Thermal Printer User's Manual

2824

Zebra

Zebra Technologies Corporation

User's Manual No. 980346-001 Rev. A

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FOREWORD

This manual provides installation and operation information for the LP 2824 series printers, manufactured by Zebra Technologies Corporation, Camarillo, California.

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LP 2824 Thermal Printers

CE

European Council Directive		Compliance to Standards	
89/336/EEC	EMC Directive	EN 55022-B 1995	RF Emissions control
92/31/EE		EN 50082-1 1997	Immunity to Electro-magnetic Disturbances
		IEC 1000-3-2	Harmonic Emmissions
		IEC 1000-3-3	Voltage Variation
	CB Schema	EN 60950	Safety

FCC - DECLARATION OF CONFORMITY:

FC

Model: LP 2824 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 equipement est conforme a l'ICS-003 classe B de la norm 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 a new label roll is loaded.

STATIC DISCHARGE:

The discharge of electrostatic energy that accumulates on the surface of the human body or other surfaces can damage or destroy the print head or electronic components used in this device.

DO NOT TOUCH the print head or the electronic components under the top cover.

THERMAL PRINTING:

The print head becomes hot while printing. To protect from damaging the print head and risk of personal injury, avoid touching the print head. Use only the cleaning pen to perform maintenance.

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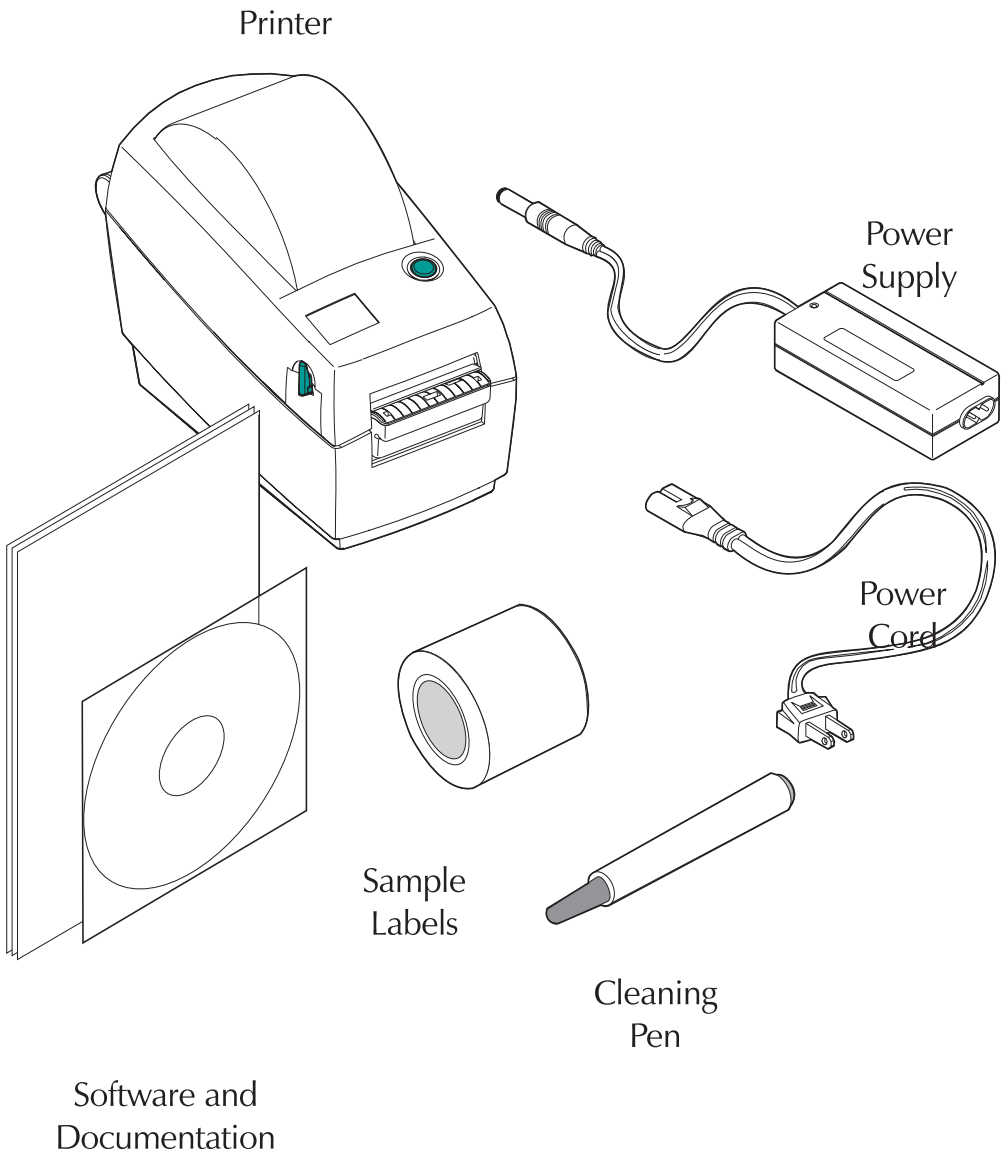
1
Installation and Operation

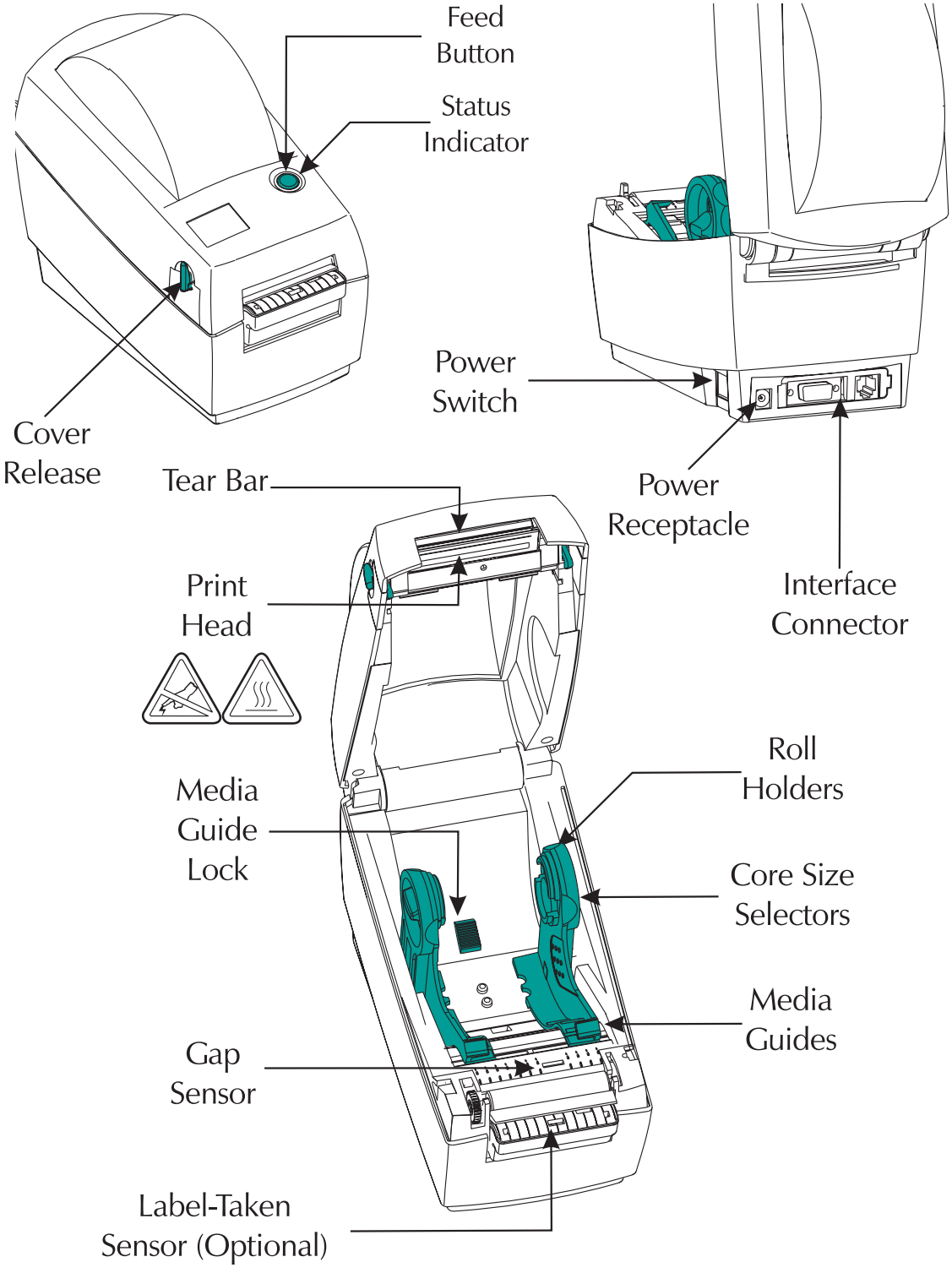
This section provides information on the installation and operation of the printer.

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

Unpacking Your Printer



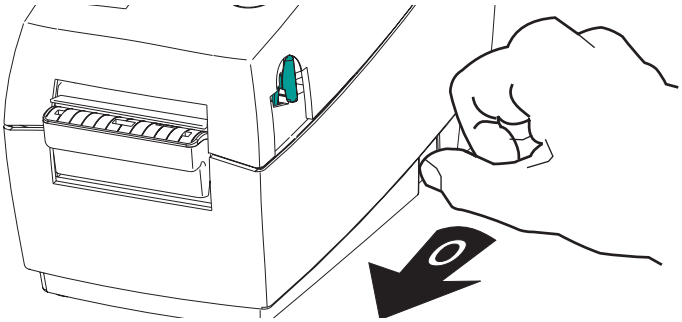
Getting To Know Your Printer



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

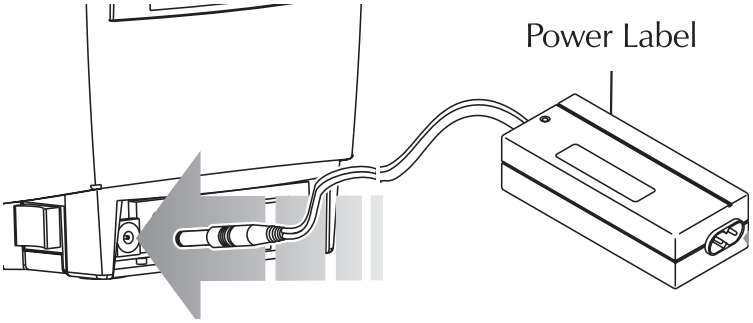
Step ❶ Attach Power Supply To The Printer

Power OFF

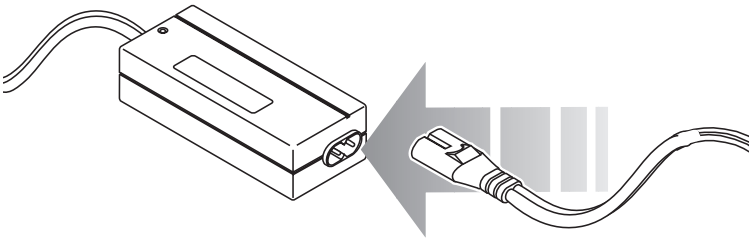


Check Voltage

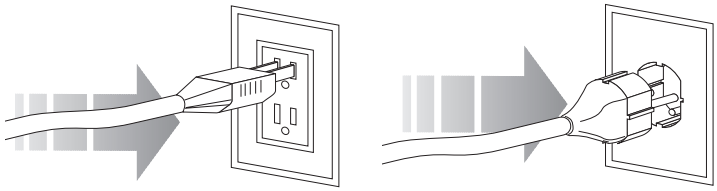
Plug in Power Module



Plug in Power Cord



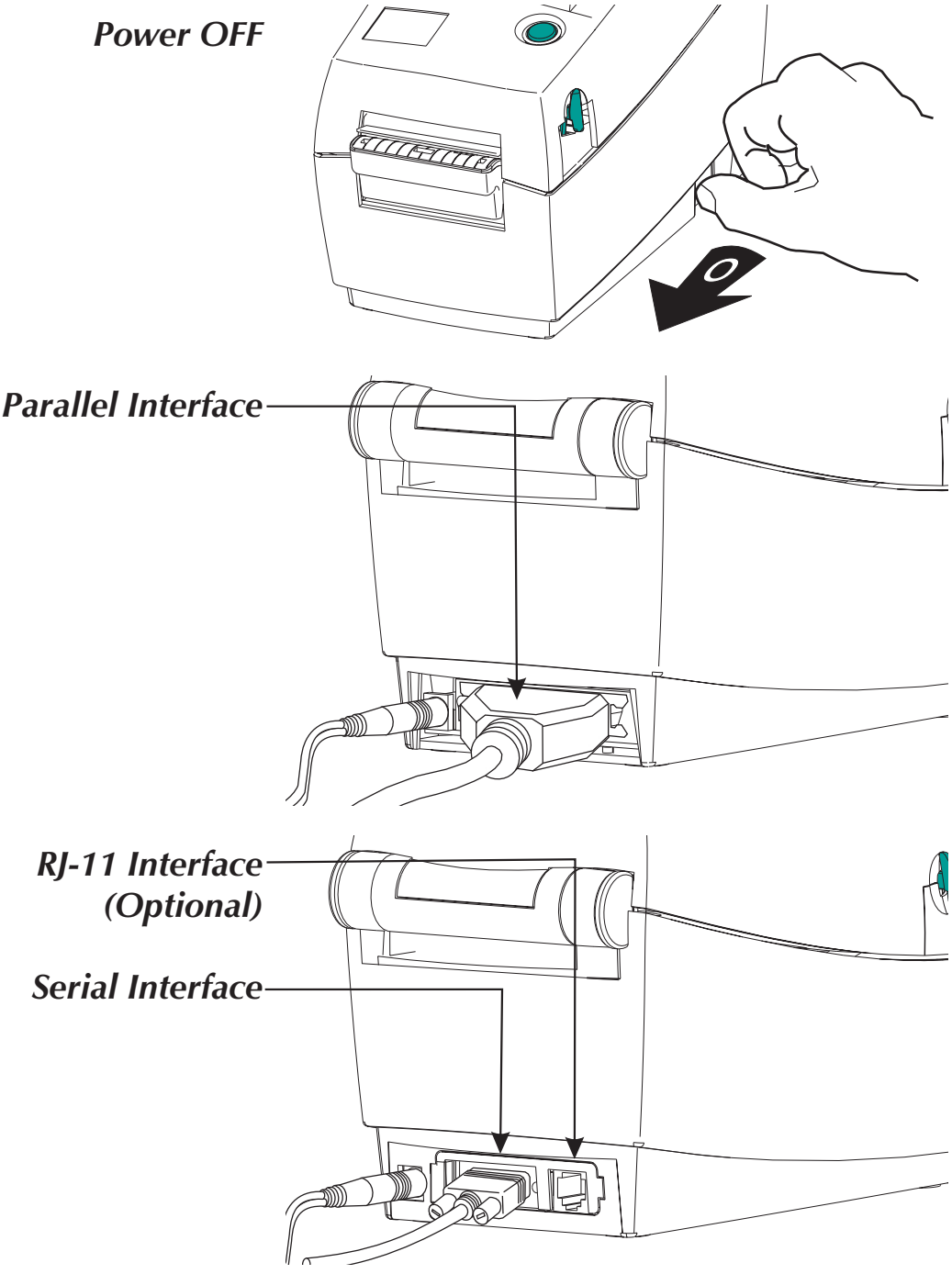
Plug Power Cord into a Suitable AC Outlet



See the SHOCK HAZARD WARNING on page iv.

Step ❷ Attach Interface Cable

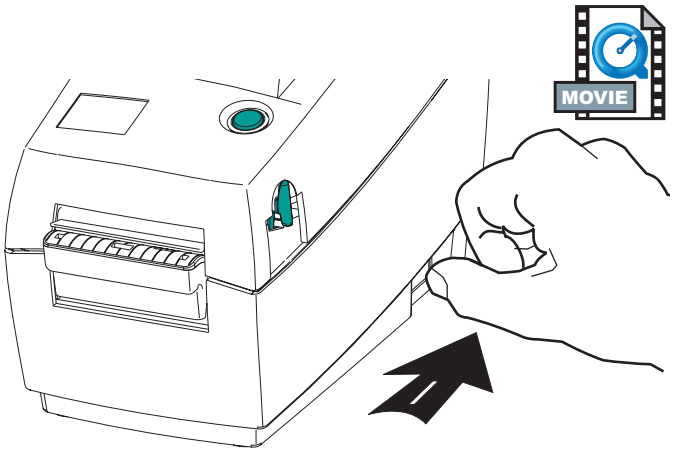
The printer has either a parallel interface or a serial interface (with optional RJ-11 connector).



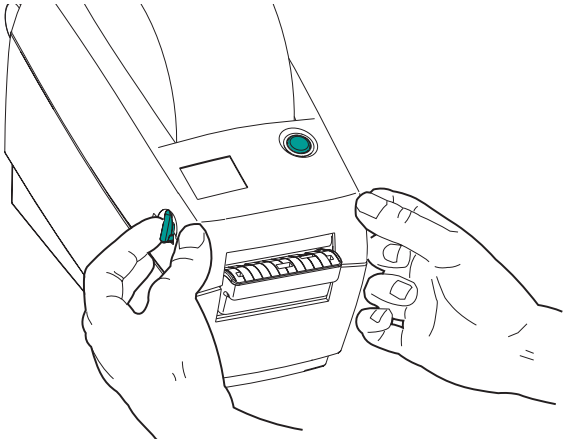
For additional information on serial cable wiring, refer to Appendix A.

Step ❸ Load Labels

Power ON

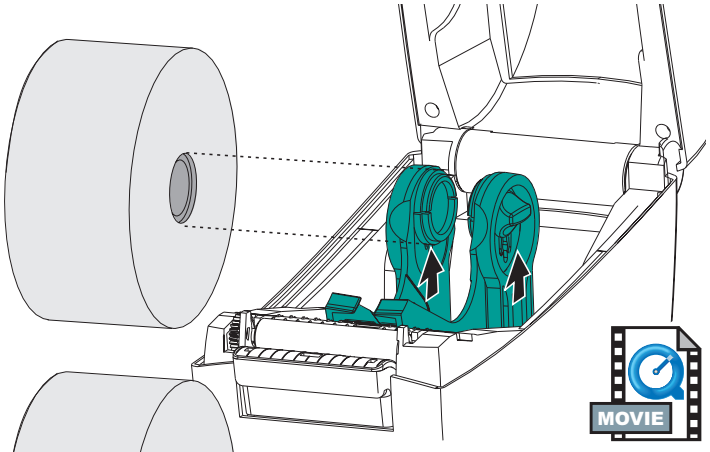


Open Cover

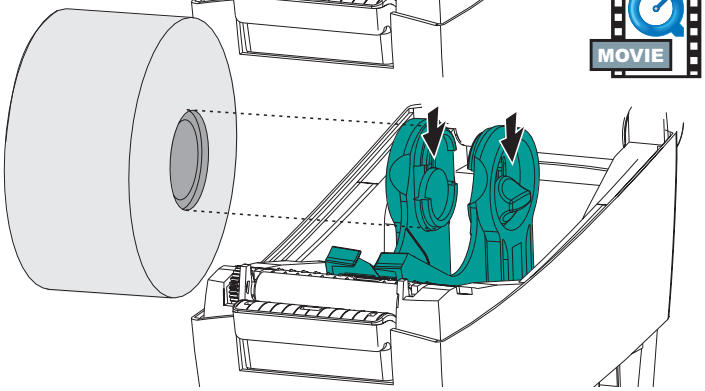


Adjust Holders

1.0 inch
2.5 cm



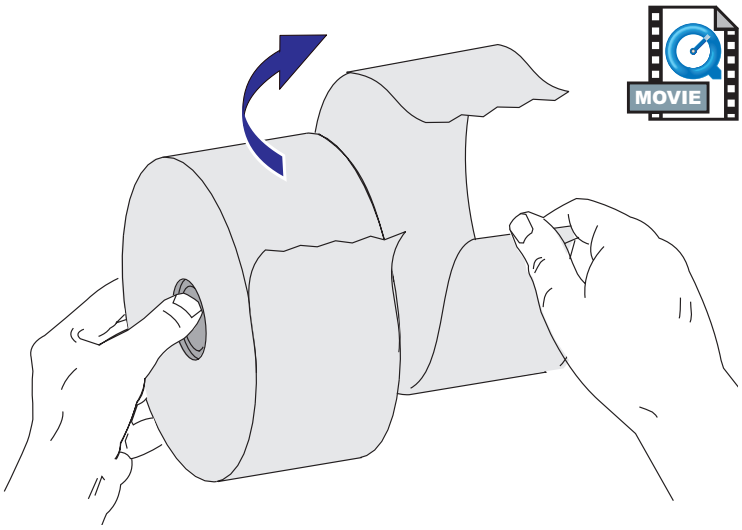
1.5 inch
3.8 cm



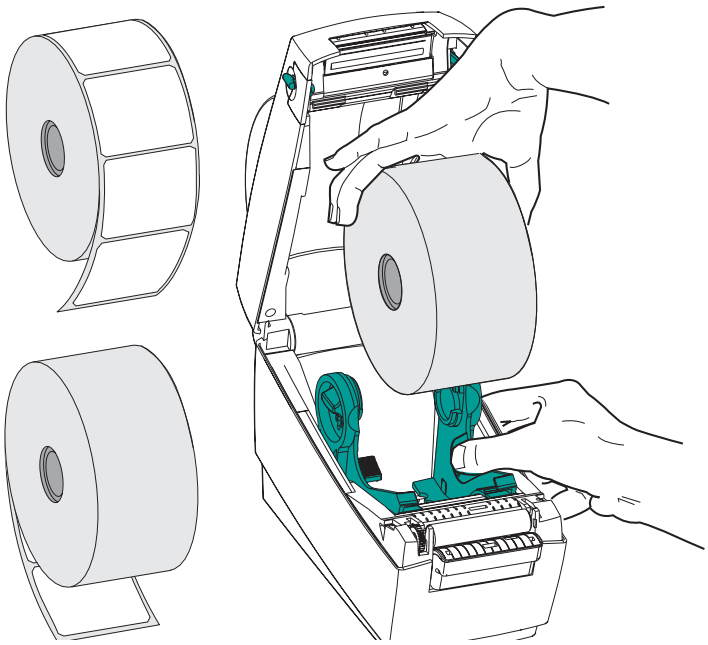
Load Labels - continued

Remove Outside Length

For more information refer to appendix A

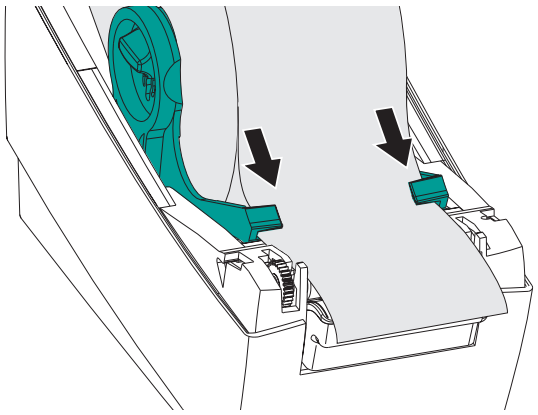


Install Roll



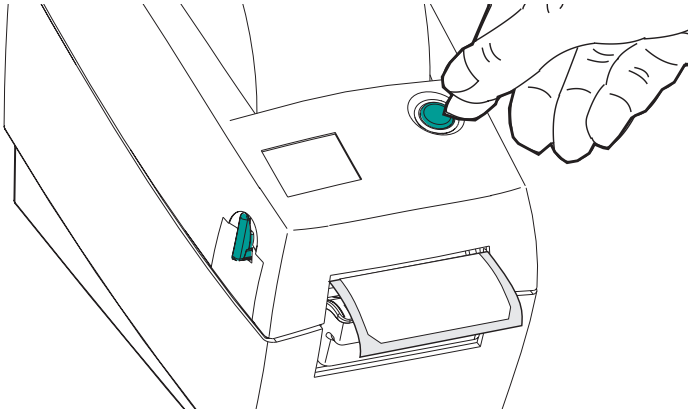
Load Labels - continued

Thread Through Guides



Close Cover

Tap Feed Button

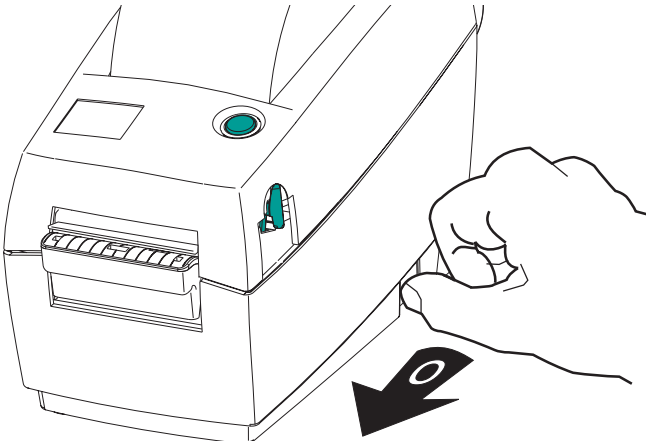


If the indicator remains dark, see Appendix A - Troubleshooting.

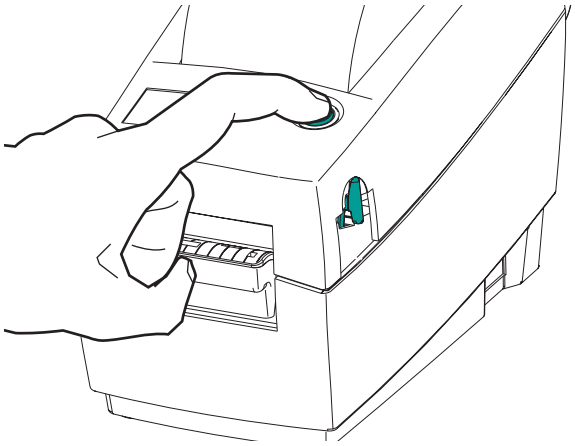
Step ❹ AutoSense Gap Sensor Adjustment

Perform this procedure when loading a new roll. If your printer has the label dispenser option, turn OFF the label taken sensor.

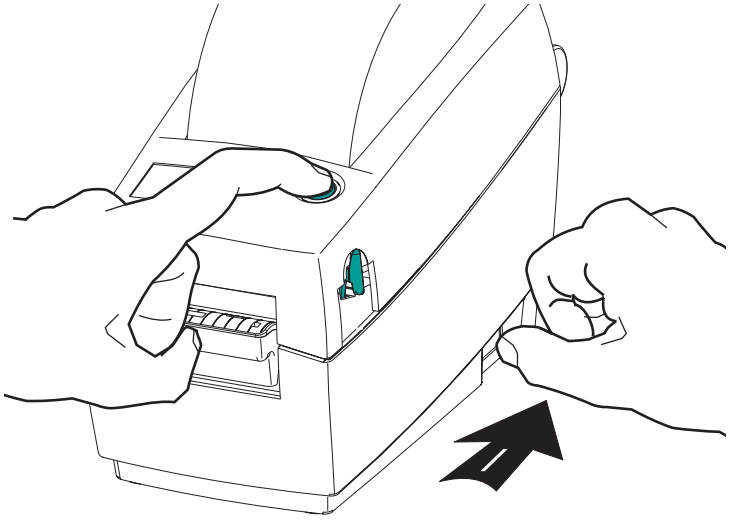
Power OFF



Hold Feed Button

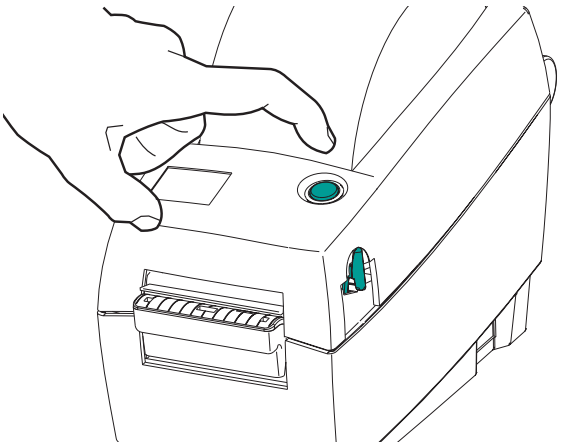


Power ON



AutoSense Gap Sensor Adjustment - continued

When Indicator Flashes, Release Feed Button



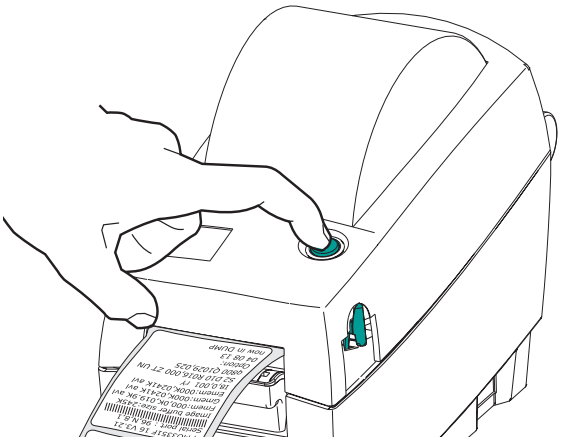
Printer Advances Media and Prints Status Summary

Note: Printer is in diagnostic dump mode

```
4 MO3351F 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 D8 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"

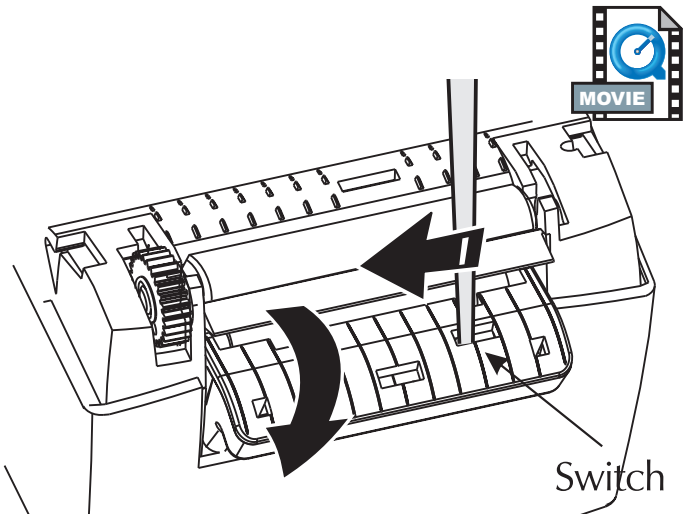


If the indicator remains orange or red, see the troubleshooting steps.

Label Dispenser Option

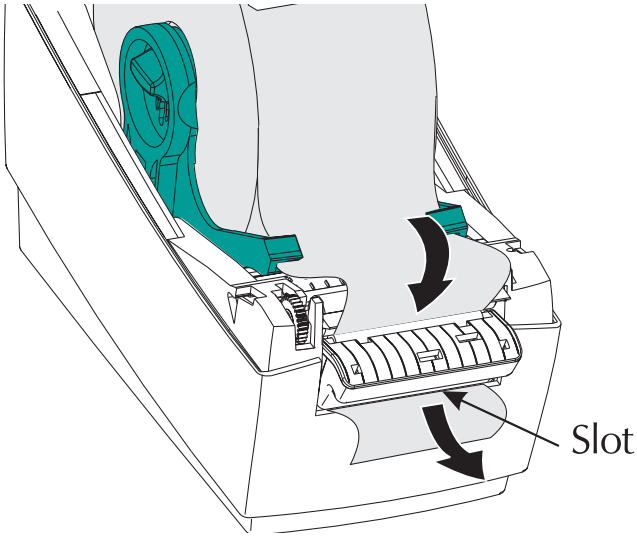
Open Door

Use a Stylus to Switch On the Label Taken Sensor

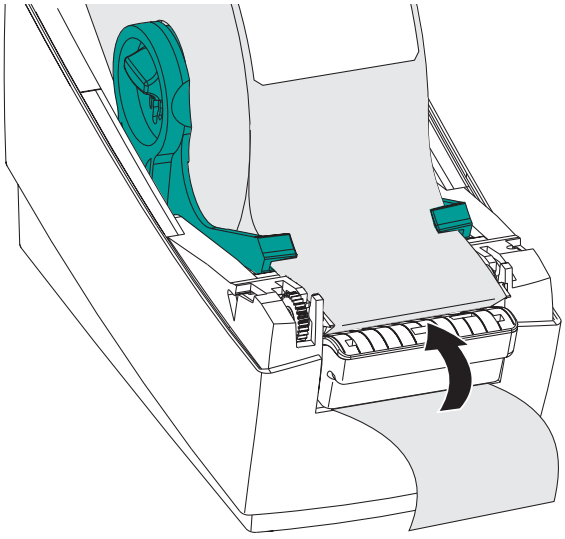


Remove Several Labels

Push Liner Through Slot



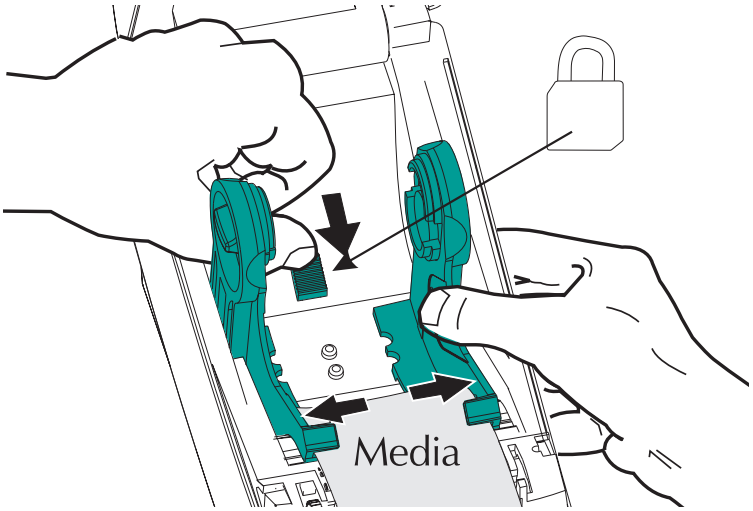
Close Door



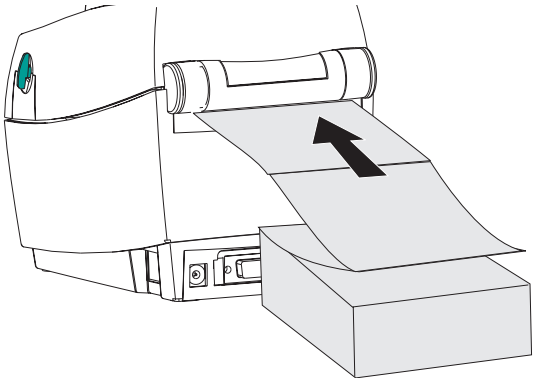
Using Fan-Fold Media

Open Guides to Width of Media

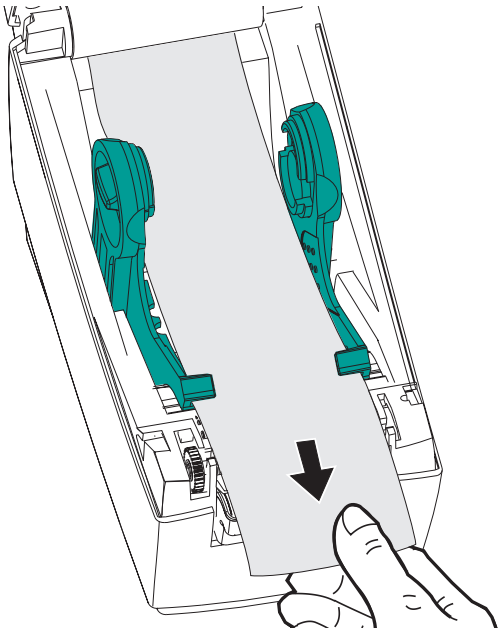
Lock Guides in Place



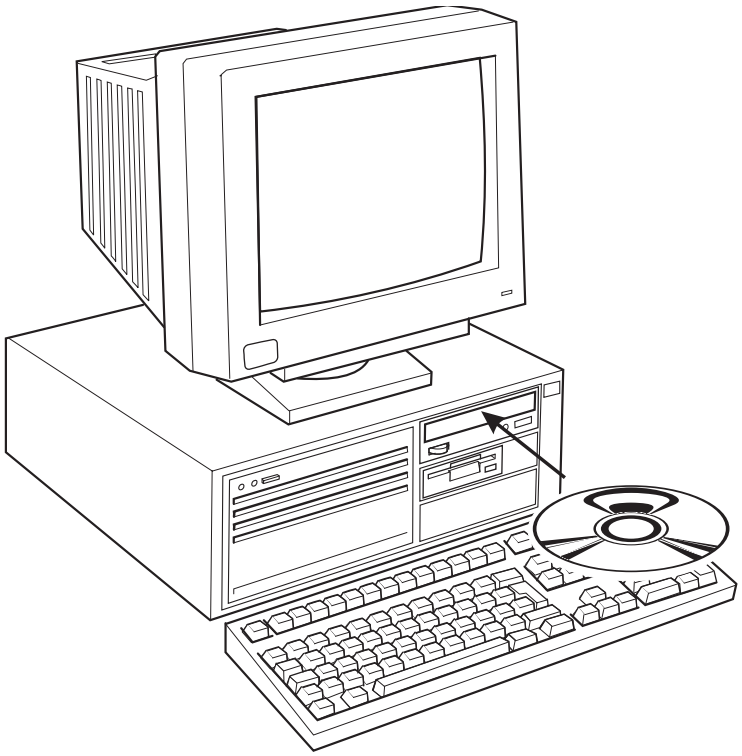
Insert Media



Thread Media Through Guides



Step ❺ Install Software



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

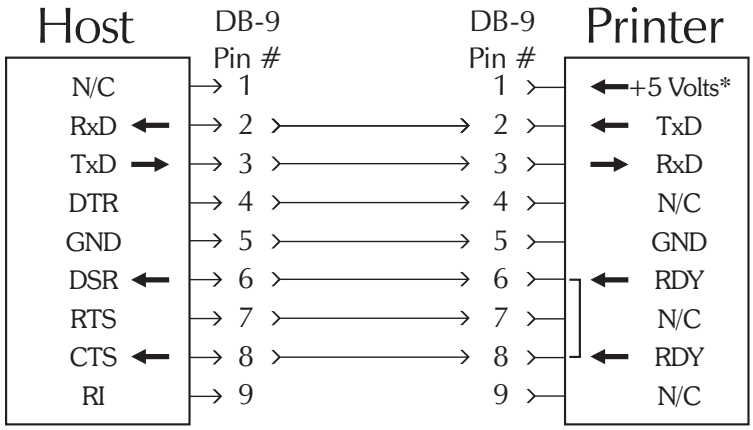
Appendix A - Troubleshooting

Problem	Solution or Reason
STATUS Indicator	
Does not light when power switch is turned to ON (I) position.	1. Check power connections from A.C. outlet to power supply to printer.
Lights GREEN, but printer will not print.	1. Check interface cable connections from computer to printer. 2. Make sure top cover is locked closed.
Blinks GREEN-RED-RED.	1. Operator has paused the printer during a batch job. Tap the FEED button to continue.
Lights AMBER.	1. Printer has encountered a syntax or command error.
Blinks RED.	1. The optional cover open sensor is active. Press top cover to close and lock.
Lights RED.	1. Media is out. Reload a new source of media so printer can continue printing. 2. Power-up failure.
Blinks GREEN-AMBER.	1. AutoSense in process. Wait until printer dispenses a status report.
Lights AMBER-RED.	1. Download in process.
Operation	
Printer appears to be working (media is being fed out), but nothing is printed.	1. Verify that the labels are the correct type (direct thermal). 2. Check that the roll is loaded with the direct thermal side facing up. 3. Clean the print head with cleaning pen. 4. Ensure top cover is locked closed.
Printing is faded or poor quality.	1. Clean the print head with cleaning pen. 2. Adjust print speed/darkness in software.

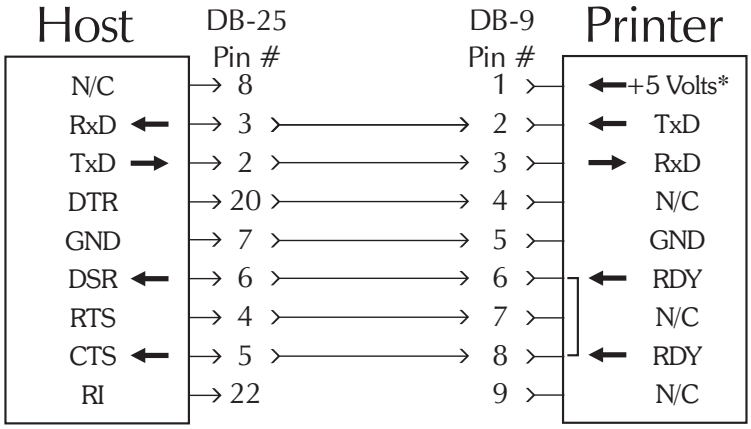
Problem	Solution or Reason
Prints only partial label or skips a label.	1. Perform AutoSense gap sensor adjustment on page 8. 2. Label caught on print head. 3. Print head is not properly latched. 4. Possible software problem. Check the printer memory configuration. Refer to the EPL2 Programming manual.
Printing stops and STATUS indicator lights ORANGE or RED.	1. Perform AutoSense gap sensor adjustment on page 8. 2. Possible problem with label stock. Use only approved labels and tags. 3. Possible label jam. 4. Insufficient memory for label size. Check the printer memory configuration. 5. Possible software problem. Refer to the EPL2 Programming manual.

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')

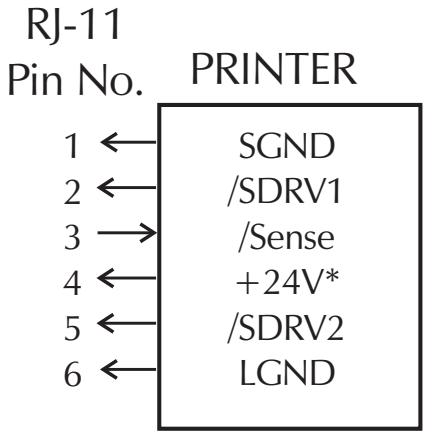


Female DB-25 to Male DB-9
Cable P/N 300018-006 (6')

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

Cash Drawer Cable Wiring

The figure below displays the pin assignments for the printer's retail cash drawer interface. Refer to the cash draw manufacturer's documentation for proper drawer wiring.

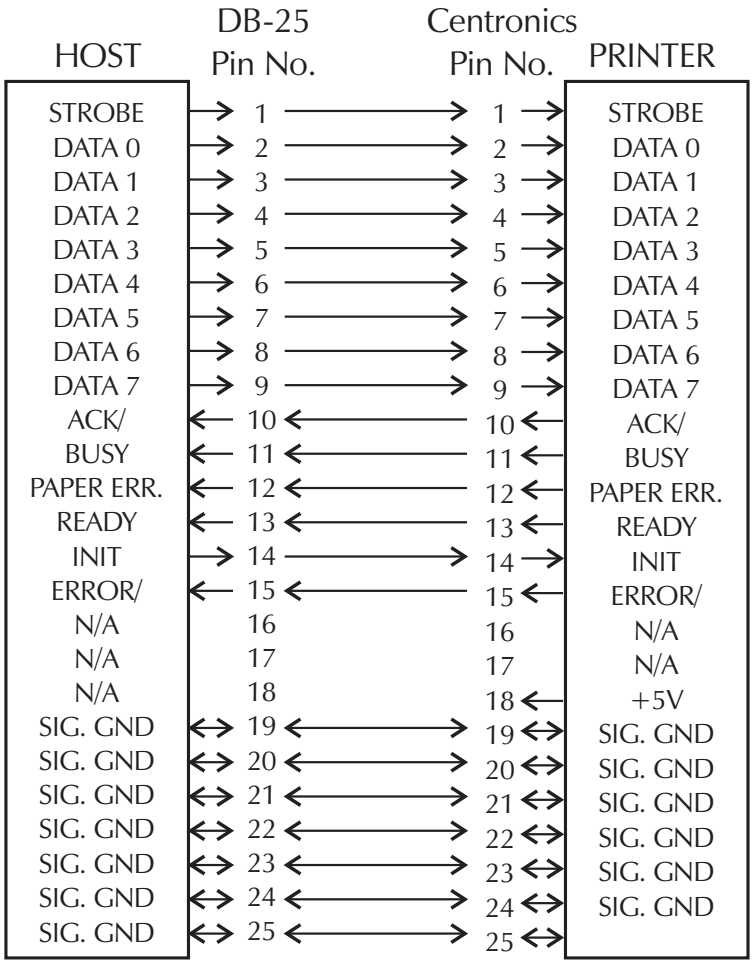


Male RJ-11

*+24 volts D.C. at no greater than 1.5 amps.

Parallel Interface Cable Wiring

The figure below displays the cable wiring required to use the printer's Centronics parallel interface.



Female DB-25 to Male Centronics (Cable)

+5 volts at 300 mA for external device (e.g. KDU or scanner)

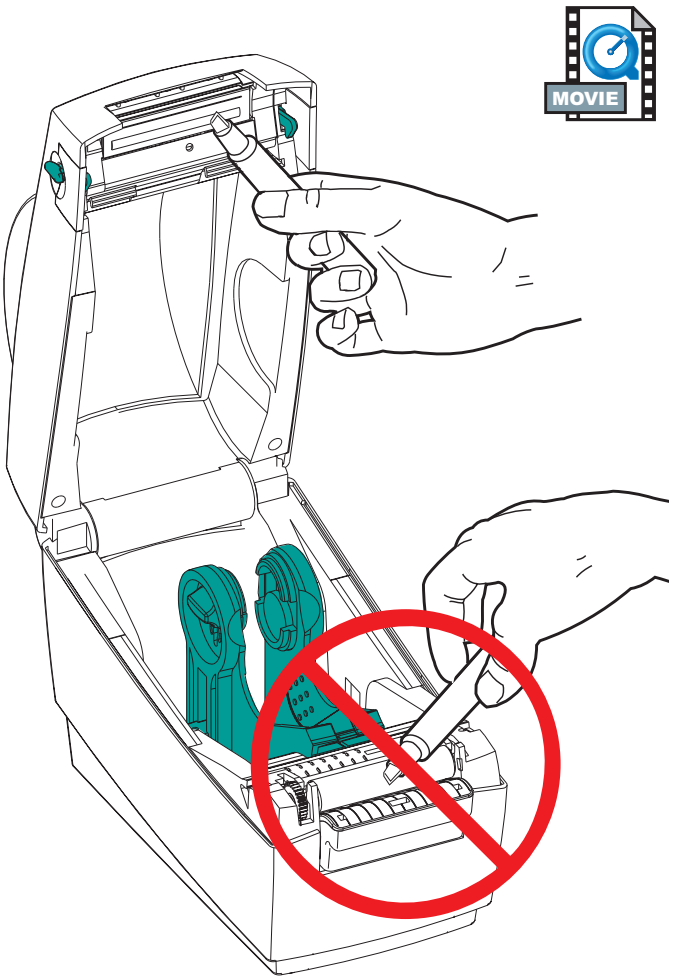
Cleaning the Print Head

When you load new media, you can also clean the print head.

Rub Cleaning Pen Across Dark Area of Print Head

Wait One Minute Before Closing Printer

Do Not Clean Roller

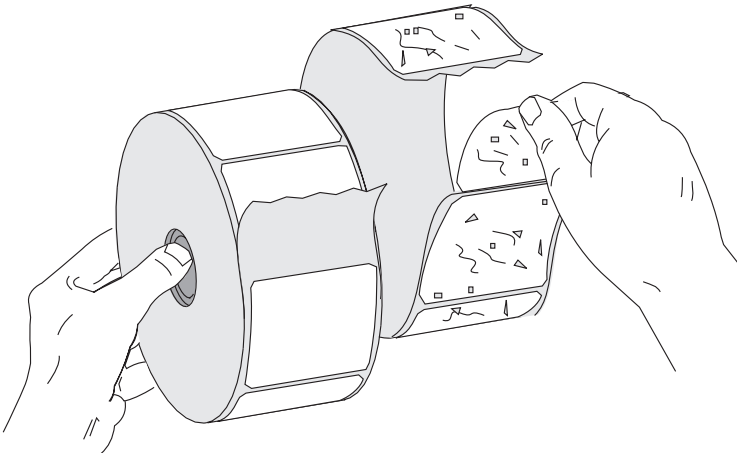


Preparing Media, Paper, and Labels Before Loading

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.

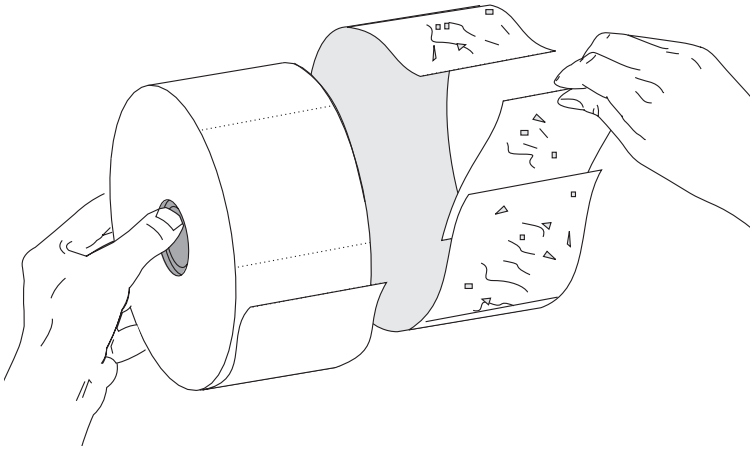
Label Rolls

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 occurance damages the print head and is not covered under your warranty.

980346- 001A