a full coin cassette as it is quite heavy.



- 6 Push the coin dispenser back into the ATM.
- 7 Follow your in-house procedure for indicating that you have replenished the coin dispenser.
- 8 Close and lock the coin dispenser door.

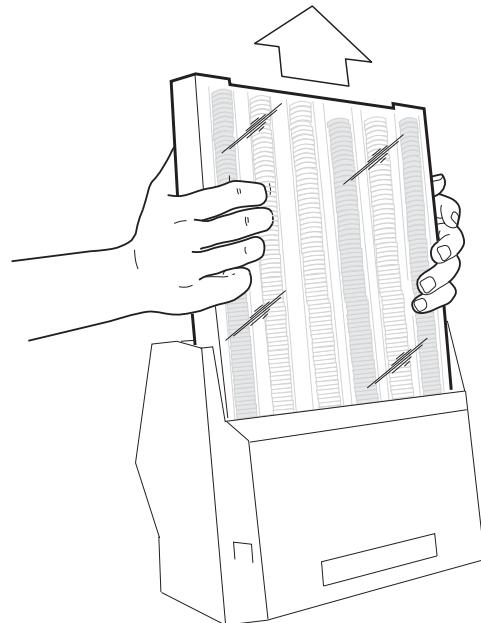
Clearing Jams

A jam in the coin dispenser module will be indicated by an error message, displayed on the operator interface.

To clear jams in the coin dispenser, proceed as follows:

- 1 Open the coin dispenser door.
- 2 If your terminal does not have the auto-supervisor option, press the switch on the operator panel to the **supervisor** option.
- 3 Access the coin dispenser as described in Chapter 1, ‘Getting Started’.
- 4 Remove the coin cassette.

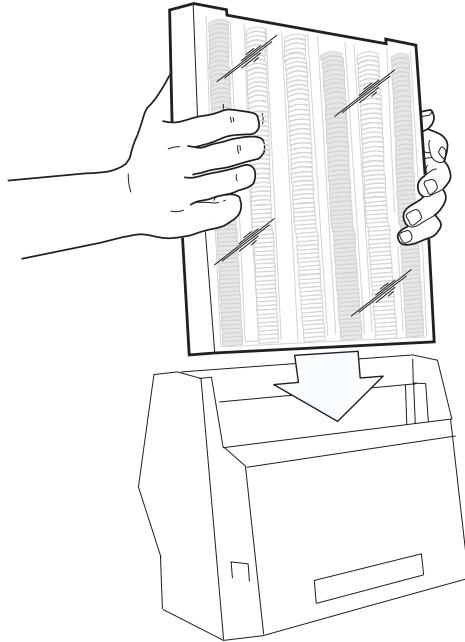
Note: Take care when removing the coin cassette not to damage any of the facia wiring.



- 5 Check for, and remove, any bent or mis-aligned coins in the cassette.
- 6 Check for any spills or foreign matter in the cassette. If necessary, clean the cassette with a soft, damp cloth.

7 Check for any foreign matter or jammed coins in the exit slot. Use a probe, such as an unsharpened pencil, to dislodge and remove any blockage.

8 Replace the coin cassette.



9 Push the coin dispenser back into the ATM.

10 Follow your in-house procedure for indicating that you have cleared a jam in the coin dispenser.

11 Close and lock the coin dispenser door.

Chapter 14

Cleaning and Maintenance

What is Required to Maintain an ATM?

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Cleaning and Maintenance

What is Required to Maintain an ATM?

NCR ATMs need very little maintenance after installation on your site.

The following daily activities are required, depending on configuration:

- Check that there are sufficient supplies in the ATM and perform replenishment activities as indicated in the section 'Replenishment' overleaf.

The following weekly activities are required, depending on configuration:

- Clean the facia and exterior panels
- Clean the magnetic heads on the motorised card reader
- Clean the magnetic heads on the dip card reader
- Clean the head on the enhanced page turn passbook printer
- Clean the sensors in the cash acceptor.

Replenishment

Consumable items in your ATM have to be replenished whenever required. The frequency of these replenishment activities depends on the ATM's use and typically, the error messaging system will provide guidance on when these activities are required.

The modules and consumables that must be replenished are listed below. Refer to the relevant module chapter in this operator manual for detailed instructions on how to replenish your ATM. Refer to the NCR publication *Consumable Items for Self Service, B006-4992* for details of consumables, specifications and ordering information.

Modules and Consumables

Receipt printer

- Graphics or dot-matrix paper roll
- Print head *
- Dot matrix ribbon cassette
- Paper knife *

Journal printer

- Graphics or dot-matrix paper roll
- Ribbon cassette
- Print head *

Statement printer

- Graphics or dot-matrix statement paper
- Print head *
- Paper knife *

Letter quality statement printer

- Statement paper
- Graphics or dot-matrix statement paper
- Paper knife *
- Print head *

Page turn passbook printer

- Ribbon cassette
- Print head *

Enhanced page turn passbook printer

- Ribbon cassette
- Cleaning sheet
- Print head *

Statement/passbook printer

- Paper
- Ribbon cassette
- Print head *
- Paper knife *

Programmable printing depository (PPD)

- Ink jet print head cartridge

Document processing module (DPM)

- Encoder ribbon
- Ink jet print head cartridge

Envelope depository

- Print head

Envelope dispenser

- Envelopes

Cheque acceptor (Type 1)

- Ink jet print head cartridge
- Black ink roller for endorser stamp
- Customised front rubber stamp

Cheque acceptor (Type 2)

- Ribbon cassette for single line endorser
- Ribbon cassette for multiple line endorser

Cheque acceptor (Type 3)

- Ribbon cassette for single line endorser
- Ribbon cassette for multiple line endorser

*** Note:** These consumable items should not need to be replaced in the life of the module. If you get an error message for these items, contact your local NCR representative.

The following modules also need to be checked routinely and replenished if required.

Coin dispenser

- Coins

Cash dispenser

- Cash
- Paper media (e.g. coupons)

Printer Media Storage

To get the best results from your printer, store spare paper supplies and ribbon cassettes in a cool, dry, dust-free place away from air vents or fans. Leave the articles in their original packing material until required for use.

Cleaning

NCR recommends that the areas/modules listed below are cleaned on a weekly basis.

- Facia and exterior panels
- Dip card reader - magnetic heads
- Motorised card reader - magnetic heads
- Enhanced page turn passbook printer - magnetic print heads
- Cash acceptor - sensors

Cleaning Materials

Cleaning materials are available from NCR Systemedia. Refer to the NCR publication *Consumable Items for Self Service, B006-4992* for contact and ordering details. You will need the following items:

- General surface cleaner
- Lint free cloth
- Card reader cleaning card, 10 sachets
- Canned/compressed air
- Cleaning sheet.

Facia and Exterior Panels

Clean the surfaces of the facia and exterior panels, using either a general surface cleaner or a dilute detergent solution (washing up liquid and warm water), as follows:

- Using a damp lint free cloth, clean the surface of the facia and exterior panels
- Using a dry lint free cloth, wipe down the surface of the facia and exterior panels.

Paint, grease or dirt can be removed by a light application of cotton wadding dampened with one of the following cleaning agents:

- Isopropyl alcohol
- Ethyl alcohol.

The surfaces should then be cleaned as previously directed.

Note: To preserve the appearance of your ATM, a non-abrasive car wax may be applied to the exterior surfaces of the facia.

When cleaning the exterior surfaces:

- Do not use an abrasive, acid, alkaline or chlorinated cleaner
- Do not scrape the surface with scouring pads, razor blades or similar implements
- Do not use any of the following cleaning agents:

- Benzene
- Petrol
- Acetone
- Carbon tetrachloride
- Paint stripper of any kind.

Keyboards vandalized by paint should not be cleaned. The keyboard should be replaced.

Dip Card Reader

To clean the heads you will require a cleaning card (NCR part number 998-0052929 or equivalent).

To clean the dip card reader heads, proceed as follows:

- 1 Open the exterior of the ATM.
- 2 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **Supervisor** position.
- 3 Follow your in-house procedures for instructions on how to run either the System Application or Supervisor Mode, depending on the System Software used.
- 4 Prepare the cleaning card according to the instructions enclosed with it.
- 5 Insert the cleaning card into the card reader with the cleaning face downwards. Remove the card from the reader. Repeat this action five times.
- 6 If your ATM does not have the auto-supervisor option, press the switch on the operator panel to the **Normal** position.
- 7 Close and lock the ATM.

Motorised Card Reader

If configured, refer to the motorised card reader chapter in your ATM manual for details of cleaning activities.

Enhanced Page Turn Passbook Printer

If configured, refer to The Enhanced Page Turn Passbook printer chapter in your ATM Manual for details of cleaning activities.

Cash Acceptor

If configured, refer to the cash acceptor chapter in your ATM manual for details of cleaning activities.

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