



---

# Datacard® SD™ Series Card Printers User's Guide

March 2014

Part No. 527400-001 Rev. A

## 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.

## Proprietary Notice

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

## Trademark Acknowledgments

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

SD is a trademark of DataCard Corporation.

Windows is a registered trademark of Microsoft Corporation.

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

### **Datacard Group**

11111 Bren Road West  
Minnetonka, MN 55343-9015  
Phone: 952-933-1223  
Fax: 952-933-7971  
[www.datacard.com](http://www.datacard.com)

©2014 DataCard Corporation. All rights reserved.  
Printed in the United States of America.

# Compliance Statements

## Liability Statement

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

All Datacard® products are built to strict safety specifications in accordance with CSA/UL60950-1 requirements and the Low Voltage Directive 2006/95/EC.

Therefore, safety issues pertaining to operation and repair of **Datacard®** equipment are primarily environmental and human interface.

The following basic safety tips are given to ensure safe installation, operation and maintenance of **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

These notices apply to the Datacard printer and all Datacard accessory devices that connect to the printer.

### FCC Notices

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.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### Industry Canada Notice

This device complies with Industry Canada licence-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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

## Host Device Labeling Requirement Notice

To meet the FCC and Industry Canada host device labeling requirements, any host equipment incorporating the 506241 module must include the FCC ID/IC number on the host label as follows:

Contains transmitter module IC: 889B-506241001  
where 889B-506241001 is the module's IC certification number.

Contains transmitter module FCC ID: GDI-506241001  
where GDI-506241001 is the module's FCC ID number.

## Notice for Europe

The EU Declaration of Conformity can be found on **Datacard.com**

We hereby certify that this printer complies with EMC Directive 2004/108/EC, R&TTE Directive 1999/5/EC, and the EU RoHS Directive EU Directive 2011/65/EC. This printer conforms to Class A of EN 55022 and to EN 301 489-5. Operation of this equipment in a residential environment may possibly cause interference. In the event of interference, the users, at their own expense, will be required to take whatever measures are necessary to correct the problem.

## 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，可能會造成射頻干擾，在這種情況下，使用者會被要求採用某些適當的對策。

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 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 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.***

**Revision Log**  
**SD Series Card Printers User's Guide**

Revision	Date	Description of Changes
A	March 2014	First release of this manual (formerly Part No. 527248-001). Updated for XPS Card Printer Driver v5 and SD460 laminating system.





# Contents

<b>Chapter 1: Introduction</b>	<b>1</b>
<b>About this Manual</b>	<b>1</b>
<b>Intended Audience</b>	<b>1</b>
<b>Technical Support</b>	<b>1</b>
<b>Chapter 2: About the Printer</b>	<b>3</b>
<b>About the SD Series Card Printers</b>	<b>3</b>
<b>Printer Components</b>	<b>3</b>
Printer Top and Front	4
Printer Left Side	5
Inside the Printer	6
Print Ribbon Cartridge	7
Printer with Duplex Option	7
Printer with Laminator (SD460 System Only)	8
System Label	9
<b>Chapter 3: Using the System</b>	<b>11</b>
<b>How the Card Travels</b>	<b>11</b>
<b>Card Printer System Overview</b>	<b>12</b>
Equipment	12
Tasks and Users	12
<b>Printer Controls</b>	<b>13</b>
Power Button	13
LCD Panel Menus	14
User Button and Light	15
Down Arrow, Up Arrow, and Enter Key	16
Ribbon Light	16
Card Light	16
<b>Retrieve the Printer IP Address</b>	<b>17</b>
<b>Print a Test Card</b>	<b>18</b>
<b>Load and Replace Supplies</b>	<b>19</b>
Load Cards	19
Load the Print Ribbon	20
Load the Cleaning Sleeve	20
Install the Ribbon Cartridge	21
<b>Chapter 4: Printing Cards</b>	<b>23</b>
<b>Before Starting to Print</b>	<b>23</b>
<b>Print Cards</b>	<b>24</b>
Print from ID Software	24
Print from Other Software	24
<b>Chapter 5: System Maintenance</b>	<b>27</b>
<b>Clean the Printer</b>	<b>27</b>
<b>Clean the Printhead</b>	<b>28</b>
<b>Run a Printer Cleaning Card</b>	<b>30</b>

<b>Chapter 6: Troubleshooting</b>	<b>35</b>
<b>Locate a Problem Within the Card Production System</b>	<b>36</b>
<b>Locate a Problem with Basic Printer Functions</b>	<b>37</b>
<b>Installation Problems</b>	<b>38</b>
USB Installation Troubleshooting	39
Network Installation Troubleshooting	40
<b>Card Printer Driver Problems</b>	<b>40</b>
The Card Printer Driver does not detect the network-connected printer	41
The Card Printer Driver does not detect the USB-connected printer	41
Driver status or Windows print queue does not provide expected data	42
<b>Card Appearance</b>	<b>42</b>
Something did not print	43
Printing includes unexpected data	44
The color printing has flaws	44
The printing is too light	46
The printing is too dark	47
The monochrome printing has flaws	47
<b>Magnetic Stripe Problems</b>	<b>48</b>
<b>Laminator Problems</b>	<b>50</b>
Patch Appearance Problems	50
Topcoat Appearance Problems	53
<b>Use Advanced Troubleshooting Tools</b>	<b>55</b>
<b>Card Jams</b>	<b>55</b>
<b>Messages and Conditions</b>	<b>56</b>
Messages on the Printer LCD	56
Messages from the XPS Card Printer Driver on the PC	60
Messages from Printer Manager	60
Other Messages	60
Respond to Messages	61
Printer Messages	61
100: Request not supported	61
101: Job could not complete	61
102: Card not in position	61
103: Printer problem	62
104: Critical problem	62
105: Magstripe data error	62
106: Magstripe data not found	63
107: Magstripe read data error	63
108: Magstripe read no data	64
109: Print ribbon problem	64
110: Print ribbon out or missing	64
111: Card not picked	65
112: Card hopper empty	65
113: Close cover to continue	65
114: Cover opened during job	65
116: Magstripe not available	66

117: Reader not available	66
118: Print ribbon type problem	67
119: Print ribbon not supported	67
120: User paused the printer	67
121: Print ribbon not identified	68
122: Magstripe format problem	68
123: Insert new card side 1 up	68
124: Insert same card side 2 up	68
149: Option not installed	69
152: Insert new card side 2 up	69
153: Insert same card side 2 up	69
170: Insert new card side 1 up	69
171: Insert same card side 1 up	70
172: Insert cleaning card	70
173: Improper shutdown	70
Laminator Messages	70
177: Laminator not available	70
196: Laminator error critical	70
197: Laminator entry card problem	71
198: L1 area card problem	71
199: L2 area card problem	71
200: Laminator exit card problem	71
201: L1 supply problem	71
202: L1 supply out or missing	72
203: L1 supply type problem	72
204: L1 supply not supported	72
205: L1 supply not identified	72
206: L2 supply problem	72
207: L2 supply out or missing	72
208: L2 supply type problem	73
209: L2 supply not supported	73
210: L2 supply not identified	73
211: L1 heater problem	73
212: L2 heater problem	73
213: L1 heater sensor problem	73
214: L2 heater sensor problem	73
215: L1 heater roller problem	74
216: L2 heater roller problem	74
217: Debow problem	74
218: Impresser problem	74
219: Impresser sensor problem	74
220: Impresser heater problem	74
221: Bar code scanner problem	75
222: Firmware version mismatch	75
223: Laminator system mismatch	75

Driver-Only Messages _____	76
500: The printer is not available _____	76
501: The printer connection was lost _____	76
502: The card data is missing or is not usable _____	76
504: The card data is missing or is not usable _____	76
505: USB communication issue _____	77
506: A card is currently processing _____	77
508: The printer is shutting down _____	77
509: The printer is offline or suspended _____	77
Driver SDK Messages _____	78
511: Cannot lock or unlock the printer. Locks are not installed. _____	78
512: Cannot lock or unlock the printer. The password is incorrect or invalid. _____	78
513: Cannot lock or unlock the printer. The printer is busy. _____	78
514: Cannot lock or unlock the printer. The cover is open. _____	78
515: Failed to lock or unlock the printer. The locks did not function. _____	78
516: Timeout expired before bar code could be read. _____	78
517: Wrong printer job ID. _____	78

<b>Appendix A: SD460 Laminating System _____</b>	<b>A-1</b>
<b>About the SD460 System _____</b>	<b>A-1</b>
Outside the Laminator _____	A-2
Laminator Back and Left Side _____	A-2
Laminator Status Light _____	A-3
Laminator Front and Right Side _____	A-3
Inside the Laminator _____	A-4
Laminator Configuration Label _____	A-5
<b>Laminator Setup _____</b>	<b>A-6</b>
Laminator Overlay Materials _____	A-6
Load Laminator Overlay Material _____	A-8
Card Design _____	A-10
Verify Setup _____	A-10
<b>Clear Laminator Card Jam _____</b>	<b>A-11</b>
<b>Clean the Laminator _____</b>	<b>A-12</b>

# Chapter 1: Introduction



---

## About this Manual

This manual provides user information for the SD Series Card Printers. The manual includes:

- An overview of printer components and options, and a description of the system label.
- How to use the printer, including how to power the printer on and off, how to use the front panel and LCD menus, card processing basics, how to print a test card, and how to load and replace supplies.
- How to perform routine maintenance and troubleshooting tasks.

An additional *Installation and Administrator's Guide* is available for use by administrators or other professionals responsible for printing cards. Refer to the Owner's Library CD.

## Intended Audience

The manual is intended for the printer operator who prints cards, loads and replaces supplies, maintains the printer, and performs troubleshooting.

## Technical Support

Contact Datacard Technical Phone Support at 1-800-328-3996.



# Chapter 2: About the Printer

# 2

---

## About the SD Series Card Printers

The card printer applies images, text, and encoded data to plastic cards. It can print full-color and monochrome images, depending on the type of print ribbon installed.

A busy issuance site might issue up to 10,000 cards a month. During these busy times, the site might use more than one printer to keep up with demand. The printer issues cards either one at a time or in batches—up to 100 cards at a time. An optional 200-card input hopper is available for some printers.

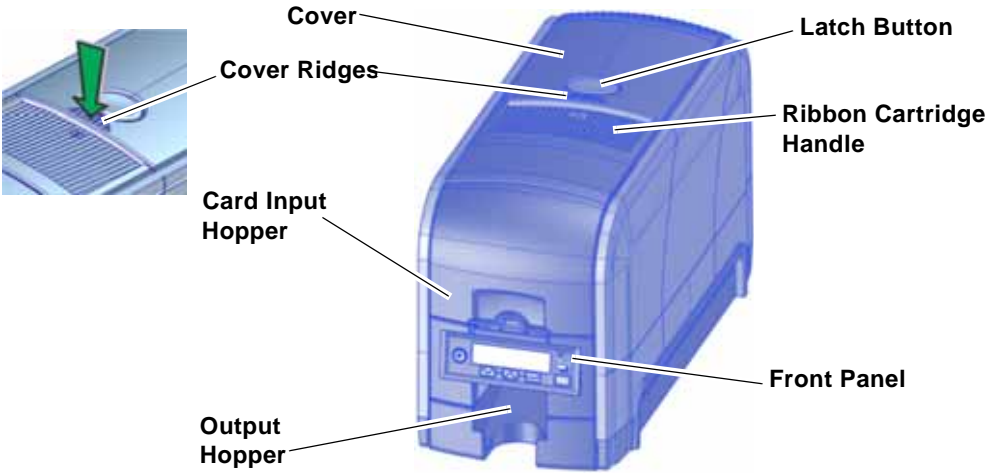
Options available for the card printer include magnetic stripe, smart card, and automatic duplex modules, and a reject hopper. The configuration label on the printer shows the options installed. Refer to “[System Label](#)” on [page 9](#) for more information about recognizing the factory-installed options on your card printer.

## Printer Components

Refer to the following to view the printer components and the different options:

- [Printer Top and Front on page 4](#)
- [Printer Left Side on page 5](#)
- [Inside the Printer on page 6](#)
- [Print Ribbon Cartridge on page 7](#)
- [Printer with Duplex Option on page 7](#)
- [Printer with Laminator \(SD460 System Only\) on page 8](#)
- [System Label on page 9](#)

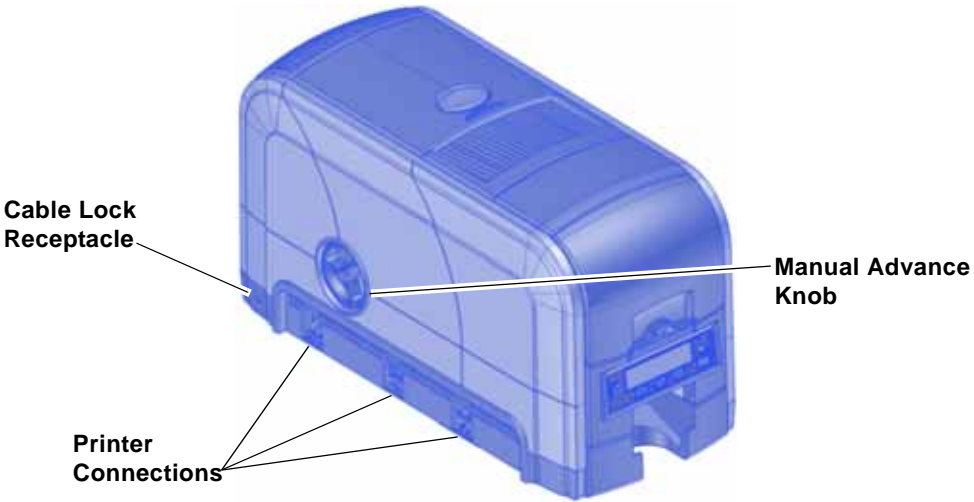
# Printer Top and Front



- Cover** Open the cover to access the printhead and ribbon.
- Latch Button** Push the latch button to release the cover and open the printer.
- Cover Ridges** Press down on the ridges when closing the cover to make sure that it latches properly on both sides.
- Ribbon Cartridge Handle** Use the handle to remove the print ribbon cartridge from the printer.
- Card Input Hopper** The input hopper loads cards to print. The hopper holds up to 100 cards (0.030 in. or 0.762 mm thickness).
- Front Panel** The front panel lets you work with the printer. It includes the USER button, the status lights, the power button, and the LCD panel with navigation keys.
- Output Hopper** The output hopper holds up to 25 completed cards. (The output hopper of a model SD260 with a manual feed holds 5 cards.)

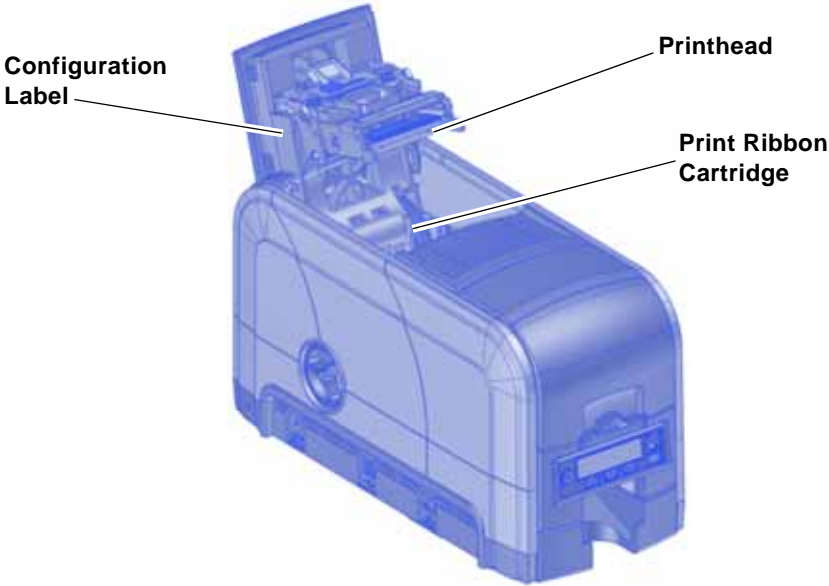


# Printer Left Side



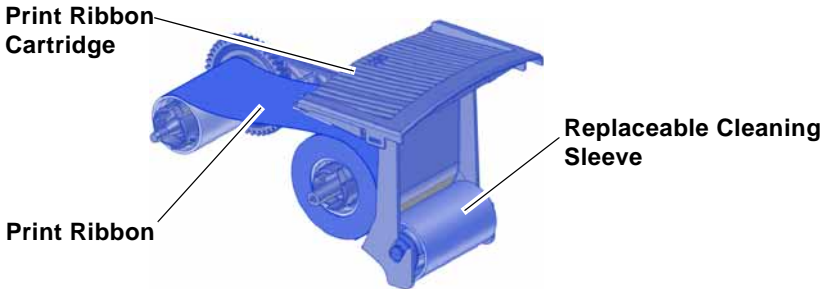
- Manual Advance Knob** The knob moves a card in the track to clear a card jam.
- Cable Lock Receptacle** The receptacle allows you to insert the security plate before attaching the optional Kensington<sup>®</sup> lock.
- Printer Connections** Printer connections include:
- Power receptacle
  - USB connection
  - Network connection

# Inside the Printer



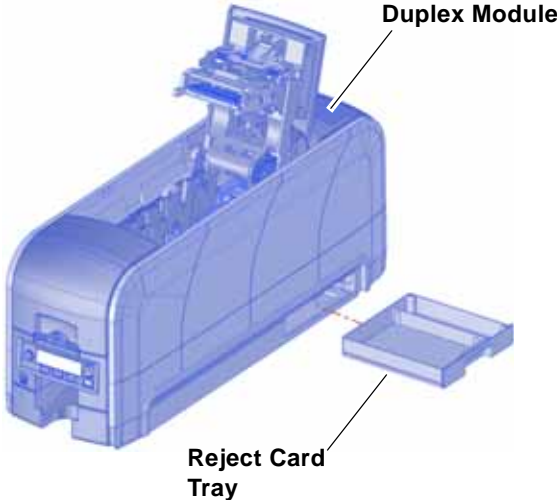
<b>Configuration Label</b>	The label shows the location and date of manufacture, and lists the options installed.
<b>Printhead</b>	The printhead transfers images to cards using the print ribbon.
<b>Print Ribbon Cartridge</b>	The cartridge holds the print ribbon and cleaning sleeve.

# Print Ribbon Cartridge



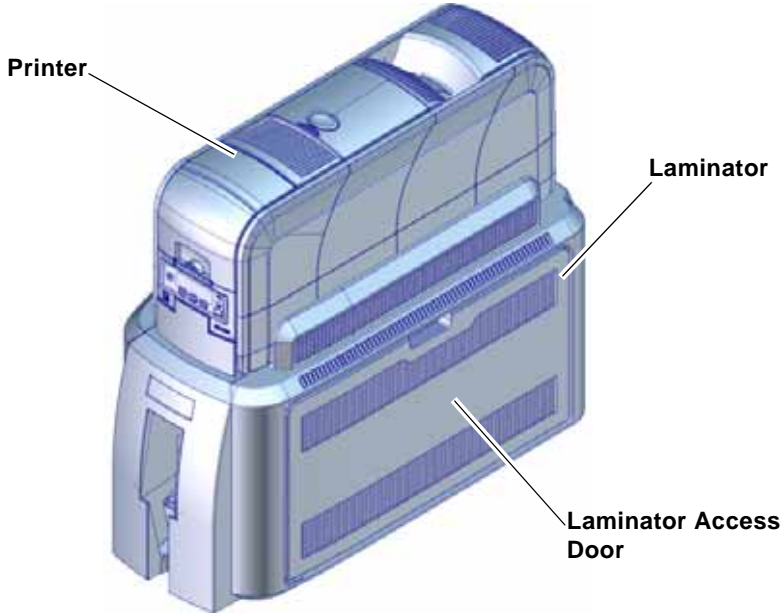
- Print Ribbon Cartridge** The cartridge holds the ribbon for printing.
- Print Ribbon** The ribbon applies images to cards.
- Replaceable Cleaning Sleeve** The cleaning sleeve removes dust and other particles from cards to maintain print quality.

# Printer with Duplex Option



- Duplex Module** The duplex module automatically turns the card for two-sided printing.
- Reject Card Tray** Unfinished cards or cards not processed properly are placed in the optional reject card tray.

# Printer with Laminator (SD460 System Only)



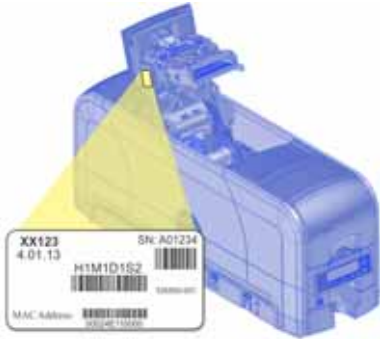
**Laminator** The laminator attaches to the printer and applies patch or topcoat overlay material to the card.

**Laminator Access Door** Open the door to access the laminator cartridges.

Refer to Appendix A, "[SD460 Laminating System](#)" on [page A-1](#), for complete information.

# System Label

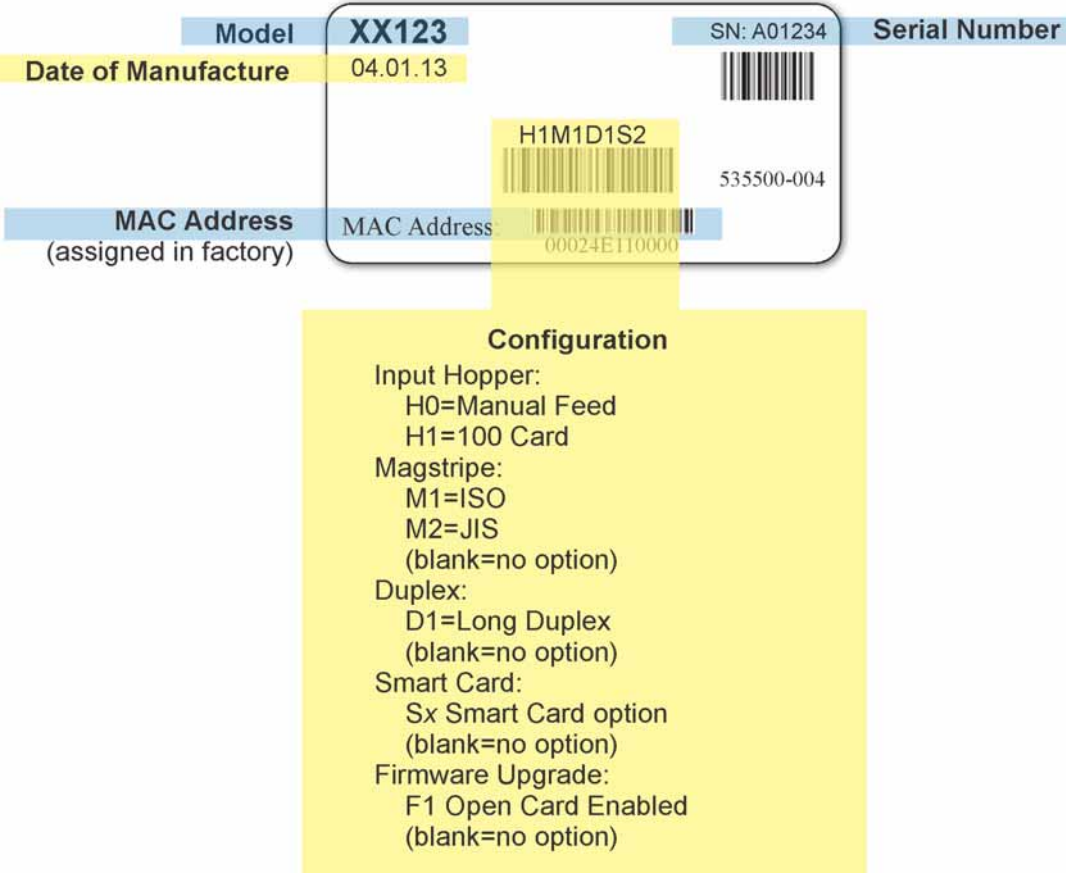
The printer configuration label on the side of the cover swingarm shows the components installed. It provides information that is useful when requesting service.



The label shows the following information:

- Printer name
- Configuration, which includes options installed in the printer
- Date and country of assembly
- MAC address to use when the printer is connected via an Ethernet network

Information for components installed by the dealer or sales group is handwritten on the label.





# Chapter 3: Using the System

# 3

This section provides information about how a card travels through the printer, printer controls, printing a test card, loading and replacing supplies, and cleaning the printer.

---

## How the Card Travels

The card is verified and sent to print from the PC. The hopper pick mechanism picks a card and moves the card into the printer for processing.

Optionally, the card moves to the magnetic stripe encoding area or to the smart card park station, depending on the type of card selected. Encrypted data is decrypted and written to the card. In an SD460 laminating system, the card then moves into the laminator where the overlay material is applied to the front and back of the card. The finished card exits the printer through the card output hopper.

# Card Printer System Overview

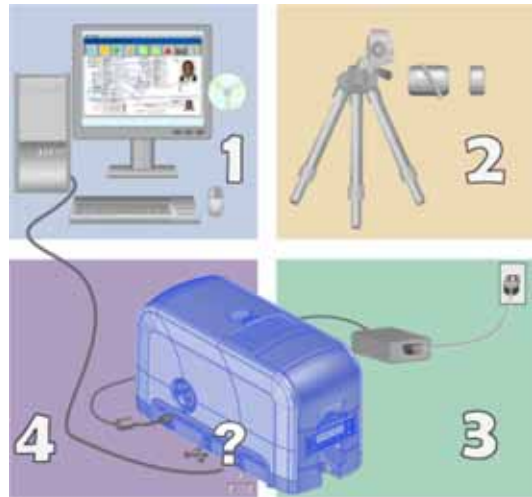
The card printer is used with other equipment and software to create a card production system. The system produces cards for a specific purpose, and the cards must meet requirements.

## Equipment

The system can include:

1. A PC, with software to support the printer, such as:

- The XPS Card Printer Driver for Windows.
- ID software designed specifically to capture, format, and save the data for cards.
- A retail application such as Microsoft® Word or Adobe® Photoshop®.



2. Capture devices, such as:

- A digital camera connected to the PC to take photos for ID badges and other cards.
- A signature capture pad or fingerprint reader.

3. The printer with supplies and a facility power source.

4. A data connection between the printer and PC, which can be a USB connection or a network connection. (Do not use both with one printer.)

## Tasks and Users

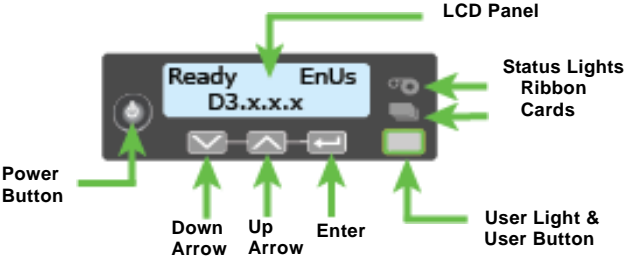
Typical roles in a card production system include:

- The **operator**, who makes cards, loads supplies, and handles minor problems such as card jams.
- The **system administrator**, who sets up the card printer and other hardware, sets up card designs, configures card production software, and identifies the best use of the card printer in the organization.



# Printer Controls

The front panel of the printer provides the controls for operating the printer. The front panel controls are described in the following sections.



## Power Button

Use the POWER button to power off and power on the printer. All lights show steady amber while the printer powers on.

To power off the printer, press the button for 1 to 2 seconds until the printer begins to shut down.

To power off the printer while it is processing cards, press the button for 2 seconds or more. Card jobs in the printer are not completed.

## LCD Panel Menus

The LCD panel shows the printer's menus and displays printer messages or conditions. Refer to “Respond to Messages” on page 61 for more information.

The menu system has four major branches:

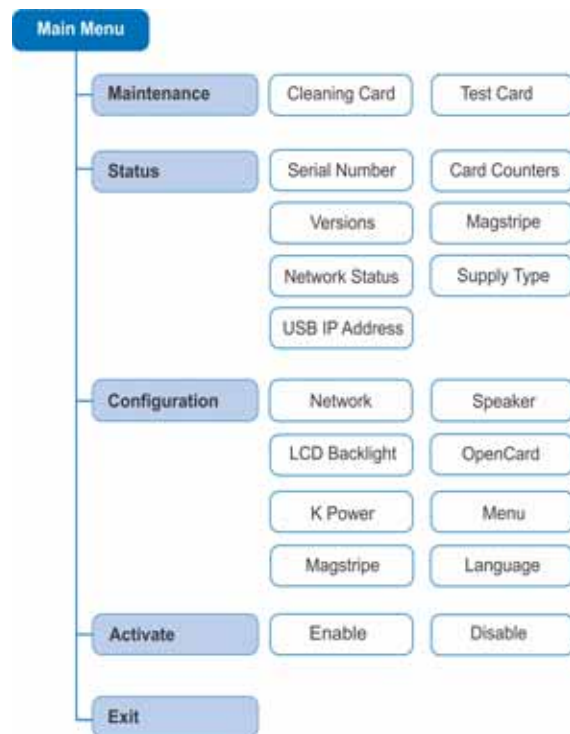
- Use the **Maintenance** menu to run a cleaning card or print a test card.
- Use the **Status** menu to see settings and data about the printer.
- Use the **Configuration** menu to change settings.
- Use the **Activate** menu to enable or disable the printer for transport.



Use the Activate menu only during installation or removal of systems that require activation.

### HINTS & TIPS







- You can access the menu system when **Ready** displays on line 1 of the LCD panel.
- The printer returns to the **Ready** status after 2 minutes of no activity. Changes not applied are lost.
- To leave a selection without changing the value, press the up or down arrow key until **Exit** displays, and then press the ENTER key.



## User Button and Light

The printer's USER button displays with a border of light that indicates the system status. Use the USER button to:

- Suspend printer activity—press the USER button when the LCD panel displays **Ready**.
- Clear a message—press the USER button once.
- Clear all messages—press the USER button for 2 seconds or more.
- Clear all cards currently printing—press and hold the USER button for 2 seconds or more. (Make sure that this action is allowed in your card system.)
- Determine whether the printer is ready, busy printing, or not available. Indicators include the following:

Off	The printer is off or suspended.	
Green	The printer is ready.	
Blinking green	The printer is busy.	
Amber	The printer is not ready. The POWER button was pressed to turn the printer off.	
Blinking amber	The printer has an error.	
Color Cycle: Amber, Green, Light Green, Off	The system is not ready or a door on the system is open. The colors cycle quickly.	



## Down Arrow, Up Arrow, and Enter Key

Use the arrow keys to move through the printer menu system, and the ENTER key to make a selection.

Press the up or down arrow key while the LCD panel displays **Ready** to display additional information about the printer on line 2, including the firmware version, printer model, serial number, and network IP address or USB IP address. The SD460 laminating system also displays the laminator firmware version and the laminator serial number. If you don't press a key for 30 seconds, the LCD panel returns to the default **Ready** message.



## Ribbon Light

The ribbon indicates the status of the print ribbon in the printer. Indicators include the following:

Off	The print ribbon is okay.	
Blinking amber	A blinking light indicates one of the following: <ul style="list-style-type: none"><li>• The printer problem applies to the print ribbon.</li><li>• The print ribbon is low.</li><li>• The print ribbon is out.</li></ul>	


## Card Light

The card light indicates the status of cards in the printer. Indicators include the following:

Off	Cards are okay.	
Blinking amber	A blinking light indicates either of the following: <ul style="list-style-type: none"><li>• No card is detected for the print job. Insert a card to continue printing.</li><li>• Scheduled printer cleaning is due. Insert a cleaning card now, or set aside time to run a cleaning card.</li></ul>	

# Retrieve the Printer IP Address

The printer can display the network IP address it uses when connected to the network. It also displays the subnet mask, gateway address, and MAC address.

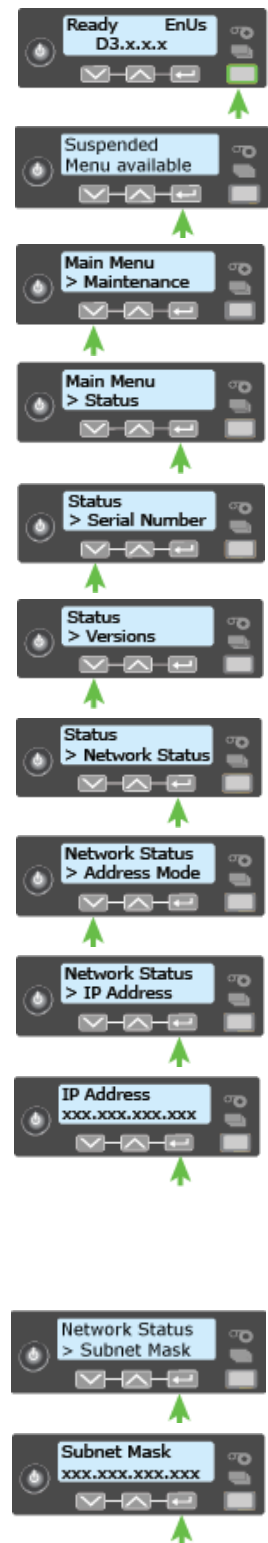
 To see just the printer IP address, press the up or down arrow key while the printer displays **Ready**. Refer to “[Down Arrow, Up Arrow, and Enter Key](#)” on page 16.

Begin with the printer power connected, and the printer connected to the network.

1. Press the POWER button (if needed) to power on the printer.
2. Access the Network Status menu in the LCD menu:
  - A. Press the USER button to suspend the printer.
  - B. Press the ENTER key to enter the menu system.
  - C. Press the down arrow to display **Status** on line 2.
  - D. Press ENTER to enter the Status menu.

Press the down arrow key until **Network Status** displays on line 2.
  - E. Press ENTER to display the Network Status menu.
3. Press the down arrow key until **IP Address** displays on line 2.
4. Press ENTER to display the IP address. Record the IP address.

5. Press ENTER to return to the Network Status menu. **Subnet Mask** displays on line 2.
6. Press ENTER to display the subnet mask. Record it, if necessary.



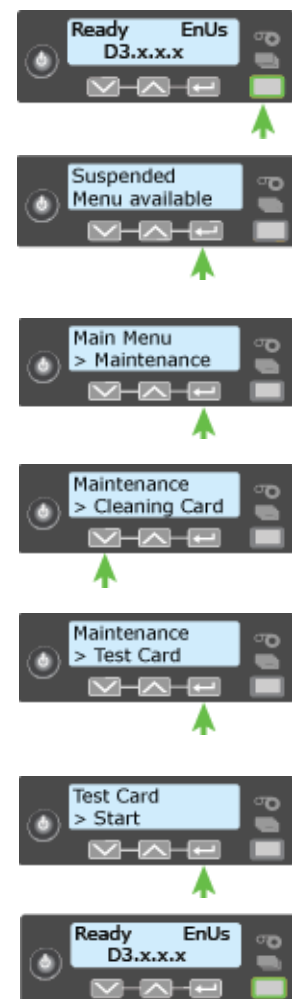
7. Press ENTER to return to the Network Status menu. Gateway Address displays on line 2.
8. Press ENTER to display the gateway address. Record it, if necessary.
9. Press ENTER to return to the Network menu.
10. Press the down arrow key to scroll to Exit on line 2.
11. Press ENTER. Then, press the USER button to return the printer to Ready. The USER button glows green.



## Print a Test Card

The printer includes a test card that runs without using a driver or other source of card data. Use it to verify that the printer is working.

1. Begin with the printer Ready. The USER button shows steady green.
2. Press the USER button to display Suspended on line 1 of the LCD panel.
3. Press ENTER to enter the menu system.
4. Press ENTER to enter the Maintenance menu.
5. Press the down arrow until Test Card displays on line 2.
6. With Test Card displayed on line 2, press ENTER to display Start on line 2.
7. Press ENTER to print the test card.



After the card prints, the printer returns to Ready.

# Load and Replace Supplies

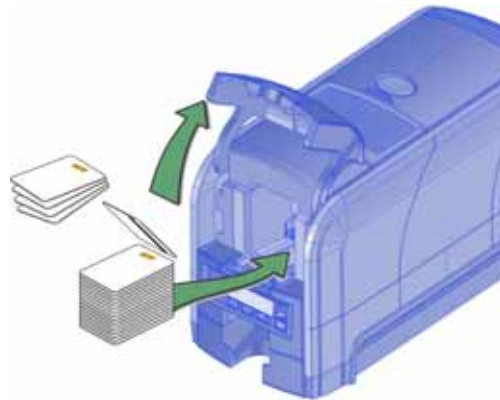
To prepare the printer to print cards, load blank card stock into the input hopper (optional), and load print ribbon and a cleaning sleeve onto the print cartridge. If you are using an SD460 system, also load overlay material into the L1 and L2 (if equipped) laminator cartridges. Refer to Appendix A, "[Load Laminator Overlay Material](#)" on [page A-8](#), for information about loading the laminator cartridges.

## Load Cards

If you are using a manual feed printer, skip this step and keep a supply of blank cards close to the printer.

For printers with an input hopper, do the following:

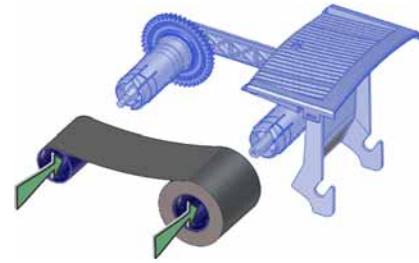
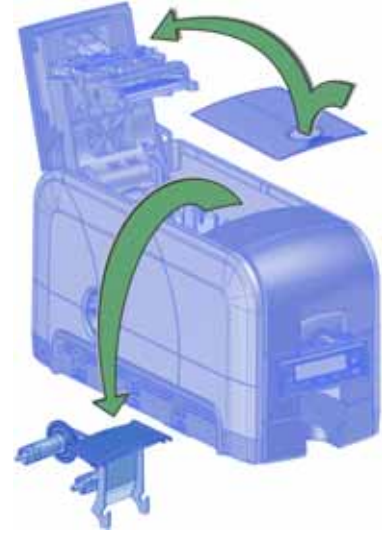
1. Open the input hopper.
2. Load the cards into the input hopper. (Cards can stick together. Slide or fan the cards to separate the edges before placing them in the input hopper.)
  - Insert ISO magnetic stripe cards with the stripe (back side) facing down and to the right.
  - Insert smart cards with the smart card chip facing up and toward the back of the hopper.
3. Close the input hopper.



## Load the Print Ribbon

Load the print ribbon when you install the printer and when the ribbon runs out.

1. Open the printer cover.
2. Remove the print ribbon cartridge.
3. Load a full roll of print ribbon (the blue spool) onto the spindle closest to the cartridge handle.
4. Place the silver take-up spool on the spindle with the black gear.
5. Wind the take-up spool counterclockwise one full turn.

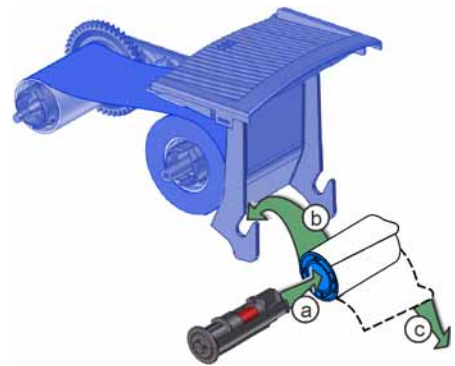


## Load the Cleaning Sleeve

Load a new cleaning sleeve when you load a new roll of print ribbon, when you notice debris on the printed cards, or when the cleaning sleeve is no longer sticky.

The printer ships with the cleaning roller spindle installed on the print ribbon cartridge.

1. Remove the cleaning roller spindle from the ribbon cartridge and slide the spindle into the continuous cleaning sleeve (a).
2. Place the spindle with the cleaning sleeve onto the ribbon cartridge (b).
3. Remove the protective wrapper from the cleaning sleeve (c).

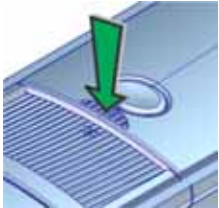
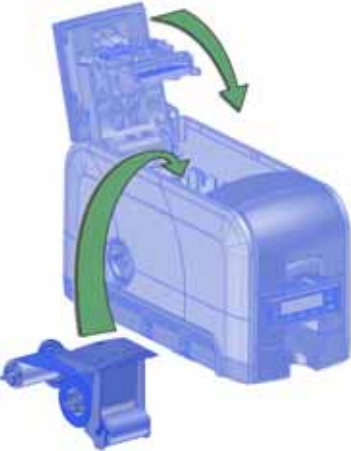




# Install the Ribbon Cartridge

Install the assembled print ribbon cartridge into the printer.

1. Open the printer cover.
2. Hold the print ribbon cartridge by the handle and lower it into the printer with the handle toward the front of the printer.
3. Make sure that the ribbon cartridge is correctly positioned in the guides.
4. Close the printer cover. Press down on the ridges on the front of the cover to make sure that it latches properly on both sides.





# Chapter 4: Printing Cards

# 4

---

## Before Starting to Print

This section explains how to print a card. Make sure that:

- Cards are loaded in the printer or available to insert.
- Ribbon is loaded in the printer. For the steps to follow, refer to [“Load the Print Ribbon”](#) on [page 20](#). If you are using the SD460 system, refer to Appendix A, [“SD460 Laminating System”](#), for information about preparing the laminator.
- The card design is set up. If you need to set up or modify the design, refer to [“Elements of Card Design”](#) in your printer’s *Installation and Administrator’s Guide*.

### HINTS & TIPS

Make sure that magnetic stripe cards are loaded correctly. The printer shows the correct position.

You also can:

- Print a test card directly from the printer. Refer to [“Print a Test Card”](#) on [page 18](#).
- Print a driver sample card. Refer to [“Printing a Driver Sample Card”](#) in your card printer’s *Driver Guide*.

# Print Cards

Make sure that cards are loaded in the printer or available to insert when prompted. For the steps to follow, refer to “Load Cards” on page 19.

## Print from ID Software

1. From the ID software, use the template or create a design for the card.
2. Select the printer if you use more than one printer.
3. Enter the data for the card. Follow the instructions for your software.
4. Capture the photo for the card, if necessary.
5. Click the **Print** button to send the card to the printer.
6. At the printer, insert a card in the single-feed slot, if necessary.

## Print from Other Software

1. Open the software application and select the card printer as the current printer.
2. Use the application’s setup page to select the ISO ID-1 page size, or set the page size to 2.13 x 3.38 in.
3. Set the margins to 0 (zero).
4. Select an orientation—portrait or landscape.
5. Create the card design:
  - A. Add graphics, such as a company logo or background.
  - B. Add a photo.
  - C. Add text information, such as name, address, or employee number.

For information about additional card features, refer to “Elements of Card Design” in your printer’s *Installation and Administrator’s Guide*.



6. Click **Print** to send the card to the printer.
7. At the printer, insert a card in the single feed slot, if necessary.

#### **HINTS & TIPS**

- The printer can receive card jobs from more than one PC. It prints cards in the order they are received.
- Orient all cards the same way.
- Do not touch the card surface to be printed. Handle cards by their edges or wear gloves.



# Chapter 5: System Maintenance

# 5

---

## Clean the Printer

The printer performs best when it is cleaned on a regular basis. Follow the cleaning guidelines for your site to keep the printer in good working condition.

Clean the printer when:

- The printer displays a message for which cleaning is a solution.
- There is debris on completed cards.
- A new roll of print ribbon is installed.

You can perform the following cleaning tasks:

- [Clean the Printhead on page 28](#)
- [Run a Printer Cleaning Card on page 30](#)
- [Clean the Laminator on page A-12](#)

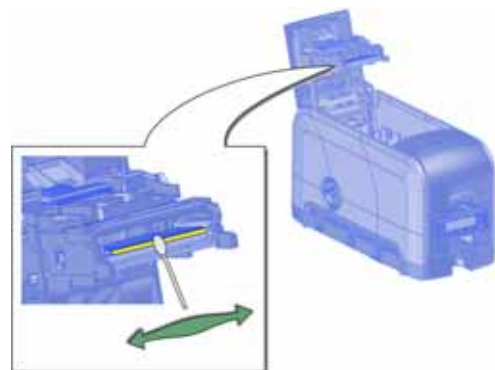
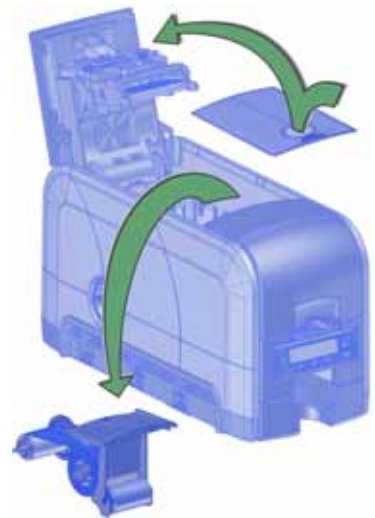
# Clean the Printhead

Clean the printhead when:

- The printhead is replaced.
- There are unprinted lines on the finished card. This usually indicates dirt or contaminants on the printhead.
- The printhead is touched accidentally. Oils from hands can affect print quality and damage the printhead.

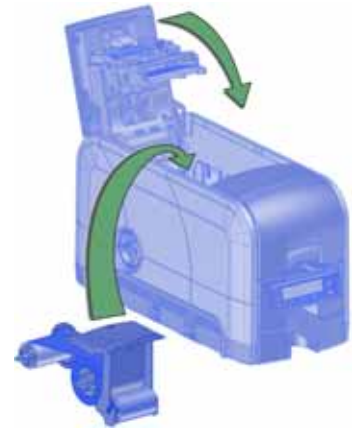
Do the following to clean the printhead:

1. Power off the printer.
2. Open the printer cover and remove the print ribbon cartridge.
3. Open and remove a cleaning swab from its package.
4. Use gentle pressure to move the cleaning swab back and forth along the full length of the printhead edge until it is completely clean.





5. Replace the print ribbon cartridge. Avoid bumping the printhead when you install the print ribbon cartridge.
6. Close the printer cover. Press down on the ridges on the front of the cover to make sure that it latches properly on both sides.
7. Power on the printer.
8. Print a sample card to verify the quality of printing. Refer to [“Print a Test Card”](#) on [page 18](#) for more information.



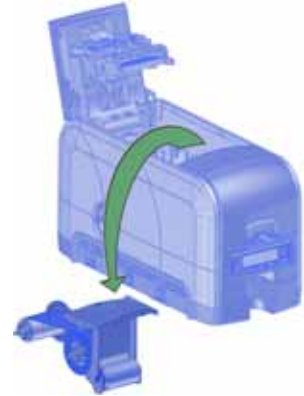
#### **HINTS & TIPS**

- Avoid touching the printhead edge with your fingers. Contamination due to skin oils eventually can damage the printhead.
- Avoid touching the printing edge of the printhead cartridge with any sharp objects that can permanently damage the printhead.
- Use only the cleaning swab to clean the printhead. Other materials can stick to the printhead and cause damage.
- Use a cleaning swab one time only. Discard it after you clean the printhead.

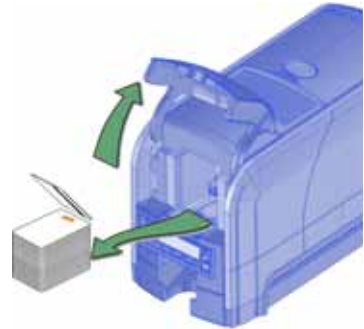
# Run a Printer Cleaning Card

Run a cleaning card to clean debris from the inside of the printer and from the hopper rollers. The cleaning card can remove most contaminants from the printer. Run a cleaning card after every 250 cards processed by the printer, or every 6 months.

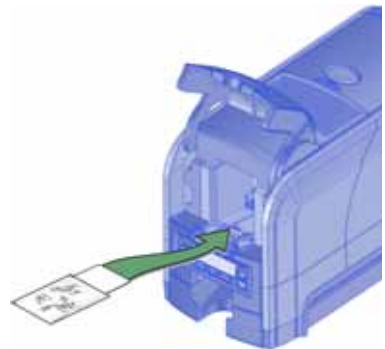
1. Prepare the printer for cleaning.
  - A. Power on the printer.
  - B. Open the printer cover and remove the print ribbon cartridge.



- C. Close the cover.
  - D. Open the input hopper and remove any unprinted cards.



- E. Open the cleaning card package and remove the cleaning card.
  - F. Load the cleaning card in the input hopper. (Plan to clean the printer immediately. The cleaning card dries out if it is out of its package for more than a few minutes.)



If you have a manual feed printer, wait until you are prompted to insert the cleaning card.

2. Use the LCD menu system to start the cleaning cycle.
  - A. Begin when the printer displays **Ready** and the **USER** button shows steady green. Press the **USER** button.

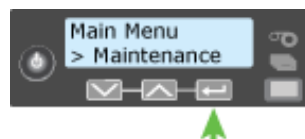


Suspended displays on line 1 of the LCD panel.

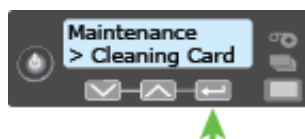
- B. Press the **ENTER** key to enter the menu system.



- C. **Maintenance** displays on line 2 of the LCD panel. Press the **ENTER** key to enter the **Maintenance** menu.



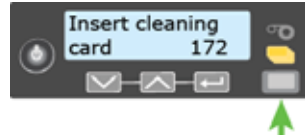
- D. **Cleaning Card** displays on line 2 of the LCD panel. Press the **ENTER** key to enter the **Cleaning Card** menu.




- E. **Start** displays on line 2 of the LCD panel. Press the **ENTER** key to start the cleaning process.



- F. **Insert cleaning card** displays on the LCD panel. If you have a manual feed printer, insert the cleaning card. Press the USER button to start the cleaning cycle.



The printer moves the card through the printer several times and ejects it into the output hopper.

 If you are cleaning an SD460 system, the cleaning card moves into the laminator after cleaning the printer and cleans the laminator rollers and card entry area. The cleaning card is ejected into the laminator output hopper. Refer to [Clean the Laminator](#) on [page A-12](#) for complete information on cleaning the laminator.

3. Remove the used cleaning card. Wait a few minutes for the rollers to dry.
4. Prepare the printer for use.
  - A. Replace the cards in the input hopper.
  - B. Install a new cleaning sleeve on the ribbon cartridge and remove the protective cover. Refer to [“Load the Cleaning Sleeve”](#) on [page 20](#) for the steps to follow.
  - C. Replace the ribbon cartridge and close the printer cover. Press down on the ridges on the front of the cover to latch it properly.

Press the USER button to return the printer to **Ready**. The printer is available to print cards again.



- D. Discard the used cleaning card and cleaning sleeve.

## HINTS & TIPS

- Use the cleaning card one time only.
- Change the cleaning sleeve each time you clean the printer or change the print ribbon.



If the card light is blinking amber and there are cards in the input hopper, the printer's configured cleaning count has been reached and it is time to clean the printer. The cleaning count is set in Printer Manager. Refer to the printer's *Installation and Administrator's Guide* for complete information about using Printer Manager.



# Chapter 6: Troubleshooting



---

This section helps you identify and fix basic issues that can occur during printing. Also refer to your printer's *Driver Guide* or OpenCard manual for additional troubleshooting information.

The section starts with an overview of card production and printer issues you may encounter:

- [Locate a Problem Within the Card Production System on page 36](#)
- [Locate a Problem with Basic Printer Functions on page 37](#)

This section also describes troubleshooting for the following:

- [Installation Problems on page 38](#)
- [Card Printer Driver Problems on page 40](#)
- [Card Appearance on page 42](#)
- [Magnetic Stripe Problems on page 48](#)
- [Laminator Problems on page 50](#)
- [Card Jams on page 55](#)
- [Messages and Conditions on page 56](#)

# Locate a Problem Within the Card Production System

For typical components of the system, refer to “[Card Printer System Overview](#)” on [page 12](#). If any one of the following components does not work properly, printing cards can be affected.

- The XPS Card Printer Driver

If you need to reinstall the Card Printer Driver to fix a problem, we recommend you download the latest version of the driver from <http://www.datacard.com>. Select **Support & Drivers > Drivers & Downloads** from the menu. Enter your printer model in the Enter Product Name or Number area, and click **Go**.

- Card production software

Card production software formats the types of data used to print cards. Make sure that the card production software features you use work with your printer.

If you do not use card production software, make sure that the software you use supports the requirements for creating cards. If you use magnetic stripe data, use an application that saves text as text and not as a graphic. (For example, Microsoft Paint only saves graphic data, while Adobe Photoshop saves both graphic and text data.) Fonts and escapes require that text is sent from the application as text.

- Printer plug-in

Card production software might require a printer plug-in, which makes the data in the card production software available in the form the Card Printer Driver can use.

- Other components of the system

An ID or badge system usually includes a camera to take photos, and may include other capture devices for biometric data. The proper use and maintenance of these components is important to the quality of cards you produce.



# Locate a Problem with Basic Printer Functions

If the system is not working as expected, follow these steps in the order listed to isolate the source of the problem before you contact your service provider.

1. Make sure that the power cord is plugged in and the printer is powered on.
2. Does the printer power on and display **Ready** on the front panel within 1 minute?
  - If the printer powers on correctly, continue to step 3.
  - If the printer powers on but does not display **Ready**, the printer is not working properly. Request service for the printer.
  - If the printer does not power on, make sure that the power source is functioning by doing one of the following:
    - Remove the printer power cord from the outlet and connect it to another outlet.
    - Remove the power cord from the printer and connect it to another device, such as a light, and then connect it to the same outlet.

If the power source is functioning, there is a problem with the printer. Request service for the printer.

If the power source isn't functioning, replace it and then begin with step 1.
3. Print a test card. Refer to [“Print a Test Card”](#) on [page 18](#) for more information.
  - If the test card prints, the printer is working correctly. Continue to step 4.
  - If the test card does not print, the printer is not working correctly. Request service for the printer.
4. Connect the printer data cable, if necessary. Make sure that you use the same type of cable (USB or network) used when the printer was installed.

5. If you use the XPS Card Printer Driver, print a driver sample card. For the steps to follow, refer to your printer's *Driver Guide*.
  - If the sample card prints, the printer and driver are working correctly. Continue to step 6.
  - If the sample card does not print, the printer and driver have a communication problem. Determine the cause of the problem and try the sample card again.

If you are not using the Card Printer Driver, ask your service provider or software provider for assistance.

6. Print a card using your card production software.
  - If the card prints, your software is working successfully with the printer. Troubleshoot the card design.
  - If the card does not print, check the following:
    - In the application, is the correct printer selected in the Print Setup or Print dialog?
    - If the printer produced a blank card, review the page size or driver settings.

If the card causes an error, the card might have a type of data the printer does not support.

## Installation Problems

This section describes issues that prevent a successful installation and provides recommended solutions to those issues. Choose from the following topics:

- [USB Installation Troubleshooting on page 39](#)
- [Network Installation Troubleshooting on page 40](#)

## USB Installation Troubleshooting

Problem	Solution
The cable is loose.	Reconnect the USB cable to the ports on the PC and the printer. Power the printer off, and then back on. If the PC and printer still do not communicate, restart the PC.
The data cable is damaged or frayed.	Power off the printer. Replace the cable if you have a spare. Contact your service provider to order a new data cable.
The system has a temporary communication problem.	Check for the following: <ul style="list-style-type: none"><li data-bbox="732 722 1403 848">• USB extension cables can cause communication problems. The recommended USB cable is 6-ft. (2 meters) long. Make sure that the cable is rated for USB 2.0 data transmission.</li><li data-bbox="732 848 1403 911">• If you are using a USB hub, a self-powered hub is recommended.</li></ul>
The PC USB port does not communicate with the printer USB port.	Power management on the PC has shut down USB communication. Open the Device Manager and the list of USB devices. Disable shutdown for each hub in the list. Restart the PC to make the changes take effect, if necessary. Hibernation on a laptop PC requires several moments to enable USB communication. Unplug the USB printer port and then connect it again. Replace the PC port or the PC. Contact your PC or port vendor if you need assistance.

## Network Installation Troubleshooting

Problem	Solution
The network cable is loose.	Reconnect the data cable to the network port and the printer. Restart the printer.
The Status page of Printer Properties shows the printer is not available, but the printer shows <b>Ready</b> on the LCD panel.	Follow your network troubleshooting procedures to isolate and test each component of the computer-to-printer communication link. Suggestions: <ul style="list-style-type: none"><li>• Verify the computer-to-network connection by accessing a network resource, such as a network drive.</li><li>• The network administrator can test communication between a server and the printer.</li><li>• Make sure that the user is logged on to the network.</li></ul>
The printer is not configured with the correct network address	Make sure that the server name or IP address is entered in the Port Settings or Configure Port dialog box on the computer. For more information about retrieving the printer's IP address, refer to " <a href="#">Retrieve the Printer IP Address</a> " on <a href="#">page 17</a> . Make sure that <b>Ready</b> displays on the printer's LCD panel.

## Card Printer Driver Problems

The Card Printer Driver and printer can have the following communication problems:

- [The Card Printer Driver does not detect the network-connected printer on page 41.](#)
- [The Card Printer Driver does not detect the USB-connected printer on page 41.](#)
- [Driver status or Windows print queue does not provide expected data on page 42.](#)

## The Card Printer Driver does not detect the network-connected printer

Problem	Solution
<p>The Printer Properties &gt; Status tab shows the printer is not available.</p>	<p>Make sure that you use the same type of data cable—USB or network—that was used when the printer was installed. You cannot switch the type of data cable after installation.</p> <p>Make sure that the current printer IP address is the same as the IP address on the Printer Properties &gt; Ports tab. For more information about retrieving the printer’s IP address, refer to <a href="#">“Retrieve the Printer IP Address”</a> on page 17.</p>
<p>Message 500 displays after you send a card to print.</p>	<p>If this happens often, consider switching from DHCP network addressing to static IP addressing. For more information about setting the Card Printer Driver network communication value, refer to the “Printer Manager” section of the card printer’s <i>Installation and Administrator’s Guide</i>.</p>
<p>The network is not operating properly.</p>	<p>Test the network using another device and fix or report network problems. To test the network, print to a different (paper) printer or verify the availability of network drives.</p>
<p>The printer is not connected to the network, or the PC is not connected to the network.</p>	<p>Make sure that both ends of the data cable are connected. Replace defective cables if needed.</p>

## The Card Printer Driver does not detect the USB-connected printer

Problem	Solution
<p>The Printer Properties &gt; Status tab shows the printer is available, but Message 500 displays after you send a card to print.</p>	<p>Make sure that you use the same type of data cable—USB or network—that was used when the printer was installed. You cannot switch the type of data cable after installation.</p> <p>Make sure that both ends of the data cable are connected. Replace a defective USB cable if needed.</p>

## Driver status or Windows print queue does not provide expected data

Problem	Solution
The Card Printer Driver sample card or magnetic stripe test cards do not print.	Check the following: <ul style="list-style-type: none"><li>• <b>Enable bidirectional support</b> must be selected on Printer Properties &gt; Ports tab to allow printing from the Card Printer Driver.</li><li>• If <b>Print directly to printer</b> is selected in the Printer Properties &gt; Advanced tab, clear the selection to allow printing of the Card Printer Driver sample cards.</li></ul>
The Ribbon Low light on the printer and the Card Printer Driver status do not match.	The percentage of ribbon remaining that causes the printer Ribbon Low light can be set using the Printer Manager FrontPanel printer setting. The driver displays the actual percentage of ribbon remaining and cannot be changed. As a result, the indicators may not be in agreement.
A print job disappears from the print queue but does not print.	The printer USB cable was disconnected after the application sent the job. Reconnect the cable and try the job again.

## Card Appearance

Card appearance problems can be caused by many different factors. Click the link below that best describes the card appearance issue on the printed card.

- [Something did not print on page 43](#)
- [Printing includes unexpected data on page 44](#)
- [The color printing has flaws on page 44](#)
- [The printing is too light on page 46](#)
- [The printing is too dark on page 47](#)
- [The monochrome printing has flaws on page 47](#)

## Something did not print

Problem	Probable Cause	Solution
Nothing is printed on the card.	The Disable Printing option in the Card Printer Driver is set to All, Front, or Back.	Open the Preferences > Layout > Advanced tab and change <b>Disable Printing</b> to <b>Off</b> .
	The print ribbon is loaded incorrectly.	Remove the print ribbon and install it correctly.
	The page size was not set to ISO ID-1.	Use your card production application to access the printer's print setup and select <b>ISO ID-1</b> for the page size. The correct page size is available after you select the printer.
Color printing on top of a black background does not print on the card.	The black panel of the ribbon is printing over the color panels.	The printer uses the print ribbon panels in sequence; the Y panel prints first, then M, and so on. The black panel of the print ribbon is used last and prints over the color panels. For best results, change the 100% black background to a color near black, so that it prints using the YMC (color) panels of the print ribbon. Refer to "Elements of Card Design" in the printer's <i>Installation and Administrator's Guide</i> for more information about color printing.

## Printing includes unexpected data

Problem	Probable Cause	Solution
Text that was intended for the magnetic stripe printed on the card instead.	The magnetic stripe font was not applied to the text.	Refer to "Magnetic Stripe Fonts" in the printer's <i>Driver Guide</i> .
	The escape code was typed incorrectly.	Refer to "Magnetic Stripe Escapes" in the printer's <i>Driver Guide</i> .
	The text to encode was longer than one line.	Reduce the font size to keep all text on one line.
Several blank cards are ejected before the full card prints.	The application uses the page size that is in effect when a card design document is created. Setting the page size after creating the document can cause errors.	Use the page setup feature of the application to set the page size <i>before</i> creating the document. Consider creating a template for cards that opens at the correct page size.

## The color printing has flaws

Problem	Probable Cause	Solution
One or more lines appear on the card.	The printhead is dirty or damaged.	Clean the printhead. Refer to "Clean the Printhead" on page 28.
One color panel is not aligned correctly with other color panels.	The cards are slipping in the track.	Run a cleaning card. Refer to "Run a Printer Cleaning Card" on page 30.
	The cards are not the correct size for the printer.	Use cards that meet the size requirement for the printer. Refer to "Cards" in your printer's <i>Installation and Administrator's Guide</i> for specifications. If you must use the cards you have, ask your system administrator for help.



Problem	Probable Cause	Solution
Printing is blurred.	The cards have a matte, not glossy, finish.	Use cards that meet the requirements for the printer. Refer to "Cards" in your printer's <i>Installation and Administrator's Guide</i> for specifications.
	The rollers are dirty.	Run a cleaning card. Refer to " <a href="#">Run a Printer Cleaning Card</a> " on page 30.
	The printhead is dirty.	Clean the printhead. Refer to " <a href="#">Clean the Printhead</a> " on page 28.
The printed card has small unprinted areas.	Unprinted cards have scratches.	Handle cards carefully. Refer to "Card Quality Guidelines" in your printer's <i>Installation and Administrator's Guide</i> .
	Cards have embedded particles, an uneven surface, or the card edge has burrs.	Use cards that meet the requirements for the printer. Refer to "Cards" in your printer's <i>Installation and Administrator's Guide</i> .
	The rollers are dirty or the card packaging contains debris.	Run a cleaning card. Refer to " <a href="#">Run a Printer Cleaning Card</a> " on page 30.
Part of the printed image is discolored.	Cards have fingerprints or other dirt on them.	Handle cards carefully. Refer to "Card Quality Guidelines" in your printer's <i>Installation and Administrator's Guide</i> .
	A signature panel is located on the other side of the card.	Design the card to avoid printing photos over signature panel residue.
	The rollers are dirty or the card packaging contains debris.	Run a cleaning card. Refer to " <a href="#">Run a Printer Cleaning Card</a> " on page 30. Use cards that meet the requirements for the printer. Refer to "Cards" in your printer's <i>Installation and Administrator's Guide</i> .

## The printing is too light

Problem	Probable Cause	Solution
Photos look faded.	The image capture system needs adjustment.	Color settings might not be optimal. Adjust color settings. Refer to the documentation for the image capture system, "Color Printing" in your printer's <i>Installation and Administrator's Guide</i> , and "Color Adjustment Tab" in your printer's <i>Driver Guide</i> .
The printing is very light.	The ribbon is loaded incorrectly.	Load the print ribbon correctly. Refer to " <a href="#">Load the Print Ribbon</a> " on <a href="#">page 20</a> .
	The card was previously printed and has topcoat on it.	Print only new cards. Refer to "Cards" in your printer's <i>Installation and Administrator's Guide</i> .
	The printhead is not installed correctly.	Contact your service provider for instructions to install the printhead correctly.
	The printhead power is too low.	Log on to the Printer Manager as a WebAdmin. Open the Printer Settings > Print menu. Increase the YMCPower setting, and press the Set Current button to save your changes.

## The printing is too dark

Problem	Probable Cause	Solution
The card shows wrinkles in darkly colored areas.	The card includes very dark areas.	Change the design to use smaller areas of dark color.
	The printhead is not aligned correctly.	Contact your service provider.
All color printing is darker than intended.	Color adjustment is too dark. A change in the card stock you use can alter the appearance of printed cards.	Change the color adjustment settings. Refer to "Color Printing" in your printer's <i>Installation and Administrator's Guide</i> , and "Color Adjustment Tab" in your printer's <i>Driver Guide</i> .

## The monochrome printing has flaws

Problem	Probable Cause	Solution
Text has broken (partly printed) characters.	The monochrome (K) power setting is balanced to print both fine text and bar codes.	If the card does not include a bar code, increase the monochrome intensity. If the card includes fine text and bar codes, change the text to improve printing. Refer to "Monochrome Printing" in the printer's <i>Installation and Administrator's Guide</i> .
	The text is formatted to print with color, and the card is being printed with monochrome ribbon.	Contact your service provider. Format text to print black so that the text is not dithered.
Printing is uneven or is missing in some areas.	The monochrome (K) power setting is too low. The cards require a different setting.	Increase the monochrome intensity. Find a balance between printing all card data and causing wrinkles.
A black-and-white image prints using the color panels.	The Windows Picture Print Wizard or Picture and Fax Viewer is printing the file. Many applications use the Windows tool to preview and print graphics. The tool does not render to true black and white.	Use another application, such as ID software or Microsoft Word, to create the card.

# Magnetic Stripe Problems

To begin troubleshooting a magnetic stripe problem, first print a magnetic stripe test card from Printer Manager or the Card Printer Driver. For the steps to follow, refer to the “Printer Manager” section of the printer’s *Installation and Administrator’s Guide* or “Printing a Driver Sample Card” in the card printer’s *Driver Guide*.

The printer uses the coercivity set using the LCD panel or in Printer Manager, and the data format set using Printer Manager.

Problem	Solution
Cards are not loaded correctly.	Load ISO cards with the magnetic stripe (back side) facing down and toward the right. Refer to “Load Cards” on page 19.
Cards do not have a magnetic stripe.	Load magnetic stripe cards in the input hopper. If the cards have a magnetic stripe, check the quality of the cards. Change card stock, if needed.
The card has dirt or damage on the magnetic stripe.	Encode and send a new card to print. If an error message displays indicating a magnetic stripe problem, run a cleaning card to clean the magnetic stripe head. Refer to “Run a Printer Cleaning Card” on page 30.
The magnetic stripe on the card is low-coercivity material and the High Coercivity setting is selected.	To use the cards you have, select low-coercivity encoding. Refer to the Printer Manager “Printer Setting Menu” in the <i>Installation and Administrator’s Guide</i> for more information. To encode with high coercivity, obtain cards manufactured for high-coercivity encoding. Refer to “Print a Test Card” on page 18.
Message 105 displays. The magnetic stripe on the card is high-coercivity material and the Low Coercivity setting is selected.	To use the cards you have, select high-coercivity encoding. Refer to the Printer Manager “Printer Setting Menu” in the <i>Installation and Administrator’s Guide</i> for more information. To encode with low coercivity, obtain cards manufactured for low-coercivity encoding.
The data for this job includes characters not allowed by the magnetic stripe format selected for the track.	Cancel the current print job. Make sure that you know which characters are allowed on the track. Change the data to be encoded, and resend the print job. Refer to “Magnetic Stripe Design” in the printer’s <i>Installation and Administrator’s Guide</i> for more information.

Problem	Solution
<p>The magnetic stripe data was sent in an encoding format not supported by the track.</p>	<p>Review the encoding format setting for the tracks in Printer Manager. Refer to the Printer Manager "Printer Setting Menu" in the <i>Installation and Administrator's Guide</i>. Make sure that the application is using the selected encoding format for the track.</p> <p>If the application and track are set to the same format, and the error message displays repeatedly, contact the application provider for assistance.</p>
<p>The application sent track data for a track not supported by the magnetic stripe module.</p>	<p>Verify the type of magnetic stripe option in the printer.</p> <p>If the printer label indicates a 3-track ISO module, you can send data for tracks 1, 2, and 3.</p> <p>If the printer label indicates a single-track JIS module, you can send data for track 1.</p> <p>The magnetic stripe option and cards must be capable of accepting and encoding each track of data sent by the card production software.</p>

# Laminator Problems

This section describes problems that might occur when you are using a laminator to apply overlay to the card.

## Patch Appearance Problems

Problem	Probable Cause	Solution
Smart cards don't work after the overlay is applied.	The Debow card option is selected.	Make sure that the Debow card option in the Card Printer Driver is not selected. Refer to the printer's <i>Driver Guide</i> for information about specifying the debow option.
Cards are bowed too much.	The Debow card option is not selected.	Select the Debow card option in the Card Printer Driver. Refer to the printer's <i>Driver Guide</i> .
	Debow time is not set correctly.	Change the card debow time. Refer to the Printer Manager "Laminator" section of the printer's <i>Installation and Administrator's Guide</i> .
	The temperature is too high for the card stock used.	Lower the laminator temperature for the overlay material. Refer to the Printer Manager "Laminate Type" section of the printer's <i>Installation and Administrator's Guide</i> .
	The card stock doesn't work with the overlay.	Switch to a different card stock.
The patch comes off when the card is flexed.	The temperature is too low for the overlay material.	Increase the laminator temperature for the overlay material. Refer to the Printer Manager "Laminate Type" section of the printer's <i>Installation and Administrator's Guide</i> .
	A patch is stuck to the heated roller.	Clean the laminator. Refer to " <a href="#">Clean the Laminator</a> " on <a href="#">page A-12</a> . If the problem continues to occur, contact your service provider.

Problem	Probable Cause	Solution
There are scratches or particles under the patch.	The inside of the printer is dirty.	Clean the printer. Refer to "Run a Printer Cleaning Card" on page 30.
	The supplies have debris on them.	Store and handle supplies carefully. Keep supplies in the original packaging until you are ready to use them.
There are repeating marks on the patch.	The heated roller is dirty.	Clean the laminator. Refer to "Clean the Laminator" on page A-12. If the problem continues to occur, contact your service provider.
The patch doesn't adhere to the trailing edge of the card.	The overlay is wound incorrectly on the take-up spool.	Process another card to allow the overlay material to reset itself. If it doesn't, remove the cartridge and turn the take-up spool clockwise several turns.
The patch is not centered between the long edges of the card.	The overlay is not loaded correctly in the cartridge.	Load the overlay material correctly. Refer to "Load Laminator Overlay Material" on page A-8.
	The laminator cartridge is not fully seated in the laminator.	Make sure that the cartridge is seated in the laminator properly.
	The overlay material is wound unevenly on the supply roll.	Process several cards to allow the overlay material to center itself. Align the edges of the overlay on the take-up spool.
	The laminator cartridge is damaged.	Replace the laminator cartridge.
The patch has wavy lines along the length of the card.	The temperature for applying the overlay is set too high.	Decrease the laminator temperature setting. Refer to the Printer Manager "Laminate Type" section of the printer's <i>Installation and Administrator's Guide</i> .
	The heated roller is damaged.	Power down the system. Contact your service provider for assistance.
	The card has features, such as a smart card chip, that interfere with application of the overlay.	Use the correct patch material for your card type. Refer to "Laminator Overlay Materials" on page A-6 for a description of overlay types.

Problem	Probable Cause	Solution
The patch shows opaque areas at the leading edge of the card.	The temperature for applying the overlay is too high.	Decrease the laminator temperature setting. Refer to the Printer Manager "Laminate Type" section of the printer's <i>Installation and Administrator's Guide</i> . If the problem continues to occur, contact your service provider for assistance.
The patch extends beyond one of the short edges of the card.	There is slack in the overlay material.	Process another card to allow the overlay material to reset itself.
	The overlay material is wound incorrectly on the take-up spool.	Remove the laminator cartridge and turn the take-up spool clockwise several turns.
	The card or overlay registration settings are not correct.	Contact your service provider for assistance.
The patch is missing from the finished card.	The supply spool is not positioned correctly in the cartridge.	Make sure that the overlay is loaded correctly. Refer to " <a href="#">Load Laminator Overlay Material</a> " on page A-8.
	The overlay was moved on the spool and the patch was used previously.	Advance the overlay past the used area. If the problem continues to occur, contact your service provider.
	The Card Printer Driver Laminate card setting was set to Do not apply.	Change the Laminate card setting to apply the overlay. Refer to the printer's <i>Driver Guide</i> for information about specifying lamination settings.



## Topcoat Appearance Problems

Problem	Probable Cause	Solution
There are scratches in the topcoat.	The inside of the printer is dirty.	Clean the printer. Refer to <a href="#">"Run a Printer Cleaning Card"</a> on page 30.
	The supplies have debris on them.	Store and handle supplies carefully. Keep supplies in the original packaging until you are ready to use them.
There are repeating marks in the topcoat.	The heated roller is dirty.	Clean the laminator. Refer to <a href="#">"Clean the Laminator"</a> on page A-12. If the problem continues to occur, contact your service provider.
The holographic topcoat shows irregular darker areas.	The temperature for applying the holographic topcoat is too high.	Decrease the laminator temperature for the overlay material. Refer to the Printer Manager "Laminate Type" section of the printer's <i>Installation and Administrator's Guide</i> .
There are particles of holographic topcoat beyond the trailing edge of the card.	The temperature for applying the holographic topcoat is too high.	<ul style="list-style-type: none"> <li>• Topcoat particles, or flash, can become attached to the card. Try to brush off the particles.</li> <li>• Clean the laminator. Refer to <a href="#">"Clean the Laminator"</a> on page A-12.</li> <li>• Decrease the laminator temperature for the overlay material. Refer to the Printer Manager "Laminate Type" section of the printer's <i>Installation and Administrator's Guide</i>.</li> </ul> <p><b>Note:</b> Reducing the temperature can reduce the number of particles, but does not eliminate them.</p>
The topcoat shows wavy lines along the length of the card.	The temperature for applying the topcoat is too high.	Decrease the laminator temperature for the overlay material. Refer to the Printer Manager "Laminate Type" section of the printer's <i>Installation and Administrator's Guide</i> .
The topcoat is spotty, especially on the leading edge of the card.	The overlay material is wound in the wrong direction on the take-up spool.	Process another card to allow the overlay material to reset itself. If it doesn't, remove the cartridge and turn the take-up spool clockwise several turns.

Problem	Probable Cause	Solution
The topcoat shows opaque areas along a short edge of the card.	The temperature for applying the topcoat is too high.	Decrease the laminator temperature for the overlay material. Refer to the Printer Manager "Laminate Type" section of the printer's <i>Installation and Administrator's Guide</i> .  If the problem continues to occur, contact your service provider for assistance.
The hologram of the topcoat doesn't appear on the card.	The Card Printer Driver Laminate card setting is set to Do not apply.	Change the Laminate card setting to apply the overlay. Refer to the printer's <i>Driver Guide</i> for information about specifying lamination settings.
	Clear topcoat is installed in the cartridge.	Remove the cartridge and change the overlay to the correct type.
	The overlay material is wound in the wrong direction on the take-up spool.	Process another card to allow the overlay material to reset itself. If it doesn't, remove the cartridge and turn the take-up spool clockwise several turns.
	The overlay is not loaded correctly in the cartridge.	Remove the cartridge and reload the overlay. Refer to " <a href="#">Load Laminator Overlay Material</a> " on <a href="#">page A-8</a> .
A long edge of the topcoat doesn't stick to the card.	The temperature of the heated roller is too low	Increase the laminator temperature for the overlay. Refer to the Printer Manager "Laminate Type" section of the printer's <i>Installation and Administrator's Guide</i> .
	Print ribbon that includes a topcoat (T) panel is loaded in the printer.	Change the print ribbon to one that doesn't include a T panel.
	The cards do not meet specifications.	Use a different supply of cards.
	The overlay material was wound in the wrong direction on the take-up spool.	Process another card to allow the overlay material to reset itself. If it doesn't, remove the cartridge and turn the take-up spool clockwise several turns.
	There is debris on the heated roller.	Process several cards to see if the problem corrects itself. If it doesn't, clean the laminator. Refer to " <a href="#">Clean the Laminator</a> " on <a href="#">page A-12</a> .

# Use Advanced Troubleshooting Tools

Printer Manager provides access to card design settings and additional troubleshooting tools. Printer Manager also allows you to perform advanced troubleshooting with the guidance of your service provider. Refer to “Printer Manager” in the printer’s *Installation and Administrator’s Guide* for more information.

## Card Jams

The card did not reach the position for the next action, such as printing or ejecting the card.

You usually can resolve the error by pressing the USER button so that the printer displays **Ready**. If the error persists, do the following to remove the card from the printer.

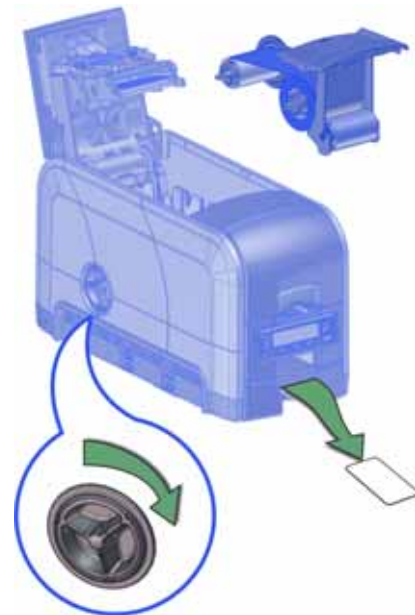
1. Open the printer.
2. Remove the print ribbon cartridge.
3. Turn the manual advance knob to move the jammed card until it is accessible from the rollers or exits into the output hopper.
4. Remove the card.
5. Replace the ribbon cartridge and close the printer.
6. Press the USER button on the printer or click **Retry** in the message box.

### HINTS & TIPS

Check the ribbon to make sure that it is not torn. Refer to “[109: Print ribbon problem](#)” on [page 64](#) to repair or replace the ribbon, if needed.



For laminator card jams, refer to “[Clear Laminator Card Jam](#)” on [page A-11](#).



# Messages and Conditions

When the printer cannot process the card sent, it issues a condition. The LCD panel on the front panel shows these conditions. When you use the XPS Card Printer Driver, the printer driver also displays the condition as a message on the PC. In a shared printer environment, messages can differ slightly from the messages and conditions described in this section.

- [Messages on the Printer LCD](#)
- [Messages from the XPS Card Printer Driver on the PC on page 60](#)
- [Messages from Printer Manager on page 60](#)
- [Other Messages on page 60](#)

## Messages on the Printer LCD

All messages are associated with a print job. The printer issues messages that focus on recovering from problems.

- The printer displays a message number and a short description 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 lights on the front panel flash while messages display on the LCD panel.

No.	LCD Message	User Light	Supply Light	Card Light	Sound
100	Request not supported	Amber Flash	Off	Off	Error
101	Job could not complete	Amber Flash	Off	Off	Error
102	Card not in position	Amber Flash	Off	Amber Flash	Error
103	Printer problem	Amber Flash	Off	Off	Error
104	Critical problem	Amber Flash	Amber Flash	Amber Flash	Error
105	Magstripe data error	Amber Flash	Off	Off	Error
106	Magstripe data not found	Amber Flash	Off	Amber Flash	Error
107	Magstripe read data error	Amber Flash	Off	Off	Error
108	Magstripe read no data	Amber Flash	Off	Amber Flash	Error

No.	LCD Message	User Light	Supply Light	Card Light	Sound
109	Print ribbon problem	Amber Flash	Off	Off	None
110	Print ribbon out or missing	Amber Flash	Off	Off	Warning
111	Card not picked	Amber Flash	Off	Amber Flash	Warning
112	Card hopper empty	Amber Flash	Off	Amber Flash	Warning
113	Close cover to continue	Amber Flash	Off	Amber Flash	Attention
114	Cover opened during job	Amber Flash	Off	Off	Error
116	Magstripe not available	Amber Flash	Off	Off	Error
117	Reader not available	Amber Flash	Off	Off	Error
118	Print ribbon type problem	Amber Flash	Off	Off	None
119	Print ribbon not supported	Amber Flash	Off	Off	None
120	User paused the printer	Amber Flash	Off	Off	Warning
121	Print ribbon not identified	Amber Flash	Off	Off	None
122	Magstripe format problem	Amber Flash	Off	Off	Error
123	Insert new card side 1 up	Amber Flash	Off	Amber Flash	None
124	Insert same card side 2 up	Amber Flash	Off	Amber Flash	None
149	Option not installed	Amber Flash	Off	Off	Error
152	Insert new card side 2 up	Amber Flash	Off	Off	Warning
153	Insert same card side 2 up	Amber Flash	Off	Off	Warning
170	Insert new card side 1 up	Amber Flash	Off	Off	Warning
171	Insert same card side 1 up	Amber Flash	Off	Off	Warning
172	Insert cleaning card	Amber Flash	Off	Off	Warning
173	Improper shutdown	Amber Flash	Off	Off	Warning

No.	LCD Message	User Light	Supply Light	Card Light	Laminator Light	Sound
177	Laminator not available	Green Flash	Off	Off		Error
196	Laminator error critical	Green Flash	Amber Flash	Green Flash	Red Flash	Error
197	Laminator entry card problem	Green Flash	Off	Off	Red Flash	Error
198	L1 area card problem	Green Flash	Off	Off	Red Flash	Error
199	L2 area card problem	Green Flash	Off	Off	Red Flash	Error
200	Laminator exit card problem	Green Flash	Off	Off	Red Flash	Error
201	L1 supply problem	Off	Amber Flash	Off	Red Flash	Error
202	L1 supply out or missing	Off	Amber Flash	Off	Red Flash	Warning
203	L1 supply type problem	Off	Amber Flash	Off	Red Flash	Error
204	L1 supply not supported	Off	Amber Flash	Off	Red Flash	Error
205	L1 supply not identified	Off	Amber Flash	Off	Red Flash	Error
206	L2 supply problem	Off	Amber Flash	Off	Red Flash	Error
207	L2 supply out or missing	Off	Amber Flash	Off	Red Flash	Error
208	L2 supply type problem	Off	Amber Flash	Off	Red Flash	Error
209	L2 supply not supported	Off	Amber Flash	Off	Red Flash	Error
210	L2 supply not identified	Off	Amber Flash	Off	Red Flash	Error

No.	LCD Message	User Light	Supply Light	Card Light	Laminator Light	Sound
211	L1 heater problem	Green Flash	Off	Off	Red Flash	Error
212	L2 heater problem	Green Flash	Off	Off	Red Flash	Error
213	L1 heater sensor problem	Green Flash	Off	Off	Red Flash	Error
214	L2 heater sensor problem	Green Flash	Off	Off	Red Flash	Error
215	L1 heater roller problem	Green Flash	Off	Off	Red Flash	Error
216	L2 heater roller problem	Green Flash	Off	Off	Red Flash	Error
217	Debow problem	Green Flash	Off	Off	Red Flash	Error
218	Impresser problem	Green Flash	Off	Off	Red Flash	Error
219	Impresser sensor problem	Green Flash	Off	Off	Red Flash	Error
220	Impresser heater problem	Green Flash	Off	Off	Red Flash	Error
221	Bar code scanner problem	Green Flash	Off	Off	Red Flash	Error
222	Firmware version mismatch	Green Flash	Amber Flash	Green Flash		Error
223	Laminator system mismatch	Green Flash	Amber Flash	Green Flash		Error

## Messages from the XPS Card Printer Driver on the PC

- The Card Printer Driver displays the same messages as those on the printer LCD panel. The messages that display on the PC provide additional information about the condition that caused the message and contain recovery instructions. Click the appropriate button in the message box to clear the message.
- Messages display on the PC that sent the card print job.
- If you cancel a job at the printer, the message is removed from the PC. Any additional messages for the canceled job (for example, for a broken ribbon) do not display on the PC.
- Messages can display in the background, behind the application sending the card. On some operating systems, the message displays in the status bar. Click the blinking Explorer (folder) icon in the status bar to open the message.
- If more than one message was issued, the next message displays after you close the current message.
- If there is more than one card printer installed on the PC, messages display one at a time. The title bar of each message shows the printer name.
- If there is more than one card printer installed on the PC and each has issued errors, the printer driver displays the messages received, even if you cleared the error at the printer.
- The Card Printer Driver Driver can issue messages that do not display on the printer LCD panel. Refer to [“Driver-Only Messages”](#) on [page 76](#) and [“Driver SDK Messages”](#) on [page 78](#) for a list of these messages.

## Messages from Printer Manager

Printer Manager issues messages that display in a web browser window. Click **Continue** in Printer Manager to continue working with the printer. Refer to *“Printer Manager”* in your printer’s *Installation and Administrator’s Guide*.

## Other Messages

- The card production application you use also may display messages.
- Other printers can cause messages if more than one model of card printer is installed.



## Respond to Messages

You can respond to printer messages using the printer front panel buttons or by clicking the appropriate response in the message box displayed by the Card Printer Driver on the PC.

## Printer Messages

The following messages display on the printer LCD panel and in a message box on the PC that issued the card print job when you use the Card Printer Driver.

### 100: Request not supported

The printer does not support the personalization being requested for the card. The card will be canceled.

Change the card data to match the printer's options and settings, or print to a printer that is configured to support the personalization being requested.

Press the **USER** button on the printer, or click **OK** in the message box to clear the message.

### 101: Job could not complete

The card took too much time to complete.

The card will be canceled.

Press the **USER** button on the printer, or click **OK** in the message box to clear the message.

### 102: Card not in position

The card is not positioned in the printer correctly.

1. Open the printer and remove the ribbon cartridge.
2. Turn the knob to remove the card.
3. Replace the ribbon cartridge and close the printer.

Press the **USER** button on the printer. In the message box, click **Retry**, or click **Cancel** to cancel the card.

### 103: Printer problem

The printer had an error. The card will be canceled.

1. Press the printer POWER button to power off the printer.
2. Press the POWER button again to power on the printer.

Click **OK** in the message box to clear the message.

### 104: Critical problem

The printer had a serious error. The card will be canceled.

1. Press the printer POWER button to power off the printer.
2. Request service.

The system must remain powered off.

Click **OK** in the message box to clear the message.

### 105: Magstripe data error

The printer failed to verify that the correct magnetic stripe data was written on the card.

1. Make sure that you are using magnetic stripe cards that match the printer settings.
2. Make sure that the cards are placed in the printer correctly.

Press the USER button on the printer. In the message box, click **Retry**, or click **Cancel** to cancel the card.

#### **HINTS & TIPS**

- The card might have been turned the wrong way.
- The card might not have a magnetic stripe.

## 106: Magstripe data not found

The printer did not find magnetic stripe data on card.

1. Make sure that you are using magnetic stripe cards that match the printer settings.
2. Make sure that the cards are placed in the printer correctly.

Press the **USER** button on the printer. In the message box, click **Retry**, or click **Cancel** to cancel the card.

### **HINTS & TIPS**

- The card might not match printer settings or the data sent.
- Ask the system administrator to verify that the card, the data, and the printer settings match.

## 107: Magstripe read data error

The printer failed to read the magnetic stripe data from the card. The card will be canceled.

1. Make sure that you are using magnetic stripe cards that match the printer settings.
2. Make sure that the cards are placed in the printer correctly.

Press the **USER** button on the printer, or click **OK** in the message box to clear the message.

### **HINTS & TIPS**

- The data might use a different format than the current printer setting.
- Ask the system administrator to verify that the card, data, and printer settings match.

## 108: Magstripe read no data

The printer did not find any magnetic stripe data on card. The card will be canceled.

1. Make sure that you are using magnetic stripe cards that match the printer settings.
2. Make sure that the cards are placed in the printer correctly.

Press the **USER** button on the printer, or click **OK** in the message box to clear the message.

### **HINTS & TIPS**

- The card might have been turned the wrong way.
- The card might not have a magnetic stripe.

## 109: Print ribbon problem

The print ribbon is not moving properly.

1. Open the printer and remove the ribbon cartridge.
2. Reposition, repair, or replace the ribbon and advance the repaired area one full turn.
3. Replace the ribbon cartridge and close the printer.

Press the **USER** button on the printer. In the message box, click **Retry**, or click **Cancel** to cancel the card.

## 110: Print ribbon out or missing

The printer does not have usable ribbon. To complete the current card:

1. Open the printer and remove the ribbon cartridge.
2. Install a new ribbon and cleaning roller.
3. Replace the cartridge and close the printer.

Press the **USER** button on the printer. In the message box, click **OK**, or click **Cancel** to cancel the card.

### **HINTS & TIPS**

Used ribbon has negative images of printed data. To keep the data confidential, follow your company policy to discard used ribbon.

### 111: Card not picked

The printer did not pick a card. To complete the current card:

For printers with an input hopper, open the input hopper, add or reposition cards, and close the hopper.

For printers with single card feed, push the card in until the printer picks it.

Press the **USER** button on the printer. In the message box, click **OK**, or click **Cancel** to cancel the card.

### 112: Card hopper empty

The printer did not detect cards in the input hopper.

Add cards to the input hopper.

Press the **USER** button on the printer. In the message box, click **OK**, or click **Cancel** to cancel the card.

### 113: Close cover to continue

The printer cover must be closed to print.

Push down on the cover to latch it.

Press the **USER** button on the printer. In the message box, click **OK**, or click **Cancel** to cancel the card.

#### **HINTS & TIPS**

Make sure that the ribbon cartridge is installed properly with the cartridge handle even with the edges of the printer.

### 114: Cover opened during job

The printer cover was opened while printing.

Push down on the cover to latch it.

Press the **USER** button on the printer. In the message box, click **Retry**, or click **Cancel** to cancel the card.

#### **HINTS & TIPS**

Make sure that the ribbon cartridge is installed properly with the handle even with the edges of the printer.

## 116: Magstripe not available

The printer does not have a magnetic stripe option. The card will be canceled.

Remove magnetic stripe data from the card or use a printer that has a magnetic stripe option installed.

Press the **USER** button on the printer, or click **OK** in the message box to clear the message.

### **HINTS & TIPS**

To remove magnetic stripe data, you or your system administrator may need to:

- Clear a check box in the card production application.
- Change the font from Mag Track x XPS Card Printer to a printable font such as Arial, Verdana, or Calibri. Refer to “Magnetic Stripe Fonts” in your printer’s *Driver Guide*.

## 117: Reader not available

The printer does not support the personalization being requested for the card. The card will be canceled.

Change the card data to match the printer’s options and settings or print to a printer that is configured to support the personalization being requested.

Press the **USER** button on the printer, or click **OK** in the message box to clear the message.

### **HINTS & TIPS**

To remove the reader request, you or your system administrator may need to clear a check box in the card production application.

## 118: Print ribbon type problem

The printer cannot use the ribbon installed. The card will be canceled.

Use ribbon designed for this printer.

Press the **USER** button on the printer, or click **OK** in the message box to clear the message.

### **HINTS & TIPS**

- Purchase ribbon from your dealer or authorized reseller.
- Check the Datacard website for newer firmware that supports new ribbon types.

## 119: Print ribbon not supported

The printer cannot use the ribbon installed. The card will be canceled.

Use ribbon designed for this printer.

Press the **USER** button on the printer, or click **OK** in the message box to clear the message.

### **HINTS & TIPS**

- Purchase ribbon from your dealer or authorized reseller.
- Check the Datacard website for newer firmware that supports new ribbon types.

## 120: User paused the printer

The printer was paused while printing.

To complete the current card press the printer's **USER** button.

In the message box, click **OK** to clear the message and complete the current card, or click **Cancel** to cancel the card.

### **HINTS & TIPS**

- If the user pressed the **USER** button for several seconds, the card has been canceled.
- If this message occurs often, ask your system administrator to set the button sensitivity to a lower value.

### 121: Print ribbon not identified

The printer cannot use the ribbon installed. The card will be canceled.

Use ribbon designed for this printer.

Press the USER button on the printer, or click **OK** in the message box to clear the message.

#### **HINTS & TIPS**

Ask your dealer or authorized reseller for a replacement ribbon.

### 122: Magstripe format problem

The magnetic stripe data sent does not match the format set in the printer. The card will be canceled.

Press the USER button on the printer, or click **OK** in the message box to clear the message.

### 123: Insert new card side 1 up

1. Insert a new card in the printer with side 1 facing up.
2. If the card is not immediately picked, press the printer's USER button or click **OK**.

Click **Cancel** in the message box if you want to cancel the card.

### 124: Insert same card side 2 up

1. Take the card from the printer.
2. Turn the card over end to end so side 2 is facing up.
3. Insert the card in the printer.
4. If the card is not immediately picked, press the printer's USER button or click **OK**.

Click **Cancel** in the message box if you want to cancel the card.



#### 149: Option not installed

The printer does not support the personalization being requested for the card. The card will be canceled.

Change the card data to match the printer's options and settings, or print to a printer that is configured to support the personalization being requested.

Press the USER button on the printer, or click **OK** in the message box to clear the message.

#### **HINTS & TIPS**

In the card format, don't include references to hardware that cannot be accessed by the system. For more information, refer to your ID software documentation or ask your system administrator.

#### 152: Insert new card side 2 up

1. Turn a new card over end to end so side 2 is facing up.
2. Insert the card in the printer.
3. If the card is not immediately picked, press the printer's USER button or click **OK**.

Click **Cancel** in the message box if you want to cancel the card.

#### 153: Insert same card side 2 up

1. Take the card from the printer and turn it over end to end so side 2 is facing up.
2. Insert the card in the printer.
3. If the card is not immediately picked, press the printer's USER button or click **OK**.

Click **Cancel** in the message box if you want to cancel the card.

#### 170: Insert new card side 1 up

1. Insert a new card in the printer with side 1 facing up.
2. If the card is not immediately picked, press the printer's USER button or click **OK**.

Click **Cancel** in the message box if you want to cancel the card.

#### 171: Insert same card side 1 up

1. Take the card from the printer and turn it over end to end so side 1 is facing up.
2. Insert the card in the printer.
3. If the card is not immediately picked, press the printer's USER button or click **OK**.

Click **Cancel** in the message box if you want to cancel the card.

#### 172: Insert cleaning card

1. Insert cleaning card.
2. If the card is not immediately picked, press the printer's USER button or click **OK**.

Click **Cancel** in the message box if you want to cancel the cleaning card.

#### 173: Improper shutdown

Always use the power button to power off the printer.

Click **OK** in the message box to clear the message.

## Laminator Messages

The following messages display on the printer LCD panel when you are using an SD460 laminating system. They also display in a message box on the PC that issued the card print job.

#### 177: Laminator not available

The printer and laminator cannot communicate. The card will be canceled.

1. Make sure the data cable from the laminator to the printer is securely plugged in.
2. Press the printer Power button to power off the system.
3. Press the Power button again to power on the system.

#### 196: Laminator error critical

The laminator has encountered a critical error. The card will be canceled.

1. Press the printer Power button to power off the system.
2. Request service. The system must remain powered off.

### 197: Laminator entry card problem

The card is not where it should be in the laminator.

1. Open the laminator.
2. Turn the knob to remove the card.
3. Close the laminator.

### 198: L1 area card problem

The card is not where it should be in the laminator.

1. Open the laminator and remove the L1 supply cartridge.
2. Turn the knob to remove the card.
3. Replace the supply cartridge and close the laminator.

### 199: L2 area card problem

The card is not where it should be in the laminator.

1. Open the laminator and remove the L2 supply cartridge.
2. Turn the knob to remove the card.
3. Replace the supply cartridge and close the laminator.

### 200: Laminator exit card problem

The card is not where it should be in the laminator.

1. Open the laminator.
2. Turn the knob to remove the card.
3. Close the laminator.

### 201: L1 supply problem

The L1 supply is not moving properly. To try another card:

1. Open the laminator and remove the L1 cartridge.
2. Reposition, repair, or replace the supply and advance the repaired area one full turn.
3. Replace the cartridge and close the laminator.

202: L1 supply out or missing

The laminator does not have usable supplies.

1. Open the laminator.
2. Replace the supply.
3. Close the laminator.

203: L1 supply type problem

The laminator cannot use the supply installed.

Use supplies designed for this laminator.

204: L1 supply not supported

The laminator cannot use the supply installed.

Use supplies designed for this laminator.

205: L1 supply not identified

The laminator cannot use the supply installed.

Use supplies designed for this laminator.

206: L2 supply problem

The L2 supply is not moving properly. To try another card:

1. Open the laminator and remove the L2 cartridge.
2. Reposition, repair, or replace the supply and advance the repaired area one full turn.
3. Replace the cartridge and close the laminator.

207: L2 supply out or missing

The laminator does not have usable supplies.

1. Open the laminator.
2. Replace the supply.
3. Close the laminator.

208: L2 supply type problem

The laminator cannot use the supply installed.

Use supplies designed for this laminator.

209: L2 supply not supported

The laminator cannot use the supply installed.

Use supplies designed for this laminator.

210: L2 supply not identified

The laminator cannot use the supply installed.

Use supplies designed for this laminator.

211: L1 heater problem

The laminator has encountered a critical error. The card will be canceled.

1. Press the printer Power button to power off the system.
2. Request service. The system must remain powered off.

212: L2 heater problem

The laminator has encountered a critical error. The card will be canceled.

1. Press the printer Power button to power off the system.
2. Request service. The system must remain powered off.

213: L1 heater sensor problem

The laminator has encountered a critical error. The card will be canceled.

1. Press the printer Power button to power off the system.
2. Request service. The system must remain powered off.

214: L2 heater sensor problem

The laminator has encountered a critical error. The card will be canceled.

1. Press the printer Power button to power off the system.
2. Request service. The system must remain powered off.

#### 215: L1 heater roller problem

The laminator has encountered a critical error. The card will be canceled.

1. Press the printer Power button to power off the system.
2. Request service. The system must remain powered off.

#### 216: L2 heater roller problem

The laminator has encountered a critical error. The card will be canceled.

1. Press the printer Power button to power off the system.
2. Request service. The system must remain powered off.

#### 217: Debow problem

The laminator has encountered an error in the debow area.

1. Remove the card.
2. Press the printer Power button to power off the system.
3. Press the printer Power button again to power on the system.
4. If the problem occurs again, request service.

#### 218: Impresser problem

The laminator has encountered a critical error. The card will be canceled.

1. Press the printer Power button to power off the system.
2. Request service. The system must remain powered off.

#### 219: Impresser sensor problem

The laminator has encountered a critical error. The card will be canceled.

1. Press the printer Power button to power off the system.
2. Request service. The system must remain powered off.

#### 220: Impresser heater problem

The laminator has encountered a critical error. The card will be canceled.

1. Press the printer Power button to power off the system.
2. Request service. The system must remain powered off.

### 221: Bar code scanner problem

1. Open the laminator and remove the L1 cartridge.
2. Verify the supply has bar codes printed on it.
3. Replace the cartridge and close the laminator.
4. Try the card again.
5. If the problem occurs again, request service.

### 222: Firmware version mismatch

The printer and laminator firmware versions are not compatible. The system cannot laminate cards until the firmware has been updated.

Update both the printer and laminator to the latest firmware versions.

### 223: Laminator system mismatch

The printer and laminator are not compatible.

The laminator is not supported by your printer model. Contact your service provider for the correct laminator model.

## Driver-Only Messages

The following messages are issued by the Card Printer Driver and display in a message box on the PC that sent the card print job. These messages do not display on the printer LCD panel.

### 500: The printer is not available

The computer cannot communicate with the printer. To complete the current card:

1. Make sure that the printer is powered on and in the **Ready** state.
2. Make sure the printer is connected to the computer using a USB or network cable, but not both.

When the printer is ready, click **OK**.

Click **Cancel** if you want to cancel the card

### 501: The printer connection was lost

The computer lost communications with the printer during printing. The card will be canceled.

1. Make sure the printer is powered on.
2. Make sure the printer connection to the computer is secure.

Click **OK** to clear the message.

### 502: The card data is missing or is not usable

The printer driver has detected invalid or missing data. The card will be canceled.

Make sure the data being sent is formatted properly and matches the options and settings in the printer.

Click **OK** to clear the message.

### 504: The card data is missing or is not usable

The printer driver has detected invalid or missing data. The card will be canceled.

Make sure the data being sent is formatted properly and matches the options and settings in the printer.

Click **OK** to clear the message.



#### 505: USB communication issue

An important driver component is not running. The card will be canceled.

1. Restart the computer. The component should start automatically.
2. If this message is displayed after restarting, notify your printer support contact.

Click **OK** to clear the message.

#### 506: A card is currently processing

The printer is busy processing an interactive job. The card will be canceled.

Wait until the current card is complete and then try again.

Click **OK** to clear the message.

#### 508: The printer is shutting down

The printer is shutting down or resetting. The card will be canceled.

When printer is powered back on, try again.

Click **OK** to clear the message.

#### 509: The printer is offline or suspended

The printer must be online to print.

To complete the current card press the printer's **USER** button until the printer returns to the **Ready** state.

Click **OK** to clear the message, or click **Cancel** to cancel the card.

## Driver SDK Messages

The following messages are issued when you use the Card Printer Driver Software Development Kit (SDK) to define your card printing. The messages are returned by the SDK to the application that sent the print job. These messages do not display on the printer LCD panel or in a message box on the PC that sent the job.

511: Cannot lock or unlock the printer. Locks are not installed.

**Severity:** Critical

512: Cannot lock or unlock the printer. The password is incorrect or invalid.

**Severity:** Critical

513: Cannot lock or unlock the printer. The printer is busy.

**Severity:** Notice

514: Cannot lock or unlock the printer. The cover is open.

**Severity:** Notice

515: Failed to lock or unlock the printer. The locks did not function.

**Severity:** Critical

516: Timeout expired before bar code could be read.

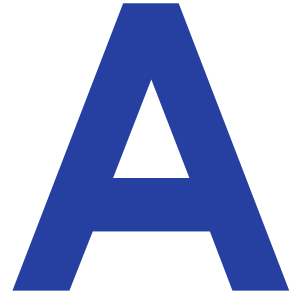
**Severity:** Notice

517: Wrong printer job ID.

**Severity:** Critical



# Appendix A: SD460 Laminating System

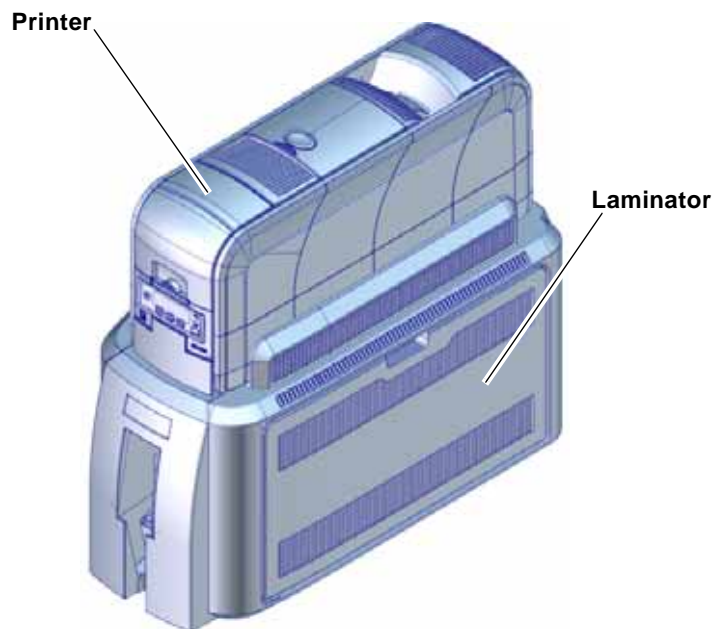


This appendix provides information about the SD460 laminating system.

---

## About the SD460 System

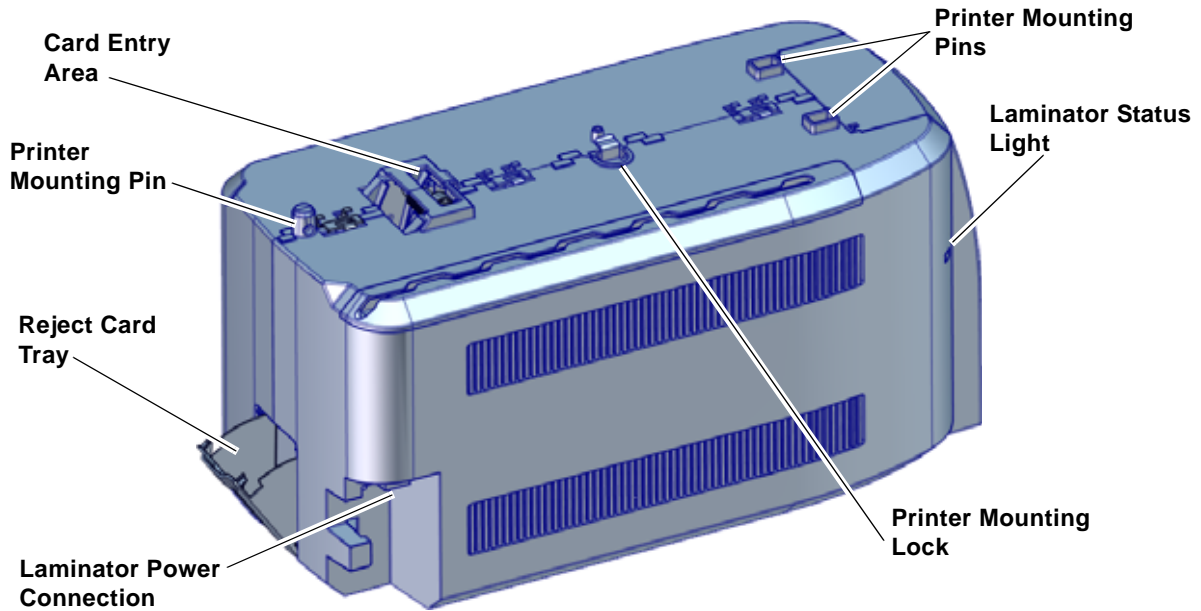
The SD460 system consists of a card printer and the SLM laminator. The SD460 system can print cards and apply an overlay material on the front and back of the card for increased durability and security. Using an overlay material with holographic or other transparent images also improves the security of the card. These materials are tamper evident, making it difficult to reproduce or modify a card.



# Outside the Laminator

Use the following information to become familiar with the laminator.

## Laminator Back and Left Side



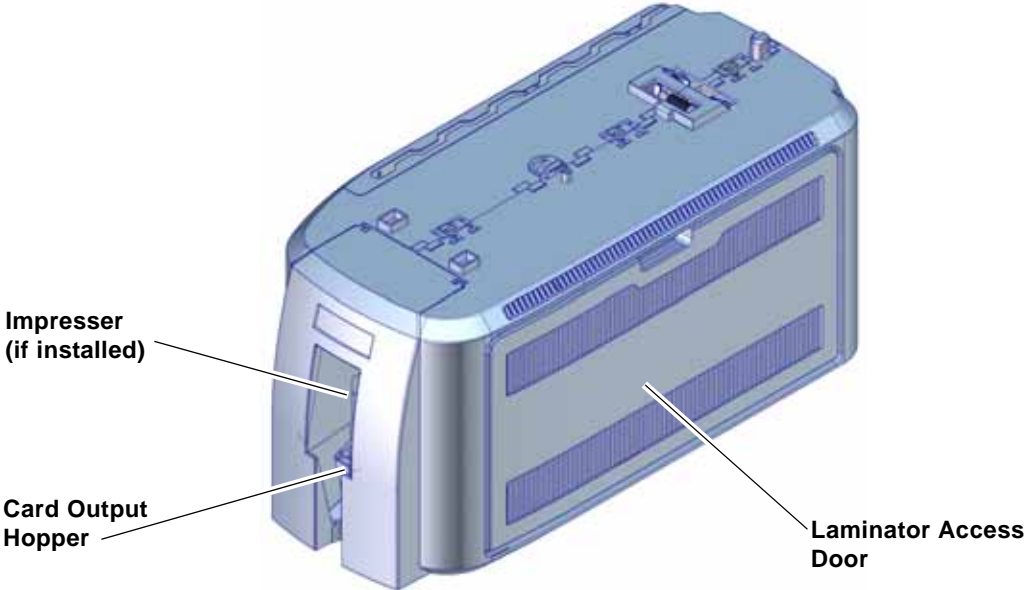
<b>Printer Mounting Pins</b>	The pins align the printer with the laminator.
<b>Printer Mounting Lock</b>	The lock secures the printer to the laminator.
<b>Laminator Status Light</b>	The light shows the status of the laminator. Refer to "Laminator Status Light" on <a href="#">page A-3</a> .
<b>Card Entry Area</b>	The card entry area receives the card from the printer and places it into position for laminating.
<b>Reject Card Tray</b>	Unfinished cards or cards not processed properly are placed in the reject card tray.
<b>Laminator Power Connection</b>	The power connection provides a plug-in connector for the laminator power supply.

### Laminator Status Light

The status light shows the status of the laminator:

Solid green	Ready
Blinking green	Busy
Solid blue	Idle/Sleeping
Blinking blue	Heating
Blinking red	Error

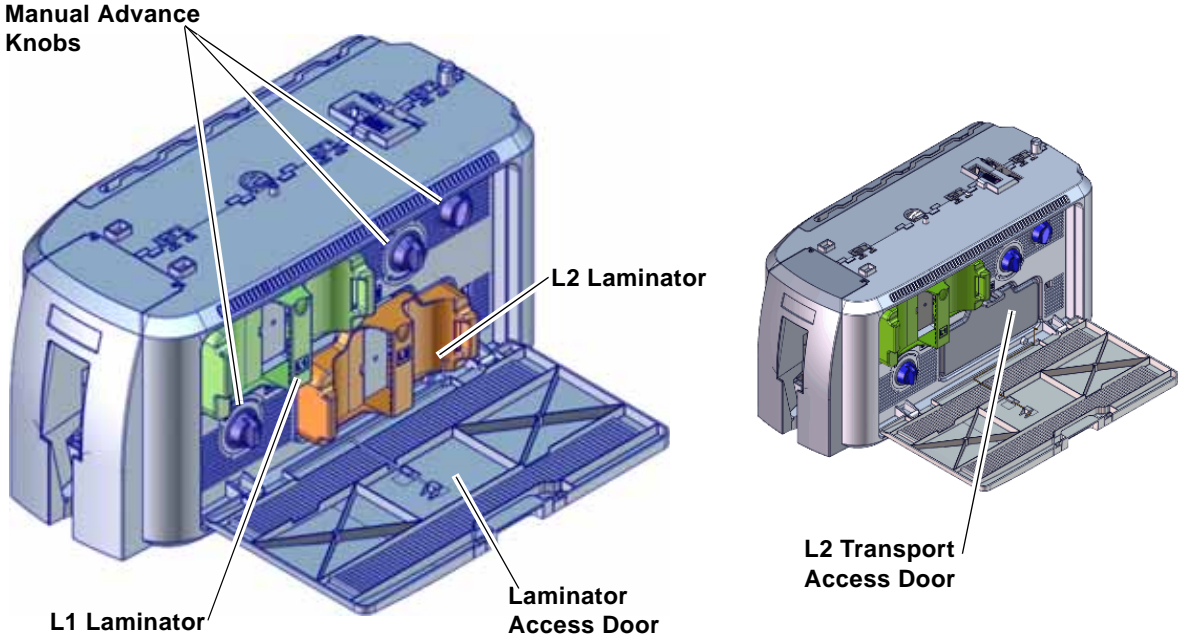
### Laminator Front and Right Side




<b>Card Output Hopper</b>	The card output hopper holds up to 100 completed cards.
<b>Laminator Access Door</b>	The access door provides access to the laminator supplies.
<b>Impresser</b>	The optional impresser is located inside the laminator just before the card exit slot.

# Inside the Laminator

The SD460 system has one standard laminator, in the L1 position, with an optional second laminator in the L2 position. The laminators apply topcoat or patch overlay material to the card. Topcoat is a continuous film and patch is a die-cut polyester shape. Both laminators can apply either overlay type. Refer to "Laminator Overlay Materials" on page A-6.

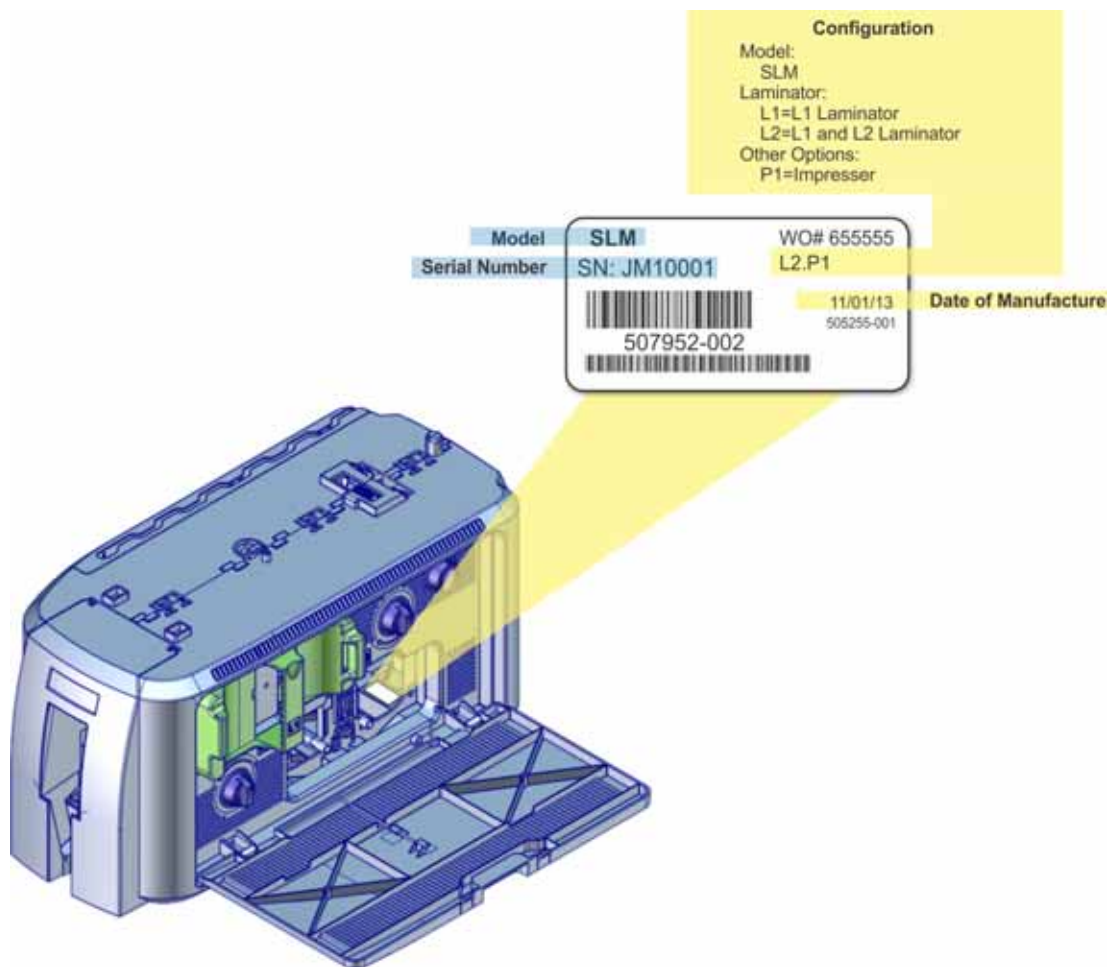


<b>Manual Advance Knobs</b>	The manual advance knobs move the card through the laminator to remove it from the system. Use the knobs to clear a card jam.
<b>L1 Laminator (green cartridge)</b>	The L1 laminator cartridge holds overlay material and applies it to the card.
<b>L2 Laminator (orange cartridge)</b>	The L2 laminator cartridge holds overlay material and applies it to the card. The L2 laminator is optional.
<b>Laminator Access Door</b>	The access door provides access to the L1 and L2 laminators to load supplies or to clear a card jam.
<b>L2 Transport Access Door</b>	The L2 transport access door replaces the L2 laminator cartridge if the optional L2 laminator is not installed. Open the door to access the laminator card transport.

-  If your system includes the optional second laminator (L2), make sure that the laminator cartridge is always installed even if the cartridge is not loaded with overlay material. If the cartridge is not in place, cards are not supported as they travel through the system and can fall into the bottom of the laminator.

## Laminator Configuration Label

The laminator configuration label is located inside the laminator beneath the L2 cartridge. Open the laminator access door and remove the L2 laminator cartridge to see the label. If an L2 laminator is not installed, open the L2 transport access door to see the label.



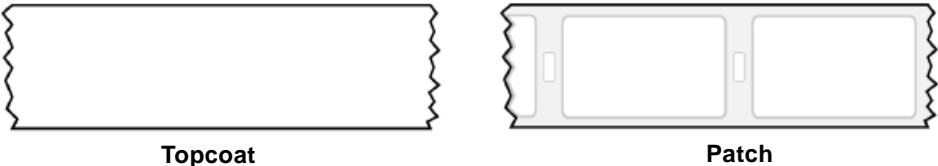
# Laminator Setup

The SD460 supports full-color print ribbons that do not have a topcoat (T) panel, including YMCK and YMCKK ribbon. The topcoat or patch overlay applied by the laminators provides protection against wear and color fading, so the print ribbon topcoat panel is not needed. However, the DuraShield overlay requires that the ribbon topcoat be applied first.

The SD460 also supports full-color print ribbon with a front-side ultraviolet (UV) fluorescing (F) panel, YMCKF-KT. The UV (F) panel is designed to create an optically variable image on the card. Refer to the printer's *Driver Guide* for information on designing a card to use a UV ribbon.

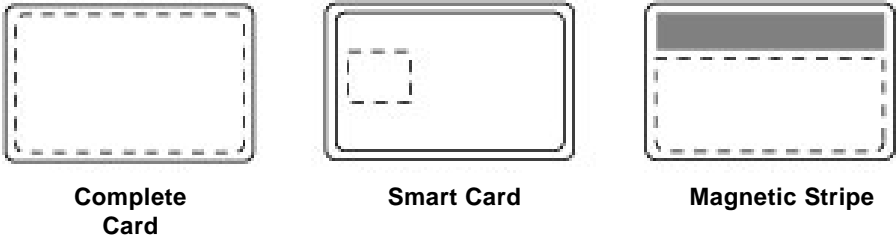
## Laminator Overlay Materials

The L1 and L2 laminators can apply either topcoat or patch material. Topcoat is a continuous film and patch is a die-cut polyester shape.



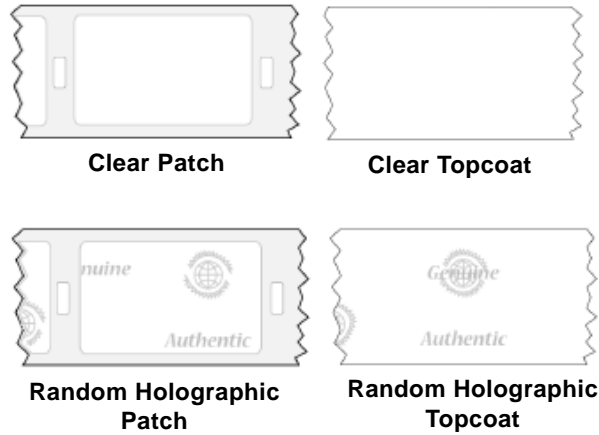
Patch overlays have a registration mark that is used by the printer to align the patch with the beginning of the card. The registration mark is a rectangular hole between the patches.

Patches can cover the entire card, can have an opening for a smart card chip, or can cover the card under the magnetic stripe. If both L1 and L2 laminators are installed, each laminator can apply different overlay material. For example, you might apply a patch that covers the complete card on the front, and a patch sized for a magnetic stripe on the back.

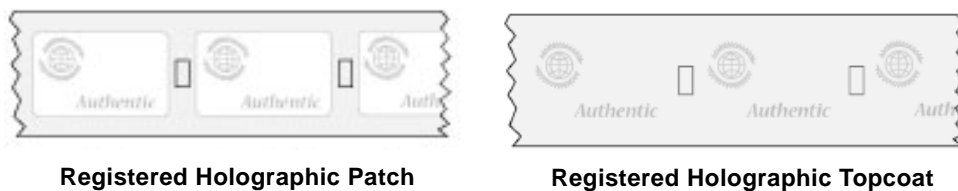





Both topcoat and patch overlays can be clear or can have a transparent holographic image on them. The holographic materials are called *holographic topcoat* or *holographic patch* and can be ordered with a custom image.



In addition, both holographic topcoat and holographic patch can be designed with a *registered image* that is located in the same position on each card. Registered holographic topcoat has a registration mark so that the image can be aligned with the card. Refer to the printer's *Installation and Administrator's Guide* for information on ordering overlay material.



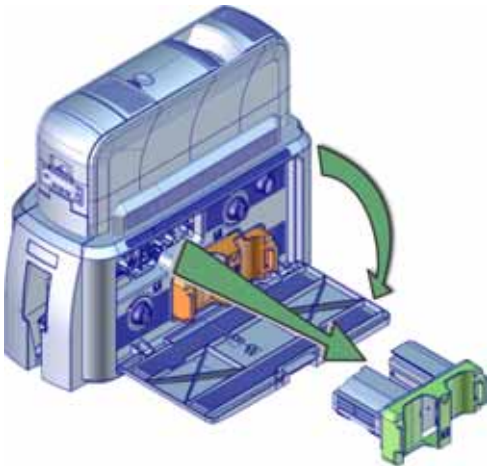
-  If you use a custom holographic overlay, make sure that you know the location of important card features, such as photos and logos. Do not place holographic images where they interfere with the appearance of photos or machine-readable features.

# Load Laminator Overlay Material

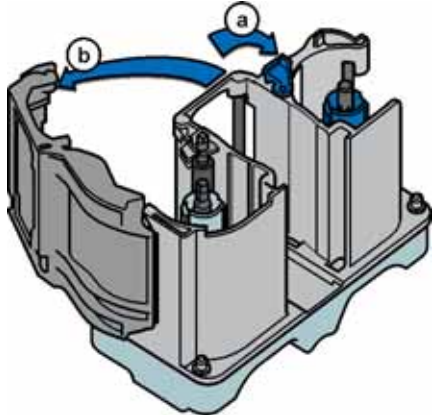
Load the overlay material in one laminator cartridge at a time.

**i** The L1 (green) and L2 (orange) cartridges fit only in their assigned locations inside the laminator. They are not interchangeable.

- 1. Open the laminator access door.
- 2. Remove the L1 (green) laminator cartridge from the laminator. Place the cartridge on a smooth level surface for loading.

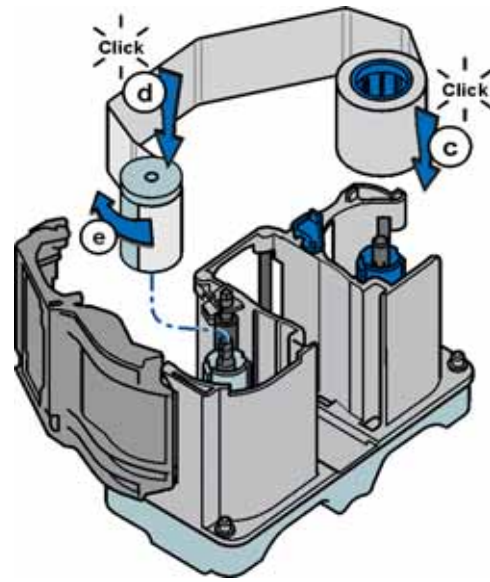


- 3. Push the release latch (a) and open the gate on the laminator cartridge (b).



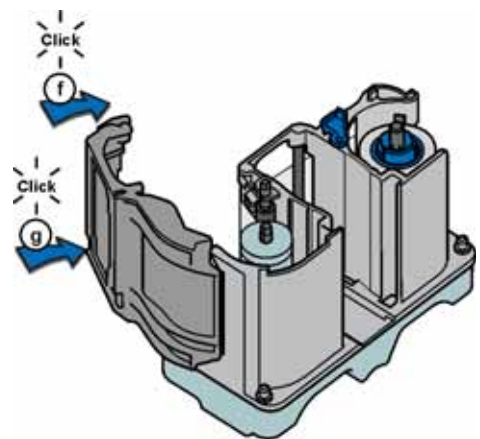
- 4. Remove both used spools from the cartridge (if present).

5. Load the new roll of laminator overlay material.
  - A. Put the blue supply spool on the blue supply spindle of the cartridge (c). The overlay supply roll can go on only one way and only fits on the correct spindle.
  - B. Put the empty silver take-up spool on the silver take-up spindle (d).
  - C. Turn the take-up spool clockwise to remove slack from the material (e). The overlay material loads in an S-shape.



Make sure that the overlay material is between the guides on both the take-up and supply sides of the cartridge.

6. Close the laminator cartridge gate (f). Push it in until the latch clicks in place (g). Make sure that the overlay material is not pinched by the cartridge gate.
7. Replace the loaded laminator cartridge in the printer.
8. Remove the L2 (orange) cartridge, if installed, from the laminator.
9. Repeat steps 3 through 7 to load the overlay onto the cartridge.
10. Close the laminator access door.



## Card Design

Set up your card design using your card production software or another application, such as Microsoft Word. You can specify your lamination preferences using the Card Printer Driver. Your card production software also may provide lamination settings.

The Card Printer Driver allows you to specify both printer and lamination preferences. Refer to your printer's *Driver Guide* for complete information on setting up printing preferences and lamination options.

- If the printer has one laminator, you can apply the overlay material to one or both sides of the card.
- If the printer has two laminators loaded with different overlay materials, the quickest way to process a card is to apply the overlay in L1 to the front of the card and the overlay in L2 to the back of the card.

You can fine-tune the settings that control the application of the overlay using Printer Manager. Refer to the printer's *Installation and Administrator's Guide* for information on using Printer Manager.

## Verify Setup

After you set up the printer, print several test cards to determine how well the laminator applies the overlay to the card. You can print test cards from the Card Printer Driver (refer to the printer's *Driver Guide*), from the printer LCD panel (refer to "Print a Test Card" on page 18), or from Printer Manager (refer to the printer's *Installation and Administrator's Guide*). You may need to print multiple test cards to make sure the overlay is positioned correctly. The card stock, the card design, and the printer's environment all can affect the appearance of cards.

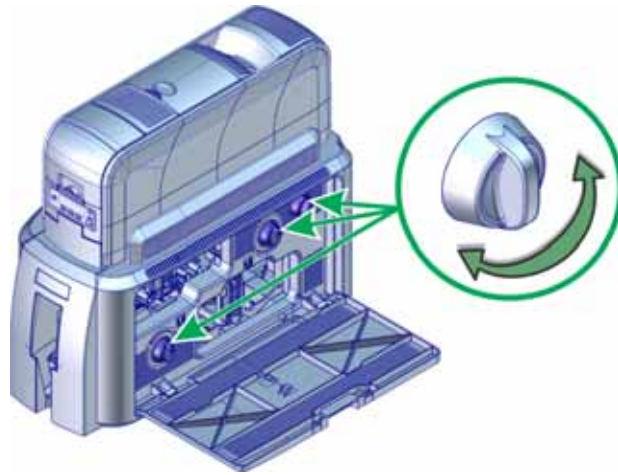
When evaluating a card, make sure that:

- The overlays are being applied properly:
  - Each overlay is applied completely to the card.
  - The material adheres well to the edges of the card.
  - The overlay does not come off when the card is bent or twisted.
- The card is debowed correctly.
- The impression is positioned correctly and has the proper depth.

If you need to make adjustments to the laminator or overlay settings, refer to the "Printer Manager" section of the printer's *Installation and Administrator's Guide*.

# Clear Laminator Card Jam

1. Open the laminator access door.
2. Remove the L1 and L2 (if installed) laminator cartridges.




3. Turn the manual advance knobs inside of the laminator until the card is accessible.
4. Remove the card.
5. Replace the laminator cartridges.
6. Close the laminator access door.

# Clean the Laminator

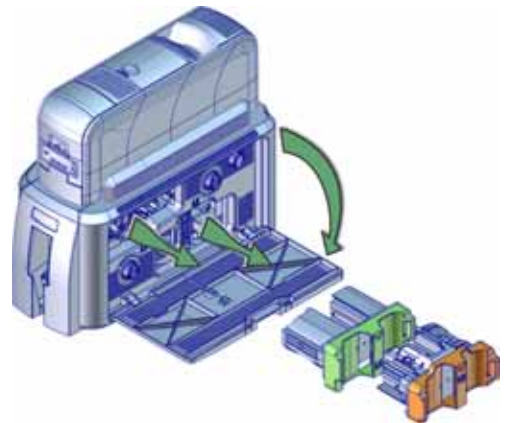
Clean the laminator when at least one laminator cartridge is loaded with holographic overlay material and any of the following are true:

- Particles appear on the laminated cards.
- Particles are visible inside the laminator.

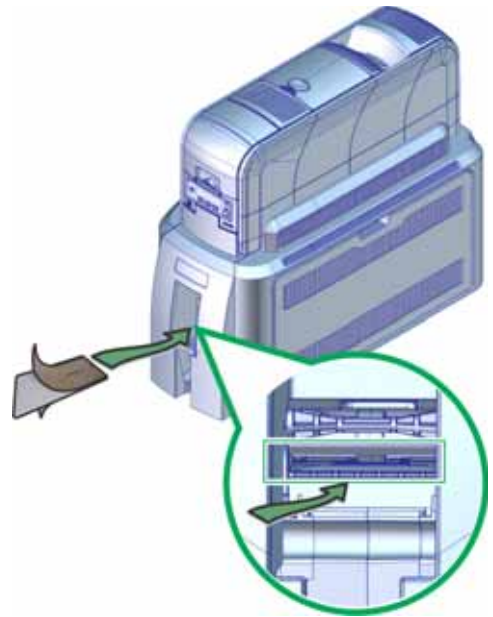
For examples of problems that require laminator cleaning, refer to “[Laminator Problems](#)” on [page 50](#).

 This procedure uses a double-sided, sticky cleaning card that removes holographic overlay particles from the laminator. When you clean the SD460 system using a regular cleaning card, the card also moves into the laminator and cleans the laminator rollers, card entry area, and the impresser exit rollers. This is sufficient if you are not using holographic overlay. Refer to “[Run a Printer Cleaning Card](#)” on [page 30](#).

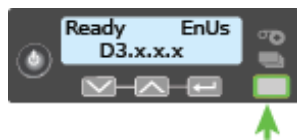
1. Open the laminator access door and remove the L1 and L2 laminator cartridges.
2. Remove printed cards from the output hopper, if necessary.



3. Remove the protective paper from both sides of the double-sided, sticky laminator cleaning card and insert the card under the rollers of the card exit slot of the laminator. When it is in the correct location and pushed in far enough, the card stays in place.



4. Use the LCD menu system to start the cleaning cycle.
  - A. Begin when the printer displays **Ready** and the **USER** button shows steady green. Press the **USER** button.

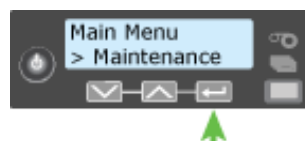


**Suspended** displays on line 1 of the LCD panel.

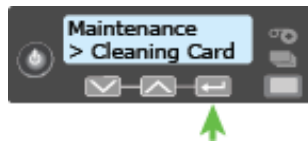
- B. Press the **ENTER** key to enter the menu system.



- C. **Maintenance** displays on line 2 of the LCD panel. Press the **ENTER** key to enter the **Maintenance** menu.



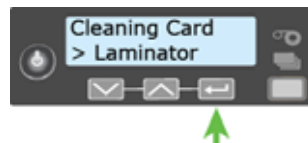
- D. Cleaning Card displays on line 2 of the LCD panel. Press the ENTER key to enter the Cleaning Card menu.



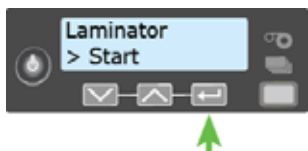
- E. Printer displays on line 2 of the LCD panel. Press the down arrow.



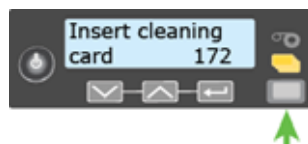
- F. Laminator displays on line 2. Press the ENTER key.



- G. Start displays on line 2 of the LCD panel. Press the ENTER key to start the cleaning process.



- H. Insert cleaning card displays on the LCD panel. Press the USER button to start the cleaning cycle.



The laminator pulls the cleaning card from the card exit slot into the laminator and moves it back and forth through the L1 and L2 cartridge areas, the card entry area, and the exit rollers several times. The used card is ejected into the laminator output hopper.



5. Inspect the laminator cartridges for particles. If particles are present:
  - A. Retrieve the laminator cleaning card from the output hopper and use it to remove the particles of overlay material from the cartridges.
  - B. If particles still remain on the cartridge and inside of the laminator, use a vacuum cleaner with a small plastic hose attachment to carefully remove the particles. Also clean any remaining particles from the output hopper.

#### **HINTS & TIPS**

- If the cleaning card is not pulled into the laminator, the card is not in the correct position. The cleaning card must be located under the rollers of the card exit slot inside the output hopper.
- At the end of the laminator cleaning cycle, the card can stick to the rollers in the output hopper. Pull gently on the card to remove it.
- Discard the laminator cleaning card after one use.
- If cleaning the laminator does not solve the problem, contact your service provider for assistance.

