

Desktop Thermal Printer User's Manual

2722

2742

3742



Zebra Technologies Corporation

User's Manual No. 980344-001 Rev. A

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TRADEMARKS

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LP2722, TLP2722, LP2742, TLP2742 and TLP3742 Thermal Printers



European Council Directive		Compliance to Standards	
89/336/EEC	EMC Directive	EN55022-A 1995	RF Emissions control
92/31/EE	EMC Directive	EN50082-1 1992	Immunity to Electromagnetic Disturbances

FCC - DECLARATION OF CONFORMITY:



Models: LP2722, TLP2722, LP2742, TLP2742 and TLP3742 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 B requirements.

Cet équipement est conforme a l'ICS-003 classe B de la norm Industrielle Canadian

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General Cautions and Warnings

This page describes general safety and maintenance warnings and cautions for the printer and are referenced throughout the manual.

Warning - Shock Hazard



The printer should never be operated in a location where it can get wet. Personal injury could result.

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 print head or electronic components used in this device. DO NOT TOUCH the print head or the electronic components under the print head assembly.

Caution - Printer Setup & Handling



*1)When installing or modifying the printer setup or configuration, **ALWAYS TURN POWER OFF Before:***

- A) Connecting any cables.*
- B) Performing any cleaning or maintenance operations.*
- C) Moving the printer.*

Media Warning



Always use high quality approved labels and tags. 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.

Media Reload Hint



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

Print Quality Tip



Print density (darkness) is affected by the heat energy (density setting) applied and by the print speed. Changing both Print Speed and Density may be required to achieve the desired results.

1

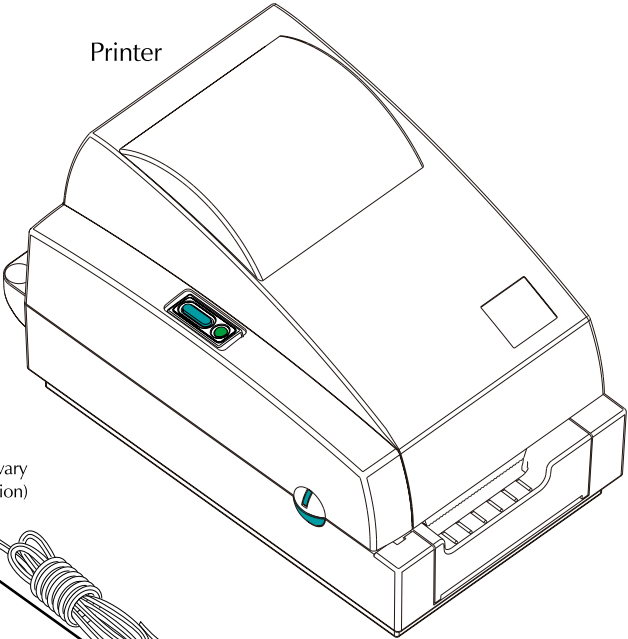
Installation and Operation

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

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

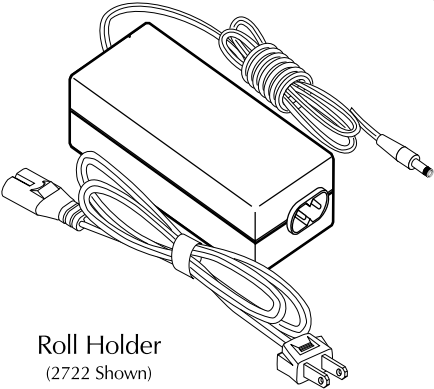
Unpacking Your Printer

Printer



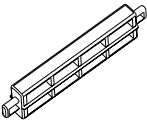
Power Supply

(Power Supply & Cord vary by model & voltage option)



Roll Holder

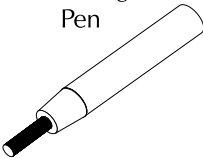
(2722 Shown)



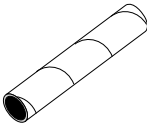
Software & Documentation CD



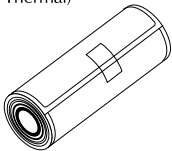
Cleaning Pen



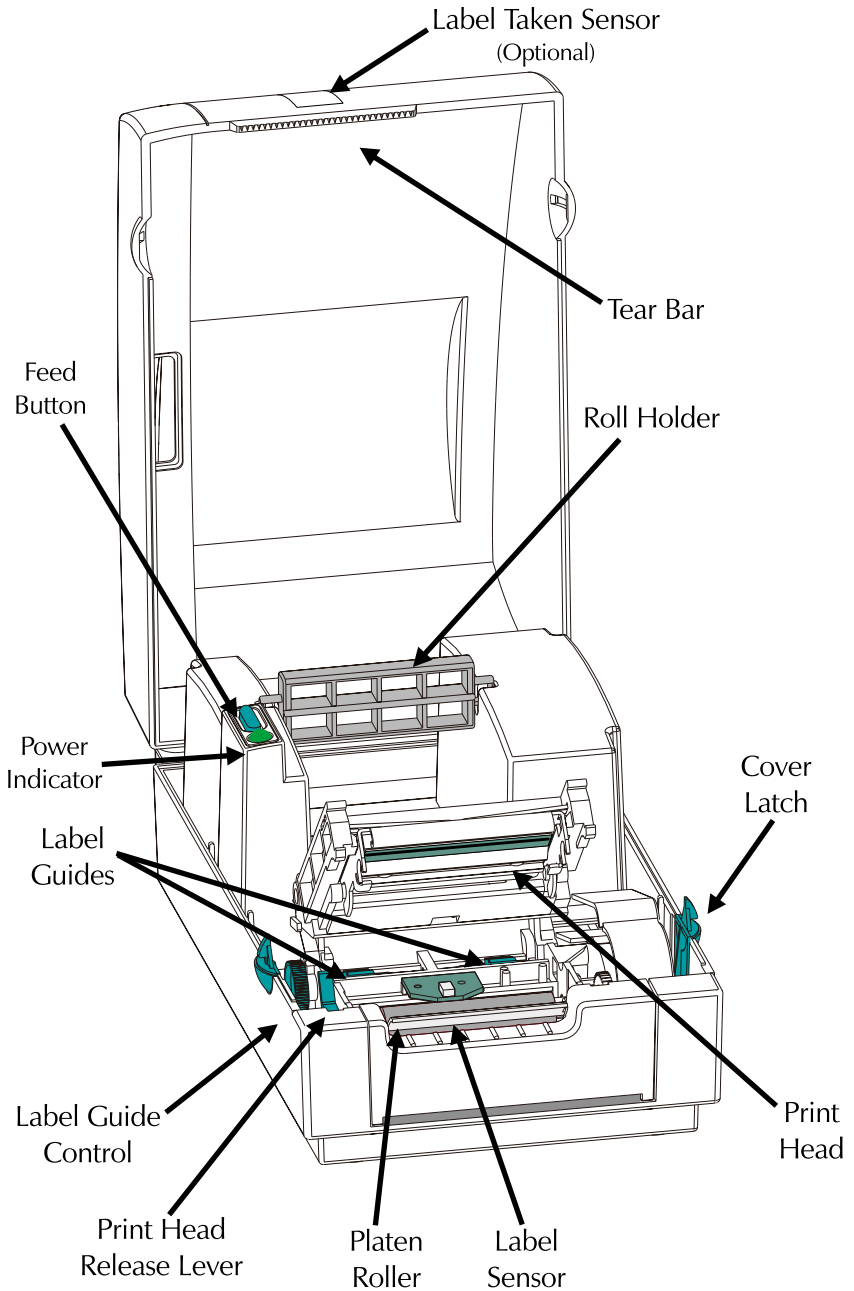
Ribbon Core
(TLP Printer Only)



Sample Labels
(Direct Thermal)



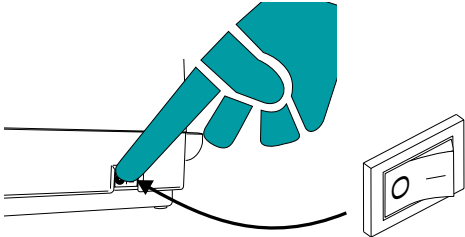
Getting To Know Your Printer



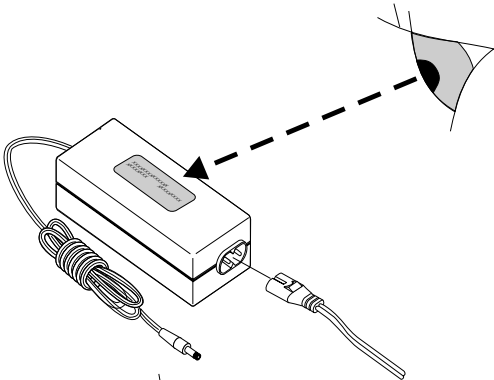
Installation The following steps will guide you through the installation of the printer, media and software.

Step 1 - Attach Power

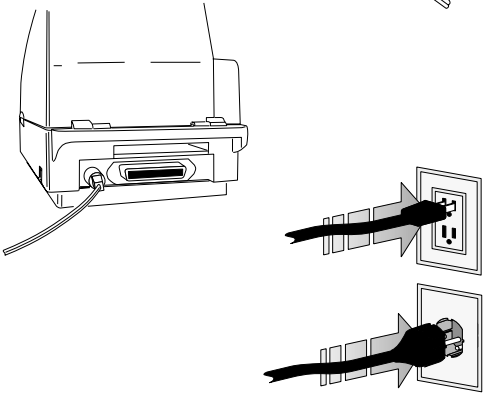
Power OFF



**Check Power
Module Voltage**



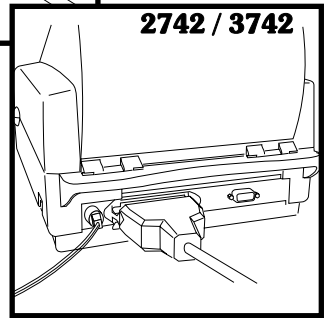
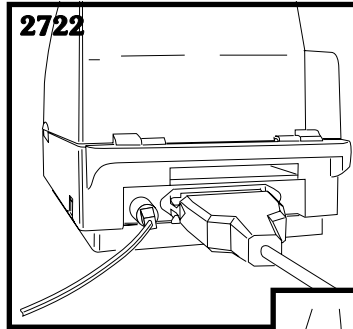
**Plug Into
Power Module**



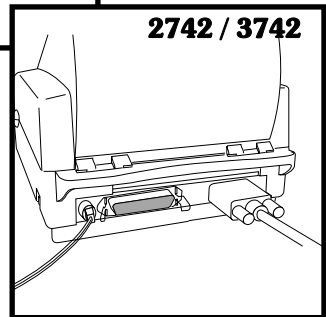
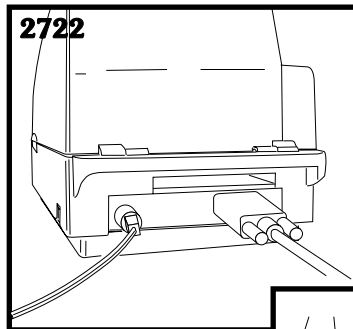
SHOCK HAZARD WARNING
See page iv

Step ② - Attach Interface Cable

Parallel Interface

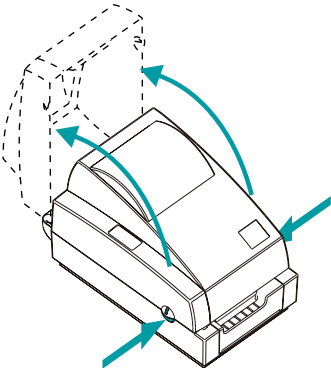


Serial Interface

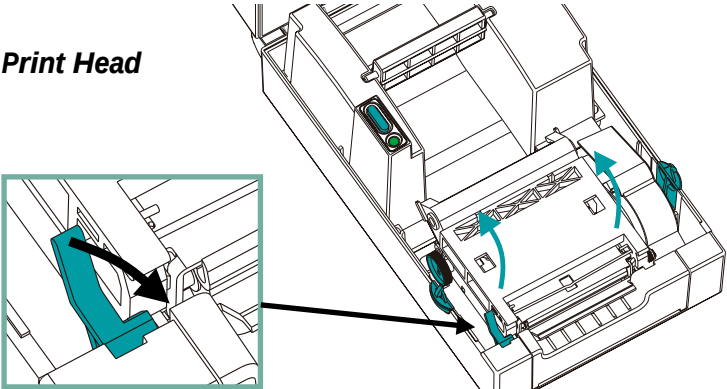


Step 3 - Load Media

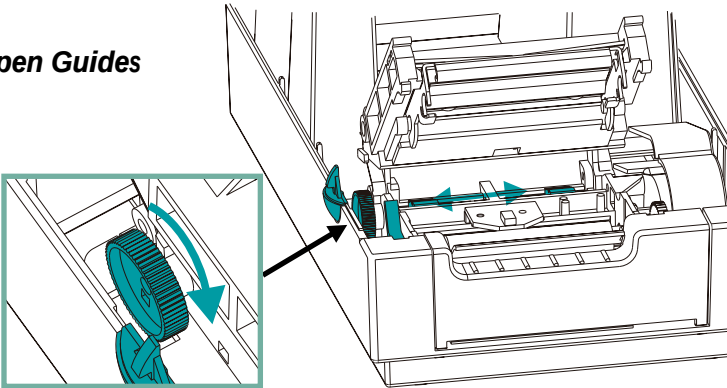
Open Cover



Open Print Head



Open Guides

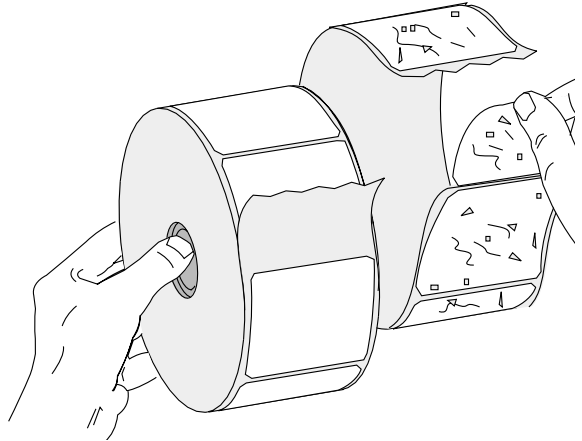


**Before You Load
Media in the
Printer**

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

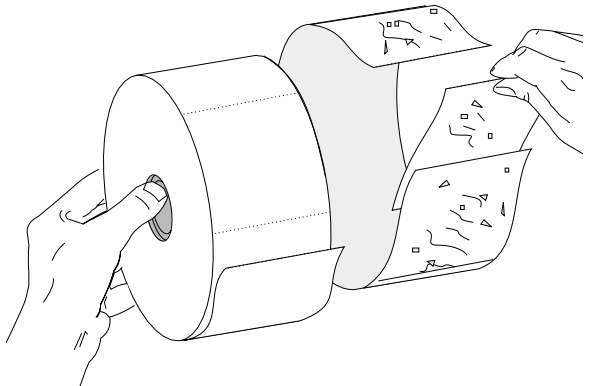
Labels

**Remove all labels
that are held by
adhesives or tape**



Tag Stock

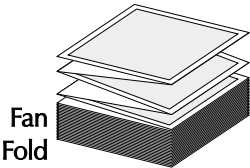
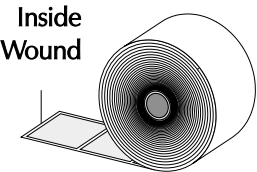
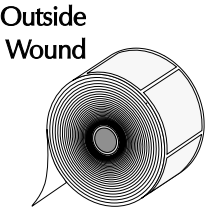
**Detach both ends of
the bottom tag**



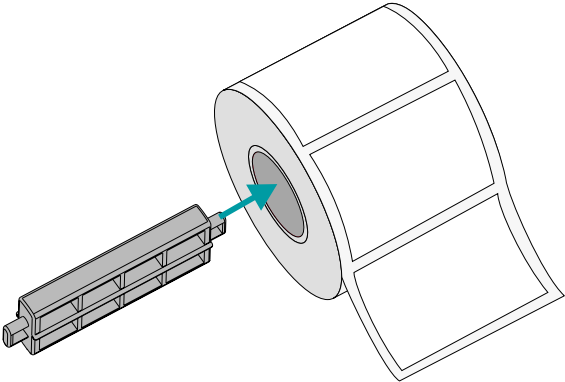
You must avoid dragging adhesive or dirty media between the print head and platen. Such an occurrence damages the print head and is not covered under your warranty. Using clean media prevents damage and reduces wear on the print head and platen.

Step 3 - Load Media (cont.)

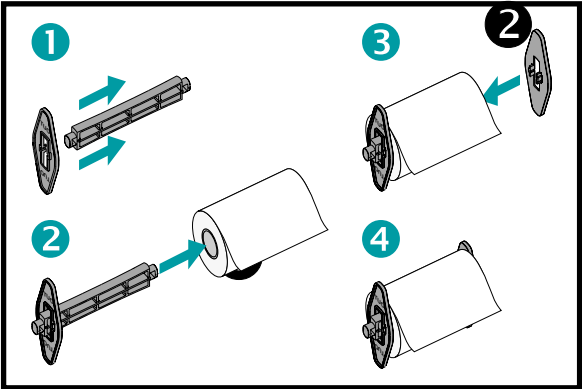
Media



2722
Install Roll

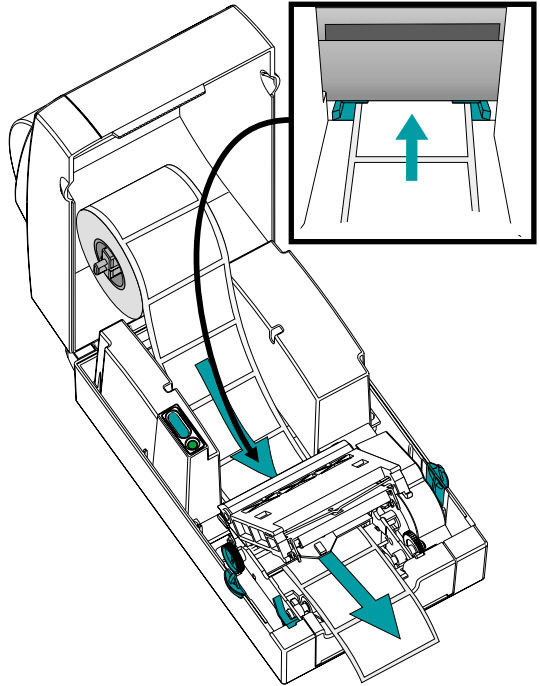


2742 / 3742
Install Roll

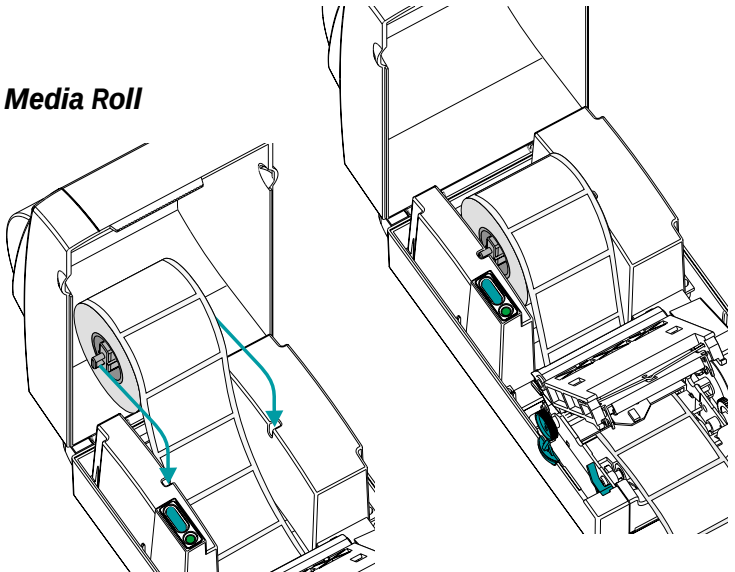


Step ③ - Load Media (cont.)

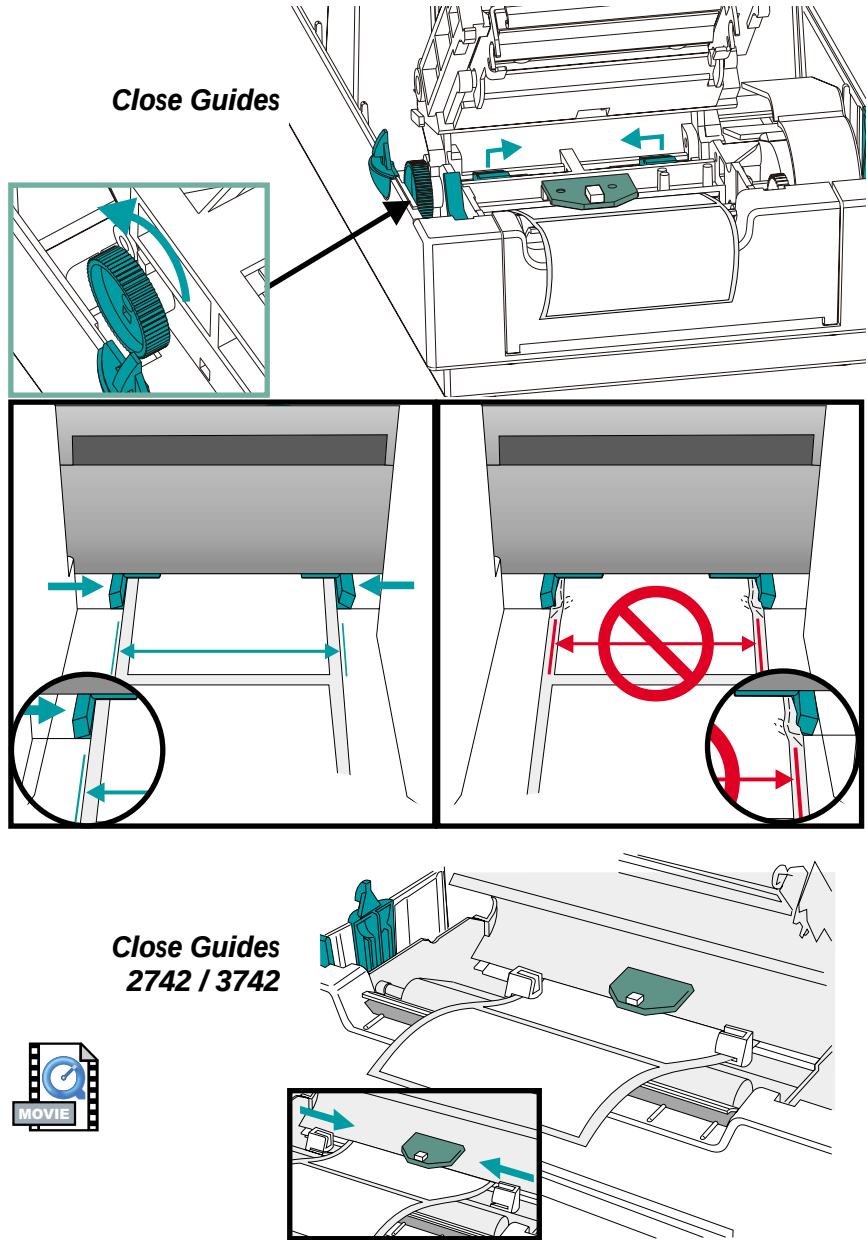
Thread the Media



Seat Media Roll



Step ③ - Load Media (cont.)

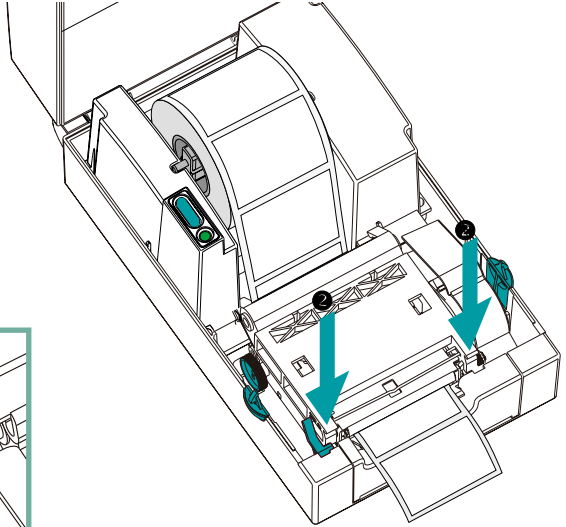
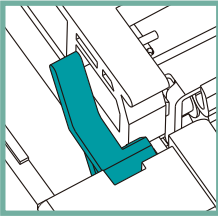


Step ③ - Load Media (cont.)

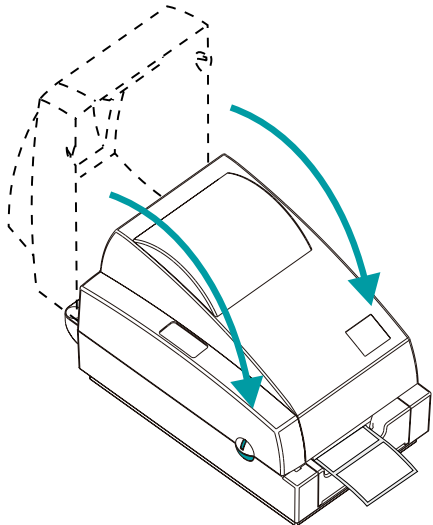
Close Print Head



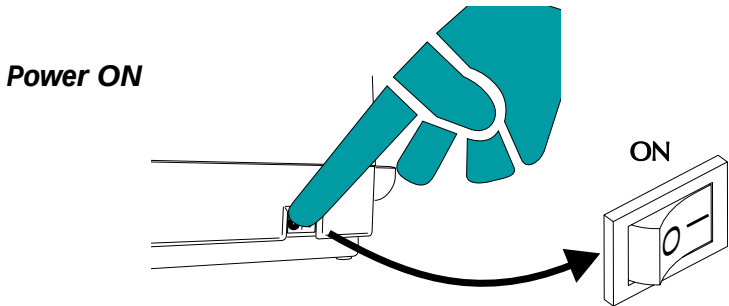
① - Verify



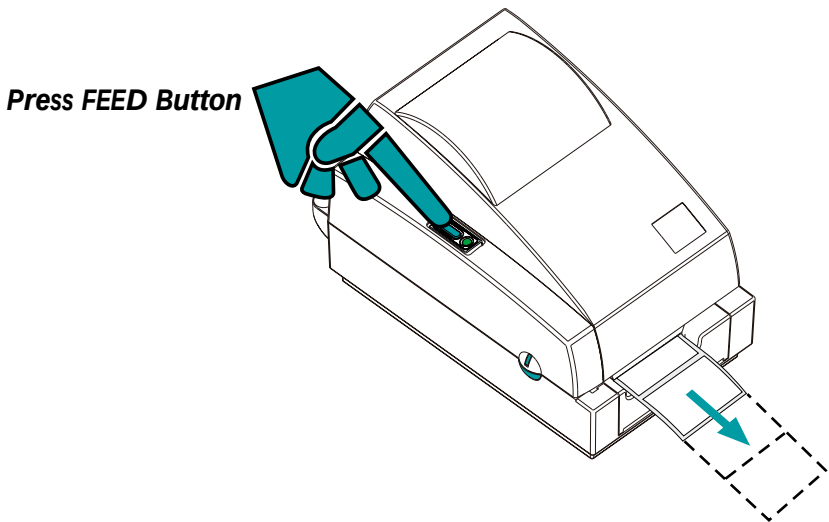
Close Cover



Step ③ - Load Media (cont.)



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



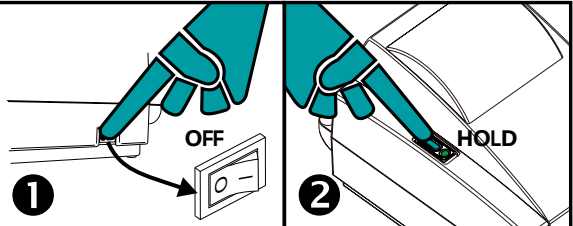
Run the AutoSense routine.

Step ④ - AutoSense

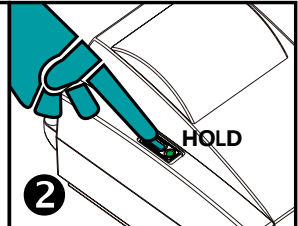


Power OFF

**Press & Hold
FEED Button**



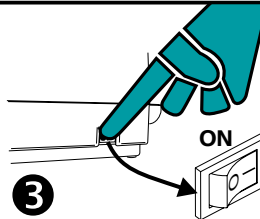
1



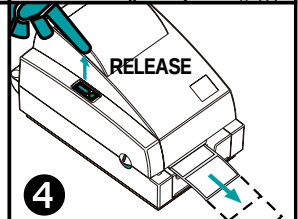
2

Power ON

Release FEED Button



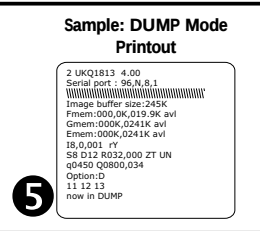
3



4

**Print Status
(Dump Mode Printout)**

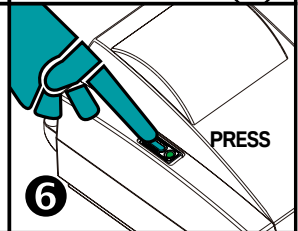
Press FEED Button



5

**Sample: DUMP Mode
Printout**

```
2 UKQ1813 4.00
Serial port : 96,N,8,1
Image buffer size:245K
Fmem:000,0K,013,2K: avl
Gmem:000K,0241K: avl
18,0,001: rY
S8 D12 R032,000 2T UN
q0450 q0800,034
Option:D
11 12 13
now in DUMP
```

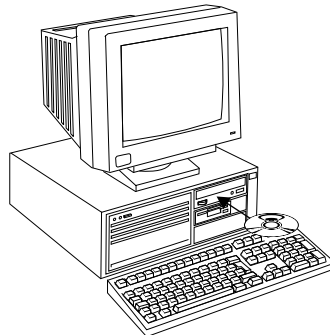


6

Step ⑤ - Install Software

Computer ON

**Insert Printer
CD ROM**

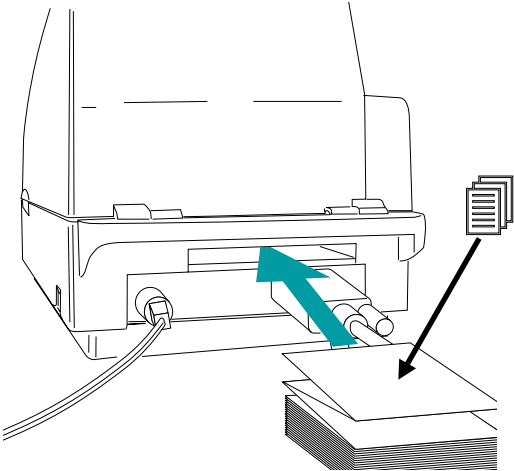


Start your computer and follow the installation instructions on the compact disc (CD).

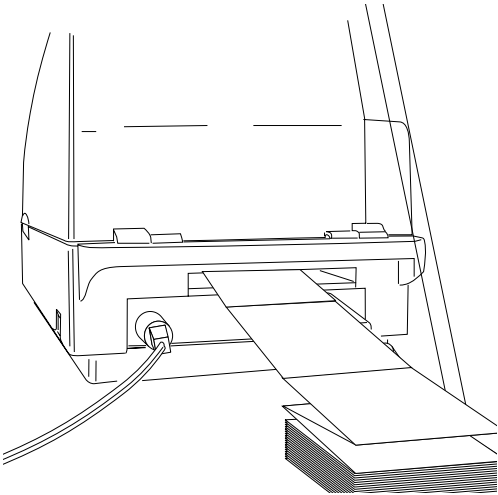
Using Fan-Fold Media

Place Media In Rear

**Face Print
Surface UP**



**Insert & Load
Media**

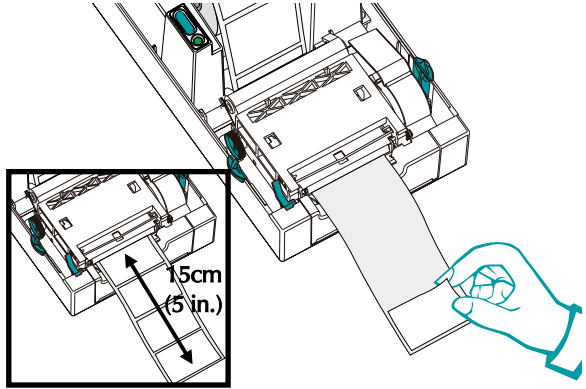


Label Dispenser Printers with an optional label taken sensor can dispense a single peeled label. Remove the label to automatically print the next label.

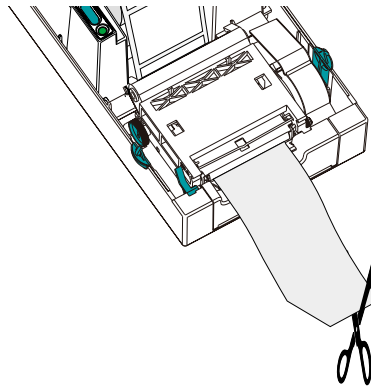


**Expose
15CM of Labels**
(2722 Shown)

**Peel
Exposed Labels**

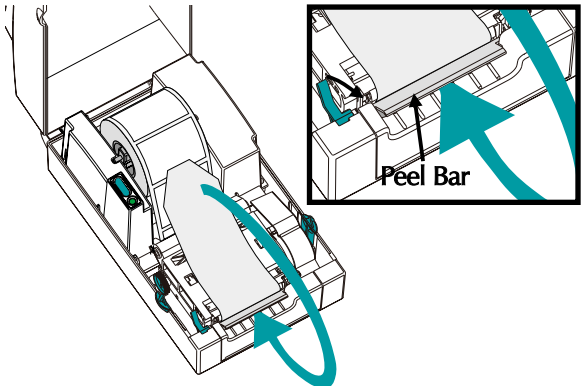


**Cut End of
Exposed Liner**
(2722 Shown)



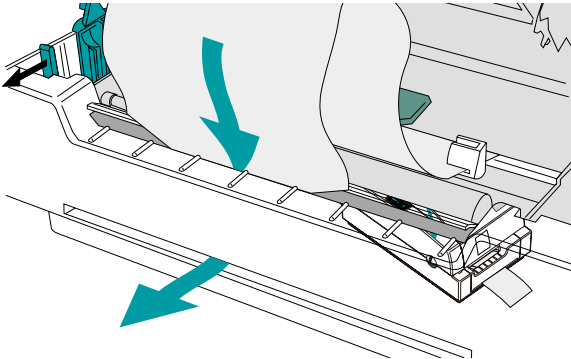
**Pull Print Head
Release Lever**
(2722 Shown)

**Insert Liner
Under Peel Bar**

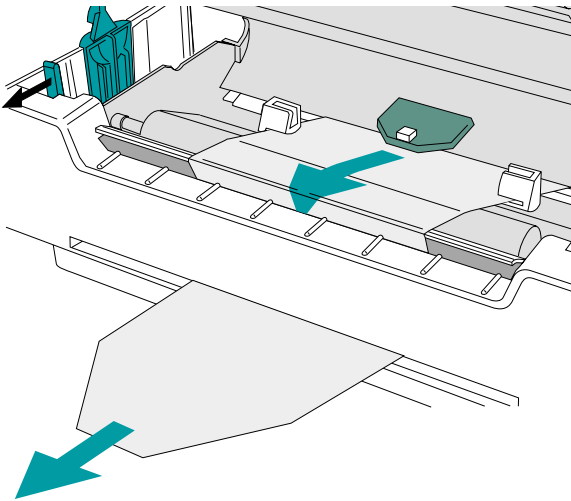


Label Dispense Option

Insert Liner
(2742 Shown)



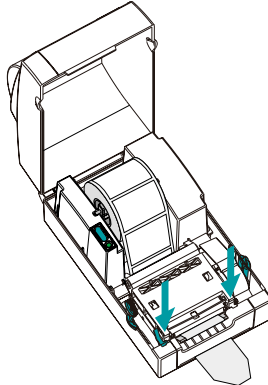
Pull Liner Through
(2742 Shown)



Label Dispense Option

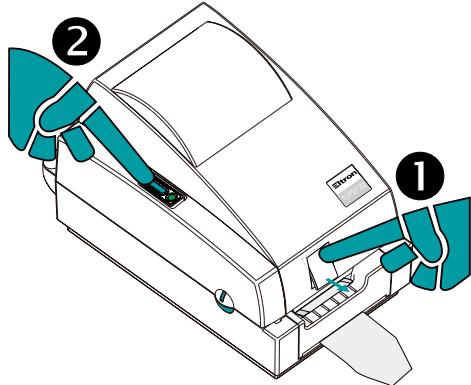
Close Print Head

Close Cover

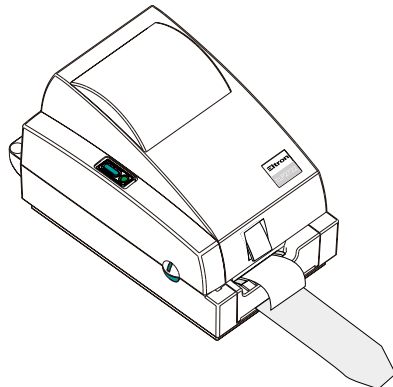


**Push to Open
Label Taken Sensor**

Press FEED Button



**Remove Presented
Label**

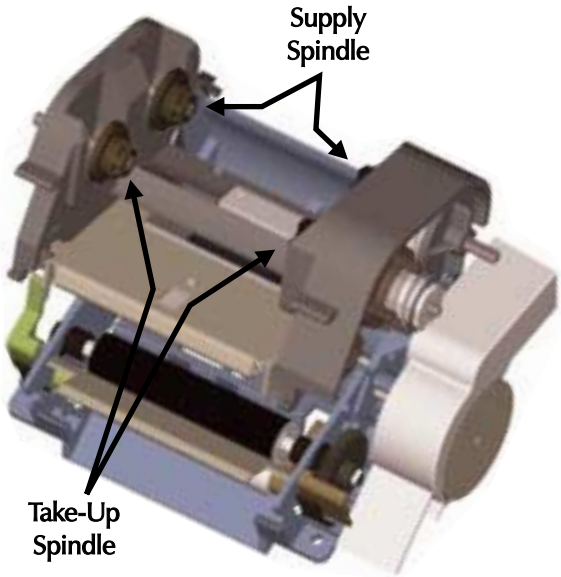


Thermal Transfer Ribbon Loading

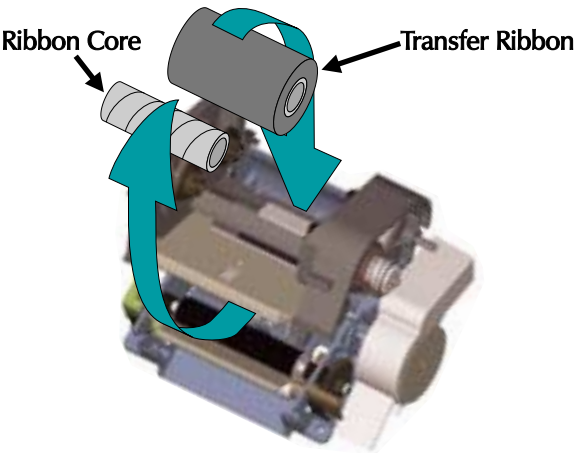


This feature is supported on TLP model printers, only.

**Thermal Transfer
Print Head
Mechanism**



Ribbon Path



Thermal Transfer Ribbon Loading

Open Print Head

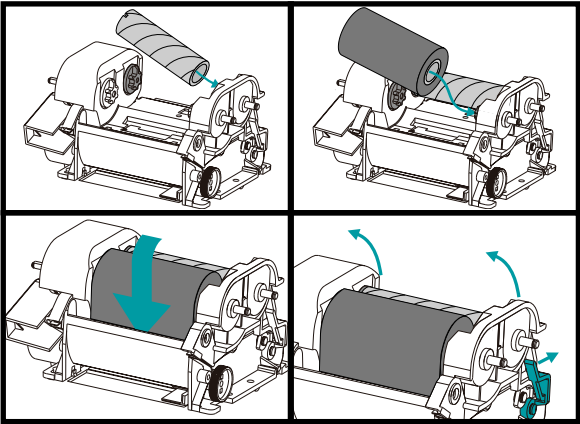
Load Ribbon Core

Load Transfer Ribbon

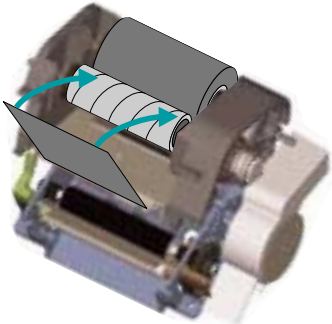
Start Ribbon

Open Print Head

(Rear View)

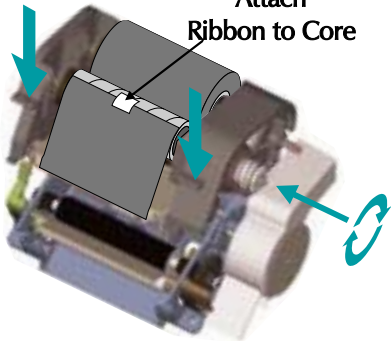


**Pull Ribbon Around
Print Head**



Close

**Attach
Ribbon to Core**



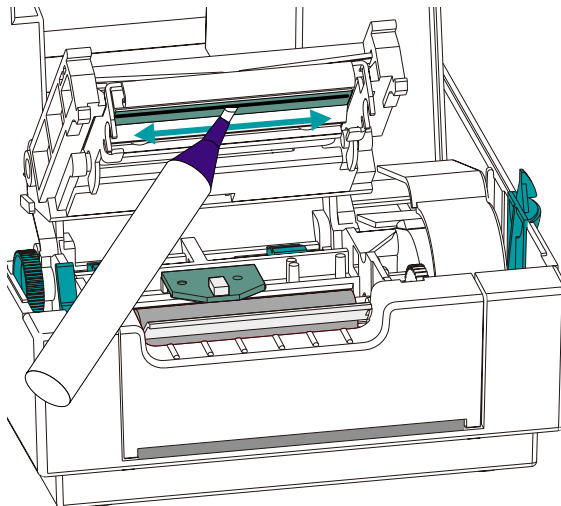
Appendix A - Troubleshooting

Problem	Solution or Reason
POWER indicator does not light GREEN when power switch is turned to ON (1) position.	1. Check power connections from A.C. outlet to power supply to printer.
POWER indicator lights GREEN, but printer will not print.	1. Check interface cable connections from computer to printer.
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. For TLP models, check that the ribbon is properly installed.
Printing is faded or poor quality.	1. Clean the print head with cleaning pen. 2. Adjust print speed/darkness in software.
Prints only partial label or skips a label.	1. Perform AutoSense gap sensor adjustment on page 13. 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 POWER indicator lights ORANGE or RED.	1. Perform AutoSense gap sensor adjustment on page 13. 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.

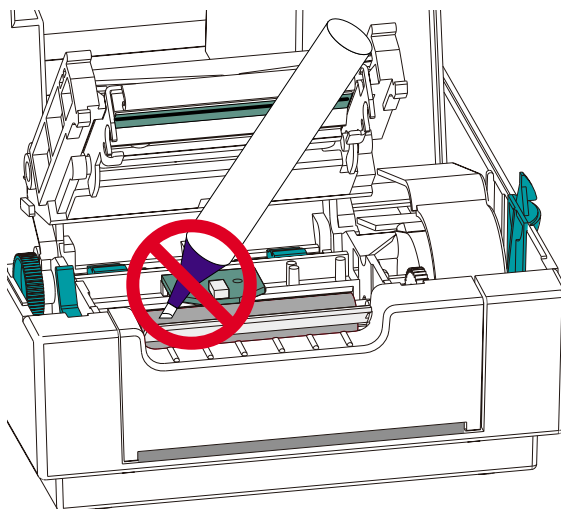
Printer Maintenance



***Clean the
Print Head***



***Don't Clean Rollers
with Cleaning Pen***



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 programming, 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.

The following are the basic settings stored in the printer:

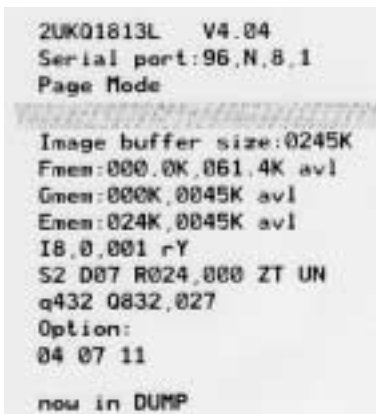
Print Mode - Direct (**OD**) or Thermal Transfer (**O**)
Speed (**S**)
Density (**D**) or heat applied
Form (label) length and gap in dots (**Q**)
Form (label) width in dots (**q**)
Serial Port (**Y**)
Margin (**R**)
Buffer Mode (**r**)

Options: D

Print Mode is Direct Thermal (**OD**)

Dump Mode Printout

(See the **U** command in the Programmer's manual for details)



```
2UK01813L V4.04
Serial port: 96,N,8,1
Page Mode

Image buffer size: 0245K
Fmem: 000.0K, 061.4K avl
Gmem: 000K, 0045K avl
Emem: 024K, 0045K avl
I8.0, 001 rY
S2 D07 R024, 000 ZT UN
q432 0832, 027
Option:
04 07 11

now in DUMP
```

Serial Interface Communication Configuration

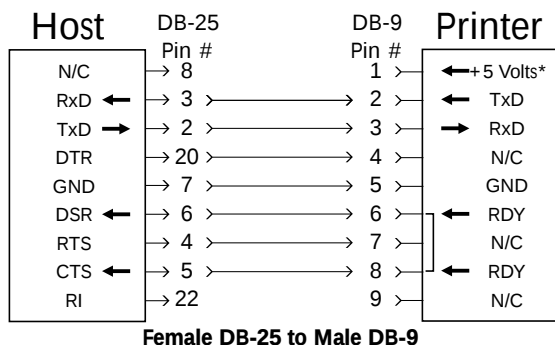
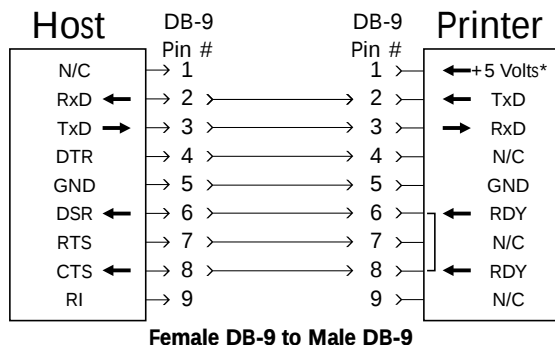
The printer's serial port is configured with the **Y** command for the printer. The printer supports interface data rates from 1200 to 38,400 baud. See the programmer's manual for details.

The printer's serial port default configuration is:

- 9600 baud
- 8 bit data
- 1 stop bit
- No parity

RS-232 Serial Interface Cable Wiring

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



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

Parallel Interface Cable Wiring

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

HOST	DB-25 Pin No.	Centronics Pin No.	PRINTER
STROBE	1	1	STROBE
DATA 0	2	2	DATA 0
DATA 1	3	3	DATA 1
DATA 2	4	4	DATA 2
DATA 3	5	5	DATA 3
DATA 4	6	6	DATA 4
DATA 5	7	7	DATA 5
DATA 6	8	8	DATA 6
DATA 7	9	9	DATA 7
ACK/ BUSY	10	10	ACK/ BUSY
PAPER ERR.	11	11	PAPER ERR.
READY	12	12	READY
INIT	13	13	INIT
ERROR/	14	14	ERROR/
N/A	15	15	N/A
N/A	16	16	N/A
N/A	17	17	N/A
N/A	18	18	+5V
SIG. GND	19	19	SIG. GND
SIG. GND	20	20	SIG. GND
SIG. GND	21	21	SIG. GND
SIG. GND	22	22	SIG. GND
SIG. GND	23	23	SIG. GND
SIG. GND	24	24	SIG. GND
SIG. GND	25	25	SIG. GND

Female DB-25 to Male Centronics (Cable)

+5 volts at 300 mA for external device (e.g. PrintServer)

