Datacard® CR500™ Instant Issuance System

User's Guide

January 2018

Part No. 527515-001, Rev. B

Notice

Please do not attempt to operate or repair this equipment without adequate training. Any use, operation or repair you perform that is not in accordance with the information contained in this documentation is at your own risk.

Trademark Acknowledgments

Datacard is a registered trademark and service mark of Entrust Datacard Corporation in the United States and other countries.

MasterCard is a registered trademark of MasterCard International Incorporated.

Visa is a registered trademark of Visa International Service Association.

All other product names are the property of their respective owners.

Proprietary Notice

The design and information contained in these materials are protected by US and international copyright laws.

All drawings and information herein are the property of Entrust Datacard Corporation. All unauthorized use and reproduction is prohibited.

Compliance Statements

Liability

The WARNING and CAUTION labels have been placed on the equipment for your safety. Please do not attempt to operate or repair this equipment without adequate training. Any use, operation, or repair in contravention of this document is at your own risk.

Safety

The following basic safety tips are given to ensure safe installation, operation, and maintenance of Entrust Datacard™ equipment.

- Connect equipment to a grounded power source. Do not defeat or bypass the ground lead.

- Place the equipment on a stable surface (table) and ensure floors in the work area are dry and non-slip.

- Know the location of equipment branch circuit interrupters or circuit breakers and how to turn them on and off in case of emergency.

- Know the location of fire extinguishers and how to use them. ABC type extinguishers may be used on electrical fires.

- Know local procedures for first aid and emergency assistance at the customer facility.

- Use adequate lighting at the equipment location.

- Maintain the recommended temperature and humidity range in the equipment area.

Regulatory Compliance

EMC Compliance Notice

To ensure compliance of the model RX10 retransfer printer to the radiated emissions requirements for class "A" Information Technology Equipment, be sure to use a shielded Ethernet cable when connecting to your network

Notice for USA (FCC Notice)

This equipment has been tested and found to comply with the limits for Class A computing devices, pursuant to Part 15 of 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. If this equipment is not installed and used in accordance with this instruction manual, it 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 their own expense. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Notice for Canada

Industry Canada

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

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

RSS-Gen, Issue 3, December 2010, Section 7.1.3 User Manual Notice

This Device complies with Industry Canada License-exempt RSS standard(s). Operation is subject to the following two conditions: 1) this device may not cause interference, and 2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme avec Industrie Canada RSS standard exemptes de licence(s). Son fonctionnement est soumis aux deux conditions suivantes: 1) ce dispositif ne peut causer des interférences, et 2) cet appareil doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement du dispositif.

Notice for Europe

The EU Declaration of Conformity can be found on **EntrustDatacard.com** under product compliance.

WARNING: This is a class A product. This equipment is compliant with class A of either CISPR32 or CISPR22. In a domestic/residential environment this equipment may cause radio interference, in which case the user may be required to take adequate measures.

WEEE: The model RX10 retransfer printer uses a lithium coin cell battery. Refer to the service manual for battery removal instructions.

Simplified EU Declaration of Conformity

Entrust Datacard Corporation declares that the following radio equipment: MXD, MX6000, MX6100, PB6500, MX2000, MX2100, SP55k, SP35, SP55, CP40, CP60, CP80, SP75, FP65, SR200, SR300, PX10, PX30, EX30, MPR3800, CR500f, MX1100, RX10, and PB1000 is in compliance with the Directive 2014/53/EU.

Intentional Radiator Information

Description/Model Number	FCC ID	Frequency	Effective Radiated Power (ERP) mW
PX10 Supplies RFID	GDI-Q20010	13.56MHz	9.16E-06
PX30 Supplies RFID	GDI-Q30030	13.56MHz	9.16E-06
Central Issuance Supplies RFID	GDI-SID004	13.56MHz	1.96E-07
LX30, RX10 Supplies RFID	GDI-506241001	13.56MHz	3.03E-05
EX30 Supplies RFID	GDI-Q30130	13.56MHz	9.16E-06
FP65 Supplies RFID	GDI-Q10055	13.56MHz	3.65E-05
Central Issuance Smartcard Coupler	GDI-50543001	13.56MHz	1.45E-05

EMC Compliance Notice:

For model RX10/Multi-hopper configurations, to ensure compliance with Conducted Immunity standard EN61000-4-6, use USB cables no longer than three meters in length.

Notice for Australia

This is a Class A product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

Notice for China (Simplified Chinese)

警告

此为 A 级产品，在生活环境中，
该产品可能会造成无线电干扰。
在这种情况下，可能需要用户
对干扰采取切实可行的措施。

Notice for Taiwan (Traditional Chinese)

警告使用者：
這是甲類的資訊產品，在居住的
環境中使用時，可能會造成射頻
干扰，在這种情況下，使用者會
被要求采用某些适當的對策。

Notice for Japan

Japanese Voluntary Control Council for Interference (VCCI) class A statement

この装置は、クラス A 情報技術装置です。この装置を家庭環境で使用する
と電波妨害を引き起こすことがあります。この場合には使用者が適切な対策
を講ずるよう要求されることがあります。   VCCI-A

Korea Communications Commission (KCC) statement

이 기기는 업무용(A급)으로 전자파적합기기로
서 판매자 또는 사용자는 이 점을 주의하시기
바라며, 가정외의 지역에서 사용하는 것을 목
적으로 합니다.

California Proposition 65 Compliance

WARNING: This product contains chemicals, including lead, known to the State of California to cause cancer, and birth defects or other reproductive harm. *Wash hands after handling.*

Entrust Datacard believes that its products are not harmful when used as designed. However, the above warning is made in compliance with the State of California Safe Drinking Water and Toxic Enforcement Act of 1986, which requires warning labels on products that may contain elements that the State of California considers harmful.

California Lithium Perchlorate Warning

Perchlorate Material - special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate.

This notice is required by California Code of Regulations, Title 22, Division 4.5, Chapter 33: Best Management Practices for Perchlorate Materials. This product/part includes a battery that contains Perchlorate material.

Revision Log
Datacard CR500 Instant Issuance User's Guide

Revision	Date	Description of Changes
A	June 2015	First release of this document.
B	January 2018	Updated printer information

Contents

Chapter 1: Introduction

1

This chapter contains information about this *User's Guide*.

About This Manual

This *User's Guide* provides detailed instructions for operating the CR500™ instant issuance system. It includes the following:

- Chapter 1: "Introduction" introduces the *User's Guide*.

- Chapter 2: "About the Printer" provides an overview of the printer components and options.

- Chapter 3: "Using the Printer" provides information for loading cards, ink ribbon, and retransfer film into the printer, operating the printer, and using it to print cards.

- Chapter 4: "Printer Settings" provides instructions for viewing and changing printer settings.

- Chapter 5: "Maintain The Printer" contains procedures for routine maintenance tasks, including cleaning and transporting the card printer.

- Chapter 6: "Error Recovery and Messages" contains procedures for clearing card jams, mending broken ribbons, and responding to other printer messages.

- Appendix A: "Touch Screen Menu System" describes the menu items and settings available from the printer touch screen.

- Appendix B: "Troubleshooting Touch Screen Messages" describes the messages issued by the CR500 printer and solutions you can try.

Related Documentation

Refer to the following for more information about the CR500 instant issuance system:

- *CR500 Instant Issuance System Installation and Administrator's Guide* provides information about installing and setting up the system.

- *CR500 Instant Issuance System User Reference Guide* provides easy access to instructions for using and maintaining the system.

Intended Audience

This manual provides information for the staff who use the CR500 system to produce cards at the issuance site.

If You Need Assistance

If you work with a Entrust Datacard-authorized dealer, distributor, or value-added reseller, contact them for assistance. A value-added reseller provides the CR500 system as part of an overall system.

If any contents of the box are missing, contact your Entrust Datacard-authorized dealer, distributor, or reseller. If you purchased your printer directly from Entrust Datacard, contact the Entrust Datacard Customer Care Center in your region:

Americas	+1 800.328.3996 or 952.988.2316
Europe, Middle East, and Africa	+44 1489555627
Asia Pacific	+852 2821 0121

Make sure that you have the printer serial number, located on the back of the printer, when you call.

For Datacard CardWizard Instant Issuance Software support, call 1-800-568-4598.

Chapter 2: About the Printer

2

This chapter provides an introduction to the CR500 instant issuance system and its components.

About the Card Printer

The Datacard® CR500 card printer uses retransfer printing technology to produce high-quality, edge-to-edge printing on a variety of PVC and non-PVC card surfaces.

The retransfer printing process uses two types of ribbon: a color ink ribbon and a retransfer film. The color ink ribbon is YMCK-I (yellow, magenta, cyan, black, and inhibitor panel). The printer uses these colors to print images on the retransfer film. A heated roller then transfers the image onto a card. The inhibitor panel on the ribbon removes retransfer material in areas of the card that have a magnetic stripe, signature panel, hologram, or smart card chip. The inhibitor panel also is called peel-off, and the ink ribbon can be identified as either YMCK-I or YMCK-PO.

The CR500 printer can print on one or both sides of the card. Magnetic stripe capability is standard, and the printer can be equipped with optional contact and contactless smart card capabilities.

The printer includes a multi-hopper that can be loaded with three different card types, and an exception card slide for printing single cards. When a card job is sent to the printer it specifies the location from which to pick the card, then moves the card through the printer.

The CR500 printer also has the ability to apply two layers of retransfer film (intermediate transfer media or InTM film) on either side or on both sides of a card, for added durability. (Refer to "Apply a Second Retransfer Layer" on .)

Printer Components

The card printer consists of two connected components:

- **Print unit:** The part of the printer that applies images to cards.

- **Security enclosure:** This locked compartment feeds cards into the print unit. It contains the multi-hopper, the touch screen, the reject card area, and the exception card slide used to insert single cards into the printer.

Security Enclosure
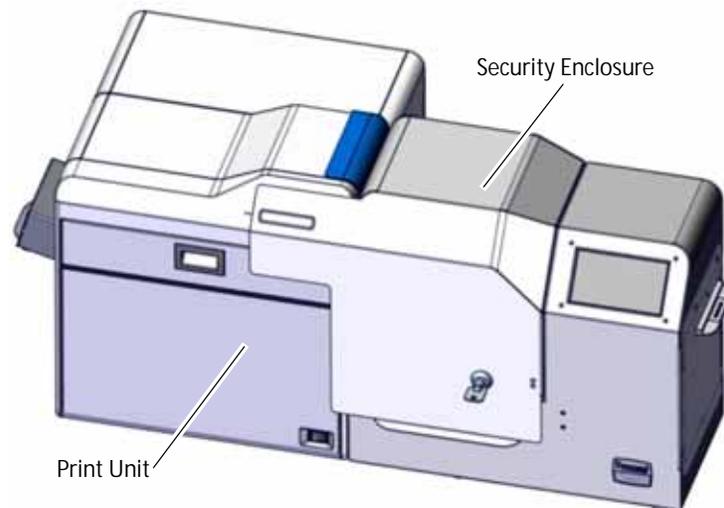
Print Unit

The Front of the Printer

Print Unit Door Latch

Security Enclosure Door

Print Unit Door

Touch Screen

Concealed Output Stacker

Power Switch

Bolt-Down Location (under printer)

Security Enclosure Lock

Exception Card Slide

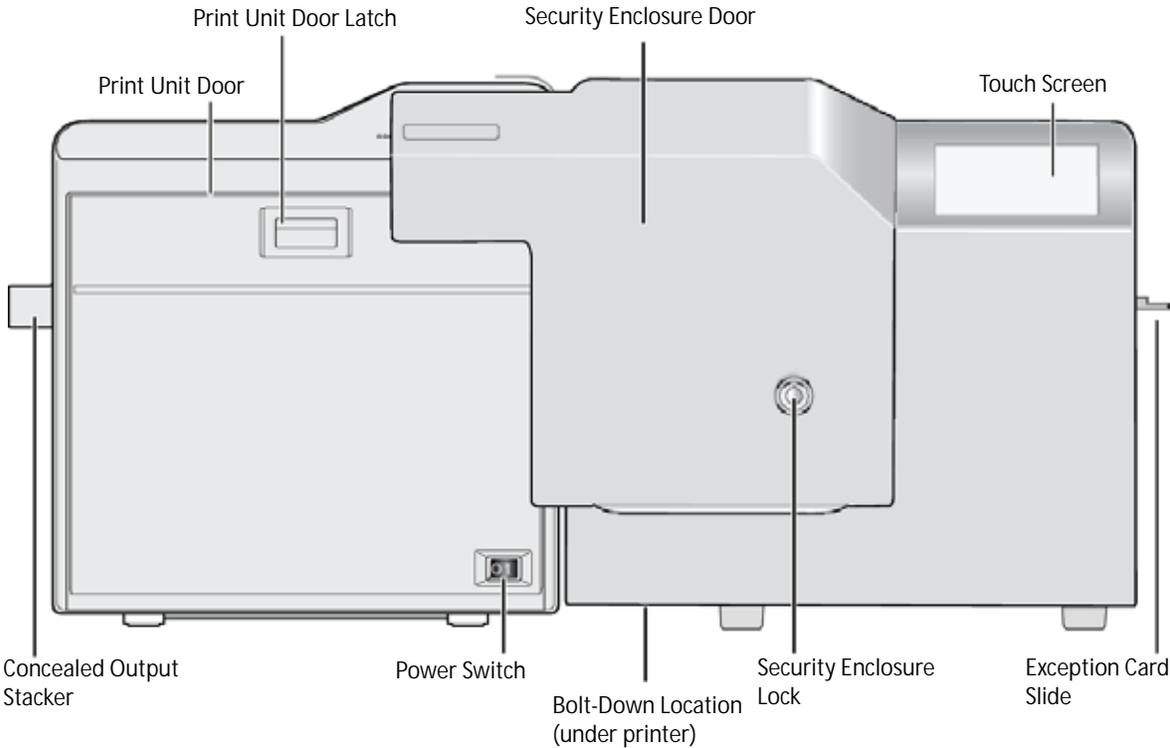|	
Print Unit Door	Open the print unit door to access the ink ribbon and retransfer film cartridges. The security enclosure door must be unlocked and open to open and close the print unit door.
Print Unit Door Latch	Lift up the latch to open the print unit door.
Security Enclosure Door	The security enclosure door provides access to load cards into the multi-hopper and to remove rejected cards from the security enclosure.
Touch Screen	The touch screen displays the printer status and any messages. Use the touch screen to enable printing, clean the printer, view printer settings and messages, and to configure network settings. Refer to "The Touch Screen" on page 8.
Concealed Output Stacker	Printed cards exit the card discharge slot and rest in the concealed output stacker. Lift the flap to remove the cards.
Power Switch	Press the switch to power the printer on and off.
Bolt-Down Location (under printer)	Use the bolt-down opening to bolt the card printer to the work surface. You must provide an appropriately sized bolt for installation.

Security Enclosure Lock	Turn the key in the lock to open the security enclosure door.
	The door is locked for shipping. Use the key only during installation. After the printer has been installed, secure the key and use CardWizard Instant Issuance software to unlock the security enclosure door electronically. Refer to *"Unlock and Lock the Security Enclosure"* on page 16.
Exception Card Slide	Pull out the tray, place a card, and push it in to use a card that is different from those in the multi-hopper. Refer to *"Use the Exception Card Slide"* on page 30 for the steps to follow.

Inside the Printer
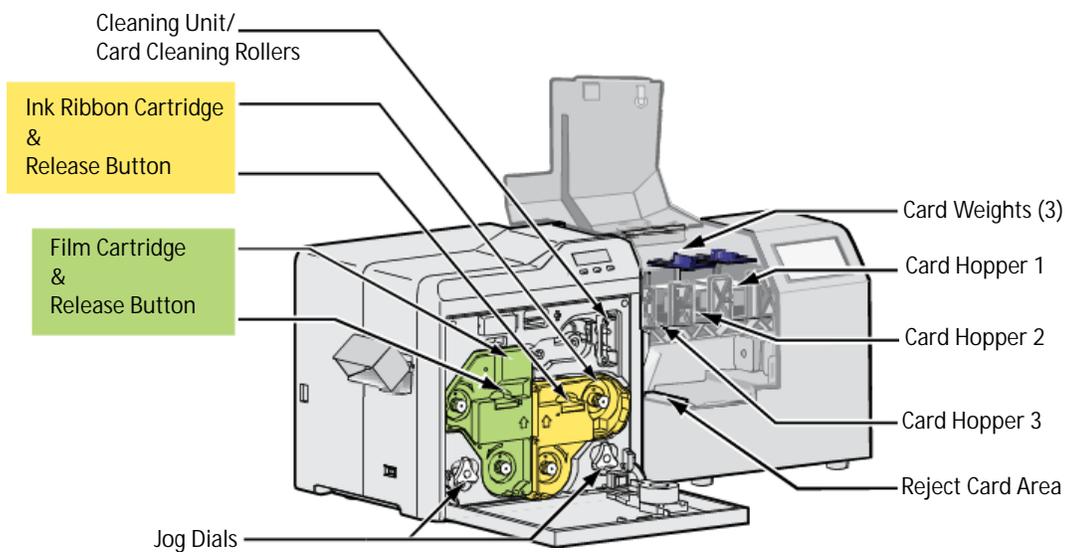
Cleaning Unit/Card Cleaning Rollers	The cleaning unit and cleaning rollers remove dust or debris from the cards before printing. Remove the unit to clean the rollers.
Ink Ribbon Cartridge	The ink ribbon cartridge holds the ink ribbon.
Ribbon Release Button	Press the ribbon release button to release and remove the ink ribbon cartridge.
Retransfer Film Cartridge	The retransfer film cartridge holds the retransfer film.
Film Release Button	Press the film release button to release and remove the retransfer film cartridge.
Jog Dials	The removable jog dials allow you to clear a card jam. Return them to the home locations after use. Refer to *"Use the Jog Dials to Move a Card Inside the Print Unit"* on page 80 for instructions about how to use the jog dials.

Card Weights	Place a card weight on cards loaded in the multi-hopper to ensure accurate picking and transporting of the cards. Each card hopper has its own card weight.
Card Hopper 1	Card hopper 1 holds 70 cards.
Card Hopper 2	Card hopper 2 holds 50 cards.
Card Hopper 3	Card hopper 3 holds 50 cards.
Reject Tray	Cards that did not complete successfully are ejected to a secure reject tray inside the security enclosure. When cleaning the magnetic stripe head, the cleaning card also is deposited in this tray.

The Back of the Printer

Security Enclosure Power   Network Data Port   Fan Filter   Security Lock Port   Print Unit Power
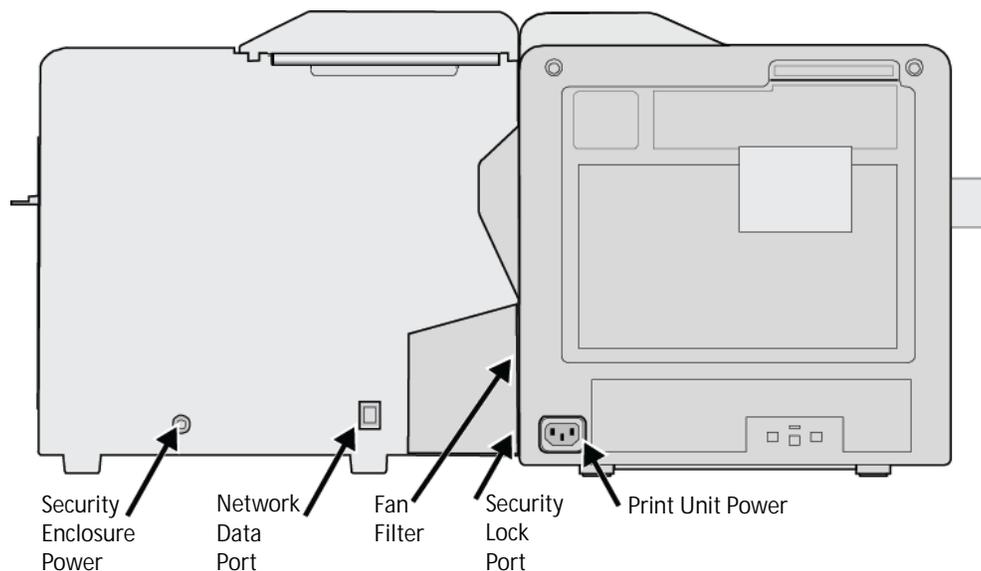
Security Enclosure Power	Plug the security enclosure power supply cord into the receptacle.
Network Data Port	Connect the network data cable to the data port.
Fan Filter	The fan filter is located on the side of the print unit. Open the cover to access the fan and the filter inside the print unit. Clean the fan filter to maintain card quality. Refer to "Clean the Print Unit Fan Filter" on page 67.
Security Lock Port	An anti-theft device located on the side of the print unit. Attach an optional cable lock to this port.
Print Unit Power	Plug the power cord into the printer power receptacle.

The Touch Screen

The touch screen, located on the security enclosure, operates when the printer is powered on.

LCD Panel

Retransfer Film Status (Green)
Ink Ribbon Status (Orange)

Ribbon Light

Card Light

User Button

Down Arrow   Up Arrow   Enter
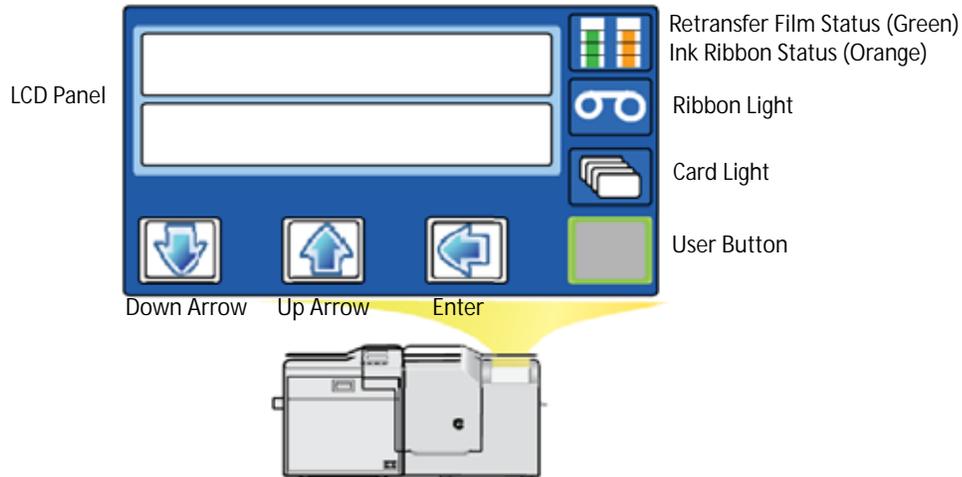
|	
LCD Panel	The LCD panel displays printer status, the printer's menu system, and printer messages or conditions as they are issued.
Retransfer Film Status (green indicator)	The green status bar displays the percentage (100%, 75%, 50%, or 25%) of retransfer film available.
Ink Ribbon Status (orange indicator)	The orange status bar displays the percentage (100%, 75%, 50%, or 25%) of ink ribbon available.
Ribbon Light	The ribbon light indicates the status of the ribbon in the printer. The background light is off when the ribbon is okay. It glows green when the print ribbon is low and glows amber when there is a problem with the ribbon, such as end of ribbon.
Card Light	The card light indicates the status of cards in the printer. The card light is off when the cards are okay. It blinks amber when the printer has a card problem, such as when the printer is out of cards.
User Button	Press the USER button to perform printer functions. During operation, the button glows or flashes with a border of green or amber light that indicates the system status.
Down Arrow Key	Press the down arrow to scroll down through the printer menu system.
Up Arrow Key	Press the up arrow to scroll up through the printer menu system.
Enter Key	Press the ENTER key to enter the menu system, select the currently displayed menu item, or take the printer out of sleep mode.

The Print Unit Front Panel

The print unit front panel is visible only when the security enclosure door is open. The LCD display has two lines of text, indicators for key functions, and symbols for connection type and lock status.

Three keys, located below the LCD display, are used to navigate the print unit menu system and to perform various printer functions.

> In most cases, you use the printer touch screen (located on the security enclosure) or Printer Manager to view and control printer settings. However, at times, you must use the print unit front panel, as described in this manual.
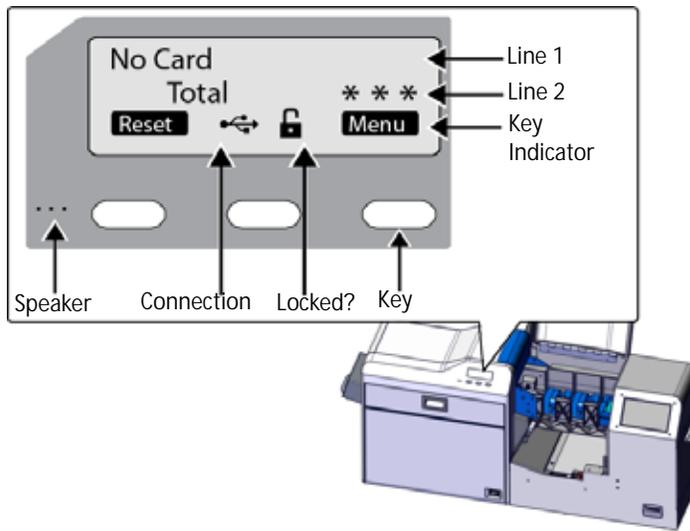
Line 1	Displays messages during error recovery and the menu name when using the print unit menu system.
Line 2	Displays card counts or selections available when using the print unit menu system. (Do not use the print unit card counts; use the touch screen card count values.)
Key Indicator	Displays the current name or function of the key directly beneath the indicator.
Speaker (buzzer)	Provides an electronic beep to indicate that an error has occurred or to confirm that settings have been saved.
Connection	Indicates whether the printer is connected through a network.
Locked?	Indicates whether the print unit door is locked or unlocked.
Keys	Press the keys to navigate the menu and display information about the printer, and to view or change settings or perform functions.

Options Label and Serial Number

The options label on the back of the print unit provides information about the options installed in the printer.
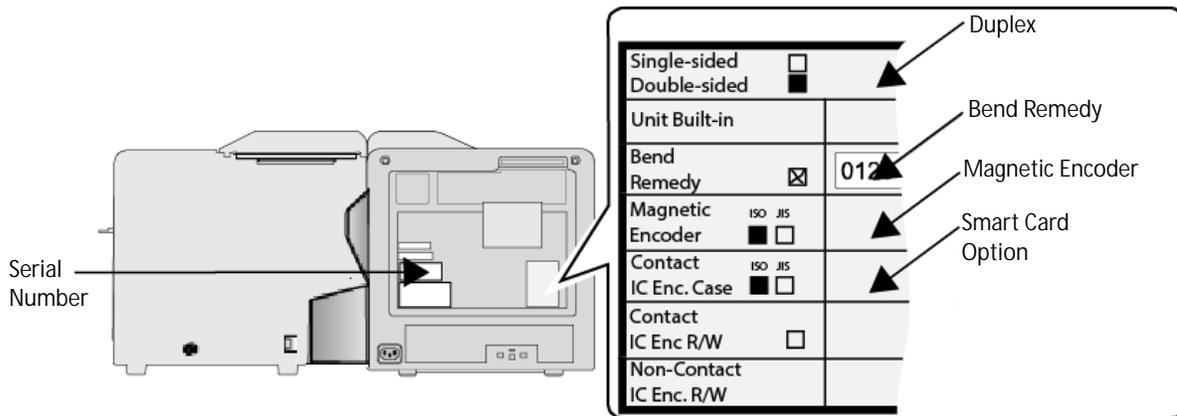
The CR500 card printer always includes the duplex and bend remedy modules. The printer also includes a magnetic stripe encoder. A non-contact smart card encoder, the Duali contact/contactless reader, is optional and uses the contact IC encoder case.

The serial number label also is located on the back of the print unit.

CardWizard

The CR500 card printer uses Datacard CardWizard Instant Issuance software to create and print cards.

The CardWizard software is a centralized application that processes card data and obtains the needed authorization from the financial system that manages customer accounts.

CardWizard software performs the following functions:

- Prepares card data

- Links to financial software, so cards issued are linked with customer accounts

- Manages security, including locking and unlocking the printer's security enclosure

Refer to "Print Cards from CardWizard" on page 29 for instructions about using CardWizard software to send cards to the printer. Refer to your CardWizard documentation for complete information about how to set up card designs and use the CardWizard software.

Printer Manager

Printer Manager is a web-based interface that displays information about the card printer and allows you to manage printer settings. You access Printer Manager through your PC's web browser, using the card printer's IP address.

System administrators and service providers can use Printer Manager to fine-tune card appearance, set advanced options, and troubleshoot printing problems.

Refer to the printer's *Installation and Administrator's Guide* for information about how to access and use Printer Manager.

Printer Manager does not have to be running to use the card printer. During normal operation, site personnel should not use Printer Manager unless asked to do so.

Chapter 3: Using the Printer

3

This chapter describes how to perform basic tasks required to operate the CR500 card printer.

This chapter describes how to:

Power the Printer On and Off

Before powering on the printer, make sure that:

- The printer is connected to the network.

- The print unit power cord is connected to the print unit and to an appropriate grounded facility power source.

- The power supply and power cord are securely connected to the security enclosure and to an appropriate grounded facility power source.

- The security enclosure door is closed and locked.

- The concealed output stacker is attached to the printer.

- Cards are loaded in the multi-hopper. Refer to "Load Cards" on page 21 for more information.

- The ink ribbon and retransfer film are loaded properly. Refer to "Load Ink Ribbon and Retransfer Film" on page 23 for more information.

- You follow your organization guidelines about when to power the printer on and off.

Power On the Printer

Press the "|" symbol on the power switch.

Power Switch
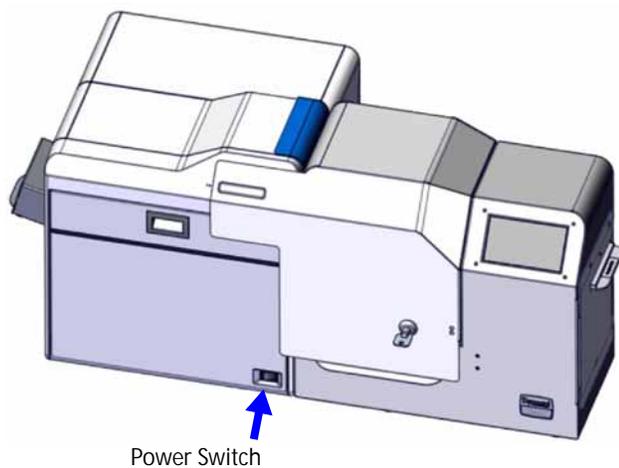
The printer powers on and begins initializing.

During power on, the touch screen displays the following status messages:

- **Initializing** (A) displays while the printer checks and positions the ink ribbon, retransfer film, and input hopper components.
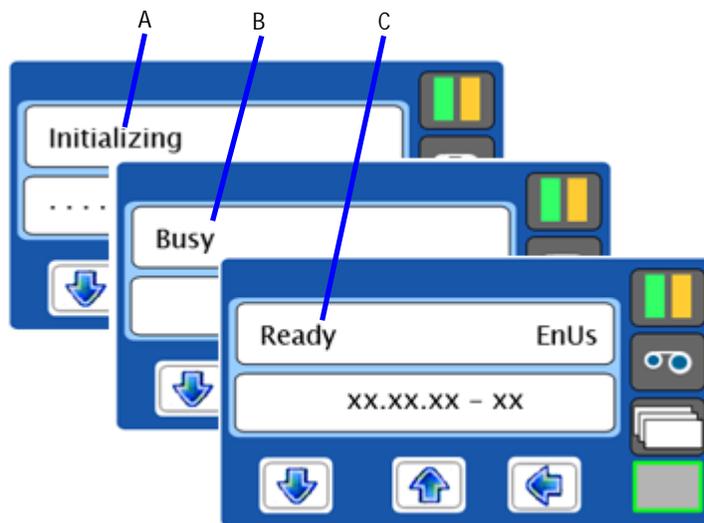
- When operation checks are complete, **Busy** (B) displays for approximately two minutes. **Print unit warming up** displays while the retransfer roller and bend remedy roller warm to their operating temperatures.

- When the printer is completely powered on, the touch screen displays **Ready** (C).

Make sure that the touch screen displays **Ready** before sending cards to the printer.

The first time you print cards, initialize the ink ribbon and retransfer film. Refer to "Initialize Supplies" on page 28.

The printer can require several minutes between power-on and the **Ready** status.

Power Off the Printer

When the printer is not in use, turn off the power, let the printer cool, and cover the printer with the plastic shipping bag to keep dust and other debris out of the printer.

Press the "O" symbol on the power switch to power off the printer.

After a few seconds, the touch screen becomes dark and the printer fan stops.

Printer Use Guidelines

When operating the card printer keep these guidelines in mind:

- Keep the printer powered off and covered when not in use. Leaving power on for long periods without printing might allow fine dust to collect inside the printer. The dust can adhere to the ribbons and cause white specks on printed cards.

- Store all supplies in a clean, cool, and dry location and in the original packaging until you load them in the printer. Keep the original packaging closed.

- Do not use supplies or cards that have been dropped on the floor or have otherwise become contaminated.

- Keep all food and liquids away from the printer.

- Keep paper and foreign materials off the printer.

- When cleaning around the printer, prevent debris from entering the printer.

Unlock and Lock the Security Enclosure

You must open the security enclosure door to install cards or to remove rejected cards. Unlocking the security enclosure door also allows you to view the print unit front panel. Open the print unit door to install ink ribbon or retransfer film cartridges.

The security enclosure door can be unlocked either by using the key in the lock or through the CardWizard software.

Use the key to unlock the security enclosure only during printer installation. When the printer is operational, place the key in a secure location. For most tasks, unlock the security enclosure by entering the required user name(s) and password(s) in CardWizard to authenticate your right to open the enclosure.

Tips for Success

- If the security enclosure door is opened when the printer is powered on and ready, the print unit beeps, the print unit front panel turns red and displays **No card**, and **Suspended: Printer unlocked** displays on the touch screen.

- After the security enclosure door is closed and locked, the touch screen displays **Busy**, while the printer initializes. When initialization completes, the touch screen displays **Ready**.

Unlock or Lock the Printer Using the Key

1. To unlock the security enclosure door:

   a. Insert the key in the lock (A).

   b. Press and turn the key clockwise (B).
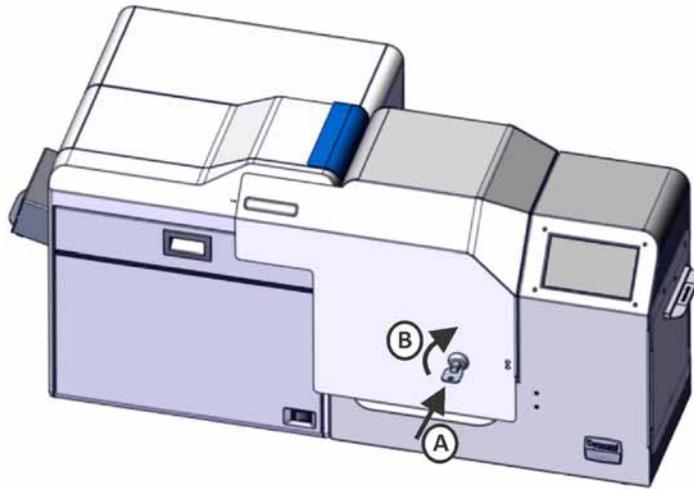
   c. Lift the security enclosure door to the fully open position (C).
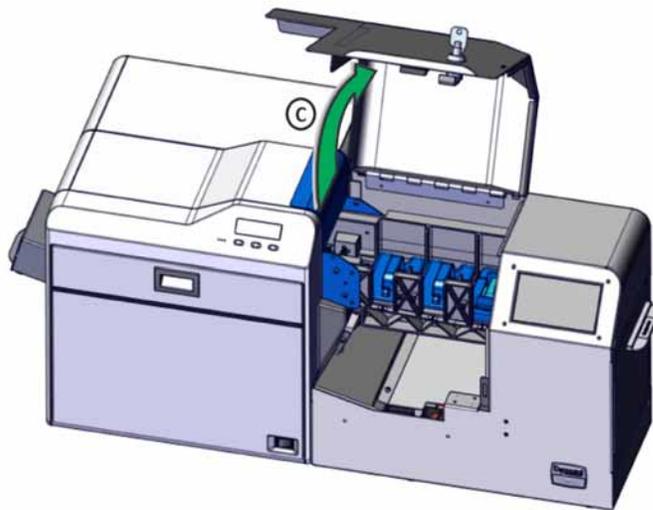
2. To lock the security enclosure door:

   a. Close the print unit door if it is open.

   b. Lower the security enclosure door.

   c. Insert the key, if needed.

d. Turn the key counterclockwise to lock the door.

e. Remove the key.

> (i) The key can be removed from the lock only when turned to the locked position.

Unlock the Printer Using Software Authentication

The security enclosure door lock is engaged by a solenoid located in the lower part of the opening. When the solenoid lock pin is extended, it engages the lock mechanism and locks the door. Sending power to the solenoid causes the lock pin to retract, allowing the door to open.

Security Enclosure Solenoid (lock pin extended)
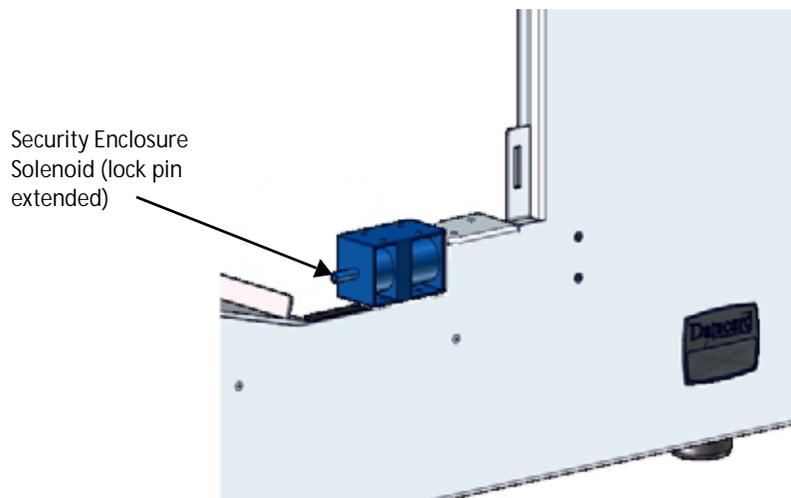
1. Refer to your CardWizard documentation for instructions to unlock the printer using authentication. (This usually requires two users to enter their user names and passwords to unlock the printer.)
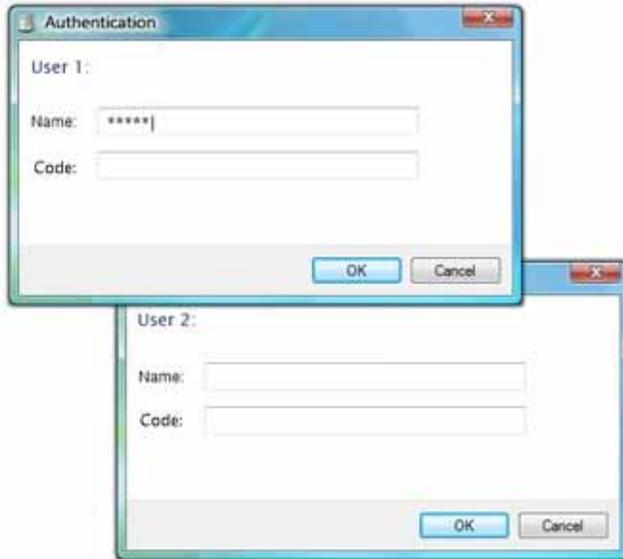
2. At the printer, lift the security enclosure door
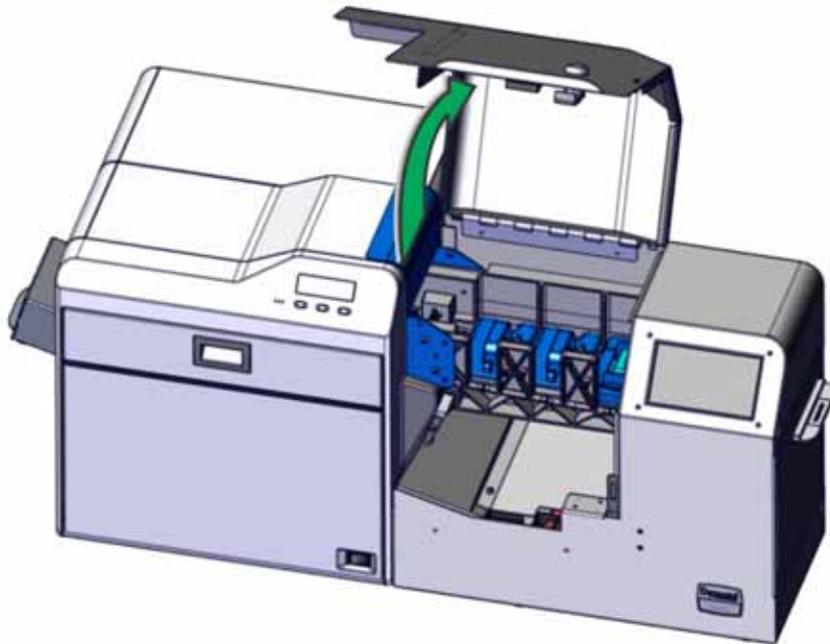
Lock the Printer After Using Software Authentication to Unlock it

Closing the security enclosure door causes the lock to engage automatically.

> ℹ For the solenoid to lock the security enclosure door, the security enclosure door must be closed and the physical key must have been turned to the locked position. If the key was in the open position, the solenoid pin does not engage the lock mechanism and the door does not lock.

1. Close the print unit door (A) if it is open.

2. Lower the security enclosure door (B) to the closed position.

    The printer locks automatically when the security enclosure door is closed. A sensor detects when the security enclosure door closes and extends the lock pin, locking the door.

Door sensor and lock pin
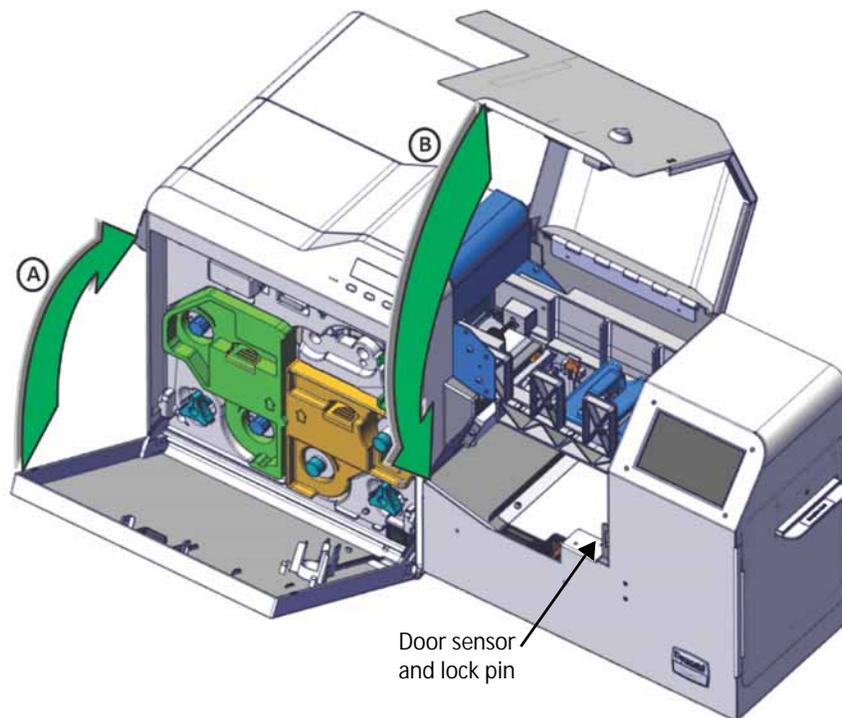
Load Cards

Load only ID-1 cards of 0.030 inch (0.75 mm) thickness into the multi-hopper. Card hopper 1 holds up to 70 cards; card hoppers 2 and 3 hold up to 50 cards each. (Refer to the printer's *Installation and Administrator's Guide* for card specifications.)

> Make sure to follow your organization's security procedures when removing cards from inventory. Follow your organization's card tracking guidelines to load the correct cards into each hopper of the printer.

Tips for Success

- The cards are held in position with a card weight. Always place a card weight in each hopper to ensure that cards are picked and transported properly, even if the hopper is empty.

- Do not touch the surface of cards before printing them. (Oils on hands can reduce printing quality.)

- Handle cards by the edges or wear the gloves provided with the printer.

- Cards can stick together. Slide or fan cards to separate the edges.

- Orient all cards the same way.

- Do not use cards that are bent or otherwise damaged.

- If you plan to use only one hopper, load cards into hopper 3 (the hopper closest to the print unit). Doing so allows cards to be fed into the printer more quickly.

Do the following to load cards into the printer:

1. Unlock the printer and open the security enclosure door. Refer to "Unlock and Lock the Security Enclosure" on page 16 for the steps to follow.

2. Remove the card weight from the hopper or hoppers to be loaded.

   > Follow your organization's guidelines to load the correct cards in hopper 1, hopper 2, and hopper 3.

3. Fan or separate cards before placing them in the hopper.

4. Place cards in the hopper (A). Refer to the following diagram for the correct orientation for magnetic stripe and smart cards.

Magnetic Stripe   Smart Card Chip
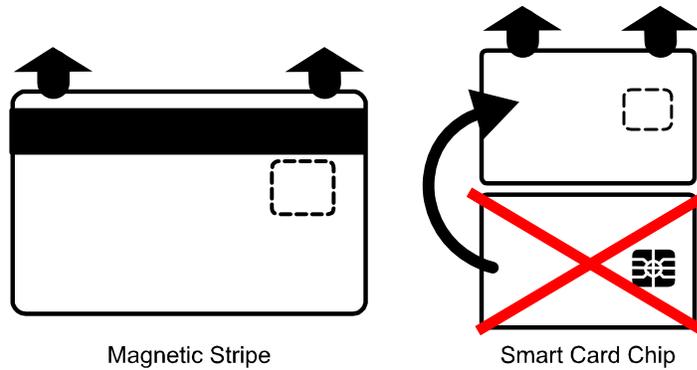
- For cards with pre-printed images, load cards with the front of the card down and the top of the image toward the print unit.

- For cards with a magnetic stripe, load cards with the stripe up and toward the print unit.

- For cards with a contact smart card chip, load cards with the chip down and toward the print unit.

Toward back of printer.
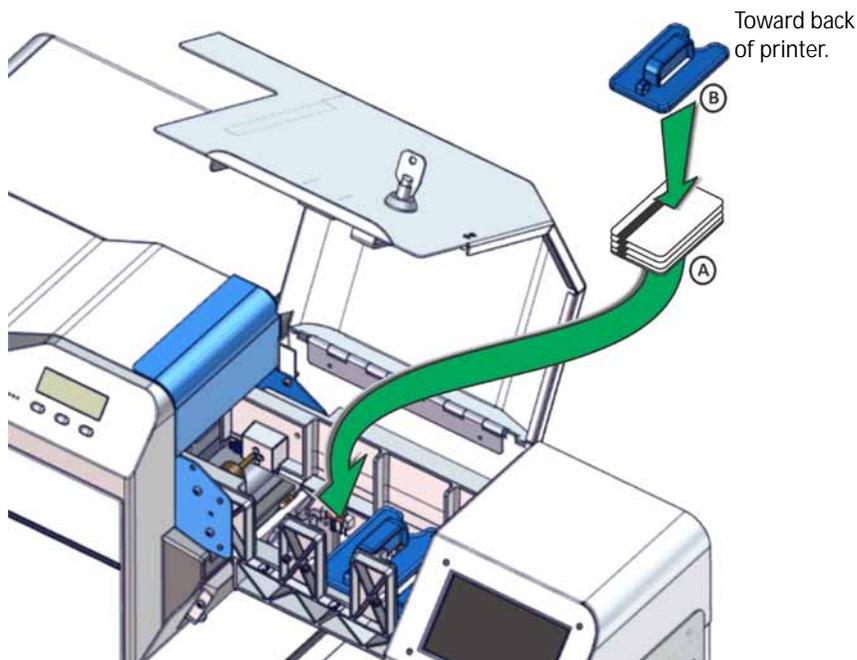
5. Place a card weight on top of the cards (B). Make sure the notched end of each card weight faces the back of the printer to prevent the weight from obstructing the card sensor.

6. Load cards in additional hoppers, if needed, following step 2 through step 5. Make sure to place a card weight in all three hoppers, even hoppers that do not contain cards.

7. After the cards are loaded, close the security enclosure door to lock the printer.

Load Ink Ribbon and Retransfer Film

The first time you use the printer, it must be powered on and off once to cancel transport mode. (The printer is shipped in transport mode, which does not allow the retransfer film to be installed. Powering on the printer cancels transport mode.) Refer to the printer's *Installation and Administrator's Guide* for more information about setting up the printer.

> Follow your organization's guidelines for tracking the supplies used in the printer.

Tips for Success

- The retransfer film cannot be installed in a printer that is in transport mode. Make sure that the printer has been powered off and then back on to cancel transport mode.

- Do not touch the printing surface of the ink ribbon or retransfer film. (Oils on hands reduce printing quality.)

- Place the cartridge on a smooth level surface when loading or reloading.

- To prevent damage to the door, do not place the cartridge on the printer door.

- Do not place ribbon or film on a dusty or dirty surface; dirt can affect print quality.

- Keep unused ink ribbon and retransfer film in the original package until ready for use. Refer to the printer's *Installation and Administrator's Guide* for information about storing ink ribbon and retransfer film.

Load the Ink Ribbon

When the ink ribbon runs out, **Ink Run Out** displays on the print unit front panel, and **Ink ribbon out 165**, displays on the touch screen. The right column of the touch screen supplies gauge is white, not orange.

Ink Ribbon Status Gauge

Refer to the printer's *Installation and Administrator's Guide* for information about ordering replacement ribbon.
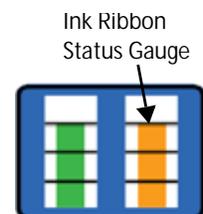
Use the following procedure to load the ink ribbon:

1. Unlock the printer and open the security enclosure door (A). Refer to "Unlock and Lock the Security Enclosure" on page 16 for the steps to follow.

2. On the print unit, slide the door latch up and open the print unit door (B).

3. Press the ink ribbon cartridge release button, and remove the orange cartridge (C).
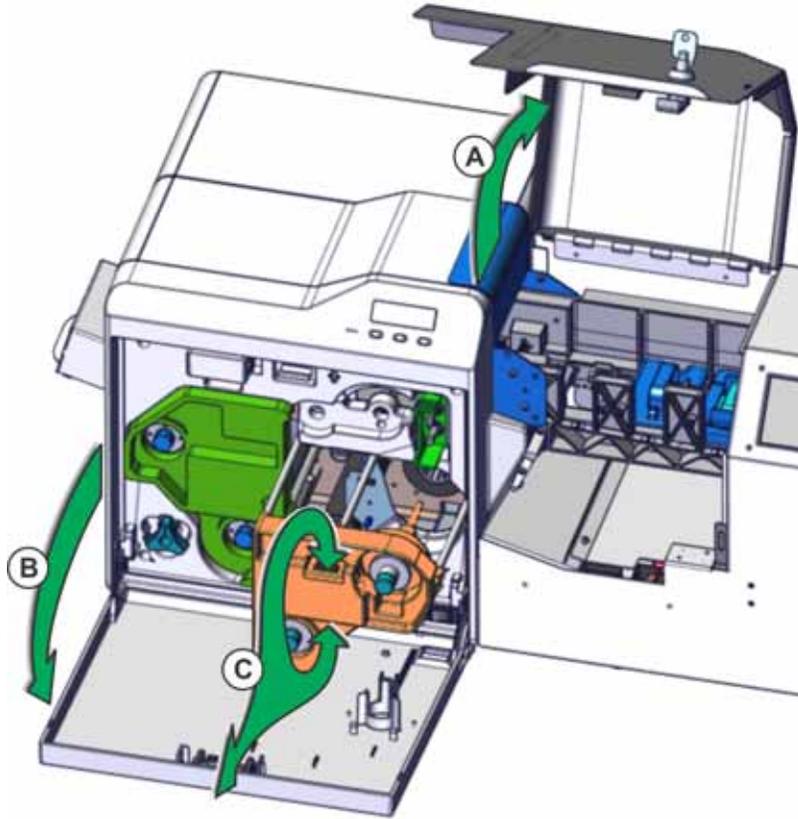
4. Remove both used ribbon spools from the cartridge (if present).

5. Load the new roll of ink ribbon on the cartridge:
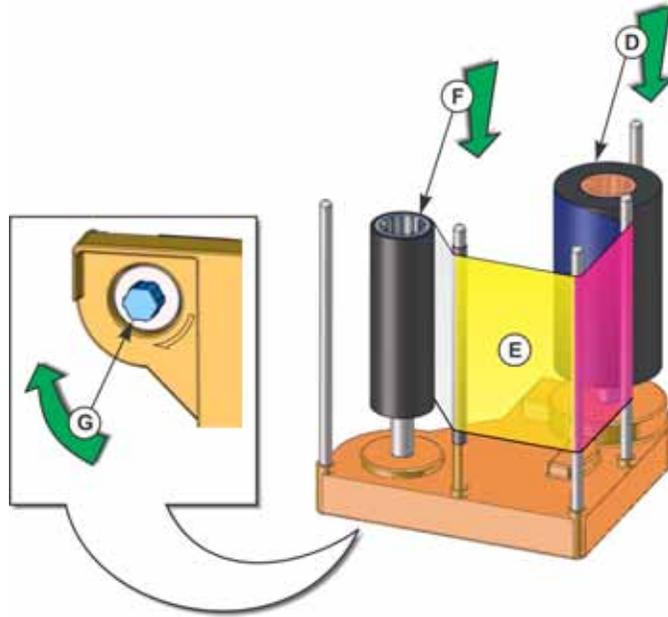
   a. Put the full spool of ribbon on the orange supply spindle (D).

   b. Align the ribbon along the three ribbon guides, as shown on the cartridge diagram (E).

   c. Put the empty take-up spool on the black take-up spindle (F).

   d. Turn the take-up knob (G) on the underside of the cartridge to remove any slack in the ribbon. Gently pull out the knob so it turns smoothly.

      If slack cannot be removed, verify that the supply and take-up spools are seated firmly on the spindles. The ribbon must be tight along the ribbon guides to insert the cartridge into the printer. Use the supply and take-up knobs to maintain the proper tension.

6. Insert the loaded ribbon cartridge in the printer until it clicks into position.

7. Close the print unit door.

8. Continue with loading the retransfer film, if needed. Refer to "Load the Retransfer Film" on page 26.

9. If you are replacing only the ink ribbon, use the print unit front panel and press **Reset** and then ⬅ (Return) to initialize the ribbon. Refer to "Initialize Supplies" on page 28.

10. After all supplies are loaded, close the security enclosure door to lock the printer.

Load the Retransfer Film

When the retransfer film runs out, **Media Run Out** displays on the print unit front panel, and **Retransfer film out 162** displays on the touch screen. The left column of the touch screen supplies gauge is white, not green.

Retransfer Film Status Gauge
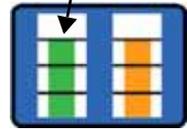
Refer to the printer's *Installation and Administrator's Guide* for information about ordering replacement film.

Use the following procedure to load the retransfer film:

1. Unlock the printer and open the security enclosure door, if needed (A). Refer to "Unlock and Lock the Security Enclosure" on page 16 for the steps to follow.

2. On the print unit, slide the door latch up and open the print unit door (B).

3. Press the retransfer film cartridge release button and remove the green cartridge (C).
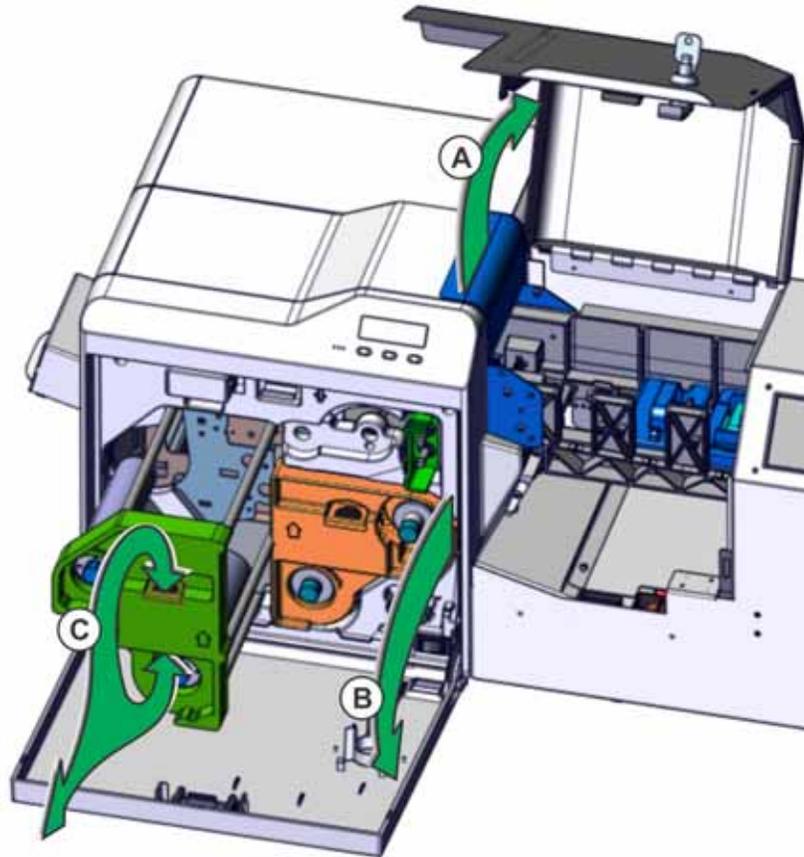
4. Remove both used film spools from the cartridge (if present).

5. Load the new roll of retransfer film on the cartridge:
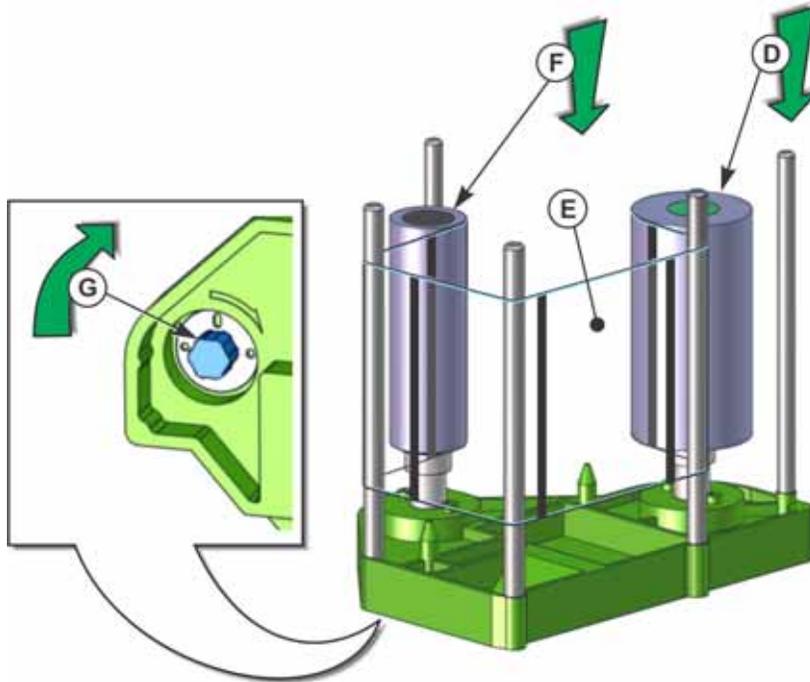
   a. Put the full roll of film on the green supply spindle (D).

   b. Align the retransfer film along the three film guides, as shown on the cartridge diagram (E).

   c. Put the empty take-up spool on the black take-up spindle (F).

   d. Wind two frames of the film onto the take-up spool.

   e. Turn the take-up knob (G) on the underside of the cartridge to remove any slack in the retransfer film. Gently pull out the knob so it turns smoothly.

      If slack cannot be removed, verify that the supply and take-up spools are firmly seated on the spindles. The film must be tight along the film guides to insert the cartridge into the printer. Use the supply and take-up knobs to maintain the proper tension.

6. Replace the loaded cartridge in the printer until it clicks into position.

7. Close the print unit door.

8. After replacing the retransfer film, use the print unit front panel and press **Reset** and then ⬅ (Return) to initialize the film. Refer to "Initialize Supplies" on page 28.

9. When all supplies are loaded, close the security enclosure door to lock printer.

Initialize Supplies

You can use the print unit front panel to initialize supplies. One initialize action moves both the ink ribbon and retransfer film into the proper position for printing. Initialization also occurs each time you power on the printer.

1. On the print unit front panel press **Reset**.
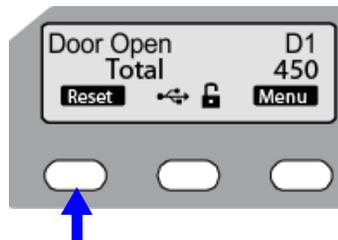
2. Press ⬅ (Return) if you want to initialize the printer without winding the ribbon and retransfer film.
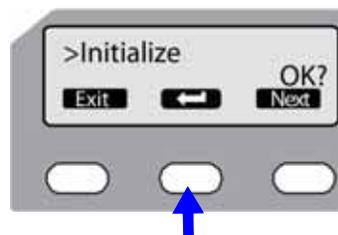
    OR

    Press **Next** to display **Next Panel, OK?** or **2'nd Panel, OK?** if you want to wind the ribbon and retransfer film one or two panel sets before printing.

    Then, press ⬅ to wind the ribbon and retransfer film and initialize the printer:
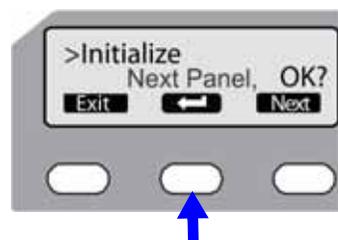
- To avoid dirt and dust particles that might adhere to the ink ribbon and retransfer film during loading, initialize and wind the supplies one panel set each time a cartridge is removed from the printer and replaced.

- The printer detects the type of ink ribbon and retransfer film installed.

Print Cards

Print cards after you install the printer and specify printer settings, load and initialize supplies, and set up your card design.

Tips for Printing Cards

- Do not open the printer during the printing operation.

- The print unit can enter power saver mode. If power saver mode is enabled, sending a card or using the touch screen restores the printer to the **Ready** state.

  > It can take several minutes for the CR500 retransfer roller to heat up after inactivity.

- Handle cards by the edges to preserve print quality. Do not touch the print surface with your hands. Wear the gloves provided.

- When printing a test card from the touch screen, always place the card in the exception card slot. (Refer to "Print a Test Card" on page 42.)

- Do not power off, unplug, or disconnect the printer during the printing process.

- The card type in each hopper must be identified to the CardWizard software. The software tells the printer to pick a card from the hopper in which the required type of card is loaded. If the specified hopper is empty, the printer displays an error. Load cards to continue.

Before You Begin

Use CardWizard software to create the card design(s) to use. Test each design before beginning production. Make sure to use production card stock, and test all data and all processes. For example:

- Verify that the proper cards are installed and oriented correctly in the multi-hopper.

- Encode and read magnetic stripe data, if used.

- Print and verify the colors and quality of printing.

Ask your service provider for assistance, if needed, to make your design work.

Print Cards from CardWizard

1. Follow the instructions in CardWizard to select a card design, and enter and save the data for the card.

2. Send the card to the printer. CardWizard performs verification, prepares the card data for printing, and sends it to the printer.

3. The printer touch screen changes from **Ready** to **Busy**. The printer processes the card and places the printed card in the concealed output stacker.

Use the Exception Card Slide

Use the exception card slide if you want to print a card that is different from the cards loaded in the hoppers.

1. At the printer:

    a. Pull out the exception card slide and place a card in the slide (A).

    The magnetic stripe, if present, should face up and toward the print unit. If card has a smart card, the chip should face down and toward the print unit.

    b. Push the slide all the way in (B). The exception card slide must be pushed in past the point of resistance until it reaches the stop position.

2. In CardWizard, click **Send** or **Print**.

3. The printer touch screen changes from **Ready** to **Busy**. The printer processes the card and places the printed card in the concealed output stacker.
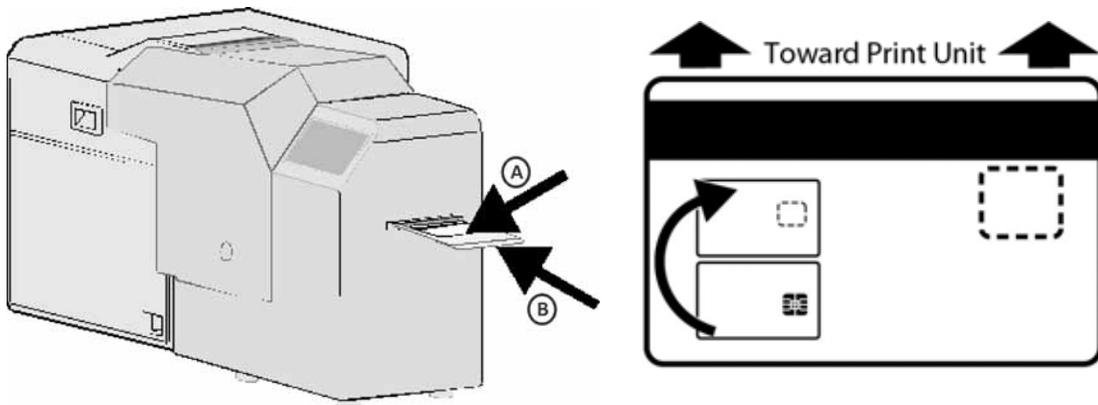
The exception card slide also is used to print test cards. Refer to

Apply a Second Retransfer Layer

To increase the durability of a card, you may want to apply a second retransfer layer to the front and/or back of the card during printing. Use the print unit front panel menu to change the printer settings to perform this process.

> Do not apply a second retransfer layer to a card if it has a magnetic stripe, signature panel, hologram, or smart card chip.
>
> When you use peel-off ribbon because the card has a magnetic stripe, a signature panel, a hologram, or a smart card chip, the second retransfer layer is not applied. The printer does not provide a notification that the second layer is not being applied. Make sure that you are familiar with your card design before proceeding with the following steps.

1. Open the security enclosure door. Refer to "Unlock and Lock the Security Enclosure" on page 16 for the steps to follow.

2. Power on the printer. (The print unit front panel should display **Door Open** because the security enclosure door is open.)

3. Press the **Menu** and center keys simultaneously for several seconds.
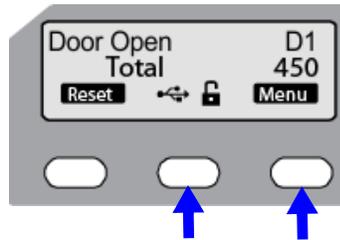
4. Release the **Menu** key first to place the printer in maintenance mode.

5. Press **Enter**.
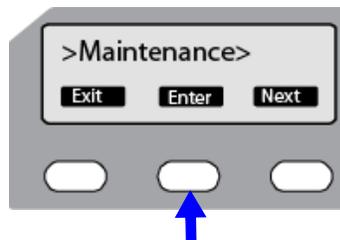
The Offset Prt Y menu displays.

6. Press **Next** multiple times until the Overcoat menu displays..

>>Offset Prt Y>
0
Exit   Change   Next
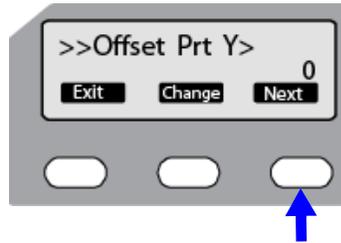
7. Press **Enter** to display the Mode (Front) menu.

>>Overcoat>
Exit   Enter   Next

8. To apply an additional retransfer layer to the front of the card, press **Change**.

>>>Mode (Front)
Off
Exit   Change   Next

OR
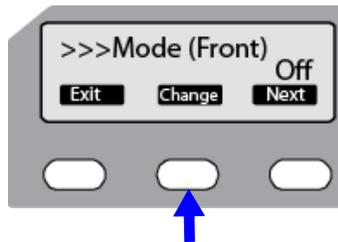
If you do not want to apply an additional layer to the front of the card, press **Next** and go to step 11.

9. Press the down arrow key to change Line 2 to **On**. Then, press ⬅ (Return) to accept the change.

>>>Mode (Front)
On
Exit   ⬅   ⬇
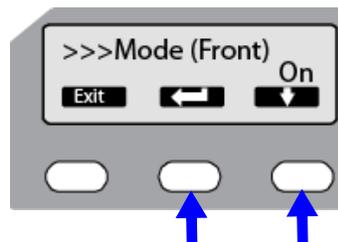
10. Press **Next** to continue.
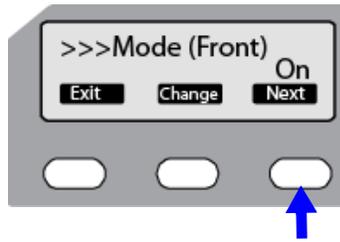
11. The Mode (Back) menu displays next.

    To apply an additional retransfer layer to the back of the card, press **Change**.

    OR
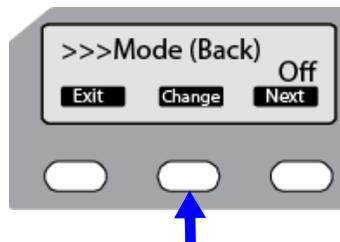
    If you do not want to apply an additional layer to the back of the card, press **Next** and go to step 14.

12. Press the down arrow key to change Line 2 to **On**. Then, press ⬅ to accept the change.
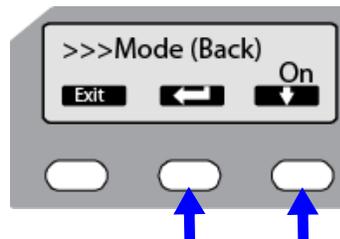
    The success of the retransfer can vary depending on the card material used. You may need to adjust the front and back speed of retransfer to get acceptable results.

    Lowering the speed can enhance the retransfer, but the stronger heat that results may cause the card to warp. Increase or decrease the speed values, as needed, to determine the best retransfer results for your card type.

    • To change the speed values, continue with step 13.

    • If you do not want to change the speed values, go to step 19.

13. Press **Next** to continue.
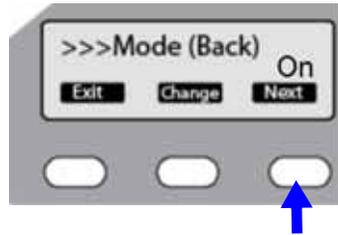
The Speed (Front) menu displays, with the current speed setting displayed on Line 2.

14. To change the front speed, press **Change**.
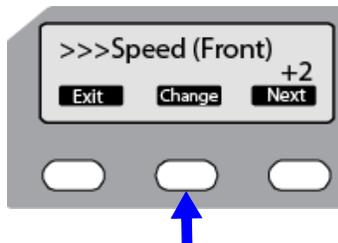
15. Press the down arrow to change the speed and then press ⬅ to accept the change.
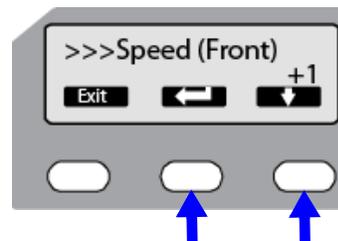
16. Press **Next** to continue.

The Speed (Back) menu displays, with the current speed setting displayed on Line 2.

17. To change the back speed, press **Change**.
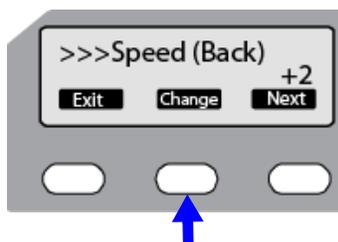
18. Press the down arrow to change the speed and then press ⬅ to accept the change.

>>>Speed (Back)
+1
Exit ⬅ ⬇
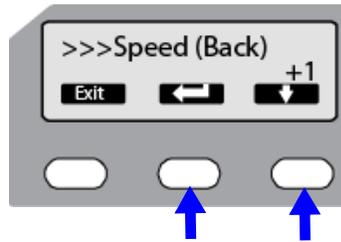
19. Press **Exit** three times to exit the menu system.

>>>Speed (Back)
+1
Exit Change Next
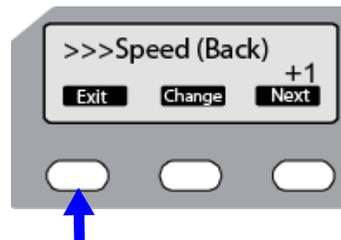
20. Press **Reset** and then ⬅ to initialize the printer.

Door Open   D1
   Total   450
Reset ⟲ 🔓 Menu

>Initialize
        OK?
Exit ⬅ Next
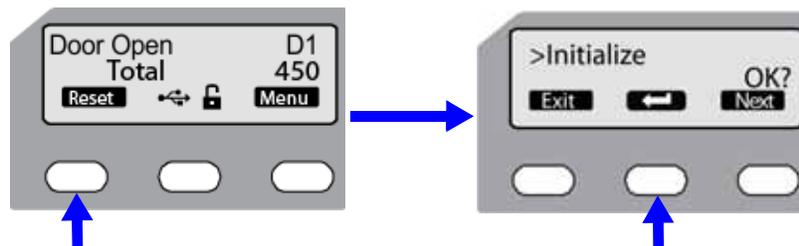
21. Close the security enclosure door to lock the printer.

22. Print several test cards to test your settings and verify that the retransfer film is being applied properly. Continue to adjust the settings until you are satisfied with your cards.

Chapter 4: Printer Settings

4

This chapter contains information and procedures for using the touch screen and the print unit front panel to view and change CR500 card printer settings.

This chapter describes how to use:

- The Security Enclosure Touch Screen

  - User Button and Light on page 38

  - Use the Touch Screen Menus on page 40

- The Print Unit Front Panel

  - Use the Print Unit Front Panel Menus on page 48

  - Print Unit Front Panel Menu Structure on page 49

You also can use Printer Manager to view or change printer settings. Refer to the "Using Printer Manager" chapter in the printer's *Installation and Administrator's Guide* for complete information.

The Security Enclosure Touch Screen

Use the touch screen to view printer status, navigate the menu system, and interact with printer messages or conditions as they are issued.
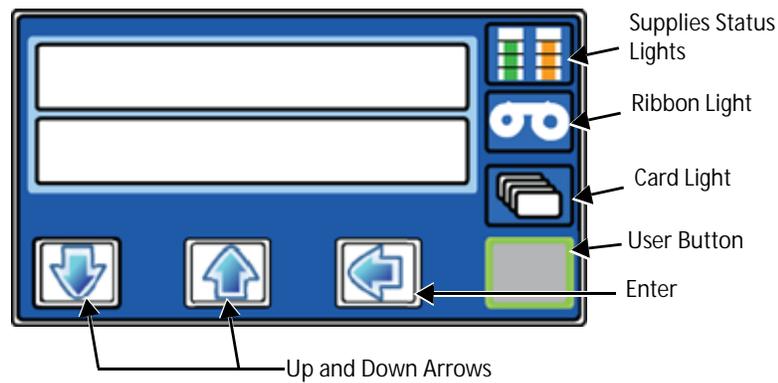
Printer status, messages, and settings display on the LCD panel, and current supplies status is indicated by the lighted icons on the touch screen. Some printer functions and settings are controlled by using the button and keys on the touch screen.

Refer to "The Touch Screen" on page 8 for more information about each part of the touch screen.

User Button and Light

The USER button displays with a border of light that indicates printer status. Press the USER button to do the following:

- Suspend the printer when the touch screen displays **Ready**. (This allows you to press ENTER to enter the menu system.)

- Clear a message from the touch screen.

- Clear all messages—press and hold the USER button for at least two seconds.

- Cancel all cards currently printing—press and hold the USER button for several seconds. (Make sure this action is allowed by your organization.)

- See whether the printer is ready, busy printing, or not available. Indicators include the following:

Off (not visible)		The printer is powered off.
Green		The printer is ready.
Blinking green		The printer is busy.
Amber		The printer is not ready.
Blinking Amber		The printer has an error.

Up Arrow, Down Arrow, and Enter Keys

Use the arrow keys to move through the printer menu system. Press ENTER to access the touch screen menu system or to make a selection from the menu. Refer to "Use the Touch Screen Menus" on page 40.

Ribbon Light

The ribbon light indicates the status of the ribbon in the printer. It glows green when the print ribbon is low and glows amber when there is a problem with the ribbon, such as end of ribbon.

Off		Ribbon is okay.
Green		Ribbon is low—less than 10% remains. The percent of ribbon remaining required for notification can be changed using Printer Manager. Refer to the Printer Manager FrontPanel settings in the printer's *Installation and Administrator's Guide*.
Amber		Ribbon is out or broken.
Blinking Amber		The printer problem applies to the ribbon.

Card Light

The card light indicates the status of the cards in the printer. It blinks amber when the printer has a card problem, such as when the printer is out of cards.

Off		Cards are okay.
Rapid Blinking Green		Insert a card using the exception card slide.
Blinking Amber		The printer problem applies to cards.

Supplies Status Lights

The touch screen status lights indicate the status of the retransfer film and ink ribbon:

- The green bar shows the amount of retransfer film available: 100% available, 75% available, 50% available, or 25% available.

- The orange bar shows the amount of ink ribbon available: 100% available, 75% available, 50% available, or 25% available.

Use the Touch Screen Menus

The touch screen menu system contains selections for viewing and changing printer settings and for performing simple maintenance tasks, including printing a test card. When the printer is not actively printing cards, the menu system is available.

To access the touch screen menu:

1. Press the USER button to suspend the printer.

2. Press ENTER to enter the menu system.

3. Use the up and down arrow keys to navigate the menu.

4. Press ENTER to select the displayed menu item.

   Selecting a menu item either performs that menu's action or, if there is a submenu, enters the submenu and allows you to navigate its options.

5. When finished, press the USER button repeatedly to exit the menu system and return the printer to the **Ready** status.

Navigating the Touch Screen Menu System

The touch screen menu system has four major branches:

- **Maintenance** menu—Use to print a test card.

- **Status** menu—Use to see settings and data about the printer.

- **Configuration** menu—Use to change network and printer settings.

- **Activate** menu—Use to enable or disable printing, for example when installing or transporting the card printer.

Main Menu

- **Maintenance** → Test Card

- **Status** → Serial Number, Network Status
  - FW Rev, Card Counters
  - Panel Rev, Ribbon Type
  - Magstripe

- **Configuration** → Network, Magstripe
  - K Power, Menu

- **Activate** → Enable, Disable
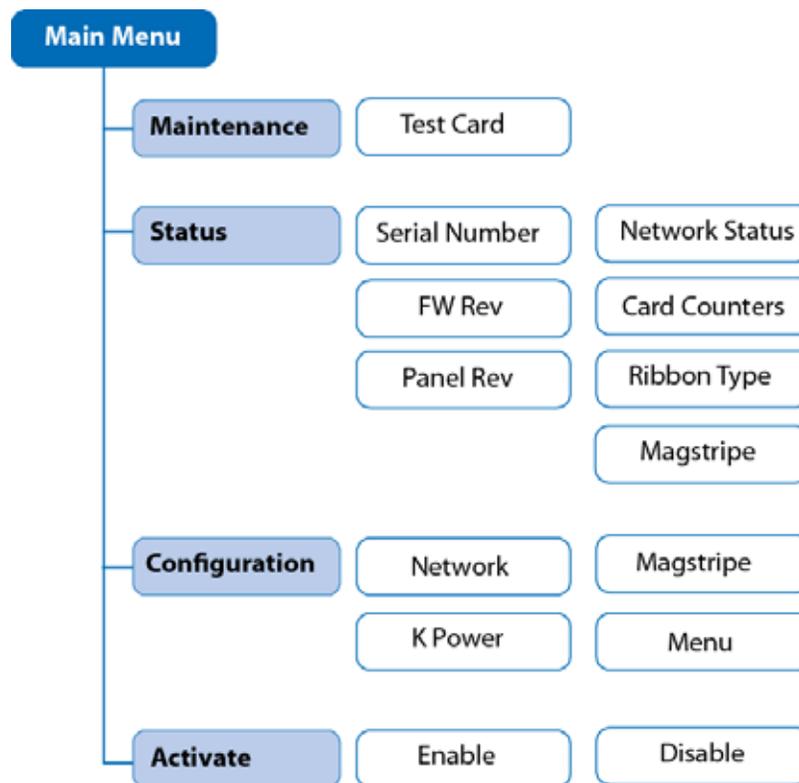
Tips for Success

- The menu system can be accessed when **Ready** displays on line 1 of the touch screen.

- To leave a selection without changing the value, do one of the following:

  - Press the up or down arrow key to scroll to **Exit** and then press ENTER.

  - Press the USER button until **Main Menu** or **Ready** displays on line 1.

  Refer to Appendix A: "Touch Screen Menu System" for a complete description of all menu items and all functions that you can performed from the menu.

Print a Test Card

You can use the touch screen to print a test card. You might print test cards before starting a production run, when using a new card design, or after changing the printer settings.

1. Pull out the exception card slide. Place a card in the slide and close it firmly.

   Be sure to place card weights in the multi-hopper, even if no other cards are loaded.
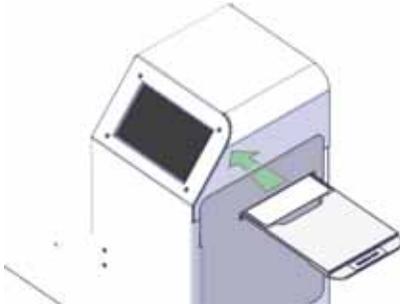
2. When **Ready** displays, press the USER button (a) to suspend the printer.

   Suspended and **Menu available** display on the touch screen.

3. Press ENTER (b) to enter the menu system.
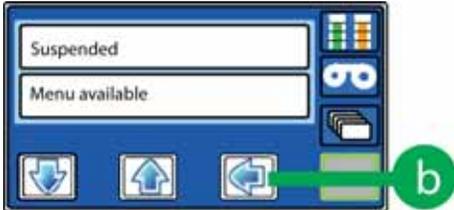
   Main Menu and **Maintenance** display on the touch screen.

4. Press ENTER (c) to select **Maintenance**.

Maintenance and **Test Card** display. (Test Card is the only item in the Maintenance menu.)

5. Press ENTER (d) to select **Test Card**.

Test Card and **Start** display on the touch screen.

6. Press ENTER (e) to print the test card. The printed test card is deposited in the concealed output stacker.

Track Card Counts

Use the touch screen to display card counts that track card usage within your organization. Select **Main Menu** > **Status** > **Card Counters**. Refer to "Status Menu" on page A-2 for more information.

Printer Manager also provides card count information from its Status menu. Printer Manager users with WebAdmin or WebService access can reset some counters. Refer to the "Status Menu" section of the printer's *Installation and Administrator's Guide* for information about displaying and resetting card counts in Printer Manager.

The print unit front panel also can display card counts. These are lifetime counts of the number of cards that have gone through the printer. They are not related to the CR500 card counts. **Do not use the print unit counts for tracking cards.**

Messages and Conditions

When the printer cannot process a card, it issues and displays a message on the touch screen.

- The touch screen displays a message number and short description for each message.

- If more than one message was issued, the next message displays after you correct the first issue and press the USER button.

- The printer issues messages that focus on recovering from problems. The print unit front panel also might display more detailed messages. The message on the touch screen directs you to the print unit front panel when needed.

- Refer to Appendix B: "Troubleshooting Touch Screen Messages" for a list of touch screen messages and how to respond to them.

The Print Unit Front Panel

The print unit front panel is visible only when the security enclosure door is open. Most printer settings and functions are performed using the touch screen or using Printer Manager. The print unit front panel is covered by the security enclosure door. You must open the security enclosure door to access the print unit front panel.
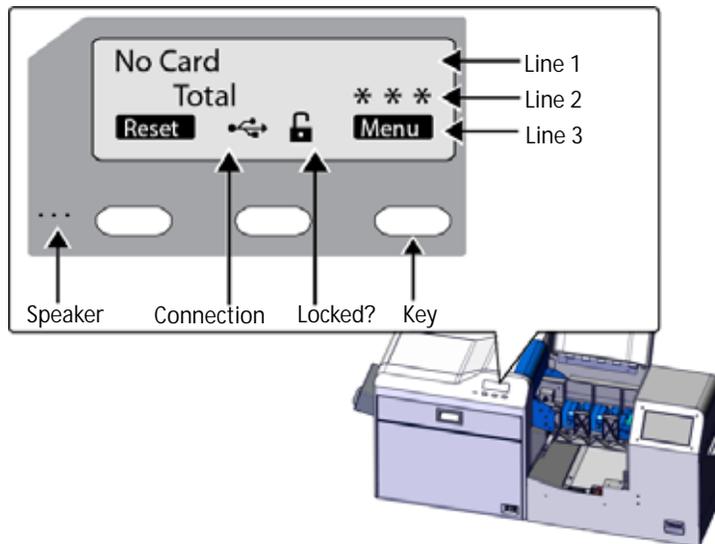
Use the front panel to view print unit status and settings. You can change some printer settings and perform certain functions (for example, cleaning the print unit) using the front panel.

● Line 1 displays the current printer status. (The error message, **No Card**, displays when the security enclosure door is open.) Line 1 also displays the menu name when using the print unit menu system.

● Line 2 displays card counts or selections available when you use the print unit menus.

● Line 3 presents key indicators that describe the function of the three keys on the front panel. Line 3 also displays the connection symbol, and the print unit lock status.

The display background color changes according to the print unit status. The background is:

● Bright green during power on.

● Bright blue when the printer is operating normally, including during initialization and preheating, and when using the menu or printing cards.

● Medium blue when recovering from errors.

● Red on print unit error, or when the security enclosure door is open.

Connection and Lock Symbols

The print unit displays the following symbols that indicate its status.

	The print unit is connected through a USB cable, and does not have an IP address. This is the proper configuration for the CR500 printer. Card data is sent to the print unit using the USB cable.
	The print unit is connected through a USB cable and has an IP address. If this symbol displays, contact your service provider for assistance.
	The print unit is connected through a network connection. The print unit does not have an IP address. If this symbol displays, power off the printer, wait several seconds, and power on the printer again. If this symbol continues to display, contact your service provider for assistance.
	The print unit is connected through a network connection. The print unit has an IP address. If this symbol displays, power off the printer, wait several seconds, and power on the printer again. If this symbol continues to display, contact your service provider for assistance.
	The print unit is unlocked. (The print unit lock is different from the security enclosure lock, and should not be used.)
	The print unit is locked. If this symbol displays, contact your service provider for assistance.
	If the laminator symbol displays, contact your service provider for assistance.

Keys

Use the three keys on the print unit front panel to access and navigate the menu system. The keys can have the following functions, as displayed on line 3 of the front panel:

Reset	**Reset**	Initializes the printer. Use the **Reset** key after loading supplies or after an error occurs.
Menu	**Menu**	Press **Menu** to use the printer menus. The key name changes to **Next**.
Enter	**Enter**	Displays the next, lower level of the menu.
Next	**Next**	Press **Next** to view the next item in the menu and to access the settings in the order listed in "Use the Print Unit Front Panel Menus" on page 48.
Arrow Keys	↓ ↑	Use the up and down arrow keys to display list items within a menu level.
Exit	**Exit**	Exits the current menu or menu selection and returns to the previous menu selection.
Return	⏎	Confirms the user selection. The setting takes effect.
Change	**Change**	Allows you to change settings.
Scroll	**Scroll**	Allows you to scroll through values for a setting.
Scroll Right	⇒	Moves the cursor one position to the right.
Scroll Left	⇐	Moves the cursor one position to the left.

Use the Print Unit Front Panel Menus

The following example shows how to access the print unit front panel menu system, navigate to the printer cleaning options, and then exit the menu system.

The print unit front panel menu structure is shown in "Print Unit Front Panel Menu Structure" on page 49.

1. Press the **Menu** key to enter the menu system.

The LCD background is bright blue and **>Cleaning>** displays.

The > symbol following a menu selection indicates that there are subcategories within the displayed menu.

2. Press the **Enter** key to view the **Cleaning** submenu. Press the **Next** key in the Cleaning submenu to view cleaning choices.

3. Press the **Exit** key at any time to exit the current level of the menu system. Continue to press **Exit** until the **Reset** and **Menu** key indicators display.

Print Unit Front Panel Menu Structure

The following chart shows the structure of the print unit front panel menu. Some menu items may not display, depending on the options installed in your printer.

Do not use the print unit front panel menu to change printer settings unless instructed to do so. Most printer settings should be changed using the touch screen or Printer Manager.
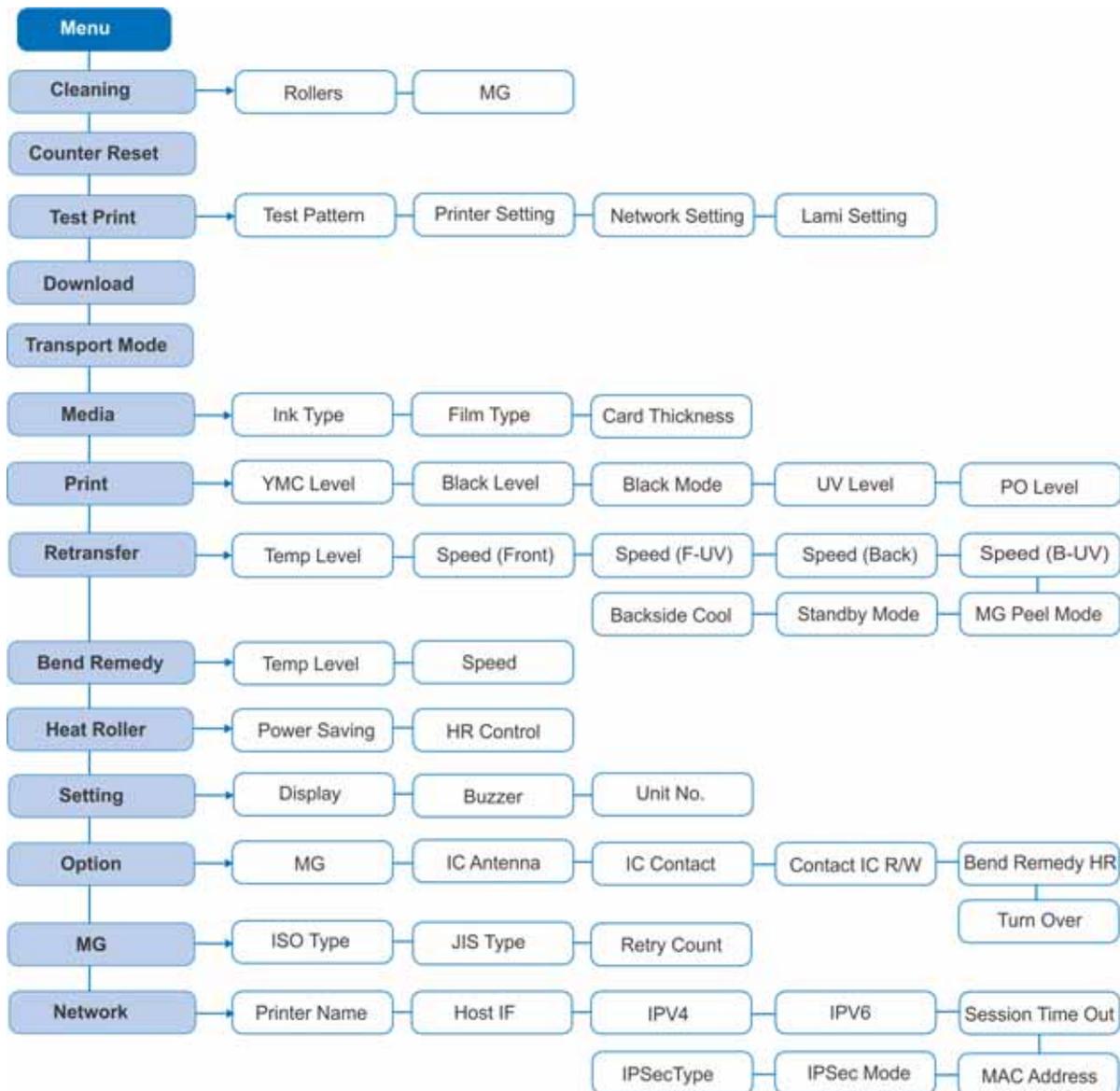
Chapter 5: Maintain The Printer

5

This chapter provides information to help you maintain the CR500 printer for optimal performance.

This chapter provides information about how to:

Remove Rejected Cards

The printer stores rejected cards inside the security enclosure. Follow your organization's procedures for when to remove rejected cards and how to track them.

1. Unlock the printer (A). Refer to "Unlock and Lock the Security Enclosure" on page 16 for the steps to follow.

2. Open the security enclosure door (B).

3. Remove rejected cards from the reject tray (C).
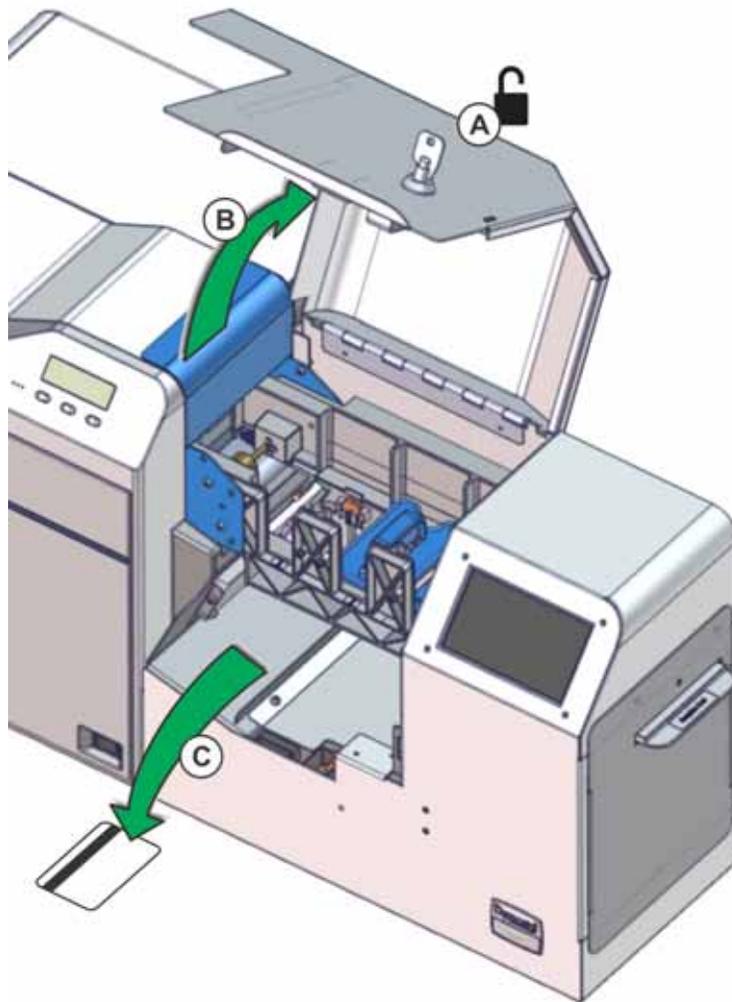
4. Close the security enclosure door to lock the printer. Refer to "Unlock and Lock the Security Enclosure" on page 16 for steps to follow.

5. Follow your organization's procedures to track the cards removed and to dispose of them properly.

Clean the Printer

This section provides instructions for proper care and cleaning of the CR500 printer, including recommendations about how often to clean and replace components.

Refer to the printer's *Installation and Administrator's Guide* for a list of recommended cleaning supplies.

Cleaning Schedule

Clean parts of the printer using the schedule in the following table.

> When the printer is not in use, turn off the power, let the printer cool, and cover the printer with the plastic shipping bag to keep dust and other debris out of the printer.

Task	Schedule	Description
*Card Cleaning Rollers/ Cleaning Unit	Every 200 cards or when you change the ink ribbon	Wash the blue cleaning rollers with water. Then, use the double-sided cleaning card and cleaning swab if debris remains on the rollers. Refer to "Clean the Card Cleaning Rollers and Cleaning Unit" on page 54.
	Yearly	Replace the cleaning unit yearly, or more often if it is no longer cleaning effectively.
*Multi-hopper	Every 200 cards or when you change the ink ribbon	Refer to "Clean the Multi-Hopper" on page 57.
Print Unit: • Card Load Roller • Card Feed Rollers • Heated Roller	Every 200 cards or when you change the ink ribbon	Clean every time you change the ink ribbon. With heavy use, clean the rollers more frequently. Refer to "Clean the Print Unit" on page 58.
*Magnetic Stripe Head	Every 200 cards or when you change the ink ribbon	Refer to "Clean the Magnetic Stripe Head" on page 64.
*Thermal Printhead	Every 200 cards or when you change the ink ribbon	Refer to "Clean the Thermal Printhead" on page 66.
*Printer Fan Filter	Clean regularly; replace yearly	Wash the filter as described in "Clean the Print Unit Fan Filter" on page 67. Replace the filter every year, or whenever the foam begins to deteriorate.

* May need to be cleaned more often depending on the type of card stock used and the environment.

Clean the Card Cleaning Rollers and Cleaning Unit

The cleaning unit, located inside the print unit door, removes lint and other debris from the cards before printing. Clean the cleaning unit rollers after every 200 cards or when you change the ink ribbon.

Use the following procedure to clean the unit.

1. Unlock and open the security enclosure door (A). Refer to "Unlock and Lock the Security Enclosure" on page 16 for the steps to follow.

2. Open the print unit door (B) and pull out the green cleaning unit (C).
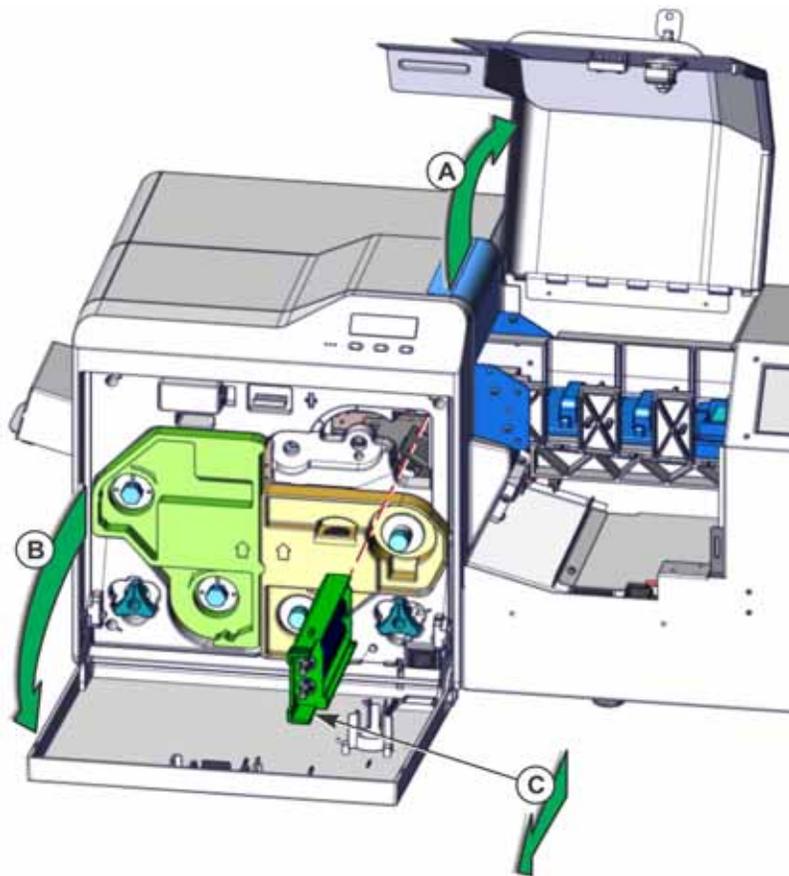
3. Clean the rollers.

a. Rinse the blue cleaning rollers with cold water. Gently rub the rollers under running water (D).
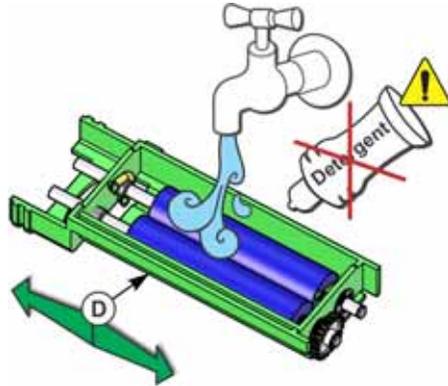
> ⚠️ **Caution:** Do not use soap or detergents, which can damage the rollers.

b. Allow the card cleaning rollers to dry thoroughly (E).
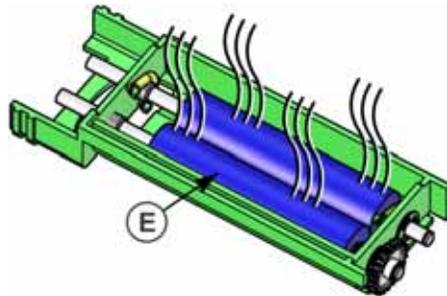
c. If debris remains on the rollers, use the double-sided cleaning card (part no. 508976-001).

i. Remove the protective paper from both sides of the double-sided cleaning card.

ii. Insert the cleaning card into the rollers of the cleaning unit.
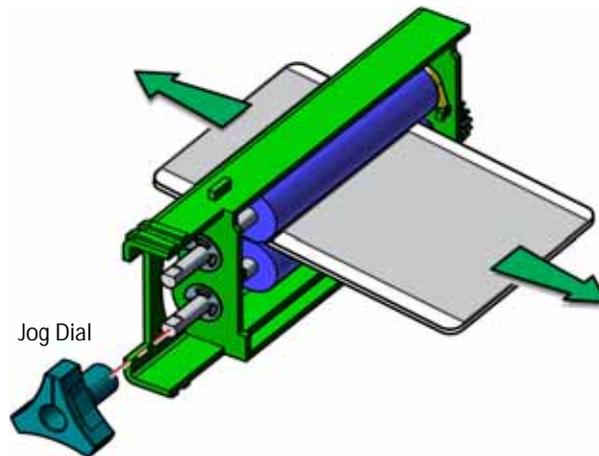
Jog Dial

iii. Move the cleaning card back and forth through the rollers until all debris possible is removed.

> ℹ️ If you have trouble moving the cleaning card through the rollers, remove a jog dial from the printer and use it to turn the rollers with the card in place.

d. If any debris still remains, use a cleaning swab to clean the rollers until no debris is visible.

When finished using the cleaning swab to clean the rollers, rinse the rollers under running water again to remove any traces of isopropanol left by the swab. Allow the rollers to dry completely before reinstalling the cleaning unit.

4. Reinstall the cleaning unit with the blue rollers facing to the right.

5. Replace the jog dial if it was removed.

6. Continue with "Clean the Multi-Hopper" on page 57.

or

If cleaning is complete, refer to "Prepare the Printer for Use" on page 68.

Clean the Multi-Hopper

The multi-hopper holds cards before they are printed. Clean the hoppers after every 200 cards, when you change the ink ribbon, or if you notice debris on cards.

1. If closed, unlock and open the security enclosure door (A). Refer to "Unlock and Lock the Security Enclosure" on page 16 for the steps to follow.

2. Remove all cards from the multi-hopper (B). Track the hopper(s) in which cards were placed so you can replace them after cleaning.

3. Prepare a cleaning card by folding an isopropanol cleaning card (C).
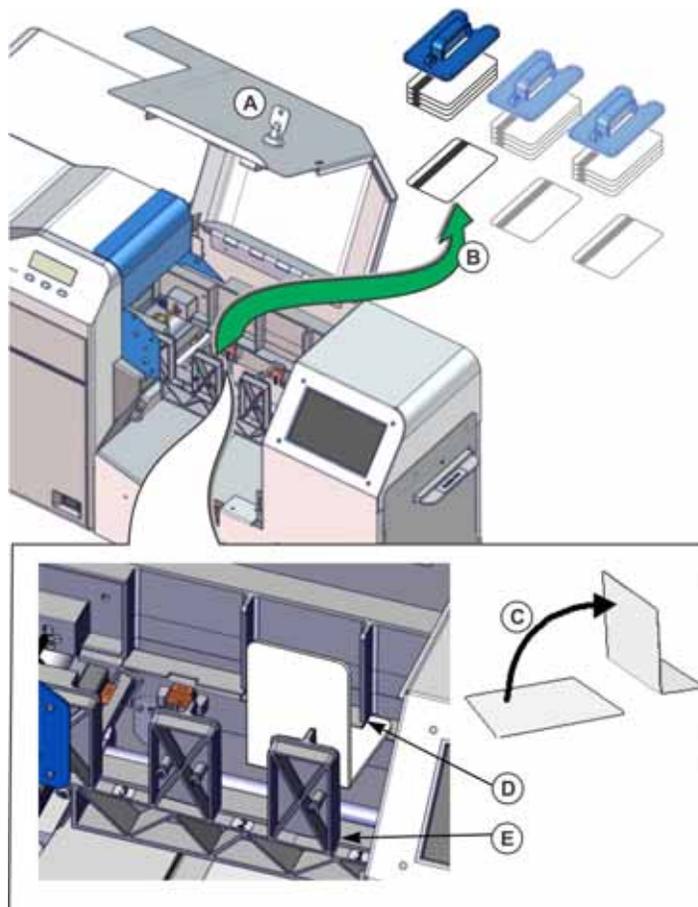
4. Clean the tracks:

   a. Insert the folded card into hopper 1 and push it all the way along the back track, toward the print unit (D). Remove the card. Repeat for hoppers 2 and 3.

   b. Use the clean end of the card to clean the front track (E).

5. Discard the used cleaning card.

6. Continue with "Clean the Print Unit".

   or

   If cleaning is complete, refer to "Prepare the Printer for Use" on page 68.

Clean the Print Unit

Use the single-sided, adhesive cleaning card to clean the card cleaning rollers, the card feed rollers, and the heated roller inside the print unit. The card cleaning rollers move cards into the print unit. The card feed rollers move the card through the printer. The heated roller provides the heat that transfers the film to the card. Clean the print unit after every 200 cards or when you change the ink ribbon.

Refer to "Print Unit Roller Layout" on page 78 to find the location of the rollers inside the print unit.

1. Before beginning this procedure, do the following:

   ■ Clean the cleaning unit as described in "Clean the Card Cleaning Rollers and Cleaning Unit" on page 54.

   ■ Clean the multi-hopper as described in "Clean the Multi-Hopper" on page 57.

2. Open the security enclosure door, if necessary. Refer to "Unlock and Lock the Security Enclosure" on page 16 for the steps to follow.

3. Power off the printer. Wait approximately 10 to 20 minutes for the printer to cool down.

   Caution: Do not clean the heated roller while it is hot. Allow the printer to cool, or perform the cleaning before the heated roller reaches operating temperature.

4. Remove the concealed output stacker (A).

5. Remove the retransfer film cartridge:

    a. On the print unit, slide the door latch up and open the print unit door.

    b. Press the retransfer film cartridge release button and remove the green retransfer film cartridge (B).

    c. Close the print unit door (C).
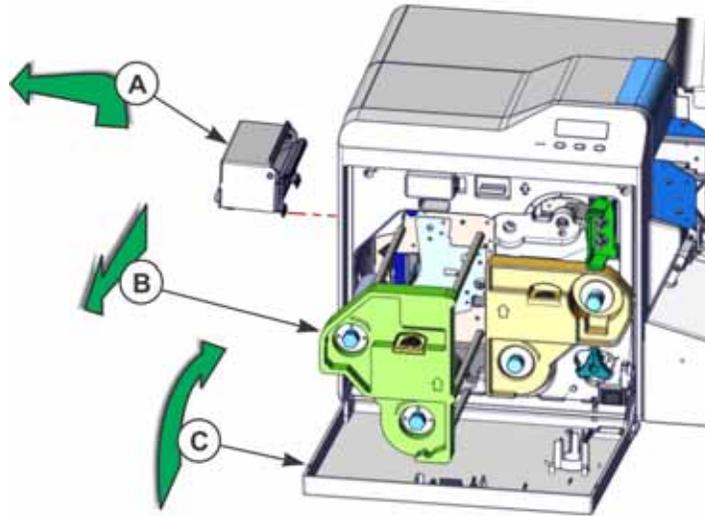
6. Remove the cards and card weights from the multi-hopper (D). Keep the security enclosure door open.
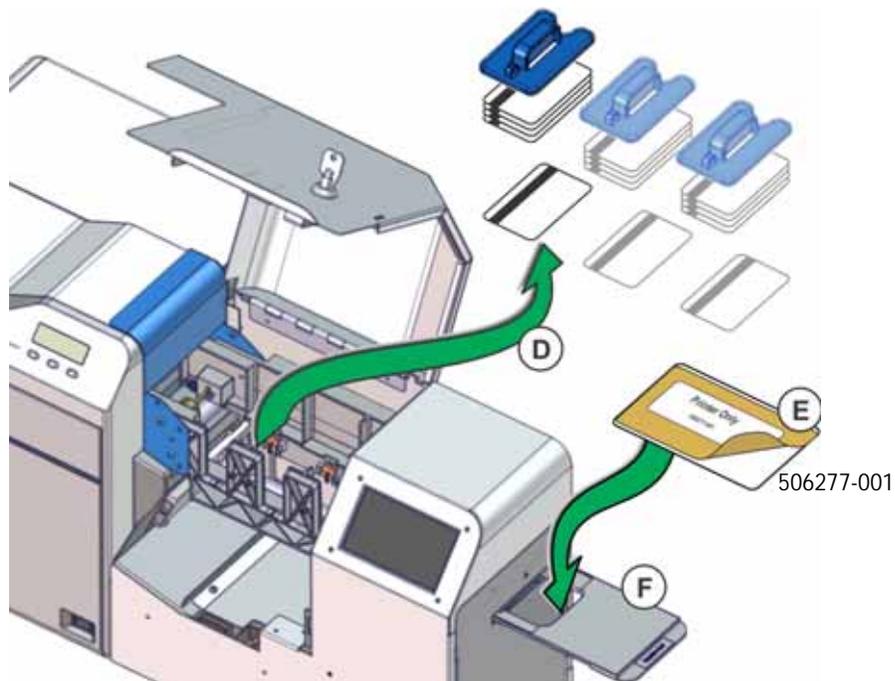
506277-001

7. Pull out the exception card slide.

8. Remove the protective paper from the single-sided cleaning card, part no. 506277-001 (E).

> ⚠️ **Caution:** The CR500 uses two different cleaning cards:
>
> - Use the single-sided cleaning card with the label "Printer Only" and part no. 506277-001 to clean the print unit (this procedure).
> - Use the double-sided cleaning card with part no. 508976-001 to manually clean the cleaning unit rollers. Refer to "Clean the Card Cleaning Rollers and Cleaning Unit" on page 54.
>
> Inserting the wrong cleaning card into the printer will damage the printer. **Do not use the card with the label "Cleaning Unit Only" to clean the print unit**.

9. Insert the cleaning card into the exception card slide with the sticky side facing up. Push it in until the end of the card rests in the slot (F).

10. Move the cleaning card through the printer.

    a. Rotate the shuttle to the down position (G).

    b. Push the exception card slide in, past the resistance until it reaches the stop position (H).
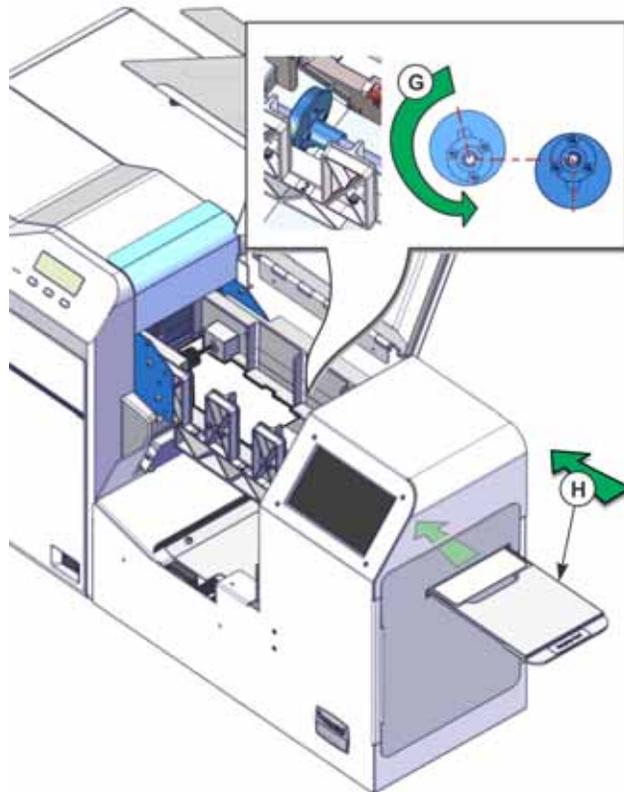
c. Manually slide the cleaning card to the print unit card feed roller (I).

d. Stop when the card is under the roller and engages the print unit (J).

> Push the cleaning card toward the print unit far enough for the load roller to pull in the card when cleaning begins.
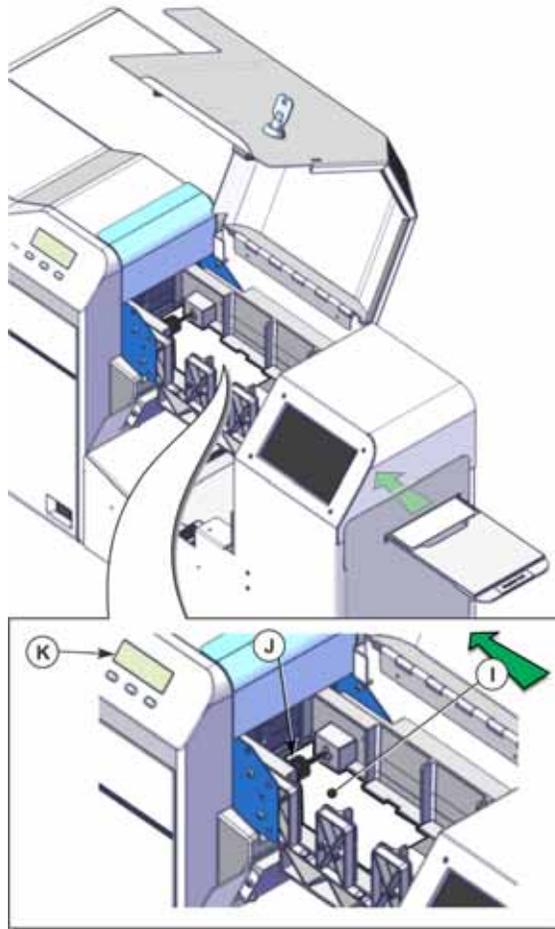
11. Power on the printer.

12. After initializing, **Film Search A1** displays on the print unit front panel (K). Press **Menu** to start the cleaning process.
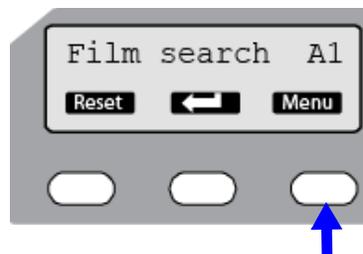
13. Use the print unit front panel to run the cleaning card:

   a. The panel displays the **Cleaning** message. Press **Enter**.
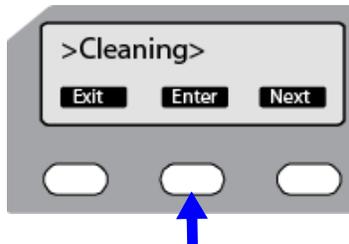
   b. The **Rollers OK?** message displays. Press ⬅ (Return).
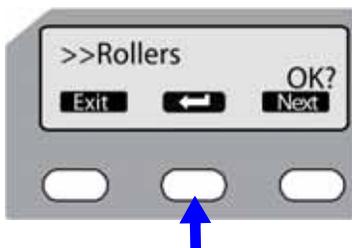
   c. The **Film Checking** message displays, followed by **Cleaning Start OK?**. Press ⬅ to start the cleaning process.

   The print unit pulls the cleaning card into the print unit. **Cleaning** displays, and the cleaning process begins.

   > ⓘ If the print unit card feed roller is turning but the card is not pulled into the unit and no errors display, lightly push the card until the roller catches it and the card moves into the print unit.

   d. The card is discharged from the output area and **Cleaning Start OK?** displays again.

   e. Turn the cleaning card over and place it in the exception card slide with the sticky side facing down. Refer to step 10 to position the cleaning card properly.

   f. Press ⬅ to start the cleaning process.

14. When the cleaning card is discharged, press **Exit** repeatedly to end the cleaning process.

15. Discard the used cleaning card.

> Dispose of the cleaning card after using it. Use a new cleaning card each time that you clean the print unit.

16. When cleaning is completed:

    a. Reinstall the retransfer film cartridge.

    b. Replace the concealed output stacker.

    Refer to "Prepare the Printer for Use" on page 68.

Clean the Magnetic Stripe Head

Clean the magnetic stripe head after every 200 cards or when you change the ink ribbon. Use an isopropanol cleaning card to perform the cleaning procedure.

1. If closed, unlock and open the security enclosure door (A). Refer to "Unlock and Lock the Security Enclosure" on page 16 for the steps to follow.

2. Remove any cards or card weights in the multi-hopper (B). Keep the security enclosure cover open.

3. Place the isopropanol cleaning card in hopper 3 (C).

   ⓘ Plan to use the cleaning card immediately after removing it from its wrapper. The card dries out if it is out of its package for more than a few minutes.

4. Manually slide the card to the print unit card feed roller (D). Stop when the card is under the roller and engages the print unit.

Hopper 3
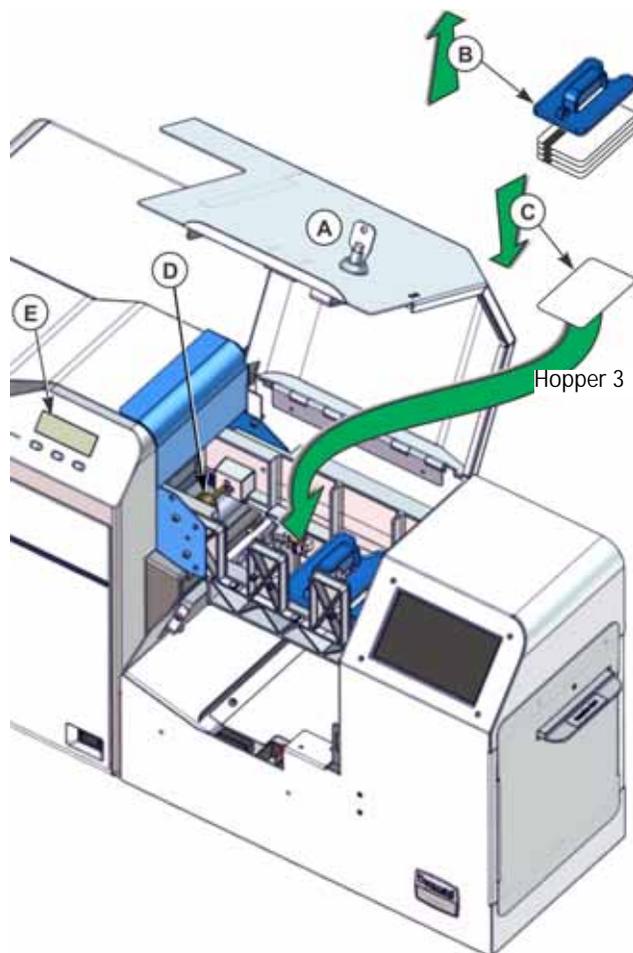
5. At the print unit front panel (E):

   a. Press **Menu** to start the cleaning process.

Door Open	D1
Total	450

   Reset Menu
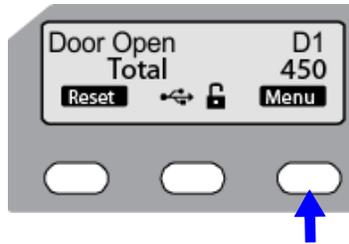
   b. The **Cleaning** message displays. Press **Enter**, then press **Next**.

   >Cleaning>

   Exit   Enter   Next

   1   2
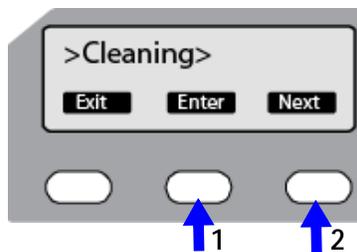
   c. The **MG OK?** message displays. Press ⬅ (Return) to start the cleaning process.

   >>MG
   OK?

   Exit   ⬅   Next
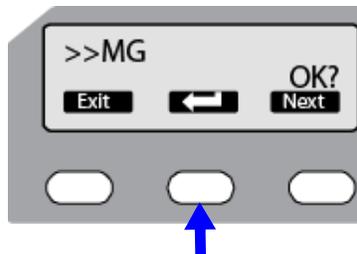
   The print unit pulls the cleaning card into the print unit and cleaning begins.

   > ℹ️ If the print unit card feed roller is turning but the card is not pulled into the unit and no errors display, lightly push the card until the roller catches it and the card moves into the print unit.

   d. When cleaning is completed, the print unit places the card into the reject tray. Remove the card from the reject tray (refer to "Remove Rejected Cards" on page 52).

6. Discard the cleaning card.

7. Continue with "Clean the Thermal Printhead" on page 66.

   or

   If cleaning is complete, refer to "Prepare the Printer for Use" on page 68.

Clean the Thermal Printhead

Clean the thermal head assembly after every 200 cards or when you change the ink ribbon. Refer to *"Print Unit Roller Layout"* on page 78 to find the location of the thermal printhead inside the print unit.

> ⚠️ **Caution:** The thermal printhead can be damaged by an electrostatic charge. Discharge yourself by touching the print unit frame before cleaning the printhead.

1. Unlock the printer and open the security enclosure (A). Refer to *"Unlock and Lock the Security Enclosure"* on page 16 for the steps to follow.

2. Power off the printer.

3. Open the print unit door (B).

4. Press the ink ribbon cartridge release button and remove the orange ink ribbon cartridge (C).

5. Press the retransfer film cartridge release button and remove the green retransfer film cartridge (D).
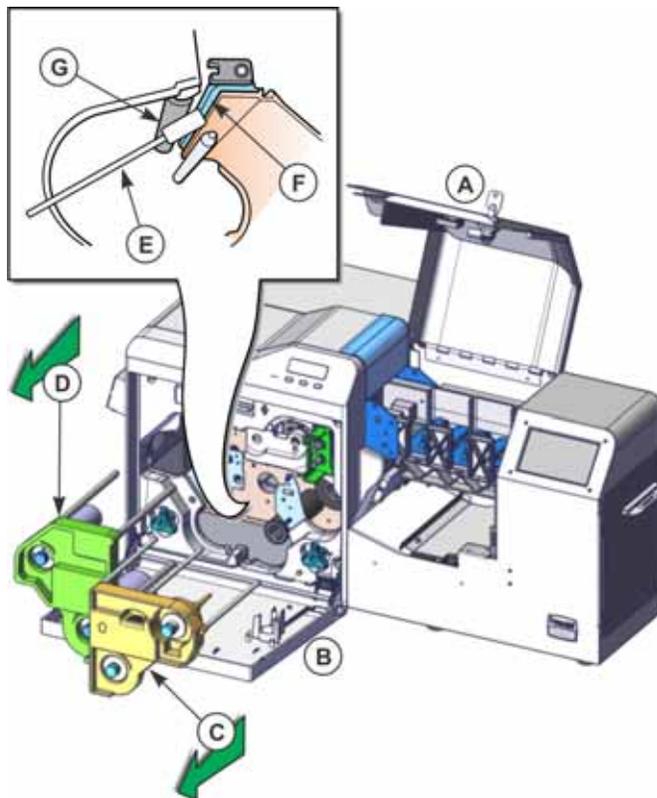
6. Locate the thermal printhead and rollers. The thermal printhead is located in the area between the ink ribbon and retransfer film cartridge slots.

   a. Carefully insert the cleaning swab (E).

   b. Gently wipe the thermal printhead (F).

   c. Gently wipe the roller (G), just above the printhead.

   d. Discard the cleaning swab when finished.

⚠️ **Caution:** Never use metal or abrasive materials to clean the thermal printhead.

7. Reinstall the ink ribbon and retransfer film cartridges.

8. Close the print unit door and power on the printer. Refer to "Prepare the Printer for Use" on page 68.

Clean the Print Unit Fan Filter

The print unit has a fan filter to prevent airborne particles from entering the print area. Clean the filter regularly and replace it yearly.

1. Press down on the latch (A) to free the external fan cover.

2. Remove the external fan cover (B) and filter (C).
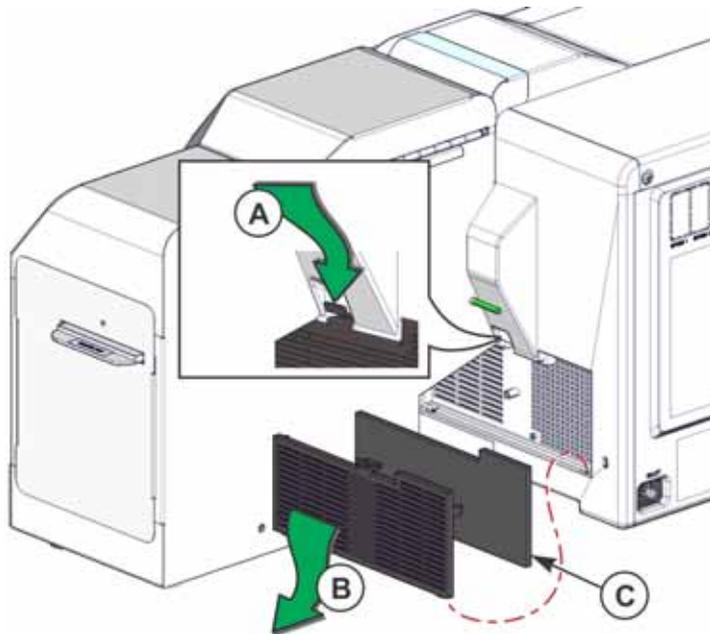
3. Rinse the filter under running water.

4. Allow the filter to dry thoroughly.

5. Replace the fan filter and cover in the print unit.

Prepare the Printer for Use

Do the following after cleaning is completed:

a. Close the print unit door if it is open.

b. On the print unit front panel, press **Exit** to return to the top level of the menu system. If an error displays on the front panel, press **Reset** and then press ⬅. The printer initializes.

c. Replace the cards and card weights in the multi-hopper.

d. Close the security enclosure door to lock the printer.

Prepare the Printer for Transport

Use saved packaging materials to prepare the printer for transport. Transport includes moving the printer from one location to another, storing the printer, or sending the printer for service.

To transport the printer:

- Disable the printer

- Prepare the printer for packaging

- Package the printer

Disable the Printer

To meet standard security requirements, the printer is shipped with most features disabled. When you send the printer to another location, disable the printer, create a new activation code, and provide the activation code to the recipient.

HINTS & TIPS

- The printer activation code must be five characters or more.

- The code can contain the numerals 0 through 9, uppercase and lowercase alphabetic characters (A–Z, a–z), and the special characters $ = / +.

To disable the printer:

1. Begin with supplies installed and the printer powered on.

2. Enter the touch screen menu.

   a. Begin when the touch screen displays **Ready** on line 1. Press the USER button (a) to suspend the printer.

   The USER button border turns gray and **Menu available** displays on line 2.

b. Press ENTER (b) to enter the menu system.

Maintenance displays on line 2.

3. Enter the **Activate** menu.

a. Press the down arrow key (c) until **Activate** displays on line 2.

b. Press ENTER (d) to select **Activate**.

Activate displays on line 1 and **Enable** displays on line 2.

c. Press the down arrow key (e) to display **Disable** on line 2.

d. Press ENTER (f) to select **Disable**.

4. Enter a new activation code.

   a. Beginning with the left-most place, press the up arrow or down arrow keys (g) to display the desired character at the cursor position.

   b. Press ENTER (h) to select the character and move the cursor to the right.

   c. Repeat step 4a and step 4b until you have entered the new activation code. Press ENTER (h) again to position the cursor after the final digit.

5. Press ENTER (i) one more time to submit the code.

If **Request Success** displays on line 2 of the touch screen, the printer is disabled.

If another message displays on line 2 of the front panel, the system deactivation failed. Repeat step 4 and step 5.

6. Exit the menu system.

Press the USER button (j) repeatedly until **Deactivated** displays on line 1.

> **Caution:** Make sure that you write down the activation code that you entered. That code must be entered to reactivate the printer. Refer to "Activating the Printer" in the printer's *Installation and Administrator's Guide* for instructions.

Prepare the Printer for Packaging

After you disable the printer (refer to "Disable the Printer" on page 69), follow these steps to prepare the printer before packaging it for shipment or storage.

Remove Supplies From the Printer

1. Unlock the printer and open the security enclosure door. Refer to "Unlock and Lock the Security Enclosure" on page 16 for steps to follow.

2. On the print unit, slide the door latch up and open the print unit door.

3. Remove the ink ribbon cartridge, and then remove the ink ribbon supply from the cartridge. Place the empty cartridge back into the printer. Refer to instructions in "Load the Ink Ribbon" on page 23.

4. Remove the retransfer film cartridge from the printer and remove the film supply from the cartridge. Place the empty cartridge back into the printer. Refer to the instructions in "Load the Retransfer Film" on page 26.

5. Remove all cards and card weights from the security enclosure. Place the card weights in the accessory tray of the shipping carton. Push the exception card slide all the way in.

6. Close the door to the print unit.

7. On the print unit front panel, press **Reset** to display the **Initialize OK** message.
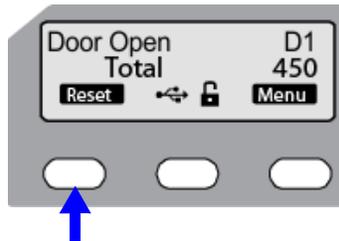
8. Press ⬅ (Return). The printer attempts to initialize, then a **Film search** or an **Ink Error** message displays.
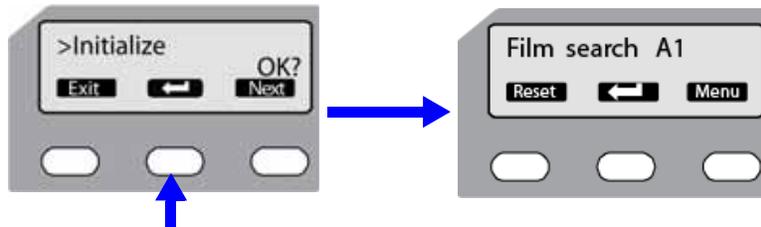
Place the Printer in Transport Mode

Use the print unit front panel to place the printer in transport mode. The printer must be in transport mode when it is moved, shipped, or stored.

9. Press the **Menu** key to enter the menu system.
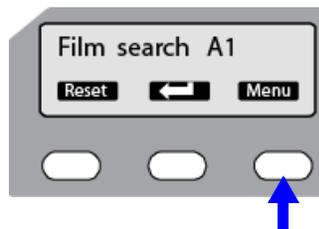
Cleaning displays on the front panel.

10. Press the **Next** key until **Transport Mode** displays on the front panel.
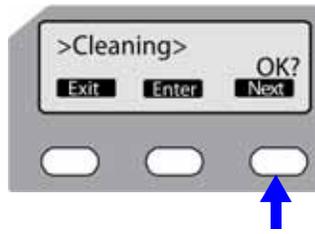
11. Press ⬅ (Return) to select **Transport Mode**.
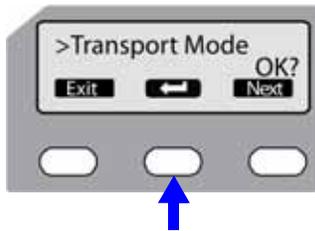
Please Power Off displays on the front panel.
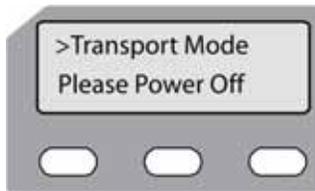
12. Close and lock the security enclosure door.

    Deactivated: Menu available displays on the touch screen.

13. Power off the printer.

    The printer is in transport mode. Transport mode is canceled when the printer is powered back on.

14. Disconnect the power and data cables from the printer.

15. Remove the concealed output stacker:

    a. Press the bottom of the stacker up to release it (A).

    b. Pull the stacker away from the printer (B).

16. Allow the unit to cool before packaging it for transport.
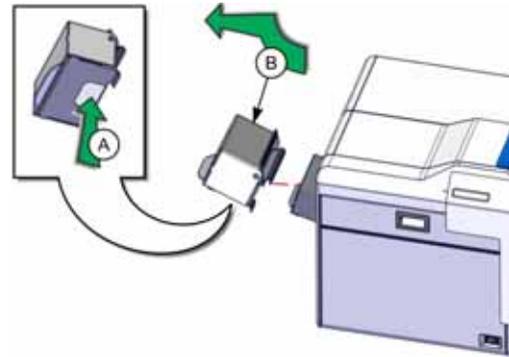
Package the Printer

Use the original shipping carton and materials to package the printer for shipping or storage.

1. Place the printer in the plastic bag.

2. Package the printer and accessories in the shipping carton.
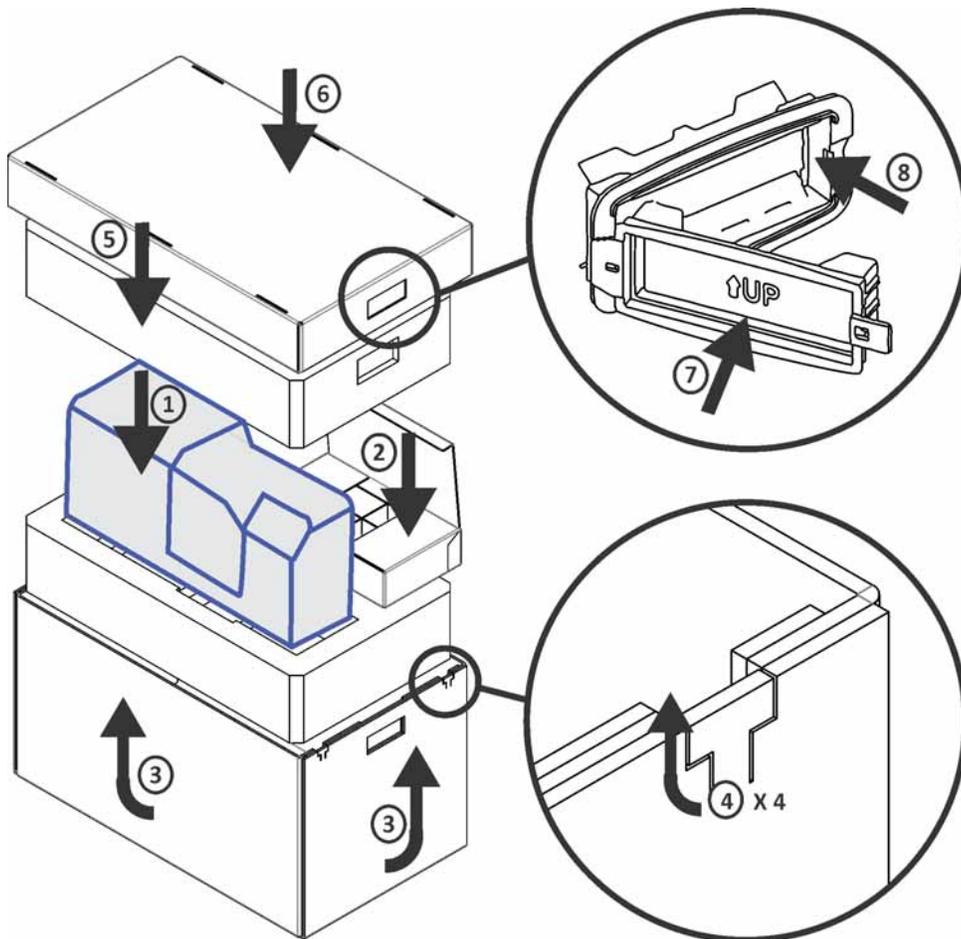
3. Make sure to provide the activation code (created during "Disable the Printer" on page 69) to the recipient of the printer.

   The recipient needs the activation code to reactivate the printer.

Maintain The Printer

Chapter 6: Error Recovery and Messages

6

This chapter provides information to help you respond to CR500 card printer messages. It also explains how to clear card jams and how to recover from other errors.

This chapter describes:

Print Unit Roller Layout

Unlock the printer before starting any of the tasks in this chapter. Refer to "Unlock and Lock the Security Enclosure" on page 16. After you open the security enclosure, you can open the print unit door to access the print unit cartridges and rollers.

The following diagram shows the location of the rollers and other components inside the print unit.
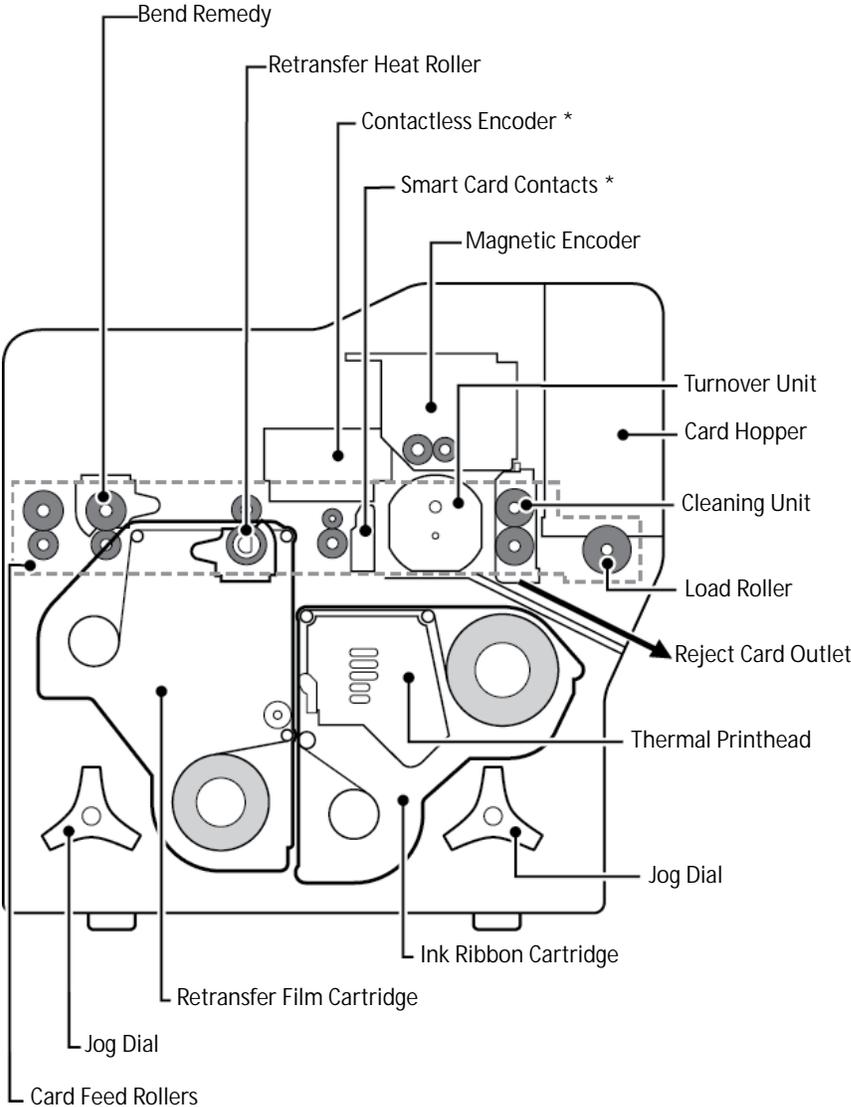
*Optional features

Printer Error Recovery

The printer touch screen displays status and error messages. The print unit front panel background color changes to red when the print unit has a problem, and it displays text that describes the problem. Use the error messages to identify the cause of the problem and to help you determine the proper remedy.

Clear Card Jams

When a card becomes jammed inside the printer, you must remove it before you can print any cards. The procedure you use to clear a card jam depends on the location of the card.

Follow these general instructions to locate the jammed card and remove it from the printer. Then, refer to the procedures in this section that contain specific instructions for clearing each type of card jam.

When a card jams inside the printer:

1. Read the message displayed on the touch screen (for example, **Input hopper card jam 157**).

2. Look up the displayed message in Appendix B: "Troubleshooting Touch Screen Messages". Read the possible causes and solutions for the message.

3. Unlock and open the security enclosure door. Look at the print unit front panel to verify the location of the jam.

4. Look inside the security enclosure or print unit to see if you can locate the card.

   Remove the ink ribbon cartridge, the retransfer film cartridge, and the card cleaning unit, if necessary.

5. Power off the printer and remove the jammed card if you can see and reach it.

   Caution:
   - Some internal parts may be hot. Wear a glove when reaching into the printer or let it cool first. Use the provided tweezers to remove the card, if possible.
   - Do not force the card to move. Contact your service provider for assistance if the card does not move easily.

6. If you remove the jammed card successfully:

   a. Replace the ink ribbon cartridge, the retransfer film cartridge, and the card cleaning unit, if removed.

   b. Close the print unit door.

   c. Close the security enclosure door to lock the printer.

d. Power on the printer.

   After initializing and warming up, **Ready** should display on the touch screen.

   If the touch screen still displays a message, press the USER button to try and clear the message.

7. If you could not find the card and clear the jam, use the following sections, based on the location of the jam.

Review "Use the Jog Dials to Move a Card Inside the Print Unit" before you attempt to clear a card jam. Knowing where to place the jog dials and understanding the effects of turning the jog dials can help you clear card jams more quickly and effectively.

Use the Jog Dials to Move a Card Inside the Print Unit

Use the two jog dials (A), located inside the print unit, to manually move a jammed card inside the print unit. When not in use, store the jog dials in their home positions as shown in the following illustration.
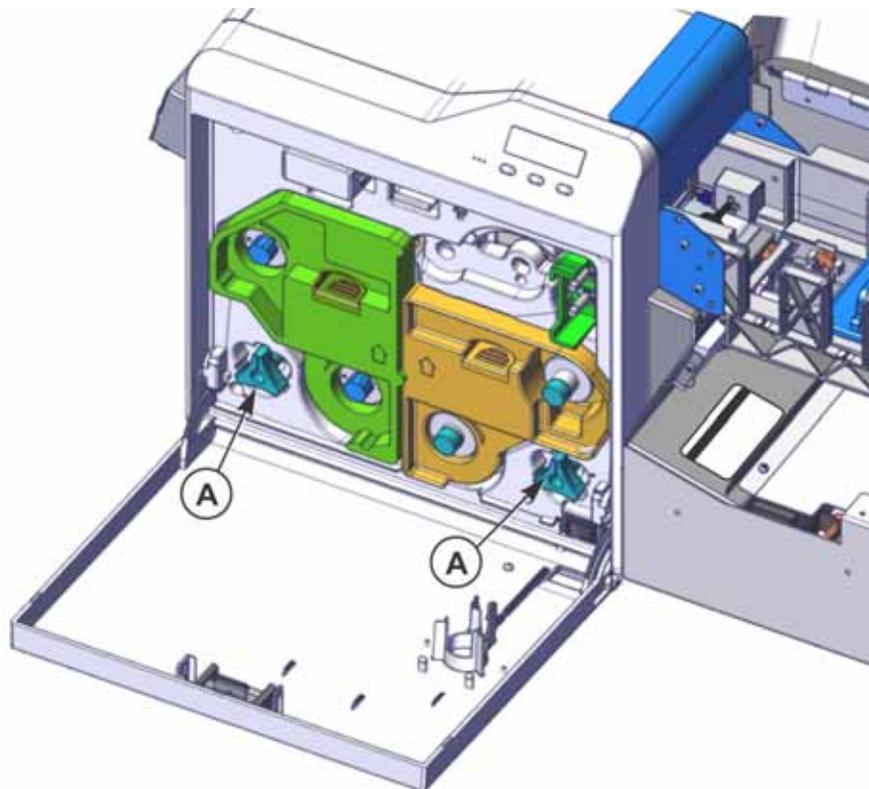
To use a jog dial, remove it from the storage position and place it on one of the following print unit shafts:

- The bottom shaft of the card cleaning unit (B)

- The turnover unit shaft (C)

  > On some systems, the turnover unit shaft may have a knob that prevents the jog dial from fitting on the shaft. This is designed to protect the turnover unit shaft from breaking. Refer to "Turnover Unit Jog Dial" on page 83 for more information.

- The retransfer heat roller shaft (D)

Placing a jog dial at each location and then turning it causes specific movements to occur inside the print unit. If a card has jammed inside, turning one or more jog dials can help you remove the card from the print unit.
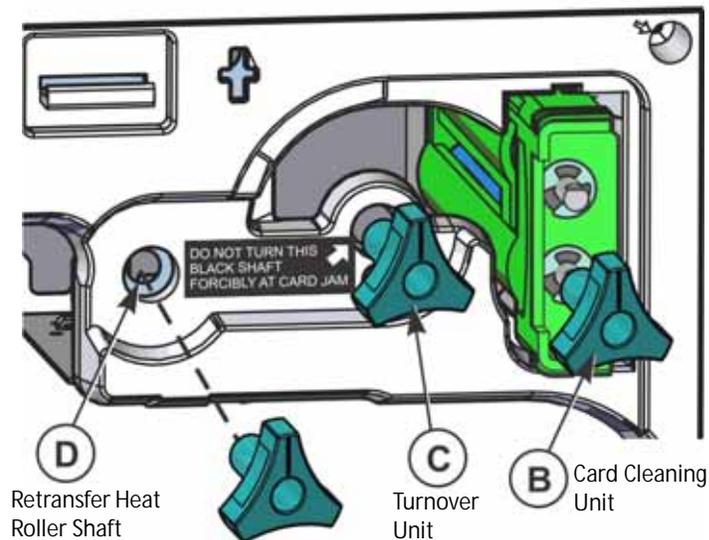
Card Cleaning Unit Jog Dial

Place a jog dial onto the bottom shaft of the card cleaning unit to do the following:

- If a card is in the cleaning unit (E), turn the jog dial clockwise to move the card to the right. This may allow you to move a jammed card into the security enclosure for removal. Turn the jog dial counterclockwise to move the card to the left. If the turnover unit is in its home position (F), you can move a card from the cleaning rollers into the turnover unit.

- If a card is in the turnover unit and the turnover unit is in its home position (F), turn the jog dial clockwise to move the card to the right, into the card cleaning unit. Turn the dial counterclockwise to move the card to the left, through the turnover unit and into the retransfer heat rollers.

> To move a card from the card cleaning unit into the turnover unit (or from the turnover unit into the card cleaning unit), the turnover unit must be in its home position (F). To manually rotate the turnover unit, refer to "Turnover Unit Jog Dial" on page 83.

Turnover Unit   Cleaning Unit
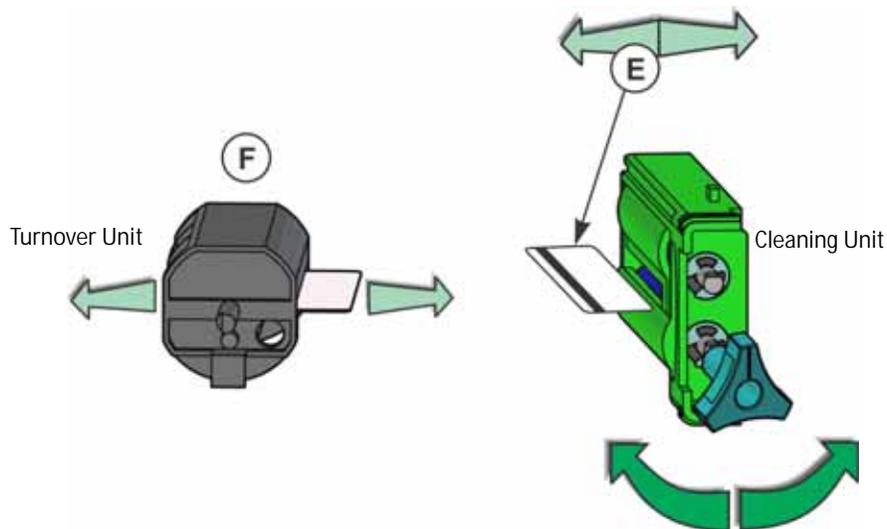
Turnover Unit Jog Dial

Placing a jog dial onto the black shaft at the end of the turnover unit allows you to rotate the turnover unit continuously in either direction. If a card is inside the turnover unit, turning this jog dial does not cause the card to move in or out of the turnover unit.

Rotating the turnover unit manually with a jog dial does the following:

- Places the turnover unit in home position, as required to put the printer in **Ready** status. When the turnover unit is in home position, the line on the jog dial is at the 3 o'clock position. This allows a card to pass horizontally from the card cleaning unit into the turnover unit.

- Allows you to slide a card out of the turnover unit and drop it into the reject tray inside the security enclosure. (Moving a card to the reject tray requires the turnover unit to be set to the 4 o'clock position, and then using a jog dial on the card cleaning unit shaft to move the card out of the turnover unit. Refer to "Clear a Transfer or Retransfer Section Jam" on page 91.)

Caution:

- During a card jam, or if there is a card protruding from the turnover unit, you may feel resistance when turning the jog dial. **Do not turn the jog dial forcefully.** If the turnover unit does not rotate freely, the plastic shaft may break and repairs will be necessary.

- When rotating the turnover unit with a card inside, turn the card cleaning unit jog dial in small increments to keep the card centered in the turnover unit. If the card protrudes in either direction, you will encounter resistance and risk breaking the turnover unit shaft. Work slowly and carefully.

Home Position

Jog dial line in 3 o'clock position

DO NOT TURN THIS BLACK SHAFT FORCIBLY AT CARD JAM

Jog dial line in 4 o'clock position

To Reject Tray
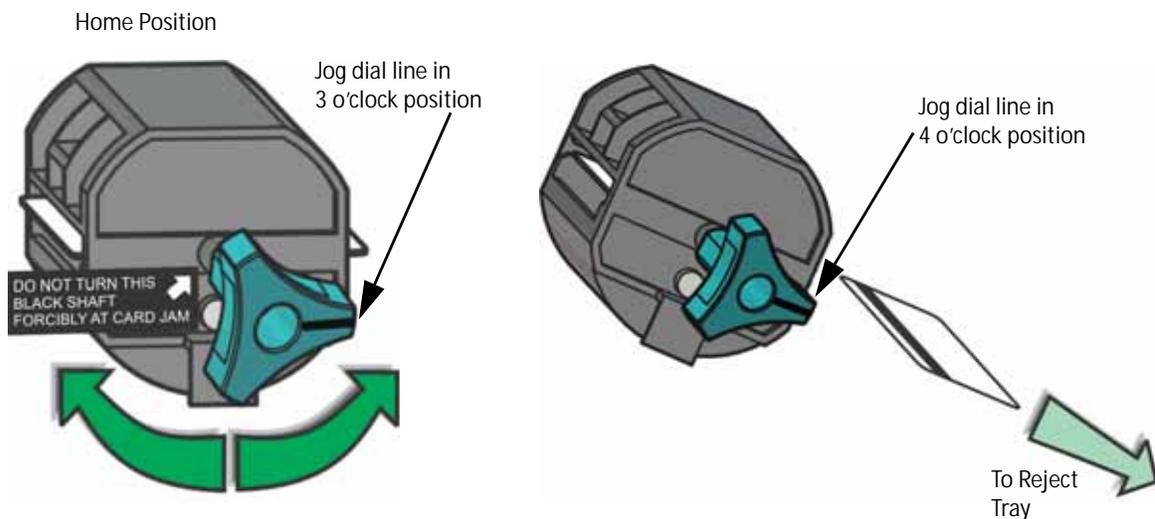
If the turnover unit shaft has a knob at the end, it prevents the jog dial from fitting onto the shaft. The knob protects the turnover unit shaft from breaking due to force from the jog dial. To remove a card jam, turn the knob at the end of the shaft carefully to rotate the turnover unit to the proper position.

Turnover Unit
Shaft Knob
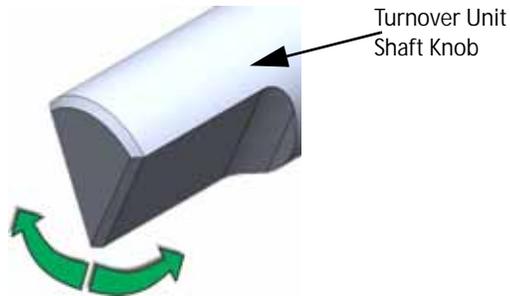
Retransfer Heat Roller Jog Dial

Placing a jog dial onto the retransfer heat roller shaft allows you to rotate the retransfer heat rollers continuously in either direction. If a card is in these rollers, turn the jog dial clockwise to move the card to the right (toward the turnover unit), or counterclockwise to move the card to the left (toward the concealed output stacker).

DO NOT TURN THIS
BLACK SHAFT
FORCIBLY AT CARD JAM
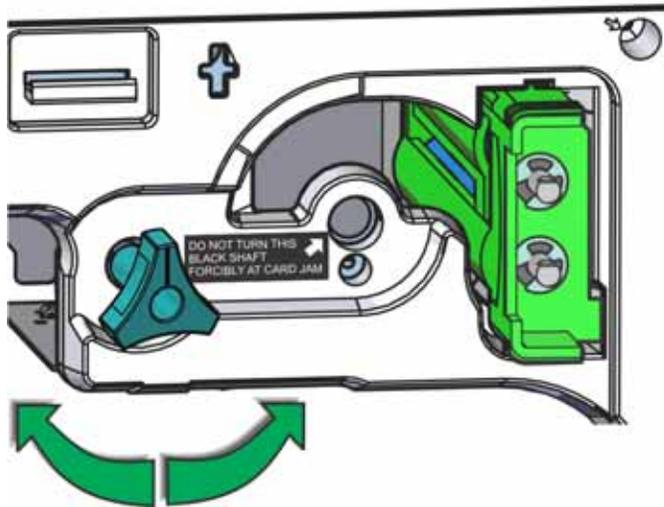
If a card is jammed in the retransfer area of the print unit, turning the jog dial counterclockwise may move the card to an open area where you can remove it from the print unit. Refer to "Clear a Transfer or Retransfer Section Jam" on page 91 for the steps to follow.

The retransfer heat rollers require you to turn the jog dial with much more force than when rotating the turnover unit. The retransfer heat rollers shaft is made of steel and will not break while turning the jog dial normally. However, if the rollers are jammed and do not turn, do not force them. Contact your service provider for assistance.

Clear a Multi-Hopper Jam

If a card jams inside the security enclosure multi-hopper or over the load roller, do the following (refer to the "Clear a multi-hopper card jam" illustration on page 86):

1. Press the USER button on the touch screen (A) to attempt to clear the problem. If the card jam message displays again, continue with these steps.

2. Unlock the printer (B) and open the security enclosure door. Refer to "Unlock and Lock the Security Enclosure" on page 16 for the steps to follow.

3. Try the following steps in the order listed:

    a. Look at the multi-hopper, near the print unit load roller, for jammed cards.

        i. If you can reach the jammed card, pull it out (C).

        ii. If necessary, remove the backup roller (D) to make it easier to pull out the card. Replace the backup roller when the card is removed.

    b. For cards in the middle of the card track.

        i. Remove all cards and card weights from the input hoppers.

        ii. Rotate the shuttle to the down position (E).

        iii. Work the card along the tracks, back to the exception card slide. Then, extend the slide and remove the card (F).

        iv. Replace the cards and card weights.

4. Record the type of card removed, following your organization's guidelines for tracking cards and supplies.

5. On the print unit front panel, look for a message. **Card Out** is the expected message.

    If another message displays, refer to "Message 158: Check print unit front panel" on page B-13 for possible causes and solutions.

6. Close the security enclosure door to lock the printer.

7. On the touch screen, press the USER button to clear the problem. The touch screen displays **Busy** while the printer initializes.

Clear a multi-hopper card jam
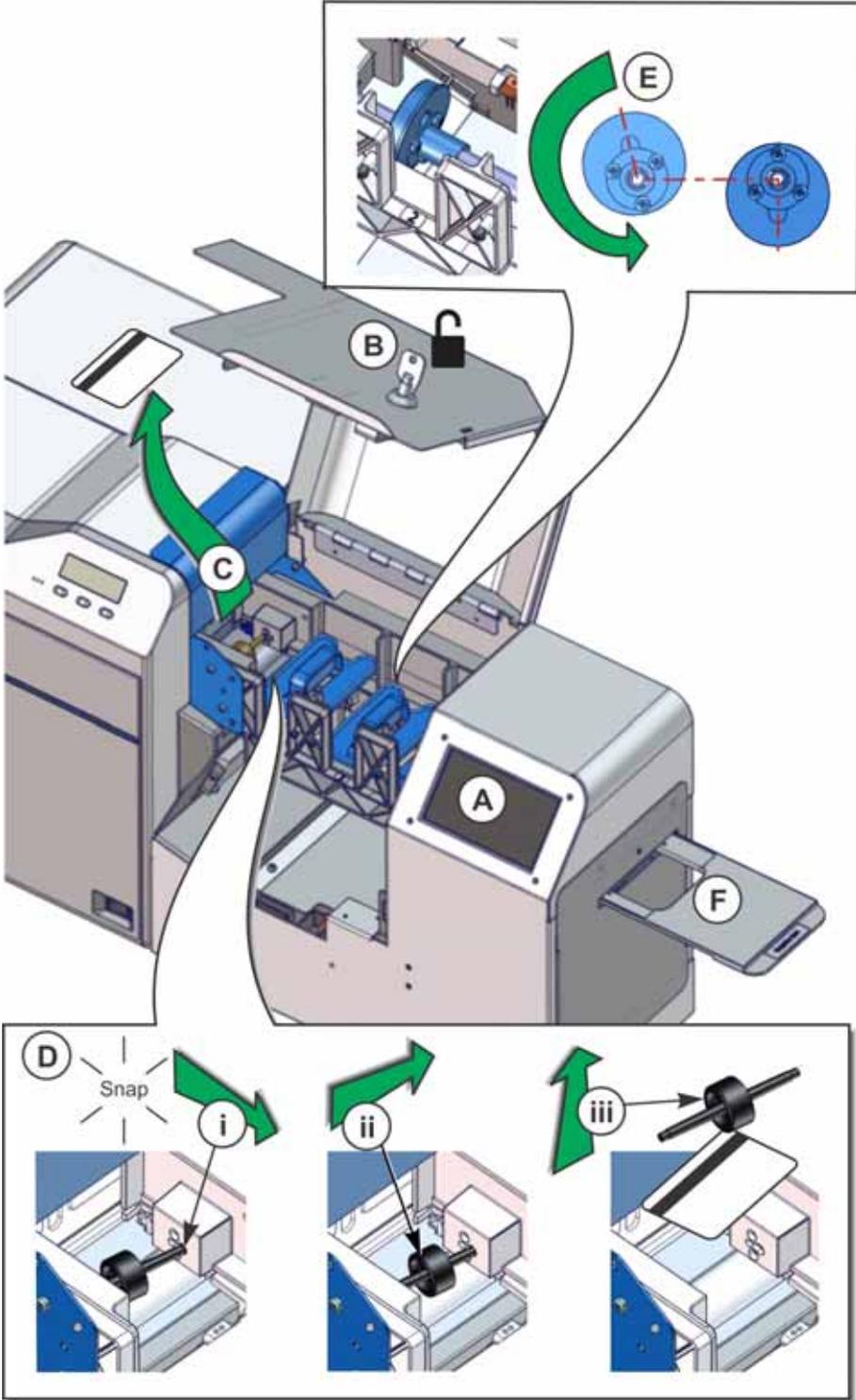
Clear a Card Feed or Turnover Jam

If a card has entered the print unit and is jammed in the card cleaning rollers or in the turnover unit, **Print unit card jam 159** displays on the touch screen. **Jam (Hopper)** or **Jam (Transfer)** displays on the print unit front panel.

Caution: Some internal parts may be hot. Wear a glove when reaching into the printer, or let it cool first.

There are two ways to remove these types of card jams:

- Place a jog dial on the card cleaning unit. Move the card back into the security enclosure for removal.

- Place one jog dial on the card cleaning unit, and a second jog dial on the turnover unit. Position the card inside the turnover unit, and then drop the card into the reject tray in the security enclosure.

  If the turnover unit shaft has a knob on the end, turn the knob to move the card into position for removal. The jog dial does not fit on the turnover unit shaft when the knob is present.

Do the following to clear the card jam:

1. Unlock the printer and open the security enclosure door. Refer to "Unlock and Lock the Security Enclosure" on page 16 for the steps to follow.

2. Read the print unit front panel to verify the location of the jam.

3. If you can see any part of the card in the multi-hopper, do the following to remove the card.

   a. Remove any cards and the card weight from hopper 3 (the hopper closest to the print unit).

   b. Slide the door latch up and open the print unit door.

c. Place a jog dial on the lower shaft of the card cleaning unit (A).

d. Turn the jog dial clockwise (B) until the card has moved as far as possible into the multi-hopper.
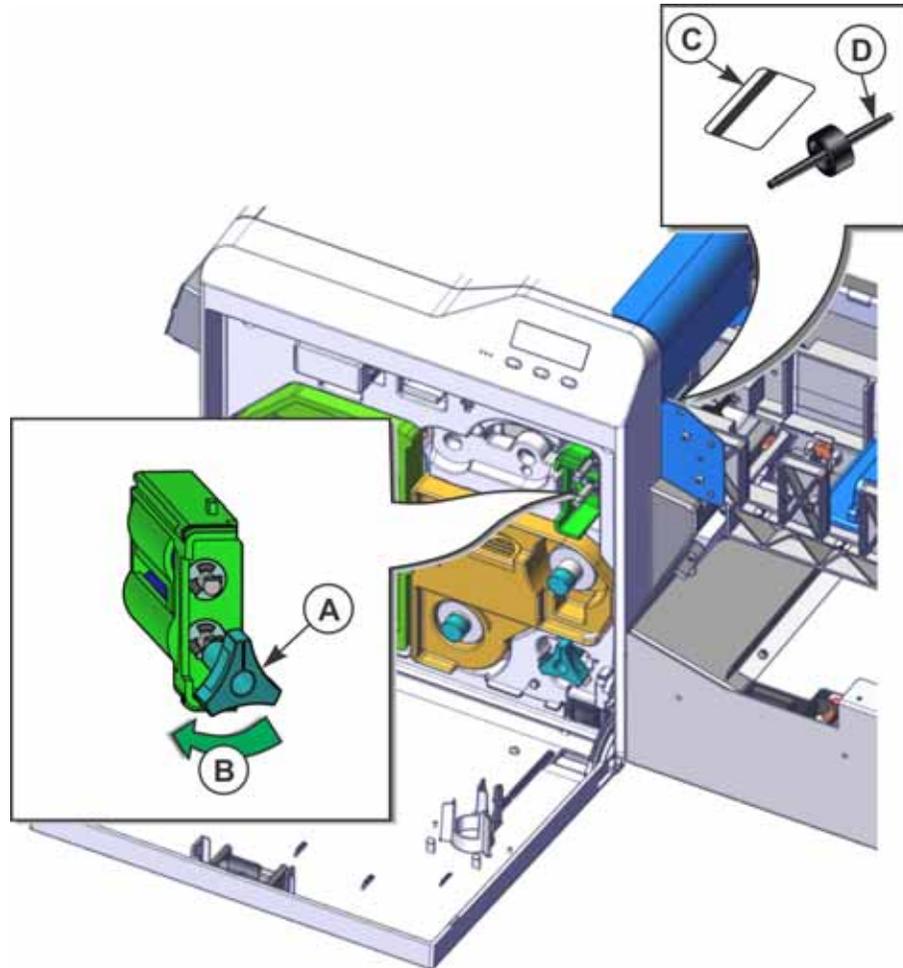
e. Manually slide the card to the right until it is fully inside the security enclosure. Then, remove the card from the multi-hopper, if possible (C).

Remove the backup roller (D) from the security enclosure, if necessary, to make it easier to access the card. Refer to "Clear a Multi-Hopper Jam" on page 85.

f. Replace the backup roller, if removed.

g. If the card was removed successfully, go to step 5.

4. If you could not remove the card from the multi-hopper, or if the card is inside the turnover unit, use the jog dials to move it to the reject tray for removal:

   a. Power off the printer.

   b. Look inside the print unit and find the jammed card's location. Observe whether the turnover unit is in its home position or has been rotated.

   c. Keep one jog dial on the lower shaft of the card cleaning unit (E).

   d. Place a second jog dial on the shaft of the turnover unit (F), or use the turnover unit shaft knob.
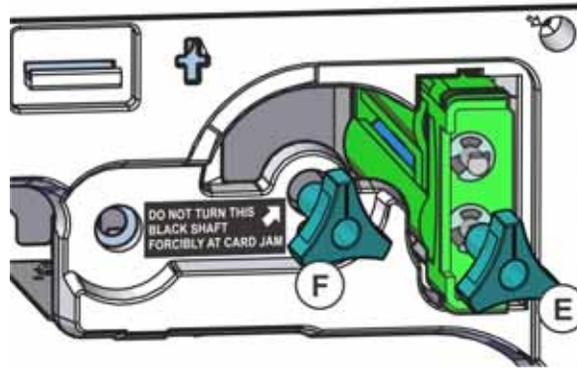
   e. Rotate the turnover unit to the 3 o'clock home position (G).

   > ⚠️ **Caution:** If you encounter resistance when rotating the turnover unit, do not force it. If a card is in the turnover unit, use the card cleaning unit jog dial to keep the card centered inside the turnover unit while rotating it.

   f. Turn the card cleaning unit jog dial counterclockwise until the card is centered inside the turnover unit. The right-hand edge of the card (H) must be just clear of the card cleaning roller.
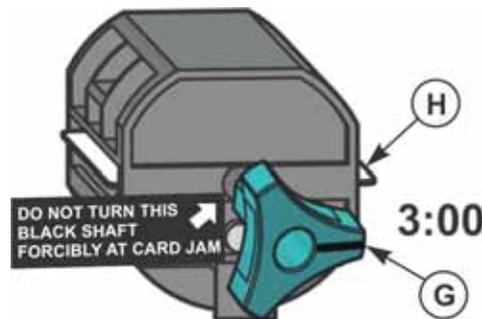
   If most of the card is in the security enclosure, the card cleaning unit rollers might not pull the card in. Push the card toward the print unit while turning the jog dial, if necessary.

g. Rotate the turnover unit clockwise to the 4 o'clock position (I). This angles the card toward the reject tray.

h. Turn the card cleaning unit jog dial clockwise (J) until the card drops into the reject tray (K).

Do not force the jog dial. If the card does not drop freely into the reject tray, adjust the turnover unit position slightly to get the proper angle.

To Reject Tray
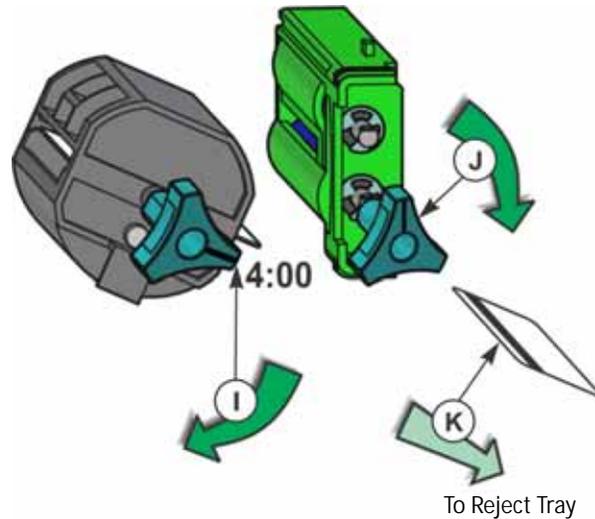
5. Replace any cards and card weights that were removed from the multi-hopper.

6. Return the jog dial(s) to their storage location inside the print unit.

7. Close the print unit door.

8. Power on the printer.

9. Close the security enclosure door to lock the printer.

10. On the touch screen, press the USER button to clear the problem. The touch screen displays **Busy** while the printer initializes, then **Ready**.

11. Record the type of card removed, following your organization's guidelines for tracking cards and supplies.

Clear a Transfer or Retransfer Section Jam

After the card passes through the turnover unit and the magnetic stripe or smart card is encoded, the card passes through a set of rollers to the retransfer heat roller. This is where the image is transferred from the retransfer film onto the card.

If the card jams in the card feed rollers, **Print unit card jam 159** displays on the touch screen. **Jam (Transfer)** or **Jam (Retransfer)** displays on the print unit front panel.

> ⚠️ **Caution:** Some internal parts may be hot and the card may be very hot. Wear a glove when reaching into the printer or let it cool first. Use the supplied tweezers to remove the card when possible.

The jammed card probably is located in the area behind or just to the right of the retransfer film cartridge (A). The card also can become stuck to the retransfer film (B).
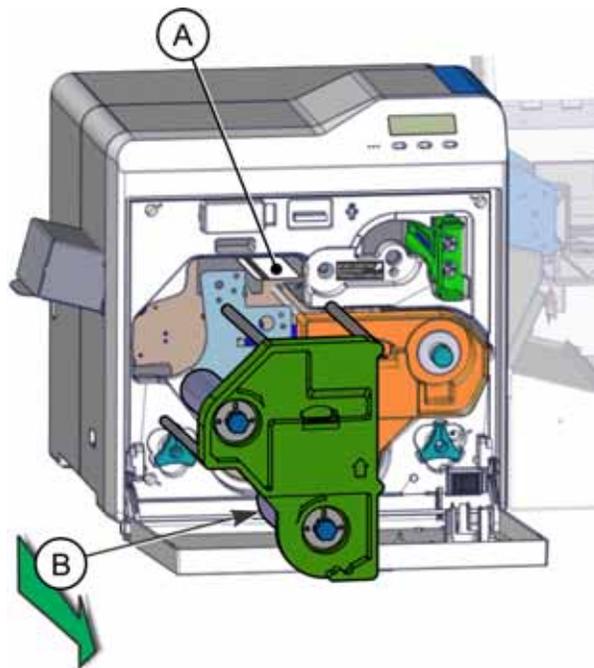
To clear a card jam:

- Use the jog dials to move the jammed card back to the turnover unit and then drop it into the reject tray. This method is effective if the card is within the heat retransfer heat roller and can be moved using the jog dial.

- Remove the retransfer film cartridge from the print unit. Then, either use the supplied tweezers to remove the card from the print unit or remove the card from the retransfer film cartridge.

> ⚠️ **Caution:** When using tweezers inside the print unit, be careful to avoid damaging the rollers.

Do the following to remove the card:

1. Unlock the printer and open the security enclosure door. Refer to "Unlock and Lock the Security Enclosure" on page 16 for the steps to follow.

2. Read the print unit front panel to verify the location of the jam.

3. Power off the printer.

4. Slide the door latch up and open the print unit door.

5. Try to clear the jam by moving the card back to the turnover unit and dropping it into the reject tray:

   a. Place one jog dial on the turnover unit (C), or use the turnover unit shaft knob.

   b. Place the second jog dial on the retransfer heat roller shaft (D).

   c. Rotate the turnover unit to the home (3:00) position (E).
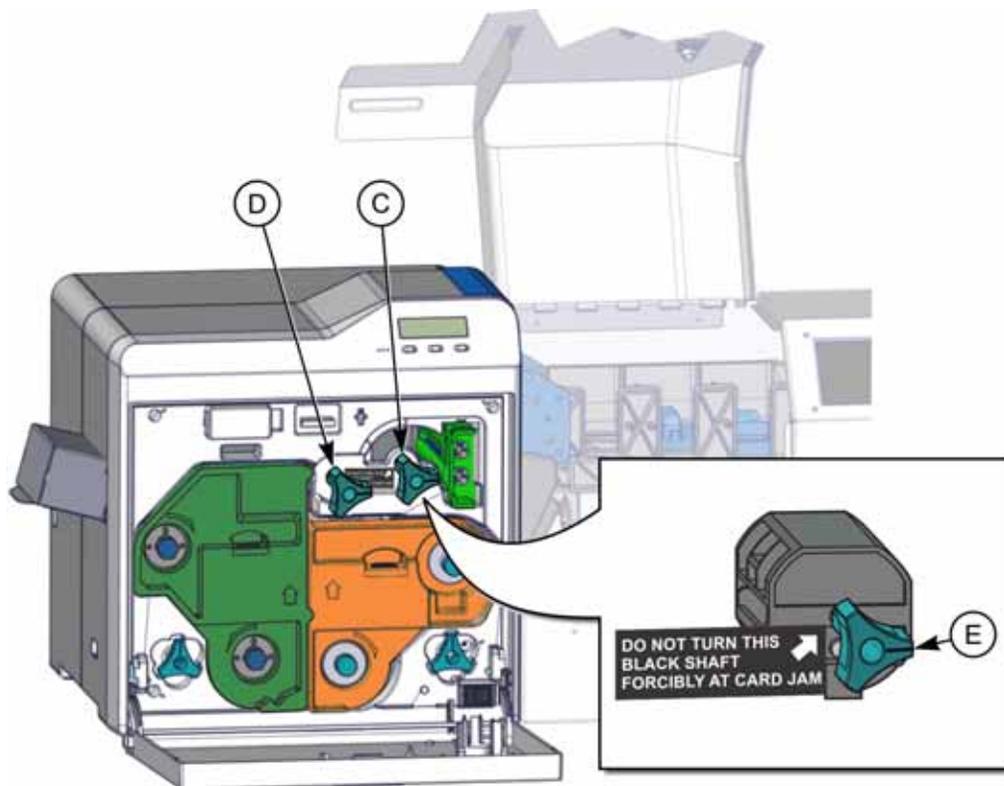
   d. Rotate the jog dial on the retransfer heat roller (D) clockwise to move the card into the turnover unit. If the jog dial does not turn normally, go to step 6.

e. Move the jog dial from the retransfer heat roller to the bottom shaft of the card cleaning unit (F).
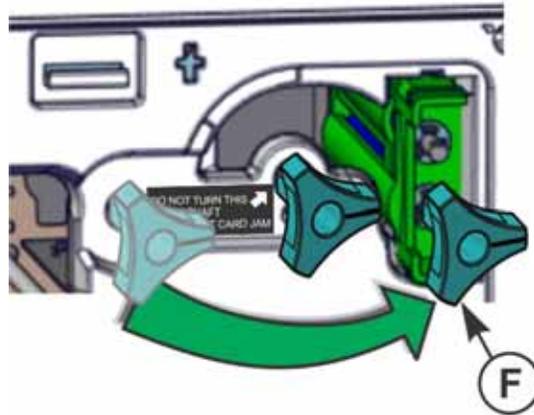
f. Rotate the turnover unit to the 4 o'clock position (G). This angles the card toward the reject tray.

g. Turn the card cleaning unit jog dial clockwise (H) until the card drops into the reject tray (I).

Do not force the jog dial. If the card does not drop freely into the reject tray, you may have to adjust the turnover unit position slightly to get the proper angle.
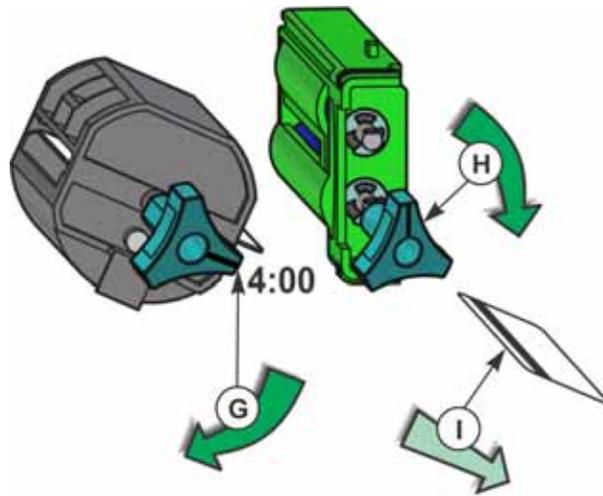
h. If the card was removed successfully, go to step 7.

6. If you could not move the card from the retransfer heat roller to the turnover unit:

   a. Press the retransfer film cartridge release button and remove the retransfer film cartridge (J).

   If the retransfer film cartridge is stuck, push it back into the printer, close the print unit door, and return to step 5. Contact your service provider for assistance.

   ⚠️ **Caution:** The card might be stuck to the film. Be careful to avoid jamming the card when removing the retransfer film cartridge.

   b. If the card comes out when the retransfer film cartridge is removed, go to step 7.

   or

   c. Look inside the print unit, above the retransfer film cartridge slot, and try to locate the jammed card.

   d. Place a jog dial on the retransfer heat roller (K).
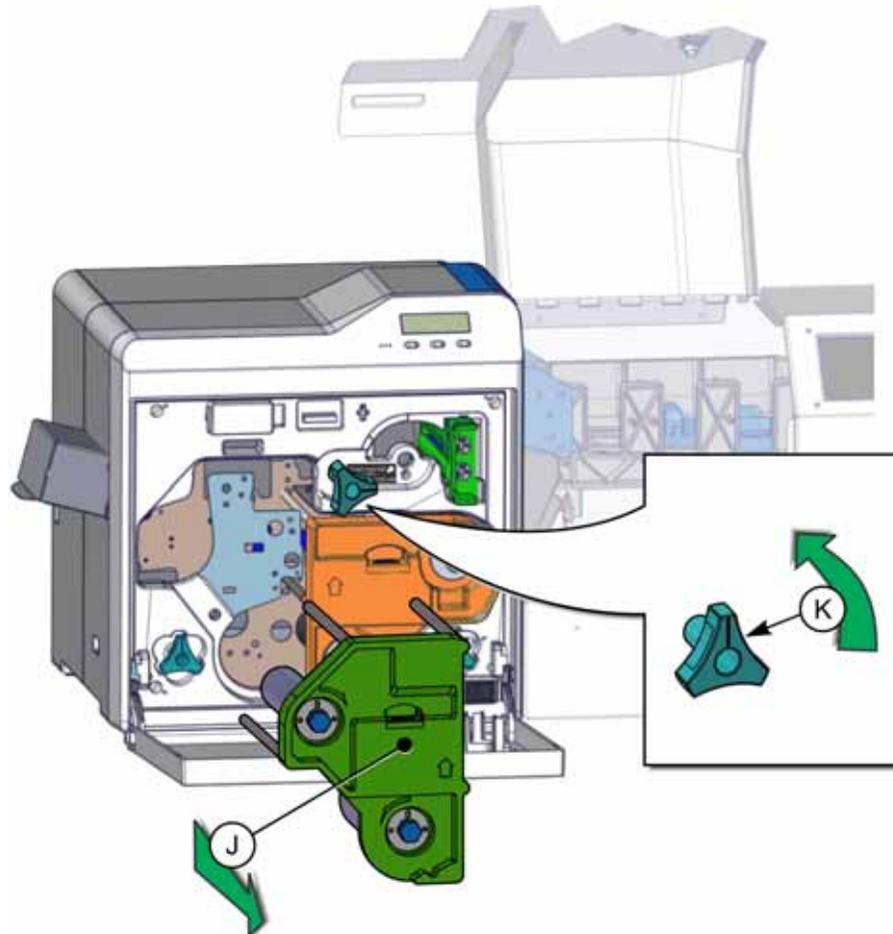
e. Turn the retransfer heat roller jog dial counterclockwise to move the card to the left, into the open space above the retransfer film cartridge slot.

> ⚠ **Caution:** Do not force the card to move. Contact your service provider for assistance if the card does not move easily.

f. If the card is stuck near the retransfer heat roller, use the supplied tweezers (L) to carefully remove the card.

> ⚠ **Caution:** When using tweezers, be careful to avoid damaging the heat unit rollers.
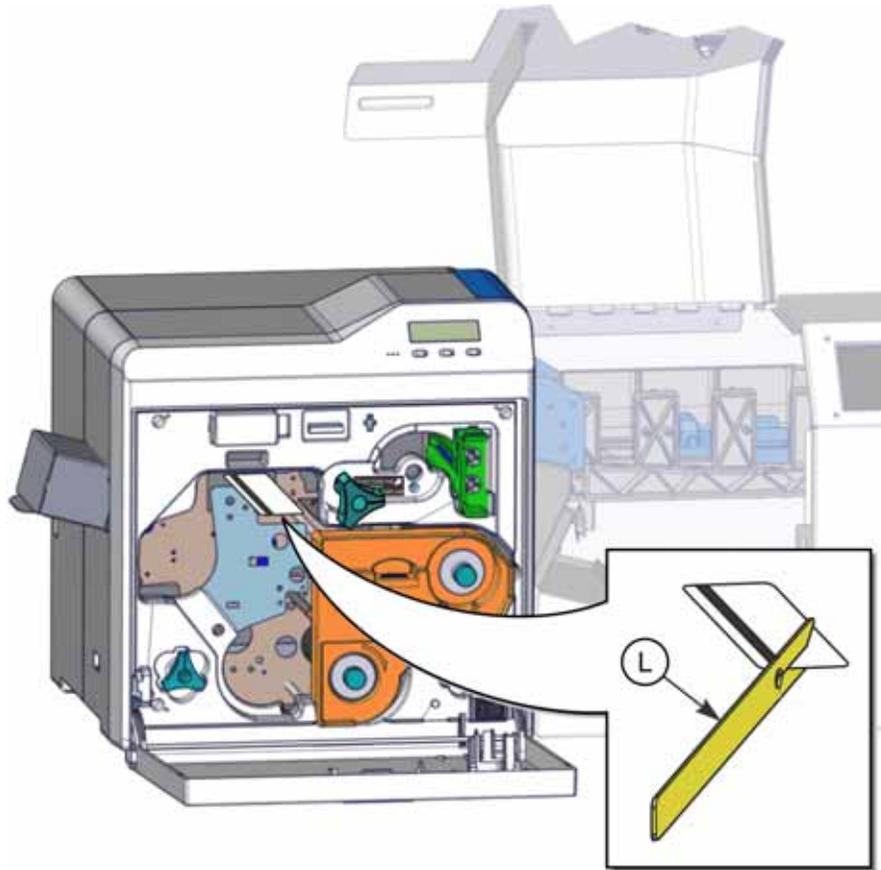
g. If the card is stuck to the right of the retransfer heat roller, refer to "Clear a Card Feed or Turnover Jam" on page 87.

7. If the card is stuck to the retransfer film (M), remove it.
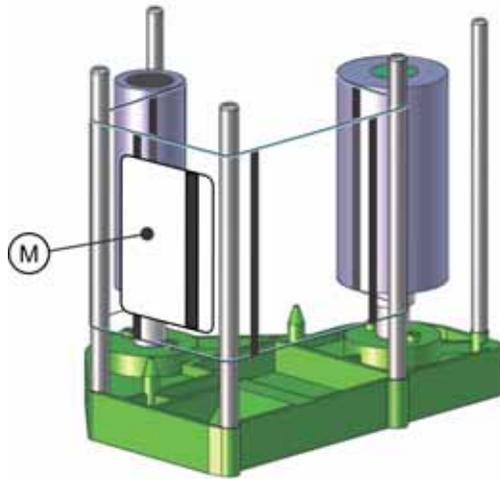
8. Look at the retransfer film. If a printed image displays on the vertical or horizontal area, turn the take-up knob to advance the film. All printed areas should be on the take-up spool. (Refer to "Load the Retransfer Film" on page 26 for the steps to follow.)

9. Replace the retransfer film cartridge into the print unit, if removed.

10. Return the jog dial(s) to their storage location inside the print unit.

11. Close the print unit door.

12. Power on the printer.

    Card Jam Removed? displays on the print unit front panel. Press **Yes** only if the card has been removed.

⚠️ **Caution:** Do not initialize the printer with the card still inside. Press **No** if the card remains inside the printer and contact your service provider for assistance.

13. Close the security enclosure door to lock the printer.

14. On the touch screen, press the USER button to clear the problem. The touch screen displays **Busy**, and then **Ready**.

15. Record the type of card removed, following your organization's guidelines for tracking cards and supplies.

Mend a Broken Ink Ribbon or Retransfer Film

If the ink ribbon or retransfer film breaks, an **Ink Search** or **Media Search** message displays on the print unit front panel.

1. Unlock the printer and open the security enclosure door. Refer to "Unlock and Lock the Security Enclosure" on page 16 for the steps to follow.

2. Read the print unit front panel to verify the problem.

3. Power off the printer, and open the print unit door.

4. Press the release button for the appropriate cartridge, and remove the cartridge.

5. Trim the ends of the broken ribbon or film evenly.

   > Do not remove the used ink ribbon or transfer film from the take-up spool. If the used supply is removed, it causes panel registration errors and you have to initialize the ink ribbon and film. Refer to "Initialize Supplies" on page 28.

6. Align the ends of the broken media and apply tape to secure them.

7. Turn the take-up knob, (A) or (C), on the underside of the cartridge until the mended portion is wound onto the spool two or three turns and to remove any slack in the supply. Gently pull out the knob so it turns smoothly.

   a. For ink ribbon, make sure the yellow panel (B) is positioned as shown on the cartridge diagram.
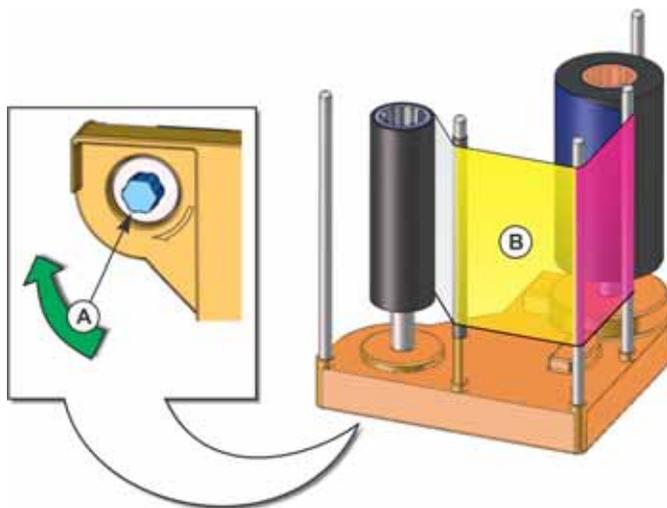
b. For retransfer film, advance the supply at least two frames to a clean unused frame (D).
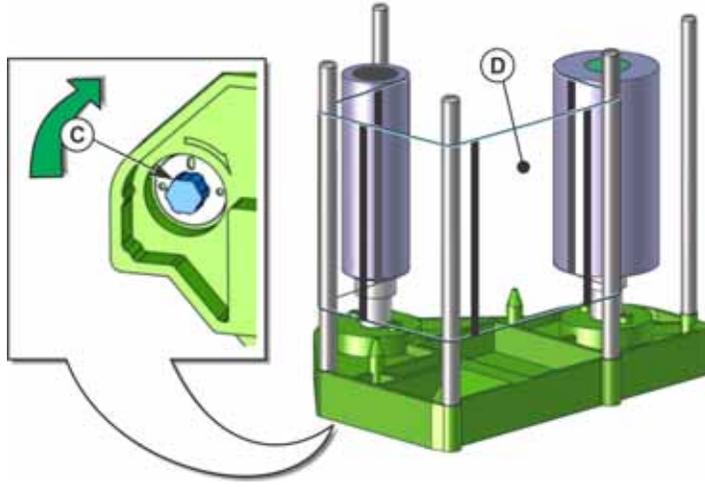
8. Reinstall the cartridge into the print unit until it clicks into position.

9. Close the print unit door. Press **Reset** and then **Enter** on the print unit front panel.

10. Close the security enclosure door to lock the printer.

11. On the touch screen, press the USER button to clear the problem and reset the printer. The touch screen displays **Busy** while the printer initializes.

Error Messages

The CR500 printer displays messages on the touch screen. Some messages, such as **Card Hopper Empty 113**, must be corrected in the security enclosure. Other messages, such as **Retransfer Film Out 162**, must be corrected in the print unit.

Touch Screen Messages

The security enclosure touch screen displays messages when a problem occurs in either the security enclosure or the print unit.

- The touch screen displays a short description and a number for each message.

- If more than one message was issued, the next message displays after you correct the problem and press the USER button.

- The messages focus on recovering from problems.

- The print unit front panel may display more detailed messages that are specific to the print unit.

Print Unit Front Panel Messages

The print unit front panel displays messages during error recovery and when the security enclosure door has been opened.

Common messages include:

- **No Card**—Displays when the security enclosure door is open and the printer is ready to print cards.

- **Initializing**—Displays when the print unit is powering on.

- **Preheating**—Displays when the print unit is heating the retransfer roller.

- **Sleeping**—Displays when the print unit has removed power from the retransfer and bend remedy roller. Press the USER button or send a card to the printer to take the printer out of sleep mode. **Preheating** displays while the rollers return to operating temperature.

Other Messages

- CardWizard software can display messages on your PC screen.

- Other printers can display messages if more than one printer is installed.

- The touch screen displays **Busy** when the printer is preparing for the **Ready** state.

Quick Link to Touch Screen Messages

Use the links in the following table to view possible causes and solutions to any error message displayed on the touch screen. The causes and solutions for all touch screen messages are found in Appendix B: "Troubleshooting Touch Screen Messages".

Number	Message Text
Message 100: Request not supported
Message 101: Job could not complete
Message 103: Printer problem
Message 104: Critical problem
Message 105: Magstripe data error
Message 106: Magstripe data not found
Message 108: Magstripe read no data
Message 111: Card not picked
Message 112: Card hopper empty
Message 113: Close cover to continue
Message 114: Cover opened during job
Message 115: Wait for print temperature
Message 116: Magstripe not available
Message 118: Print ribbon type problem
Message 119: Print ribbon not supported
Message 120: User paused the printer
Message 121: Print ribbon ID problem
Message 122: Magnetic stripe format problem
Message 123: Insert new card side 1 up
Message 124: Insert same card side 1 up
Message 149: Option not installed
Message 150: Print while unlocked
Message 151: Failed to lock
Message 152: Insert new card side 2 up
Message 153: Insert same card side 2 up
Message 154: Print unit not available
Message 155: Room temperature too low

Number	Message Text
Message 156: Printer warming up
Message 157: Input hopper card jam
Message 158: Check print unit front panel
Message 159: Print unit card jam
Message 160: Set print unit to download
Message 161: Retransfer film problem
Message 162: Retransfer film out
Message 163: Clear hopper card track
Message 164: Ink ribbon problem
Message 165: Ink ribbon out
Message 169: Manual ribbon advance rqd
Message 173: Improper shutdown
Message 181: Input Hopper Problem
Message 182: Input Hopper Jam two cards
Message 183: Input Hopper jam card lost
Message 184: Input Hopper jam card at exit
Message 185: Input Hopper jam print input
Message 186: Input Hopper Jam at exit
Message 187: Input Hopper Jam print input
Message 188: Input Hopper Jam print input
Message 189: Input Hopper jam card at exit
Message 190: Input Hopper jam exception
Message 191: Input Hopper jam print input
Message 192: Input Hopper Jam exception
Message 193: Input Hopper Jam two cards
Message 194: Input Hopper jam card lost

Appendix A: Touch Screen Menu System

This appendix contains a complete list and description of the menu items that you can access using the CR500 printer touch screen.

Touch Screen Menu

To enter the touch screen menu system, first press the USER button to display **Menu Available** on line 2. Then, press ENTER to enter the main menu.

Use the up and down arrow keys to scroll through the menu. Press ENTER to select the displayed menu item or to enter the displayed submenu.

Press the USER button to back out of a menu or submenu, one step at a time.

The touch screen USER button flashes amber and green while the touch screen menu is being used.
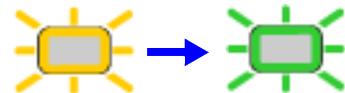
The following tables list and describe each of the four main menu selections (Maintenance, Status, Configuration, and Activate), along with their submenus and settings that you can view or change using the menus.

Maintenance Menu

Submenu	Submenu Selections	Description
Test Card	Start	Press ENTER to display **Start** on line 2. Then, press ENTER again to print the test card.
	Exit	Press ENTER to return to the Test Card submenu.
Exit	–	Press ENTER to return to the Main menu.

Status Menu

Submenu	Submenu Selections	Description
Serial Number	–	Press ENTER to display the serial number (for example, AA11860).
FW Rev	–	Press ENTER to display the current firmware version (for example, U1. 33. 1-9).
Panel Rev	–	Press ENTER to display the current panel version (for example, 0B4860. 05. 04).
Network Status	Address Mode	Press ENTER to display the current address mode: DHCP or Static.
	IP Address	Press ENTER to display the printer's IP address.
	Subnet Mask	Press ENTER to display the printer's subnet mask.
	Gateway Address	Press ENTER to display the printer's gateway address.
	MAC Address	Press ENTER to display the printer's MAC address.
	Exit	Press ENTER to return to the Main menu.
Card Counters	Card Count	Press ENTER to display the total number of cards sent to the printer.
	Completed Card	Press ENTER to display the number of cards that have printed successfully.
	Rejected Cards	Press ENTER to display the number of cards that have been placed in the reject card area of the security enclosure.
	Lost Cards	Press ENTER to display the number of cards that were lost, including card jams.
	Exit	Press ENTER to return to the Card Counters menu.
Ribbon Type	–	Press ENTER to display the type of ink ribbon currently installed, or **None**.

Submenu	Submenu Selections	Description
Magstripe	Coercivity	Press ENTER to display the current magstripe coercivity setting: High or Low.
	Exit	Press ENTER to return to the Magstripe menu.
Exit	–	Press ENTER to return to the Main menu.

Configuration Menu

Submenu	Submenu Selections	Description
Network	DHCP/Static IP	Use the up and down arrow keys to select the printer's network setting: DHCP or Static IP. Press ENTER to apply the new setting or to continue by viewing or changing the IP address.
	IP Address	Displays the printer's current IP address. Use the up and down arrow keys to change the IP address. Press ENTER to move the cursor to the next byte. Press ENTER to continue by viewing or changing the subnet mask.
	Subnet Mask	Displays the printer's current subnet mask. Use the up and down arrow keys to change the subnet mask. Press ENTER to move the cursor to the next byte. Press ENTER to continue by viewing or changing the gateway address.
	Gateway Address	Displays the printer's current gateway address. Use the up and down arrow keys to change the subnet mask. Press ENTER to move the cursor to the next byte. Press ENTER to continue to the Apply submenu.
	Apply	Press ENTER to apply any changes you have made to the IP address, the subnet mask, and the gateway address.
	Exit	Press ENTER to return to the Configuration menu.

After entering the **Configuration > Network** menu, the normal procedure is to view or change all four settings (DHCP/Static IP, IP Address, Subnet Mask, and Gateway Address). Each time you press ENTER, the menu moves to the next selection. When **Apply** displays, press ENTER to apply all changes you have made, or press the down arrow key and select **Exit** to cancel the changes.

Submenu	Submenu Selections	Description
K Power	–	Use the up and down arrow keys to select the printer's K Power setting. • Set K Power higher to increase the print density. • Set K Power lower to decrease the print density and reduce blurring of fine lines. Press ENTER to apply the setting.
Magstripe	Coercivity	Use the up and down arrow keys to select the amount of energy used to encode magnetic data onto cards: High or Low. Press ENTER to apply your selection.
	Exit	Press ENTER to return to the Magstripe menu.
Menu	Style	Use the up and down arrow keys to select the desired appearance of the menu: Modern or Legacy. Press ENTER twice to apply your selection.
Exit	–	Press ENTER to return to the Main menu.

Activate Menu

Submenu	Submenu Selections	Description
Enable	–	Use the up and down arrow keys and the ENTER key to enter the activation code.
Disable	–	Use the up and down arrow keys and the ENTER key to create a new activation code.
Exit	–	Press ENTER to return to the Main menu.

Appendix B: Troubleshooting Touch Screen Messages

B

This appendix contains a complete list and description of CR500 printer messages that display on the security enclosure touch screen.

Touch Screen Message Display

The printer displays messages on the touch screen. Some messages, such as **Card Hopper Empty 113**, are corrected in the security enclosure. Other messages, such as **Retransfer Film Out 162**, are corrected in the print unit.

For instructions on clearing card jams and recovering from other printer errors, refer to Chapter 6: "Error Recovery and Messages".

The printer touch screen displays a short description and a number for each message, as shown in the following example:
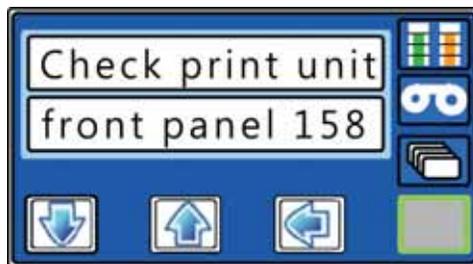
Message Causes and Solutions

Use the following for more information about the messages displayed on the touch screen.

Message 100: Request not supported

Message Source/Text	Possible Cause	Solution
Security Enclosure	A message was cleared while the printer was open.	Close the security enclosure door to lock the printer before resuming operation. Refer to "Unlock and Lock the Security Enclosure" on page 16.
Security Enclosure	The setting change requested is not supported.	Use the Printer Manager to change settings, and choose a value within the range shown.
Print Unit: Security Key 21, 22, or 23	A security key (number) was set in the print unit.	DO NOT set a security key in the print unit. If a security key was set, contact your service provider for assistance.

Message 101: Job could not complete

Message Source/Text	Possible Cause	Solution
Security Enclosure	The card took too long to complete.	The card is canceled. Check your card design and send the card again.

Message 103: Printer problem

Message Source/Text	Possible Cause	Solution
Print Unit: No Card D0	Print unit problem with handling cards.	Power the printer off and then on. If that does not solve the problem, contact your service provider for assistance. **Note:** This is the default print unit front panel message when the security enclosure door is open.
Print Unit: Codes A1, 20, 24, 26, 27, FB,	The printer has a control problem.	Power the printer off and then on. If that does not solve the problem, contact your service provider for assistance.
Security Enclosure	The printer has a control problem.	Power the printer off and then on. If that does not solve the problem, contact your service provider for assistance.
Security Enclosure	The card did not reach the print unit input area.	Power the printer off and then on. If that does not solve the problem, contact your service provider for assistance.
Security Enclosure	The message needs to be cleared from the touch screen.	Press the USER button to display **Ready** on the touch screen.

Message 104: Critical problem

Message Source/Text	Possible Cause	Solution
Print Unit: Hardware 44	Print unit operation problem.	Contact your service provider for assistance.
Print Unit: Hardware D8	Print unit operation problem.	Contact your service provider for assistance.
Print Unit: Cam Error C1	Cam operation problem.	Contact your service provider for assistance.
Print Unit: HR Overheat C2	Heat roller operation problem.	Contact your service provider for assistance.

Print Unit: Head Overheat F8	The thermal head is overheated.	Contact your service provider for assistance.
Print Unit: TR Overheat F0	The retransfer roller is overheated.	Contact your service provider for assistance.
Print Unit: TR heater F1	Retransfer roller operation problem.	Contact your service provider for assistance.
Print Unit: TR Thermister F2	Retransfer roller operation problem.	Contact your service provider for assistance.
Print Unit: RR Overheat F3	Bend Remedy roller operation problem.	Contact your service provider for assistance.
Print Unit: RR Heater F4	Bend Remedy roller operation problem.	Contact your service provider for assistance.
Print Unit: RR Thermister F5	Bend Remedy roller operation problem.	Contact your service provider for assistance.
Print Unit: Power Intrpt C3	Power was interrupted for a short time.	Contact your service provider for assistance.
Print Unit: EEProm Broken FA	EEPROM malfunction	Contact your service provider for assistance.
Print Unit: MG Mechanical AB	Magnetic stripe mechanical problem	Contact your service provider for assistance.
Print Unit: MG Hardware AC	Magnetic stripe hardware problem	Contact your service provider for assistance.
Security Enclosure	The printer has an internal problem.	Power the printer off and then on. If that does not solve the problem, contact your service provider for assistance.

Message 105: Magstripe data error

Message Source/Text	Possible Cause	Solution
Security Enclosure	The printer failed to verify the correct magnetic stripe data was written to the card.	Make sure that you are using magnetic stripe cards that match the printer settings and that the cards are loaded correctly in the hoppers.
Print Unit: MG Test Err OR MG Write Error in Self Test A8	A writing error has occurred during magnetic encoder self-diagnosis.	Power the printer off and then on. If that does not solve the problem, contact your service provider for assistance.
Print Unit: MG Read Error AE	A problem occurred during magnetic encoding data reading.	Press the USER button to clear the message. The card is canceled and moved to the reject area. Check the card specifications and the data sent. Refer to your CardWizard documentation for information about specifying magnetic stripe data.
Print Unit: MG Write Error AD	A problem occurred during magnetic encoding data writing.	Press the USER button to clear the message. The card is canceled and moved to the reject area. Check the card specifications and the data sent. Refer to your CardWizard documentation for information about specifying magnetic stripe data.

Message 106: Magstripe data not found

Message Source/Text	Possible Cause	Solution
Security Enclosure	The printer did not find magnetic stripe data on the card.	Make sure that you are using magnetic stripe cards that match the printer settings and that the cards are loaded correctly in the hoppers.

Message 108: Magstripe read no data

Message Source/Text	Possible Cause	Solution
Security Enclosure	The printer did not find magnetic stripe data on the card.	Make sure that you are using magnetic stripe cards that match the printer settings and that the cards are loaded correctly in the hoppers.

Message 111: Card not picked

Message Source	Possible Cause	Solution
Security Enclosure	A card was picked but did not reach the print unit Pick area.	Press the USER button to clear the message. Refer to "Clear a Multi-Hopper Jam" on page 85 for the steps to follow.

Message 112: Card hopper empty

Message Source	Possible Cause	Solution
Security Enclosure	Cards are not loaded in the hopper specified by the print job.	Load cards. Refer to "Load Cards" on page 21. Press the USER button to clear the message. The card continues processing. After loading cards and clearing the message, if the touch screen displays **Busy** and you do not hear the card printing, press the USER button for 10 seconds to cancel all jobs.

Message 113: Close cover to continue

Message Source/Text	Possible Cause	Solution
Print Unit: Door Open D1	The print unit door is open, or a supply cartridge or cleaning unit is missing.	Insert all supply cartridges and the cleaning unit. Initialize printer supplies. Close the print unit door and the security enclosure door to lock the printer. Press the USER button to clear the message.
Security Enclosure	The security enclosure door is open.	Close the security enclosure door to lock the printer. Press the USER button to clear the message.

Message 114: Cover opened during job

Message Source/Text	Possible Cause	Solution
Security Enclosure	The printer was opened during a job.	Close the security enclosure door to lock the printer. Press the USER button to clear the message.

Message 115: Wait for print temperature

Message Source/Text	Possible Cause	Solution
Security Enclosure	The printer is heating up.	Wait until the printer is ready.

Message 116: Magstripe not available

Message Source/Text	Possible Cause	Solution
Print Unit: MG Encoder not installed 2D	Magnetic encoder is not installed.	Press the USER button to clear the message. The card is canceled and moved to the reject area.

Message 118: Print ribbon type problem

Message Source/Text	Possible Cause	Solution
Print Unit: Wrong Ink	The ink ribbon requested by the card job is not supported.	Press the USER button to clear the message. The card is canceled and moved to the reject area. Obtain assistance from the application administrator to match card features, such as peel-off, with the ink ribbon.

Message 119: Print ribbon not supported

Message Source/Text	Possible Cause	Solution
Print Unit: Ink Error B0	The ink ribbon installed is not supported.	Install a supported ink ribbon. Refer to the printer's *Installation and Administrator's Guide* for supported ink ribbon part numbers. Press the USER button to clear the message. The card is canceled and moved to the reject area.

Message 120: User paused the printer

Message Source/Text	Possible Cause	Solution
Security Enclosure	The user pressed the USER button on the touch screen.	Press the USER button on the touch screen to unpause the printer. The card continues processing.

Message 121: Print ribbon ID problem

Message Source/Text	Possible Cause	Solution
Security Enclosure	The printer cannot identify the installed ribbon.	Use ribbon supported by the printer. The card is canceled.

Message 122: Magnetic stripe format problem

Message Source/Text	Possible Cause	Solution
Print Unit: LCD text unknown	Magnetic encoding data is incorrect.	Press the USER button to clear the message. The card is canceled and moved to the reject area. Check the card specifications and the data sent. Refer to your CardWizard documentation for information about specifying magnetic stripe data.

Message 123: Insert new card side 1 up

Message Source/Text	Possible Cause	Solution
Security Enclosure	A new card must be inserted in the printer.	Insert a new card in the printer with side 1 facing up.

Message 124: Insert same card side 1 up

Message Source/Text	Possible Cause	Solution
Security Enclosure	The same card must be inserted in the printer.	Insert the same card with side 1 facing up.

Message 149: Option not installed

Message Source/Text	Possible Cause	Solution
Print Unit: IC Encoder not installed 2C OR MG Encoder not installed 2D OR Option not installed 2E	The smart card encoder or other optional devices are not installed. The magnetic stripe encoder has been removed.	Press the USER button to clear the message. The card is canceled and moved to the reject area. Do not send cards to the printer unless the options are installed in your printer. Refer to "Options Label and Serial Number" on page 10.

Message 150: Print while unlocked

Message Source/Text	Possible Cause	Solution
Security Enclosure	The printer is unlocked and a card was sent.	Close the security enclosure door to lock the printer. Press the USER button to clear the message.

Message 151: Failed to lock

Message Source/Text	Possible Cause	Solution
Security Enclosure	The lock command could not complete successfully.	Make sure that the security enclosure door can close fully, and that the lock pawl is in the vertical position. If needed, use the key to move the lock from the horizontal to vertical position. Refer to "Unlock and Lock the Security Enclosure" on page 16 for the steps to follow. Make sure that nothing interferes with the security and locking features on the door and below the card track. Press the USER button to clear the message.

Message 152: Insert new card side 2 up

Message Source/Text	Possible Cause	Solution
Security Enclosure	A new card must be inserted in the printer.	Insert a new card with side 2 facing up.

Message 153: Insert same card side 2 up

Message Source/Text	Possible Cause	Solution
Security Enclosure	The same card must be inserted in the printer.	Insert the same card in the printer with side 2 facing up.

Message 154: Print unit not available

Message Source/Text	Possible Cause	Solution
Security Enclosure	Print unit is not found.	If the print unit is powered on, press the power button to power it off, wait 15 seconds, and power on again. Make sure that the print unit is powered on. Press the USER button to clear the message.

Message 155: Room temperature too low

Message Source/Text	Possible Cause	Solution
Print Unit: Overcool F6	It is too cold for the printer to operate.	Press the USER button to clear the message. The card is canceled and moved to the reject area. Use at the recommended operating environment temperature as described in the printer's *Installation and Administrator's Guide*.

Message 156: Printer warming up

Message Source/Text	Possible Cause	Solution
Print Unit: Preheating DA	Preheating is in progress.	Wait until preheating is complete. This message clears without pressing the USER button.

Message 157: Input hopper card jam

Message Source/Text	Possible Cause	Solution
Security Enclosure	One or more cards were in the card track when the printer was powered on.	Press the USER button to clear the message. The printer attempts to place the card back in the hopper.
Security Enclosure	A card was picked but did not reach the print unit. One or more cards were in the card track when a message was cleared with the USER button.	Remove the card. Refer to "Clear a Multi-Hopper Jam" on page 85 for the steps to follow. Press the USER button to clear the message.

Message 158: Check print unit front panel

Message Source/Text	Possible Cause	Solution
Print Unit: Please, Power Off	The power must be turned off to initialize the printer.	Turn the power switch off and then on again.
Print Unit: Please Remove Media Cassette	Cleaning cannot start when the retransfer film cartridge is in the printer.	Remove the retransfer film cartridge. On the print unit front panel, press **Reset** and then ⬅ (Return) to initialize the print unit. Start the cleaning cycle again, following the steps in "Clean the Print Unit" on page 58.
Print Unit: HR is too hot	Cleaning cannot start because the temperature of the heat roller is too high.	Power off the printer and allow the heat roller to cool for about 20 minutes. Refer to "Clean the Print Unit" on page 58 for instructions on how to run the cleaning card. Contact your service provider if "HR is too hot" displays on the print unit front panel and you are not cleaning the printer.
Print Unit: Please Adjust Turn Unit Pos!	The card turnover unit is not in the correct position.	Turn the unit to the home position using a jog dial, as described in "Clear a Card Feed or Turnover Jam" on page 87. Contact your service provider for assistance if the problem persists.
Print Unit: Testing or Cleaning DC	The print unit is processing a cleaning card or the front panel menu is being used.	Wait until the cleaning is complete, or complete the menu task. On the print unit front panel, press **Reset** and then ⬅ (Return) to initialize the print unit.
Print Unit: On Setting or Transport Mode DD	The print unit front panel is being used. The print unit has been set to transport mode.	Complete any work using the front panel. Close the print unit door and then close the security enclosure door to lock the printer. Power off the printer, wait 15 seconds, and power on to cancel transport mode.
Print Unit	The print unit is in power saving mode.	Unlock and open the security enclosure door. Refer to "Unlock and Lock the Security Enclosure" on page 16 for the steps to follow. On the print unit front panel, press **Reset** and then ⬅ (Return) to initialize the print unit. Close the doors to lock the printer.

Message 159: Print unit card jam

Message Source/Text	Possible Cause	Solution
Print Unit: Jam (Hopper) 90	There is a card jam in the hopper section.	Remove the jammed card from the card hopper. Refer to *"Clear a Multi-Hopper Jam"* on page 85 and *"Clear a Card Feed or Turnover Jam"* on page 87.
Print Unit: Jam (Turnover) 91	There is a card jam in the turnover section.	Remove the jammed card from the turnover section. Refer to *"Clear a Card Feed or Turnover Jam"* on page 87.
Print Unit: Jam (MG) 92	There is a card jam in the magnetic stripe encode section.	Remove the jammed card from the turnover section. Refer to *"Clear a Card Feed or Turnover Jam"* on page 87.
Print Unit: Jam (Transfer) 93	There is a card jam in the card feed rollers.	Remove the jammed card. Refer to *"Clear a Transfer or Retransfer Section Jam"* on page 91.
Print Unit: Jam (Discharge)94	There is a card jam in the card discharge section.	Remove the jammed card. Refer to *"Clear a Transfer or Retransfer Section Jam"* on page 91 Check that the concealed output stacker is securely attached to the stacker receptacle. An incorrectly mounted card stacker can cause discharge jams.
Print Unit: Jam (Retransfer) 95	There is a card jam near the retransfer rollers.	Remove the jammed card from the retransfer section. Refer to *"Clear a Transfer or Retransfer Section Jam"* on page 91.

Message 160: Set print unit to download

Message Source/Text	Possible Cause	Solution
Print Unit: Not Ready for Download DE	Printer firmware is being updated, and the update includes print unit firmware.	The printer firmware, including firmware for the print unit, is being updated. The print unit must be set to accept the firmware. Unlock and open the printer. Refer to "Unlock and Lock the Security Enclosure" on page 16 for the steps to follow. Using the print unit front panel, set the print unit to receive the firmware update. Refer to "Print Unit Front Panel Menu Structure" on page 49. Press the USER button to clear the message.

Message 161: Retransfer film problem

Message Source / Text	Possible Cause	Solution
Print Unit: Media Search A1 OR Film Search A1	The retransfer film is broken or missing.	Repair the retransfer film as described in "Mend a Broken Ink Ribbon or Retransfer Film" on page 97. Press the USER button to clear the message.

Message 162: Retransfer film out

Message Source/Text	Possible Cause	Solution
Print Unit: Film Run Out A2 OR Media Run Out A2	Retransfer film is not detected. Retransfer film has run out.	Install the retransfer film. Refer to "Load the Retransfer Film" on page 26. Press the USER button to clear the message.

Message 163: Clear hopper card track

Message Source	Possible Cause	Solution
Security Enclosure	A card is in the exception card slot.	Slide out the exception card slide and remove the card. Press the USER button to clear the message.
Security Enclosure	One or more cards were in the card track when a message was cleared with the USER button.	Remove the card. Refer to "Clear a Multi-Hopper Jam" on page 85 for the steps to follow. Press the USER button to clear the message.

Message 164: Ink ribbon problem

Message Source/Text	Possible Cause	Solution
Print Unit: Ink Search B1	The ink ribbon is broken. The ink ribbon data is not usable.	Repair the ink ribbon as described in "Mend a Broken Ink Ribbon or Retransfer Film" on page 97. Press the USER button to clear the message.

Message 165: Ink ribbon out

Message Source/Text	Possible Cause	Solution
Print Unit: Ink Run Out B2	Ink ribbon is not detected. The ink ribbon has run out.	Install the ink ribbon. Refer to "Load the Ink Ribbon" on page 23. Press the USER button to clear the message.

Troubleshooting Touch Screen Messages

Message 169: Manual ribbon advance rqd

Message Source/Text	Possible Cause	Solution
Print Unit	The print unit needs intervention.	Open the printer and move the retransfer film one panel. Refer to step 4 of "Clear a Card Feed or Turnover Jam" on page 87. Press the USER button to clear the message.

Message 173: Improper shutdown

Message Source/Text	Possible Cause	Solution
Security Enclosure	The printer was not shut down correctly, or facility power was interrupted.	Press the USER button to clear the message.

Message 181: Input Hopper Problem

Message Source/Text	Possible Cause	Solution
Security Enclosure	There is a problem with the firmware or printer settings.	Power the printer off and back on. If the message displays again, contact your service provider for assistance.

Message 182: Input Hopper Jam two cards

Message Source/Text	Possible Cause	Solution
Security Enclosure	A card was picked but did not reach the print unit. A second card was picked, causing two cards to be in the card track.	Remove both cards. Refer to "Clear a Multi-Hopper Jam" on page 85 for the steps to follow.

Message 183: Input Hopper jam card lost

Message Source/Text	Possible Cause	Solution
Security Enclosure	The card did not arrive at the hopper exit. Either the card was not picked, or it was dropped. This could indicate a problem with the rotary or linear offsets.	Remove the card if it was picked. Refer to "Clear a Multi-Hopper Jam" on page 85 for the steps to follow.

Message 184: Input Hopper jam card at exit

Message Source/Text	Possible Cause	Solution
Security Enclosure	A card is already at the hopper exit when a new card was to be picked.	Remove the card. Refer to "Clear a Multi-Hopper Jam" on page 85 for the steps to follow.

Message 185: Input Hopper jam print input

Message Source/Text	Possible Cause	Solution
Security Enclosure	A card is already at the entrance of the print unit.	Remove the card. Refer to "Clear a Multi-Hopper Jam" on page 85 for the steps to follow.

Message 186: Input Hopper Jam at exit

Message Source/Text	Possible Cause	Solution
Security Enclosure	A card remained at the multi-hopper exit and did not reach the print unit.	Remove the card. Refer to "Clear a Multi-Hopper Jam" on page 85 for the steps to follow.
Security Enclosure	After a card jam, the card was cleared by pushing it out of the multi-hopper to be deposited in the reject card area. The card was not placed in the reject card area.	Remove the card. Refer to "Clear a Multi-Hopper Jam" on page 85 for the steps to follow.

Message 187: Input Hopper Jam print input

Message Source/Text	Possible Cause	Solution
Security Enclosure	The card still did not reach the print unit after an attempt to move it into the print unit.	Remove the card. Refer to "Clear a Multi-Hopper Jam" on page 85 for the steps to follow.

Message 188: Input Hopper Jam print input

Message Source/Text	Possible Cause	Solution
Security Enclosure	A card is already at the entrance of the print unit when another card is to be picked.	Remove the card. Refer to "Clear a Multi-Hopper Jam" on page 85 for the steps to follow.

Message 189: Input Hopper jam card at exit

Message Source/Text	Possible Cause	Solution
Security Enclosure	A card is at the hopper exit during hopper reset.	Remove the card. Refer to "Clear a Multi-Hopper Jam" on page 85 for the steps to follow.

Message 190: Input Hopper jam exception

Message Source/Text	Possible Cause	Solution
Security Enclosure	A card is in the exception slide during a hopper reset.	Remove the card from the exception slide. This may or may not require the security enclosure door to be opened.

Message 191: Input Hopper jam print input

Message Source/Text	Possible Cause	Solution
Security Enclosure	A card is at the entrance of the print unit during a hopper reset.	Remove the card. Refer to "Clear a Multi-Hopper Jam" on page 85 for the steps to follow.

Message 192: Input Hopper Jam exception

Message Source/Text	Possible Cause	Solution
Security Enclosure	A card is in the exception slide during a hopper reset.	Remove the card from the exception slide. This may or may not require the security enclosure door to be opened.

Message 193: Input Hopper Jam two cards

Message Source/Text	Possible Cause	Solution
Security Enclosure	Two cards were in the card track. After a card jam, an attempt was made to push the card out of the multi-hopper to be deposited in the reject card area. The card at the print unit entrance causes the reject to fail.	Remove the cards. Refer to "Clear a Multi-Hopper Jam" on page 85 for the steps to follow.

Message 194: Input Hopper jam card lost

Message Source/Text	Possible Cause	Solution
Security Enclosure	A card either was not picked or was dropped before it reached the multi-hopper exit during a reject operation.	Remove the card, if one was picked. Refer to "Clear a Multi-Hopper Jam" on page 85 for the steps to follow.