



# P205 & P210i Plastic Card Printer

## Welcome to your new Zebra P205 (Monochrome) & Zebra P210i (Color) User's Manual

General information

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Printing a card

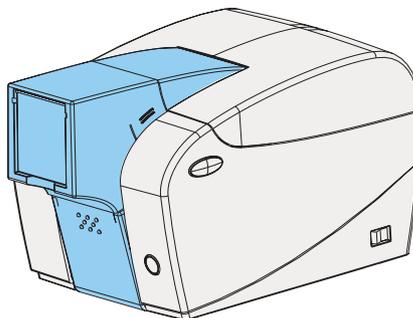
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Part Number: 980443-001

Rev.C

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## **FOREWORD**

This manual contains installation and operation information for the Zebra P200 Series card printers manufactured by Zebra Technologies Corporation.

## **RETURN MATERIALS AUTHORIZATION**

Before returning any equipment to Zebra Technologies Corporation for in-warranty or out-of-warranty repair, contact Repair Administration for a Return Materials Authorization (RMA) number. Repack the equipment in the original packing material and mark the RMA number clearly on the outside. Ship the equipment, freight prepaid, to the address listed below:

For USA and Latin America:  
Zebra Technologies Corporation  
Zebra Card Printer Solutions  
1001 Flynn Road  
Camarillo, CA. 93012-8706.USA  
Phone: +1 (805) 579-1800  
FAX: +1 (805) 579-1808

For Europe, Asia and Pacific:  
Zebra Technologies Inc. France  
Zebra Card Printer Solutions  
Zone Industrielle, Rue d'Amsterdam  
44370 Varades, France  
Phone: + 33 (0) 240 097 070  
FAX: + 33 (0) 240 834 745

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## **Warranty information**

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### **Printers:**

All P210i/P205 Card Printers are warranted against defects in material or workmanship for twenty-four (24) months from the date of purchase date.

Proof of purchase or shipment date is required to validate the warranty period. The warranty becomes void if the equipment is modified, improperly installed or used, damaged by accident or neglect, or if any parts are improperly installed or replaced by the user.

Note: Products returned must be packaged in the original or comparable packing and shipping container. In the event equipment is not so packaged, or if shipping damage is evident, it will not be accepted for service under warranty. Surface transportation charges for return to customers in the continental United States is paid by Zebra. Otherwise, Zebra pays CPT (carriage paid to) nearest airport, customer pays customers, duties, taxes, and freight from airport to destination. If Zebra determines that the product returned for warranty service or replacement is not defective as herein defined, the customer will pay all handling and transportation costs.

### **Printheads:**

Since printhead wear is part of normal operation, the original printhead is covered by a twenty-four (24) month warranty. Warranty period begins on purchase date.

To qualify for this warranty, the printhead must be returned to the factory or to an authorized service center. Customers are not required to purchase Zebra supplies (media and/or ribbons) for warranty qualification. However, if it is determined that the use of other manufacturer supplies has caused any defect in the printhead for which a warranty claim is made, the user is responsible for Zebra's labor and material charges required to repair the defect. The warranty becomes void if the printhead is physically worn or damaged; also if it is determined that failure to follow the preventive maintenance schedule listed in the User's Guide has causes defect in the thermal printhead for which a warranty claim is made.

### **Spare Parts:**

All parts, maintenance kits, options kits, and accessories are warranted to be free of defects in material and workmanship for 90 days (except where otherwise denoted) from date of purchase. This warranty become void if the item is modified, improperly installed or used, or damaged by accident or neglect.

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## DECLARATIONS OF CONFORMITY

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European Council Directive		Compliance to Standards	
89/336/EEC modified by 92/31/EEC and 93/68/EEC	EMC Directive	EN 55022-A	RF Emissions control
	EMC Directive	EN 500082-1,1992	Immunity to Electromagnetic Disturbances
73/23/EEC modified by 93/68/EEC	Low voltage Directive	EN 60950	Product safety



Model: P210i conforms to the following specification:  
 FCC Part 15, Subpart A, Section 15.107(a) and Section 15.109(a)  
 Class B digital device

### Supplemental Information:

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



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## INTRODUCTION

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Thank you for choosing the Zebra *P210i* Plastic Card Printer.

Zebra's P200 series card printers offer a low cost, high quality solution to those requiring computer-controlled printing and encoding of credit card style plastic cards. Card applications include customer loyalty, access control, visitor, membership, gift cards, durable business cards.

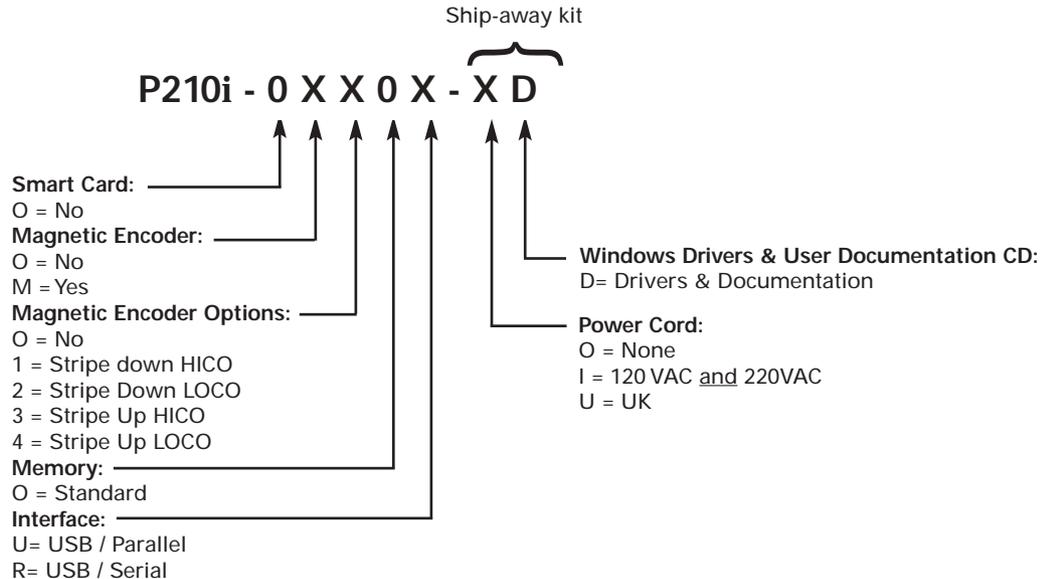
This manual guides you to efficient start up and operation of your new Card Printer.

### P2101i/P205 **PRINTER MODELS**

The Zebra Product Number tells a story:

Here is a quick review of the Zebra Card Printer Series numbering and lettering system to help you.

The *P210i* Plastic Card Printer employs Dye Sublimation and Resin Thermal Transfer technologies. Model numbers include identifiers that specify options using the following lettering conventions:





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## ICONS

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Throughout this manual, different icons highlight important information, as follows:



Important general information.



Mechanical hazard, such as one associated with moving parts, capable of resulting in equipment damage or personal injury.



Electrical hazard, such as an exposed voltage point, capable of causing electrical shock and personal injury.



An area where electrostatic discharge (ESD) can cause component damage. Use a grounding wrist band.



Elevated temperature hazard, capable of producing a burn.



Keep Card Printer clean by minimizing cover open time.



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# 1 GETTING STARTED

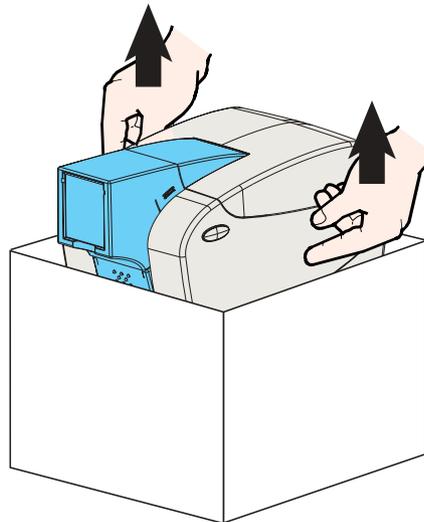
## 1 • 1 Unpacking your card printer

Your P210i printer ships in a carton and protective anti-static bag. Keep all packaging material in case you need to move or re-ship the printer.

Pull your printer out of the carton by grabbing it on both side.

While unpacking, inspect the carton to ensure that no damage occurred during shipment.

Please ensure that you have a clean and nearly dust free environment for proper operation and storage of the printer.





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Make sure the following items are included with your *P210i* printer:

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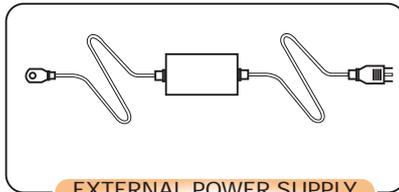
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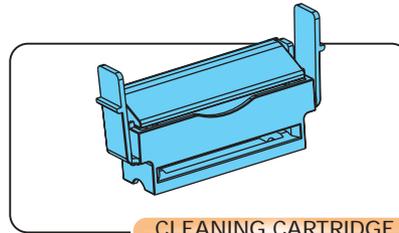
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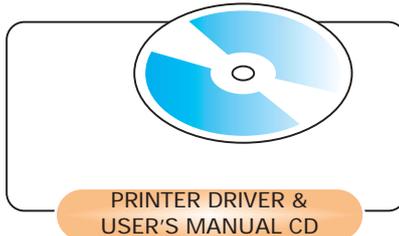
POCKET GUIDE



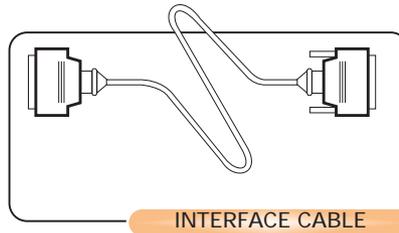
EXTERNAL POWER SUPPLY



CLEANING CARTRIDGE



PRINTER DRIVER &  
USER'S MANUAL CD



INTERFACE CABLE

If any items are missing, please contact your dealer.  
To reorder, please refer to Appendix C of this manual.



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## 1 • 2 Indicators and Control

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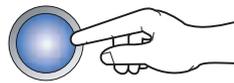
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Your P210i/P205 printer is equipped with a Multi Function Panel Button with a surrounding light ring that glows in three colors to provide printer status indication.

	ON	FLASHING
 Green	POWER ON READY	RECEIVING DATA PROCESSING
 Orange	RIBBON OR CARD OUT	COMMUNICATION ERROR CLEANING
 Red	HARDWARE OR FATAL ERROR Refer to troubleshooting	

The Multi Function Panel Button is used to perform the following operations:



- Clear Error
- Cleaning process (see chapter 4)
- Test Card (see chapter 2)

### Power Switch:

The Power switch is located on the right-rear of the printer unit.



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## 1 • 3 Printer Installation

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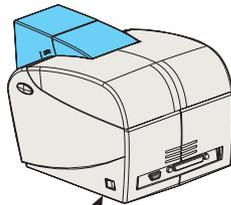
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The following will guide you through the installation of your P210i/P205 printer.



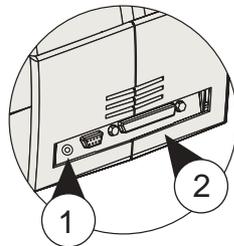
**CAUTION:** Limit AC power supplied to the P210i/P205 Printer to 24 VDC. Limit excess current draw to 16 amps or less, using an associated circuit breaker or other such device. Never operate the printer in a location where operator, computer, or printer can get wet. Personal injury could result. The printer must be connected to an earthed electrical power supply and properly protected against electrical surges and grounding faults. The power supply pack can only be replaced by the same product from the constructor.



0

1 • Place the printer in a location that allows easy access to all sides. The printer should never be operated while resting on its side or upside down.

2 • Place the printer's power switch in the OFF "O" position.



3 • Insert the power supply to the printer power socket "1" and attach to grounded electrical socket of the proper voltage and type.

4 • Attach interface cable "2" to printer and computer and then secure.

5 • Switch power on.



**CAUTION:** Intermittent or unpredictable operation may occur from unsecured connectors. If damaged, the power cable must be replaced by an exact equivalent. Use only Parallel Cable under 3 Meters in length. The socket should always be easily accessible to power off the printer.



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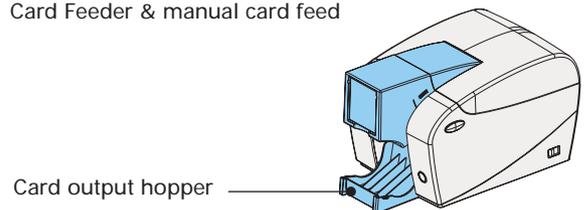
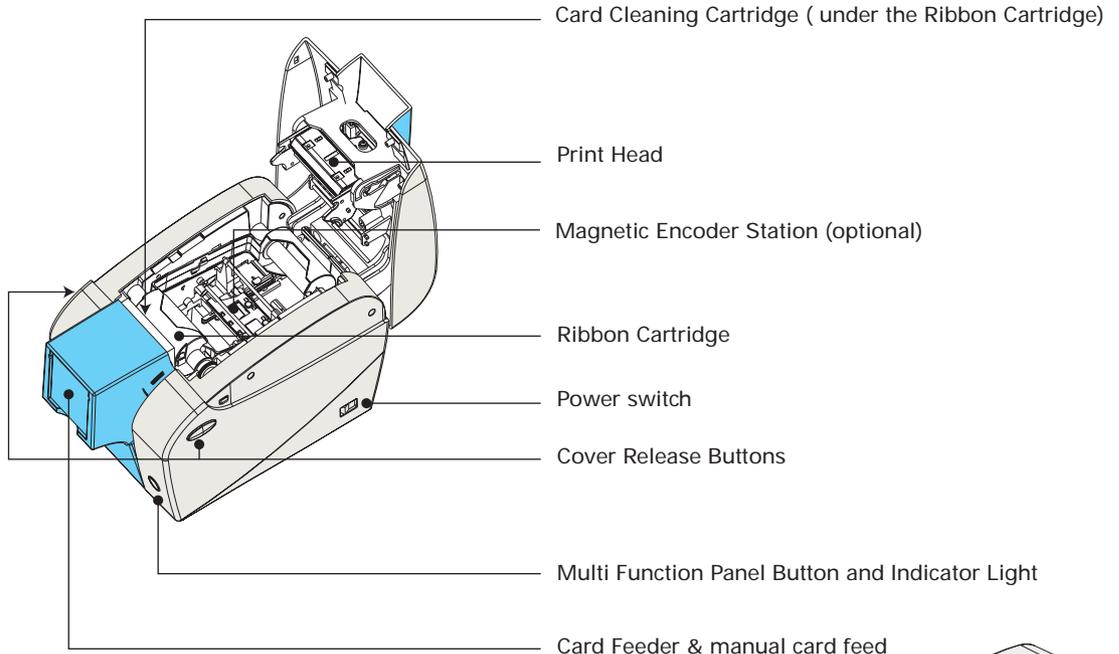
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## 2 • 1 Printer Features

# 2 OPERATION

The following shows the features found on your P210i Printer:



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## 2 • 2 Loading Ribbon Cartridge

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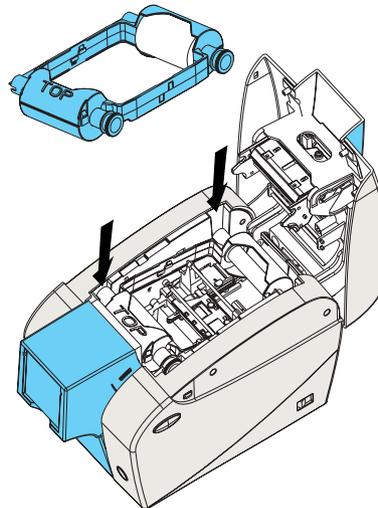
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The P210i Printer requires approved ribbon cartridges (see Appendix C). The Resin Thermal Transfer and Dye Sublimation ribbons are specifically designed for your P210i Printer. i Series Printers require the use of i Series ribbons for full color printing. You can print up to 100 cards in YMCKO with the ribbon cartridge. When ribbon is completely used change the whole cartridge assembly.



**DO NOT TOUCH** the print head or the electronic components on the print head carriage. Discharges of electrostatic charge from the human body or other surfaces can damage the print head or other electronic components used in this device.

- 1 • Open printer cover by pressing both Cover Release buttons on the sides of your printer.
- 2 • Insert vertically the ribbon cartridge into the slot and press gently until you can feel it engage properly.



Please note that the ribbon automatically synchronizes.



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## 2 • 3 Loading Cards

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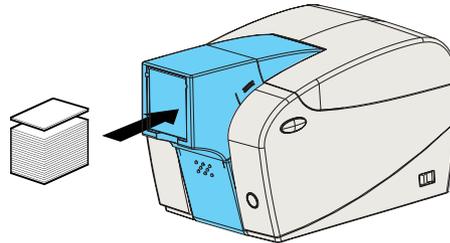
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To help you load, print, and collect cards, the P210i has the following items:

### A - CARD FEEDER

This item is used for loading cards, it can hold up to 50 cards of 30 mils.

You may have to install the Card Feeder.  
Hold the card feeder on the sides and slide it into the rail guide.



- Install Cards into feeder at the front of your P210i printer.

For Cards with magnetic stripe refer to Appendix A for loading instructions.



**DO NOT** bend cards or touch print surfaces as this can reduce print quality. The surface of the cards must remain clean and dust free. Always store cards in an enclosed container. Ideally, use cards as soon as possible. If cards stick together, carefully shuffle them.

\* See Chapter 6, Technical Specifications, for card requirements and capacities.



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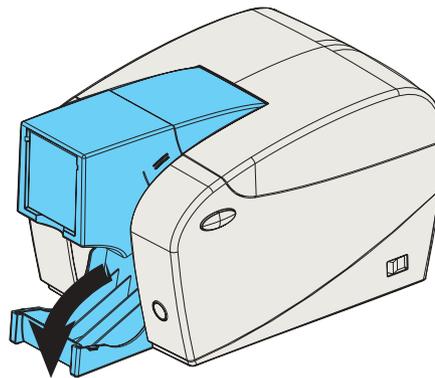
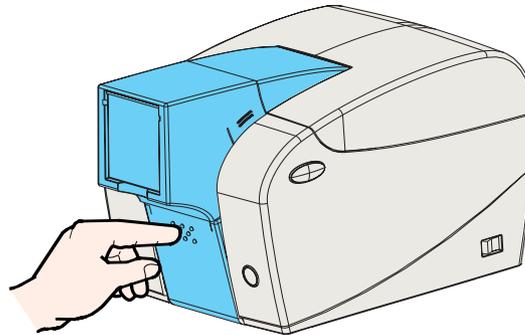
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## B - CARD OUTPUT HOPPER

- 1 • Press on the card output hopper door and pull it down to place it in its functional position.

When not using the printer place the card output hopper back in its closed position to protect the printer from dust.





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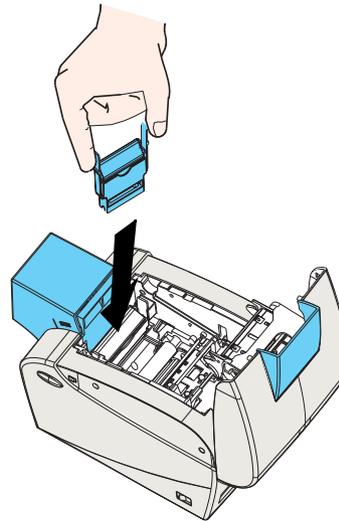
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## **C - INSTALL CARD CLEANING CARTRIDGE**

This item is used to clean the cards entering the printer. It must be installed before using the printer.

\*Improper cleaning will reduce printer life and degrade print quality.



- 1 • Open the lid by pressing both Cover Release buttons located on the sides of your printer.
- 2 • If the ribbon cartridge is installed, remove it to access the cleaning cartridge location.
- 3 • Remove Card Cleaning Cartridge from plastic bag. Peel off protective wrapper from adhesive cleaning roller.
- 4 • Install adhesive cleaning roller supplied with your ribbon cartridge.
- 5 • A slide rail will guide you to insert the Cleaning Cartridge in the appropriate location. A Cleaning Cartridge diagram is visible on the inside of your printer to help you find the appropriate location.
- 6 • Ensure the assembly locks in place by pressing gently on the top of the cartridge until it engages properly.
- 7 • Close the lid by pressing down firmly on both sides until you hear audible "clicks" as each side becomes latched.



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## 2 • 4 *Feeding one card at a time*

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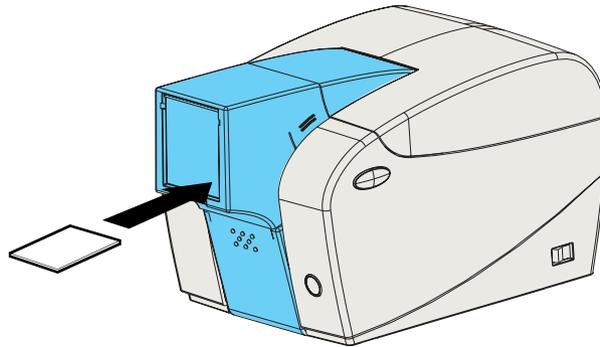
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For feeding one card at a time, like Cleaning Cards for example, remove all cards from card feeder and insert one card at a time at the bottom of the feeder.



Do not feed more than one card at a time.



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## 2 • 5 *Printing a Test Card*

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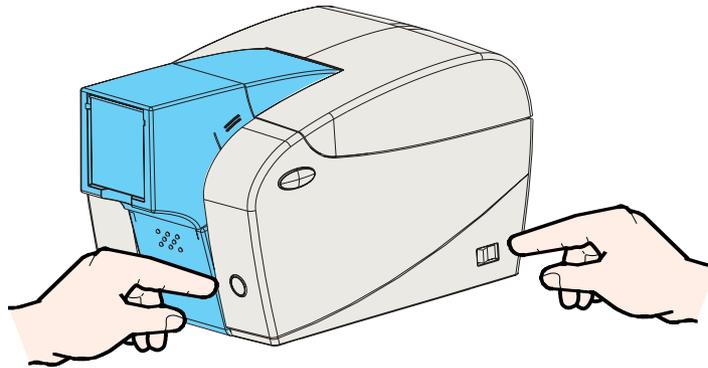
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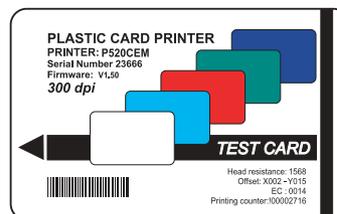
Appendix B

With ribbon cartridge and cards loaded, your P210i printer is ready to print. To check the operation of the printer, you should print a test card.



- 1 • Place the printer's power switch in the OFF (0) position.
- 2 • While holding down the Multi Function Panel Button, switch printer ON (1). The status indicator will glow green.
- 3 • Keep pressing the Multi Function button until the green indicator starts flashing.
- 3 • Release the Multi Function button and a test card will print after a few seconds.

This is an example of the test card.





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# 3

## *PRINTING A SAMPLE CARD*

Printing with the P210i Printer requires the Windows Printer Driver, your card design/issuing software or printer command level programming through the printer interface.

The P210i Card Printer can be used with any Windows 98/M.E, Windows 2000 or Windows NT 4.0, or XP software application program, using the drivers provided on CD with the printer.

This section contains information on the printing of a sample card in color (using the 5-panel color ribbon YMCKO) and the Windows Printer Driver.



**BEFORE** installing updated printer driver versions, always delete the existing printer driver version from your computer.



## P205 & P210i Plastic Card Printer

### ***3 • 1 To install the P210i Printer Driver Automatically on all Operating Systems, Use the Zebra Install Wizard***

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The wizard will:

- Automatically launch when the driver CD is inserted.
- Check to see which operating system you are using
- Delete previous versions of the driver and clean up any necessary Registry entries.
- You must select "Remove" from the install options to remove any previous driver versions.
- Shut down of PC if necessary.
- Install the new driver files and Registry entries to their correct locations.
- Shutdown of PC is not required, but it is advised.

The install Wizard will walk you through the appropriate steps.



Do not power the printer with USB attached.

The driver will prompt you for USB installation.



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## 3 • 2 Set Printer Driver Options:

The P210i Printer screen appears. Change the options as follows:

- 1• On the **Device Settings** tab the magnetic encoder feature is automatically enabled. If you need to change settings for a Magnetic Encoder, select **Magnetic Encoder** settings button.
- 2• On the **Advanced** tab select card orientation: Landscape or portrait - Select "**Landscape**".  
(in NT, this is located under Document Defaults. In Windows 2000, it is located under Print preferences.)
- 3• In the **Ribbon** section, the ribbon type is automatically detected and enabled for you.
- 4• In the same tab, go to Black Panel area and select **Text Only**. This option allows the text printing using the Black Resin Panel from the Color Ribbon.
- 5• Close the Zebra P210i Printer screen.

Now that you have loaded media and set up the printer driver, the P210i Printer is ready to print.



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## 3 • 3 *Printing a sample card:*

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Follow the steps to print your first card

- 1• Go to the Microsoft Word Software.
- 2• If the printer was not selected as the default printer, go to the **file** menu and Select **Printer** and choose **Zebra P210i Card Printer** or **i Serie Parallel card printer** in the printer names list. Then Close the print dialog box.
- 3• Come back to **file** menu and choose **Page Setup**.
- 4• Select **Size** tab and in **Paper Size** choose **Card**. Then select the orientation: "landscape".
- 5• Go to **Margins** tab, Set the Top, Bottom, left and right margins to 0 (zero) values (for P210i only).
- 6• Press **OK** to close Page Setup window.
- 7• The card appears on the screen.
- 8• Design a card with both black and colored text and with colored pictures (for P210i printer only) as follow:



- 9• Once you are ready to print, go to **File** and select **Print**
- 10• The printer will feed in a card and start printing (the data download time will vary depending on the complexity of the card design and the processing speed of the computer).
- 11• Once the printing job is achieved the card is ejected from the printer.



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## 4 CLEANING



### **PROTECT YOUR FACTORY WARRANTY!**

The recommended maintenance procedures must be performed to maintain your factory warranty. Other than the recommended cleaning procedures described in this manual, allow only Zebra authorised technicians to service the P210i Printer.  
**NEVER** loosen, tighten, adjust, or bend, etc. a part or cable inside the printer.  
**NEVER** use a high pressure air compressor to remove particles in the printer.



# P205 & P210i Plastic Card Printer

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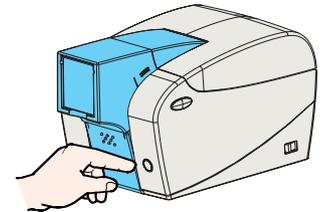
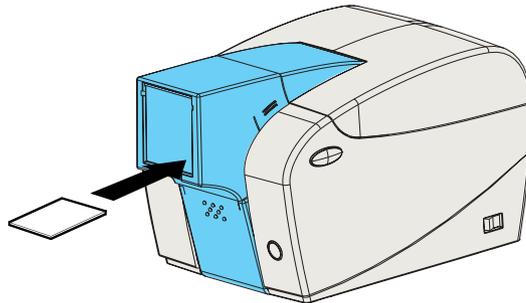
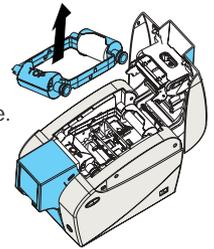
Your P210i Printer includes a simple cleaning system using Pre-Saturated Cleaning Cards provided. The regular use of these cards will clean and maintain important parts of your printer that cannot be reached: including the Print Head the Transport Rollers and Magnetic Encoder Station (optional feature).

### WHEN TO CLEAN

Every 1000 cards approximately using 5-panel color ribbon cassette.

### HOW TO CLEAN

- 1 • Leave power on.  
Press on both sides the Cover Release buttons to open cover and remove ribbon cartridge. Close Cover. Remove cards from Card Feeder.
- 2 • Insert one Pre-Saturated Cleaning Card through the bottom slot of the Card feeder.



- 3 • Press the multi function control button for a few seconds. The card will feed into the printer and carry out the cleaning process.  
Repeat the process with a new Cleaning card if necessary.



# P205 & P210i Plastic Card Printer

## 4 • 2 *Cleaning the Print Head*

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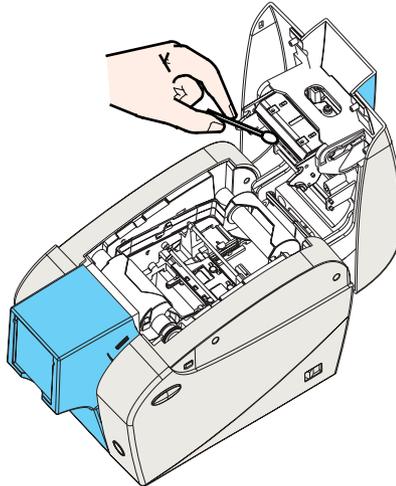
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A cleaning using the cleaning system with cards usually suffices. However, a separate Print head cleaning using swabs can remove more stubborn deposits when print anomalies persist. To avoid deposits, only use foam-tipped swabs.



1 • Switch power Off, open cover by pressing both cover release buttons and remove the Ribbon Cartridge.

2 • Clean Print Head by moving alcohol-moistened swab tip side-to-side across Print Head elements. Only use moderate force.  
Make sure the elements are dry before switching on.  
(To reorder swabs see Appendix C).



Never use a sharp object to scrape deposits from the print head. Permanent damage will result.



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## 4 • 3 Card Cleaning Cartridge

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Your P210i Printer also has a Card Cleaning Cartridge. This item cleans the cards entering the printer. To ensure print quality, the cleaning roller should be replaced with every ribbon cartridge replacement

### WHEN TO MAINTAIN

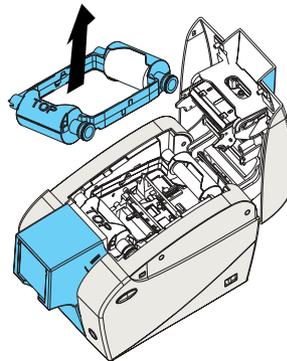
Each time the ribbon cartridge is replaced.

If you plan to run a printer cleaning, do so before replacing the cleaning roller.  
(see 4.1 Cleaning System for more instructions).

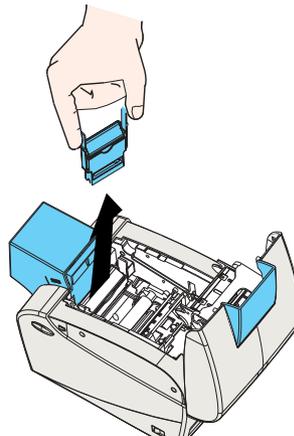
### HOW TO MAINTAIN

1 • Turn power off.

Open Cover by pressing on both sides on the Cover Release buttons. Remove ribbon cartridge.



2 • Gently remove Cleaning Cartridge by pressing the cartridge's arms on both sides and pulling up .





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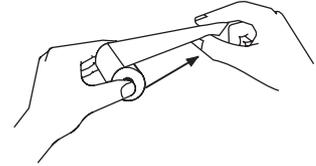
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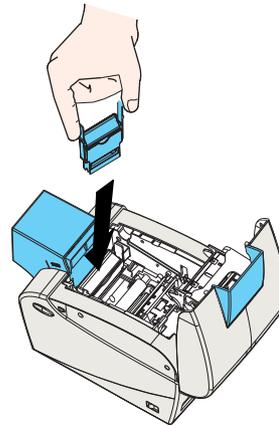
3 • Lift the cartridge lid up and remove the Adhesive Cleaning Roller from the cartridge and discard.

4 • Carefully peel off wrapper from new Cleaning Roller.



5 • Install new Cleaning Roller into the Cartridge\*. To avoid contamination, always hold the Cleaning Roller assembly by the ends.

6 • Replace Cleaning Cartridge into printer following the rail guides. Ensure the assembly locks in place.



**DO NOT** touch the roller surface that contacts the cards.

7 • Re-insert the Ribbon Cartridge

8 • Close Cover by pushing firmly down on both sides.

\* See Appendix C for replacement Cleaning Rollers.



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## TROUBLESHOOTING

This section offers solutions to potential problems you may experience with your P210i printer.

### 5 • 1 Print Quality Issues

This section will help you resolve print quality problems. The print quality is dependent on several factors. The two most important factors that will increase your print quality are cleanliness and card stock. To diagnose and fix print quality problems, follow the troubleshooting procedure below:



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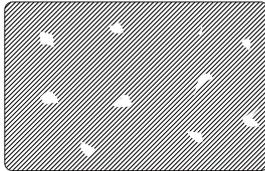
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- Small spots appear on the printed card with a non-printed area or a different color.



### Possible Cause

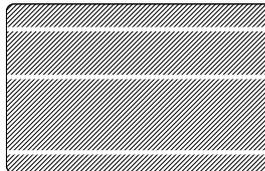
- A • Contamination on the card surface.
- B • Dust inside the printer and/or dirty Cleaning Roller.

### >> Solution

- A1 • Check that cards are stored in a dust free environment
- A2 • Use a different supply of cards.

- B1 • Perform a Cleaning of the printer (see Cleaning section 4.1 Cleaning system & 4.3 Card Cleaning Cartridge).
- B2 • Replace Cleaning Roller (see Cleaning section 4.3 Card Cleaning Cartridge)

- There are non-printing horizontal lines (white) on the card surfaces.



### Possible Cause

- A • Ribbon cartridge is not correctly positioned.
- B • Print Head may be dirty.
- C • Print Head elements may have been damaged (e.g. scratched or burnt).

### >> Solution

- A1 • Open cover and replace ribbon cassette, make sure it locks in place.
- A2 • Check that the ribbon is properly rolled onto the ribbon cores of the cartridge and that there are no wrinkles in the ribbon.
- A3 • Push down firmly on both sides of the cover until the lid engages properly.
- A4 • Ribbon will automatically synchronize.
- A5 • Print again.
- B1 • Perform a Cleaning of the Print Head (see 4 • 2 Cleaning the Print Head).
- C1 • Call service for Print Head replacement information.



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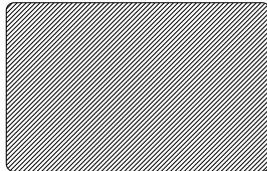
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- Printing shows very pale or inconsistent results.



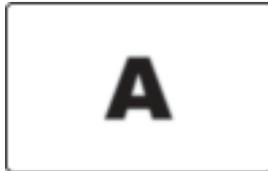
## Possible Cause

- A • Ribbon cartridge have been stored improperly or is damaged.
- B • Cards may not meet specifications.
- C • Contrast and/or Intensity may be set to values which are too high.
- D • Dust or embedded contamination on elements of the Print Head.

## >> Solution

- A1 • Change ribbon cartridge and print again.
- B1 • Use a different supply of cards.
- C1 • Adjust Contrast and/or Intensity values in software.
- D1 • Perform a Cleaning of the Print Head (see 4 • 2 Cleaning the Print Head)

- Printing shows blurry printed image.



## Possible Cause

- A • Ribbon cartridge may not be correctly positioned.
- B • Ribbon may not be synchronized on the correct color panel position.
- C • Cards may not meet specifications.
- D • Dust inside the printer and/or dirty Cleaning Roller.

## >> Solution

- A1 • Open cover and replace ribbon cartridge, make sure it locks in place.
- A2 • Check that the ribbon is properly rolled onto the ribbon cores of the cartridge.
- A3 • Push down on the cover until the lid engages properly.
- A4 • Ribbon will automatically synchronize.
- A5 • Print again.
- B1 • Open cover and replace ribbon cartridge, make sure it locks in place.
- B2 • Push down on the cover until the lid engages properly.
- B3 • Ribbon will automatically synchronize.
- B4 • Print again.
- C1 • Use a different supply of cards.
- D1 • Perform a cleaning of the Print Head (See 4 • 2 Cleaning the Print Head).
- D2 • Replace Cleaning Roller (See 4 • 3 Card Cleaning Cartridge).



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- No printing on the card.



**Possible Cause**

- A • Ribbon cartridge may not be installed in the printer.
- B • Cards may not meet specifications.
- C • Cable on Print Head may be disconnected.
- D • Print Head elements may be scratched or burnt.

**>> Solution**

- A1 • Check for ribbon cartridge in the printer.
- B1 • Use a different supply of cards.
- C1 • Power off the printer and check the Print Head cable connections.
- D1 • Call Service for Print Head replacement information.



For optimum print quality, always keep cover of the printer closed.



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## TECHNICAL SPECIFICATIONS



### General

- High speed printing  
30 seconds per card in YMCKO  
4 seconds per card in Monochrome
- Small footprint
- Windows Drivers for 98/2000/ME/XP and NT 4.0
- Two year printer warranty
- Two year (100,000 passes) print head warranty
- Powerful EPCL (Zebra Printer Command Language)

### Color Printing

- Color dye sublimation or monochrome thermal transfer printing
- 300 dpi (11.8 dots/mm) print resolution
- Edge to edge printing standard (P210i only)
- 30 seconds per card edge to edge in full color (YMCKO)

### Bar Code

- Code 39
- Code 128 B & C with & without check digit
- 2 of 5 & 2 of 5 interleave
- UPCA
- EAN8 & EAN13

### Fonts

- Resident: Arial Normal 100, Arial Bold 100
- Flash memory supports download of different fonts.
- True Type fonts available via Windows Driver

### Cards

- Types PVC, Composite
- Card width/length: ISO CR-80 - ISO 7810,  
2.125" (54mm) by 3.375" (86mm)
- Option: Magnetic Stripe - ISO 7811
- Card thickness: 10mil (0,25mm) to 30mil (0,75mm)
- Card Feeder capacity: up to 50 cards (30mil)
- Card Output Hopper capacity: 20 cards (30mil)



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**Ribbons Cartridges**

- Black Monochrome: 500 cards/cartridge
- YMCKO dye sub: 100 cards/cartridge

**Interfaces**

- USB port / Parallel
- USB port / Serial

**Mechanical without card feeder**

- Width: 7.16" (182 mm)
- Depth: 9.44" (240mm)
- Height: 7.1" (180mm)
- Weight: 6.4 lbs (2,9 kg)

**Mechanical with card feeder**

- Width: 7.16" (182 mm)
- Depth: 11.9" (303mm)
- Height: 7.1" (180mm)
- Weight: 6.41 lbs (2,9 kg)

**Electrical**

- 110 ~ 230 Volts AC, 60 ~ 50 Hz
- FCC Class B, CE, UL, and CUL approved

**Environmental**

- Operating Temperature: 60 to 86°F (15 to 30°C)
- Operating Humidity: 20 to 65% non condensing
- Storage Temperature: -23 to 158°F (-5 to 70°C)
- Storage Humidity: 20 to 70% non condensing
- Ventilation: Free air

**Options**

- Magnetic Encoder (0.76mm cards only)
- Cleaning supplies

## CARD DIMENSIONS

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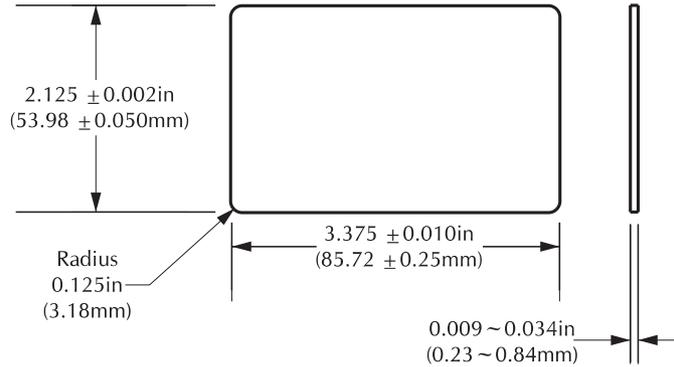
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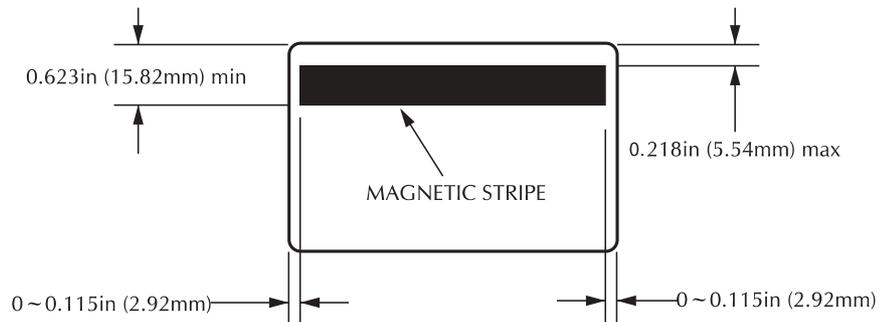
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### ISO STANDARD DIMENSIONS FOR PLAIN CARD



### ISO STANDARD DIMENSIONS FOR MAGNETIC STRIPE CARD





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## *Magnetic Card Stripe Encoder*

This section contains information on the additional operations of the P210i Printers with Magnetic Card Stripe Encoder.  
(See Chapter 2 for location.)

### INTRODUCTION

Operation and maintenance requirements for the P210i Printer with the optional magnetic card stripe encoder.  
(See Chapter 2 for location.)  
The magnetic encoder can be set for either high or low coercivity.



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## A • MEDIA LOADING ORIENTATION

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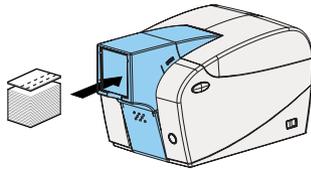
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The magnetic encoder is a factory installed item with the read/write head positioned below the card path, available with HICO encoding or LOCO encoding.

When loading cards into the Card Cartridge, please ensure that the magnetic stripe is facing down and closest to the right.

### Note:

M1 = Stripe Down HICO      M3 = Stripe up HICO

M2 = Stripe Down LOCO      M4 = Stripe up LOCO

approved HICO & LOCO PVC cards are available. (See Appendix C).



**ONLY USE** cards that comply with ISO 7810 & 7811 standards for magnetic stripe cards. The magnetic stripe must be flush to the surface of the card to work properly. Never use cards which have taped-on magnetic stripes.



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## B • MAGNETIC ENCODER CLEANING

Use the standard cleaning card process.

. This cleans the most important parts of the printer; including the print Head, Transport Roller and Magnetic Stripe Encoder (refer to chapter 4 "Cleaning" for more instructions.)

- 1 • Leave power on.
- 2 • Remove cards from the card feeder.
- 3 • Insert one presaturated card (provided) through slot on the side of the Card Cartridge.
- 4 • Press the Multi function button.

## ISO STANDARD ENCODING

Track #	Field Separator	Track density	Valid Characters	# of characters
1	^	210BPI*	Alphanumeric (ASCII 20 - 95**)	79***
2	=	75BPI*	Numeric (ASCII 48 - 62)	40***
3	=	210BPI*	Numeric (ASCII 48 - 62)	107***

\* Bit per inch

\*\* Except the "?" character

\*\*\* Including Start, Stop and LRC characters. Also note that these 3 characters are automatically managed by the magnetic encoder according to the ISO Standard norms.

**NOTE:** Refer to the Card Printer Programmer's Manual for complete programming information.



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## B APPENDIX

### Accessories & Supplies

Please contact your Zebra authorised dealer to place an order for accessories and supplies.



i Series Printers require the use of i Series ribbons for full color printing.

Refer to the Accessories section for more information about Card and Ribbon Media available from Zebra Technologies Corp.

#### RIBBONS:

Part Number	Description : Starter Kit
105912-294	YMCKO Ribbon Cartridge + Cleaning Roller+ 100 PVC Cards

Part Number	Description	Cards/Cartridge
800015-201	⊙ Black Monochrome	500
800015-240	⊙ 5 Panel YMCKO Dye Sub	100



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Part Number	Description	Card/pack	thickness
104523-111	premier grade PVC	100	30mil
104523-112	premier grade PVC LoCo	100	30mil
104523-113	premier grade PVC HiCo	100	30mil
104524-101	premier plus grade composite	100	30mil
104524-102	premier plus grade composite LoCo	100	30mil
104524-103	premier plus grade composite HiCo	100	30mil



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Accessories available for P210i printers appear below. Always refer to the part number when placing an order.

Printer supplies	
Part Number	Description
300320-001	Centronics Parallel cable (36 pins)
105912-212	USB Cable (6ft A-B)
105925-001	Replacement Print Head Kit

Cleaning Supplies	
Part Number	Description
105909-169	Premier Cleaning Kit (25 swabs, 50 cards)
105912-301	Adhesive Cleaning Roller Kit (set of 5)
105912-302	Cleaning Cartridge, complete
105909-055	Cleaning Card Kit (box of 100 cards)
105909-057	Cleaning Swab Kit (box of 25 swabs)

Miscellaneous	
Part Number	Description
806503-001	Card Punch (slots card for lapel clip)
104527-001	Lapel Clips (pack of 100 clips)



# P205 & P210i Plastic Card Printer

## World Wide Sales and Support:

**Zebra Technologies Corporation**  
**Zebra Card Printer Solutions**  
1001 Flynn Road  
Camarillo, CA 93012-8706.USA  
Phone: + 1(805) 579 1800  
Fax.: + 1 (805) 579 1808  
Toll Free in US: (800) 452-4056  
e-mail: cards@ZebraCard.com

**Zebra Technologies Corporation**  
**Zebra card Printer Solutions, (Europe, Middle East, Africa)**  
The Valley Centre, Gordon Road, High Wycombe  
Buckinghamshire HP13 6EQ, England  
Phone: + 44 (0) 870 241 1527  
Fax.: + 44 (0) 870 241 0765  
e-mail: eurosales@ZebraCard.com

**Zebra Technologies Corporation**  
**Zebra card Printer Solutions, Latin America**  
6175 NW 153 rd Street, Suite # 121  
Miami Lakes, FL 33014 USA  
Phone: + 1 (305) 558 8470  
Fax: + 1 (305) 558-8485  
e-mail: latinsales@ZebraCard.com

**Zebra Technologies Corporation**  
**Zebra Card Printer Solutions, Asia/Pacific**  
1 Sims lane # 06-11  
387355 Singapore  
Phone: + 65 84 20 322  
Fax.: + 65 84 20 514  
e-mail: asiasales@ZebraCard.com

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Fax.: + 1 (847) 913 8766  
e-mail: sales@Zebra.com

Website: [www.zebracard.com](http://www.zebracard.com)

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