



Zebra[®] TLP & LP 2844-Z[™] Desktop Printers

User Guide



Part #980410-001 | Rev. B

Troubleshooting

What the Status Light is Telling You		
Status LED Condition and Color	Printer Status	For a Resolution, Refer to number:
Off	Off	1
Solid Green	On	2
Flashing Amber	Stopped	3
Flashing Green	Normal Operation	4
Flashing Red	Stopped	5
Double Flashing Green	Paused	6
Solid Amber	Various	7
Alternately Flashing Green and Red	Needs Service	8

Resolutions

1. The printer is not receiving power.

- Have you turned on the printer power?
- Check power connections from the wall outlet to the power supply, and from the power supply to the printer.

2. The printer is on and in an idle state.

No action necessary.

3. The printer has failed its power on self test (POST).

• If this error occurs right after you turn on the printer, contact an authorized reseller for assistance.

There is a shortage of memory.

• If this error occurs after you have been printing, turn the printer power off and on. Then, resume printing.

4. The printer is receiving data.

• As soon as all of the data has been received, the status LED will turn green; then, the printer will automatically resume operation.

5. Either the media or ribbon is out.

- Load a roll of media, following the instructions in "Loading the Media" on page 9. Then, press the feed button to resume printing.
- Load a roll of ribbon, following the instructions in "Loading the Ribbon" on page 12. Then, press the feed button to resume printing.

The print head is open.

• Close the top cover. Then, press the feed button to resume printing.

6. The printer is paused.

• Press the feed button to resume printing.

7. The print head is under temperature.

• Continue printing while the print head reaches the correct operating temperature.

The print head is over temperature.

 Printing will stop until the print head cools to an acceptable printing temperature. When it does, the printer will automatically resume operation.

8. FLASH memory is not programmed.

• Return the printer to an authorized reseller.

Print Quality Problems

No print on the label.

- You must use the correct media for the method of printing you require. When printing without a ribbon, you must use direct thermal media. When using ribbon, you must use thermal transfer media. The printer's ribbon sensor detects motion of the supply spindle.
- Is the media loaded correctly? Follow the instructions in "Loading the Media" on page 9.

The printed image does not look right.

- The print head is dirty. Clean the print head according to the instructions on page 35.
- The print head is under temperature.
- Adjust the print darkness and/or print speed. Refer to the six-flash sequence in "Feed Button Modes" on page 45, or the ^PR and ~SD commands in the ZPL II Programming Guide.
- The media being used is incompatible with the printer. Be sure to use the recommended media for your application, and always use Zebra-approved labels and tags.

There are long tracks of missing print (blank vertical lines) on several labels.

- The print head is dirty. Clean the print head according to the instructions on page 35.
- The print head elements are damaged. Replace the print head (see "Replacing the Print Head" on page 34).

The ribbon sensor settings did not print.

• The printer is set for direct thermal printing; use the ^XA^MTT^XZ command to reset the printer for thermal transfer printing and calibrate again.

The printing does not start at the top of the label, or misprinting of one to three labels.

- The media may not be threaded under the media guides. Refer to "Loading the Media" on page 9.
- The printer needs to be calibrated. Refer to "Auto Calibration" on page 13.
- The correct media sensor may not be activated. Manual calibration selects the media sensing method for the labels being used (refer to the ^MN command in the ZPL II Programming Guide).
- Verify that the Label Top (^LT) command is correctly set for your application (consult the ZPL II Programming Guide).

A label format was sent to, but not recognized by, the printer.

- Is the printer in pause mode? If so, press the feed button.
- If the status LED is on or flashing, refer to "What the Status LED is Telling You" on page 37.
- Make sure the data cable is correctly installed.
- A communications problem has occurred. First, make sure that the correct communications port on the computer is selected. Refer to "Communicating with the Printer" on page 18.

Manual Calibration

Manual calibration is recommended whenever you are using pre-printed media or if the printer will not correctly auto calibrate.

- 1. Make sure media is loaded.
- 2. Turn on the printer power.
- 3. Press and hold the feed button until the green status LED flashes once, then twice. Release the feed button.
- 4. The printer will set the media sensor for the label backing being used. After it is done making this adjustment, the roll will automatically feed until a label is positioned at the print head.
- 5. A profile of the media sensor settings (similar to the example below) will print. Upon completion, the printer will save the new settings in memory and the printer is ready for normal operation.
- 6. Press the feed button. One entire blank label will feed. If this does not happen, try defaulting (refer to the four-flash sequence in "Feed Button Modes" on page 45) and recalibrating the printer.
- NOTE: Performing a manual calibration disables the auto calibration function. To return to auto calibration, default the printer (see the four-flash sequence in "Feed Button Modes" on page 45).



Troubleshooting Tests

Printing a Configuration Label

To print out a listing of the printer's current configuration, refer to the one-flash sequence in "Feed Button Modes" on page 45.

Recalibration

PRINTER CONF	IGURATION
Zebra Technologies	
210 1LP2844-2-200dp	1
+10	DARKNESS
+000	TEAR OFF
TEAR OFF	PRINT MODE
NON-CONTINUOUS	MEDIA TYPE
WEB	SENSOR TYPE
DIRECI-IHERMAL	PRINI METHOD
1233	PRINI WIDIH
22.0IN 557MM	MAXIMUM LENGTH
CONNECTED	USB COMM.
PARALLEL	PARALLEL COMM.
RS232	SERIAL COMM.
38400	BAUD
8 BITS	DATA BITS
XON/XOFF	PARIII HOST HANDSHAKE
NONE	PROTOCOL
000	NETWORK ID
NORMAL MODE	COMMUNICATIONS
<~> 7EH	CONTROL PREFIX
<^> 5EH	FORMAT PREFIX
<,> 20H	ZELIMITER CHAR
FFFD	MEDIA POWER UP
FEED.	HEAD CLOSE
DEFAULT	BACKFEED
+020	LABEL TOP
+0000	LEFT POSITION
029	WEB S. MEDIA S
050	RIBBON S.
050	MARK S.
001	MARK MED S.
031	MEDIA LED
000	RIBBON LED
015	MARK LED
	MODES DISABLED
832 8/MM FULL	RESOLUTION
V45.11.1 <	FIRMWARE
v09.00.0.31	HARDWARE ID
CUSTOMIZED	CONFIGURATION
1024R:	
0000B: 0768 E.	MEMUKI LAKD
NONE	FORMAT CONVERT
	TWINAX/COAX ID
NONE	ZEBRA NET II

Recalibrate the printer if it starts to display unusual symptoms, such as skipping labels. See "Auto Calibration" on page 13.

Resetting the Factory Default Values

Sometimes, resetting the printer to the factory defaults solves some of the problems. Follow the four-flash sequence instructions in "Feed Button Modes" on page 45.

Communications Diagnostics

If there is a problem transferring data between the computer and printer, try putting the printer in the communications diagnostics mode. The printer will print the ASCII characters and their respective hexadecimal values (a sample is shown below) for any data received from the host computer. To find out how, refer to the power off mode procedure in "Feed Button Modes" on page 45.

^FS^F0394, 25^AA 5E 46 53 5E 46 4F 33 39 34 2C 32 35 5E 41 41 N, 18, 10^FDC0000 4E 2C 31 38 2C 31 30 5E 46 44 28 30 30 30 30 **)9999-99997FS** 29 39 39 39 20 39 39 39 39 5E 46 53 0D 0A **^F00**, **50^AAN**, **18**, 5E 46 4F 30 2C 35 30 5E 41 41 4E 2C 31 38 2C 5E 46 44 43 45 4E 54 45 52 20 53 54 41

Feed Button Modes

Power Off Mode (Communications Diagnostics Mode)

With the printer power off, press and hold the feed button while you turn on the power. The printer prints out a listing of its current configuration. After printing the label, the printer will automatically enter a diagnostic mode in which the printer prints out a literal representation (see Figure 23) of all data subsequently received. To exit the diagnostic mode and resume printing, turn off and then turn on the printer.

Power On Modes

With the printer power on and top cover closed, press and hold the feed button for several seconds. The green status LED will flash a number of times in sequence. The explanation at the right (Action) shows what happens when you release the key after the specific number of flashes.

Flash Sequence	Action	
*	A configuration label prints.	
* **	The media sensor calibrates and a media sensor profile prints (see "Manual Calibration" on page 42).	
*	To reset the communication parameters. Press and release the feed button while the LED rapidly flashes amber and green.	
** ***	For autobaud synchronization: Send a ZPL II format to the printer while the LED rapidly flashes amber and green. When the printer and host are synchronized, the LED changes to solid green. NOTE: No labels will print during autobaud synchronization.	
* ** *** ***	Resets the factory defaults, auto calibrates, and saves settings into memory.	
* ** *** ****	The print width calibrates. While the status LED alternately flashes green and amber, a series of stacking rectangles print on the label. When the rectangle prints to the outer edges of the label, press and release the feed button. The label width and current communication parameters will be saved into memory.	
* ** *** ***** *****	The print darkness calibrates. A series of nine samples print, starting with the lightest and ending with the darkest image. When the desired print darkness is achieved, press and release the feed button. The print darkness will be saved into memory.	
If the feed b button wher	utton remains pressed after a 7-flash sequence, the printer will ignore the n it is released.	



Zebra Technologies Corporation