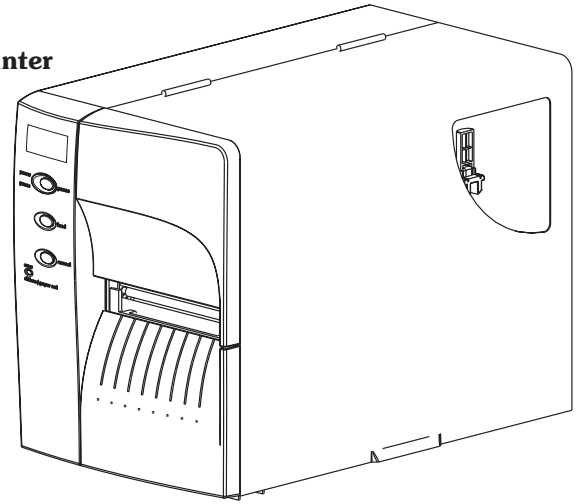
UPS
2348+ Thermal Printer
Quick Start

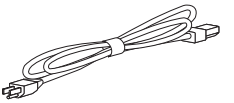
Unpack Your Printer

Printer



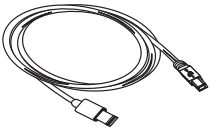
Quick Start

Power Cord

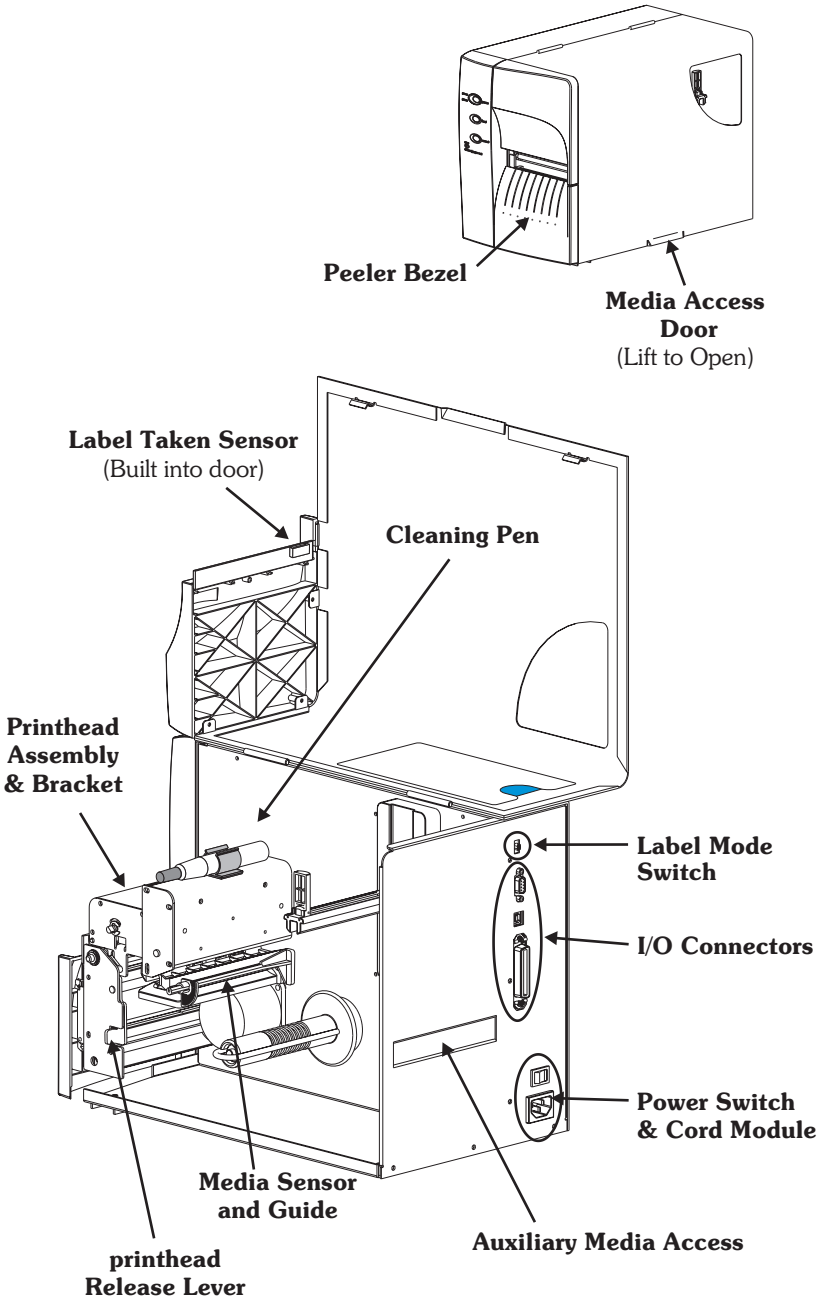


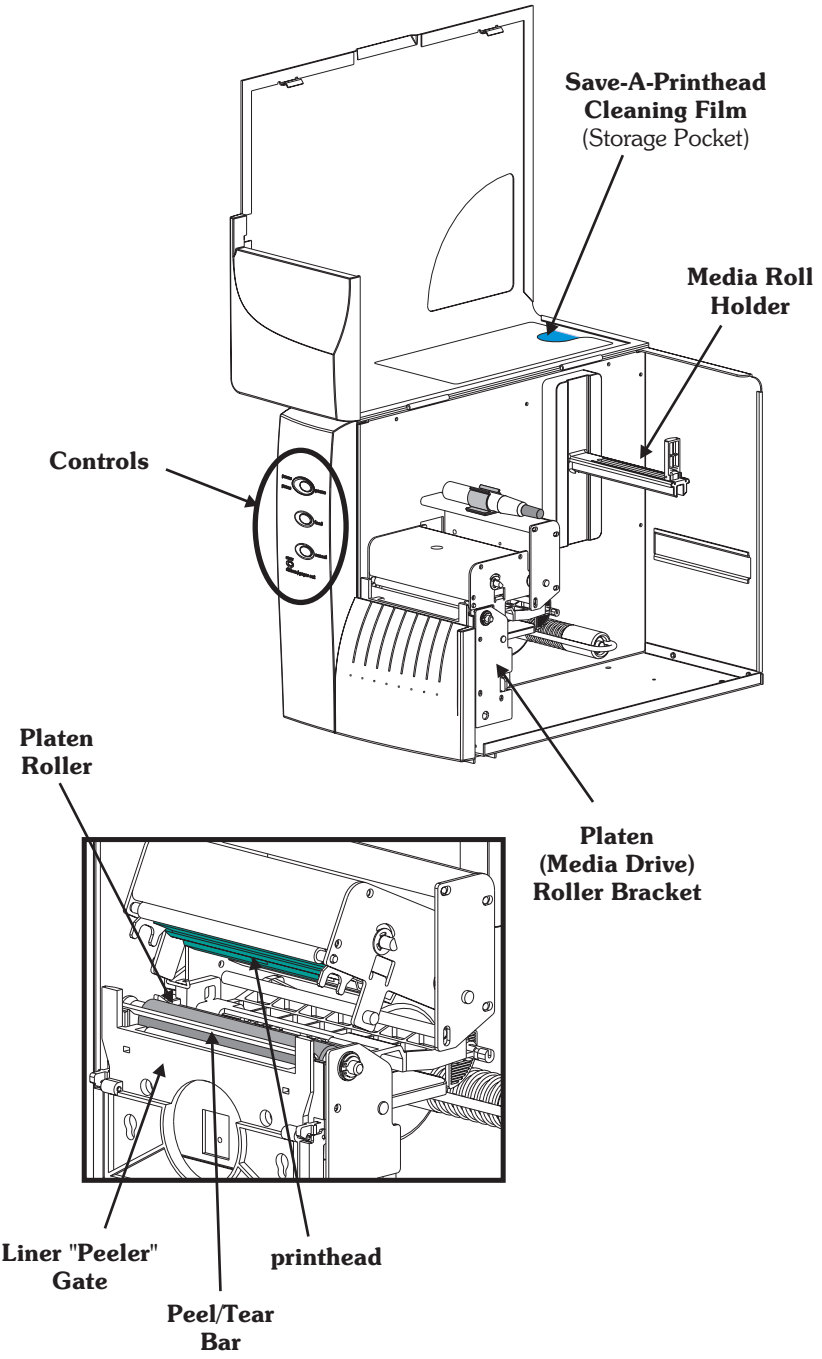
Parallel Cable

USB Cable

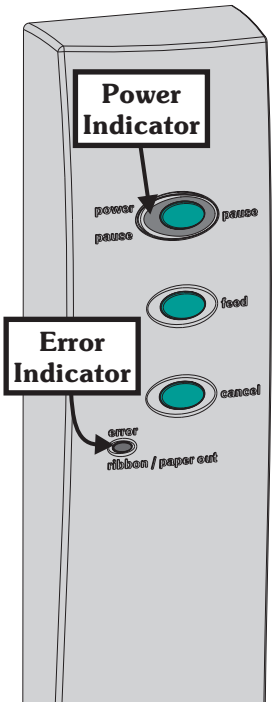


Note: Ethernet option printers do not include any interface cables.


Peeler Bezel
Media Access Door
(Lift to Open)
Label Taken Sensor
(Built into door)
Cleaning Pen
Printhead Assembly & Bracket
Label Mode Switch
I/O Connectors
Power Switch & Cord Module
Media Sensor and Guide
printhead Release Lever
Auxiliary Media Access


Save-A-Printhead
Cleaning Film
(Storage Pocket)
Media Roll
Holder
Controls
Platen
Roller
Platen
(Media Drive)
Roller Bracket
Liner "Peeler"
Gate
printhead
Peel/Tear
Bar

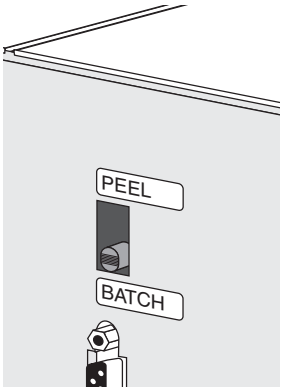
Controls and Indicators



Power Switch		
OFF	**0** = Off	
ON	**1** = On	

Button	Function
PAUSE	**Press Once** - Halt batch printing.
	Press Second Time - Resume batch printing operation.
FEED	**Press Once** - Feed one label or "form".
	Press & Hold - Will feed labels until the **FEED** button is released.
CANCEL	**Press Once** - resets and terminates any print operation in progress and clears the command input buffer.

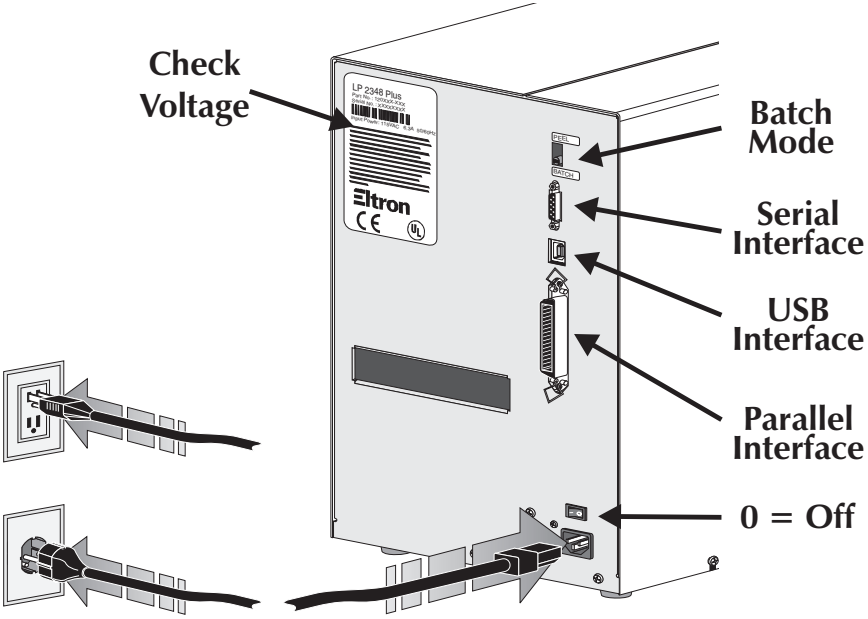
Indicator LEDs		Condition Report
POWER	**ERROR**	
On Solid	OFF	Power On
Flashing	OFF	Pause
OFF	Flashing	Printhead Open
OFF	On Solid	Labels Out
OFF	On Solid	Hardware Error



Label Mode Switch	
Mode	**Description**
Peel	Print one label and pause. Remove label. Prints next label. Repeats until print operation is completed. Use label liner rewinder to *peel* the liner from the label.
Batch	Standard operation - Prints one or more labels until the print form operation is complete.

Installation

Connect the printer power and interface cable.



The printer's serial port interface (RS-232) default setting is 9600 baud, No parity, 8 Data bits and 1 stop bit.

Warning - Shock Hazard
See the back page, page 27, for important information on handling, set-up and installation of your printer.

If you use a USB cable, the **New Hardware** and **Printer Wizards** help you. Attach the USB cable between the printer and the computer. Turn on the printer. The computer detects a USB device, installs USB printer support; then installs the printer driver.

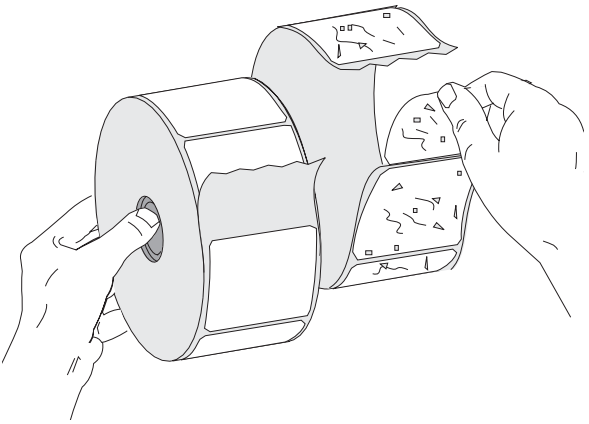
If the computer prompts you to browse to file locations, find the **OEMSETUP.INF** and **USBPRINT.INF** files under the UPS folder: **c:\UPS\Common\Foss\Drivers**

Before Loading Media

You must remove the outside length of media (that is, one, full revolution of labels and any liner). Tape or adhesive holds the loose end and the outside length of media becomes contaminated when handled or stored.When you remove this part of the media, you remove the oils, dust, and adhesives that contaminate it.

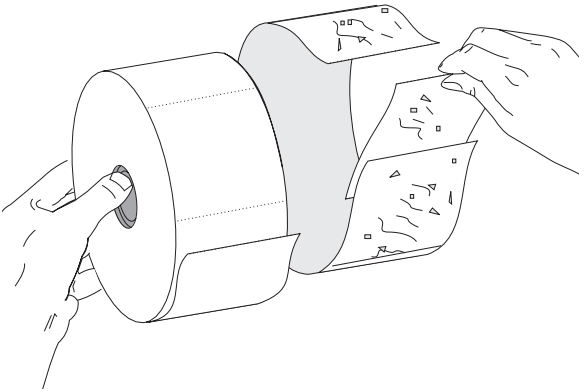
Labels

Remove all labels that are held by adhesives or tape



Tag Stock

Detach both ends of the bottom tag



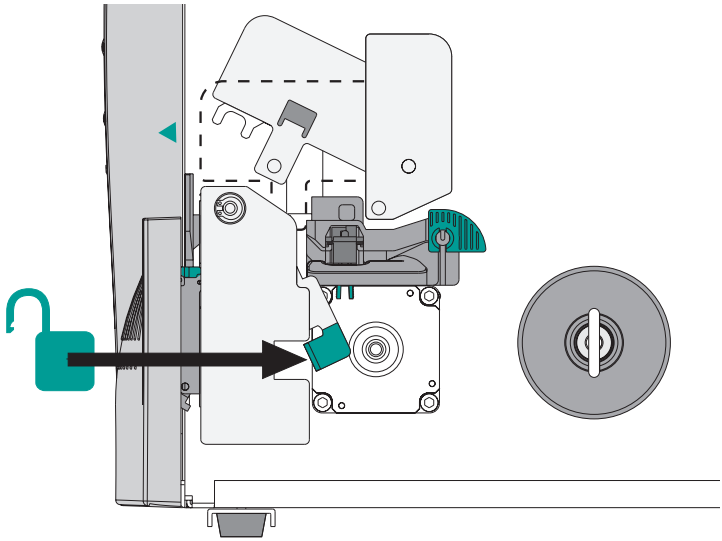
You must avoid dragging adhesive or dirty media between the printhead and platen. Such an occurrence damages the printhead and is not covered under your warranty. Using clean media prevents damage and reduces wear on the printhead and platen.

Loading Media

Use approved media for best results.

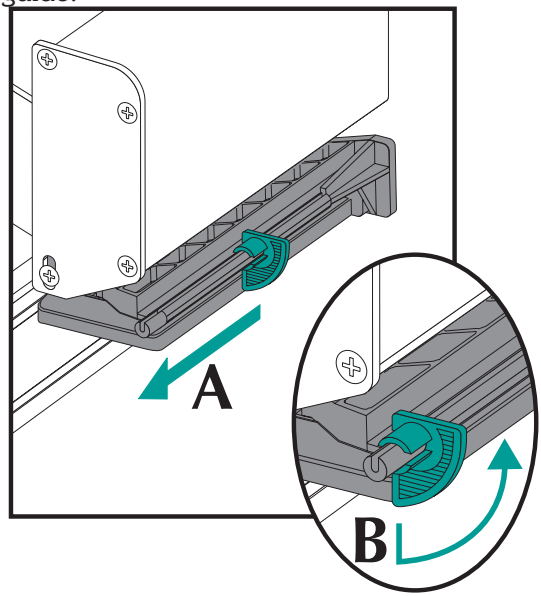
Step 1

Open printhead.



Step 2

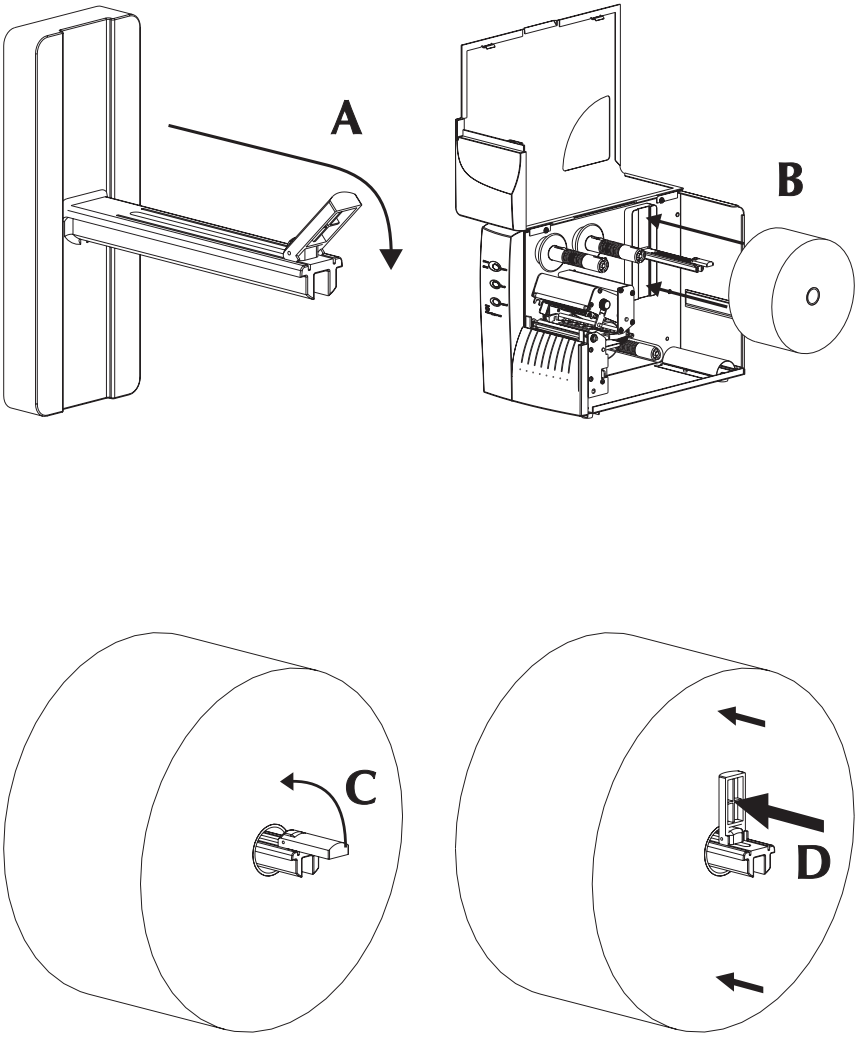
Open media guide.



Step 3

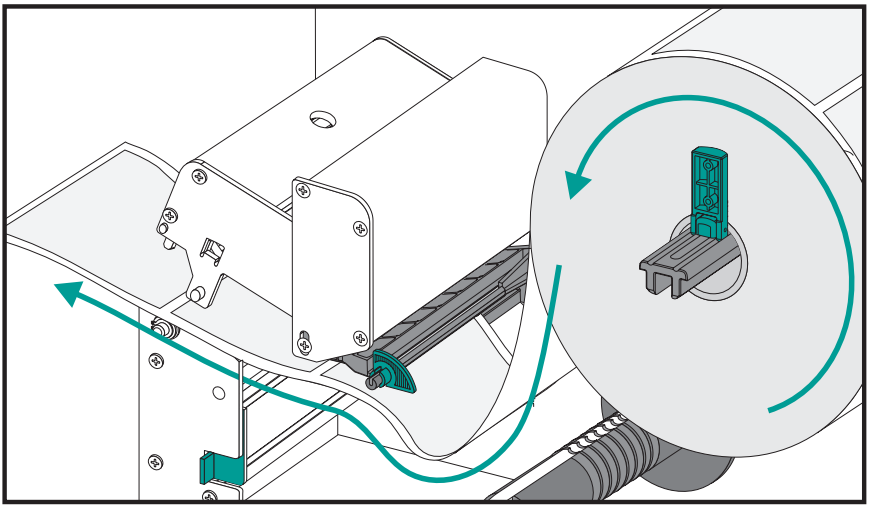
Mount and thread the media.

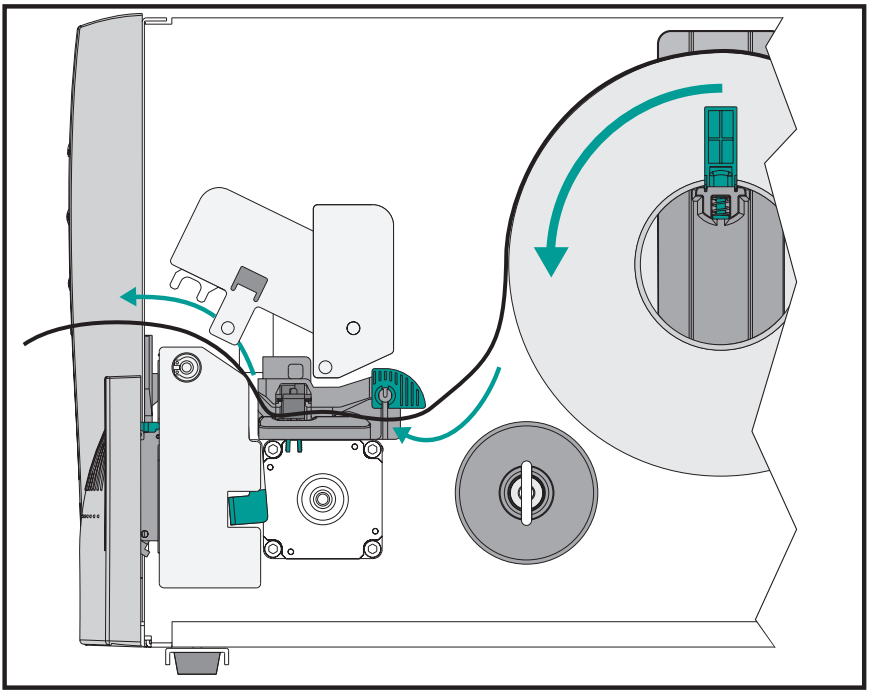
Push the roll tight against the inside roll bracket with the green flip arm.



Step 4

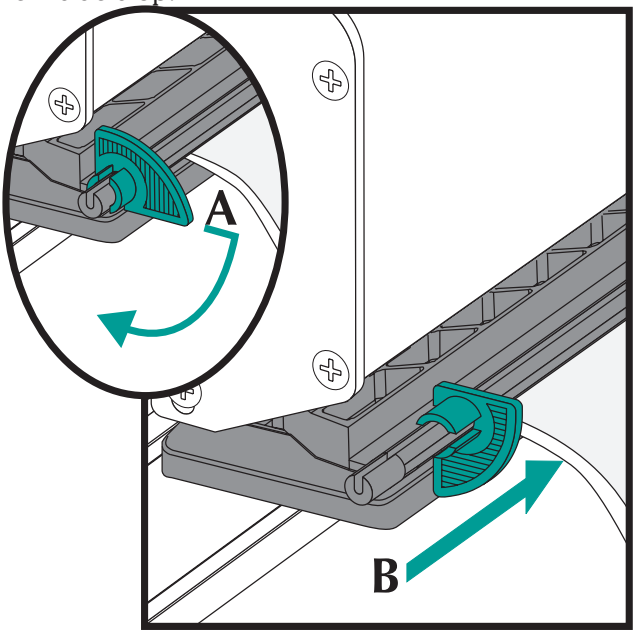
Thread the media through the media guide and printhead.





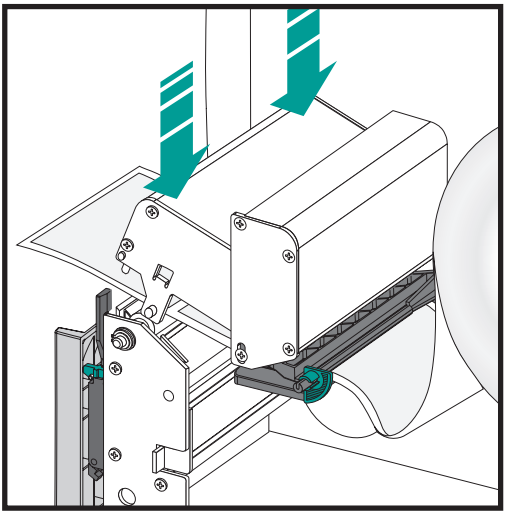
Step 5

Close media guide. Slide the guide against the media until the media touches the inside stop.



Step 6

Close the printhead.

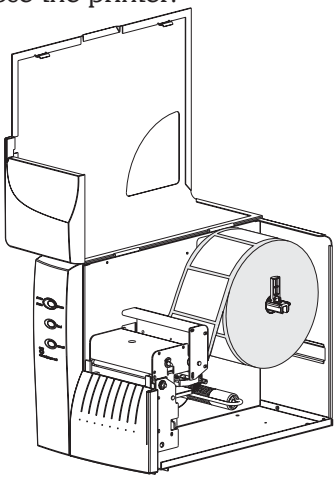


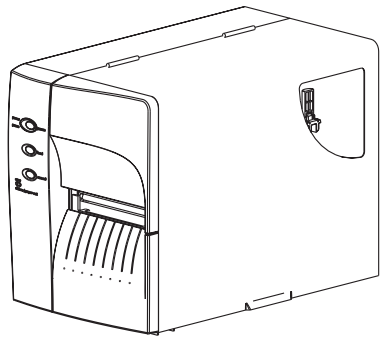
AutoSense: Media Calibration

Run the printer's AutoSense routine to calibrate the printer for new media.The printer will measure the label, liner and gap parameters and print a configuration status label.

Step 1

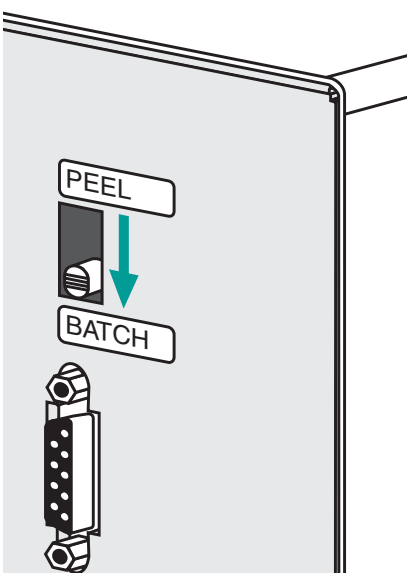
Close the printer.

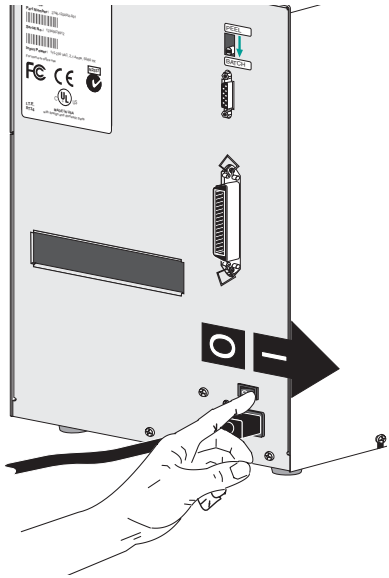




Step 2

With the label mode switch set to "Batch", turn on the printer.

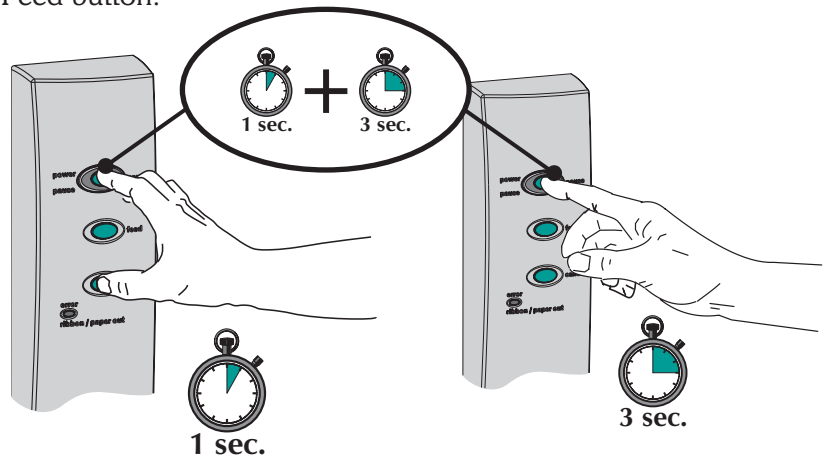




AutoSense: Media Calibration

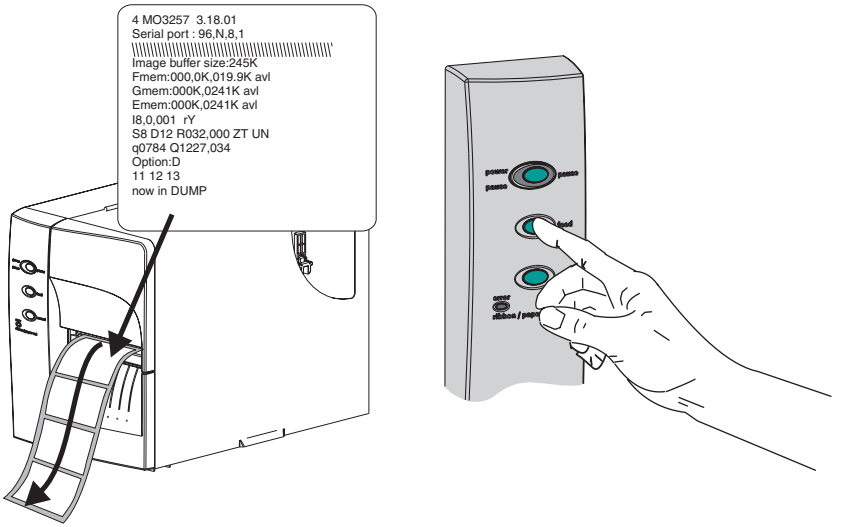
Step 3

Press and hold the Cancel and Feed buttons for one (1) second and then release only the Cancel button. After three (3)more seconds, release the Feed button.



Step 4

A "Dump" mode configuration status label will print. Press the FEED button (do not hold down feed button) until “Out of DUMP” prints.

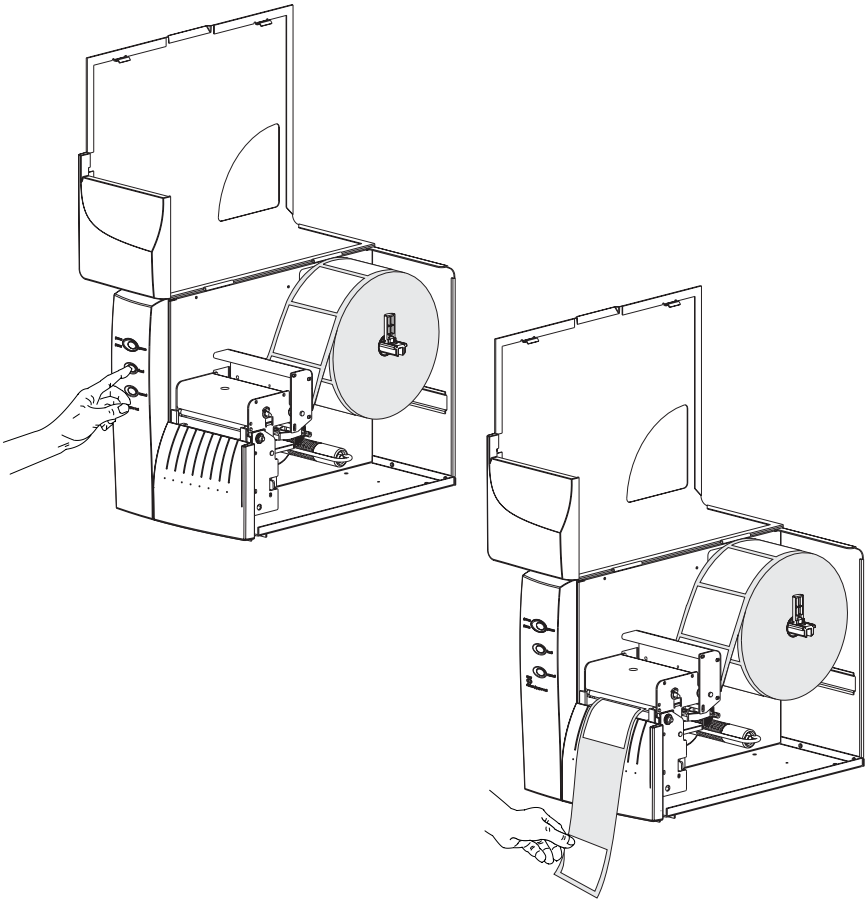


Label Peel Mode

The printer can present a single peeled label and wind the backing. Removing the presented label will prompt the printer to print the next label.

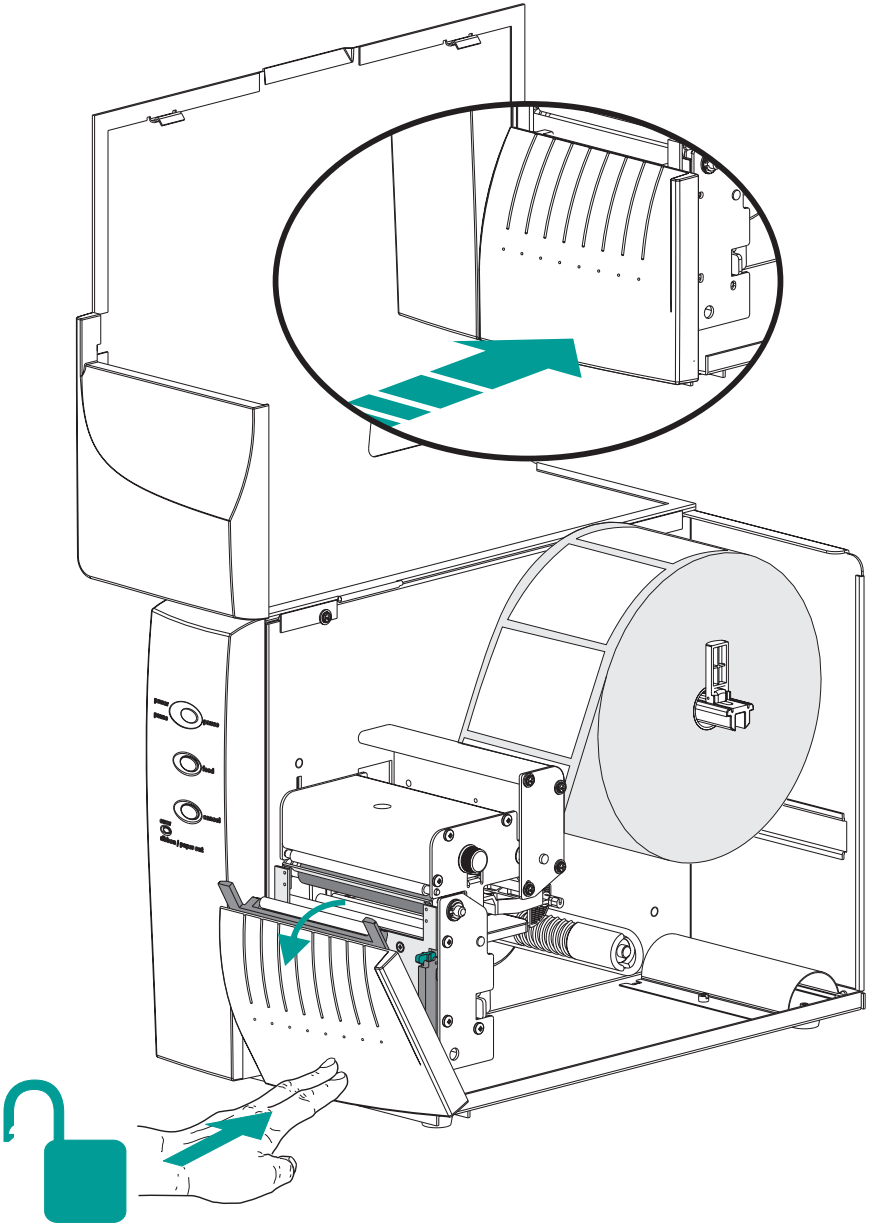
Preparation

Feed approximately 16 inches of media and remove the exposed labels from the liner.



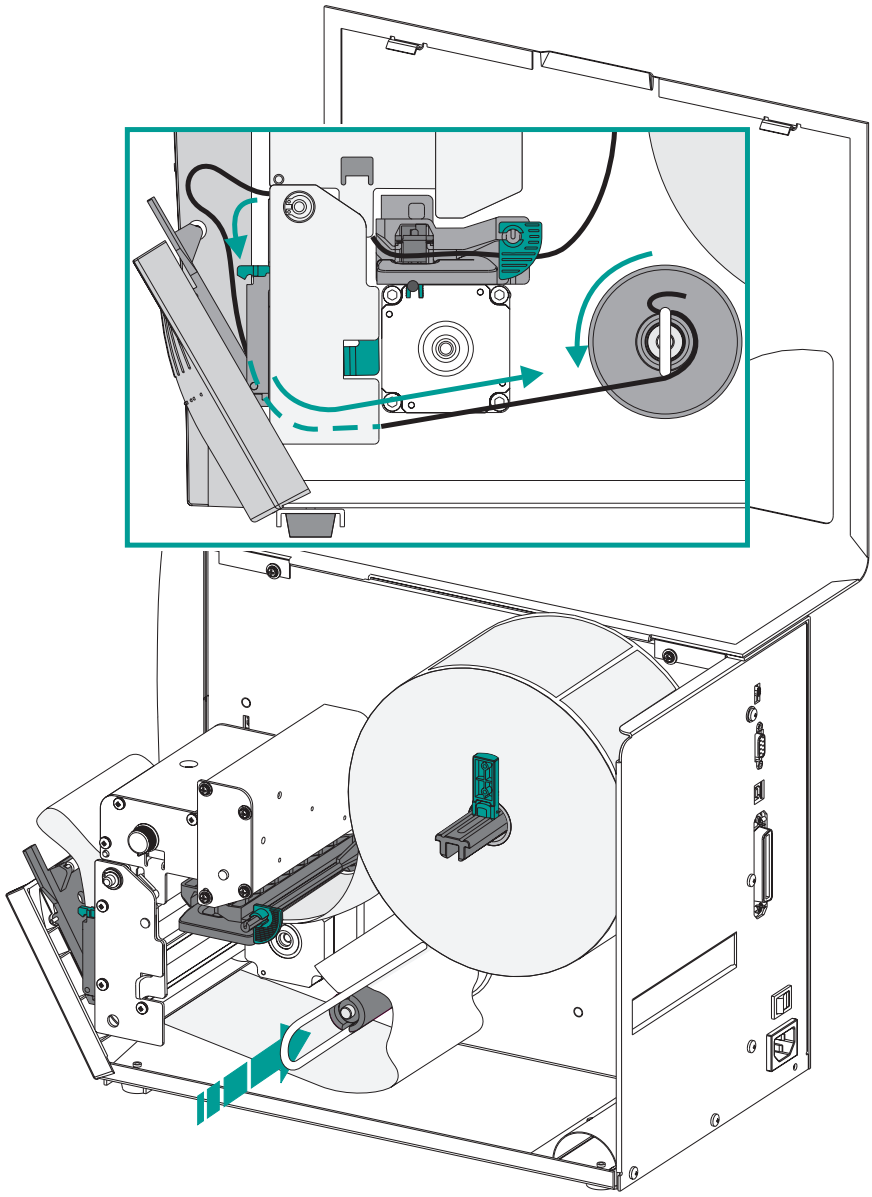
Step 1

Open the peeler gate. Push the peeler bezel in the lower middle area and the gate will snap open.



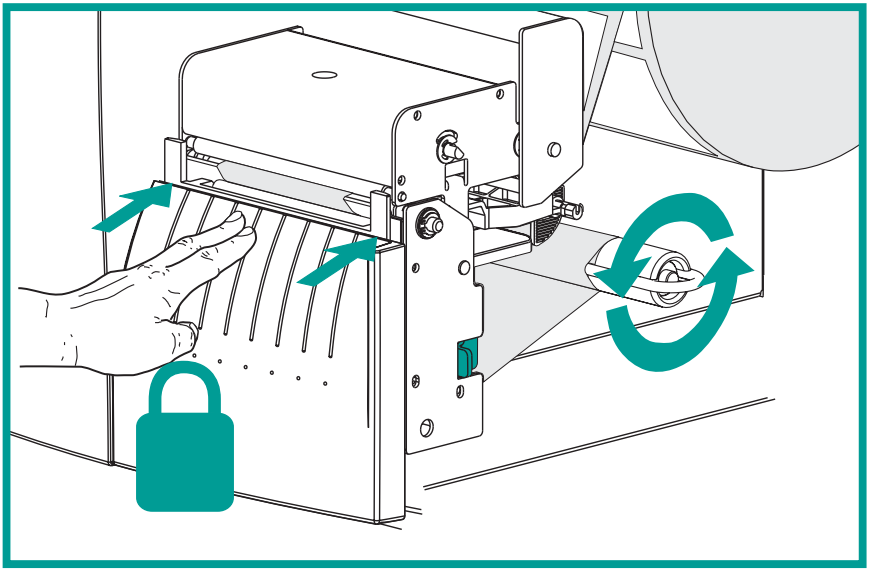
Step 2

Thread the media through the peeler gate and attach the media to the rewind tube with the clip.



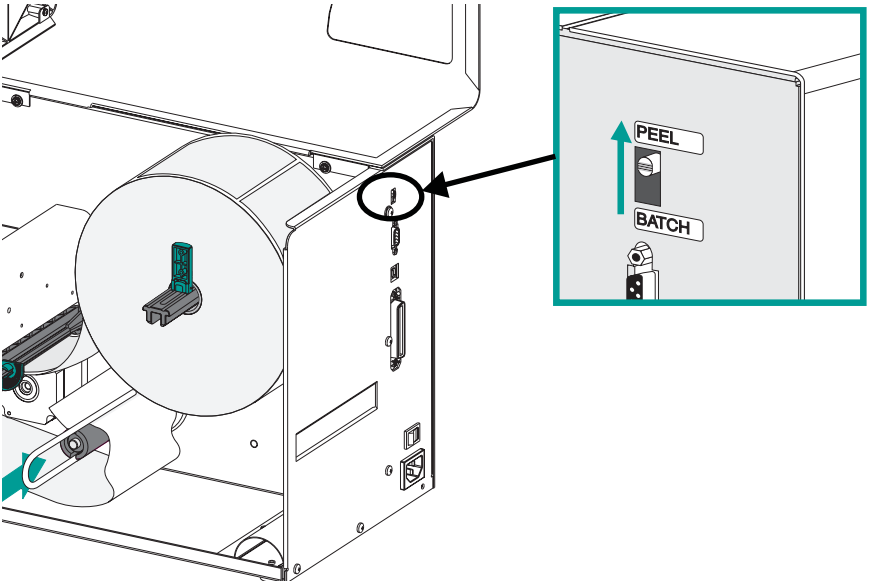
Step 3

Wind the rewind tube counter-clockwise (to remove liner slack) and close the peeler gate.



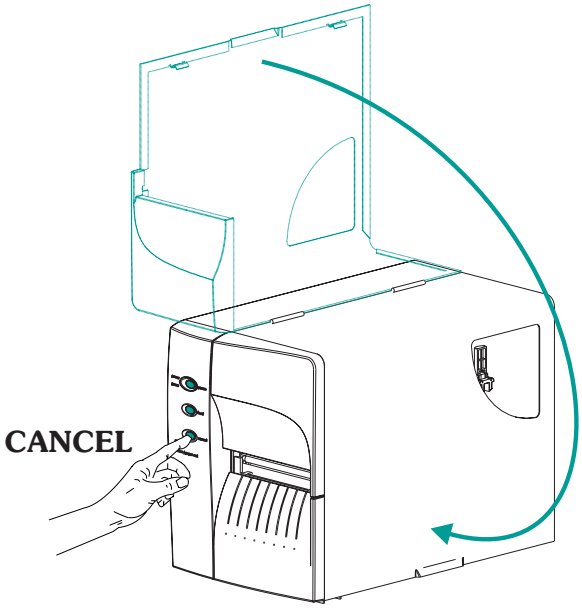
Step 4

Set the Label Mode switch on the rear panel to PEEL.



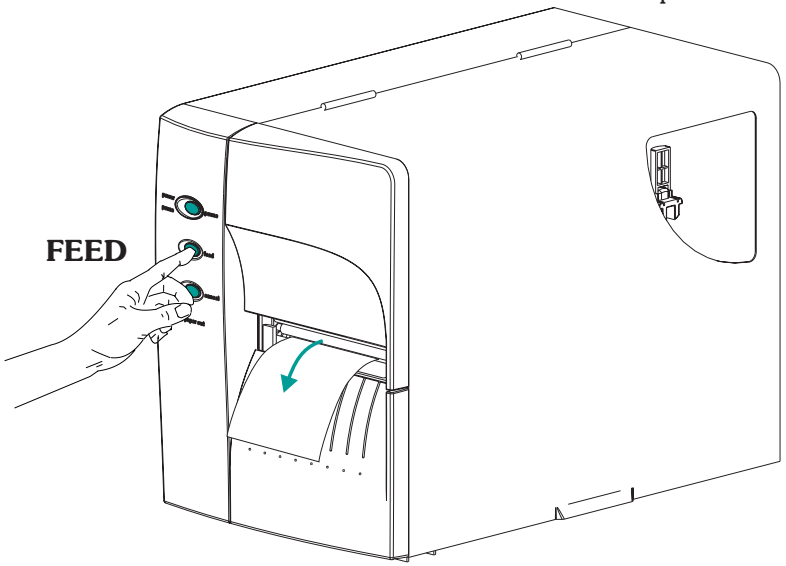
Step 5

Press CANCEL to initialize the Peel Mode. Carefully close the printer door.



Step 6 - Optional

Press the FEED button to remove slack and the first label is presented.



Using UPS Internet Shipping to Install the Printer

❶ 1. Click on the Shipping tab after Log In.

❷ Click on '**Create a Shipment**'. Accept "Terms and Conditions" to continue.

❸ Click on '**Set Preferences**'.

❹ Scroll to Printing Preferences and click '**Install UPS Thermal Printer**'.

❺ Follow the instructions to install the printer driver and plug-in.

❻ Now you are able to print via UPS Internet Shipping using your UPS 2348 Thermal Label Printer.

If you have any questions, call the UPS Internet Shipping Support Help Desk at 877-289-6418.

Cleaning Your Printer

The printer's media path allows for cleaning and clearing of media jams. The user can clean the printhead, platen roller and areas adjacent to the media path surfaces.

Warning -Shock Hazard
Always turn the printer off before cleaning.

The media path surfaces (except the printhead) can be cleaned with a lint free, clean, damp cloth very lightly moistened with medical grade alcohol. Alcohol may be used to help remove any adhesive or label material buildup.

Warning - Static Discharge.
Never touch the printhead. Always clean the printhead with a cleaning pen (to protect the printhead from static discharge and fibers).

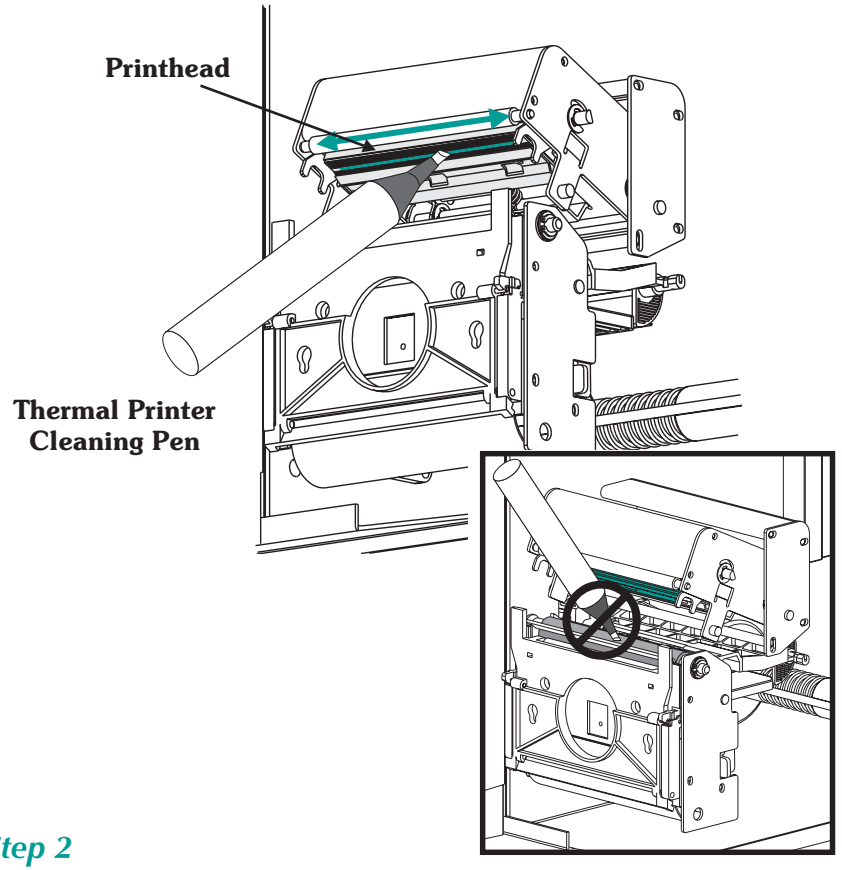
If a label has become jammed in the printer, remove the label and any adhesive residue, immediately. Adhesive may spread through out the printer's media path if not completely removed. Many adhesives are permanent and have short "set" times.

Cleaning the Print Head

As you use your printer, the printhead may become contaminated resulting in poor print quality. Whenever new labels are loaded into the printer, the printhead should be cleaned with a cleaning pen.

Step 1

Open the printer and the printhead carriage.



Step 2

Gently rub the cleaning pen across the amber area of the printhead.

Allow the printhead to dry for 1 minute before loading labels.

Do Not Clean the printhead with sharp objects! Only used approved cleaning materials.

Print Head Care

The main factors that contribute to reduced head life are:

Touching the printhead! Static electricity can discharge and damage the printhead. The body's oils and acids also damage the printhead.

Cleaning - For optimum performance, clean the printhead regularly after every roll of direct thermal labels.

Abrasion - Over time, the movement of media/ribbon across the printhead will wear through the protective ceramic coating, exposing and eventually damaging the print elements (dots).

Use of proper media - Use only approved media. Non-approved media may contain chemicals that can destroy or dramatically reduce the printhead's life.

Temperature - printhead density (heat) setting. Set the density to the lowest possible setting that prints a good image.

Print Speed - Fast print speeds have higher friction levels on the printhead's surface.

Regular printhead Conditioning - Use the Save-A-Printhead cleaning film to remove printhead contamination buildup quickly and easily. (Part No.105950-047)

Printhead Conditioning

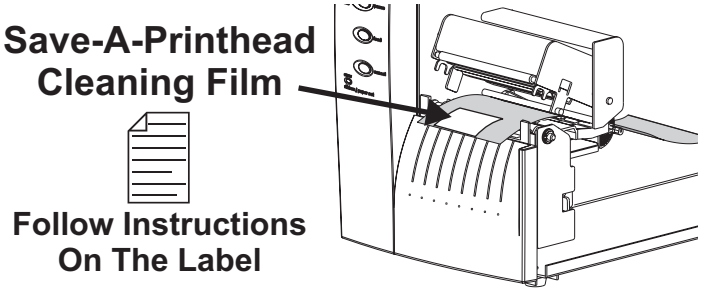
Every third new roll of labels the printhead needs regular printhead conditioning. Use the Save-A-Printhead cleaning film to keep particle and contamination build-up from occurring.

Using the Save-A-Printhead cleaning film:

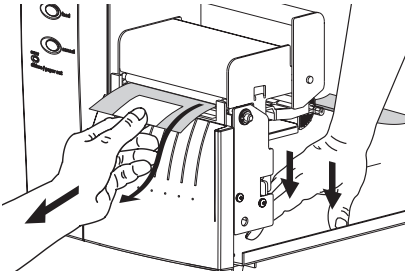
1. Turn the printer power off. Remove the media.

2. Clean the printhead with the cleaning pen.

3. Insert the cleaning film with the label near the printhead.



4. Close and latch the printhead. Grasp the cleaning film and pull it out of the front of the printer.



5 Clean the printhead with the cleaning pen.

6. Record the date cleaned on the rear of the film's label.

7. Load media and resume printing.

Cleaning the Platen Roller

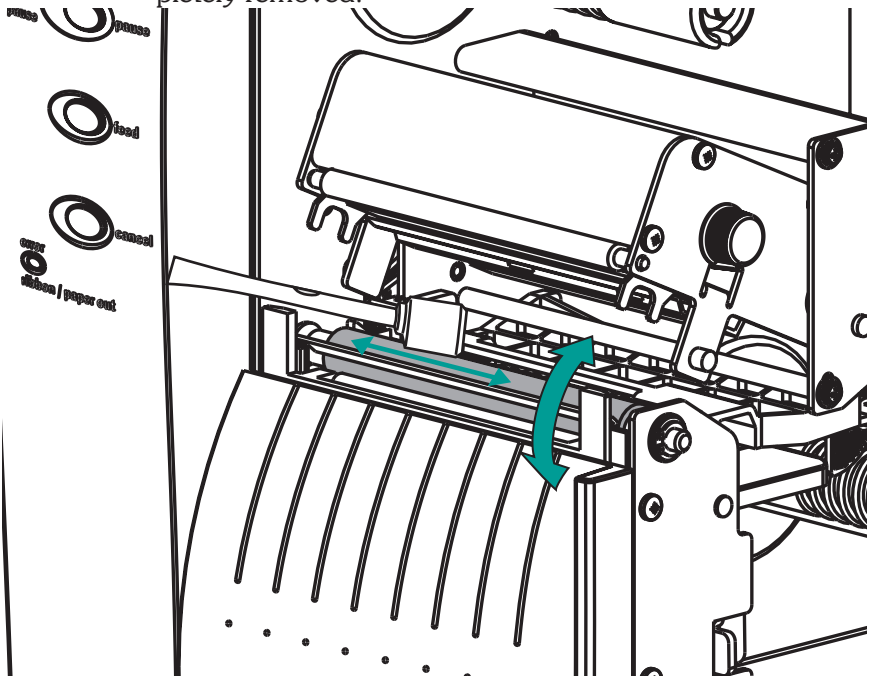
The platen (drive) roller normally does not require cleaning. Paper and liner dust can accumulate without effecting print operations. Contaminates on the platen roller can damage the printhead or cause the media to slip when printing. Adhesive, dirt, general dust, oils and other contaminates should be cleaned immediately off the platen.

The platen can be cleaned with a fiber free swab (such as a Texpad swab) or a lint free, clean, damp cloth (such as Kimwipes) very lightly moistened with medical grade alcohol (95% pure or better). *Do Not Use the Cleaning Pen!*

1. Open the printhead and remove the media.

2. Clean the platen surface with the alcohol moistened swab. Hand rotate the platen while swabbing.

3. Repeat this process two to three times with a new swab to remove residual contaminates. Adhesives and oils, for example, may be thinned by the initial cleaning but not completely removed.



Printer Configuration Settings

The printer has flash (non-volatile) memory to store printer configuration settings. The settings are stored in flash memory and are set by programing, printer drivers or the AutoSense routine. The settings are shown on the Dump mode printout or can be reported back to the host via the serial port or USB interfaces.

The data printed out above the stripe bar is used to identify the printer. The first line has Print Width (**4"**), Model Code (**MO3257**) and Firmware Version (**V4.XX**.XX XXX). The next lines are Serial Number (**S/N: XXXXXXXX**) and serial port setting.

The following are the basic settings stored in the printer:
Speed (**S**)
Density (**D**) or heat applied
Form (label) length and gap in dots (**Q**)
Form (label) width in dots (**q**)
Serial port - Set by command line programming with **Y**command
Margin (**R**)
Buffer Mode (**r**)

Options: **D**
Print Mode is Direct Thermal (**OD**)

Sample Dump Mode Printout

```
4" MO3257    V4.15.29 065
S/N: 55035724
Serial port:96,N,8,1

Image buffer size:0245K
Fmem:002.0K,058.8K avl
Gmem:000K,0069K avl
Emem:000K,0069K avl
I8,0,001 rY JF WY
S8 D07 R016,000 ZT US
q816 Q01022,028
Option:D
14 17 25

Now in DUMP
Press Feed to exit
```

Warning - Shock Hazard

Never operate the printer in a location where it can get wet. Personal injury could result.

Caution - Printer Setup & Handling

1)When installing or modifying the printer setup or configuration, <u>ALWAYS TURN POWER OFF Before</u>:
A) Connecting any cables.
B) Performing any cleaning or maintenance operations.
C) Moving the printer.
2) Damage to the printer interface connector, accessories or door may result from placing the printer on it's front bezel or backside during unpacking or handling.

Warning - Static Discharge

The discharge of electrostatic energy that accumulates on the surface of the human body or other surfaces can damage or destroy the printhead or electronic components used in this device. DO NOT TOUCH the printhead or the electronic components under the printhead carriage.

LP2348+ Thermal Printers

European Council Directive		**Compliance to Standards**	
89/336/EEC	EMC Directive	EN55022-B,1998	RF Emissions Control
	EMC Directive	EN50024,1998	Immunity to Electromagnetic Disturbances
	EMC Directive	EN61000-3-2: 1995	Harmonic Emissions
	EMC Directive	EN61000-3-3: 1995	Voltage Variation
	CB Scheme	EN60950 IEC60950	Product Safety

FCC - Declaration Of Conformity:

Models: LP 2348+ conform 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 A requirements.
Cet équipement est conforme à l'ICS-003 classe A de la norme Industrielle Canadienne.

©2004 Zebra Technologies Corporation, all rights reserved.
UPS®, UPS OnLine® and UPS OnLine® WorldShip® are registered trademarks of United Parcel Service of America, Inc. Windows® is a registered trademark of Microsoft Corporation.
LP2348 and LP2348+ are trademarks of Zebra Technologies Corporation

&
980385-003