

# Thermal Printer User's Manual

**2443**



**Zebra Technologies Corporation**

User's Manual No. 980336-001 Rev. A

©2001 Zebra Technologies Corporation



## FOREWORD

---

This manual provides installation and operation information for the LP 2443 series printers, manufactured by Zebra Technologies Corporation, Camarillo, California.

## COPYRIGHT NOTICE

---

This document contains information proprietary to Zebra Technologies Corporation. This document and the information contained within is copyrighted by Zebra Technologies Corporation and may not be duplicated in full or in part by any person without written approval from Zebra Technologies Corporation. While every effort has been made to keep the information contained within current and accurate as of the date of publication, no guarantee is given or implied that the document is error-free or that it is accurate with regard to any specification. Zebra Technologies Corporation reserves the right to make changes, for the purpose of product improvement, at any time.

## TRADEMARKS

---

LP 2443 is a service mark of Zebra Technologies Corporation. Windows and MS-DOS are registered trademarks of Microsoft Corp. All other marks are trademarks or registered trademarks of their respective holders.

## LP 2443 Thermal Printers

---

	European Council Directive		Compliance to Standards	
	89/336/EEC	EMC Directive	EN 55022-B 1995	RF Emissions control
	92/31/EE	EMC Directive	EN 50082-1 1992	Immunity to Electro-magnetic Disturbances

## FCC - DECLARATION OF CONFORMITY:

---



**Model: LP 2443 conforms to the following specification:**

**FCC Part 15, Subpart B, 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.

## INDUSTRY CANADA NOTICE:

---

This device complies with Industry Canada ICS-003 class B requirements.

Cet équipement est conforme à l'ICS-003 classe B de la norme Industrielle Canadian



**SHOCK HAZARD WARNING:**

*The printer and power supply should never be operated in a location where either one can get wet. Personal injury could result.*

---



**MEDIA WARNING:**

*Always use high quality, approved labels, tags and transfer ribbons. If adhesive backed labels are used that DO NOT lay flat on the backing liner, the exposed edges may stick to the label guides and rollers inside the printer, causing the label to peel off from the liner and jam the printer. Approved supplies can be ordered from your dealer.*

---



**RELOADING HINT:**

*If you should run out of labels while printing, DO NOT turn the power switch OFF (0) while reloading or data loss may result. The printer will automatically resume printing when a new label roll is loaded.*

---

## TABLE OF CONTENTS

---

<b>Installation and Operation . . . . .</b>	<b>1</b>
Unpacking Your Printer . . . . .	2
Getting To Know Your Printer . . . . .	3
Installation . . . . .	4
Power Supply . . . . .	4
Interface Cable . . . . .	5
Load Labels. . . . .	6
AutoSense . . . . .	8
Label Dispenser Option . . . . .	10
Using Fan Fold Media . . . . .	11
Install Software . . . . .	12

---

<b>Troubleshooting . . . . .</b>	<b>13</b>
Serial Interface Cable Wiring. . . . .	14
Cleaning the Print Head . . . . .	15
Preparing Media, Paper, and Labels Before Loading . . . . .	16

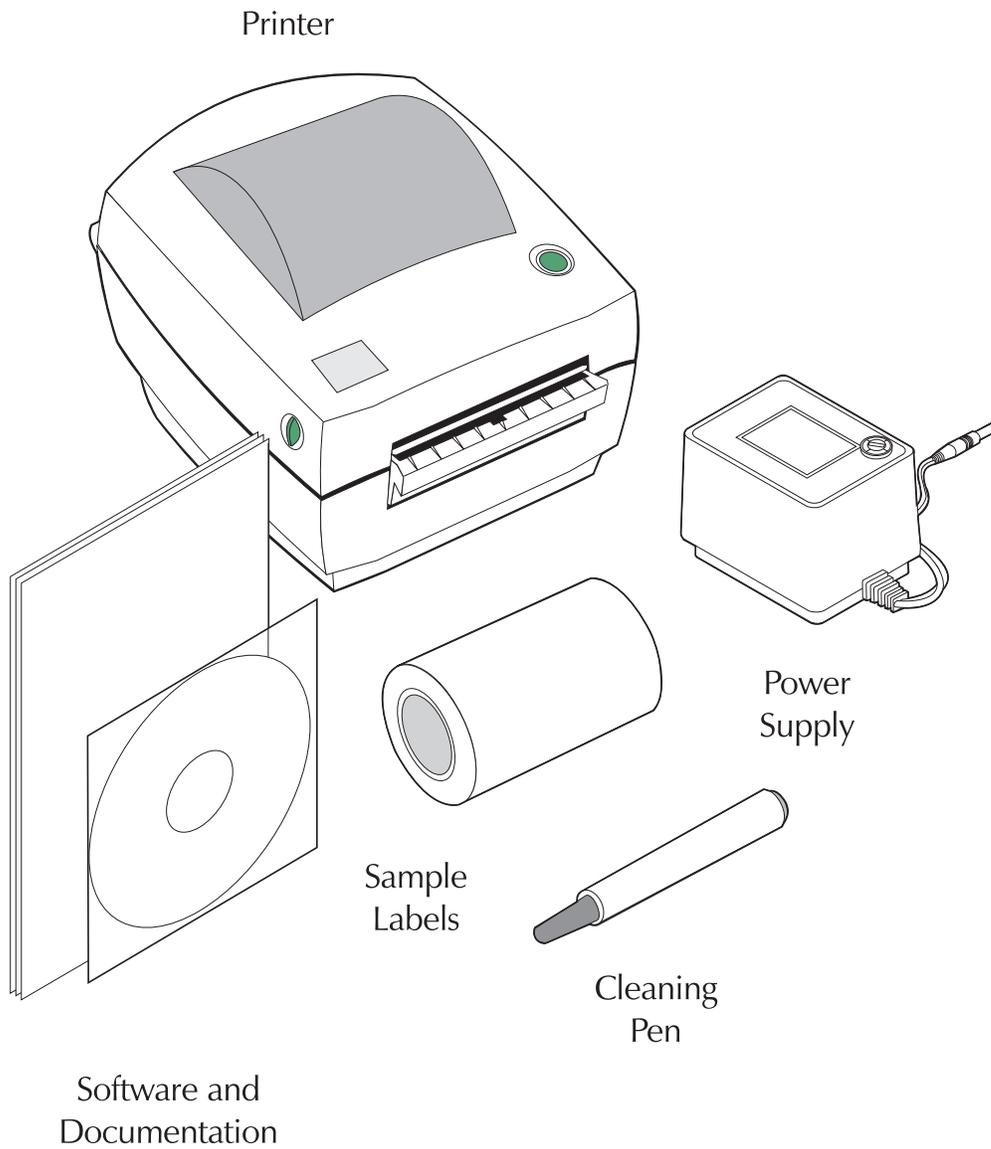


# **1** *Installation and Operation*

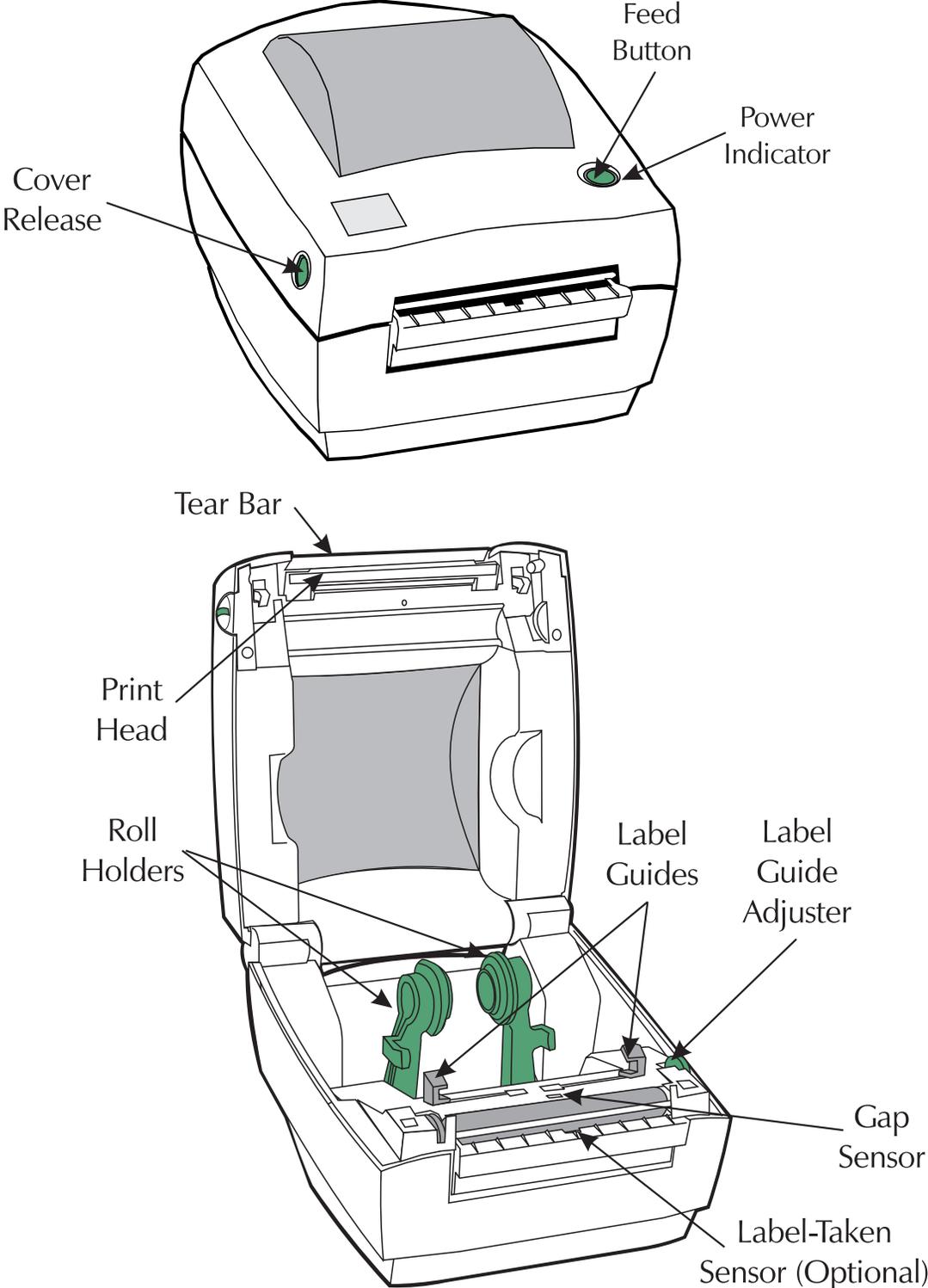
This section provides information on the installation and operation of the printer.

The LP 2443 is a low cost, desktop direct thermal printer. This family of printers is specifically designed for printing labels, tags or continuous receipts (with or without bar codes) from any DOS™, Windows™ or ASCII-based compatible computer.

## Unpacking Your Printer

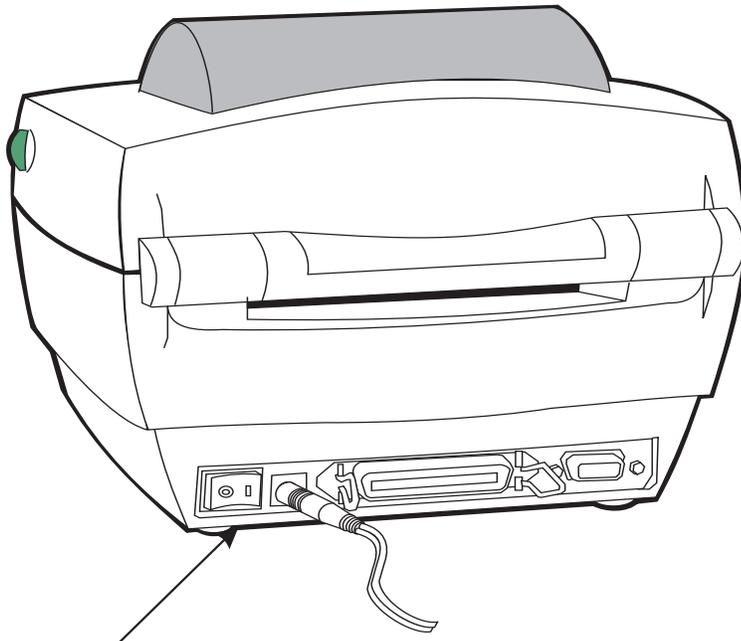


# Getting To Know Your Printer



**Installation** The following steps will guide you through the installation of the printer and software.

**Step 1 Attach Power Supply To The Printer**



Power Switch

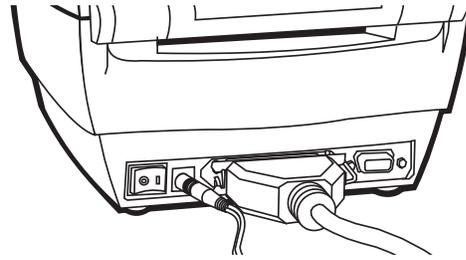
Attach the power supply to a suitable AC outlet.

See the SHOCK HAZARD WARNING on page iv.

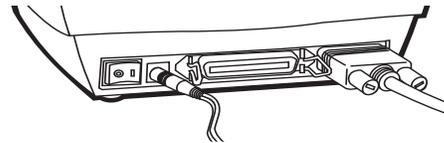
---

**Step 2 Attach Interface Cable**

*Parallel Interface*



*Serial Interface*

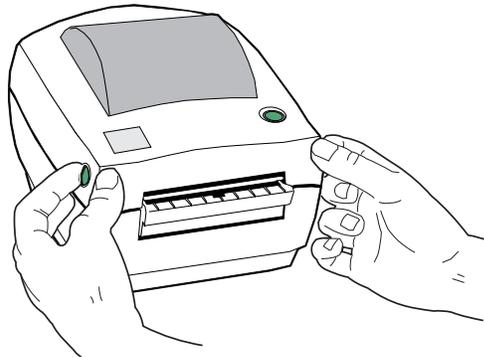


For serial cable wiring, refer to Appendix A.

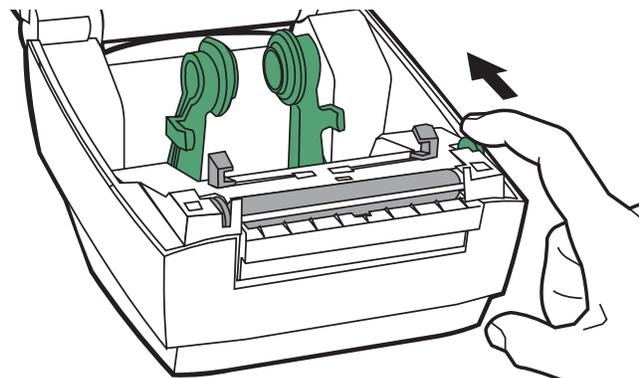
---

**Step 3 Open Printer**

*Open Cover*



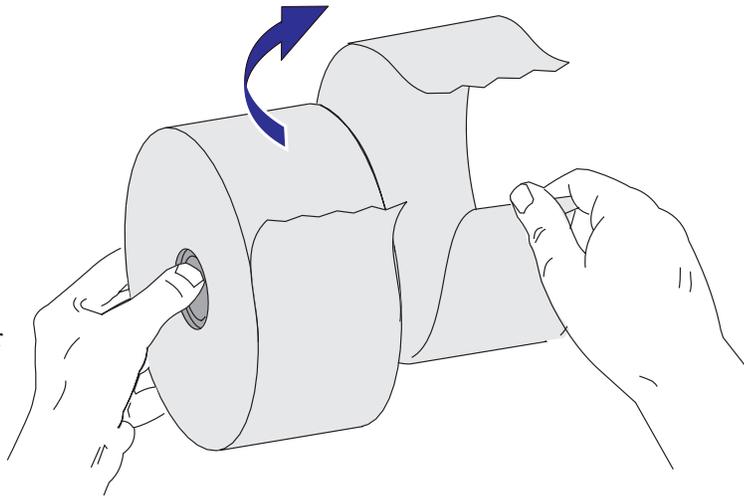
*Open Guides*



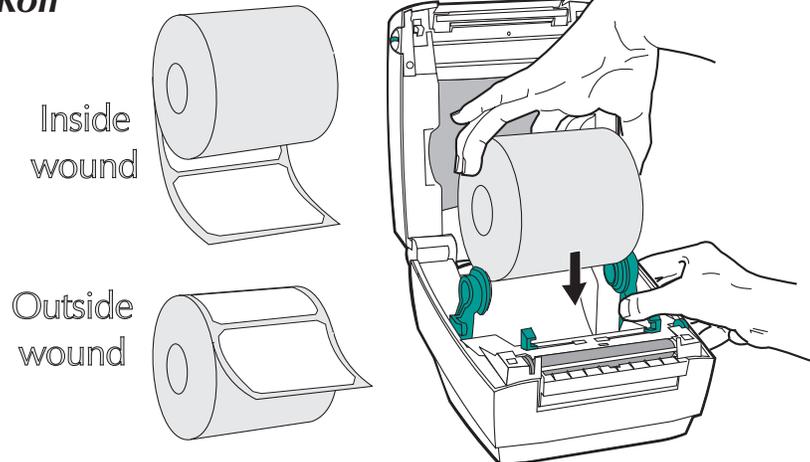
## Step 4 Load Media

**Remove the outside length of media**

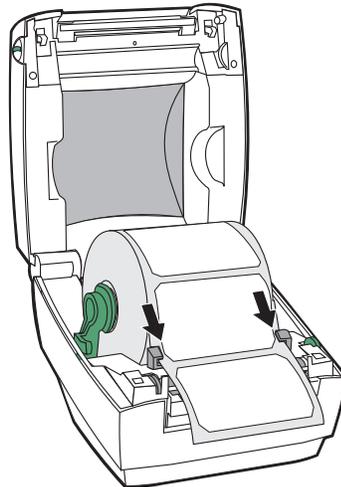
For more information on media preparation, refer to Appendix A.



### Install Roll



### Thread Through Guides

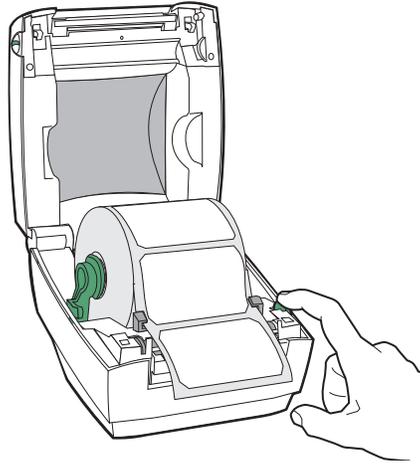


---

## ***Load Media - continued***

### ***Adjust Guides***

***Note: When using  
linerfree labels,  
adjust the guides  
to the widest  
position.***



### ***Close Cover and Tap Feed Switch***

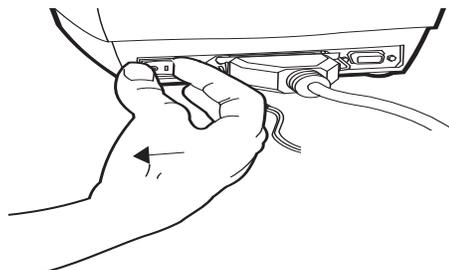


If the indicator fails to light, refer to  
Appendix A - Troubleshooting.

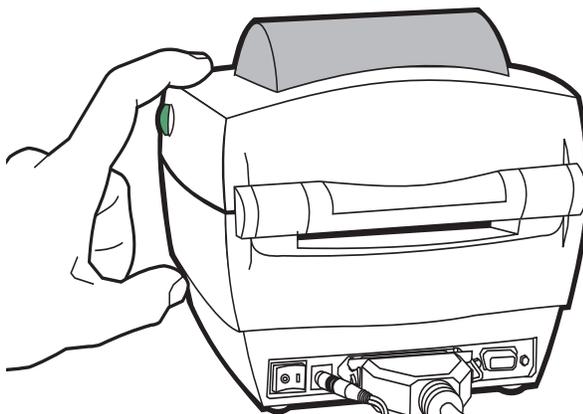
## Step 5 **AutoSense Gap Sensor Adjustment**

Perform this procedure when loading a new roll. You cannot perform this procedure if using the printer's label dispenser option.

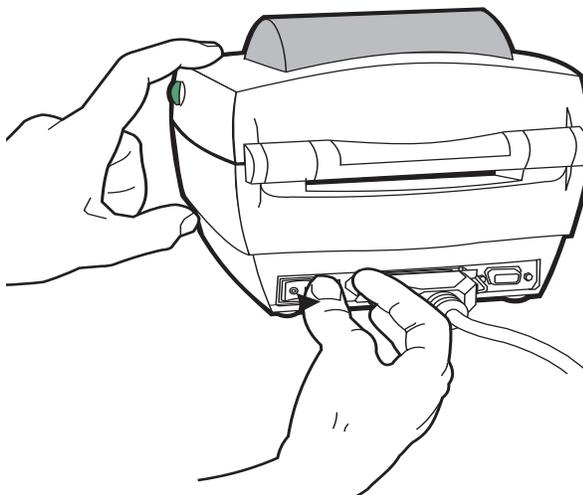
**Power OFF**



**Hold  
Feed Button**

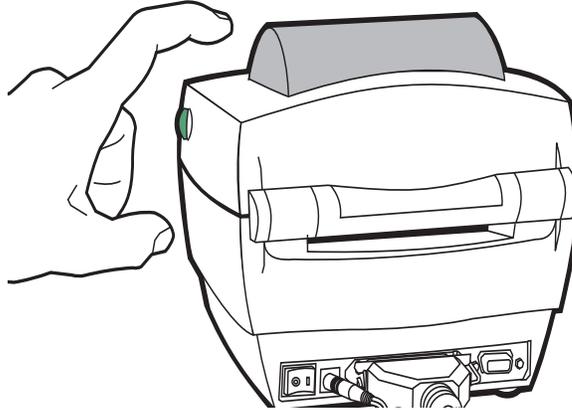


**Power ON**



## AutoSense Gap Sensor Adjustment - continued

**When Indicator  
Flashes, Release  
Feed Button**



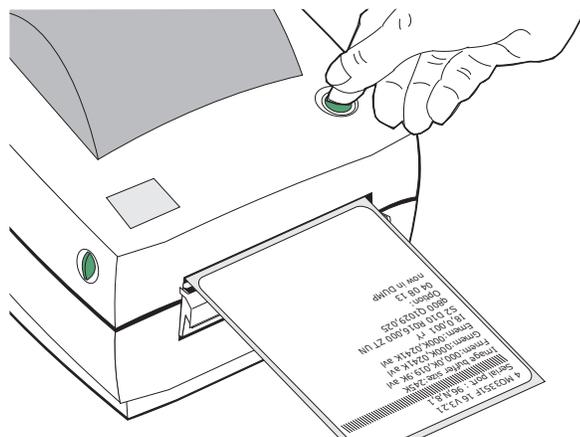
**Printer Advances  
Media and Prints  
Status Summary**

**Note: Printer is in  
diagnostic dump mode**

```
4 M03351F 16 V3.21
Serial port : 96,N,8,1
////////////////////
Image buffer size:245K
Fmem:000,0K,019.9K avl
Gmem:000K,0241K avl
Emem:000K,0241K avl
I8,0,001 rY
S2 D10 R016,000 ZT UN
q800 Q1029,025
Option:
04 08 13
now in DUMP
```

**Tap Feed Button  
To Begin Normal  
Operation**

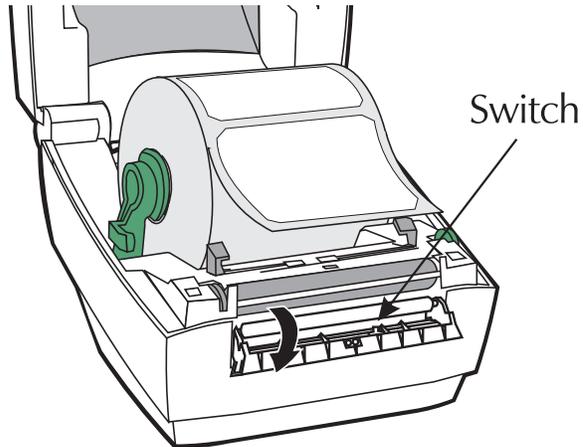
**Note: Printer prints  
"out of DUMP"**



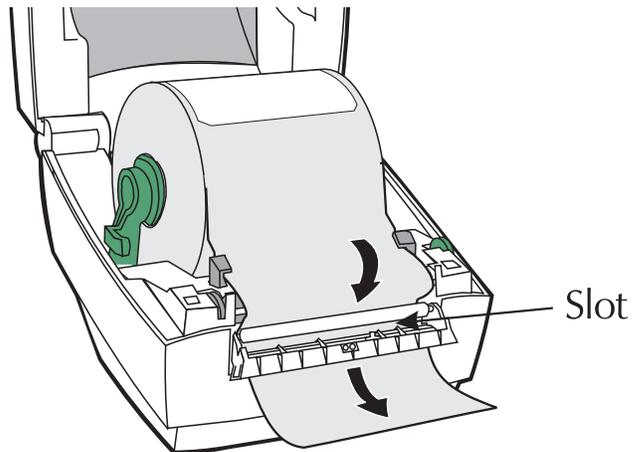
If the indicator remains orange or red, see the troubleshooting steps.

## ***Label Dispenser Option***

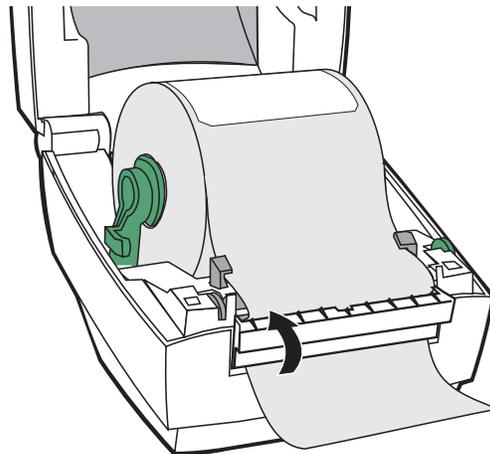
***Open Door and  
Push Switch  
1 = Dispense  
0 = Batch***



***Remove Several  
Labels and Push  
Liner Through Slot***

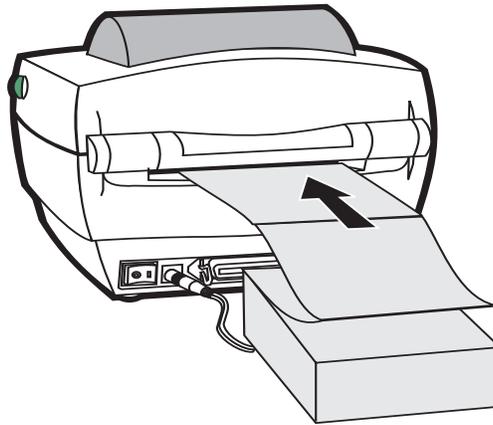


***Close Door***



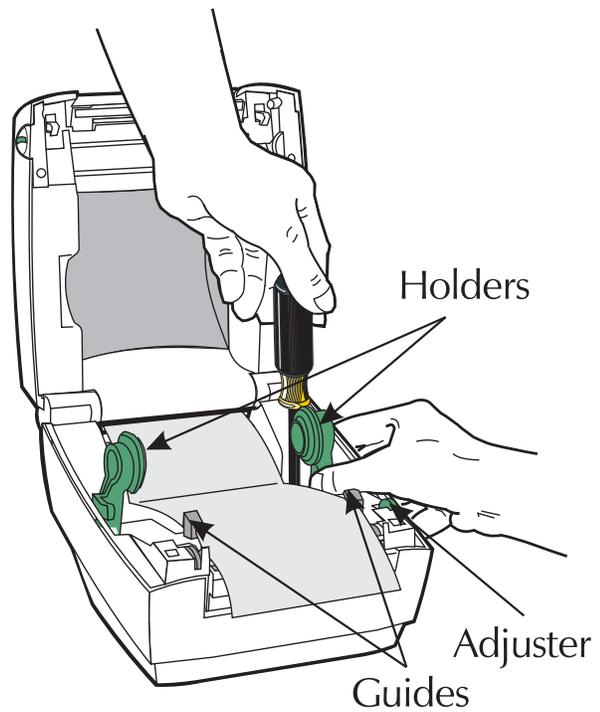
## Using Fan-Fold Media

### Insert Media

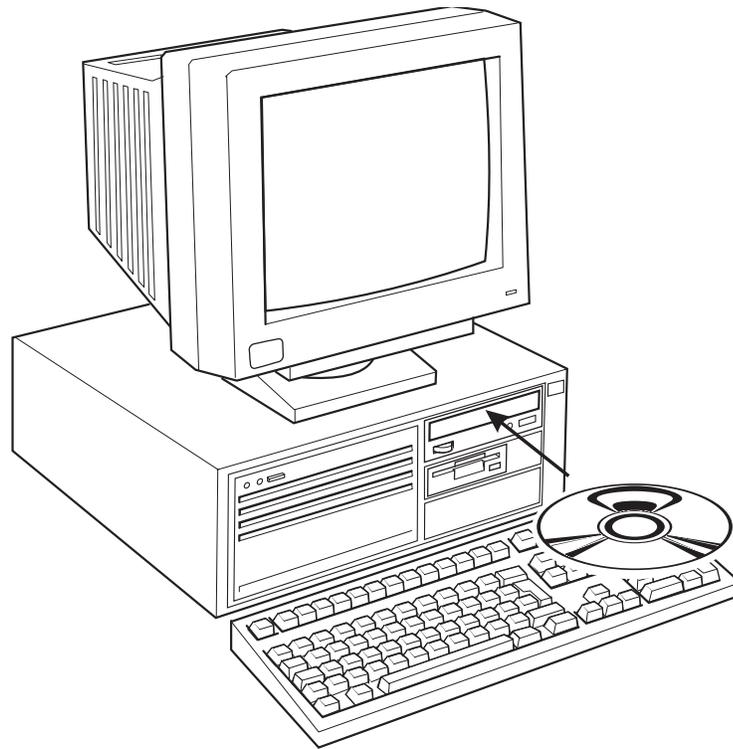


**Adjust Guides**  
**Adjust Holders**  
**Tighten Screw**

**Note: Use a small  
Phillips driver (#1)**



## Step ⑥ Install Software

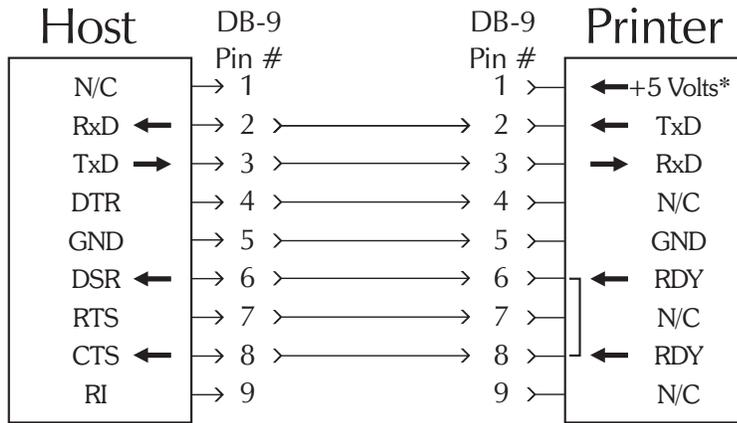


Start your computer and follow the installation instructions on the compact disc (CD).

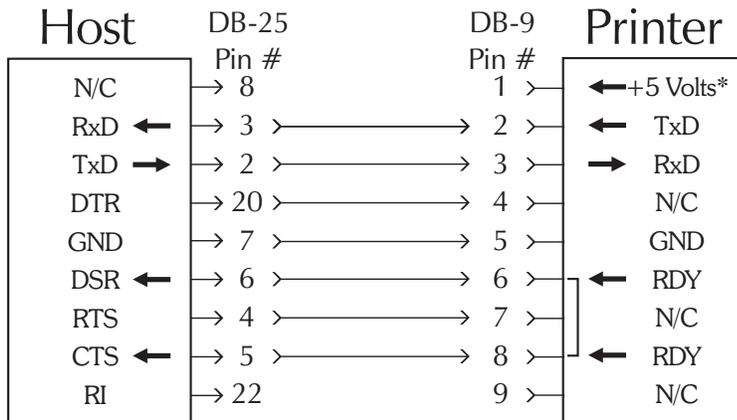
## Appendix A - Troubleshooting

Problem	Solution or Reason
POWER indicator does not light GREEN when power switch is turned to ON (1) position.	<ol style="list-style-type: none"> <li>1. Check power connections from A.C. outlet to power supply to printer.</li> </ol>
POWER indicator lights GREEN, but printer will not print.	<ol style="list-style-type: none"> <li>1. Check interface cable connections from computer to printer.</li> </ol>
Printer appears to be working (media is being fed out), but nothing is printed.	<ol style="list-style-type: none"> <li>1. Verify that the labels are the correct type (direct thermal).</li> <li>2. Check that the roll is loaded with the direct thermal side facing up.</li> <li>3. Clean the print head with cleaning pen.</li> </ol>
Printing is faded or poor quality.	<ol style="list-style-type: none"> <li>1. Clean the print head with cleaning pen.</li> <li>2. Adjust print speed/darkness in software.</li> </ol>
Prints only partial label or skips a label.	<ol style="list-style-type: none"> <li>1. Perform AutoSense gap sensor adjustment on page 8.</li> <li>2. Label caught on print head.</li> <li>3. Print head is not properly latched.</li> <li>4. Possible software problem. Check the printer memory configuration. Refer to the EPL2 Programming manual.</li> </ol>
Printing stops and POWER indicator lights ORANGE or RED.	<ol style="list-style-type: none"> <li>1. Perform AutoSense gap sensor adjustment on page 8.</li> <li>2. Possible problem with label stock. Use only approved labels and tags.</li> <li>3. Possible label jam.</li> <li>4. Insufficient memory for label size. Check the printer memory configuration.</li> <li>5. Possible software problem. Refer to the EPL2 Programming manual.</li> </ol>

**Serial Interface Cable Wiring** The figure below displays the cable wiring required to use the printer's RS-232 serial interface.



**Female DB-9 to Male DB-9**  
Cable P/N 300017-006 (6') or 300017-010 (10')



**Female DB-25 to Male DB-9**  
Cable P/N 300018-006 (6')

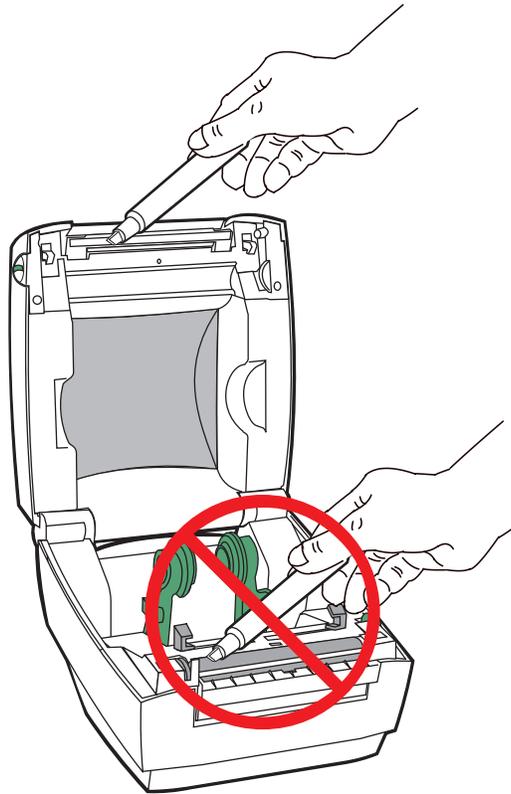
\*+5 volts at 150 mA for external device (e.g. KDU or scanner)

***Cleaning the Print Head*** When you load new media, you can also clean the print head.

***Rub Cleaning Pen  
Across Dark Area of  
the Print Head***

***Wait One Minute  
Before Closing  
Printer***

***Do Not Clean  
the Platen***



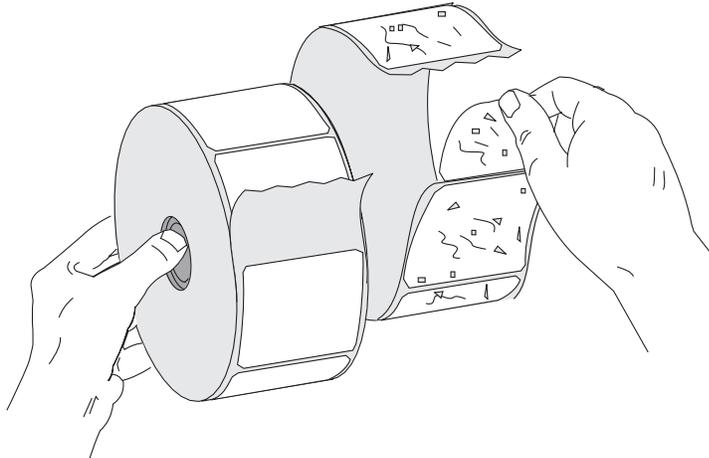
---

***Preparing Media,  
Paper, and Labels  
Before Loading***

During shipment, the outside length of media may become dirty when handled or dusty when stored. A preparation before loading media makes sure both the print head and platen stay cleaner for more time.

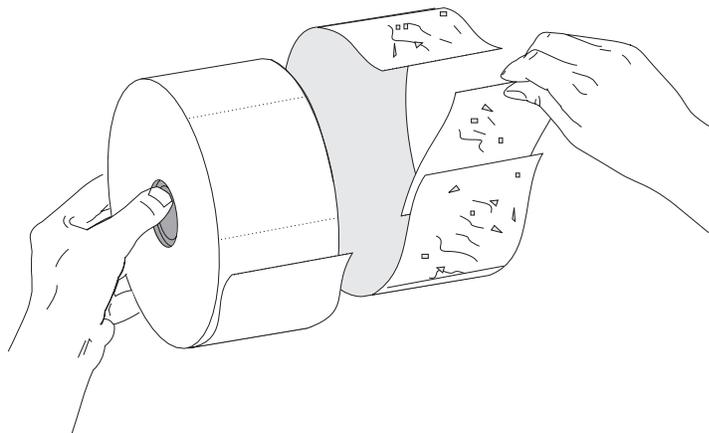
***Label Rolls***

***Find the tape and  
pull off both labels  
held by the tape***



***Tag Stock Rolls***

***Find the tape  
and detach the  
bottom tag***



You must avoid dragging adhesive or dirty media between the print head and platen. Such an occurrence damages the print head and is not covered under your warranty.

---



