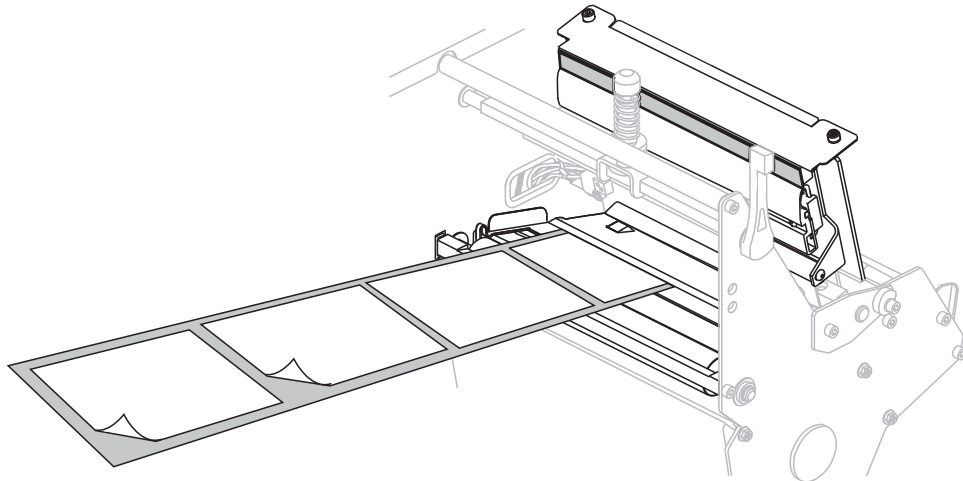
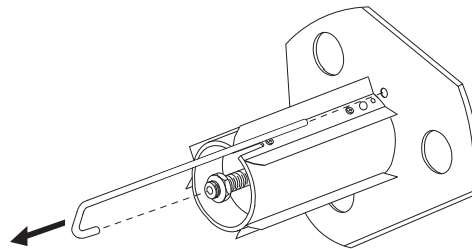


13. Extend approximately 36 in. (920 mm) of media out of the printer. Remove and discard the labels from this exposed media.



14. Remove the hook from the rewind spindle.

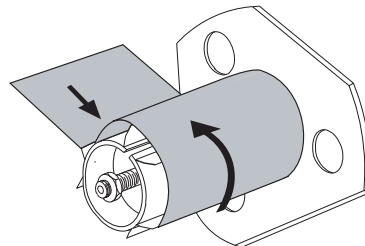


15. If you are using a core, slide it onto the rewind spindle until it is flush against the guide plate.

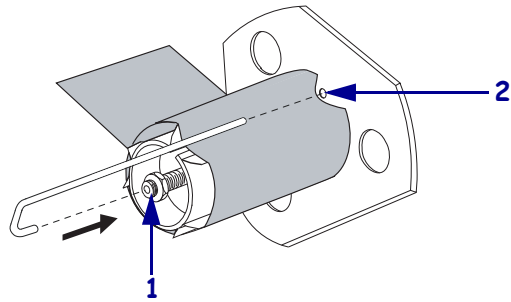


**Note** • A core is not required.

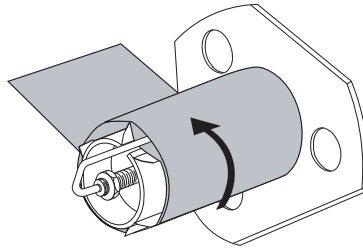
16. Wind the media liner counterclockwise around the rewind spindle.



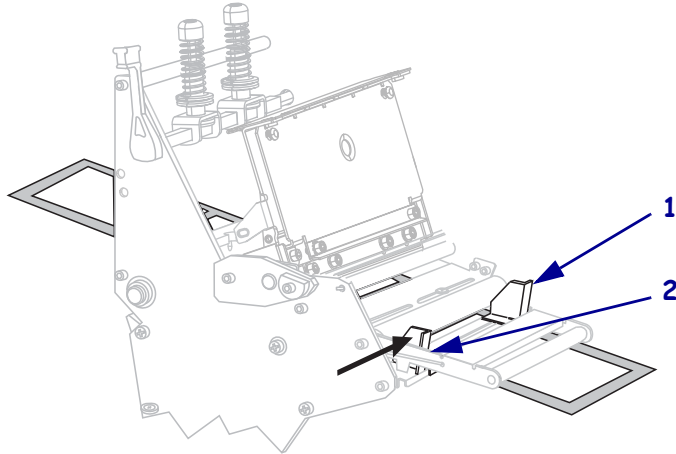
17. Reinstall the hook. Insert the short end of the hook into the hole in the center of the adjusting nut (1). Insert the long end of the hook into the small hole on the guide plate (2).



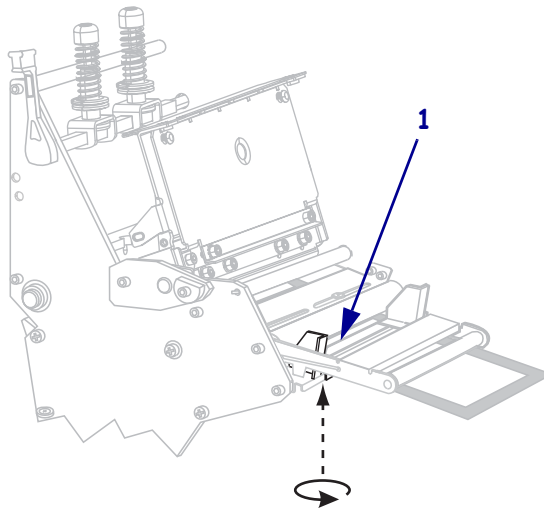
- 18.** Rotate the spindle counterclockwise several turns to wind the media liner over the hook and remove any slack.



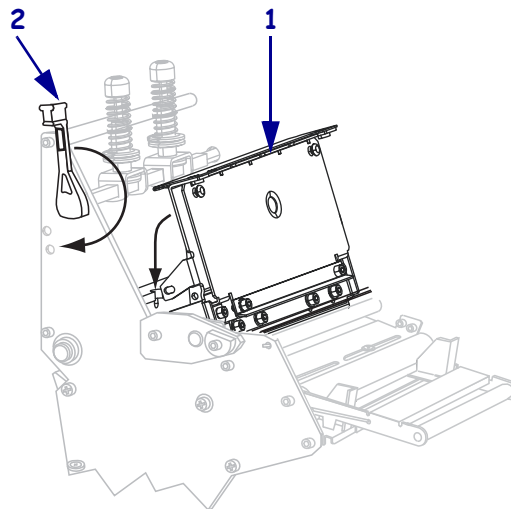
- 19.** Align the media with the inner media guide (1). Slide in the outer media guide (2) until it just touches the edge of the media.



20. Tighten the thumb screw (not visible from this angle) that is located on the bottom of the outer media guide (1).



21. Push down the printhead assembly (1), and then rotate the printhead-open lever (2) clockwise until it locks into place.



The labels wind on the rewind spindle or core.

## Remove Media Liner from the Rewind or Peel Spindle

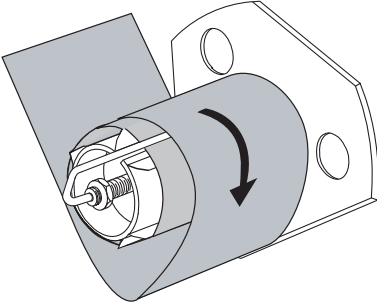
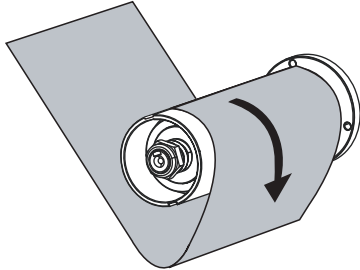
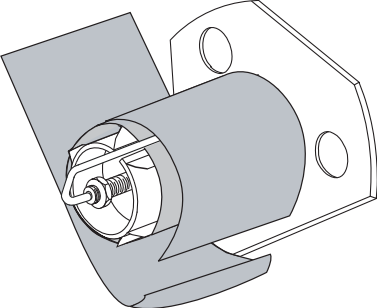
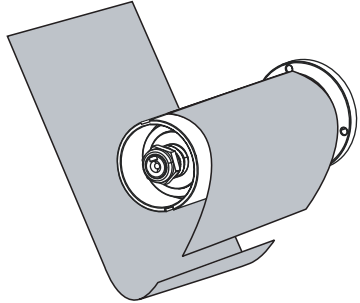
Rewind mode and Peel-Off mode each use spindles to wind used media liner. Remove the media liner from the spindle each time that you change labels.



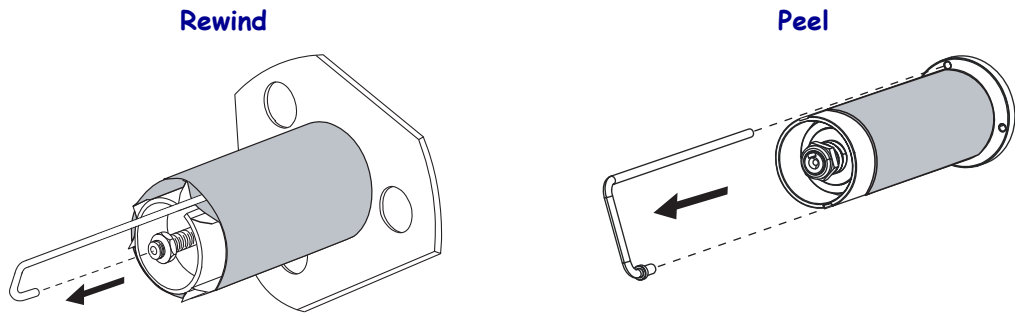
**Important** • It is **not** necessary to turn off the power to remove media liner from the spindle. If power is turned off, all label formats and images, as well as any temporarily saved parameter settings stored in the printer's internal memory, are lost. When power is turned back on, these items must be reloaded.

To remove media liner from the rewind or peel spindle, complete these steps:

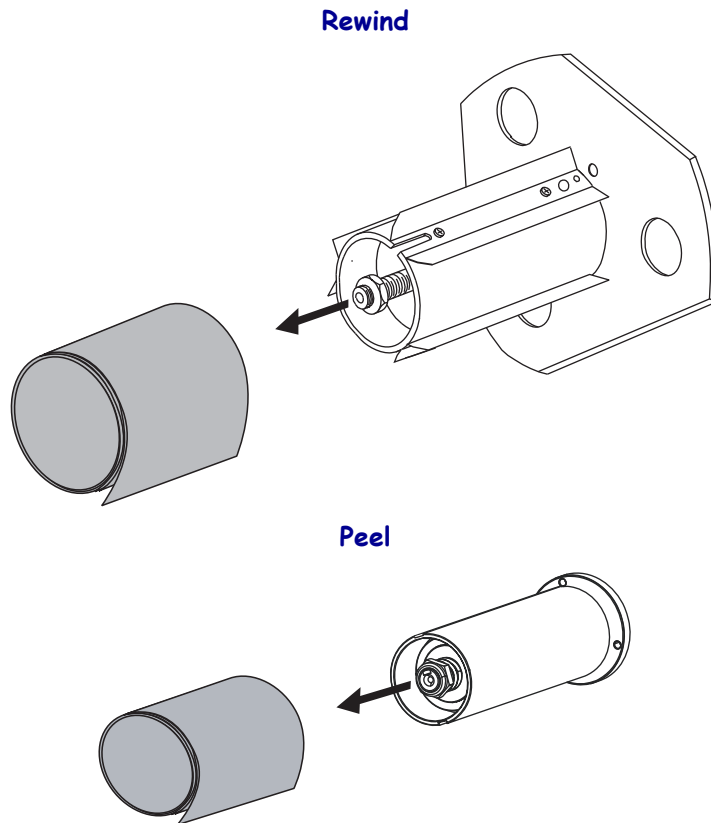
1. Has the media run out?

If...	Then...
No	<p data-bbox="592 716 1333 779"><b>a.</b> Create slack in the media liner by rotating the spindle slightly clockwise.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p data-bbox="781 793 870 825"><b>Rewind</b></p>  </div> <div style="text-align: center;"> <p data-bbox="1219 793 1276 825"><b>Peel</b></p>  </div> </div> <p data-bbox="592 1178 1097 1209"><b>b.</b> Cut or tear the media liner at the spindle.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p data-bbox="781 1224 870 1255"><b>Rewind</b></p>  </div> <div style="text-align: center;"> <p data-bbox="1219 1224 1276 1255"><b>Peel</b></p>  </div> </div>
Yes	Continue with the next step.

2. Pull out the spindle hook.



3. Slide the media liner off of the spindle and discard.



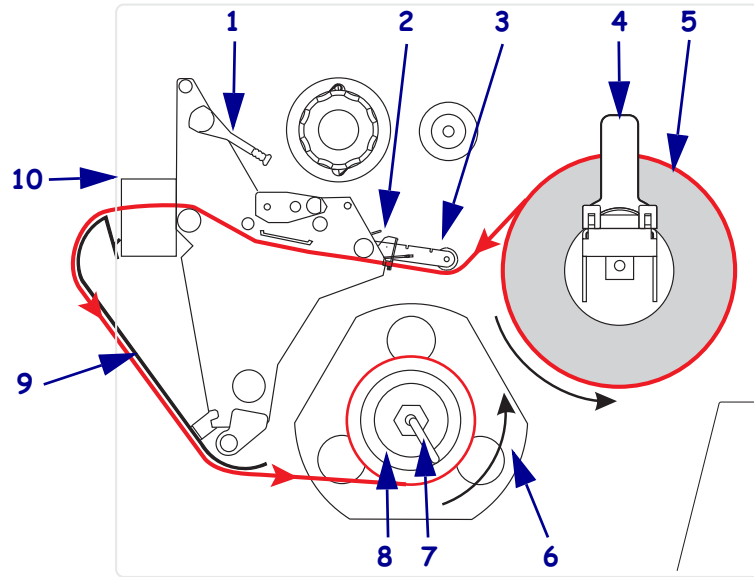
## Load Media in Rewind Mode (with Cutter Option)

Some printers with the Cutter option can use Rewind mode to print and save a roll of labels (Figure 10). This section shows how to load media for Rewind mode in printers that have a Cutter option.



**Note** • Rewind mode cannot be used with the Cutter option on 110Xi4 printers.

**Figure 10 • Media Loaded in Rewind Mode with Cutter Option**



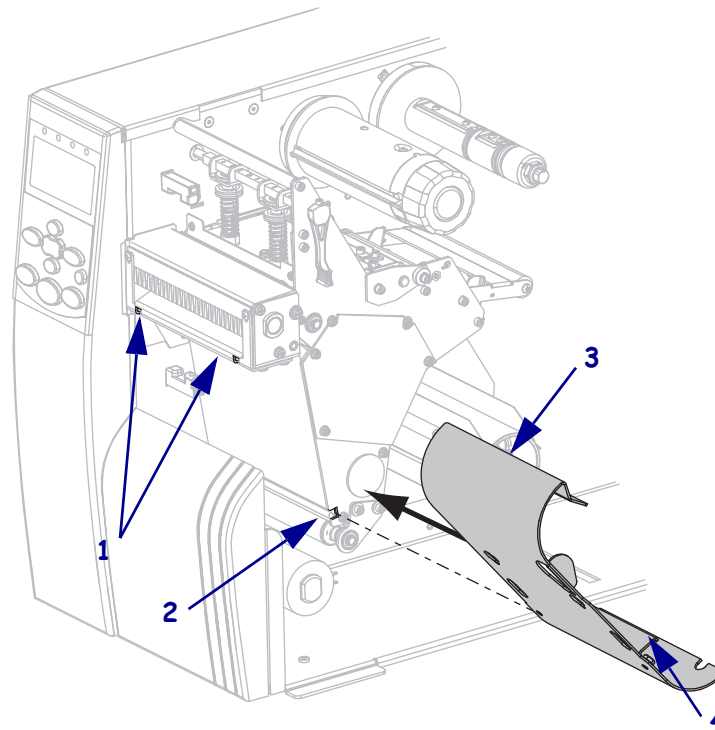
<b>1</b>	Printhead-open lever
<b>2</b>	Media guide
<b>3</b>	Media guide roller
<b>4</b>	Media supply guide
<b>5</b>	Labels
<b>6</b>	Guide plate
<b>7</b>	Spindle hook
<b>8</b>	Rewind spindle
<b>9</b>	Rewind plate for Rewind mode with Cutter option*
<b>10</b>	Printed label
<b>11</b>	Cutter

\* In new printers, remove the protective plastic covering from the rewind plate before using.

**Caution** • While performing any tasks near an open printhead, remove all rings, watches, hanging necklaces, identification badges, or other metallic objects that could touch the printhead. You are not required to turn off the printer power when working near an open printhead, but Zebra recommends it as a precaution. If you turn off the power, you will lose all temporary settings, such as label formats, and you must reload them before you resume printing.

**To set up the Rewind mode for printers with the cutter option, complete these steps:**

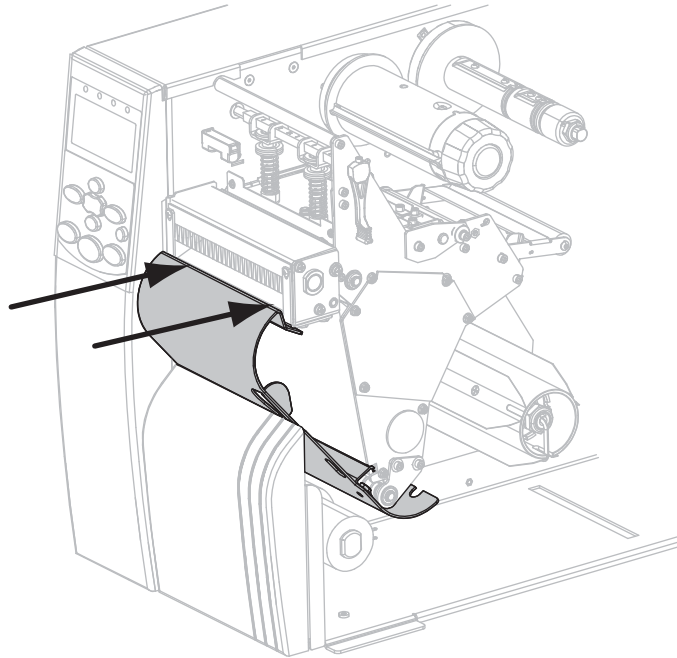
1. Remove the rewind plate from its storage location inside the printer.
2. Position the rewind plate so that the lip on the attached hook plate points down.



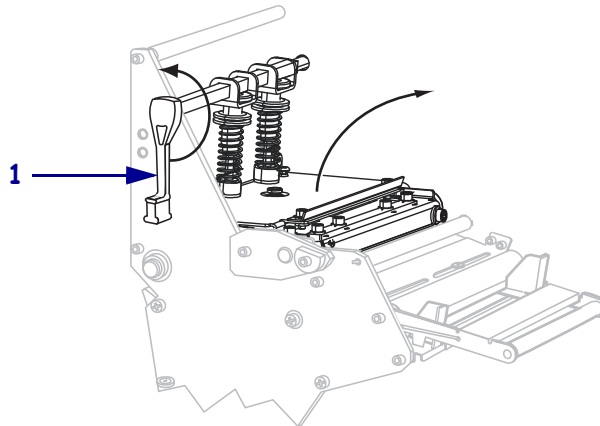
<b>1</b>	Slots on cutter
<b>2</b>	Lower slot
<b>3</b>	Rewind plate
<b>4</b>	Lip

3. Insert the hook plate lip 1/2 in. (13 mm) into the lower slot in the side plate.
4. Slide in the rewind plate until it stops against the printer's main frame.

5. Push the top edges of the rewind plate until the rewind plate snaps into place in the slots on the cutter.

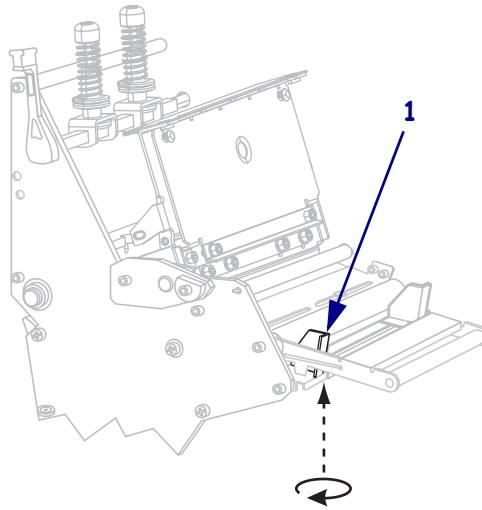


6. Set the printer to Rewind mode. See [Select Print Mode on page 101](#) for instructions.
7. Insert media into the printer. See [Prepare the Media for Loading on page 37](#) for instructions.
8. Open the printhead assembly by rotating the printhead-open lever (1) counter-clockwise.

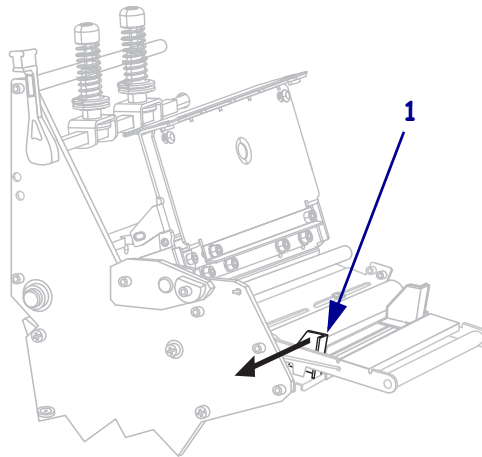




9. Loosen the thumb screw (not visible from this angle) that is located on the bottom of the outer media guide (1).



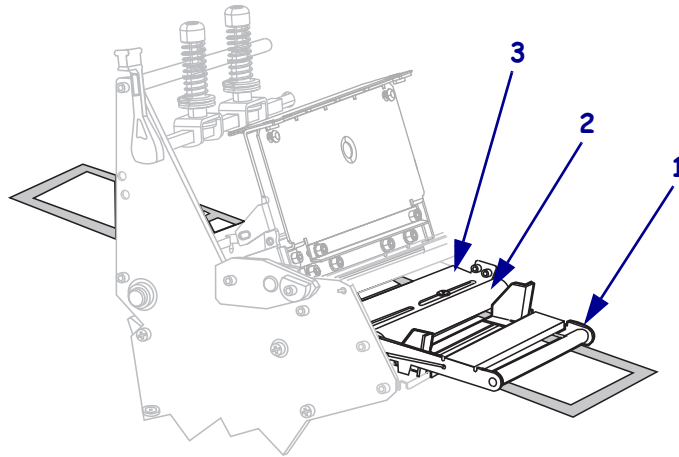
10. Slide the outer media guide (1) all the way out.



11. If your printer includes a media dancer assembly (1), thread the media under the media dancer assembly roller. For all printers, thread the media under the media guide roller (2) and then the upper media sensor (3).

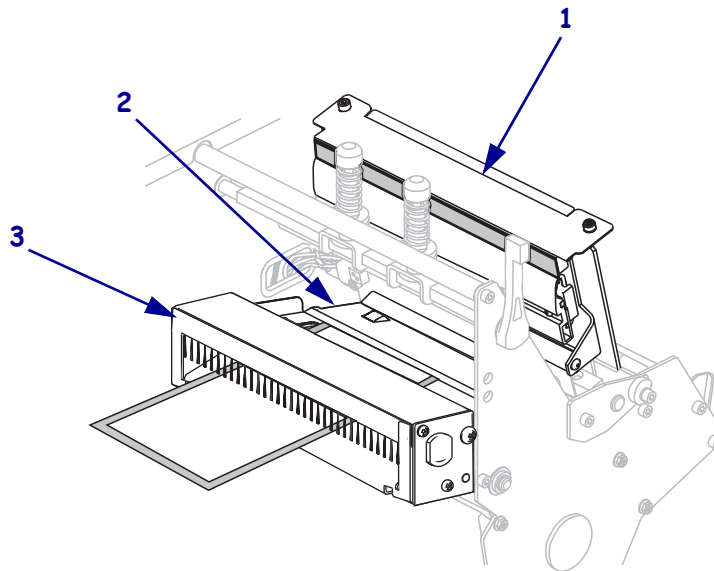


**Important** • Make sure that you thread the media under these components. If you thread the media over the them, the media obstructs the ribbon sensor and causes a false **RIBBON OUT** error.

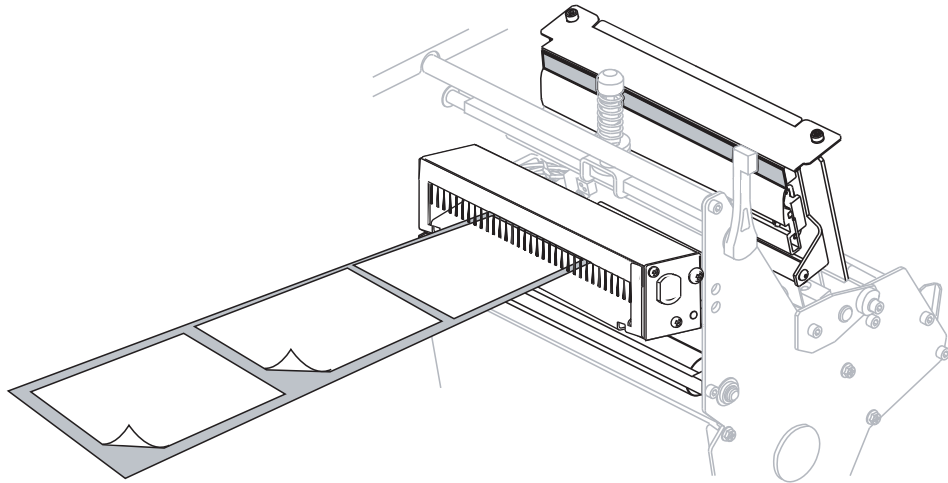


- 
12. **Caution** • The cutter blade is sharp. Do not touch or rub the blade with your fingers.
- 

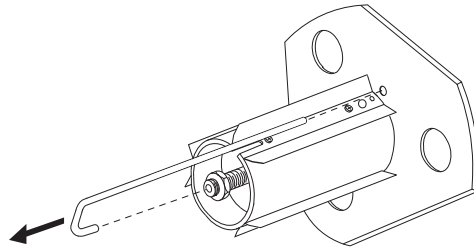
Thread the media forward until it passes under the printhead assembly (1), under the snap plate (2), and through the cutter assembly (3).



13. Extend approximately 36 in. (920 mm) of media out of the printer. Remove and discard the labels from this exposed media.



14. Remove the hook from the rewind spindle.

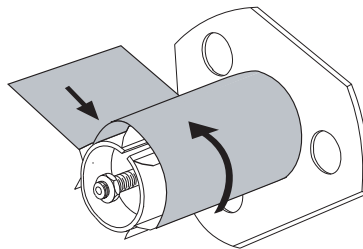


15. If you are using a core, slide it onto the rewind spindle until it is flush against the guide plate.

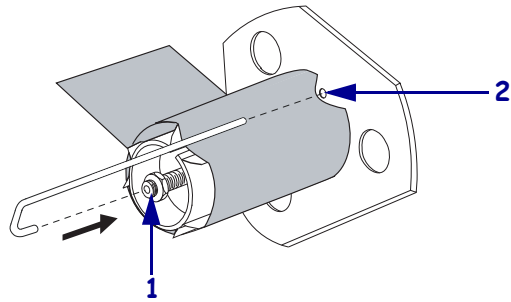


**Note** • A core is not required.

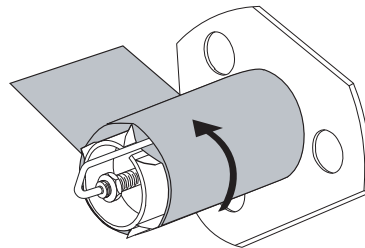
16. Wind the media liner counterclockwise around the rewind spindle.



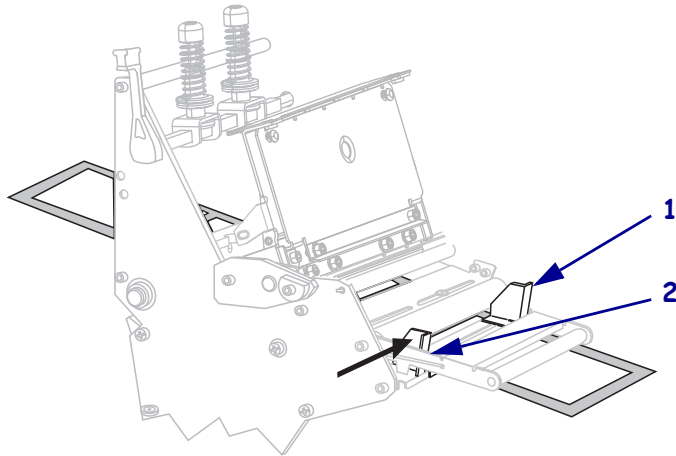
17. Reinstall the hook. Insert the short end of the hook into the hole in the center of the adjusting nut (1). Insert the long end of the hook into the small hole on the guide plate (2).



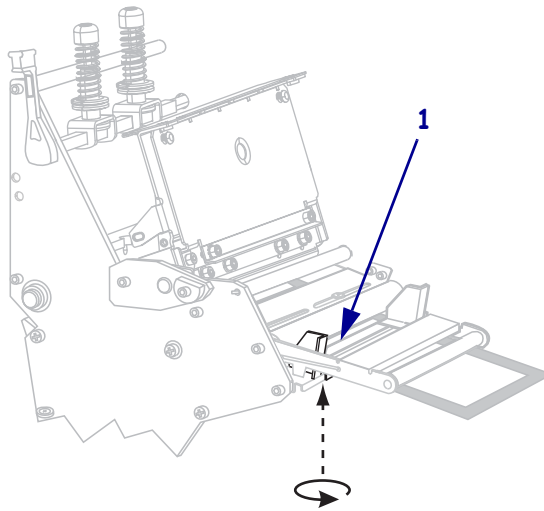
- 18.** Rotate the spindle counterclockwise several turns to wind the media liner over the hook and remove any slack.



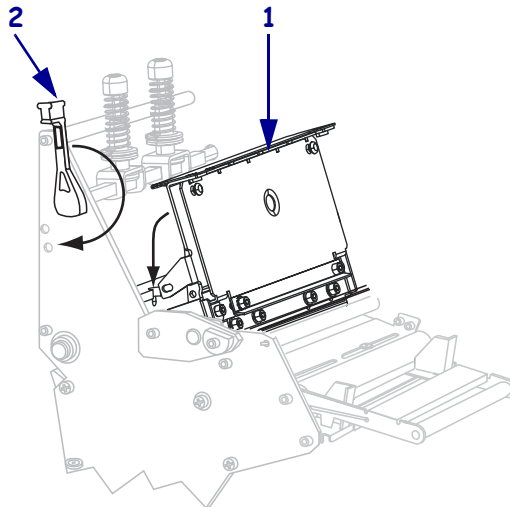
- 19.** Align the media with the inner media guide (1). Slide in the outer media guide (2) until it just touches the edge of the media.



20. Tighten the thumb screw (not visible from this angle) that is located on the bottom of the outer media guide (1).



21. Push down the printhead assembly (1), and then rotate the printhead-open lever (2) clockwise until it locks into place.



The labels wind on the rewind spindle or core.

22. For instructions for removing the labels from the rewind spindle, see [Remove Media Liner from the Rewind or Peel Spindle](#) on page 64.

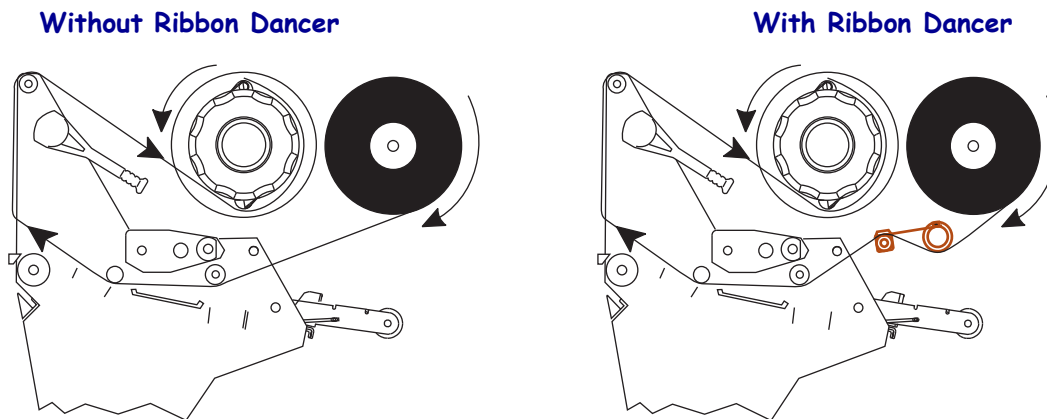
## Load Ribbon

Use the instructions in this section to load ribbon for use with thermal transfer labels. For direct thermal labels, do not load ribbon in the printer. The ribbon path is slightly different for printers with ribbon dancers (Figure 11).



**Important** • Use ribbon that is wider than the media to protect the printhead from wear. Ribbon must be coated on the outside.

Figure 11 • Ribbon Path



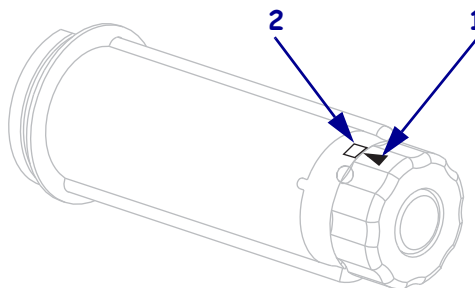
---

**Caution** • While performing any tasks near an open printhead, remove all rings, watches, hanging necklaces, identification badges, or other metallic objects that could touch the printhead. You are not required to turn off the printer power when working near an open printhead, but Zebra recommends it as a precaution. If you turn off the power, you will lose all temporary settings, such as label formats, and you must reload them before you resume printing.

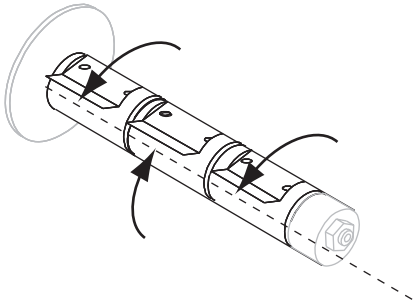
---

### To load ribbon, complete these steps:

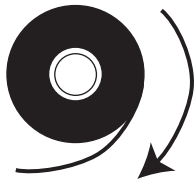
1. Align the arrow (1) on the ribbon take-up spindle knob with the notch (2) in the ribbon take-up spindle.



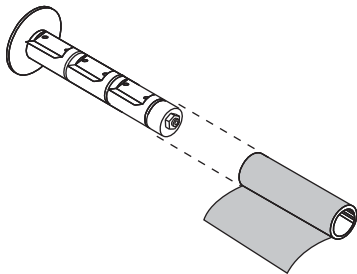
2. Align the segments of the ribbon supply spindle.



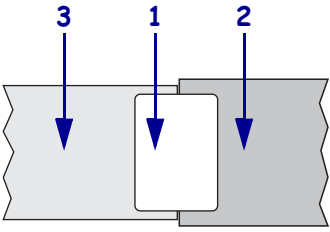
3. Orient the ribbon with the loose end unrolling clockwise.



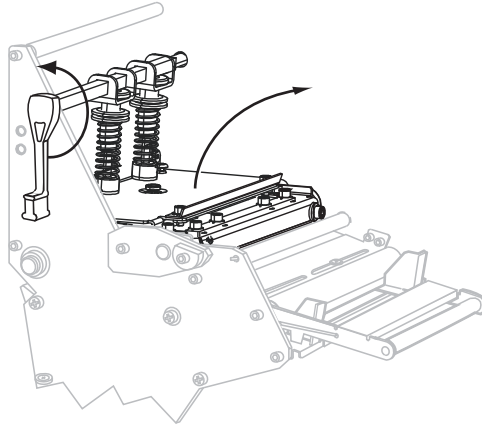
4. Place the roll of ribbon on the ribbon supply spindle. Push the roll back as far as it will go.



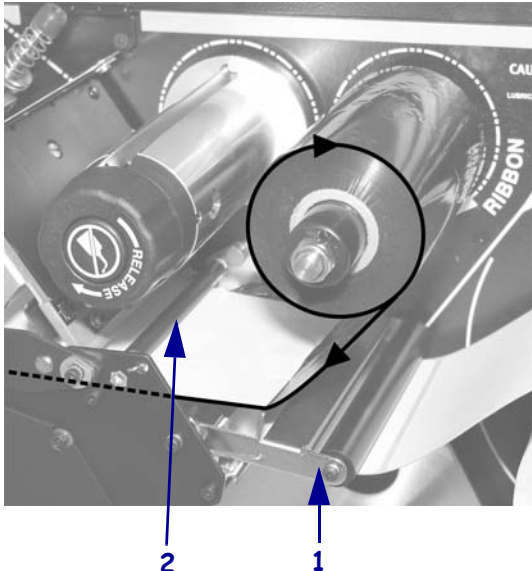
5. A ribbon leader makes ribbon loading and unloading easier. Does your roll of ribbon have paper or something else attached to the end to serve as a ribbon leader?

If...	Then...
Yes	Continue with the next step.
No	<p>a. Tear off a strip of media (labels and liner) about 6–12 in. (150–305 mm) long from the roll.</p> <p>b. Peel a label from the media strip.</p> <p>c. Use this label (1) to attach the end of the ribbon (2) to the media strip (3). The media strip acts as a leader.</p> 

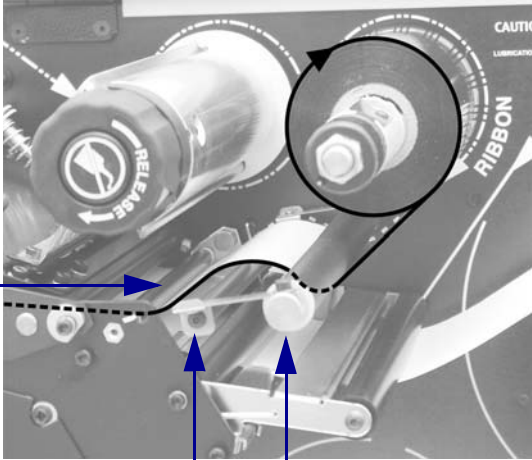
6. Open the printhead assembly by rotating the printhead-open lever counter-clockwise.



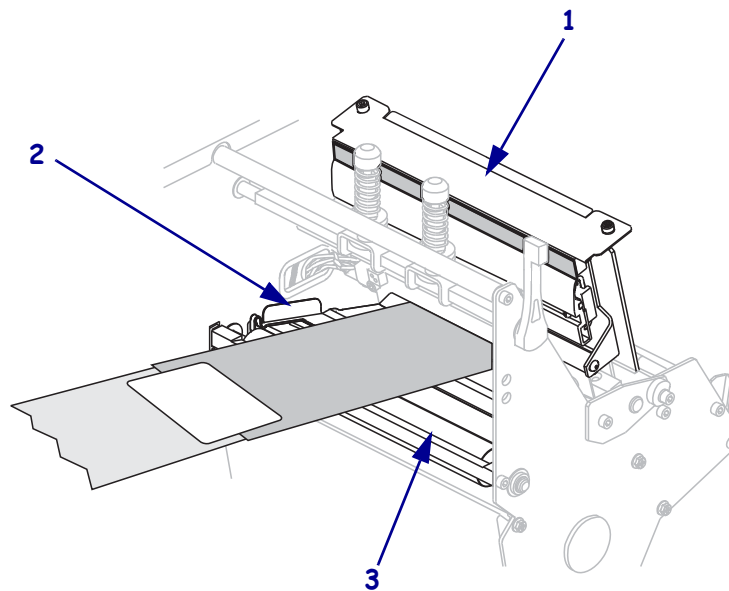
7. Does your printer contain a ribbon dancer assembly? (See [Figure 11 on page 74](#) for the ribbon dancer location.)

If...	Then...
No	<p>Thread the ribbon over the media dancer assembly (1) and under the ribbon guide roller (2).</p> 

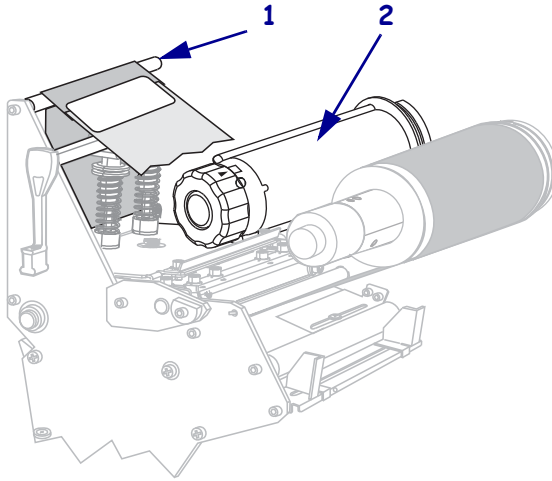


If...	Then...
Yes	<p>a. Thread the ribbon through the ribbon dancer. The ribbon must go under the upper roller (1) and then over the lower roller (2).</p> <p>b. Thread the ribbon under the ribbon guide roller (3).</p> 

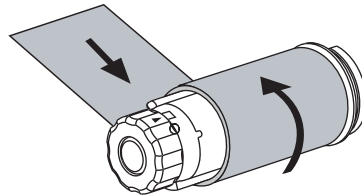
8. Push the ribbon leader forward until it passes under the printhead assembly (1), over the snap plate (2), and then over the platen roller (3).



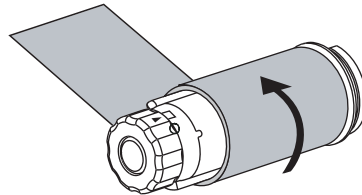
9. Bring the ribbon leader over the upper ribbon roller (1) and then toward the ribbon take-up spindle (2).



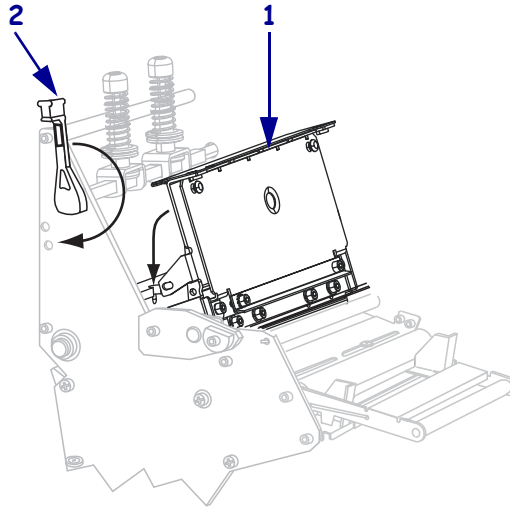
10. Wind the ribbon leader and attached ribbon counterclockwise around the ribbon take-up spindle.



11. Rotate the spindle counterclockwise several turns to wind the ribbon and remove any slack.



12. Push down the printhead assembly (1), and then rotate the printhead-open lever (2) clockwise until it locks into place.



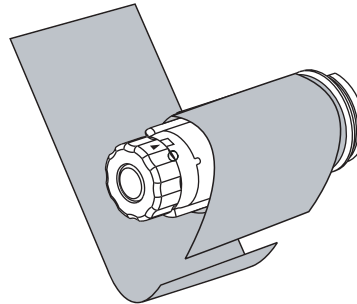
## Remove Used Ribbon

Remove used ribbon from the ribbon take-up spindle each time you change the roll of ribbon.

### To remove used ribbon, complete these steps:

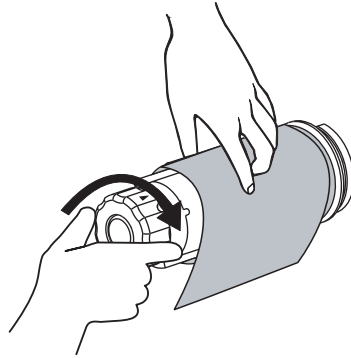
1. Has the ribbon run out?

If the ribbon...	Then
Ran out	Continue with the next step.
Did not run out	Cut or break the ribbon before the ribbon take-up spindle.

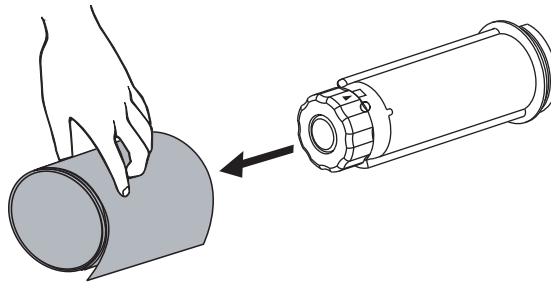


2. While holding the ribbon take-up spindle, turn the ribbon release knob clockwise until it stops.

The ribbon release bars pivot down, easing the spindle's grip on the used ribbon.



3. Slide the used ribbon off of the ribbon take-up spindle and discard.



## Calibrate the Printer

Calibrate the printer when it is first put into service. Calibration allows the printer to establish the proper settings for the specific media and ribbon used in your application. You may calibrate the printer at other times as needed. [Table 8](#) shows the different methods for calibration.

**Table 8 • Types of Calibration**

Type of Calibration	Description	When/How It Occurs
<b>Auto-calibration</b>	The printer automatically sets the value it detects for the spaces between labels.	Occurs at the following times: <ul style="list-style-type: none"> <li>When the printer is first turned on if CALIBRATION is selected for <b>MEDIA POWER UP</b> (see <a href="#">Select Media Power-Up Option</a> on page 113).</li> <li>When the printer feeds media after the printhead is closed if CALIBRATION is selected for <b>HEAD CLOSE</b> (see <a href="#">Select Head Close Option</a> on page 114).</li> <li>As part of both the sensor profile and media and ribbon sensor calibration procedures.</li> </ul>
<b>Long (Standard) Calibration</b>	The printer does the following: <ul style="list-style-type: none"> <li>feeds media and ribbon</li> <li>sets the values it detects for media length, media type (continuous or non-continuous), and print mode (thermal transfer or direct thermal)</li> <li>updates the sensor values</li> </ul>	To perform a long calibration, do one of the following: <ul style="list-style-type: none"> <li>Press PAUSE on the control panel to pause the printer, and then press CALIBRATE.</li> <li>Select CALIBRATION for the <b>MEDIA POWER UP</b> or <b>HEAD CLOSE</b> parameter (see <a href="#">Select Media Power-Up Option</a> on page 113 or <a href="#">Select Head Close Option</a> on page 114).</li> </ul>
<b>Short Calibration</b>	The printer calibrates using the current sensor values rather than detecting the spaces between labels and resetting the sensors. This calibration sequence uses fewer labels than the long calibration sequence, but it is less reliable because the values that are stored in the sensors could be incorrect.	Select SHORT CAL for the <b>MEDIA POWER UP</b> or <b>HEAD CLOSE</b> parameter (see <a href="#">Select Media Power-Up Option</a> on page 113 or <a href="#">Select Head Close Option</a> on page 114).

Table 8 • Types of Calibration (Continued)

Type of Calibration	Description	When/How It Occurs
<b>Sensor Profile Calibration</b>	The printer auto-calibrates and prints a media sensor profile.	Select the <b>SENSOR PROFILE</b> option on the control panel. See <i>Print Sensor Profile</i> on page 108 for instructions.
<b>Media and Ribbon Sensor Sensitivity Calibration</b>	One of the most common adjustments to printer settings. The printer resets the sensitivity of the sensors to detect correctly the media and ribbon that you are using. If you change the type of ribbon and/or media, you might need to reset the sensitivity of the media and ribbon sensors. When the sensors are at their new sensitivity, the printer performs an auto-calibration.	Select the <b>MEDIA AND RIBBON CALIBRATE</b> option on the control panel. See <i>Calibrate Media and Ribbon Sensor Sensitivity</i> on page 109 for instructions.

## Adjust Media Sensors

The transmissive sensor consists of two sections: a light source (the lower media sensor) and a light sensor (the upper media sensor). The media passes between the two.

Adjust these sensors only when the printer cannot detect the top of the label. The control panel LCD displays **ERROR CONDITION PAPER OUT**, even though there are labels loaded in the printer.

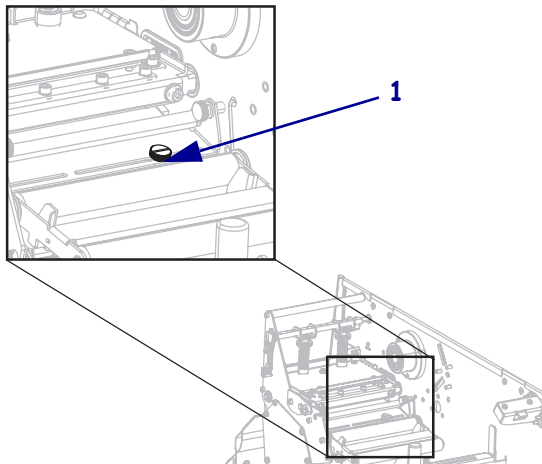


**Note** • For most models of Xi4, the upper media sensor can be positioned along the inside half of the media (the side closest to the back frame of the printer) or the outside half of the media (the side farthest from the back frame of the printer). However, for the 220Xi4, you cannot move the sensors to the outside half of the media.

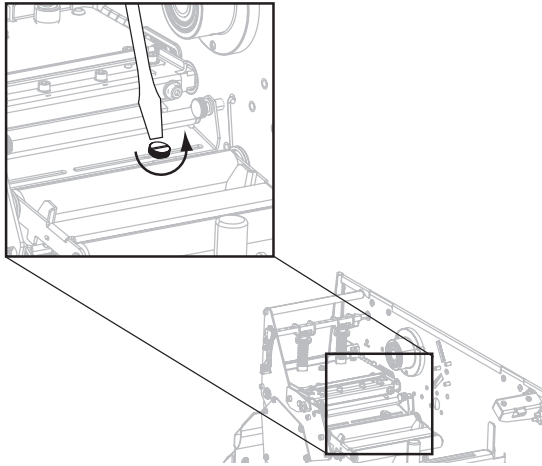
### Upper Media Sensor—Inside Half of Media

**To adjust the upper media sensor for the inside half of the media, complete these steps:**

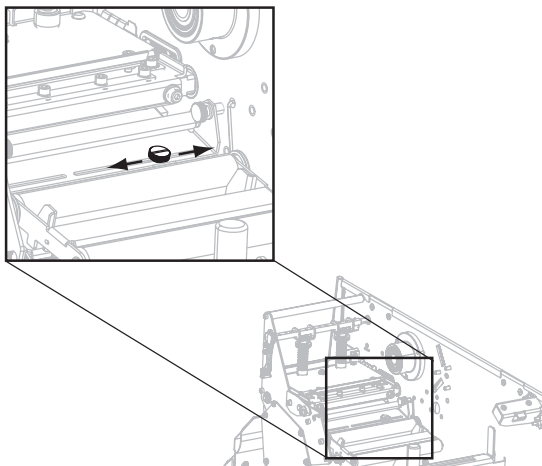
1. Remove the ribbon (if ribbon is used).
2. Locate the upper media sensor adjustment screw (1). The upper media sensor eye is directly below the adjustment screw head.



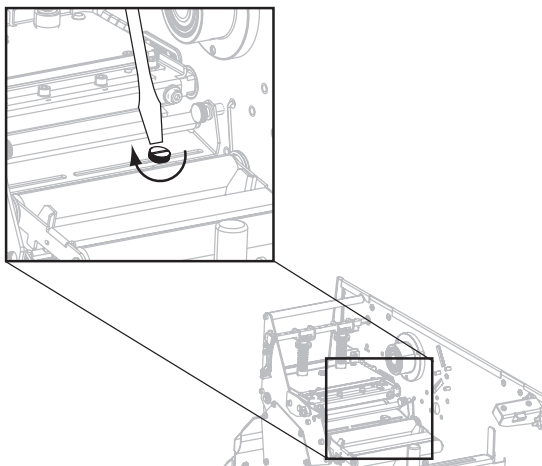
3. Using a thin, flat-blade screwdriver, loosen the upper media sensor adjustment screw.



4. Slide the upper media sensor along the slot to the desired position (for non-continuous media with a notch or hole in the media, the sensor must be directly above the notch or hole).



5. Tighten the adjustment screw to secure the upper media sensor.



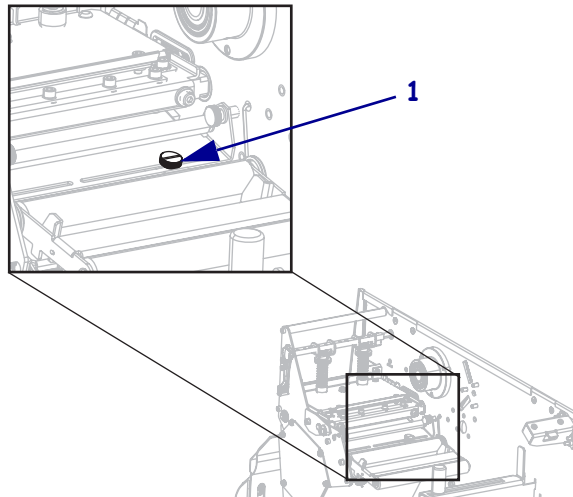
6. Adjust the lower media sensor to match the new position of the upper media sensor. See [Lower Media Sensor](#) on page 87.



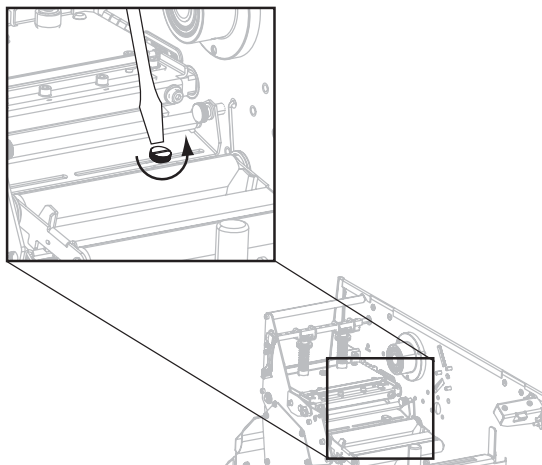
## Upper Media Sensor—Outside Half of Media

To adjust the upper media sensor for the outside half of the media, complete these steps (all models except the 220Xi4):

1. Remove the ribbon (if ribbon is used).
2. Locate the upper media sensor adjustment screw (1). The upper media sensor eye is directly below the adjustment screw head.

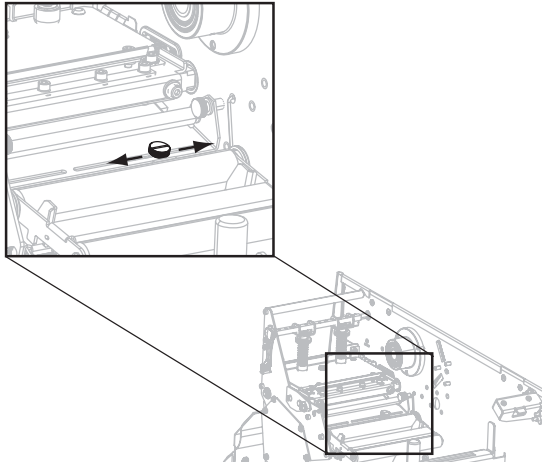


3. Using a thin, flat-blade screwdriver, loosen and then remove the upper media sensor adjustment screw.

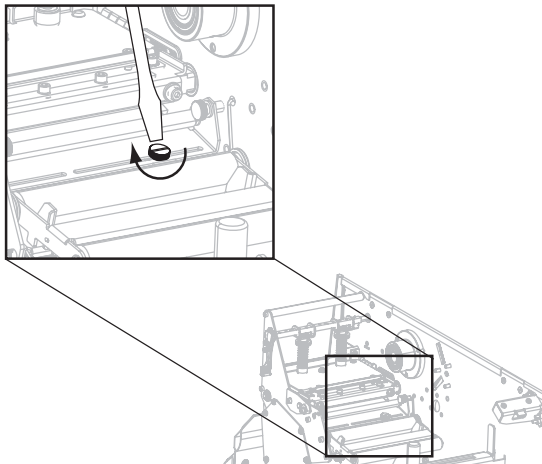


4. Lift the upper media sensor assembly from the slot, and move it and the wire cover to the outside slot. Carefully pull the wires through the cable tie. You may need to set aside the sensor wire cover if the adjustment is too far to the outside.
5. Replace and slightly tighten the adjustment screw.

6. Slide the upper media sensor along the slot to the desired position (for non-continuous media with a notch or hole in the media, the sensor must be directly above the notch or hole).



7. Tighten the adjustment screw.



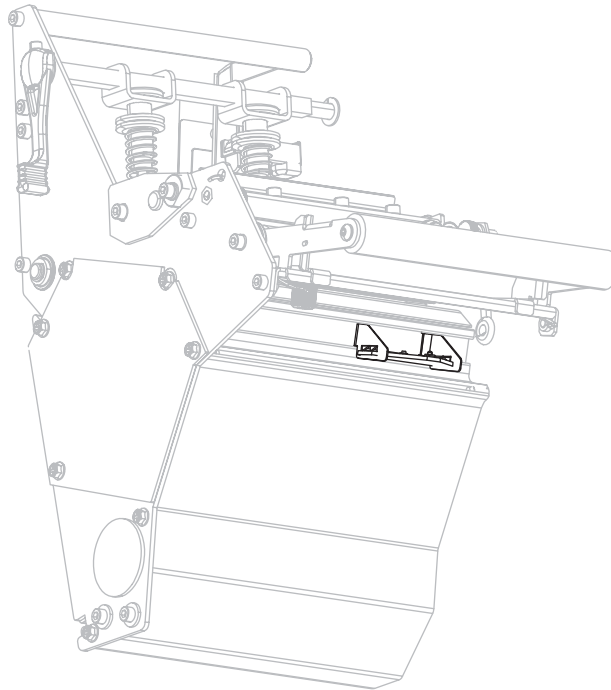
8. Make sure that the wires are routed back into the groove of the media sensor bracket.
9. Adjust the lower media sensor to match the new position of the upper media sensor. See [Lower Media Sensor on page 87](#).

## Lower Media Sensor

After you adjust the upper media sensor, adjust the lower media sensor to match its new position.

### To adjust the lower media sensor, complete these steps:

1. Locate the lower media sensor assembly under the rear roller. The sensor is a spring clip holding a circuit board.



2. Slide the lower sensor until it is under the upper media sensor. Use the light that shines from the sensor to help align it with the upper sensor. Gently pull wires out as needed (wires should have a little slack).

## Adjust Printhead Pressure and Toggle Position

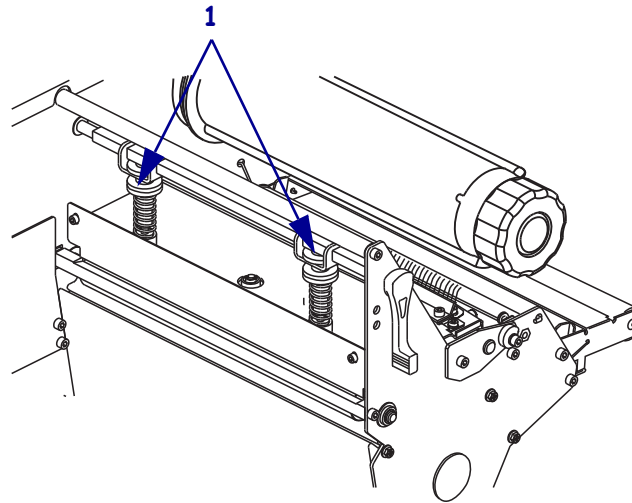
Print quality depends on the labels and ribbon used as well as the toggle pressure and position. Make sure that your labels and ribbon are acceptable for your application. If they are, check the toggle position and then the printhead pressure.

### Toggle Position Adjustment

You may need to adjust the toggles if printing is too light on one side or if thick labels are used. If the toggle pressure is too light or uneven, the labels and ribbon may slip.

#### To position the toggles, complete these steps:

1. Loosen the locking nuts (1) at the top of the toggle assemblies.



2. Slide the toggles until they provide even pressure on the media. For extremely narrow media, position one toggle over the center of the labels, and decrease the pressure on the unused toggle.
3. Tighten the locking nuts.

## Printhead Pressure Adjustment

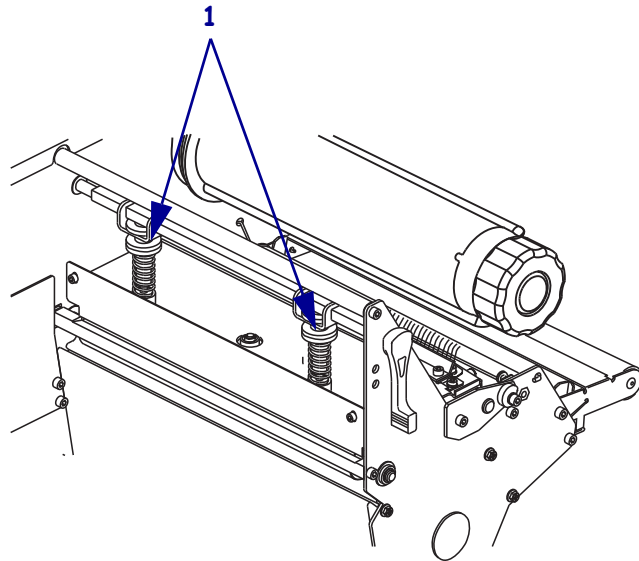
If positioning the toggles properly does not solve a print quality problem, try adjusting the printhead pressure. Maximize printhead life by using the lowest pressure that produces the desired print quality.



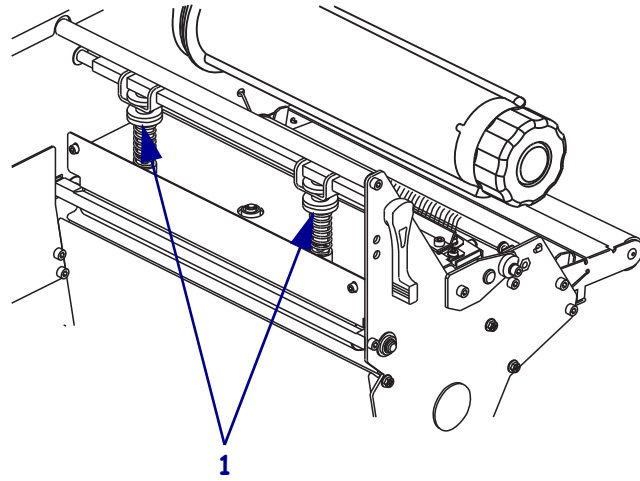
**Caution** • Observe proper electrostatic safety precautions when handling any static-sensitive components such as circuit boards and printheads.

### To adjust printhead pressure, complete these steps:

1. Print some labels at 2.4 in. (61 mm) per second by running the *PAUSE Self Test* on page 154.
2. While printing labels, use the control panel controls to lower the darkness setting until the labels are printing gray instead of black.
3. Loosen the upper knurled nuts on the toggle assemblies (1).



4. Some media types require higher pressure to print well. For these media types, increase or decrease pressure using the lower knurled nuts (1) until the left and right edges of the printed area are equally dark.



5. Increase the darkness level using the control panel controls until the printing is clear.
6. Tighten the upper knurled nuts.



**Notes •** \_\_\_\_\_

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# Configuration

This section describes the control panel parameters that are used to configure the printer for operation.

## Contents

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## Setup Mode

After you have installed the media and ribbon and the Power-On Self Test (POST) is complete, the control panel displays **PRINTER READY**. You may now set printer parameters for your application using the control panel display and the buttons directly below it. If it becomes necessary to restore the initial printer defaults, see *FEED and PAUSE Self Test* on page 158.



**Important** • Certain printing conditions may require that you adjust printing parameters, such as print speed, darkness, or print mode. These conditions include (but are not limited to):

- printing at high speeds
- peeling the media
- the use of extremely thin, small, synthetic, or coated labels

Because these and other factors affect print quality, run tests to determine the best combination of printer settings and media for your application. A poor match may limit print quality or print rate, or the printer may not function properly in the desired print mode.



**Note** • If the printer is operating on an IP network and you have a ZebraNet 10/100 Print Server or Wireless Plus Print Server, you can change the printer's parameters in these additional ways:

- with ZebraLink™ WebView. For information, see the appropriate print server user guide.
- with ZebraNet Bridge. For information, see the *ZebraNet Bridge Enterprise Printer Management User Guide*.

## Enter and Use Setup Mode

Use the LCD on the control panel to view and adjust printer settings through Setup mode. When a parameter is changed, an asterisk (\*) appears in the upper left corner of the display to indicate that the value is different from the one currently active in the printer.


Press this key...	To do the following...
SETUP/EXIT	enter or exit Setup mode.
SELECT	select or deselect a parameter.
PLUS (+)	continue to the next parameter.
MINUS (-)	return to the previous parameter in the cycle.

## Exit Setup Mode

When you exit setup mode, you have several options for saving, changing, or not changing parameters.

### To leave Setup mode, complete these steps:

1. Press SETUP/EXIT.  
The LCD displays **SAVE CHANGES**.
2. Press PLUS (+) or MINUS (-) to display the save options:

LCD	Description
<b>PERMANENT</b>	Stores values in the printer even when power is turned off.
<b>TEMPORARY</b>	Saves the changes until power is turned off.
<b>CANCEL</b>	Cancels all changes made since you entered Setup mode, except for changes made to the darkness and tear-off settings, which go into effect as soon as they are made.
<b>LOAD DEFAULTS</b>	Restores all parameters other than the network settings back to the factory defaults. Use care when loading defaults because you will need to reload all settings that you changed manually.  <b>Note</b> • On non-RFID printers, loading factory defaults causes the printer to auto-calibrate.
<b>LOAD LAST SAVE</b>	Loads values from the last permanent save.
<b>DEFAULT NET</b>	Restores the wired and wireless network settings back to factory defaults.

3. Press NEXT/SAVE to select the displayed choice.  
When the configuration and calibration sequence is done, **PRINTER READY** displays.

## Change Password-Protected Parameters

Certain parameters, including the communication parameters, are password-protected by factory default.

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**Caution** • Do not change password-protected parameters unless you have a complete understanding of the parameters' functions. If the parameters are set incorrectly, the printer may function unpredictably.

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The first time that you attempt to change a password-protected parameter, the printer displays **ENTER PASSWORD**. Before you can change the parameter, you must enter the four-digit numeric password. After you have entered the password correctly, you do not have to enter it again unless you leave Setup mode by pressing **SETUP/EXIT** or by turning off (O) the printer.

### To enter a password for a password-protected parameter, complete these steps:

1. At the password prompt, use **MINUS (-)** to change the selected digit position.
2. When you have selected the digit that you wish to change, use **PLUS (+)** to increase the selected digit value. Repeat these two steps for each digit of the password.
3. After entering the password, press **NEXT/SAVE**.

The parameter you selected to change is displayed. If the password was entered correctly, you can change the value.

## Default Password Value

The default password value is **1234**. The password can be changed using the Zebra Programming Language (ZPL) command **^KP** (Define Password) or using the printer's web pages (ZebraNet® 10/100 Print Server or Wireless Plus Print Server required).

## Disable the Password Protection Feature

You can disable the password protection feature so that it no longer prompts you for a password by setting the password to **0000** via the **^KP** ZPL command. To re-enable the password-protection feature, send the ZPL command **^KPx**, where **x** can be any number from 1 to 9999.

## Print a Configuration Label

A configuration label lists the printer settings that are stored in configuration memory. After you load the media and ribbon (if necessary), print a configuration label as a record of your printer's current settings. Keep the label to use when troubleshooting printing problems.

### To print a configuration label, complete these steps:

1. On the control panel, press SETUP/EXIT.
2. Press NEXT/SAVE or PREVIOUS to scroll through the parameters until you reach **LIST SETUP**.
3. Press PLUS (+) to confirm printing.

A configuration label prints (Figure 12).

Figure 12 • Sample Configuration Label

PRINTER CONFIGURATION	
Zebra Technologies	
ZTC 140K111Plus-200dpi	
ZBR3099332	
+0.0.....	DARKNESS
12 IPS.....	PRINT SPEED
+000.....	TEAR OFF
TEAR OFF.....	PRINT MODE
CONTINUOUS.....	MEDIA TYPE
WEB.....	SENSOR TYPE
DIRECT-THERMAL.....	PRINT METHOD
1024.....	PRINT WIDTH
2000.....	LABEL LENGTH
39.0IN 980MM.....	MAXIMUM LENGTH
MAINT OFF.....	EARLY WARNING
BIDIRECTIONAL.....	PARALLEL COMM.
RS232.....	SERIAL COMM.
9600.....	BAUD
8 BITS.....	DATA BITS
NONE.....	PARITY
XON/XOFF.....	HOST HANDSHAKE
NONE.....	PROTOCOL
000.....	NETWORK ID
NORMAL MODE.....	COMMUNICATIONS
<*> 7EH.....	CONTROL PREFIX
<*> 5EH.....	FORMAT PREFIX
<*> 20H.....	DELIMITER CHAR
ZPL II.....	ZPL MODE
CALIBRATION.....	MEDIA POWER UP
CALIBRATION.....	HEAD CLOSE
DEFAULT.....	BACKFEED
+020.....	LABEL TOP
+0000.....	LEFT POSITION
0000.....	HEAD TEST COUNT
0557.....	HEAD RESISTOR
OFF.....	VERIFIER PORT
OFF.....	APPLICATOR PORT
ENABLED.....	ERROR ON PAUSE
PULSE MODE.....	START PRINT SIG
FEED MODE.....	RESYNCH MODE
DISABLED.....	REPRINT MODE
068.....	WEB S.
068.....	MEDIA S.
072.....	RIBBON S.
100.....	TAKE LABEL
050.....	MARK S.
000.....	MARK MED S.
004.....	TRANS GAIN
034.....	TRANS BASE
196.....	TRANS BRIGHT
239.....	RIBBON GAIN
014.....	MARK GAIN
DPCSMFXM.....	MODES ENABLED
1024 8/MM FULL.....	MODES DISABLED
1024 8/MM FULL.....	RESOLUTION
V53.17.12 <-.....	FIRMWARE
1.2.....	XML SCHEMA
V40.....	HARDWARE ID
CUSTOMIZED.....	CONFIGURATION ID
11008k.....	R: RAM
59392k.....	E: ONBOARD FLASH
NONE.....	FORMAT CONVERT
*** APPLICATOR.....	P31 INTERFACE
007 POWER SUPPLY.....	P32 INTERFACE
FW VERSION.....	TRINAX/COAX ID
12/01/08.....	IDLE DISPLAY
17:06.....	RTC DATE
DISABLED.....	RTC TIME
2.1.....	ZBI
268,983 IN.....	ZBI VERSION
268,983 IN.....	NONRESET CNTR
268,983 IN.....	RESET CNTR1
683,216 CM.....	RESET CNTR2
683,216 CM.....	NONRESET CNTR
683,216 CM.....	RESET CNTR1
683,216 CM.....	RESET CNTR2
SELECTED ITEMS.....	PASSWORD LEVEL
FIRMWARE IN THIS PRINTER IS COPYRIGHTED	

## Print a Network Configuration Label

If you are using a print server, you can print a network configuration label after the printer is connected to the network.

### To print a network configuration label, complete these steps:

1. On the control panel, press SETUP/EXIT.
2. Press NEXT/SAVE or PREVIOUS to scroll through the parameters until you reach **LIST NETWORK**.
3. Press PLUS (+) to confirm printing.

A network configuration label prints (Figure 13). An asterisk designates whether the wired or wireless print server is active. If no wireless print server is installed, the wireless portion of the label does not print.

Figure 13 • Network Configuration Label (With a Wireless Print Server Installed)

Network Configuration	
Zebra Technologies ZTC ZM400-200dpi ZPL ZBR2834792	
0.0.0 *.....	OPTION FIRMWARE
Wired.....	PRIMARY NETWORK
NO.....	LOAD FROM EXT?
Internal Wired.....	ACTIVE PRINTSRVR
<b>External Wired</b>	
ALL.....	IP PROTOCOL
000.000.000.000.....	IP ADDRESS
255.255.255.000.....	SUBNET MASK
000.000.000.000.....	DEFAULT GATEWAY
000.000.000.000.....	WINS SERVER IP
YES.....	TIMEOUT CHECKING
300.....	TIMEOUT VALUE
000.....	ARP INTERVAL
9100.....	BASE RAW PORT
<b>Internal Wired*</b>	
ALL.....	IP PROTOCOL
010.003.004.116.....	IP ADDRESS
255.255.255.000.....	SUBNET MASK
010.003.004.001.....	DEFAULT GATEWAY
010.003.001.098.....	WINS SERVER IP
YES.....	TIMEOUT CHECKING
300.....	TIMEOUT VALUE
000.....	ARP INTERVAL
9100.....	BASE RAW PORT
00074d2b4168.....	MAC ADDRESS
<b>Wireless</b>	
ALL.....	IP PROTOCOL
000.000.000.000.....	IP ADDRESS
255.255.255.000.....	SUBNET MASK
000.000.000.000.....	DEFAULT GATEWAY
000.000.000.000.....	WINS SERVER IP
YES.....	TIMEOUT CHECKING
300.....	TIMEOUT VALUE
000.....	ARP INTERVAL
9100.....	BASE RAW PORT
NO.....	CARD INSERTED
0000H.....	CARD MFG ID
00000H.....	CARD PRODUCT ID
000000000000.....	MAC ADDRESS
YES.....	DRIVER INSTALLED
INFRASTRUCTURE.....	OPERATING MODE
125.....	ESSID
100.....	TX POWER
ON.....	1 Mb/s
ON.....	2 Mb/s
ON.....	5.5 Mb/s
ON.....	11 Mb/s
11 Mb/s.....	CURRENT TX RATE
DIVERSITY.....	RECEIVE ANTENNA
DIVERSITY.....	XMIT ANTENNA
OPEN.....	WEP TYPE
NONE.....	WLAN SECURITY
1.....	WEP INDEX
020.....	POOR SIGNAL
LONG.....	PREAMBLE
NO.....	ASSOCIATED
ON.....	PULSE ENABLED
15.....	PULSE RATE
OFF.....	INTL MODE
07FFH.....	CHANNEL MASK

asterisk indicating the active print server

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## Standard Control Panel Parameters

Table 9 shows parameters in the order in which they are displayed when you press NEXT/SAVE after entering Setup mode. For parameters that do not appear in this table, see [Additional Control Panel Parameters on page 121](#).



**Note** • Your label preparation software or the printer driver may override adjustments made through the control panel. Refer to the software or driver documentation for more information.

**Table 9 • Printer Parameters (Continued, page 1 of 22)**



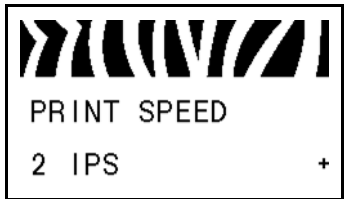

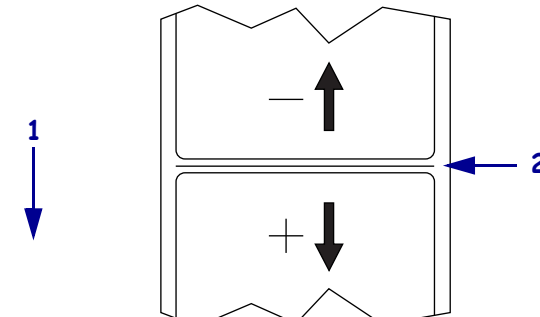
Language/Parameter	Action/Explanation
	<p><b>Adjust Print Darkness</b></p> <p>Darkness (burn duration) settings depend on a variety of factors, including ribbon type, media type, and the condition of the printhead. You may adjust the darkness for consistent high-quality printing.</p> <p> <b>Important</b> • Set the darkness to the lowest setting that provides good print quality. If the darkness is set too high, the ink may smear, the ribbon may burn through, or the printhead may wear prematurely.</p> <p>If printing is too light or if there are voids in printed areas, increase the darkness. If printing is too dark or if there is spreading or bleeding of printed areas, decrease the darkness.</p> <p>The <a href="#">FEED Self Test on page 155</a> can be used to determine the best darkness setting. You may want to adjust darkness while performing the <a href="#">PAUSE Self Test on page 154</a>. Because the darkness setting takes effect immediately, you can see the results on labels that are currently printing. Darkness settings also may be changed by the driver or software settings.</p> <p><i>Default Value:</i> +10 <i>Range:</i> 00 to +30</p> <p><b>To change the value shown:</b></p> <ol style="list-style-type: none"> <li>1. Press PLUS (+) to increase darkness.</li> <li>2. Press MINUS (-) to decrease darkness.</li> </ol>

Table 9 • Printer Parameters (Continued, page 2 of 22)

Language/Parameter	Action/Explanation				
	<p><b>Adjust Print Speed</b></p> <p>Adjusts the speed for printing a label (given in inches per second). Slower print speeds typically yield better print quality. Print speed changes take effect upon exiting Setup mode.</p> <p><i>Default Value:</i> 2 IPS</p> <p><i>Range:</i></p> <ul style="list-style-type: none"> <li>• 200 dpi: 2 to 10 IPS</li> <li>• 300 dpi: 2 to 8 IPS</li> <li>• 600 dpi: 1 to 4 IPS</li> </ul> <p><b>To change the value shown:</b></p> <ol style="list-style-type: none"> <li>1. Press PLUS (+) to increase the value.</li> <li>2. Press MINUS (-) to decrease the value.</li> </ol>				
	<p><b>Adjust the Tear-Off Position</b></p> <p>This parameter establishes the position of the media over the tear-off/peel-off bar after printing.</p> <p>See <a href="#">Figure 14</a>. Higher numbers move the media out (the tear line moves closer to the leading edge of the next label), and lower numbers move the media in (the tear line moves closer to the edge of the label just printed).</p> <p style="text-align: center;"><b>Figure 14 • Tear-Off Position Adjustment</b></p>  <table border="1" data-bbox="698 1480 1299 1564"> <tr> <td><b>1</b></td> <td>Media direction</td> </tr> <tr> <td><b>2</b></td> <td>Factory-set tear line location at position 00</td> </tr> </table> <p><i>Default Value:</i> 0</p> <p><i>Range:</i> -120 to +120</p> <p><b>To change the value shown:</b></p> <ol style="list-style-type: none"> <li>1. Press PLUS (+) to increase the value. Each press adjusts the tear-off position by four dot rows.</li> <li>2. Press MINUS (-) to decrease the value. Each press adjusts the tear-off position by four dot rows.</li> </ol>	<b>1</b>	Media direction	<b>2</b>	Factory-set tear line location at position 00
<b>1</b>	Media direction				
<b>2</b>	Factory-set tear line location at position 00				