



# ZM400/ZM600 Quick Reference Guide

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

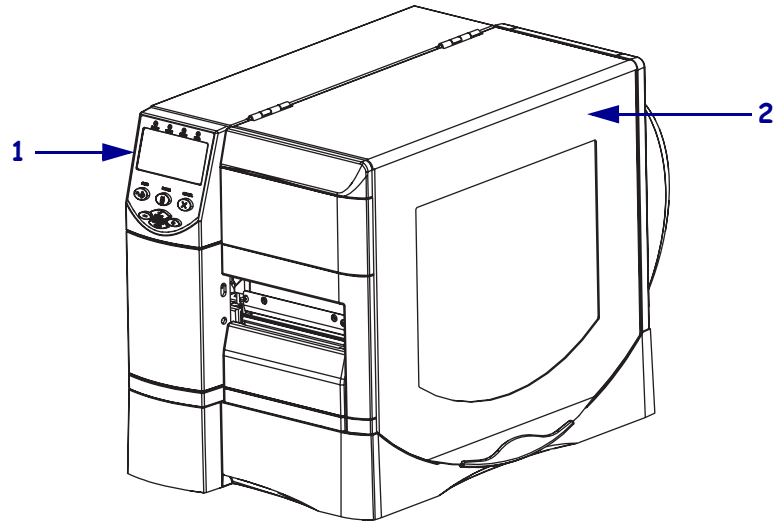
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## External View

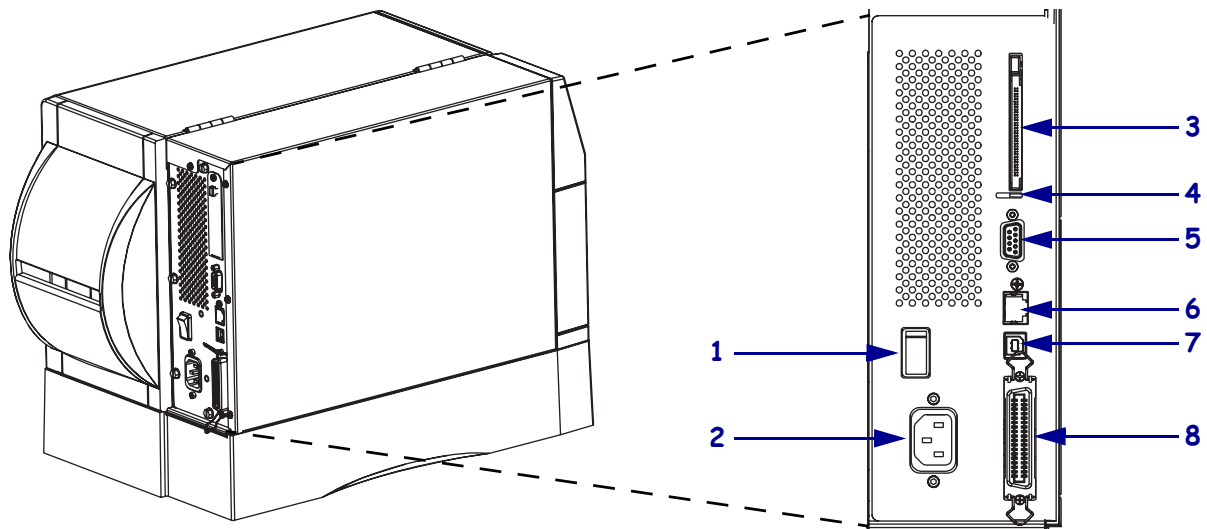
Figure 1 and Figure 2 show the components and connections on the outside of the printer.

**Figure 1 • Front of Printer**



<b>1</b>	Control panel
<b>2</b>	Media door

**Figure 2 • Rear of Printer**



<b>1</b>	Power switch (O = off, I = on)
<b>2</b>	AC power connector
<b>3</b>	Wireless print server card slot (Ethernet)
<b>4</b>	Wireless card ejector button

<b>5</b>	Serial port
<b>6</b>	Internal wired print server port (Ethernet)
<b>7</b>	USB port
<b>8</b>	Parallel port

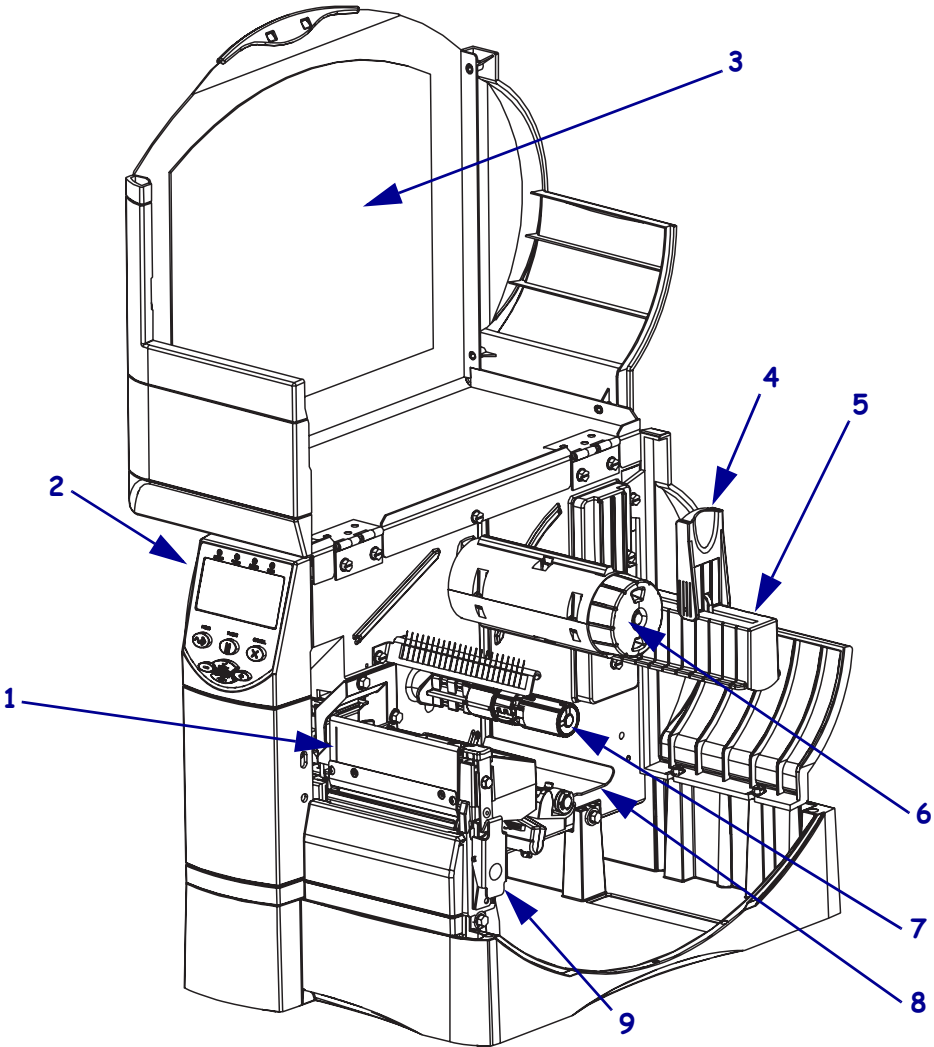
# Printer Media Compartment

Figure 3 shows the components inside the media compartment of your printer. Depending on installed options, your printer may look slightly different.



**Note** • For optimal printing quality and proper printer performance across our product line, Zebra strongly recommends the use of genuine Zebra™ supplies as part of the total solution. Specifically, the ZM400 and ZM600 are designed to work only with genuine Zebra™ printheads, thus maximizing safety and print quality.

Figure 3 • Printer Components



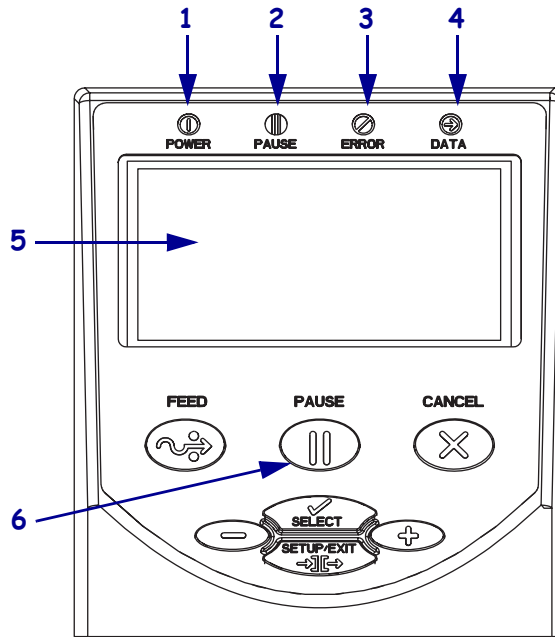
1	Printhead assembly
2	Control panel
3	Media door
4	Media supply guide
5	Media supply hanger

6	Ribbon take-up spindle
7	Ribbon supply spindle
8	Dancer assembly
9	Printhead release latch

## Control Panel

The control panel (Figure 4) contains the lights that indicate basic operation and the buttons that you may need to press during basic operation.

Figure 4 • Control Panel

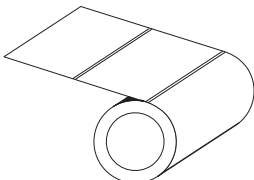
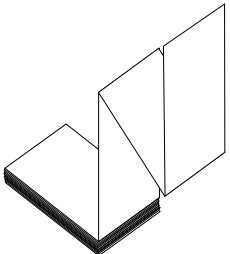
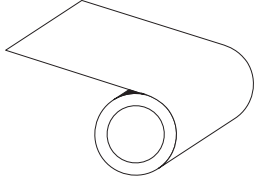
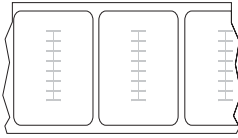



<b>1</b>	Power light	On when the printer is on.
<b>2</b>	PAUSE light	On when the printer is paused.
<b>3</b>	Error light	Blinks or remains on when the printer needs attention.
<b>4</b>	Data light	Blinks quickly when the printer is receiving data.
<b>5</b>	LCD	Shows the printer's operating status.
<b>6</b>	PAUSE button	Starts or stops printer operation when pressed.

## Types of Media

The printer can use various types of media (Table 1).

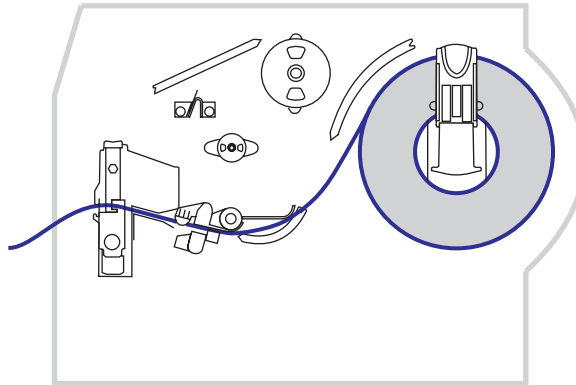
**Table 1 • Types of Media**

Media Type	How It Looks	Description
<b>Non-Continuous Roll Media</b>		Roll media is wound on a 3-in. (76-mm) core. Labels have adhesive backing that sticks them to a liner, and they are separated by gaps, holes, notches, or black marks. Tags are separated by perforations.
<b>Non-Continuous Fanfold Media</b>		Fanfold media is folded in a zigzag pattern. Fanfold media can have the same label separations as non-continuous roll media. The separations would fall on or near the folds.
<b>Continuous Roll Media</b>		Roll media is wound on a 3-in. (76-mm) core. Continuous roll media does not have gaps, holes, notches, or black marks to indicate label separations. This allows the image to be printed anywhere on the label. Sometimes a cutter is used to cut apart individual labels.
<b>RFID “Smart” Media (for use only with printers that have an RFID reader/encoder installed)</b>		Radio frequency identification (RFID) “smart” labels are made from the same materials and adhesives as non-RFID labels. Each label has an RFID transponder, made of a chip and an antenna, embedded between the label and the liner (sometimes called an “inlay”). The shape of the transponder varies by manufacturer and is visible through the label.  All “smart” labels have memory that can be read, and many have memory that can be encoded.   <b>Important</b> • Transponder placement within a label depends on the transponder type and the printer model. Make sure that you are using the correct “smart” media for your printer.

## Load Media

Use the instructions in this section to load media in Tear-Off mode (Figure 5). For instructions for loading in other print modes, refer to the *User Guide*.

Figure 5 • Tear-Off Mode Media Path



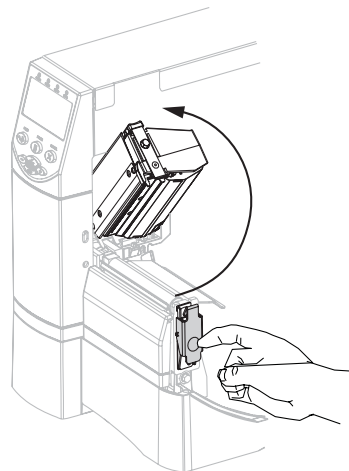
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**Caution** • When you are loading media or ribbon, remove all jewelry that could come into contact with the printhead or other printer parts.

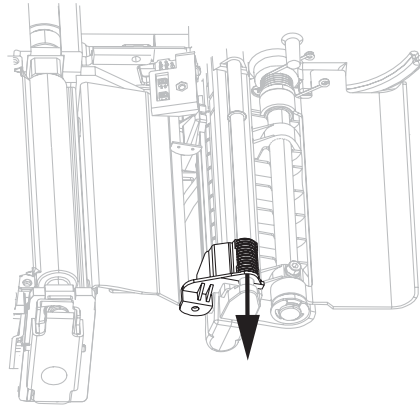
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### To Load Roll Media in Tear-Off Mode, complete these steps:

1. Press the printhead release latch to open the printhead assembly. Lift the printhead until it latches open.



2. Slide out the media guide.

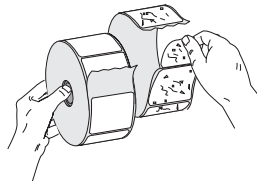


3. Insert media into the printer. Follow the instructions for roll or fanfold media, as appropriate.



**Roll Media**

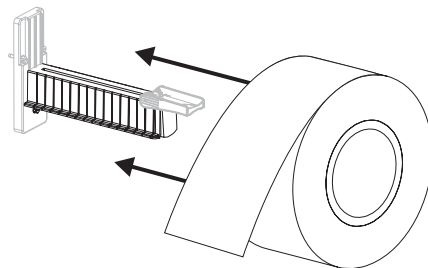
- a. Remove and discard any tags or labels that are dirty or that are held by adhesives or tape.



- b. Flip down the media supply guide.



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



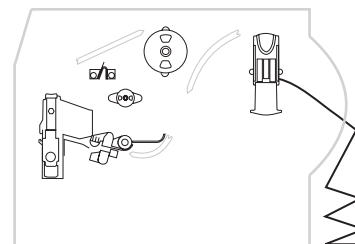
**Fanfold Media**

- a. Flip down the media supply guide.

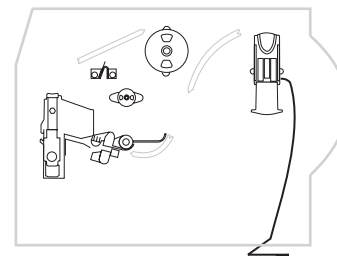


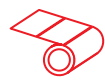
- b. Feed the media through the rear or bottom access slot.

**Rear Feed**



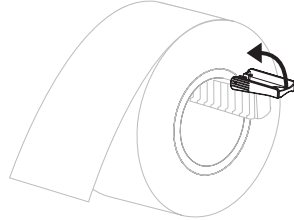
**Bottom Feed**



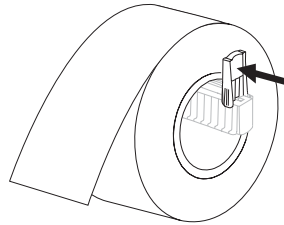


**Roll Media (Continued)**

d. Flip up the media supply guide.

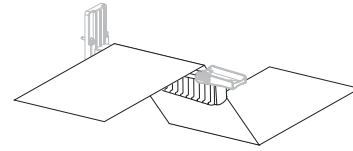


e. Slide in the media supply guide until it touches the edge of the roll.

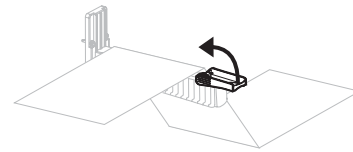


**Fanfold Media (Continued)**

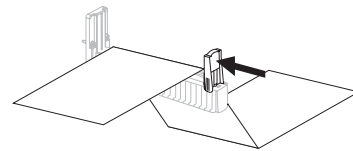
c. Drape the media over the media supply hanger.



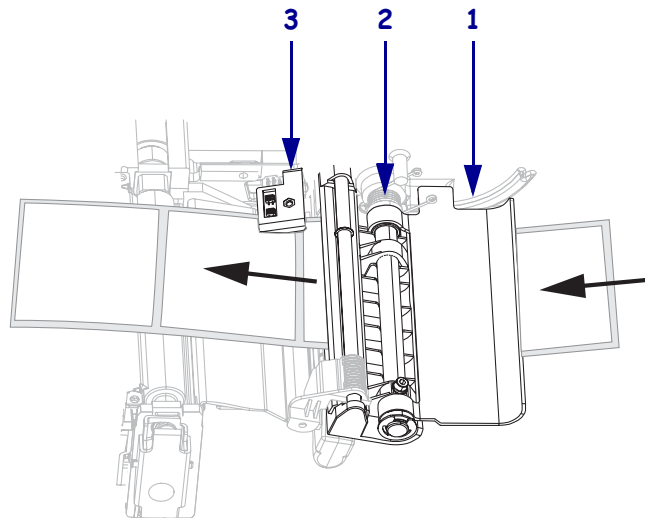
d. Flip up the media supply guide.



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

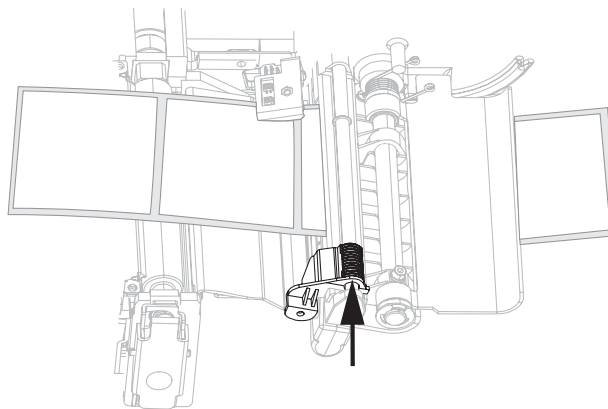


4. Feed the media under the dancer assembly (1), the upper media sensor (2), and the ribbon sensor (3).

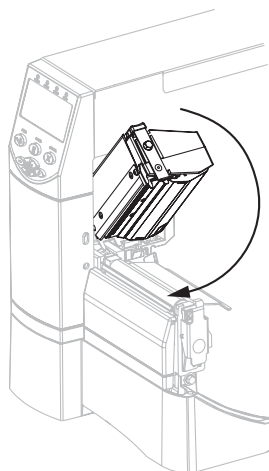




5. Slide in the media guide until it touches the edge of the media.



6. Close the printhead assembly.



7. If the printer is paused (the Pause light is on), press PAUSE to enable printing.

## Ribbon Overview

Ribbon is a thin film that is coated on one side with wax, resin, or wax resin, which is transferred to the media during the thermal transfer process.

### When to Use Ribbon

Thermal transfer media requires ribbon for printing while direct thermal media does not. To determine if ribbon must be used with a particular media, perform a media scratch test.

#### To perform a media scratch test, complete these steps:

1. Scratch the print surface of the media rapidly with your fingernail.
2. Did a black mark appear on the media?



If a black mark...	Then the media is...
Does not appear on the media	<b>Thermal transfer.</b> A ribbon is required.
Appears on the media	<b>Direct thermal.</b> No ribbon is required.

### Coated Side of Ribbon

Ribbon can be wound with the coated side on the inside or outside. The ribbon used must match the Thermal Transfer option installed. The standard Thermal Transfer option (black ribbon spindle) uses ribbon coated on the outside, and the alternate Thermal Transfer option (gray ribbon spindle) uses ribbon coated on the inside.

#### To determine which side of a ribbon is coated, complete these steps:

1. Peel a label from its liner.
2. Press a corner of the sticky side of the label to the outer surface of the roll of ribbon.
3. Peel the label off of the ribbon.
4. Observe the results. Did flakes or particles of ink from the ribbon adhere to the label?

If ink from the ribbon...	Then...
Adhered to the label	The ribbon is coated on the <b>outside</b> and can be used with the standard Thermal Transfer option (black ribbon spindle). In the ribbon loading procedure, instructions are marked with this symbol. 
Did not adhere to the label	The ribbon is coated on the <b>inside</b> and can be used with the alternate Thermal Transfer option (gray ribbon spindle). In the ribbon loading procedure, instructions are marked with this symbol. 

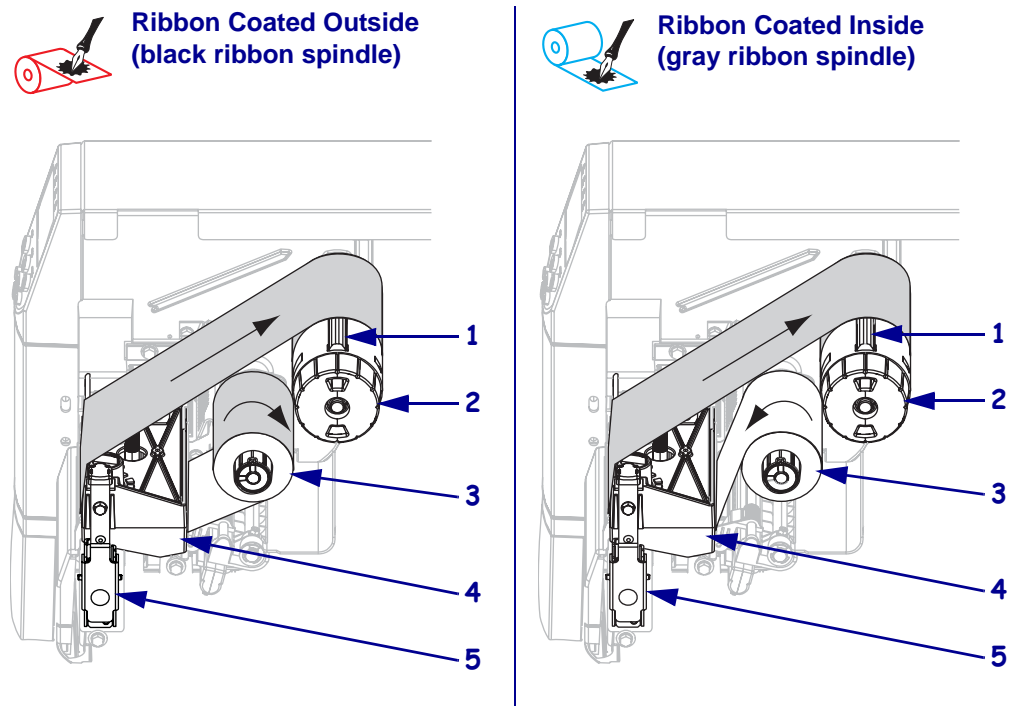
## Load Ribbon

Always use ribbon that is wider than the media to protect the printhead from wear. For direct thermal printing, do not load ribbon in the printer.

The standard Thermal Transfer option (black ribbon spindle) uses ribbon coated on the outside, and the alternate Thermal Transfer option (gray ribbon spindle) uses ribbon coated on the inside. To avoid damaging your printer, follow the directions for the Thermal Transfer option installed in your printer.

Figure 6 shows the ribbon paths for ribbon coated on the outside and ribbon coated on the inside. The coated surfaces of the ribbon are shown in gray when they are visible. To determine which side of a ribbon is printed, see [Coated Side of Ribbon on page 10](#).

Figure 6 • Ribbon Path



1	Tension blade
2	Ribbon take-up spindle
3	Ribbon supply spindle
4	Printhead assembly
5	Printhead release latch

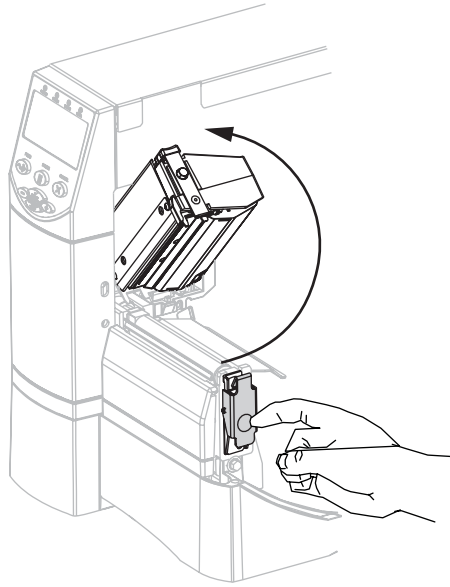
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**Caution** • When you are loading media or ribbon, remove all jewelry that could come into contact with the printhead or other printer parts.

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**To load ribbon, complete these steps:**

1. Press the printhead release latch to open the printhead assembly. Lift the printhead until it latches open.



2. Insert the ribbon into the printer. In this step, follow the instructions for the Thermal Transfer option installed in your printer.



**Ribbon Coated Outside  
(black ribbon spindle)**

- a. Hold the ribbon with the loose end unrolling clockwise.



**Ribbon Coated Inside  
(gray ribbon spindle)**

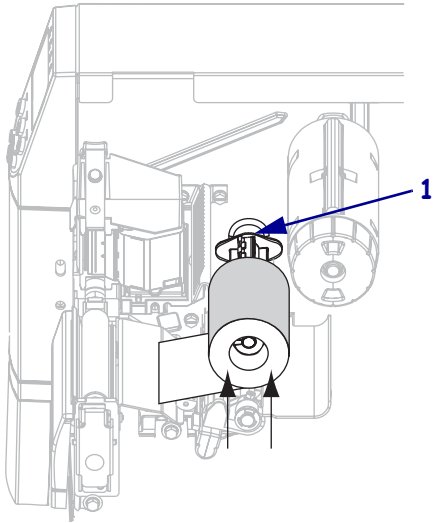
- a. Hold the ribbon with the loose end unrolling counterclockwise.



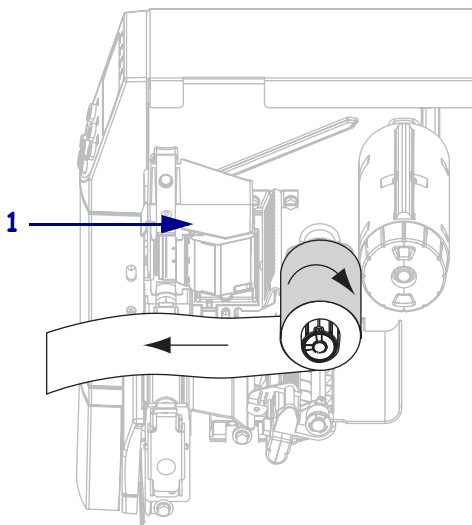


### Ribbon Coated Outside (black ribbon spindle) (Continued)

- b. Place the roll of ribbon on the ribbon supply spindle (1) and push it all the way back.

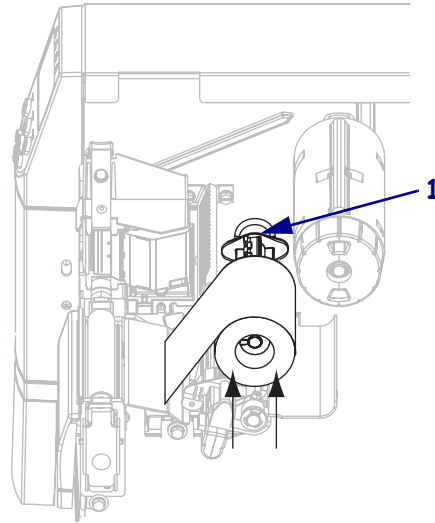


- c. Pull the end of the ribbon under the printhead assembly (1) and out the front of the printer. Extend the ribbon approximately 24 in. (610 mm) out of the printer.

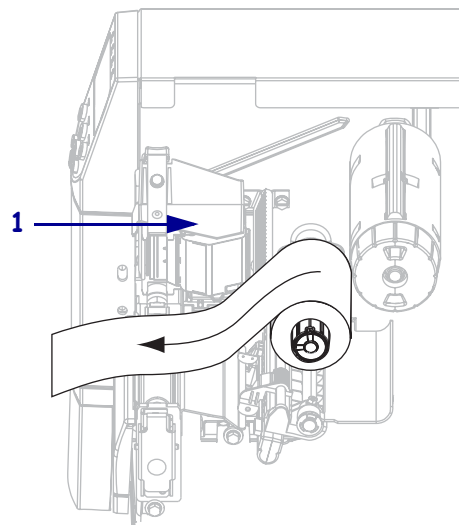


### Ribbon Coated Inside (gray ribbon spindle) (Continued)

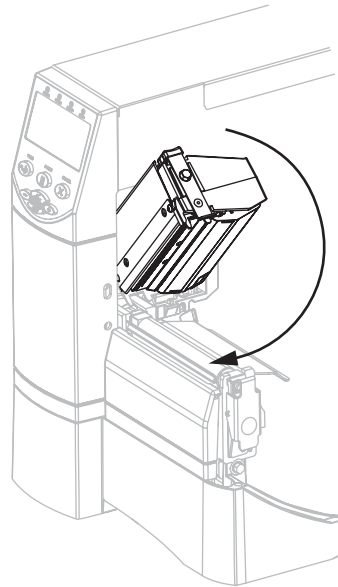
- b. Place the roll of ribbon on the ribbon supply spindle (1) and push it all the way back.



- c. Pull the end of the ribbon under the printhead assembly (1) and out the front of the printer. Extend the ribbon approximately 24 in. (610 mm) out of the printer.



3. Close the printhead assembly.



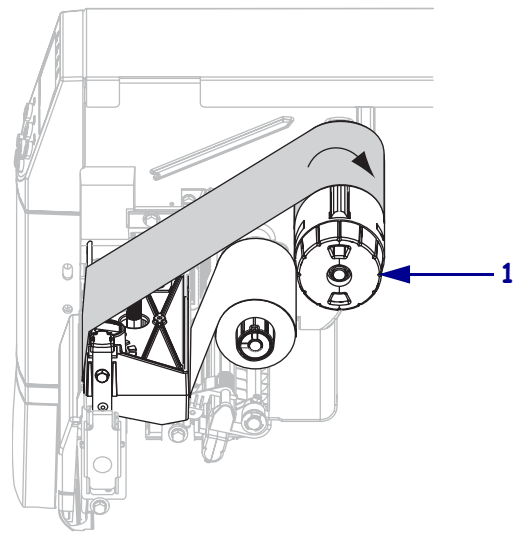
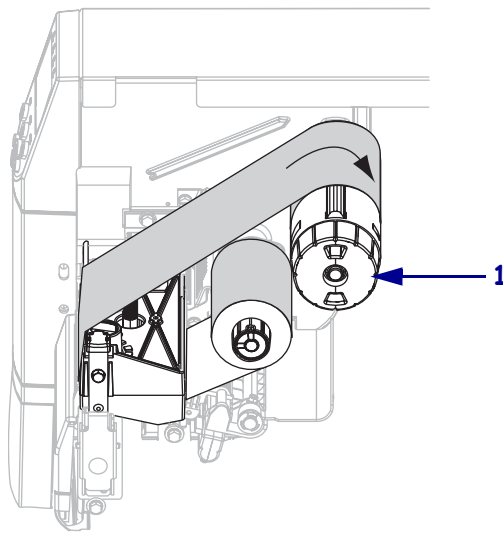
4. Wind the ribbon clockwise onto the ribbon take-up spindle (1).



**Ribbon Coated Outside  
(black ribbon spindle)**



**Ribbon Coated Inside  
(gray ribbon spindle)**

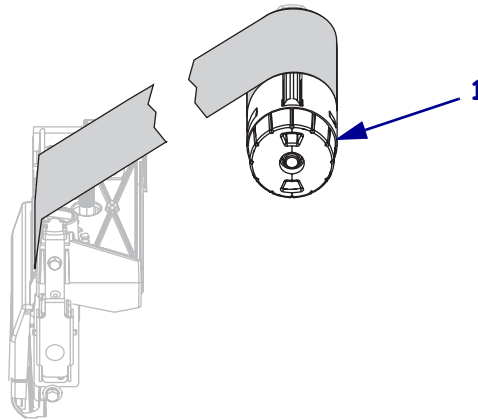


## Remove Used Ribbon

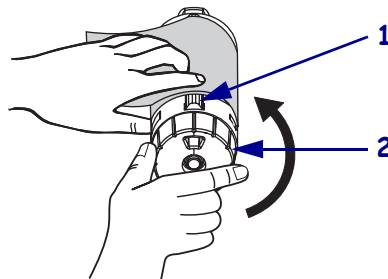
To remove used ribbon, complete these steps:

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

If the ribbon has not run out, cut or break it before the ribbon take-up spindle (1).



2. To loosen the ribbon, squeeze it against the ribbon take-up spindle tension blades (1). At the same time, turn the ribbon take-up spindle release knob counterclockwise (2). The tension blades collapse into the ribbon take-up spindle, loosening the ribbon.



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

