LE810DT

User's Guide

Copyright Information

Document Information

LE810DT User's Guide

P/N 59320201

Revision 1.2

April, 2010

Disclaimer

Every effort has been made to ensure that the information in this document is complete, accurate, and up-to-date. The manufacturer assumes no responsibility for the results of errors beyond its control. The manufacturer also cannot guarantee that changes in software and equipment made by other manufacturers and referred to in this guide will not affect the applicability of the information in it. Mention of software products manufactured by other companies does not necessarily constitute endorsement by the manufacturer .

While all reasonable efforts have been made to make this document as accurate and helpful as possible, we make no warranty of any kind, expressed or implied, as to the accuracy or completeness of the information contained herein.

The most up-to-date drivers and manuals are available from the web site: http://www.okiprintingsolutions.com

Trademark Information

Oki is a trademark of Oki Electric Industry Company Ltd.

Apple, Macintosh and Mac OS are registered trademarks of Apple Computers Inc. Hewlett-Packard, HP, and LaserJet are registered trademarks of Hewlett-Packard Company. Microsoft, MS-DOS and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Other product names and brand names are registered trademarks or trademarks of their proprietors.

> **Note**
> The appearance of your printer may differ somewhat from the illustrations in this manual, depending on the model you purchased.

Contents

Introduction

About This Manual

This manual uses special information boxes. Examples of these boxes and the type of information provided in each, are below.

> **Warning!**
> **Provides information that, if unheeded, may result in personal injury.**

> **Caution!**
> **Provides information that, if unheeded, may result in equipment damage.**

> **Attention!**
> *Provides information that is deemed of special importance but will not result in personal injury or product damage if unheeded.*

> **Note**
> Provides helpful hints to assist in performing the tasks at hand.

General Printer Description

The LE810DT printer comes in several configurations which can differ by

- Connection ports on the back of the printer
- Default print mode
- Internal path for print media

> **Note**
> The appearance of your printer may differ somewhat from the illustrations in this manual, depending on the model you purchased.

Printer Components
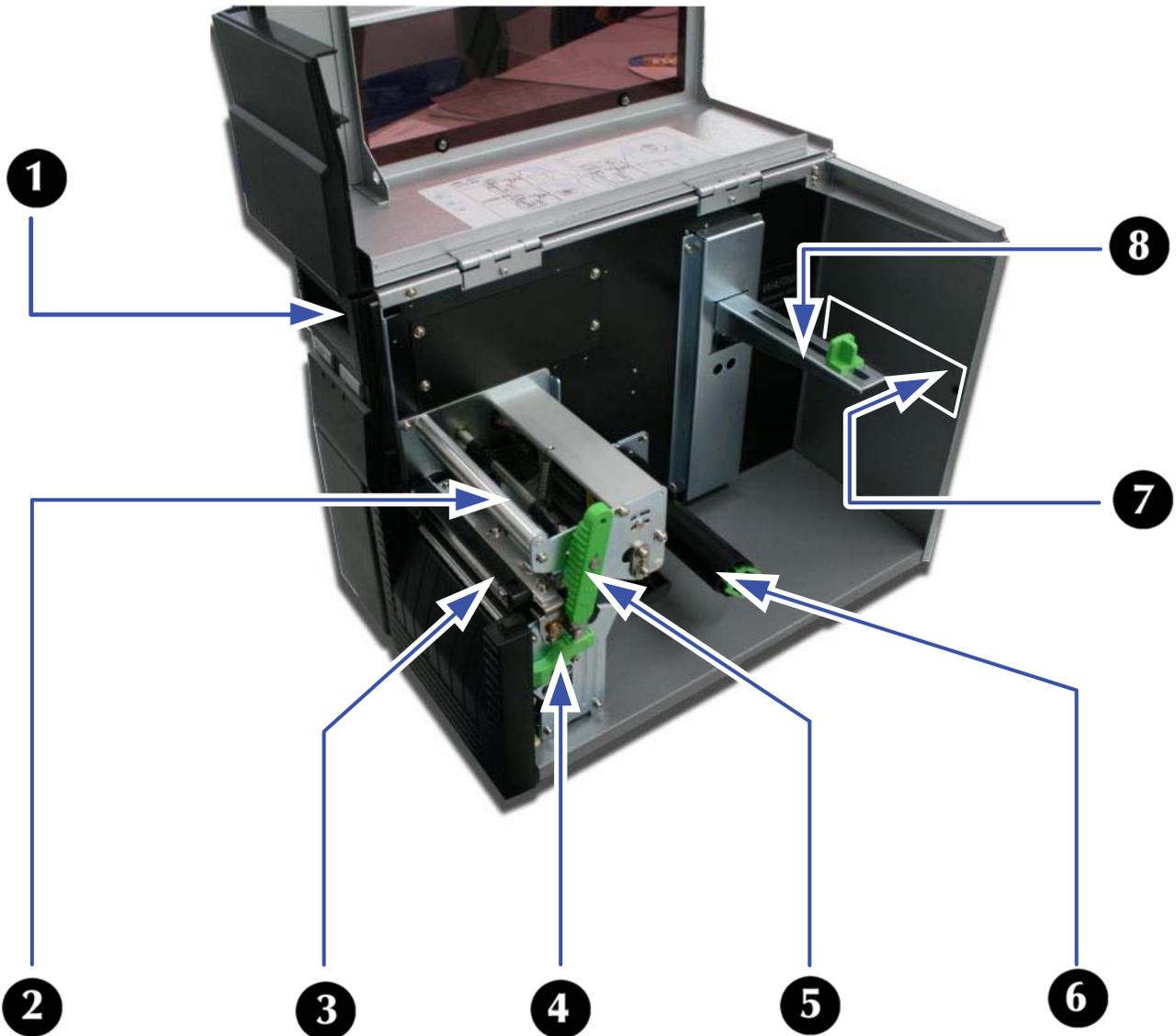
1 Operator Panel

2 Print Assembly

3 Platen Roller

4 Dispenser Latch

5 Print Head Latch

6 Rewinder Shaft (only present on some models)

7 External Media Slot

8 Media Holder

Operator Panel
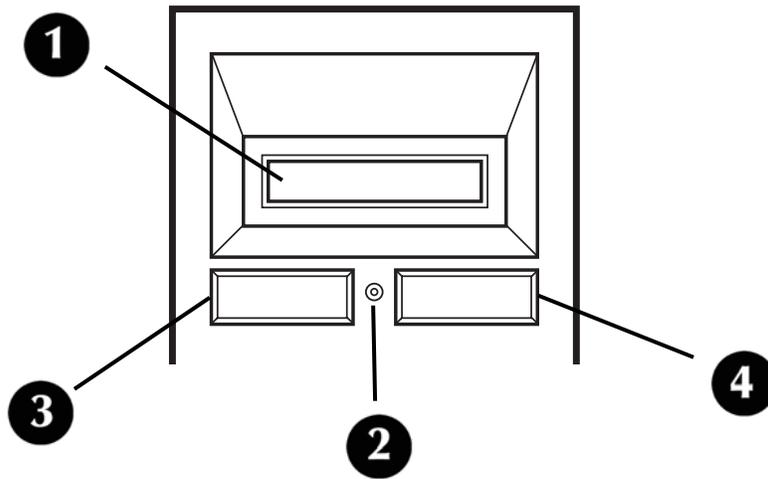
1 LCD Display

2 Status LED
- Illuminates green when online and turns off when offline.
- Blinks green when receiving data or the buffer is near full.
- Illuminates or blinks red when detecting a printer error.

3 LINE button
- Press to switch back and forth between online and offline state.
- Press to scroll through menu options.
- Press to initiate other special functions as indicated later in this manual.

4 FEED button
- Press to advance the label media.
- Press to select menu options.
- Press top initiate other special functions as indicated later in this manual.

Installation

Parts Identification
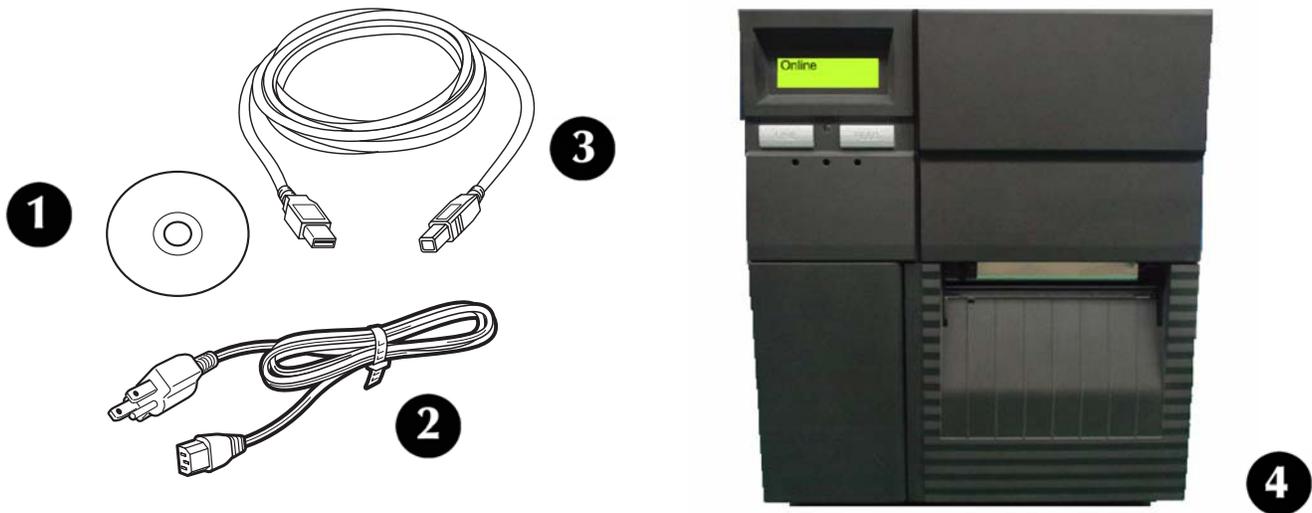
1 CD-ROM
2 Power Cable
3 USB Cable (included only on models equipped with a USB port)
4 Printer (front view)

Printer Installation

Site Location

- Place the printer on a solid flat surface, away from hazardous materials.
- Make sure it is within operational distance of the host, based on interface specifications.

Interface Connection

USB / RS232C / IEEE Models
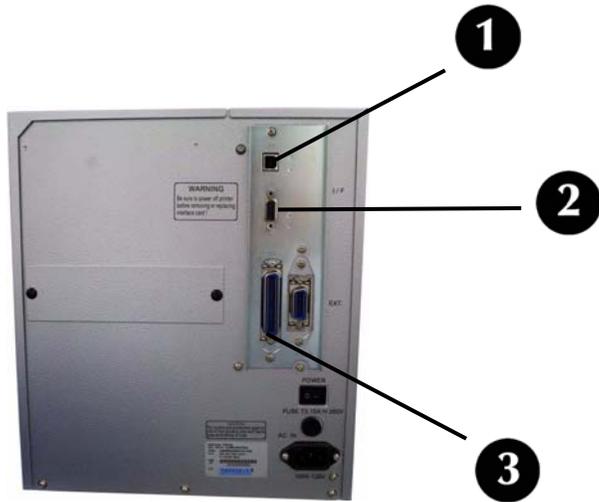
1. Locate the interface connection ports on the back of the printer.

   1: USB

   2: Serial (RS-232C)

   3: IEEE Parallel

2. Connect the appropriate cable to the interface port, then connect it to the computer.

USB

RS232C

IEEE
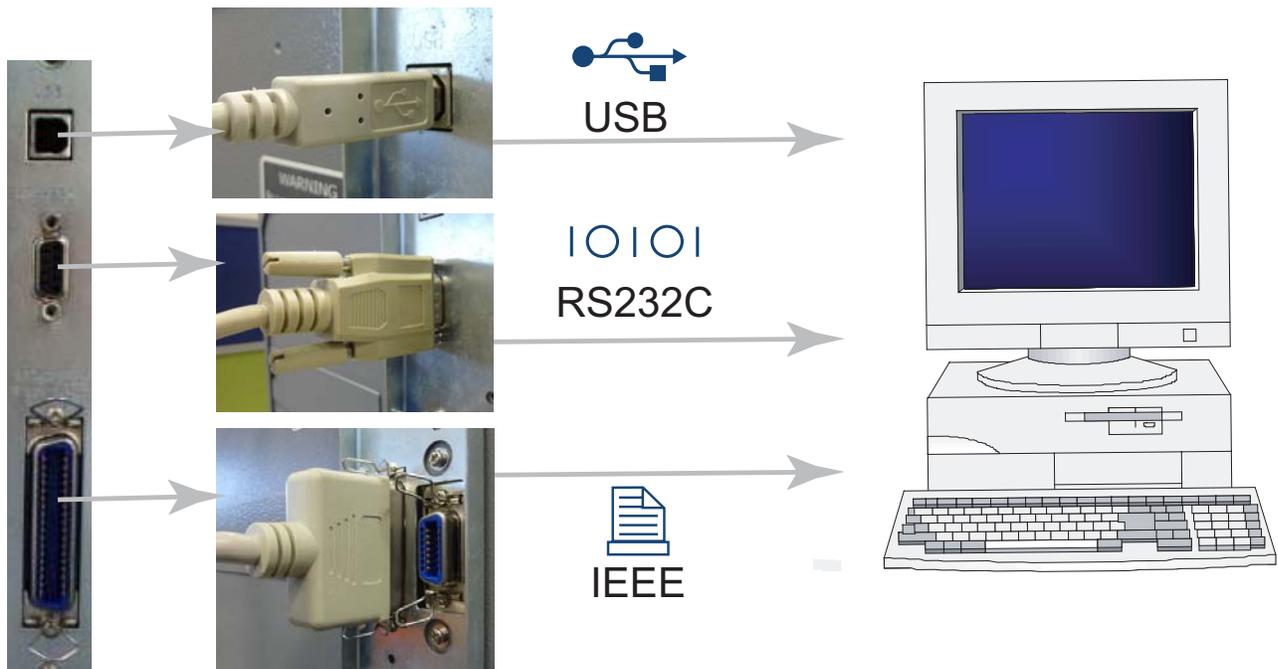
Ethernet (LAN) Models

1. Locate the Ethernet port on the back of the printer.

LAN

2. Plug a 10/100Base T Category 5 Ethernet cable (not supplied) into the Ethernet port on the printer and then into the computer.

USB Only Model

1. Locate the USB port on the back of the printer.
2. Plug the USB cable supplied with the printer into the USB port on the printer, then into the USB port on the computer.

USB
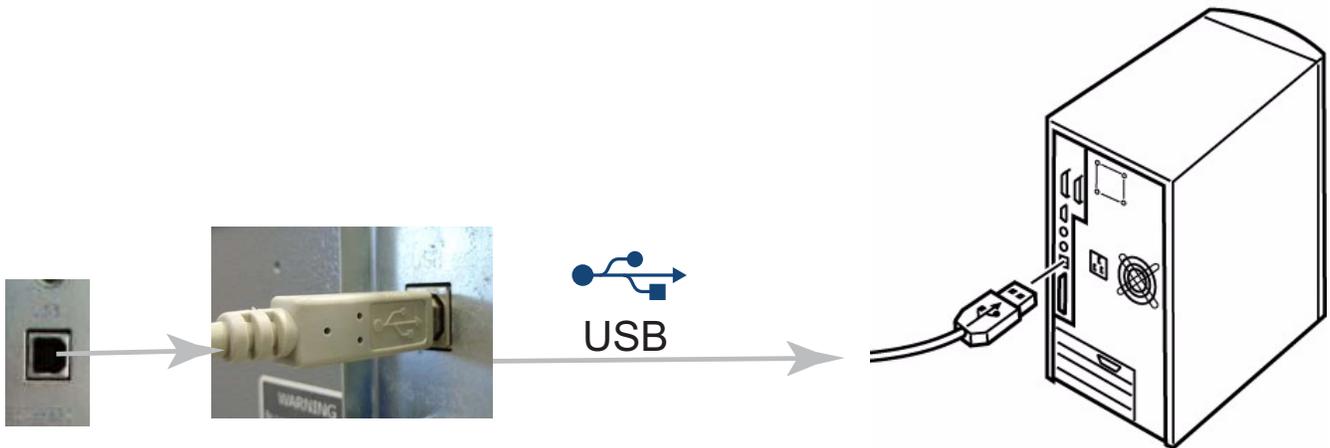
Connect to Power

1. Connect the power cable to the power socket on the back of the printer, then connect it to a 120-volt, grounded power outlet.
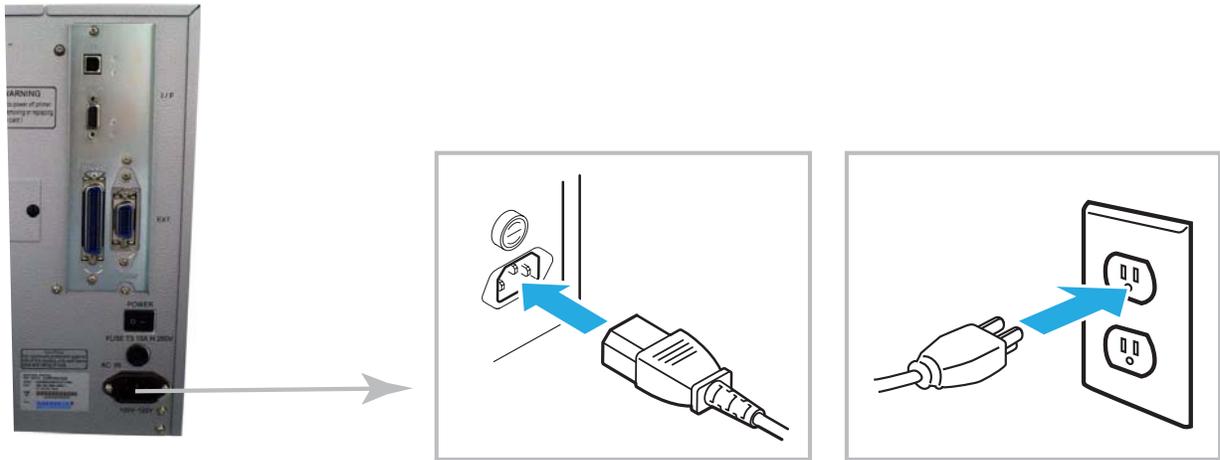
2. Turn the printer on.
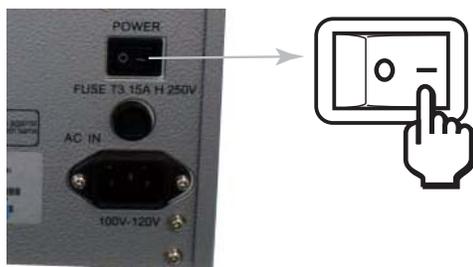
3. Set the interface option in the configuration menus of the operator panel. Refer to the Configuration unit of this manual to configure the printer for host computer interfacing.

> **Note**
> Multiple interface options may display in the printer's LCD menus, the desired option must be chosen.

Media Selection

Caution

The media width should be equal to, or just narrower than, the print head. Using media that does not cover the print head will allow the platen roller to tread on it and wear it out. The media edge will also wear a groove in the platen roller affecting print quality.

Both roll-type and fanfold media can be used with the printer. To use fanfold media, you may need to remove the access plate on the back of the printer as described under Loading Media, Fanfold Type.

Loading Media

Roll-Type, with Liner Fed to Rewinder Shaft
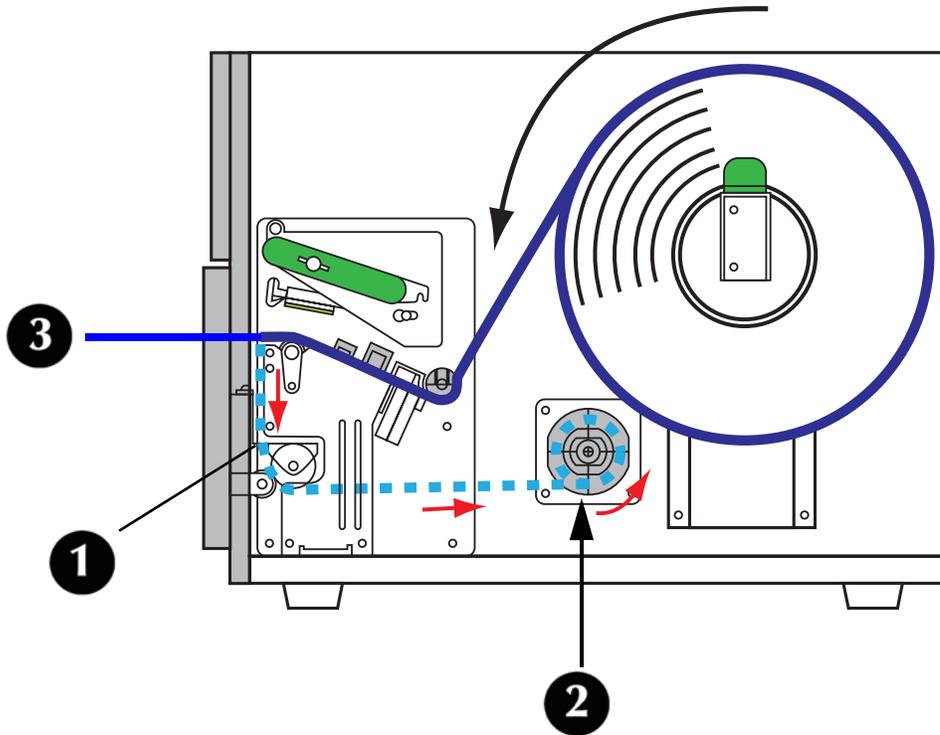
With roll-type media loaded this way, the liner (1) automatically separates from the media and is pulled back into the printer and wrapped around the rewinder shaft (2). The self-adhesive label (3) without its liner moves out the front of the printer for pickup and direct application. The printer will not print another label until the printed label is removed.

1. Lift up the Top Access Cover.

2. Open the printer front door: push down on the green dispenser latch (1) to release the door, then swing it open (2).

3. Open the Print Head Assembly by rotating the Head Latch (1) counter clockwise.

4. Pull the green Media Supply Guide (1) out as far as it will go, then angle the label roll over it and push the roll back against the printer housing. Push the Media Support Guide back in until it fits snugly against the media roll (2).

5. Locate the metal Outside Media Guide (1) under the print path and slide it toward you as far as it will go.

6. Push in on the bottom of the Outside Media Guide (1) to move the top out of the way while you are loading the media.

7. Slide the media into the print path, making sure it goes under the Media Hold-Down (1) and under the Sensor Assembly (2) Push it against the back of the printer.

Attention!
If the media does not go under the Sensor Assembly, the printer will not recognize that media is loaded.

8. Adjust the media sensor to compensate for irregularities in the media (i.e.: notch, tag hole, gap, perforation or markings). The proper position will be media-dependent. To properly adjust the sensor position, loosen the green Sensor Adjust Knob located on the bottom side of the Media Transport Assembly and move the sensor in ¼-inch increments (or finer) until the sensor error is cleared. After the error is cleared, retighten the Sensor Adjust Knob.

9. Pull out the bottom of the Outside Media Guide so that it is upright, then push the guide inward until it barely contacts the outside edge of the media.

10. Pull the media roll out until about 24 inches are exposed, then remove the labels from that section. Feed the end of the liner back into the bottom of the printer, under the Backing Drive Roller (1).
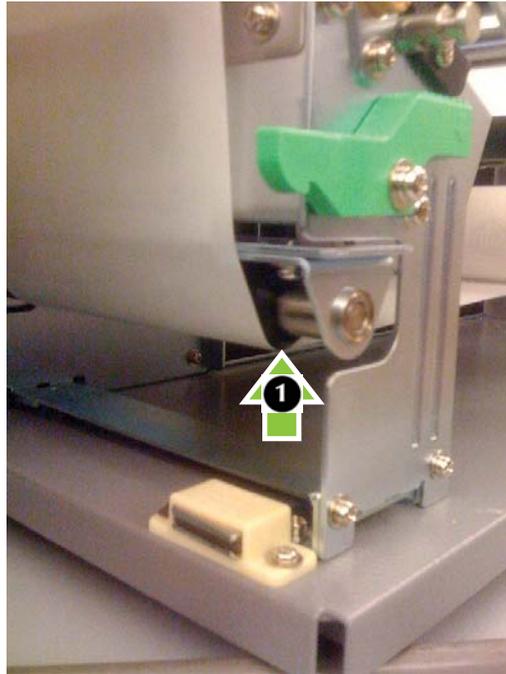
11. Pull out the green tab (1) on the front of the Take-Up Spindle (2). Notice the two prongs (3) on the Take-Up Spindle. Pull the liner through the bottom of the printer and pass the end under the two prongs, then use the green tab to rotate the spindle until the liner is wrapped around it several times. When you are done, swing the tab back into place.
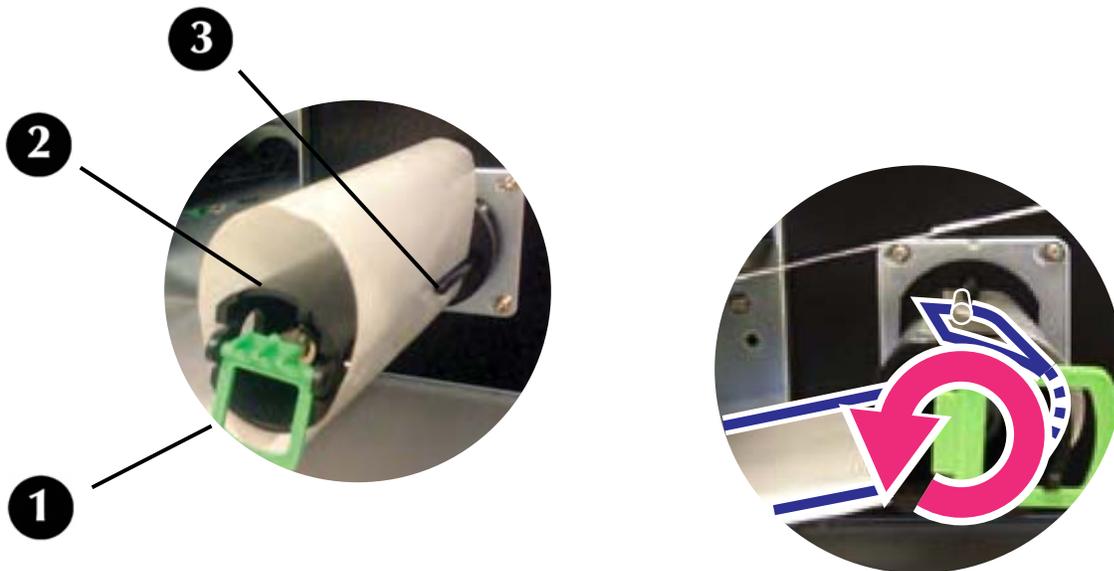
12. Swing the Head Latch back down to close the print head, then latch it in place.
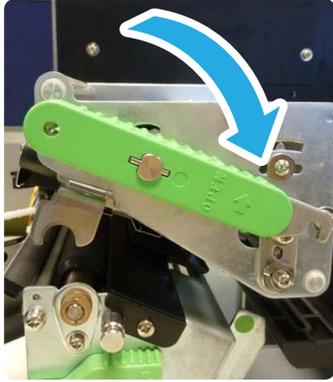
13. Close the front door and lower the top access cover into place.

Attention!
These covers have interlock switches and the printer will not operate if either is open.

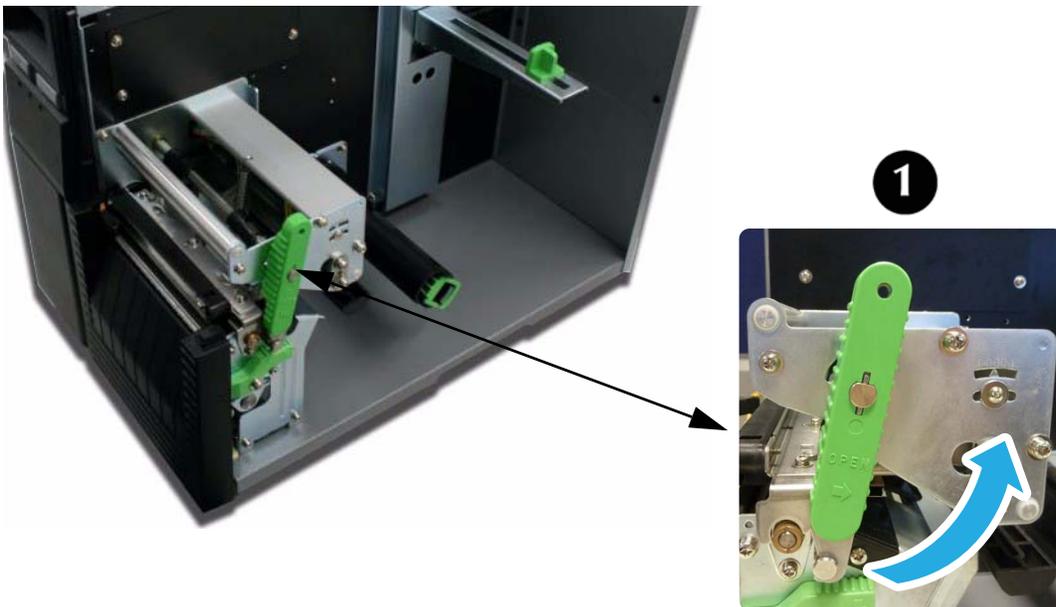# Roll-Type, Front Exit with Liner Attached
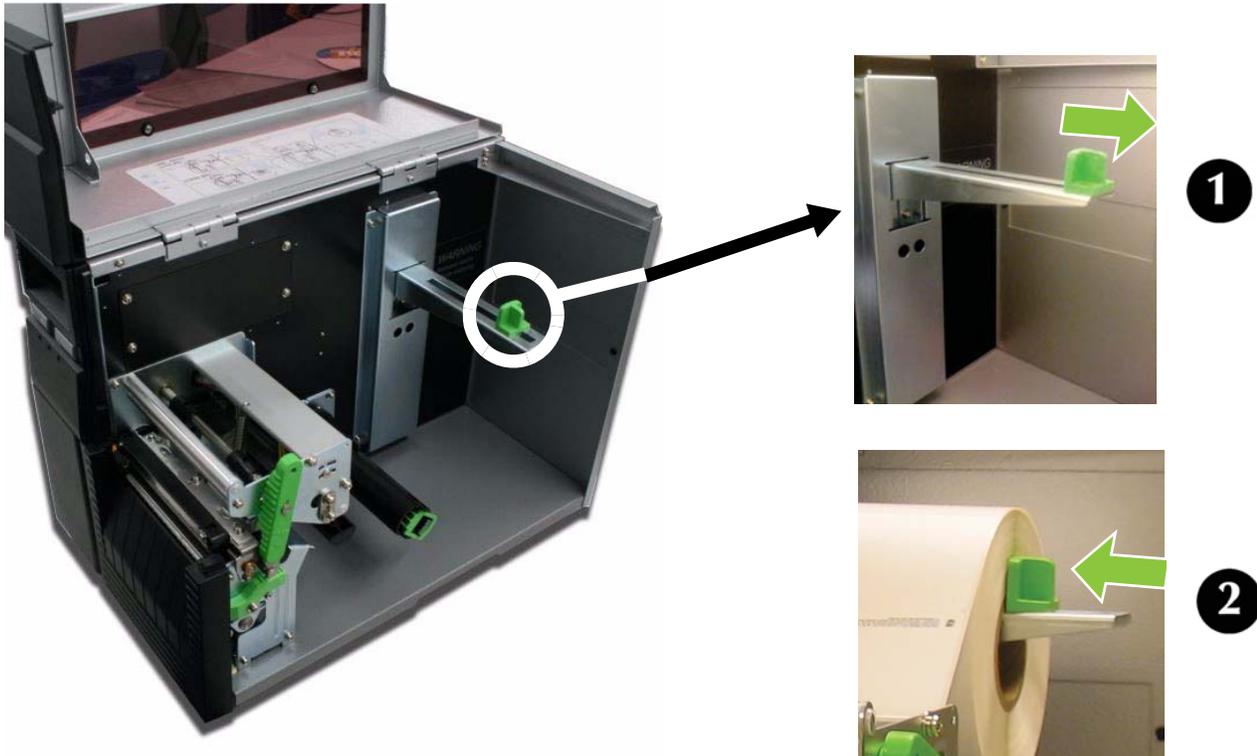

1. Lift up the Top Access Cover.

2. Open the printer front door: push down on the green dispenser latch (1) to release the door, then swing it open (2).

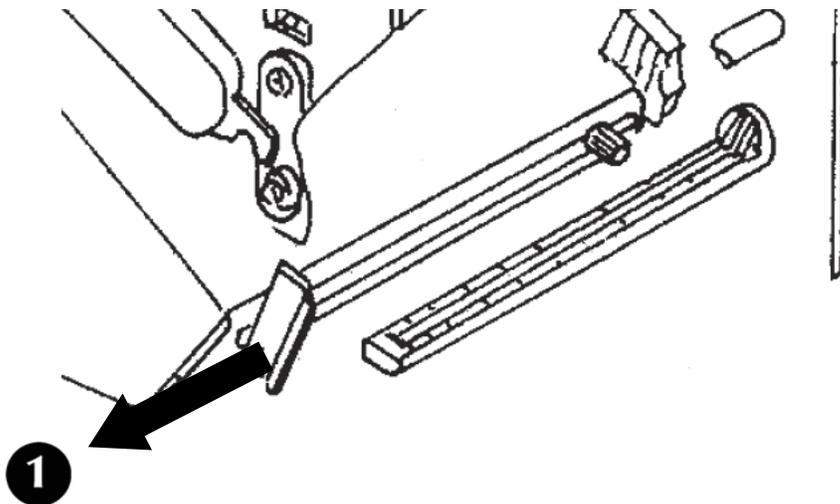3. Open the Print Head Assembly by rotating the Head Latch (1) counter clockwise.

4. Pull the green Media Supply Guide (1) out as far as it will go, then angle the label roll over it and push the roll back against the printer housing. Push the Media Support Guide back in until it fits snugly against the media roll (2).

5. Locate the metal Outside Media Guide (1) under the print path and slide it toward you as far as it will go.

6. Push in on the bottom of the Outside Media Guide (1) to move the top out of the way while you are loading the media.

7. Slide the media into the print path, making sure it goes under the Media Hold-Down (1) and under the Sensor Assembly (2) Push it against the back of the printer.

> **Attention!**
> If the media does not go under the Sensor Assembly, the printer will not recognize that media is loaded.

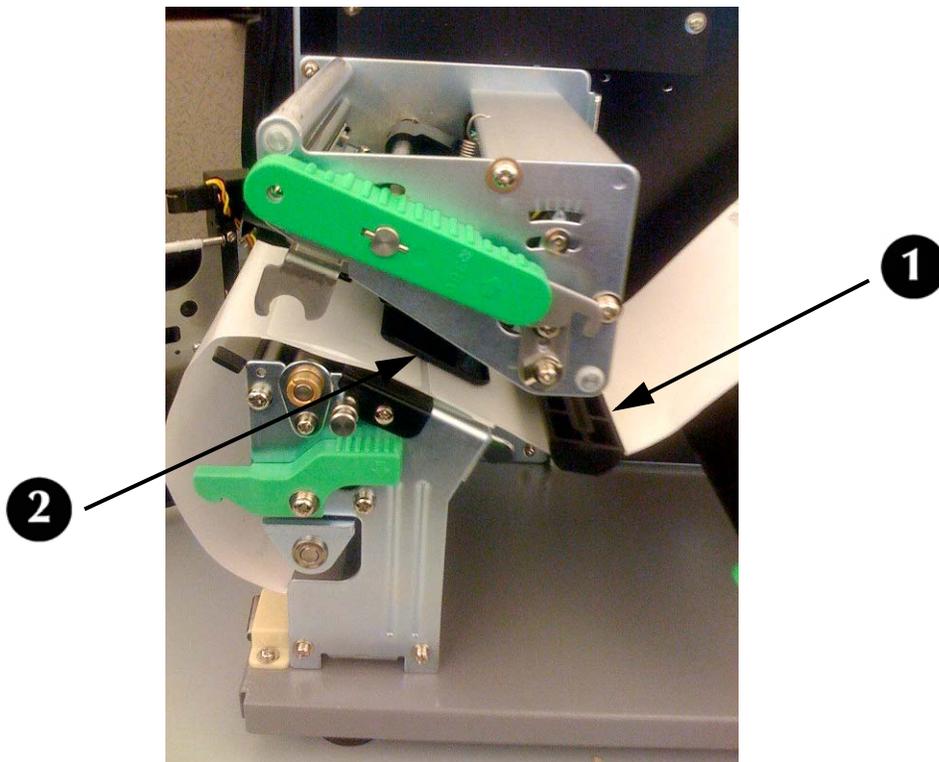8. Adjust the media sensor to compensate for irregularities in the media (i.e.: notch, tag hole, gap, perforation or markings). The proper position will be media-dependent. To properly adjust the sensor position, loosen the green Sensor Adjust Knob located on the bottom side of the Media Transport Assembly and move the sensor in ¼ inch increments (or finer) until the sensor error is cleared. After the error is cleared, retighten the green Sensor Adjust Knob.

9. Pull out the bottom of the Outside Media Guide so that it is upright, then push the guide inward until it barely contacts the outside edge of the media.

10.Swing the Head Latch back down to close the print head, then latch it in place.
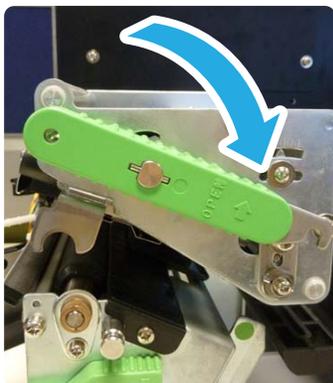
11.Close the front door and lower the top access cover into place.

Attention!
These covers have interlock switches and the printer will not operate if either is open.

Fanfold Type
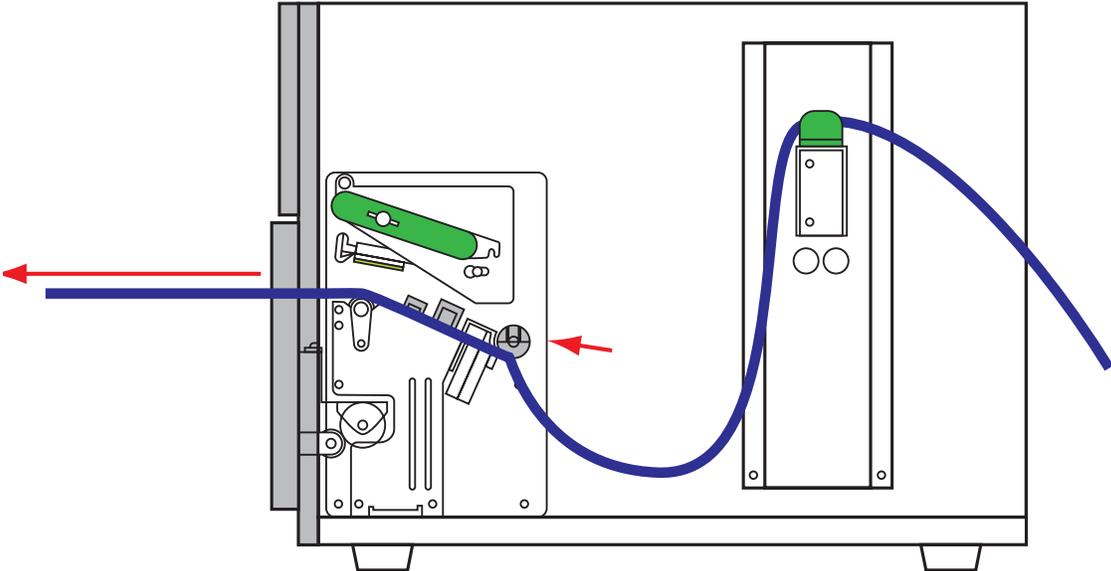
1. Lift up the Top Access Cover.

If the back plate is on your printer, perform the following step; other wise, skip to step 3.

2. Remove the back plate covering the access hole.

    a. Press on the pin holders (1) inside the printer at either end of the bracket until the pins extend from the outer housing.
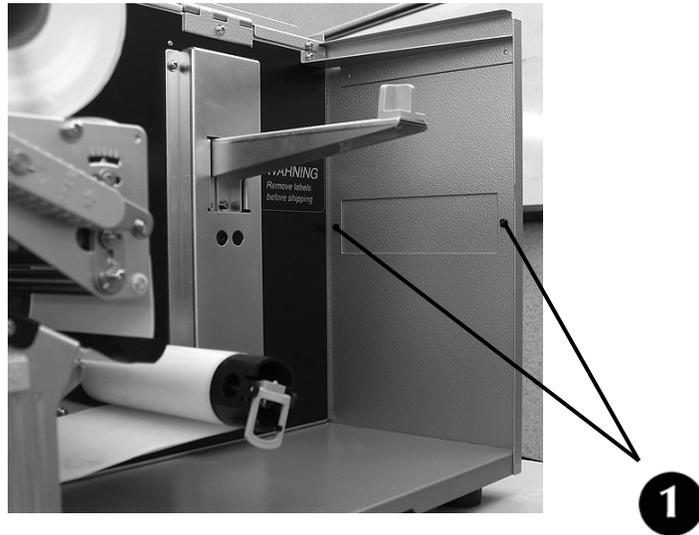
    b Carefully pull out the pins at either end of the cover plate and save them.

       You will need the pins if you ever decide to reinstall the back plate.
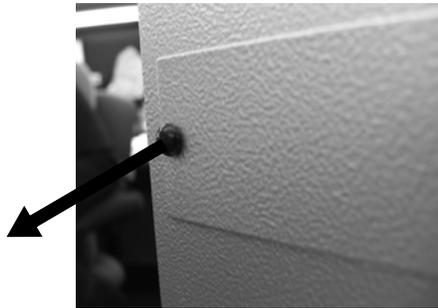
    c Remove the plate from the printer.

       Save it with the pins: you will need them should you ever decide to reinstall it.

3. Place the stack of fanfold media behind the printer and feed the first label in through the opening.
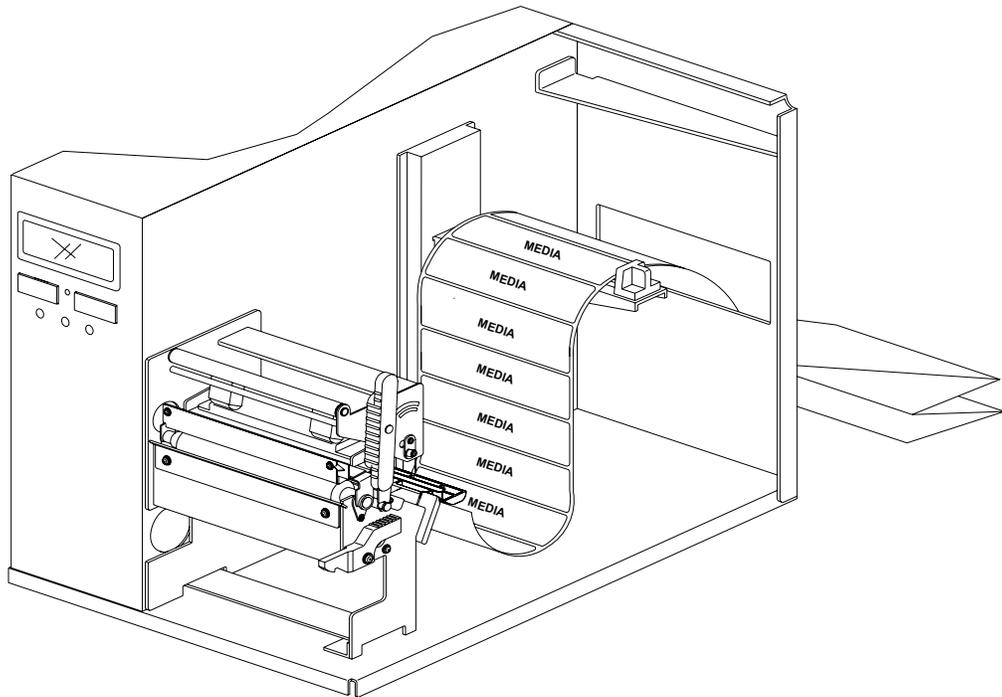
4. Locate the metal Outside Media Guide (1) under the print path and slide it toward you as far as it will go.
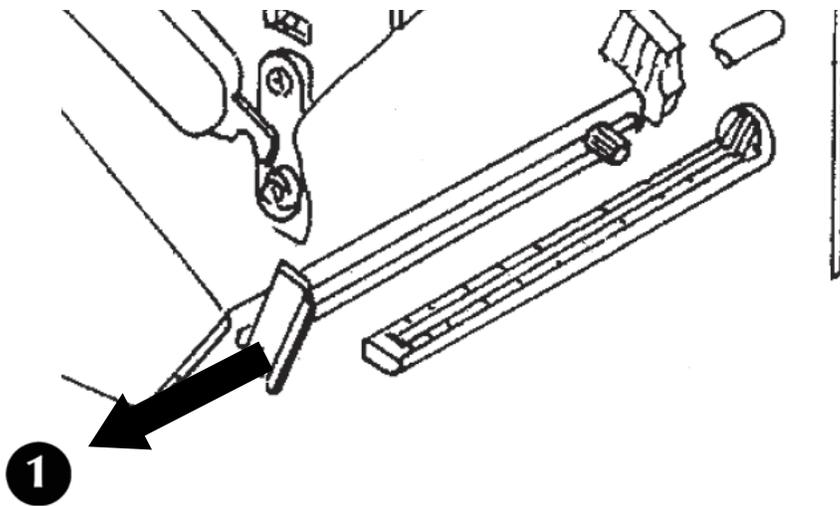
5. Push in on the bottom of the Outside Media Guide (1) to move the top out of the way while you are loading the media.
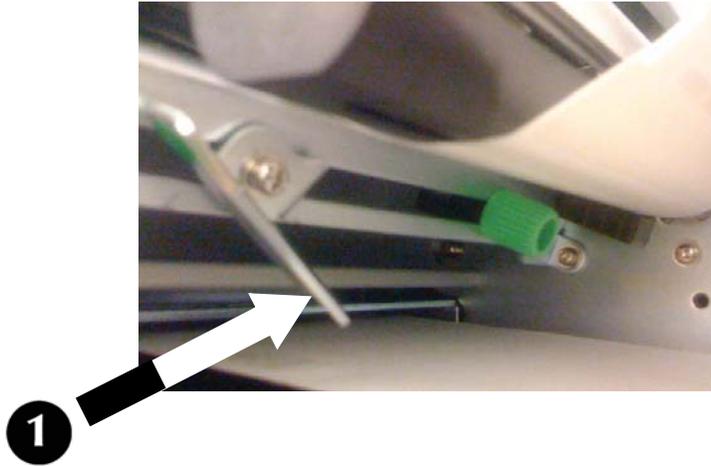
6. Slide the media into the print path, making sure it goes under the Media Hold-Down (1) and under the Sensor Assembly (2) Push it against the back of the printer.

> **Attention!**
> If the media does not go under the Sensor Assembly, the printer will not recognize that media is loaded.
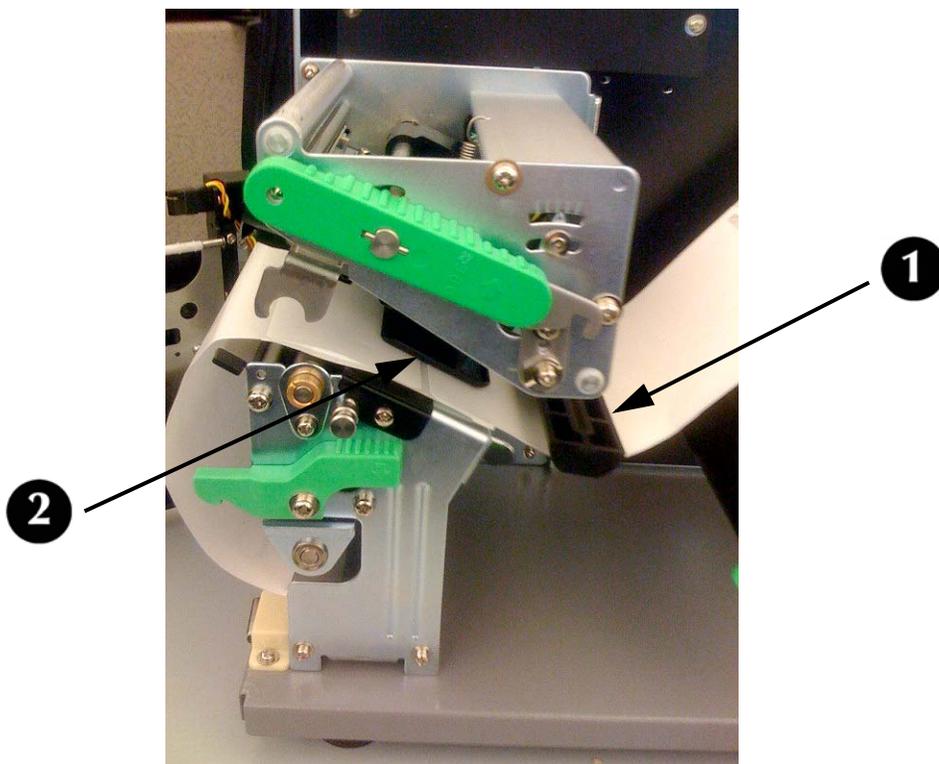
7. Adjust the media sensor to compensate for irregularities in the media (i.e.: notch, tag hole, gap, perforation or markings). The proper position will be media-dependent. To properly adjust the sensor position, loosen the green Sensor Adjust Knob located on the bottom side of the Media Transport Assembly and move the sensor in ¼ inch increments (or finer) until the sensor error is cleared. After the error is cleared, retighten the green Sensor Adjust Knob.

8. Pull out the bottom of the Outside Media Guide so that it is upright, then push the guide inward until it barely contacts the outside edge of the media.

9. Swing the Head Latch back down to close the print head, then latch it in place.
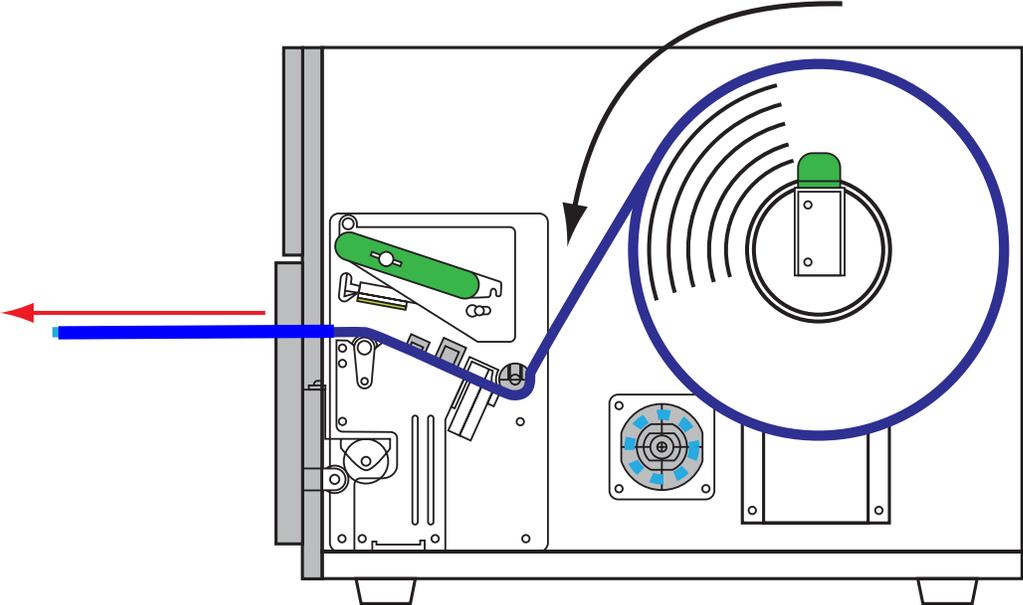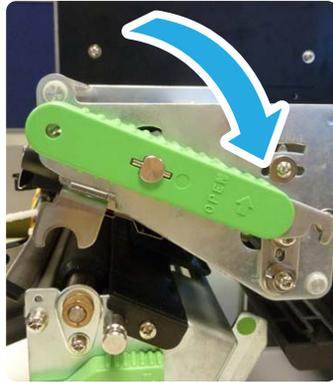

10. Close the front door and lower the top access cover into place.

Attention!

These covers have interlock switches and the printer will not operate if either is open.
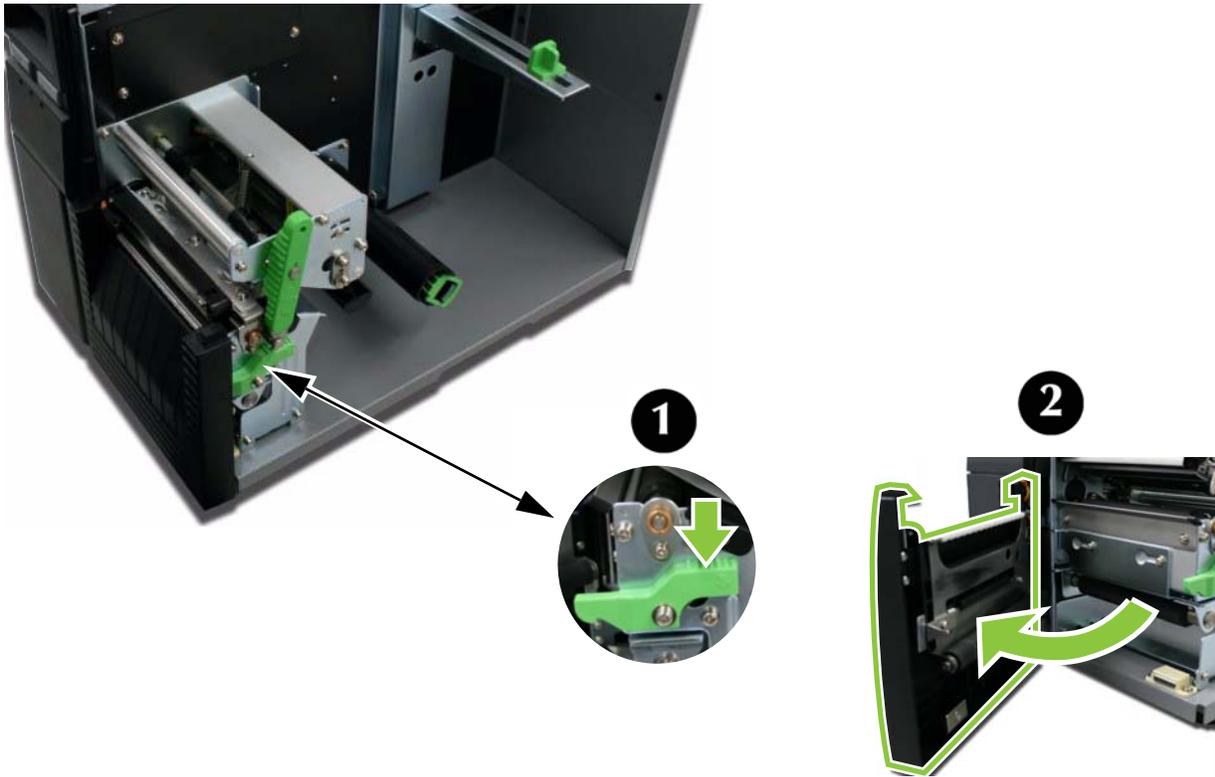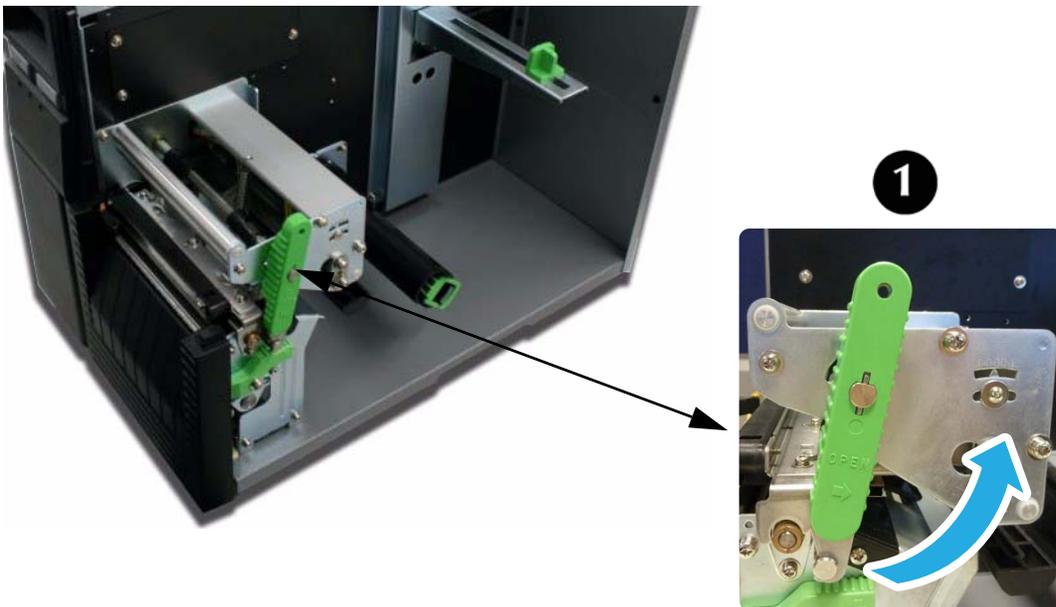

Operational Mode Selection

There are three modes of printer operation; Tear-off, Continuous, and Dispense.

Tear-off Mode

- For printing labels one at a time.
- The liner remains with the label as it exits the printer.
- Once the printed label has been removed from the printer, the unprinted media will retract and position itself for printing the next label.

Continuous Mode

- For printing bulk quantities of labels.
- The liner remains with the label as it exits the printer.
- The media remains in position for printing at all times.
- A printed label is only available for removal when one to four additional labels have been printed (quantity depends upon label size).

Dispense Mode

- For printing labels one at a time.
- The printer automatically peels the liner from the printed label as it exits the printer.
- Once the printed label has been removed from the printer, the unprinted media will retract and position itself for printing the next label.

Printer Configuration

Basic Configuration Modes

Configuration is done using the operator panel buttons. However, many settings may also be controlled via external software commands. In the case of conflict between external software commands and control panel settings, the printer will always use the last valid setting (the default is software commands).

See the Menu Definition Tables starting on page 39 for more information on the modes below.

Normal Mode

For configuring print features that tend to change from job to job. See page 39.

POWER: ON

ONLINE   [Z]
QTY: 000000

LINE   FEED

Reprints last label if enabled.

LINE + FEED

OFFLINE
QTY: 000000

LINE   FEED

Feeds one label if DSW3-3 is OFF.

PRINT DARKNESS
1 2 3 4 5

LINE

Scrolls options

FEED

PRINT SPEED
2 3 4 5 6

Scrolls options

LINE

FEED

PITCH OFFSET
+00MM

LINE

Scrolls options

Selects and advances

FEED

CANCEL PRINT JOB
YES   NO

LINE

NO FEED

YES FEED

All print jobs saved

All print jobs canceled

USER TEST PRINT
YES   NO

LINE

NO FEED

YES FEED

TO TEST PRINT MENU

Advanced Mode

For making basic printer operational adjustments. Typically, once these adjustment settings have been made, they will not require additional changes unless a new job is downloaded.

LINE + POWER

ADVANCED MODE

Toggles Service Mode — LINE — FEED

DARKNESS RANGE
A   B

Scrolls options — LINE — FEED

AUTO ONLINE
YES   NO

Scrolls options — LINE — FEED

Only if calendar is installed

SET CALENDAR
YES   NO

Scrolls options — LINE

Yes FEED   No FEED

CALENDAR
YY / MM / DD HH : MM

Scrolls options — LINE — FEED

Selects and advances

PRINT OFFSET
V: +XXXX   H: +XXX

Scrolls options — LINE

FEED

Selects and advances

IGNORE   CR/LF
YES   NO

Scrolls options — LINE — FEED

INTERFACE TYPE
IEEE   RS232   USB

Scrolls options — LINE

IEE/USB FEED   RS232 FEED

DATA BIT SELECT
8BIT   7BIT

Scrolls options — LINE — FEED

PARITY SELECT
EVEN   ODD   NON

Scrolls options — LINE — FEED

STOP BIT SELECT
1BIT   2BIT

Scrolls options — LINE — FEED

BAUD RATE SELECT
9600   19200   >>
<<   3800   S7600

Scrolls options — LINE — FEED

PROTOCOL SELECT
RD/BSY XON/OF   >>
<<   BICOM3 BICOM4

Scrolls options — LINE — FEED

Counters Mode

- **Print Head Counter**

  The head counter records the length of the media that has been printed since the print head was installed. It should be reset each time the print head is replaced.

- **Life Counter.**

  The life counter measures the length of media the printer as a whole has printed. This counter would only be reset in case of circuitry replacement.

The printer's Counter Mode allows the operator to view the accumulated measurement and also allows the print head counter to be reset to zero.
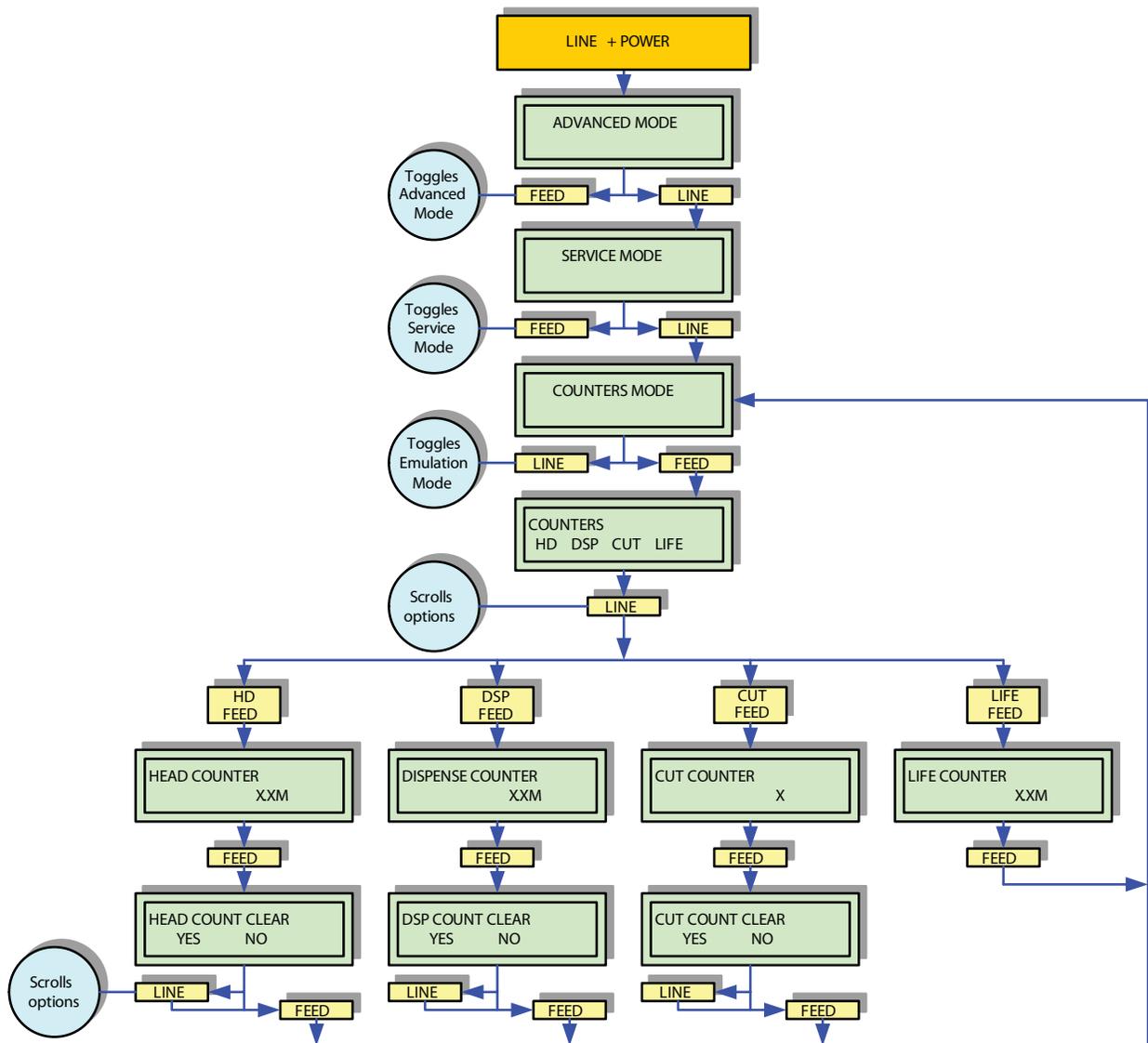
Test Print Mode

For printing a test label.

Test labels are designed to identify failures in configuration, adjustments problems, and mechanical defects.

```
                              ┌─────────────────────┐
                              │   FEED  + POWER     │
                              └─────────────────────┘
                                        │
                              ┌─────────────────────┐
                              │ TEST PRINT MODE     │
                              │    CONFIGURATION    │
                              │       BARCODE       │
                              │    HEADCHECK        │
                              │       FACTORY       │
                              └─────────────────────┘
            ( Scrolls                   │
             options )────────────[ LINE ]
                                  ┌──────────┴────────────┐
                          ┌────────────┐          ┌────────────┐
                          │Configuration│         │  Factory   │
                          │Barcode      │         │  FEED      │
                          │Headcheck    │         └────────────┘
                          │FEED         │               │
                          └────────────┘          ┌────────────────┐
                     ┌────────────────┐           │ PRINT SIZE     │
                     │ TEST PRINT SIZE│           │ SMALL   LARGE  │
                     │          XXCM  │           └────────────────┘
                     └────────────────┘
     ( Scrolls  )──[ LINE ]           ( Scrolls )──[ LINE ]
      options                  [ FEED ]  options
                                 │
                            ( Test
                              printing
                              begins )
                          ┌────────────────┐
                          │ PRESS FEED KEY │
                          │ TO STOP PRINTING│
                          └────────────────┘
                               [ FEED ]
                            ( Test
                              printing
                              stops )
                          ┌────────────────┐
                          │ PRINT CONTINUE │
                          │ YES      NO    │
                          └────────────────┘
     ( Scrolls )──[ LINE ]
      options
              ┌────────────┐      ┌────────────┐
              │ YES        │      │ NO         │
              │ FEED       │      │ FEED       │
              └────────────┘      └────────────┘
```

```
                          ┌────────────────┐
                          │ USER TEST PRINT│
                          │ YES       NO   │
                          └────────────────┘
                              [ LINE ]      ( Scrolls )
                                             options
                   ┌────────────┐   ┌────────────┐
                   │ NO         │   │ YES        │
                   │ FEED       │   │ FEED       │
                   └────────────┘   └────────────┘
                          ┌────────────────┐
                          │ ONLINE MODE  [Z]│
                          │     QTY: XXXXXX │
                          └────────────────┘
```

Default Setting Mode

For resetting the printer to the default configuration state as received from the factory. Use the printer's buttons to select and enter the required options.
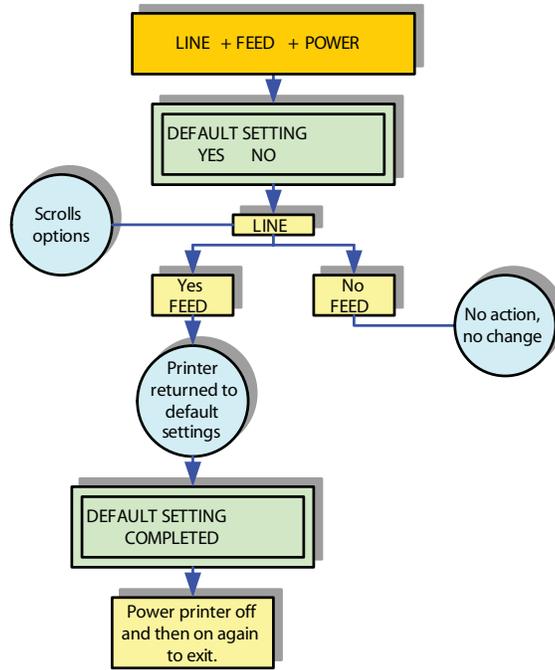
Hex Dump Mode

The contents of the print buffer and the contents received before it may be examined through the use of the Hex Dump Mode. Each line of the printed data is enumerated in the first column, the second column contains the data in hexadecimal format, and the right column contains the same data in ASCII format.

```
        ┌─────────────────────────────┐
        │  Send ~ESC+HX command       │
        └─────────────────────────────┘
                      │
                      ▼
        ┌─────────────────────────────┐
        │ ONLINE              [Z]      │
        │        QTY: XXXXXX           │
        └─────────────────────────────┘
                      │
                      ▼
                 ╭─────────╮
                 │ Printer │
                 │ receives│
                 │  data   │
                 ╰─────────╯
                      │
                      ▼
                 ╭─────────╮
                 │ Printer │
                 │ begins  │
                 │ Hex Dump│
                 │ printing│
                 ╰─────────╯
                      │
                      ▼
        ┌─────────────────────────────┐
        │  Power printer off ,         │
        │        to exit               │
        └─────────────────────────────┘
```
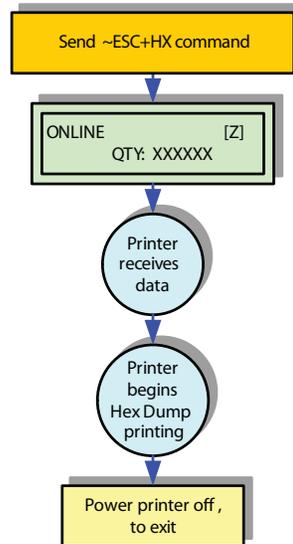
Menu Definition Tables

Normal Mode

Display	Description
ONLINE QTY XXXXXX	Displays the printer's operational status. The ONLINE status is displayed on the top line and the label quantity status is on the bottom. The message will be changed to OFFLINE whenever the printer is switched offline by pressing the LINE key. When a print job is received, the quantity line will indicate the number of labels to be printed. As the label job prints, the display status indicates the quantity of labels remaining to be printed.
OFFLINE QTY XXXXXX	Displays the printer's operational status. The OFFLINE status is displayed on the top line and the label quantity status is on the bottom. The message will be changed to ONLINE whenever the printer is switched online by pressing the LINE key.
PRINT DARKNESS 1 2 3 4 5	Permits the adjustment of print density. Higher print density equates to darker pint images.
PRINT SPEED 2 3 4 5 6	Permits the printer's printing speed to be established based on inches per second (IPS).
PITCH OFFSET +00MM	The label pitch is the distance from the leading edge (the edge that comes out of the printer first) of a label and the leading edge of the next label. Once the position has been set, it can be fine adjusted using the PITCH potentiometer. Positive (+) digit settings moves the leading edge forward and away from the print head while a negative (-) setting moves the label's leading edge incrementally back into the mechanism.
CANCEL PRINT JOB YES NO	Print data that has previously been received, can be cleared. If YES is selected, the print data will be deleted and then the printer will go offline. If the NO option is selected, the printer will go offline without deleting data in buffer.
USER TEST PRINT YES NO	Provides the specific sequence of events required by the operator, the printer, and the printer's software for a test label to be printed. Select YES to enter User Test Print menu while select NO will advance to Online mode.

Advanced Mode

Display	Description
ADVANCED MODE	Is the first menu screen of the Advanced Mode. The Advanced Mode is provided to make basic printer operational adjustments. Typically, once these adjustments or settings have been made, they will not require additional address unless a new job is downloaded.
DARKNESS RANGE **A B**	Allows the darkness (print density) selection of the printed image. Has two selection options.
AUTO ONLINE **YES NO**	The printer can be set to automatically go into the online mode when powered on. Otherwise, theprinter starts in the offline state and must be manually placed online before it is ready to print.
PRINT OFFSET **V: +XXXX H: +XXX**	Print offset refers to the vertical and horizontal shifting of the entire print area relative to the label and the print start position. The movement is incremental by dots in the positive (+) or negative (-) direction. Positive and negative vertical adjustment is toward and away from the print head respectively. Positive and negative horizontal adjustment is to the left and right of the reference point respectively.
IGNORE CR/LF **YES NO**	Determines whether the print data code requires deletion. Hexadecimal graphic data will not be deleted. Select YES to delete all carriage return (CR) and line feed (LF) commands in the data stream - including graphics and 2D barcodes.
SET CALENDAR **YES NO**	The calendar is an optional feature that allows the date and time to be manually set using the operator panel or through command codes. This screen will not be displayed if the calendar chip (real-time clock) is not installed. This menu allows the operator to choose if the calendar settings are to be altered.
CALENDAR **00 / 00 / 00 00:00**	• This menu screen allows the calendar settings to be altered. The calendar is divided into five sets of two digits. The first two allows for the year to be set, followed by the month, the day, the hour, then the minute.
INTERFACE TYPE **IEEE RE232 USB**	• This menu will display only when the standard Plug-in 3-in-1 combo interface module is installed. Select the type of interface according to the connection to the host. Either IEEE, RS232 or USB interface can be selected. • If the optional single interface board (LAN or USB) is installed, this menu will not be displayed.

Counters Mode

Display	Description
ADVANCED MODE	First transitional menu screen to access the Counters Mode.
SERVICE MODE	Second transitional menu screen to access the Counters Mode.
COUNTERS MODE	Is the first menu screen of the Counters Mode. The Counters Mode allows the printers various internal counters to be reset to zero or to view count in meters printed thus far.
COUNTERS **HD LIFE**	Allows the selection of which counter to be viewed to reset. HD: Head counter LIFE: Life counter
HEAD COUNTER **XXXM**	Is an informational screen that provides the printed length of media using the existing print head. The head counter must be reset each time the print head is replaced.
LIFE COUNTER **XXXM**	Is an informational screen that provides the printed the length of media since printer setup.
HEAD COUNTER CLEAR **YES NO**	Resets the print head counter to zero.

Test Print Mode

Display	Description
TEST PRINT MODE **CONFIGURATION** **BARCODE** **HEADCHECK** **FACTORY**	Is the initial screen of the Test Print Mode. • **CONFIGURATION:** The printer's configuration settings. • **BARCODE:** The printer's installed barcodes. • **HEAD CHECK:** A pattern to check print head elements. • **FACTORY:** A factory test label will be printed.
TEST PRINT SIZE **XXCM**	This menu screen only appears if CONFIGURATION, BARCODE, or HEAD CHECK was chosen in the previous menu. The increments of measure is 1cm.
PRINT SIZE **SMALL LARGE**	For factory test prints, this screen appears instead of the previous screen for setting print size. Large (10cm) and small (4cm) are the only two options.
PRESS FEED KEY **TO STOP PRINTING**	Is a directional screen prompting action on how to terminate print activity. Press FEED to stop printing and press again to resume printing.
PRINT CONTINUE **YES NO**	A confirmation screen to stop test printing or to continue the label test printing. If YES is selected, the printer will goes back to TEST PRINT MODE selection menu. If NO is selected, the test print mode will stop and proceed to Online mode.
USER TEST PRINT **YES NO**	Provides the specific sequence of events required by the operator, the printer, and the printer's software for a test label to be printed. Select YES to enter User Test Print menu while select NO will advance to Online mode.
ONLINE MODE (Z) **QTY: XXXXXX**	Displays the printer's operational status. The ONLINE status is displayed on the top line and the label quantity status is on the bottom. Ready for print job.

Default Setting Mode

Display	Description
DEFAULT SETTING YES NO	Is the first menu screen of the printer's Default Setting Mode. The Default Setting Mode allows the printer to be reset to the programmed condition as received from the factory. The selection of YES confirms the operator wants to proceed and the selection of NO allows for exit without default reset. If YES is selected, resetting will immediately begin. Reboot the printer to return to normal operation.
DEFAULT SETTING COMPLETED	Is an informational screen only indicating that reset activity is complete.

Hex Dump Mode

Display	Description
ONLINE (Z) QTY: XXXXXX	Displays to indicate the printer is online and waiting to print HEX interpretation of data received by the print buffer.

Troubleshooting

Test Label Printing

The test label is designed to assist in the identification of print problems. The actual content of the test label depends on the type of test label printed.

To print a test label:

1. To enter the Test Print mode, turn off the printer, then press and hold the FEED button while turning the printer on.

   TEST PRINT MODE appears on the display.

2. Press the LINE button to scroll to your choice of CONFIGURATION, BARCODE or HEADCHECK, then press FEED to select it.

   The display shows the current test print size.

3. To change the size, use the LINE button to scroll through the various choices.
4. Once the appropriate size is selected, press FEED to start printing the test label.
5. When the label has finished printing, press FEED to stop the test.
6. To exit the Test Print mode, turn the printer off, then on again.

Sample Test Print Label

> **Note**
> The only print problem that the following sample test label does not display is fading of print image from one side of the label to the other. This type of fading is the result of improper print head balance.
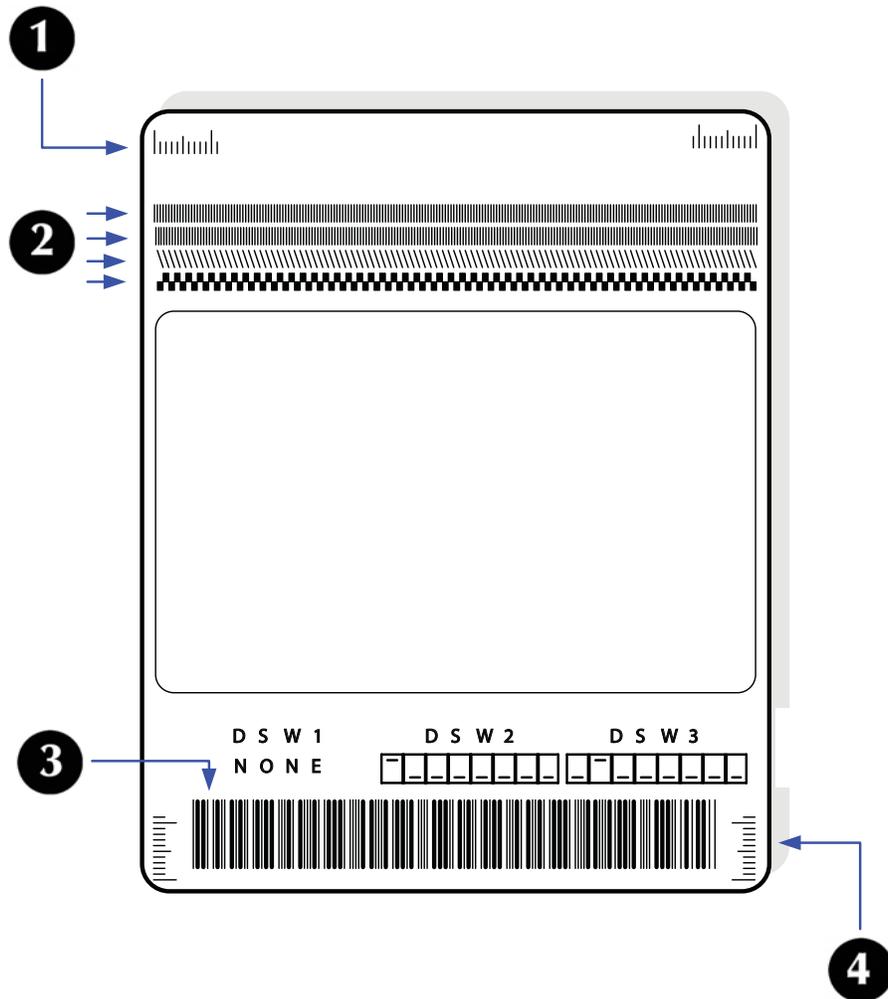
1 Compare this scale on each side to ensure the print is evenly spaced horizontally.
2 Visually inspect these rows for voids indicating defective elements.
3 Line sharpness is determined by print speed and darkness.
4 Compare this scale on either side to ensure the print is evenly spaced vertically.

Maintenance

Cleaning the Printer

> **Warning!**
> **Disconnect the power cord and allow the printer to cool to room temperature before cleaning.**
>
> **Be careful when cleaning to prevent personal injury.**

Cleaning of the printer is a necessary maintenance activity to ensure print quality and longer printer life. There are two basic types of cleaning involved; the removal of loose debris and the removal of residue.

Removing Debris

Use a soft cloth and/or a pneumatic blower to remove debris from the printer. This process should be performed prior to the removal of residue.
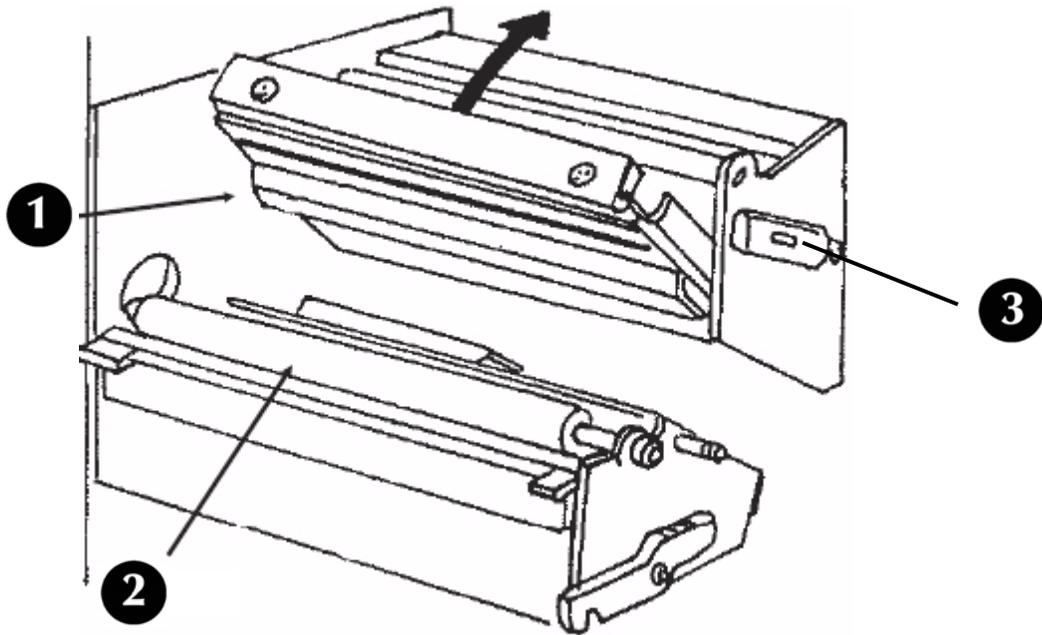
> **Caution**
> **If you are using a pneumatic blower to remove debris from the printer, be careful to stay away from the print head to avoid damaging it.**

Cleaning the Print Head and Platen
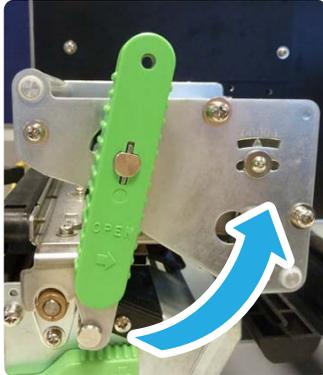
Attention!
The print head should be cleaned after every other label roll is loaded.

1. Turn the printer off and remove the power cable.
2. Open the Top Access Cover.

3. Rotate the green Head Latch counter clockwise to open the print head.

4. Remove any print media from the print head.
5. The print head faces downward along the front edge of the print head assembly.
6. Apply some isopropyl alcohol (available at most pharmacies) to a cotton swab, then gently run the swab across the full width of the print head.
7. Check the swab for any dark coloring or adhesive. If either is present, run a new swab over the print head. Repeat until no residue is found on the swab.
8. Next, clean the platen roller by running a fresh cotton swab (with alcohol on it) along the platen. Be sure to rotate the platen to clean all of its surface.
9. Allow the roller to dry, then reload the print media and close the top cover.

Cleaning the Printer Housing

Use a soft lint-free cloth dampened with a bit of water to wipe the printer housing clean.

Specifications

Physical Characteristics

Width	10.7 Inches (271 mm)
Height	12.7 Inches (322 mm)
Depth	16.9 Inches (428 mm)
Weight	32.6 Pounds (14.8 Kg)

Power

Input Voltage	100-120 Volts AC +/- 10%, 50/60 Hertz +/-5%
Power Consumption	Peak Time : 190VA 130W Idle : 24VA 16W

Environmental

Operating Temperature	41 to 104°F (5° to 40°C)
Storage Temperature	23 to 140°F (-5° to 60°C)
Storage Humidity	30 to 90% RH Non-Condensing
Operating Humidity	30 to 80% RH Non-Condensing

Processing

CPU	32 Bit RISC
Flash ROM	2 Megabytes
Receive Buffer	2.95 Megabytes maximum, 2 Megabytes near full

Interfaces

Model	Interface(s)
LE810DT- SER/PAR/USB	Combo Interface Board: • Serial: RS232C (9600 to 57,600 bps) • Parallel: IEEE1284 Enhanced Parallel Port • USB: Universal Serial Bus (USB Full Speed)
LE810DT- ETHERNET	Ethernet: 10/100 Base-T
LE810 DT – PAR	Parallel: IEEE1284 Enhanced Parallel Port
LE810 DT – SER	Serial: RS232C (9600 to 57,600 bps)
LE810 DT – USB	USB: Universal Serial Bus (USB Full Speed)

Print Specifications

Method	Direct Thermal
Maximum Speed (selectable)	2, 3, 4, 5, 6 Inches Per Second (50.8 - 152.4 mm)
Print Module (dot size)	.0049 Inches (.125 mm)
Resolution	203 Dots Per Inch (8 dpmm)
Maximum Print Width	4.09 Inches (104 mm)
Maximum Print Length	15.75 Inches (400 mm)

Sensing Specifications

Gap	Adjustable
Reflective I-Mark	Adjustable
Media Out	Constant
Cover Open	Constant

Media

Width	• Media Width: 0.866 to 5.04 Inches (22-128 mm) • Media Width with Backing Paper: 0.984 to 5.16 Inches (25-131 mm)
Length	• Media Length: 15.63 Inches (397 mm) • Media Length with Backing Paper: 15.75 Inches (400 mm)
Length (Tear-Off)	• Media Length: 0.669 to 7.01 Inches (17-178 mm) • Media Length with Backing Paper: 0.787 to 7.13 Inches (20-181 mm)
Type	• Roll or Fan-Fold • I-Mark or Gap • Direct Thermal
Thickness	0.003 to 0.010 inches (0.08-0.26 mm)
Roll Diameter	Maximum: 8.6 inches (218 mm)
Core Diameter	3.0 Inches (76.2 mm)
Wind Direction	Face Inward
Fan-Fold Height	Maximum: 3.94 Inches (100 mm)

Commands

Standard	• ZEBRA emulation and ZPL command • SATO Barcode Printer Language (SBPL) • Intelligent Command
Non-Standard	N/A

Character Font Capabilities

TTF fonts	
0	15 dots H x 12 dots W

Bitmap fonts	
A	9 dots H x 5 dots W
B	11 dots H x 17 dots W
C	18 dots H x 10 dots W
D	18 dots H x 10 dots W
E	28 dots H x 15 dots W
F	26 dots H x 13 dots W
G	60 dots H x 40 dots W
H	21 dots H x 13 dots W
P	20 dots H x 18 dots W
Q	28 dots H x 24 dots W
R	35 dots H x 31 dots W
S	40 dots H x 35 dots W
T	48 dots H x 42 dots W
U	59 dots H x 53 dots W
V	80 dots H x 71 dots W

Downloadable Fonts	
	N/A

Character Control	
	Expansion up to 12 x in either the X or Y coordinates. Character Pitch Control Line Space Control Journal Print Facility 0, 90, 180, and 270 Degree Rotation

Bar Code Capabilities

Bar Code Capabilities	
Linear Bar Codes	• UPC A/E • JAN 8/13 • EAN 8/13 • Code 39 • Code 93 • Code 128 • Interleaved 2 of 5 • Industrial 2 of 5 • Matrix 2 of 5 • Bookland • NW-7 • MSI • POSTNET • UCC/EAN 128 • NW-7 (Codabar)
Two Dimensional	• QR Code • Data Matrix • Maxi Code • PDF417 • Synthetic Symbol
Ratios	1:2, 1:3, 2:5, User definable bar widths
Bar Height	4 to 999 dots, User programmable
Rotation	0, 90, 180, and 270 Degrees
Sequential Numbering	Sequential numbering of both numerics and bar codes
Expansion Ratio of Character	• Height: 1 to 12 times • Width: 1 to 12 times
Graphics	Full dot addressable graphics, BMP or PCX formats
Form Overlay	Form overlay for high-speed editing of complex formats