NAUTILUS HYOSUNG

Operator Manual
MX2600SE System

V01.00.00 (2015. 3. 4)

Revision History

| Operator Manual - MX2600SE System |

No.	Version	Date	Description of Change	Chapter
1	V01.00.00	2015/03/04	New Publication	All

Contents

Chapter1. Preface

Purpose

▶ This manual is produced to describe how the customers operate Nautilus Hyosung's MX2600SE.

This manual details how the customers replenish the notes and paper and how they remove the jam at the MX2600SE.

Audience

▶ Customers and staffs of Nautilus Hyosung who use and operate the MX2600SE in each branches of bank.

Support Information

▶ If any question or error occurs while operating MX2600SE in compliance with this manual, please contact maintenance staffs of Nautilus Hyosung.
For the contact of maintenance staffs of Nautilus Hyosung, see the E-mail addresses and telephone numbers provided separately.

What is in This Manual

▶ This manual is designed to provide the operation guide for the MX2600SE and the detailed description of the following:
  ▪ Replenishing the notes and the receipt paper
  ▪ Emptying the notes
  ▪ Removing the jam like the notes and the receipt paper

▶ All information described in this manual is a licensed product of Nautilus Hyosung.

Some of the information in this manual may differ according to the network processor to be connected and may be subsequently updated by the bank's needs or the improvement by Nautilus Hyosung.

It is the policy of Nautilus Hyosung to improve products as new technology, components, software, and firmware become available. Therefore Nautilus Hyosung reserves the right to change specifications without notice.

Terminologies

► In this document the terminology listed below is used as follows:
- ▪ Customer and consumer refer to any person who transacts business through the ATM.
- ▪ Device and unit refer to the standard and optional ATM equipment, such as monitor, card reader, printer and dispenser.
- ▪ Fascia refers to the entire front portion of the unit, including the portion where the customer transacts business.
- ▪ Module refers to a plug-in device that can be serviced or replaced.
- ▪ Note(s) and bill(s) refer to the individual documents loaded into and dispensed from the dispenser.
- ▪ Servicing and maintenance refer to the supervisor, operator and technician's tasks performed to keep the ATM operational.
- ▪ Screen refers to the text appearing on the customer display.

Abbreviations

► In this document the abbreviations listed below is used as follows:

#	Abbreviations	Description
1	AD board	Analog to Digital conversion Board
2	ADA	The American Disabilities Act
3	AP	Application Program
4	Assy	Assembly
5	BATT S/W	Battery Switch
6	CAM	Camera Unit
7	CDU	Cash Dispenser Unit
8	CE	Control Electronics
9	Earphone Jack	Voice Converter for Visually Disabled Persons (ADA)
10	EMV	Europay, Mastercard, Visa
11	EP	Elementary Program
12	EPP	Encryption PIN Pad
13	H/W	Hardware
14	I/F	Interface
15	ISO	International Standard Organization
16	JPR	Journal Printer
17	LCD	Liquid Crystal Display
18	MCU	Magnetic Card Unit
19	OPL	Operation Panel for Customers to Operate
20	OSD board	On Screen Display Board

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#	Abbreviations	Description
21	P/S	Power Supply
22	PIN	Personal Identification Number
23	PNC	Panel Control Board
24	PTR	Printer (mainly Receipt Printer)
25	S/W	Switch
26	SIU	Sensor and Indications Unit
27	SP	Service Provider
28	SPR	Slip Printer (Receipt Printer)
29	TTU	Text Terminal Unit (OPL or SPL)
30	VFD	Vacuum Fluorescent Display

Safety Precautions (English)

▶ Common Safety Precaution

Precautions outlined this manual provide information on safe and proper handling of the product. Non-compliance of the precautions may result in injury or damage to the product. This precaution symbol with sample term tells you safety warnings during equipment handlings.

▶ Please read the following instructions before operating equipment.
- ▪ Operate equipment in the order outlined in this manual.
- ▪ Follow precautions indicated in this manual, as well as the equipment itself. Failure to properly address these precautions may lead to injury or damage to the product.
- ▪ Avoid operations not addressed in this manual.
- ▪ If you cannot remedy system problems using the methods outlined in this manual, please refer to contact information listed in the manual.
- ▪ Any change or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

<Note!>
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

▶ Description of Precaution Symbols

Symbol	Description
	Electrical Shock Warning ▪ Do not remove cover. Only a maintenance engineer is allowed to open the cover. ▪ Do not touch. You may receive electric shock. ▪ Make sure to turn off the power when servicing the equipment.
	High Temperature Warning ▪ Do not touch the equipment when it is running. ▪ The equipment can get extremely hot and may cause a burn. ▪ Make sure to close the cover before running the equipment.

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	Use Precaution when Moving ▪ The equipment is heavy. Make sure at least 2 people lift or move the equipment. ▪ Do not attempt to move the equipment alone. You may be injured from dropping the heavy equipment.
	Fire Hazard ▪ Place the equipment in an area away from any combustible materials. ▪ The equipment may catch on fire from overheating or short circuit of the power supply unit.
	Disassembly Warnings ▪ Do not disassemble or modify the equipment unless you are a certified engineer. ▪ Contact the service center for maintenance, adjustments and repairs. ▪ Improper disassembly may cause fire or electrical shock.
	Collapse Precautions ▪ Do not place the equipment where the floor cannot sustain the weight of the equipment, or on slanted or unstable surface. ▪ Equipment may fall and cause injury or damage.
	Unplug the Equipment ▪ Stop using the equipment immediately if it smokes, emits an unusual smell, makes abnormal sounds, or if liquids or other foreign materials enter the equipment. ▪ If the above-mentioned abnormalities occur, immediately turn off the power, unplug the equipment and contact the service center. ▪ If you ignore these symptoms, the equipment may catch on fire or cause electric shock.

<CAUTION>
1. TO REDUCE THE RISK OF FIRE, USE ONLY No. 26 AWG OR LARGER TELECOMMUNICATION LINE CORD
2. RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSED OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS
3. FOR PLUGGABLE EQUIPMENT, THE SOCKET-OUTLET SHALL BE INSTALLED NEAR THE EQUIPMENT AN SHALL BE EASILY ACCESSIBLE
4. THE EQUIPMENT IS TO BE SECURED TO THE BUILDING STRUCTURE BEFORE OPERATION

Précautions pour la sécurité (French)

► Précaution générale pour la sécurité

Précautions décrits de ce manuel fournissent des informations sur une manipulation sûre et appropriée du produit. Le non-respect des précautions peut causer des blessures ou endommager le produit.

Ce symbole de précaution avec le terme d'example vous indique des consignes de sécurité lors de la manipulation de l'équipement.

► Veuillez lire des instructions suivantes avant d'utiliser l'équipement
  ▪ Fonctionner l'équipement dans l'ordre indiqué dans ce manuel.
  ▪ Suivre les précautions indiquées dans ce manuel, ainsi que l'équipement lui-même.
    Le défaut de traiter correctement de ces précautions peut entraîner des blessures ou endommager le produit.
  ▪ Évitez des opérations non traitées dans ce manuel.
  ▪ Si vous ne pouvez pas résoudre des problèmes du système en utilisant des méthodes décrites dans ce manuel, veuillez se référer aux informations de contact figurant dans le manuel, s'il vous plaît.
  ▪ Certain changement ou des modifications dans la construction de ce dispositif qui ne sont pas expressément approuvés par la partie responsable de la conformité pourraient annuler l'autorité de l'utilisateur de faire fonctionner l'équipement.

<REMAQUE!>

Cet équipement a été testé et fondé pour se conformer aux limites pour un équipement numérique de classe A, conformément à la partie 15 des règles FCC. Ces limites sont conçues pour fournir une protection raisonnable contre des interférences nuisibles lorsque l'équipement est utilisé dans un environnement commercial. Cet équipement génère, utilise et peut émettre des fréquences radios et, s'il n'est pas installé et utilisé conformément aux instructions de ce manuel, peut causer des interférences nuisibles aux communications radios.

Le fonctionnement de cet équipement dans une zone résidentielle est susceptible de provoquer des interférences nuisibles dans le cas, l'utilisateur devra corriger ces interférences à ses propres frais.

► Description des symboles de précaution

Symbole	Description
	Choc électrique • Ne pas retirer le couvercle. Seul le technicien d'entretien est autorisé à ouvrir le couvercle. • Ne pas toucher. Vous pouvez avoir un choc électrique. • Assurez-vous d'éteindre l'appareil lors de l'entretien de l'équipement.

	À haute temperature • Ne pas toucher l'équipement quand il est en marche. • L'équipement peut devenir extrêmement chaud et peut provoquer une brûlure. • Assurez-vous de fermer le couvercle avant de lancer l'équipement.
	Soyez prudent lors du déplacement • L'équipement est lourd. Assurez-vous d'au moins 2 personnes pour soulever ou déplacer l'équipement • N'essayez pas de déplacer l'équipement seul. Vous pouvez être blessés par la chute de l'équipement lourd.
	Risque d'incendie • Placer l'équipement dans une zone éloignée de tous les matériaux combustibles. • L'équipement peut s'enflammer de surchauffe ou de court-circuit de l'unité d'alimentation.
	Démontage • Ne pas démonter ou de modifier l'équipement, sauf si vous êtes ingénieur certifié. • Contacter le centre de service pour l'entretien, le réglage et la réparation. • Le mauvais démontage peut provoquer un incendie ou un choc électrique.
	Tomber • Ne pas placer l'équipement dont le sol ne peut pas supporter le poids de l'équipement, ou sur une surface inclinée ou instable. • L'équipement peut tomber et provoquer des blessures ou des dommages.
	Débrancher l'équipement • Cessez d'utiliser l'équipement immédiatement si il fume, émet une odeur inhabituelle, fait des bruits anormaux ou si des liquides ou d'autres matériaux étrangers dans l'équipement. • Si les anomalies mentionnées ci-dessus se produisent, éteignez immédiatement la puissance, débranchez l'appareil et contactez le centre de service. • Si vous ignorez ces symptômes, l'équipement peut prendre feu ou provoquer un choc électrique.

AVERTISSEMENT :
1. POUR RÉDUIRE LES RISQUES D'INCENDIE, UTILISEZ UNIQUEMENT AWG n ° 26 OU LA LIGNES DE TELECOMMUNICATION PLUS GROSSE
2. RISQUE D'EXPLOSION SI LA BATTERIE EST REMPLACEE PAR UN TYPE INCORRECT. DISPOSER POUR UTILISATION DES BATTRIES SELON LES INSTRUCTIONS
3. POUR LES APPAREILS RACCORDES, LA PRISE DOIT ETRE INSTALLEE PRES D'EQUIPEMENT POUR ÊTRE FACILEMENT ACCESSIBLE

4. L'EQUIPEMENT DOIT ETRE SECURISE A LA STRUCTURE DU BATIMENT AVANT D'UTILISER

Related Document

▶ The related documents are listed as follows. If needed, please contact staffs of our technical support team and maintenance team.

▪ Installation Manual
▪ Service Manual

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Chapter2. Introduction

About the MX2600SE

► Newly designed ATM - The MX2600SE's totally unique design enhances your customers' ATM experience. Unlike any other retail ATM, the sleek look and halo-like LED lights will attract more users and drive additional transactions thus delivering more revenue to your bottom line.

► Convenience everyone can enjoy - The MX2600SE provides unsurpassed convenience to all users with its intuitive user interface presented on a vivid 10.1" LCD screen, LED indicator for the pin pad and Braille for visually impaired users.
The MX2600SE combines the best of Nautilus Hyosung's innovative design and engineering capabilities to ensure the speed and convenience your customers will love.

► Maximum Reliability - Leveraging our extensive experience in the Retail ATM industry, Nautilus Hyosung continues its industry-leading reputation for reliability and ease of service. The MX2600SE incorporates proven cash dispensing technology widely regarded as the best in the industry. Ease of maintenance and simplified service also ensure maximum availability and uptime with minimal operational intervention.

► Green Technology - With leadership also comes responsibility. The MX2600SE is equipped with energy saving features long lasting ATM parts designed to minimize environmental impact. Users can also be presented the choice of no receipt or to display an encoded digital receipt on the screen to minimize paper use.

The Exterior Overview

▶ The following picture shows the front of MX2600SE and key units.

The fascia provides the interface between the customer and MX2600SE.
The customer selects transactions and requests information at the fascia.

Customer
Display

Function Keys

Receipt
Printer Slot

Card
Reader Slot
(Dip Type)

Encryption
Pin Pad

Headphone
Jack

Cash
Dispenser

Basic Features

▶ Major features of MX2600SE are highlighted in the following list:

Main Controller			
CPU		S5PC100 834MHz	
Memory		SDRAM 256MB	
		Flash 256MB	
Operating System		WinCE 6.0	
USB Ports		USB 1.1 Port 1EA	Option : Extended 4-Ports
Serial Ports		8 Ports	
VGA		On-Board	LVDS / TTL I/F
Communication		MODEM & TCP/IP Selectable	
Customer Display			
Display	Type	10.1" wide TFT LCD(1024*600)	
	Brightness	200 cd/m² (LED BU)	
Privacy Filter		N/A	Option
Guide Light	Flicker LED	MCU/EPP/EPP2	
Signage		LED Inner Signage (ATM)	
Customer Input Method			
PIN Pad		EPP 8000M (PCI3.0 Compliant)	
Function Key		4 x 2 NDC	F-KEY Model Option
Cash Dispenser			
Number of cassettes		Max. 3-Cassettes	
Maximum Dispense		40 Notes/1transaction	
Cassette Capacity		Max. 2,000 notes per cassette	MIN ; 1K / MAX : 2K
Reject Type		Note by Note Reject (200 bills Max)	
Card Reader			
Type		EMV DIP Type	
Magnetic Stripe		ISO 1,2,3 Read	
IC card		Support	
Receipt Printer			
Printing Type		Thermal Line Printing	
Paper Specification	Type	Thermal Roll Paper	
	Width	Max. 80mm	
	Outer Diameter	Max. 180Φ	
Black Mark Paper		Support	

Paper Setting Method		Semi-Automatic	
Journal			
Electronic Journal		Support	
Safety			
Safety		UL291 Business Hour Safety	
Locking device		E- Lock	Cencon Lock Option
Safety Spec.	Safety Body	Steel Thickness : 2.0t	
	Safety Bottom	Steel Thickness : 3.0t	
	Safety Door	Steel Thickness : 3.0t	
System Key		Common key	
Additional Function			
Audio guidance		Support	-
ADA Volume Control		Support	Through EPP Pin
RF		Vivopay Kiosk-II RF Option	
Camera		CCD Option	
Power Supply			
Main Power Supply		100W Free Voltage (90~264VAC)	
Battery		-	Option

<Note!>

Your MX2600SE may not contain all the devices described in this section. Some devices are optional and some devices cannot be used in combination with other devices (mutually exclusive combinations).

Devices of MX2600SE

Customer Display & Keypad

► The customer display welcomes the customer and provides instructions for performing transactions at ATM.

During the transaction sequence, ATM prompts the customer to use the customer keypad to enter transaction information. The 16-key keypad uses a security module and encryption PIN pad technology to secure the information entered by the customer at the keypad.

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

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Basic Specification of Customer Display
▪ 10.1" wide TFT LCD(1024*600) Type Display
▪ 200 cd/m² (LED BU) Brightness
▪ 4 x 2 NDC Function Key
  (F-KEY Model Option)

Basic Specification of Pin-Pad
▪ EPP 8000M
  (PCI3.0 Compliant)

Cash Dispenser Unit

▶ The cash dispenser delivers media (cash) to the cardholder after the cardholder's request is processed by the network and the software. The media is drawn from the cassettes and transported to a slot in the fascia of ATM, where the cardholder can receive it. If the media is too mutilated or wrinkled to dispense, or if a multiple pick occurs, the dispenser sends the notes to the reject bin.

Basic Specification of Cash Dispenser Unit
▪ Number of cassettes: Max. 3-Cassettes
▪ Maximum Dispense: 40 Notes/1transaction
▪ Cassette Capacity: Max. 2,000 notes per cassette
                              (MIN ; 1K / MAX : 2K)
▪ Reject Type: Note by Note Reject (200 bills Max)

<CDU 1K>

<CDU 2K>

<CDU 4K>

<CDU 6K>

<Drawer Type CDU>

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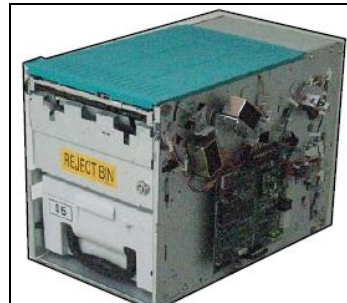
Receipt Printer

▶ The receipt printer provides a printed receipt of the customer's transaction.
The transaction information can include the amount, ATM number, location and other desired information.

Basic Specification of Receipt Printer
▪ Printing Type: Thermal Line Printing
▪ Paper Specification:
 - Type: Thermal Roll Paper
 - Width: Max. 80mm
 - Outer Diameter: Max. 180Φ
▪ Black Mark Paper: Support
▪ Paper Setting Method: Semi-Automatic

Card Reader

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

<u>**Basic Specification of Magnetic Card Reader**</u>
▪ DIP Type card reader

Main Control Board

▶ This motherboard is applied to MX2600SE.

Basic Specification of Control Electronics

- CPU: S5PC100 834MHz
- Memory: SDRAM 256MB
          Flash 256MB
- Operating System: Win_CE 6.0
- USB Ports: USB 1.1 Port 1EA
          (Option : Extended 4-Ports)
- Serial Ports: 8-Ports
- VGA: On-Board
          (LVDS / TTL I/F)
- Communication: Modem & TCP/IP Selectable
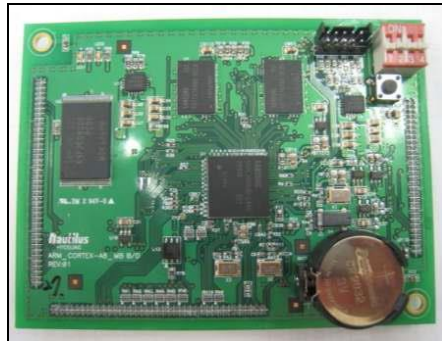
Chapter3. For the beginning operator

Opening the Exterior Door

Upper Front Body Opening

▶ Opening Upper Front Body

1. Open the Upper Front Body with key as the picture below.

Security Enclosure Opening

▶ Open the Security Enclosure as follows
1. Open the security cover with key.

2. Unlock the E-lock referring to "Opening/Closing the Security Enclosure"
3. Turn the security door handle counterclockwise, and then pull the security door to open it.

4. Use the reverse order of above description to close the security cover and door.

Switching Power On/Off

Switching Power On

▶ The power supply unit allows the user to turn on/off the system, enter power-failure
mode, and perform other sequences.

    1. The system turning-on process is as follows
    2. Open the upper front body
    3. Press the power switch ("I").
    4. The system will be turn on automatically

Switching Power Off

▶ The system turning-off process is as follows
　　1. Open the upper front body
　　2. Press the power switch ("O")
　　3. The system will be shut down automatically
　　4. The operating system will shut down then power will turn off.

Opening/Closing the Security Enclosure (Security Door)

Electronic Lock

► Opening Electronic Lock
1. The default combination for Electronic Lock is 1-2-3-4-5-6. Enter this sequence on the electronic lock keypad. The lock will confirm a valid combination entry with a double signal. Lock will signal three (3) times for invalid combination entry.
2. Turn the vault door handle counterclockwise. The vault door will open.

► Wrong Try Penalty
1. Entry of four (4) consecutive invalid combinations starts a five (5) minute delay period.
   ▪ LED lashed red at ten (10) second intervals.
2. At the end of the delay period, two (2) more consecutive invalid combinations will restart the additional five (5) minute delay period.

   <Note!>
   Entry will not respond to keystrokes during delay period.

► How to change the electronic lock combination
   Always perform this operation with the door open.
1. Enter **0-0-0-0-0-0**, six (6) zeros, into the Electronic Lock keypad.
2. Enter in the old combination once.
3. Enter in the new combination twice.   Combinations must be six digits in length.
4. If a mistake is made wait thirty (30) seconds and repeat steps 1-3.
5. Test lock operation several times before closing the door.

   <CAUTION>
   When selecting a combination do not use birthday or other predictable data that could give correlation between the user and combination.

   <Note!>
   The Electronic Lock will signal three (3) times if the new combination is invalid and the old combination has been retained.

► Battery Low Warning
1. Repeated LED flashing and beeping during an opening indicates that the battery is low and needs immediate replacement.
2. Uses one (1) 9-Volt alkaline battery only. (Example: Duracell™ or Eveready™ alkaline batteries.) The replacement of batteries at least once annually is recommended.

   <Note!>
   If battery is depleted and will not allow lock to open, follow instructions below.

Lock contains a non-volatile memory, even with batteries removed the lock will retain all programming.

► Changing Your Battery
1. Slide the keypad housing up and carefully pull away from mounting surface to expose battery compartment.
2. Remove the old 9-Volt alkaline battery.
3. Remove the connector by unsnapping it from the two terminals on the top of the battery.
4. Replace with NEW 9-Volt alkaline battery.

<CAUTION>
Hold onto battery terminal connector to avoid pulling the wires out of housing

5. Carefully position the keypad over the mounting screws and slide the keypad Housing down. Ensure there are no wires or cables trapped between the input pad and the safe door. Pinched cables can result in a short circuit.

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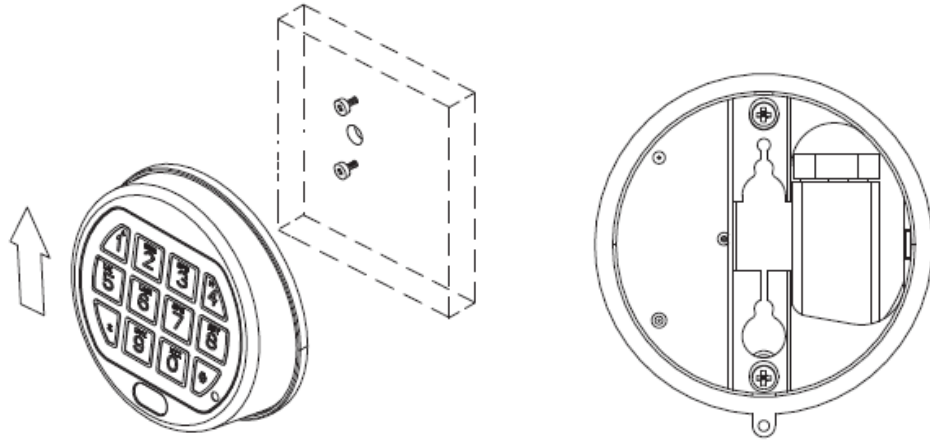
Cencon Lock (Option)

▶ **Security Door with Cencon**

The Cencon lock is highly-secured, advanced-design lock. Even though the lock is electromechanical, they require no wiring or batteries for opening the lock because they are self-powered. Power is generated by turning the dial knob on the lock to the left (counter-clockwise). After several turns of the knob, enough power is generated to allow the microprocessor in the lock to function.

▶ **Opening and closing the Security Door**

Each Cencon Lock is shipped from the factory in Shelved Mode. The One Time Combination feature which requires a Smart Key is not available when the lock is shelved. Instead, the Shelved Mode combination is used to open the lock without any Smart Key. The default Factory Combination is set to 50-25-50. Practice opening the lock in shelved mode with the default factory combination until you are comfortable with its operation. The default combination may be changed, in which case the new combination would be used to open the lock while in Shelved Mode. The correct opening procedure for a shelved lock in:

1. Turn the dial to the left (CCW), using full wrist turns, until the letters "EC" (Enter Combination) appear on the LCD.

<Note!>
If you are operating a Cencon lock and **–dL** appears on the display during an operation, it indicates that you should **d**ial **L**eft (Counter Clockwise). The purpose is both to give the lock additional power and to ensure the lock bolt is fully extended.
CW = Clockwise; CCW = Counter Clockwise

2. Enter the factory combination of 50-25-50 by sequentially pressing those six buttons. The LCD will display the entered number.

3. When the combination has been correctly entered, the LCD will read "OPr" meaning "Open right."

4. Turn the dial right (CW) until it stops. The lock's bolt is now retracted and the lock is open.

5. Turn the handle to the left (CCW) and open the security door.

6. Turn the dial a minimum of one complete rotation to the left (CCW) to extent the bolt.

<Note!>
After opening and closing any lock, you should always check to ensure that the lock is physically relocked (i.e., bolt fully extended and locked in place) by turning the dial to the right. If the bolt does not retract, you can be assured the lock is secured.

Helpful Hint:
At any point while entering the combination during an opening sequence, if you notice that an incorrect number was pressed on the keypad, you may clear the entire operation and start again by pressing the star (*) key. This allows you to

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return to the EC prompt without getting a wrong try error (lightning bolt).

Caution - Lock Out (LCO):
When the combination is incorrectly entered, a lightning bolt error will flash on the display (with no other numbers following it). To clear this error and start again, press and hold the star (*) key. Even in Shelved Mode, it is important to avoid getting 5 wrong combination attempts in a row without a successful opening in between because the lock will be put into Lock-Out condition, displaying, "LCO." Clearing the LCO condition in Shelved Mode requires waiting 5 minutes and then entering the correct combination.

▶ Changing Shelved Mode Combination
For Cencon Locks with a code level of 71[1], or greater, you may change the Shelved Mode combination. You may change the default Factory Combination of 50-25-50 to a new combination to be used while the lock is still in Shelved Mode. Once you have changed the combination for the first time, you may want to change the combination again to a different Shelved Mode combination. You can even change it back to the Factory combination of 50-25-50.

This is an option that is only available while the lock is in Shelved Mode and is intended only for temporary use after the ATM is deployed but before the lock is activated. It is not recommended to keep the Cencon lock in this Shelved Mode condition, due to lack of security and control.

Required Items:
Change Key, Current Shelved Mode Combination

<Note!>
You can only change the Shelved Mode combination while operating in Shelved Mode. Once a lock is "activated" in any mode, the Shelved Mode combination returns to the Factory Default of 50-25-50

To change the Shelved Mode Combination:

1. Power Lock → EC
   Turn the Dial to the left (CCW) until "EC" (Enter Combination) is displayed.

2. EC → Enter Shelved Mode Combination → OPr
   Enter the current Shelved Mode combination (either 50-25-50 or a changed Shelved

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[1] It is sometimes necessary to determine the level of the Cencon Lock with which you are working. This can be done by entering a command via the keypad. The lock level will then be displayed on the LCD. Use the following procedure:
1) Power the lock by turning the dial to the left (counter clockwise) until EC is displayed.
2) Enter the # 1 keypad command. Then the lock displays a string of characters on the LCD, displaying two characters at a time. The best thing to do in analyzing the lock level is to write down the entire string and then pick out the portions of it that are significant to you, or if you are experiencing a problem with the lock, report the entire string to the Tech Support group.

Mode combination) by sequentially pressing those digits on the lock keypad. The numbers will be displayed on the LCD as they are entered. When the combination has been correctly entered, the LCD will read **OPr**, meaning "**OP**en **r**ight."

3. OPr → Retract Bolt
   Turn the Dial to the right (CW) to retract the bolt

4. Open Door

5. Insert Change Key
   Insert the change key into the change key socket on the back of the lock.

   WARNING:
   Do not close the door.
   Leave the door open during this process until your are comfortable opening the lock with the new combination.

6. Extend Bolt
   Turn the Dial to the left (CCW) to extend the bolt.

7. Power Lock → [tEC]

   Turn the dial to the left (CCW) until [tEC] (the Change Key symbol along with Enter Combination) is displayed.

8. [tEC] → Press #8 → EcF
   Press the "#" button followed by the "8" button. EcF (Enter current Factory combination) will be displayed

9. EcF → Enter Current Shelved Mode Combination → EnF
   Enter the current shelved mode combination, "EnF" (Enter new Factory combination) will be displayed.

10. EnF → Enter New Combination → Cnf
    Select and enter the new combination. "CnF" (confirm new Factory combination) will be displayed

11. Cnf → Enter New Combination → POC
    Enter new combination again to confirm. POC (Pull Out Change key) will be displayed.

    WARNING:
    Record the new combination and store it in a secure place. If this combination is lost or forgotten, there is no alternate way to open the lock.

12. POC → Remove Change Key → EOP
    Remove the change key. EOP (End Operation) is displayed.

13. EOP → Power Lock → EC
    Turn the dial to the left (CCW) until EC (Enter Combination) is displayed.

14. EC → Enter New Shelved Mode Combination → OPr
    Enter the new shelved mode combination by pressing those digits on the lock's keypad. The numbers will be displayed on the LCD as they are entered. When the combination has been correctly entered, the LCD will read OPr, meaning "**OP**en **r**ight."

15. OPr → Retract Bolt
    Turn the Dial to the right (CW) to retract the bolt.

16. Close Door

17. Extend Bolt
    Turn the Dial to the left (CCW) to extend the bolt.

Chapter4. Cash Dispenser

Bill Conditions

▶ **Acceptable condition**

1. Bill which is very clean and can readily be recognized as a true bill

2. Bill has sufficient life or sizing to be handled easily

3. Bill which can be manually held straightly when one end is held by a hand and the bill is slightly curved vertically
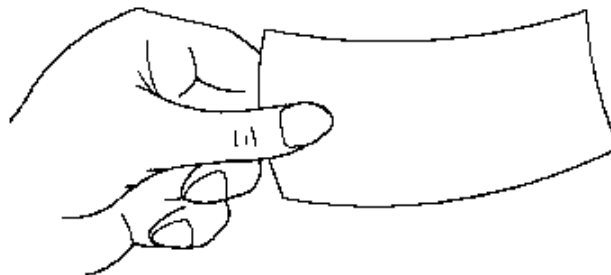
▶ **Unacceptable condition**

    1. Bill having serious wrinkles, torn or broken section wherein paper fiber is broken and separation begins.

      ✓   Wrinkle

Wrinkle

      ✓   Torn

Torn

      ✓   Broken section

Broken Section

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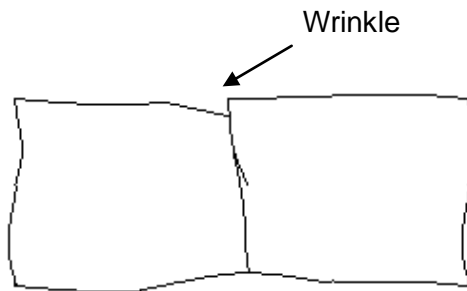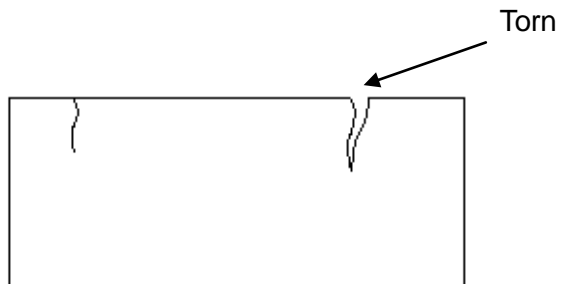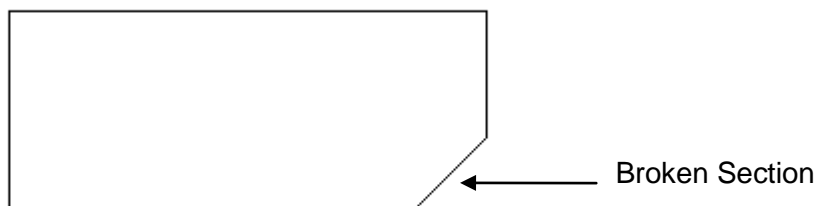
2. Bill having adequate life or sizing, but stained seriously

Stained
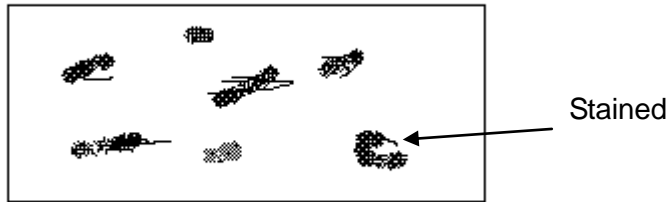
3. Bill with holes (Perforated bill)

Hole
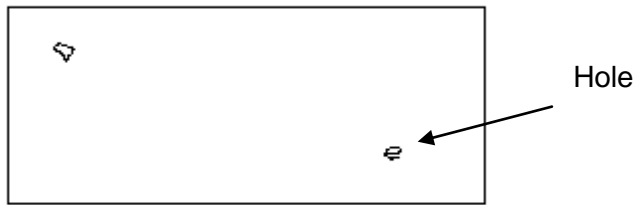
4. Bill ragged and cannot be held straightly when one end is supported by a hand

20mm [0.79inch]
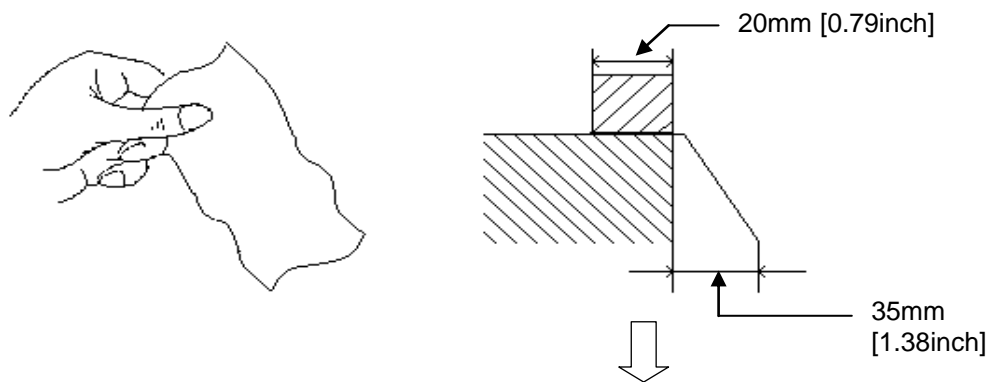
35mm
[1.38inch]

When the bill is held by 20mm [0.79inch] and the straightness
of the bill is 35mm [1.38inch] or less, it cannot be used

5. Bill with cellophane tape, scotch tape, etc

Tape
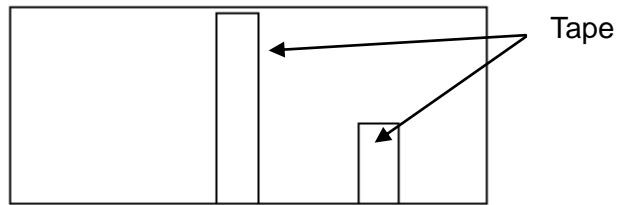
6. Bill with folds
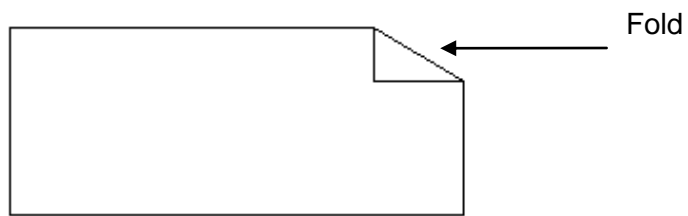
Fold

7. Gradually curved bill (bills tied by hand seal, etc)

Band
seal
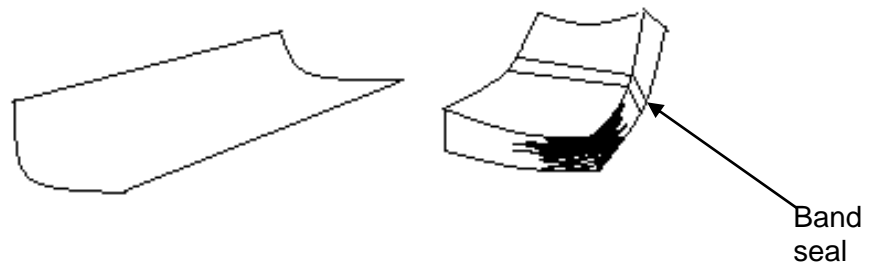
8. Bill with folded lines

✓ Case 1

✓ Case 2

✓ Case 3
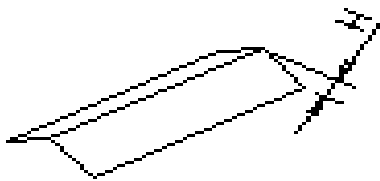
☞ Bill distortion should not exceed 10 mm [0.39inch]

▶ **Prior to replenishing the cash cassette with the notes,**

1. Fan the notes so that the notes are not sticking together.
2. Remove all notes with holes or notes that are torn.
3. Unfold the folded notes.
4. Place the notes correctly.

SIDE VIEW   PLAN VIEW   NOTE FEED DIRECTION

INCORRECT LOADING   CORRECT LOADING
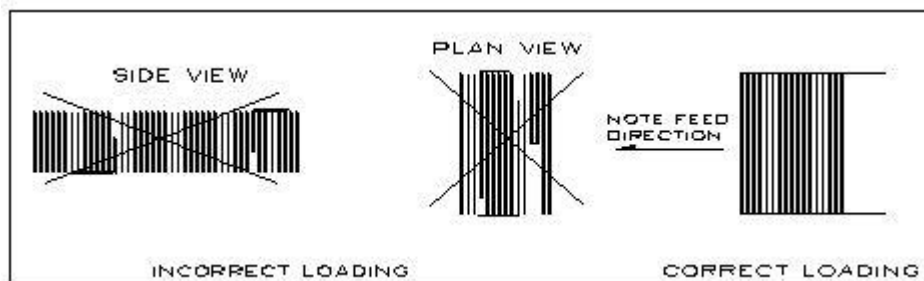
How to Replenish the Cash Cassette

1. Open the Security Cover and Door.

2. With one hand holding the cash cassette handle and the other hand supporting the cash cassette from the bottom, pull it out carefully.

3. Place the cash cassette on a flat level platform and turn the cassette key clockwise to unlock the cassette cover. Then lift the cassette cover.


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4. Pull the cash plate back until it is locked against the cash plate latch. And then, replenish the cash cassette.
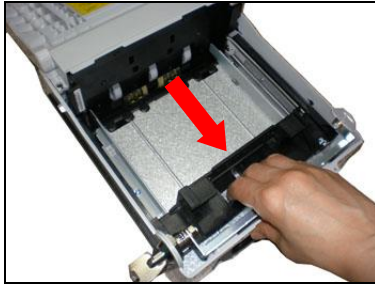
5. After replenishing the cash cassette, release the cash plate from the cash plate latch and allow it gradually to take up its position behind the notes.
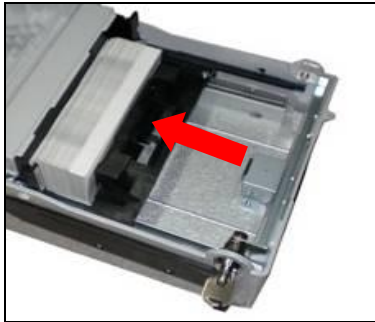
6. After closing the cassette cover, turn the key counterclockwise

7. With one hand holding the cash cassette handle and the other hand supporting the cash cassette from the bottom, place the cash cassette carefully on the set guide of the Cash Dispensing Unit and push it in until it is locked in place.

8. And then close the security door.

How to Empty the Reject Bin

1. Open the reject bin cover.
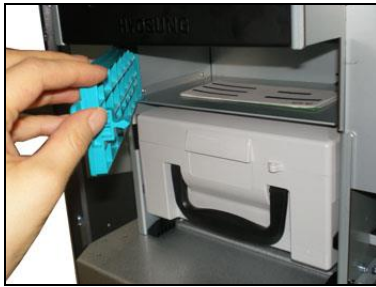
2. Remove the notes in the reject bin and close the reject bin cover.

[PRECAUTION!]
Don't recycle any bill in reject box into cassette.
Doing so will cause not only the same reject problem, but other unexpected problems such as note jam on cash dispenser

How to Clear Jam

1. Turn power off first.
   Pull the rail on the bottom of the cash dispenser outward.
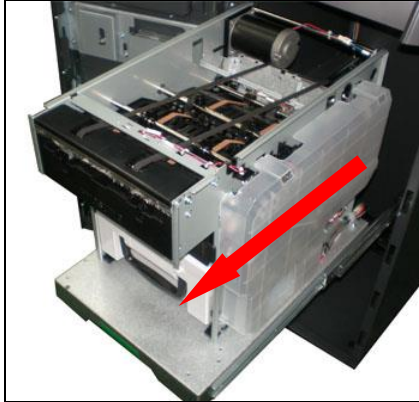
2. Move the belt in order to move jammed note into a well removed position
3. Take out the jammed note carefully.
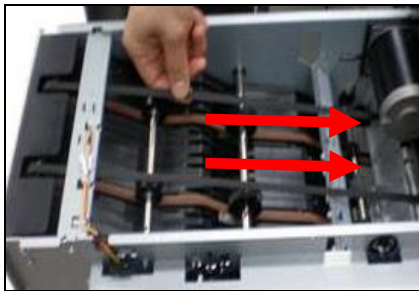
[WARNING!]
If the belt is detached from the Roller, the lifespan of the belt can be dramatically reduced which can result in breakage. Therefore, it is extremely important to check if the belt is positioned correctly after removing the jammed bills.

Optional Cash Dispenser with 2K cassette

How to Replenish the Cash Cassette

1. With one hand holding the cassette handle and the other hand supporting the cash cassette from bottom, pull it up and out carefully.

2. Place the cash cassette on a flat level platform and turn the cassette key clockwise to unlock the cassette cover. Then lift the cassette cover.

3. Pull the cash plate back until it is locked against the cash plate latch.
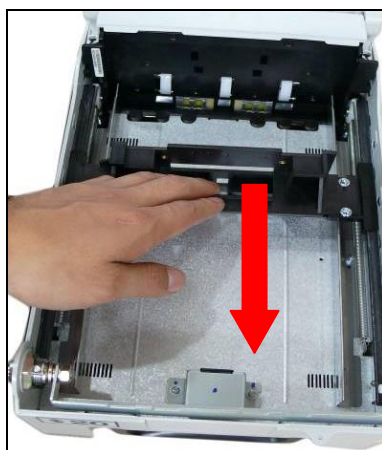
[PRECAUTION!]
Be careful not to hurt your hands when the black push-plate fails to get locked and suddenly recovers its positions

4. Replenish the cassette (Take note as below)
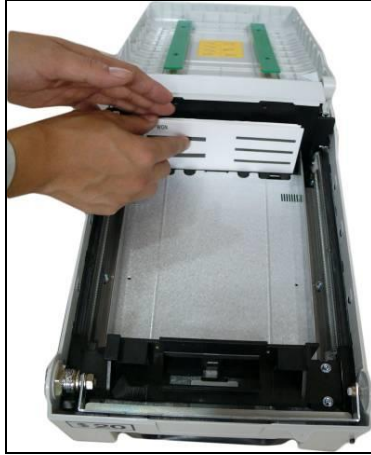
[PRECAUTION!]
Don't replenish more cash than recommended capacity. It means that it should be replenished less than 2,000 bills per cassette for new bills. Make sure that Cash Low Bracket in cassette will not be extruded outside cassette after replenishing cash.

5. Unlock the cash plate by pulling it again and move it smoothly.
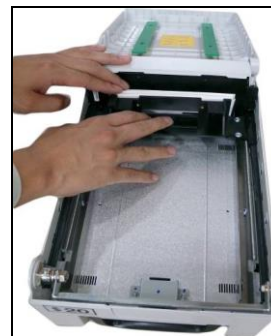
6. Close the cassette cover and turn the cassette key counterclockwise until it is locked. Remove the key when it is locked.

7. With one hand holding the cassette handle and the other hand supporting the cassette from the bottom, place the cassette carefully on the set guide of the CDU and push it in until it is locked in place.

How to Empty the Reject Bin

1. Insert the reject box key, turn it clockwise.
2. Open the lid of reject box.

3. Take bills from the reject box and close the box with key.

[PRECAUTION!]
Don't recycle any bill in reject box into cassette. Doing so will cause not only the same reject problem, but other unexpected problems such as note jams on cash dispenser

How to Clear Jam

1. Turn power off first and pull the rail of CDU outward while pressing the green button on the CDU.
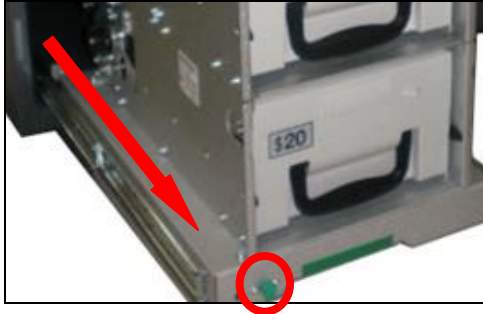
2. Turn the pulley located in left upper in order to move jammed note into a well removed position.
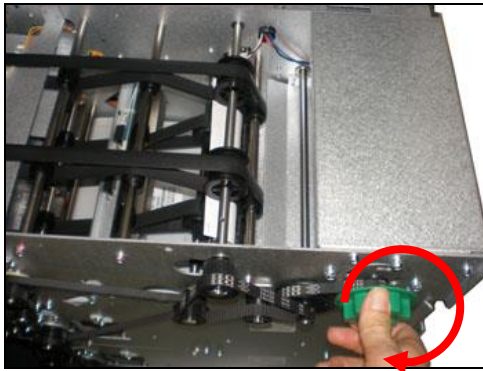
3. Take out the jammed note carefully.
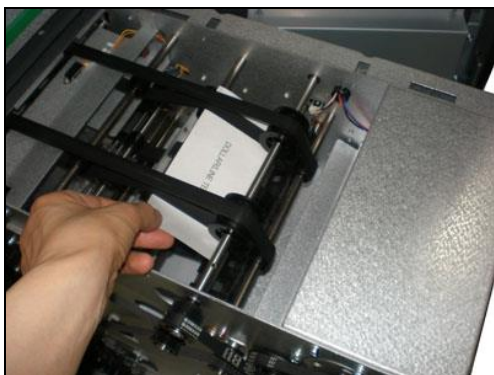
4. Remove the cash cassettes to check whether there is any jammed note inside of CDU body. If so, remove the jammed note from it.

[WARNING!]
If the belt is detached from the Roller, the lifespan of the belt can be dramatically reduced which can result in breakage. Therefore, it is extremely important to check if the belt is positioned correctly after removing the jammed bills.

Optional Cash Dispenser – Drawer Type

Replenishing cash to the cassette

1. Push the green unlocking latch on the left side of cassette handle with finger in order to pull out cash cassette drawer.

2. Pull the cash cassette drawer out carefully.
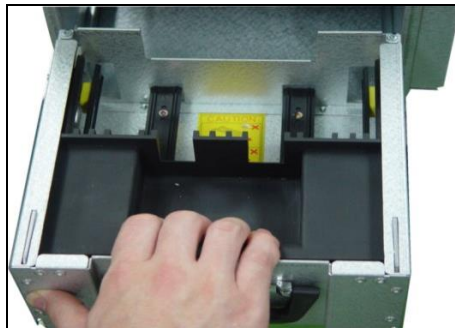
3. Pull the cash plate back until it is locked against the cash plate latch. And then add cash into the cassette.
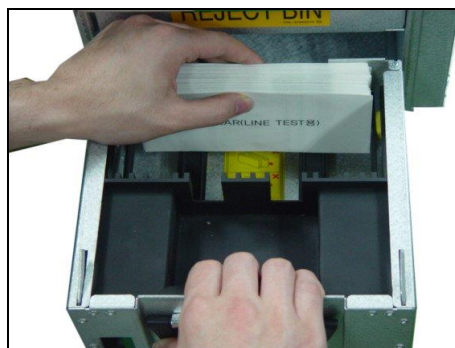

<Note!> TIPS ABOUT ADDING BILLS:
1. Fan the notes so that the notes do not stick together.
2. Remove all notes with holes or notes that are torn.
3. Unfold the folded notes.
4. Place the notes correctly.
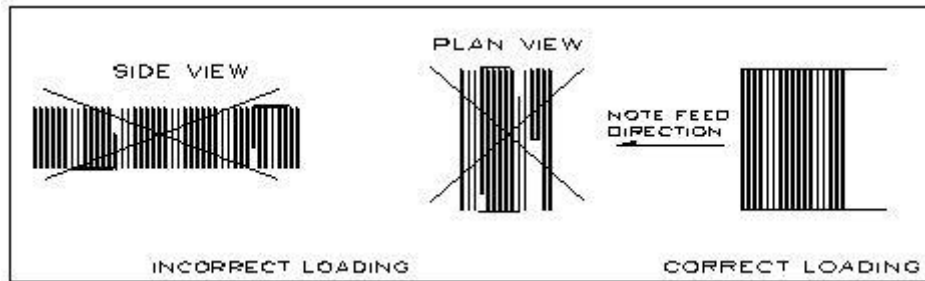
4. After replenishing the cash cassette, release the cash plate latch and allow the cash plate gradually to take up its position behind the notes. And then push the cash drawer until it latches closed.
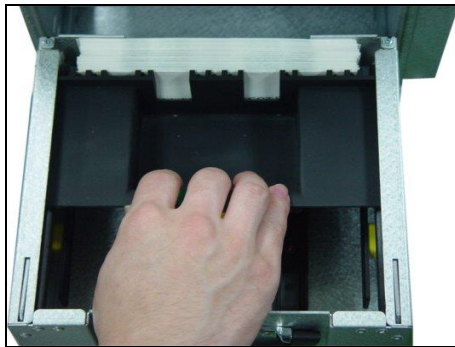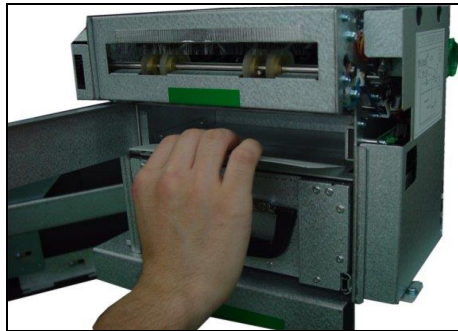
Emptying the Reject Bin

1. Open the reject bin cover by pulling on the green tab located on the right of the reject bin.

2. Remove any notes inside the reject bin.

3. Close the reject bin cover by pressing it closed until it locks in place

⚠️ **WARNING :**
Do not recycle rejected bills into a cassette.
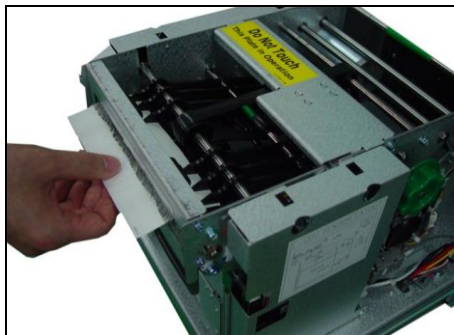Doing so could cause more rejects or jams

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How to Clear Note Jams

    1. Pull out the green tab on the bottom rail of the cash dispenser slowly.

    2. Turn the green knob located on upper right of cash dispenser in order to move jamming notes into a well removed position

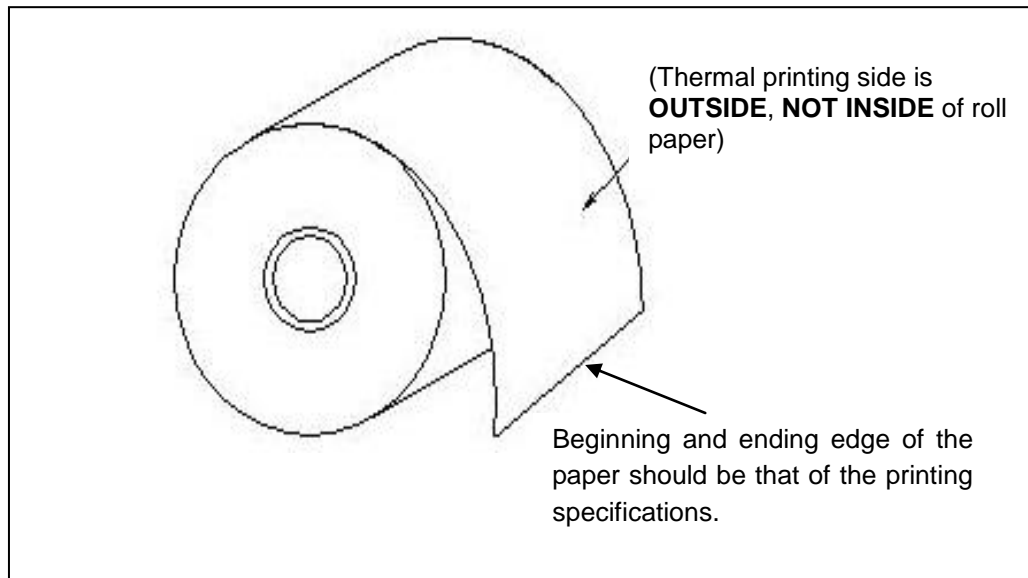
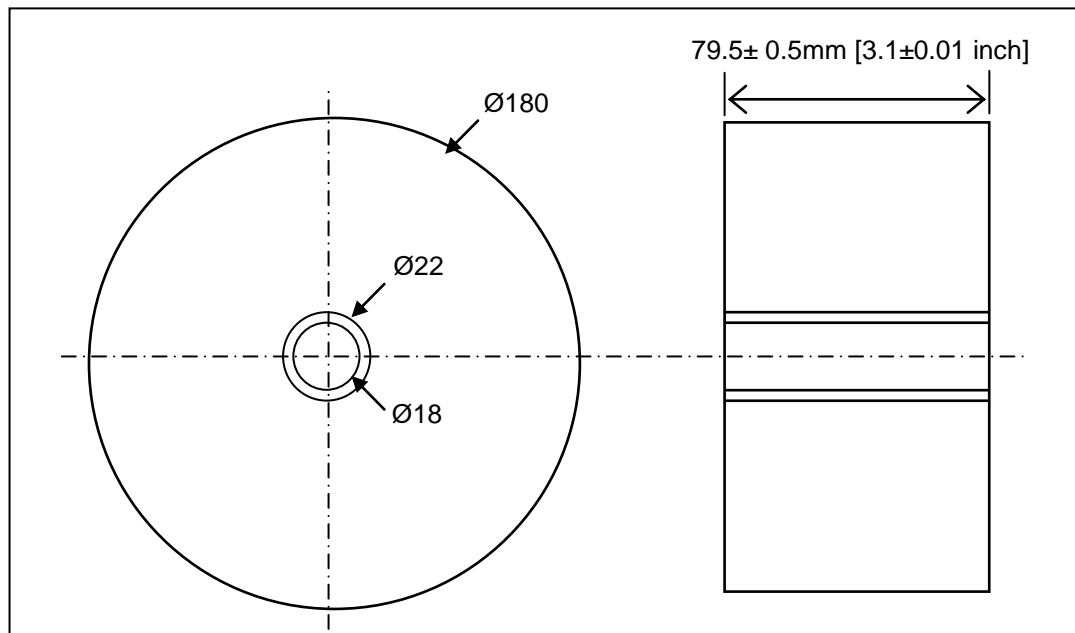   3. Take out the jamming notes carefully.

Chapter5. Receipt Printer

Receipt Paper

▶ <u>**Specifications**</u>

Item	Specifications	Remark
Paper Type	Thermal Roll Paper	Paper detects heat.
Paper Width	79.5±0.5mm	
Paper Exterior	Ø180	
Paper basis Weight	55±3 g/m^2	
Paper Thickness	58±4 μm	
Print Color	Black	
Type of Paper Setting	Semi-Auto loading	

▶ <u>**Roll appearance**</u>

(Thermal printing side is **OUTSIDE**, **NOT INSIDE** of roll paper)

Beginning and ending edge of the paper should be that of the printing specifications.

79.5± 0.5mm [3.1±0.01 inch]

Ø180

Ø22

Ø18

▶ **Paper Handling Precautions**

1. Store it away from high temperature and humidity:
   If the paper is stored in a place where temperature is above 50℃ [122℉] or humidity is above 90% RH, the coloring capability may deteriorate or the paper surface may inflate.
2. Refrain from exposing to direct sunlight:
   The paper surface can be inflated if you expose it to direct sunlight or leave it under the fluorescent lamp for a long time.
3. Keep it away form the organic solvents:
   Paper color may change if the paper comes in contact with organic solvents or glues containing organic solvent.
4. Keep it away from plastics:
   If the paper comes in contact with materials containing plastics, its coloring capability may deteriorate or de-coloring of the paper may occur.
5. Store the paper roll separately to prevent damage to the paper.
6. Do not connect the papers with tape.
7. Make sure the paper end is not attached to the paper pipe.
8. Make sure the paper is rolled evenly.
9. Miscellaneous:
   If the paper comes in contact with carbon copy paper or if the paper surface is scratched with a metallic object, de-coloring may occur.

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How to load the receipt paper

▶ Prior to loading the receipt paper, the following must be kept in mind.

<Note!>
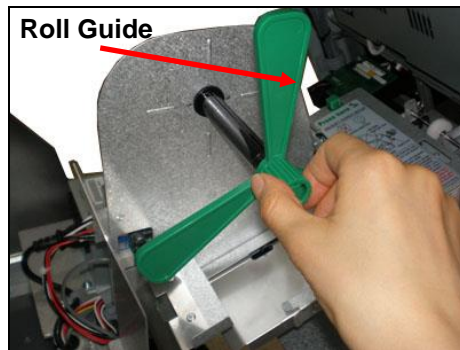1) Load a paper roll into the unit with the shape of the roll kept intact. (Deformed roll may cause jamming.)
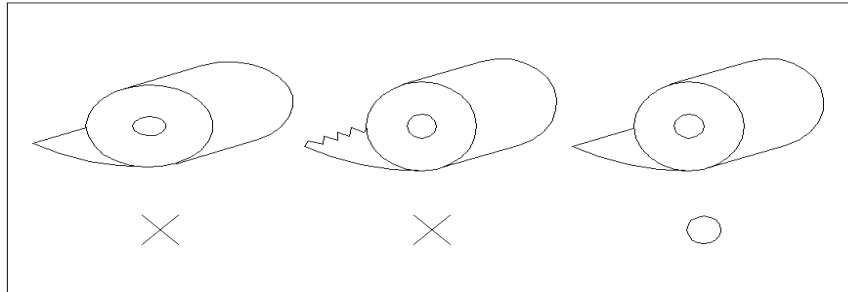
2) The leading edge of the roll shall neatly be cut prior to loading the roll. Correct shape of the paper roll

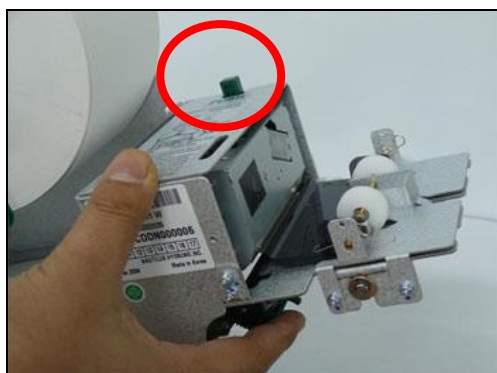1. Open the upper front body with key as the picture below.

5-3

2. Remove the roll guide by carefully pulling it off.

Roll Guide

3. Add the receipt paper into the rod and then insert the roll guide tightly again to fix it.
4. The shiny side of the paper should be faced up to be printed properly and the metallic tension guide should be surrounded with paper to reduce the tension during feeding.
5. Insert the leading edge of paper between lower guide and upper guide of the receipt printer slowly.   When the machine is initialized, the paper is going to start feeding.

Roll Guide

Upper Guide

Lower Guide
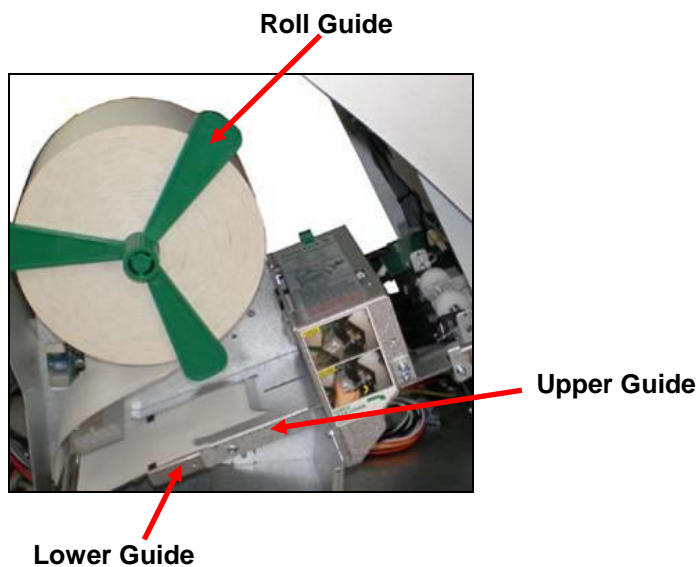
6. If the paper does not feed at all during initializing, make sure that paper has a CLEAN CUT at the end and the Thermal Print Head (TPH) is closed as shown in left picture.
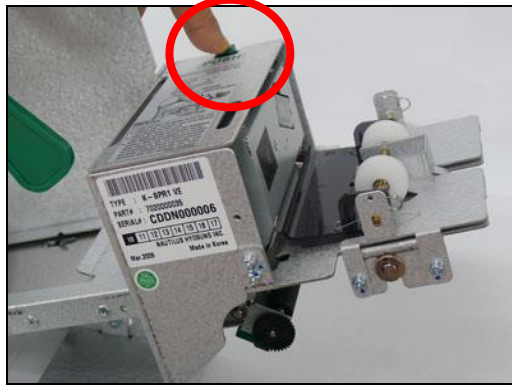
7. Close the upper front body with key as the picture below.
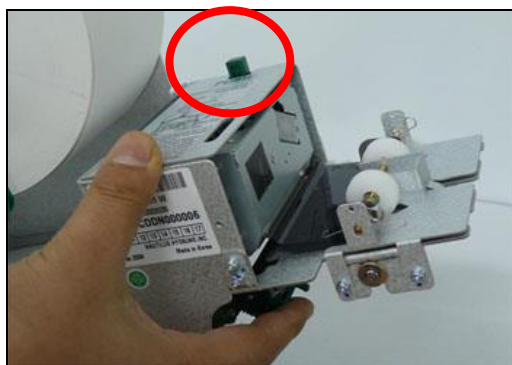
How to Clear a Receipt Jam

1. Open the upper front body with key and pull this outward completely with hands. To remove a jammed paper inside transport path, press down the green button to release the lower roller assembly.

2. To take out a jammed paper in front of transport path, lift up the transparent window guide and remove the jamming receipt carefully.

3. After finishing clearing the receipt, load the receipt paper properly.   Make sure that the Thermal Print Head (TPH) is closed. When finished loading paper, close the Front Panel and remove the key.

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Notes