

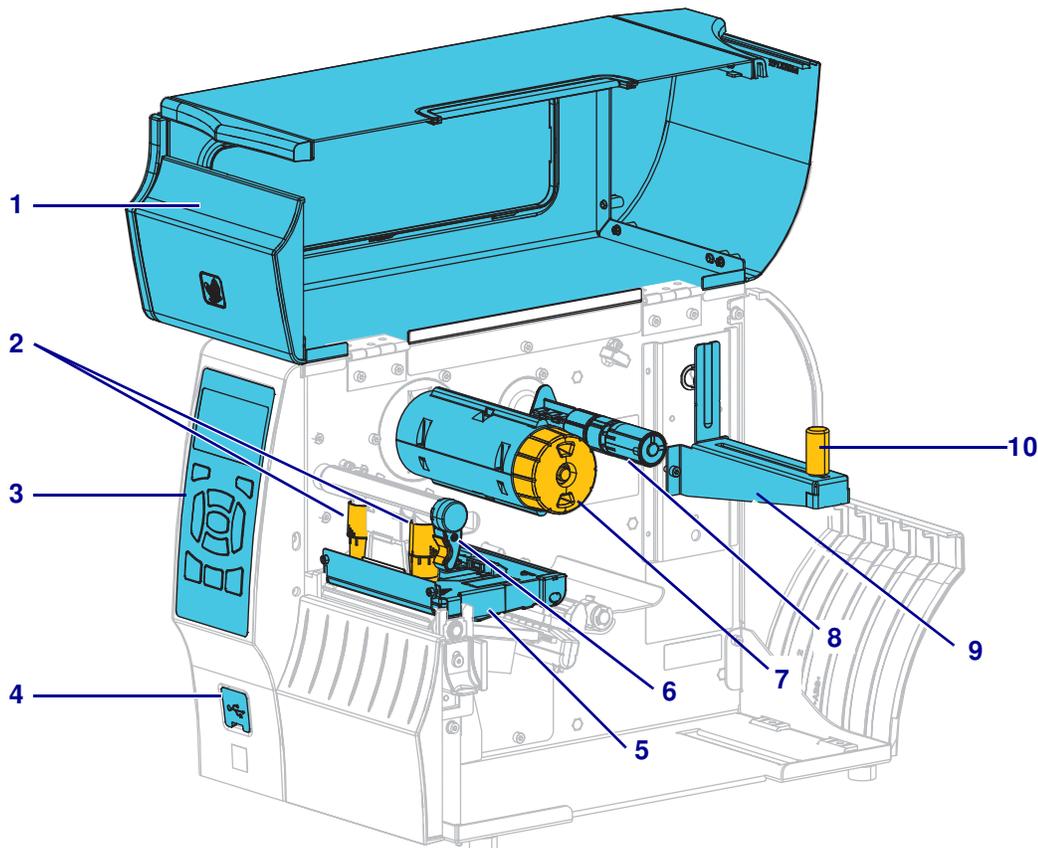
# ZT400™ Series Quick Reference Guide

Use this guide to operate your printer on a daily basis. For more detailed information, refer to the *User Guide*.

## Printer Components

Figure 1 shows the components inside the media compartment of your printer. Depending on the printer model and the installed options, your printer may look slightly different. Familiarize yourself with these components before continuing with the printer setup procedure.

Figure 1 • Printer Components



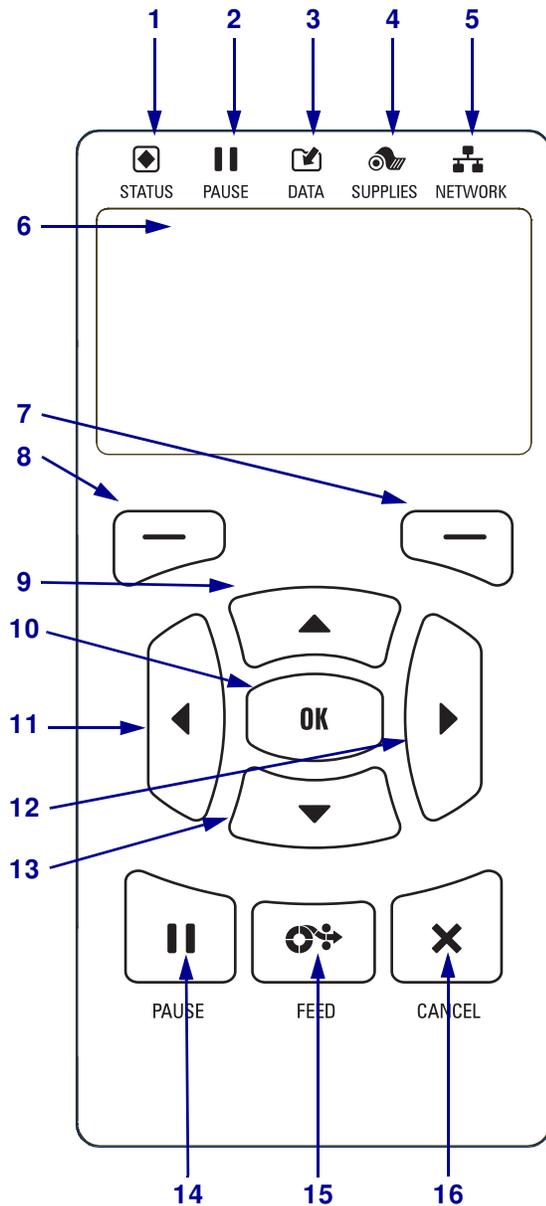
1	Media door
2	Printhead pressure adjustment toggles
3	Control panel
4	USB host port
5	Printhead assembly

6	Printhead-open lever
7	Ribbon take-up spindle
8	Ribbon supply spindle
9	Media supply hanger
10	Media supply guide

## Control Panel

The control panel (Figure 2) indicates the printer's current status and allows the user to control basic printer operation.

Figure 2 • Control Panel



1	STATUS light	These <b>indicator lights</b> show the current status of the printer. For more information, refer to the <i>User Guide</i> .
2	PAUSE light	
3	DATA light	
4	SUPPLIES light	
5	NETWORK light	
6	The <b>display</b> shows the printer's current status and allows the user to navigate the menu system.	
7	<b>RIGHT SELECT button</b>	These buttons execute the commands shown directly above them in the display.
8	<b>LEFT SELECT button</b>	
9	The <b>UP ARROW button</b> changes the parameter values. Common uses are to increase a value or to scroll through choices.	
10	The <b>OK button</b> selects or confirms what is shown on the display.	
11	The <b>LEFT ARROW button</b> , which is active only in the menu system, navigates to the left.	
12	The <b>RIGHT ARROW button</b> , which is active only in the menu system, navigates to the right.	
13	The <b>DOWN ARROW button</b> changes the parameter values. Common uses are to decrease a value or to scroll through choices.	
14	The <b>PAUSE button</b> starts or stops printer operation when pressed.	
15	The <b>FEED button</b> forces the printer to feed one blank label each time the button is pressed.	
16	The <b>CANCEL button</b> cancels label formats when the printer is paused. <ul style="list-style-type: none"> <li>• Press once to cancel the next label format.</li> <li>• Press and hold for 2 seconds to cancel all label formats.</li> </ul>	

## Preparing the Printer for Use

After you have familiarized yourself with the printer components, prepare the printer for use.

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**Caution** • When you are loading media or ribbon, remove all jewelry that could come into contact with the printhead or other printer parts.

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**Caution** • Before touching the printhead assembly, discharge any built-up static electricity by touching the metal printer frame or by using an anti-static wriststrap and mat.

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### To set up the printer, complete these steps:

1. Select a location for the printer that meets these conditions:
  - The surface must be solid and level of sufficient size and strength to hold the printer.
  - The area must include enough space for ventilation and for accessing the printer components and connectors
  - The printer should be within a short distance of an appropriate power outlet that is easily accessible
  - The printer must be within range of your WLAN radio (if applicable) or within an acceptable range for other connectors to reach your data source (usually a computer). For more information on maximum cable lengths and configuration, refer to the *User Guide*.
2. Unpack and inspect the printer. If necessary, report any shipping damage. For more information, refer to the *User Guide*.
3. Place the printer in the preselected location.

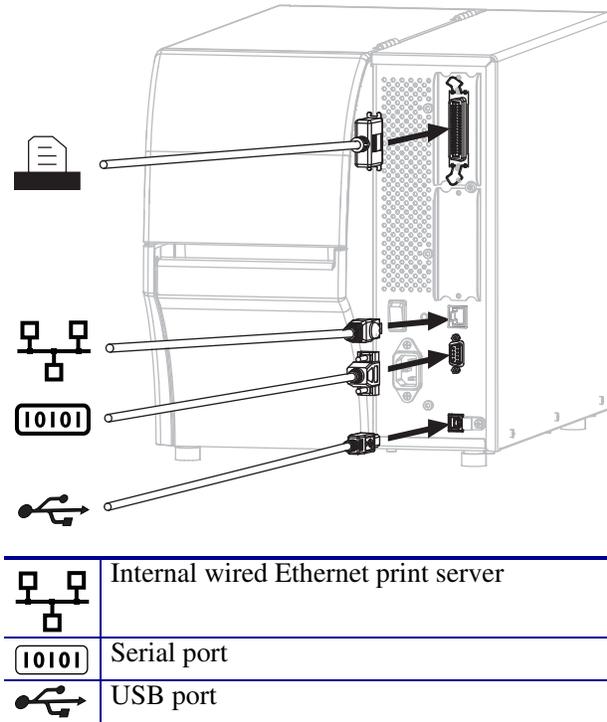


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4. **Important** • You must install the Zebra Setup Utilities program before connecting the printer to your computer. Your computer will not install the correct printer drivers if you connect the printer to it without the Zebra Setup Utilities program.
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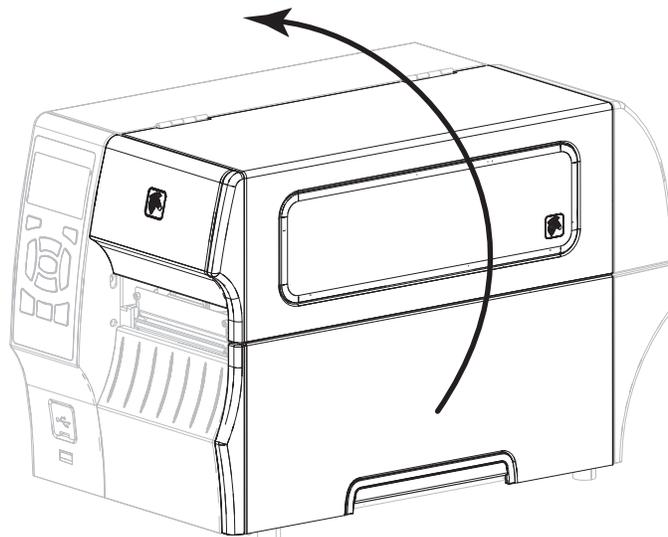
Install the Zebra Setup Utilities program from <http://www.zebra.com/setup>. Use this program to install the printer drivers on your computer. For detailed instructions, refer to the *User Guide*.

## 4 | Preparing the Printer for Use

5. Connect the printer to a computer using one or more of the available connections. The standard connections are shown here. A parallel connection or a ZebraNet<sup>®</sup> wireless connection may also be available on your printer.

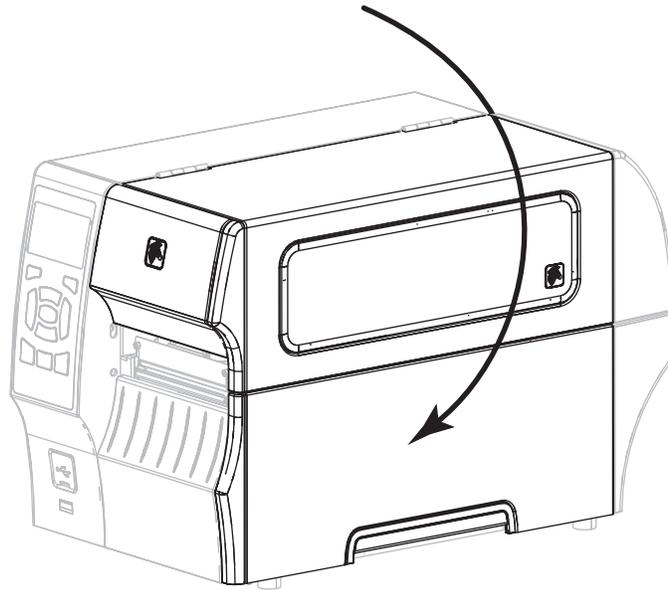


6. Raise the media door.

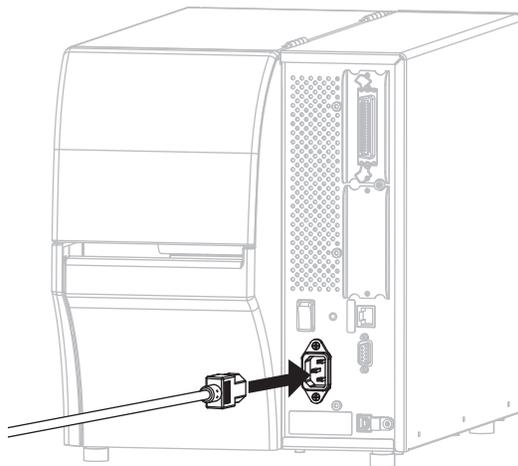


7. Load ribbon (if using Thermal Transfer mode) and media into the printer (see [Load Media and Ribbon on page 9](#)).

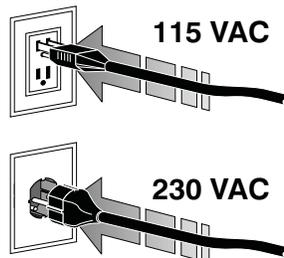
8. Close the media door.



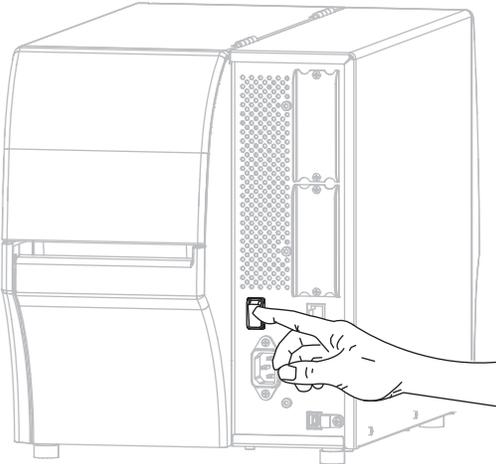
9. Plug the female end of the A/C power cord into the A/C power connector on the back of the printer.



10. Plug the male end of the A/C power cord into an appropriate power outlet.



11. To verify that the media and ribbon are loaded correctly, print a printer configuration label.
  - a. Press and hold the CANCEL button.
  - b. Turn on (I) the printer.



The printer boots up and performs a self-test. The results of the self-test are shown in [Table 1](#). If the media and ribbon are loaded correctly, the printer prints a printer configuration label ([Figure 3](#)) and then a network configuration label ([Figure 4](#)).

**Figure 3 • Sample Printer Configuration Label**

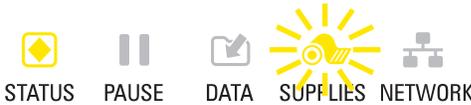
PRINTER CONFIGURATION	
Zebra Technologies ZTC ZT410-203dpi ZPL XXXXXXXX-XX-XXXX	
+10.0.....	DARKNESS
10.0 IPS.....	PRINT SPEED
+000.....	TEAR OFF
TEAR OFF.....	PRINT MODE
CONT INJOU.....	MEDIA TYPE
TRANSMISSIVE.....	SENSOR SELECT
THERMAL-TRANS.....	PRINT METHOD
832.....	PRINT WIDTH
1800.....	LABEL LENGTH
41000-71/1302-05637	PRINT HEAD ID
15.0IN 380MM.....	MAXIMUM LENGTH
CONNECTED.....	USB COMM.
BIDIRECTIONAL.....	PARALLEL COMM.
RS232.....	SERIAL COMM.
9600.....	BAUD
8 BITS.....	DATA BITS
NONE.....	PARITY
XON/XOFF.....	HOST HANDSHAKE
NONE.....	PROTOCOL
NORMAL MODE.....	COMMUNICATIONS
<~> FEH.....	CONTROL PREFIX
<~> SEH.....	FORMAT PREFIX
<~> ZCH.....	DELIMITER CHAR
ZPL II.....	ZPL MODE
CALIBRATION.....	MEDIA POWER UP
CALIBRATION.....	HEAD CLOSE
DEFAULT.....	BACKFEED
+000.....	LABEL TOP
+0000.....	LEFT POSITION
DISABLED.....	REPRINT MODE
049.....	WEB SENSOR
080.....	MEDIA SENSOR
051.....	RIBBON SENSOR
050.....	TAKE LABEL
027.....	MARK SENSOR
027.....	MARK MED SENSOR
003.....	TRANS GAIN
016.....	TRANS BASE
100.....	TRANS LED
128.....	RIBBON GAIN
128.....	MARK GAIN
050.....	MARK LED
DPSCAFPM.....	MODES ENABLED
MODES DISABLED.....	
832 8/MM FULL.....	RESOLUTION
2.0.....	LINK-OS VERSION
V75.19.72P23143 <~>	FIRMWARE
1.3.....	XPL SCHEMA
6.5.0 0x0012.0x0045	HARDWARE ID
4086K.....	R: RAM
65536K.....	E: ONBOARD FLASH
NONE.....	FORMAT CONVERT
FM VERSION.....	IDLE DISPLAY
08/29/13.....	RTC DATE
18:57.....	RTC TIME
DISABLED.....	ZBI
2.1.....	ZBI VERSION
READY.....	ZBI STATUS
62 LABELS.....	NONRESET CNTR
62 LABELS.....	RESET CNTR1
62 LABELS.....	RESET CNTR2
680 IN.....	NONRESET CNTR
680 IN.....	RESET CNTR1
680 IN.....	RESET CNTR2
1.728 CM.....	NONRESET CNTR
1.728 CM.....	RESET CNTR1
1.728 CM.....	RESET CNTR2
EMPTY.....	SLOT 1
EMPTY.....	SLOT 2
0.....	MMS STORAGE COUNT
0.....	HID COUNT
OFF.....	USB HOST LOCK OUT
FIRMWARE IN THIS PRINTER IS COPYRIGHTED	

**Figure 4 • Sample Network Configuration Label**

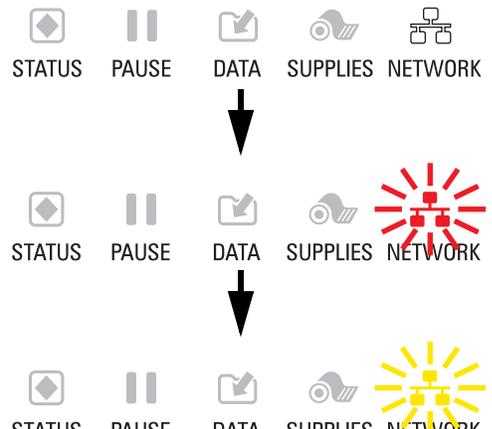
Network Configuration	
Zebra Technologies ZTC ZT410-203dpi ZPL XXXXXXXX-XX-XXXX	
PrintServer.....	LOAD LAN FROM?
INTERNAL WIRED.....	ACTIVE PRINTSRVR
Wired*	
ALL.....004.072	IP PROTOCOL
010.003.004.072	IP ADDRESS
255.255.255.000	SUBNET
010.003.004.001	GATEWAY
010.003.001.098	WINS SERVER IP
YES.....	TIMEOUT CHECKING
300.....	TIMEOUT VALUE
000.....	ARP INTERVAL
9100.....	BASE RAW PORT
9200.....	JSON CONFIG PORT
Wireless	
ALL.....	IP PROTOCOL
000.000.000.000	IP ADDRESS
255.255.255.000	SUBNET
000.000.000.000	GATEWAY
000.000.000.000	WINS SERVER IP
YES.....	TIMEOUT CHECKING
300.....	TIMEOUT VALUE
000.....	ARP INTERVAL
9100.....	BASE RAW PORT
9200.....	JSON CONFIG PORT
NOT INSERTED.....	CARD INSERTED
H.....	CARD MFG ID
H.....	CARD PRODUCT ID
00:00:00:00:00:00	MAC ADDRESS
YES.....	DRIVER INSTALLED
INFRASTRUCTURE.....	OPERATING MODE
125.....	ESSID
100.....	TX POWER
ALL.....	CURRENT TX RATE
OPEN.....	WEP TYPE
NONE.....	WLAN SECURITY
1.....	WEP INDEX
000.....	PDOOR SIGNAL
LONG.....	PREAMBLE
NO.....	ASSOCIATED
ON.....	PULSE ENABLED
15.....	PULSE RATE
OFF.....	INTL MODE
not available.....	REGION CODE
no region code.....	COUNTRY CODE
0x3FFFFFFF.....	CHANNEL MASK
Bluetooth	
4.2.0.....	FIRMWARE
04/20/2012.....	DATE
on.....	DISCOVERABLE
2.1.....	RADIO VERSION
on.....	ENABLED
ac:9f:14:12:0f:26	MAC ADDRESS
XXXXXXXX-XX-XXXX	FRIENDLY NAME
No.....	CONNECTED
1.....	MIN SECURITY MODE
nc.....	CONN SECURITY MODE
FIRMWARE IN THIS PRINTER IS COPYRIGHTED	

- To test the connection between your printer and your computer, use a label design package to create a sample label and send it to the printer. Zebra recommends ZebraDesigner Pro. You can download this software from <http://www.zebra.com/software> and operate it in Demo mode to print a sample label.

**Table 1 • Status of Printer As Shown by Indicator Lights**

 <p>STATUS PAUSE DATA SUPPLIES NETWORK</p>	<p><i>STATUS light steady green (other lights steady yellow for 2 seconds during printer power-up)</i></p> <p>The printer is ready.</p>
 <p>STATUS PAUSE DATA SUPPLIES NETWORK</p>	<p><i>PAUSE light steady yellow.</i></p> <p>The printer is paused.</p>
 <p>STATUS PAUSE DATA SUPPLIES NETWORK</p>	<p><i>STATUS light steady red</i> <i>SUPPLIES light steady red</i></p> <p>The media supply is out. The printer needs attention and cannot continue without user intervention.</p>
 <p>STATUS PAUSE DATA SUPPLIES NETWORK</p>	<p><i>STATUS light steady red</i> <i>SUPPLIES light flashing red</i></p> <p>The ribbon supply is out. The printer needs attention and cannot continue without user intervention.</p>
 <p>STATUS PAUSE DATA SUPPLIES NETWORK</p>	<p><i>STATUS light steady yellow</i> <i>SUPPLIES light flashing yellow</i></p> <p>The printer is in Direct Thermal mode, which does not require ribbon; however, ribbon is installed in the printer.</p>
 <p>STATUS PAUSE DATA SUPPLIES NETWORK</p>	<p><i>STATUS light steady red</i> <i>PAUSE light steady yellow</i></p> <p>The printhead is open. The printer needs attention and cannot continue without user intervention.</p>
 <p>STATUS PAUSE DATA SUPPLIES NETWORK</p>	<p><i>STATUS light steady yellow</i></p> <p>The printhead is over temperature.</p> <p> <b>Caution</b> • The printhead may be hot and could cause severe burns. Allow the printhead to cool.</p>
 <p>STATUS PAUSE DATA SUPPLIES NETWORK</p>	<p><i>STATUS light flashing yellow</i></p> <p>This indicator light flashing indicates one of the following:</p> <ul style="list-style-type: none"> <li>• The printhead is under temperature.</li> <li>• The power supply is over temperature.</li> <li>• The main logic board (MLB) is over temperature.</li> </ul>
 <p>STATUS PAUSE DATA SUPPLIES NETWORK</p>	<p><i>STATUS light steady red</i> <i>PAUSE light steady red</i> <i>DATA light steady red</i></p> <p>The printhead was replaced with one that is not a genuine Zebra™ printhead. Install a genuine Zebra™ printhead to continue.</p>

**Table 1 • Status of Printer As Shown by Indicator Lights (Continued)**

	<p><i>STATUS light flashing red</i></p> <p>The printer is unable to read the dpi setting of the printhead.</p>
<p><b>ZebraNet wired Ethernet</b></p>	
	<p><i>NETWORK light off</i></p> <p>No Ethernet link is available.</p>
	<p><i>NETWORK light steady green</i></p> <p>A 100 Base link was found.</p>
	<p><i>NETWORK light steady yellow</i></p> <p>A 10 Base link was found.</p>
	<p><i>NETWORK light steady red</i></p> <p>An Ethernet error condition exists. The printer is not connected to your network.</p>
<p><b>ZebraNet wireless</b></p>	
	<p><i>NETWORK light off</i></p> <p>A radio was found during power-up. The printer is attempting to associate with the network. The light flashes red while the printer associates with the network. The light then flashes yellow while the printer is authenticating with the network.</p>
	<p><i>NETWORK light steady green</i></p> <p>The radio is associated with your network and authenticated, and the WLAN signal is strong.</p>
	<p><i>NETWORK light flashing green</i></p> <p>WLAN—The radio is associated with your network and authenticated, but the WLAN signal is weak.</p>
	<p><i>NETWORK light steady red</i></p> <p>A WLAN error condition exists. The printer is not connected to your network.</p>

## Load Media and Ribbon

Use the instructions in this section to load ribbon (if used) and media in Tear-Off mode. Ribbon is used with thermal transfer labels. For direct thermal labels, do not load ribbon in the printer. For instructions for loading fanfold media or for loading in different print modes, refer to the *User Guide*.

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**Caution** • When you are loading media or ribbon, remove all jewelry that could come into contact with the printhead or other printer parts.

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**Note** • In some of the drawings that follow, the printer is shown without a ribbon system to give you a better view of the components involved in media loading.

**To load ribbon and roll media in Tear-Off mode, complete these steps:**

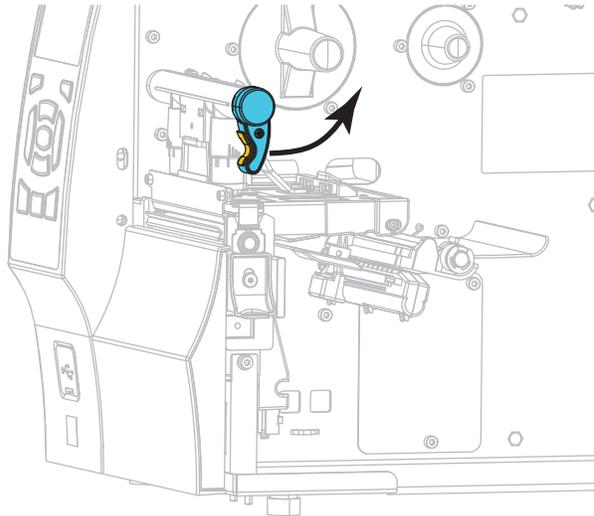
### Load Media



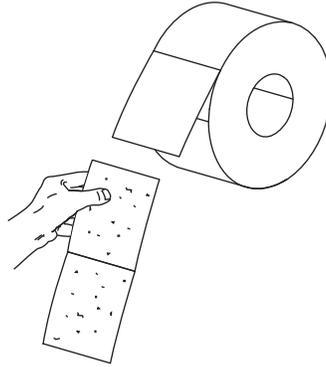
1. **Caution** • The printhead may be hot and could cause severe burns. Allow the printhead to cool.

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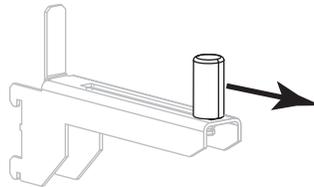
Open the printhead assembly by rotating the printhead-open lever.



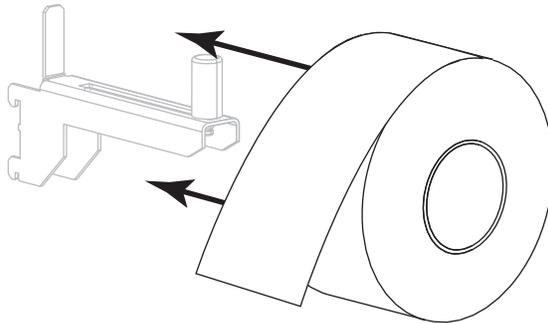
2. Remove and discard any tags or labels that are dirty or that are held by adhesives or tape.



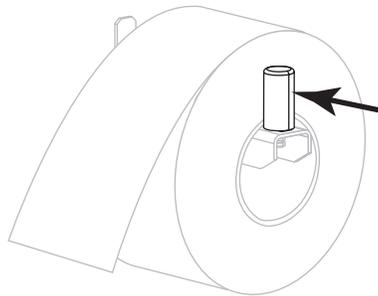
3. Pull out the media supply guide as far as it goes.



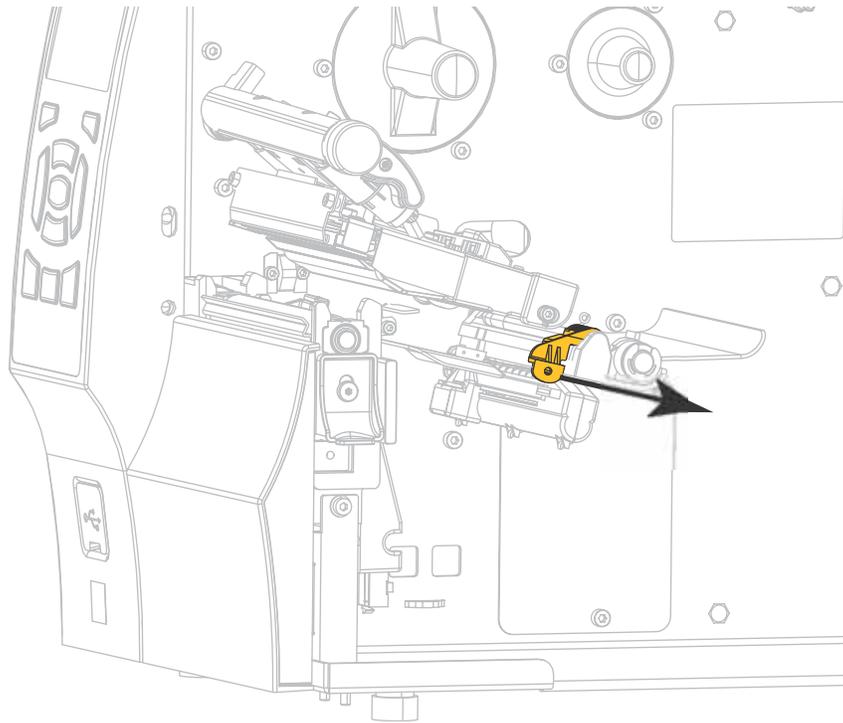
4. Place the roll of media on the media supply hanger. Push the roll as far back as it will go.



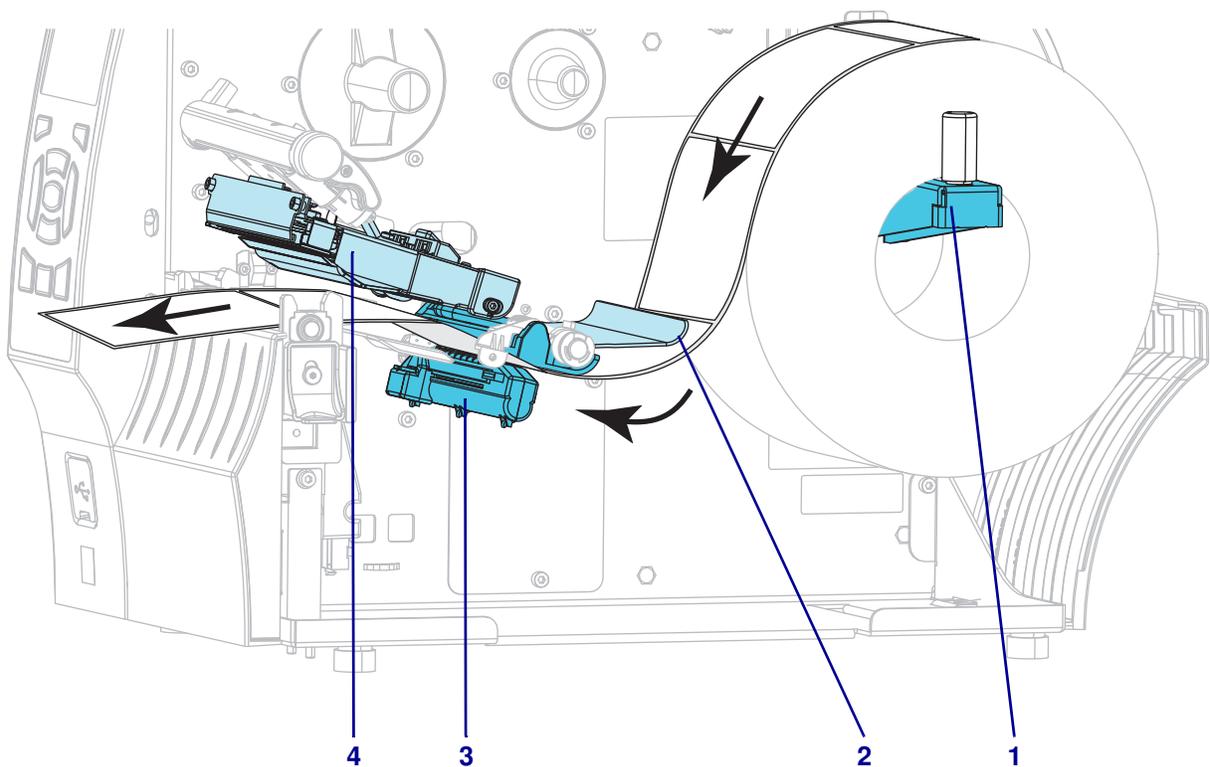
5. Slide in the media supply guide until it touches the edge of the roll.



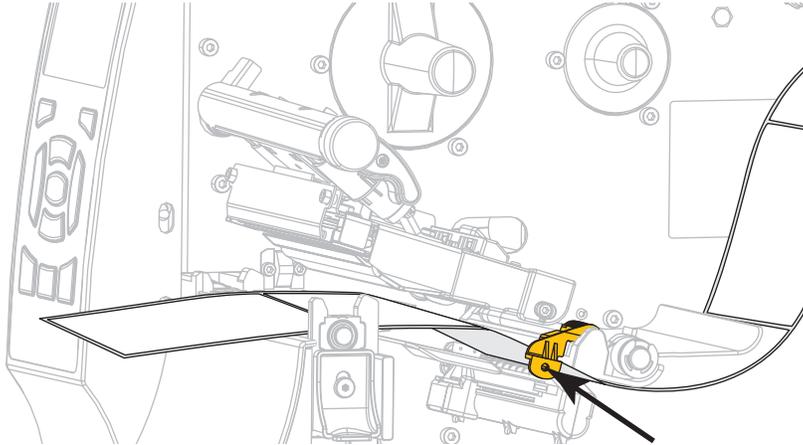
6. Slide the media guide all the way out.



7. From the media hanger (1), feed the media under the dancer assembly (2), through the media sensor (3), and under the printhead assembly (4). Slide the media back until it touches the inside back wall of the media sensor.



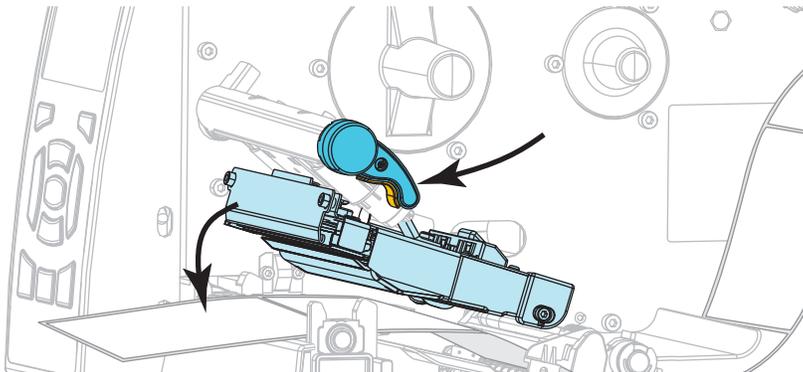
8. Slide in the media guide until it just touches the edge of the media.



9. Which type of media did you load into the printer?

If you loaded...	Then...
Direct Thermal media	Continue with <a href="#">step 10</a> .
Thermal Transfer media	Continue with <a href="#">step 12</a> .

10. Rotate the printhead-open lever downward until it locks the printhead in place.



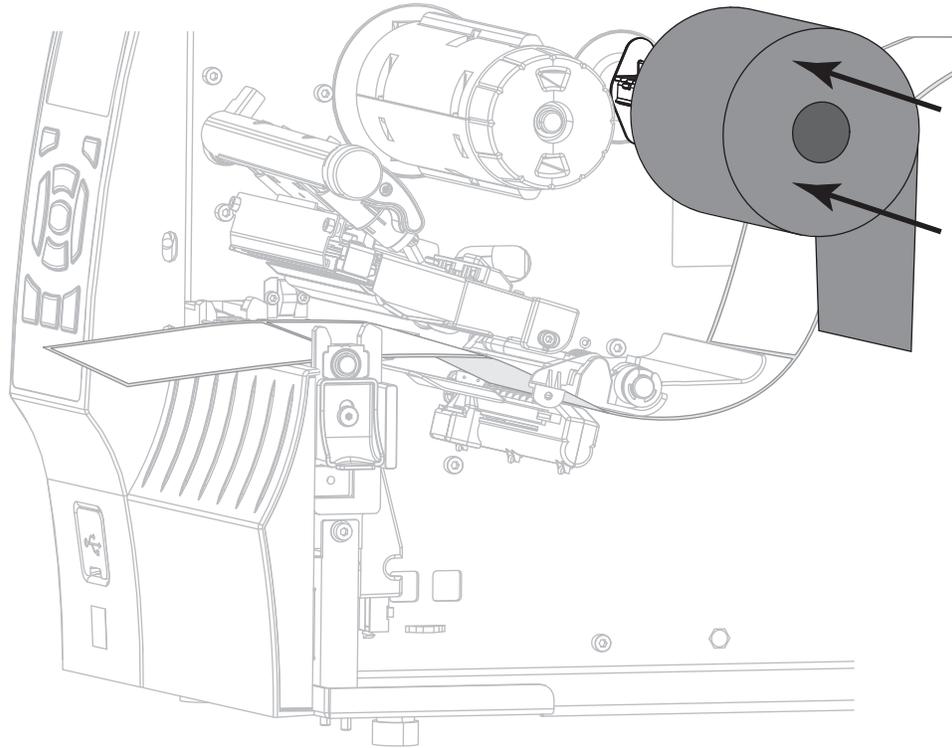
11. If necessary, press PAUSE to exit pause mode and enable printing.

## Load Ribbon

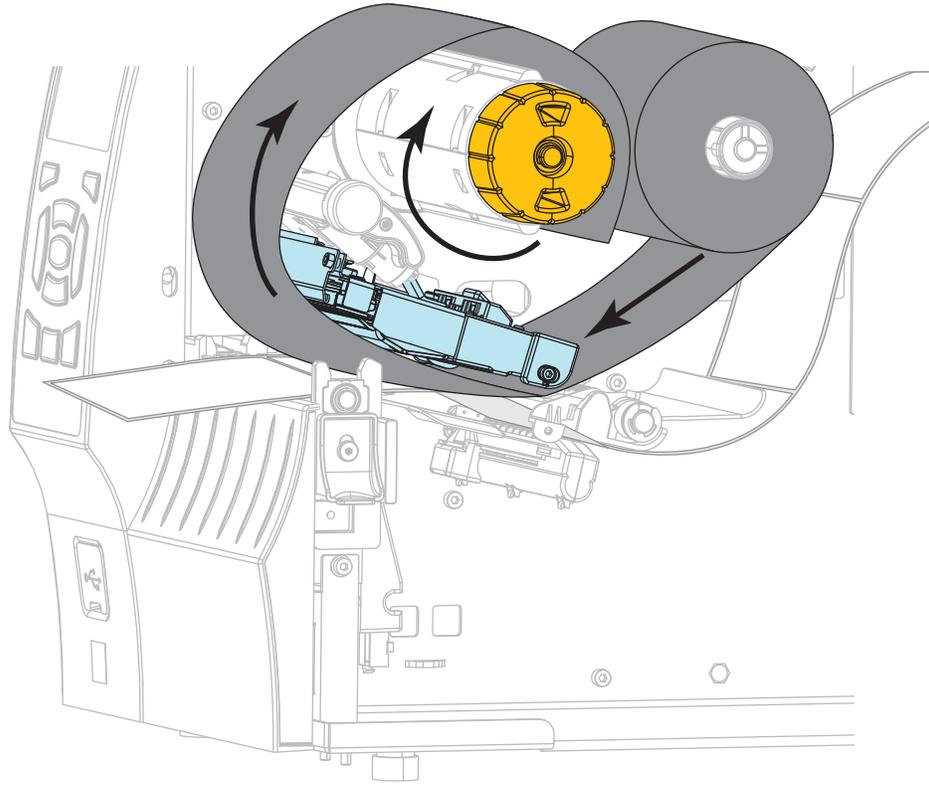


**Important** • Use ribbon that is wider than the media to protect the printhead from wear. Ribbon must be coated on the outside (refer to the *User Guide* for more information).

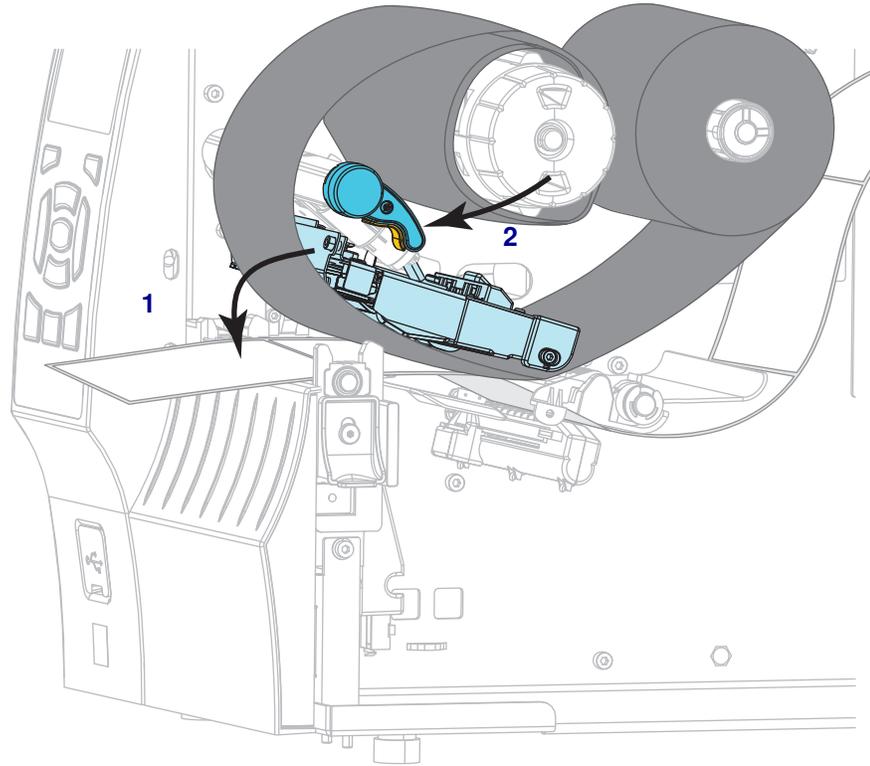
12. Place the roll of ribbon on the ribbon supply spindle with the loose end of the ribbon unrolling as shown. Push the roll back as far as it will go.



13. Slide the ribbon under the printhead assembly, and then wrap it several turns around the ribbon take-up spindle.



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



15. If necessary, press PAUSE to clear any errors and enable printing.

## 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:

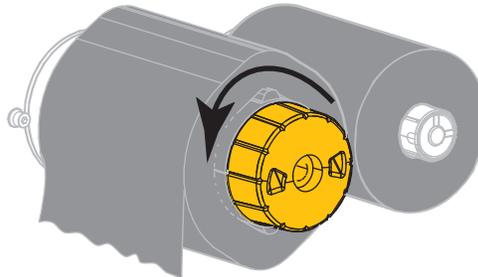
1. Has the ribbon run out?

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.

**Caution** • Do not cut the ribbon directly on the ribbon take-up spindle. Doing so may damage the spindle.

2. While holding the ribbon take-up spindle, turn the ribbon release knob to the left 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.

