



# Printhead Conversion Kit

## Installation Instructions

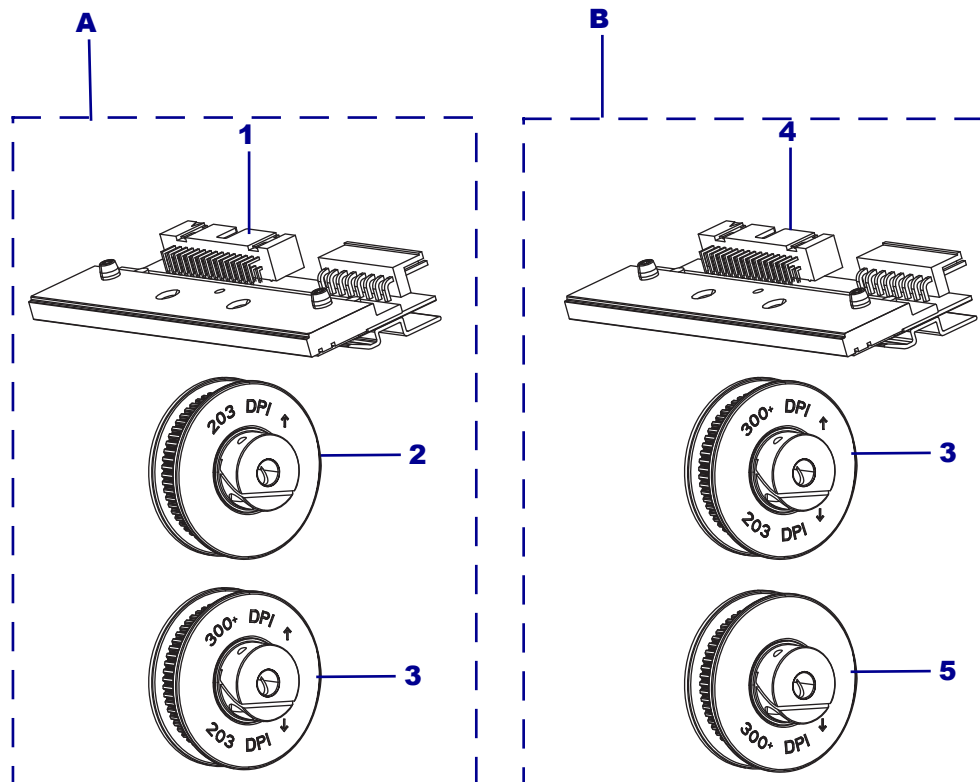
This kit includes the parts and documentation necessary to install the Printhead Conversion Kit on ZT510™ series printer.

Read these instructions thoroughly before installing this kit.

## Parts List

Before proceeding, verify that your kit contains the items for your printer listed below.

Figure 1 • Kit Contents



## 2 | Printhead Conversion

### Remove the Electronics Cover

Table 1 • Parts List

| ✓                                                                                                                                                                                                                              | Item     | Qty | Description                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----|-----------------------------------|
|                                                                                                                                                                                                                                | <b>A</b> | 1   | 203 dpi Conversion Kit            |
|                                                                                                                                                                                                                                | <b>1</b> | 1   | 203 dpi Printhead Maintenance Kit |
|                                                                                                                                                                                                                                | <b>2</b> | 1   | 203 dpi Upper Pulley              |
|                                                                                                                                                                                                                                | <b>3</b> | 1   | 203 dpi Rewind Pulley             |
|                                                                                                                                                                                                                                | <b>B</b> | 1   | 300 dpi Conversion Kit            |
|                                                                                                                                                                                                                                | <b>4</b> | 1   | 300 dpi Printhead Maintenance Kit |
|                                                                                                                                                                                                                                | <b>3</b> | 1   | 300 dpi Upper Pulley              |
|                                                                                                                                                                                                                                | <b>5</b> | 1   | 300 dpi Rewind Pulley             |
| N/A = Not available as a separate part (listed for identification purposes only).<br><b>Bold</b> = Part available for purchase.<br><i>Light italic</i> = Part not available for purchase, listed and shown for reference only. |          |     |                                   |

## Tools Required



**Tools** • You need these tools to complete this procedure:

- ☐ Flat-Blade Screwdriver Set
- ☐ Antistatic Wriststrap and Mat
- ☐ Torx-Head Wrench Set

## Remove the Electronics Cover

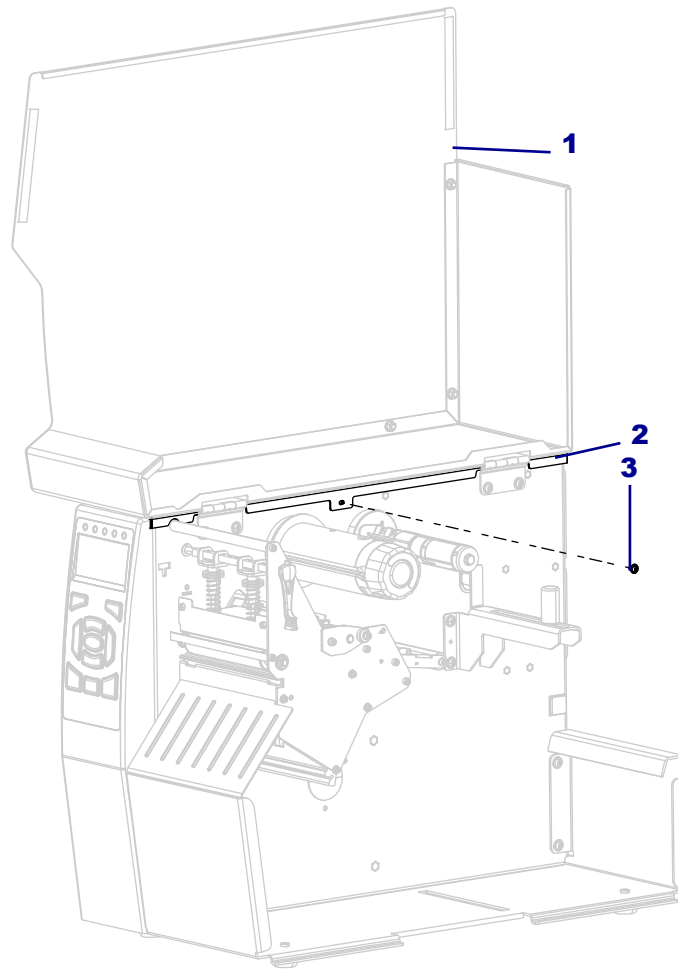


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. See [Figure 2](#). Remove the screw securing the electronics cover.

**Figure 2 • Locate the Electronics Cover Mounting Screw**



|          |                                  |
|----------|----------------------------------|
| <b>1</b> | Media door                       |
| <b>2</b> | Electronics cover                |
| <b>3</b> | Electronics cover mounting screw |

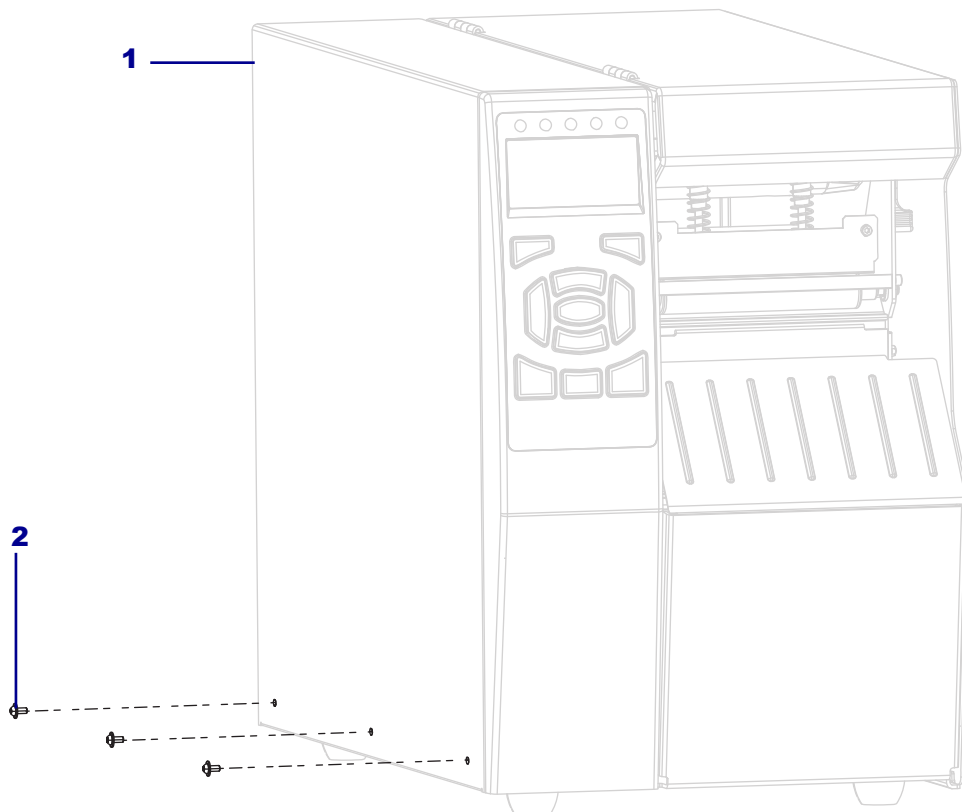
3. Close the media door.

#### 4 | Printhead Conversion

Remove the Electronics Cover

4. See [Figure 3](#). Remove the three mounting screws securing the electronics cover to the printer.

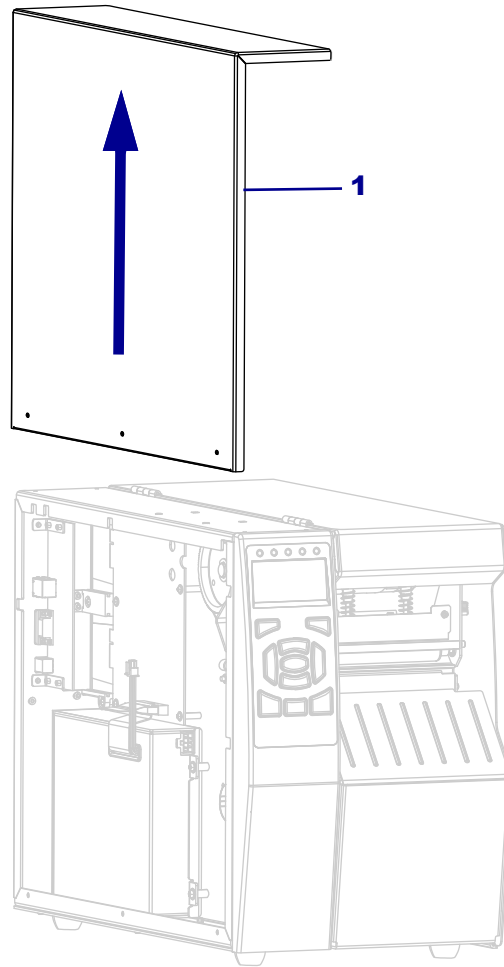
**Figure 3 • Remove the Electronics Cover Mounting Screws**



|          |                     |
|----------|---------------------|
| <b>1</b> | Electronics cover   |
| <b>2</b> | Mounting screws (3) |

5. See [Figure 4](#). Lift the electronics cover off of the printer.

**Figure 4 • Lift the Electronics Cover Off of the Printer**

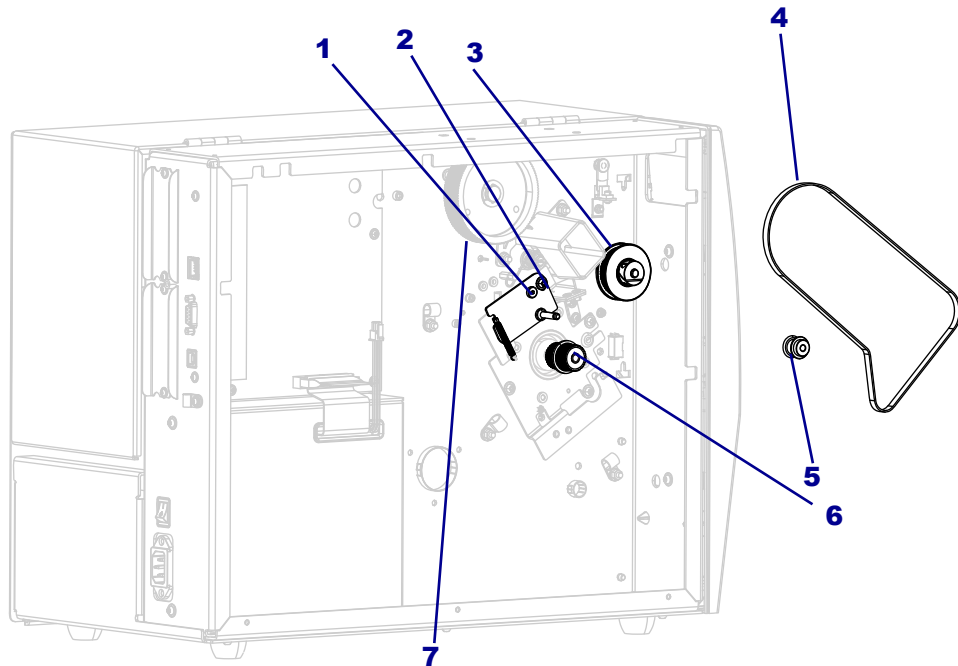


|          |                   |
|----------|-------------------|
| <b>1</b> | Electronics cover |
|----------|-------------------|

## Conversion without Rewind

1. See [Figure 5](#). Remove the main drive belt by loosening the locking screw on the main drive belt tensioner.

**Figure 5 • Loosen the Tensioner**

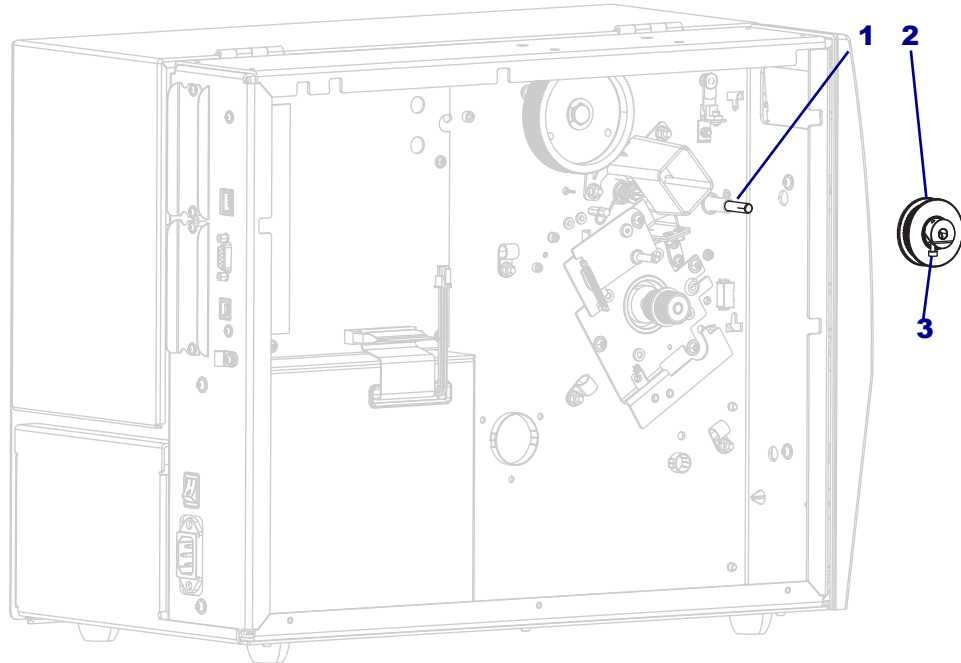


|          |                                         |
|----------|-----------------------------------------|
| <b>1</b> | Main drive belt tensioner               |
| <b>2</b> | Main drive belt tensioner locking screw |
| <b>3</b> | Upper platen pulley                     |
| <b>4</b> | Main drive belt                         |
| <b>5</b> | Main drive belt idler pulley            |
| <b>6</b> | Stepper motor pulley                    |
| <b>7</b> | Ribbon take-up pulley                   |

2. Rotate the main drive belt tensioner to extend the spring, and then tighten the locking screw.
3. Slide the main drive belt and idler pulley out of the printer.

4. See [Figure 6](#). Loosen the upper platen pulley mounting screw, and then slide the pulley out of the printer.

**Figure 6 • Remove the Upper Platen Pulley**

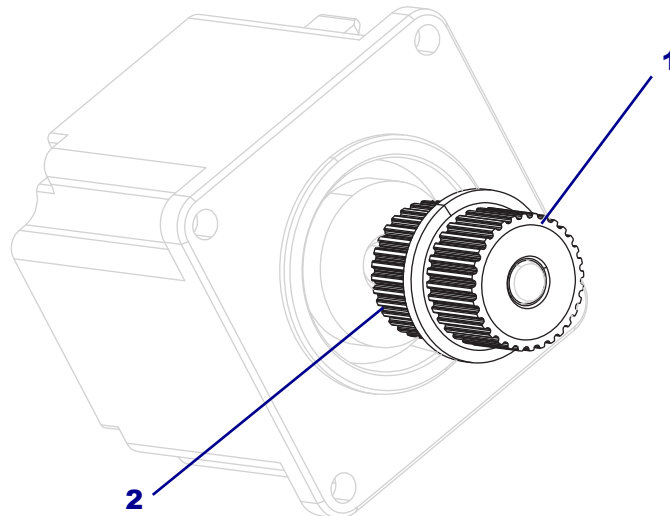


|          |                                    |
|----------|------------------------------------|
| <b>1</b> | Upper platen roller shaft          |
| <b>2</b> | Upper platen pulley                |
| <b>3</b> | Upper platen pulley mounting screw |

5. Remove the proper pulley from the option kit.
6. See [Figure 6](#). While holding the platen roller assembly in from the media side, slide the new pulley onto the upper platen roller shaft until it stops.
7. Tighten the pulley mounting screw.

8. See [Figure 5 on page 6](#) and [Figure 7](#). Install the new drive belt onto the drive motor outside pulley and around the upper platen pulley, and the around the ribbon take-up pulley.

**Figure 7 • Drive Motor Pulleys**



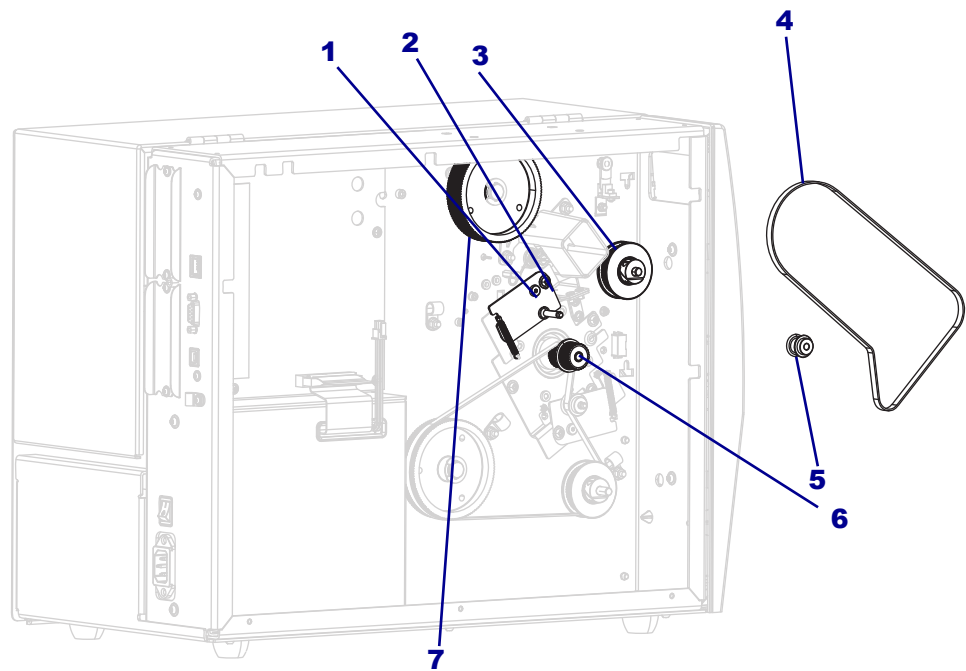
|          |                          |
|----------|--------------------------|
| <b>1</b> | Main drive belt pulley   |
| <b>2</b> | Rewind drive belt pulley |

9. Ensure that the belt is on the inside part of the idler pulley.
10. Loosen the main drive belt tensioner locking screw.
11. Rotate the belt several times to seat the belt on all the pulleys, and then tighten the locking screw on the main drive belt tensioner.
12. Go to [Remove the Old Printhead Assembly on page 15](#).

Conversion with Rewind

1. See Figure 8. Remove the main drive belt by loosening the locking screw on the main drive belt tensioner.

Figure 8 • Remove the Main Drive Belt and Idler Pulley



|   |                                         |
|---|-----------------------------------------|
| 1 | Main drive belt tensioner               |
| 2 | Main drive belt tensioner locking screw |
| 3 | Upper platen pulley                     |
| 4 | Main drive belt                         |
| 5 | Main drive belt idler pulley            |
| 6 | Stepper motor pulley                    |
| 7 | Ribbon take-up pulley                   |



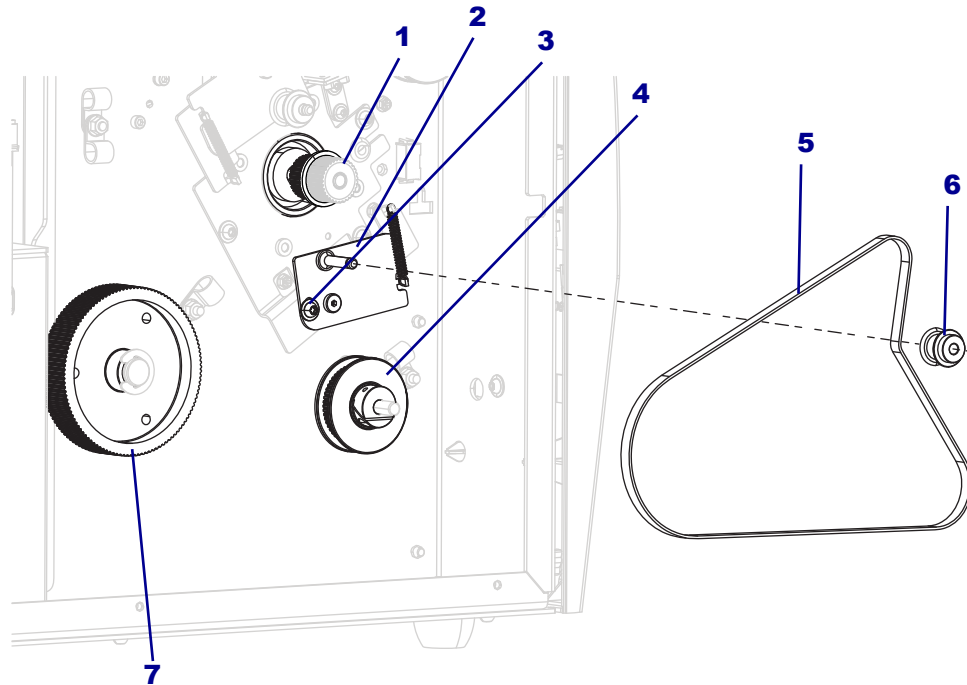
2. **Caution •** Wear protective eyewear when installing or removing E-rings, C-clips, snap rings, springs, and mounting buttons. These are under tension and could fly off.

Rotate the main drive belt tensioner to extend the spring, and then tighten the locking screw.

3. Slide the main drive belt and idler pulley out of the printer.

4. See [Figure 6 on page 7](#). Loosen the upper platen pulley mounting screw, and then slide the pulley out of the printer.
5. See [Figure 9](#). Remove the rewind drive belt by loosening the locking screw on the main drive belt tensioner.

**Figure 9 • Remove the Rewind Drive Belt and Idler Pulley**

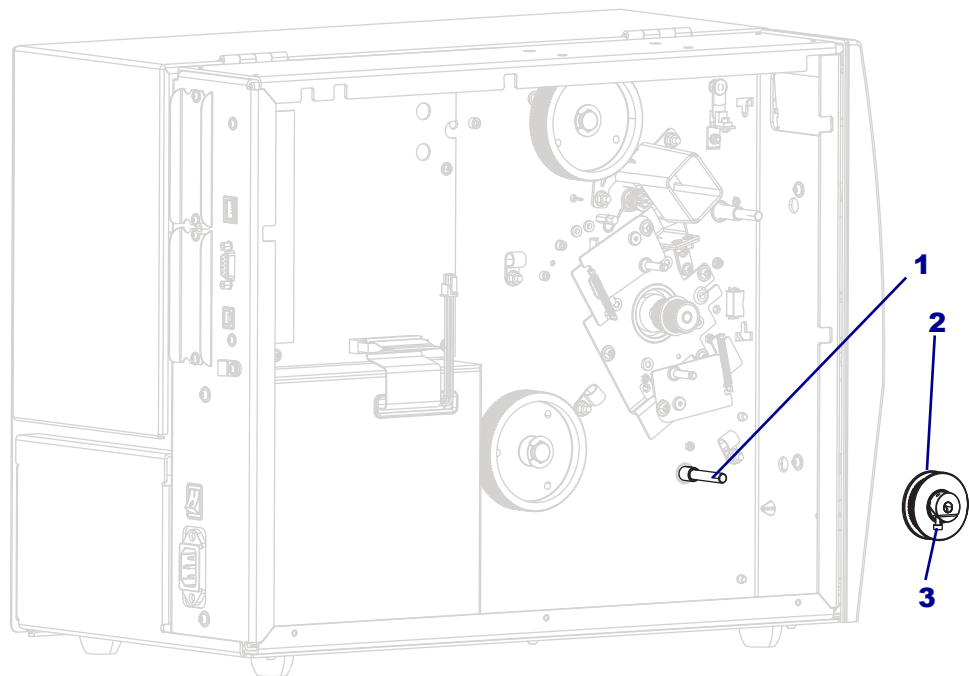


|          |                                           |
|----------|-------------------------------------------|
| <b>1</b> | Stepper motor pulley                      |
| <b>2</b> | Rewind drive belt tensioner               |
| <b>3</b> | Rewind drive belt tensioner locking screw |
| <b>4</b> | Rewind platen pulley                      |
| <b>5</b> | Rewind drive belt                         |
| <b>6</b> | Rewind drive belt idler pulley            |
| <b>7</b> | Rewind spindle pulley                     |

6. Rotate the main drive belt tensioner to extend the spring, and then tighten the locking screw.
7. Slide the main drive belt and idler pulley out of the printer.

- See [Figure 10](#). Loosen the rewind platen pulley mounting screw, and then slide the pulley out of the printer.

**Figure 10 • Remove the Rewind Platen Pulley**



|          |                                     |
|----------|-------------------------------------|
| <b>1</b> | Rewind platen roller shaft          |
| <b>2</b> | Rewind platen pulley                |
| <b>3</b> | Rewind platen pulley mounting screw |

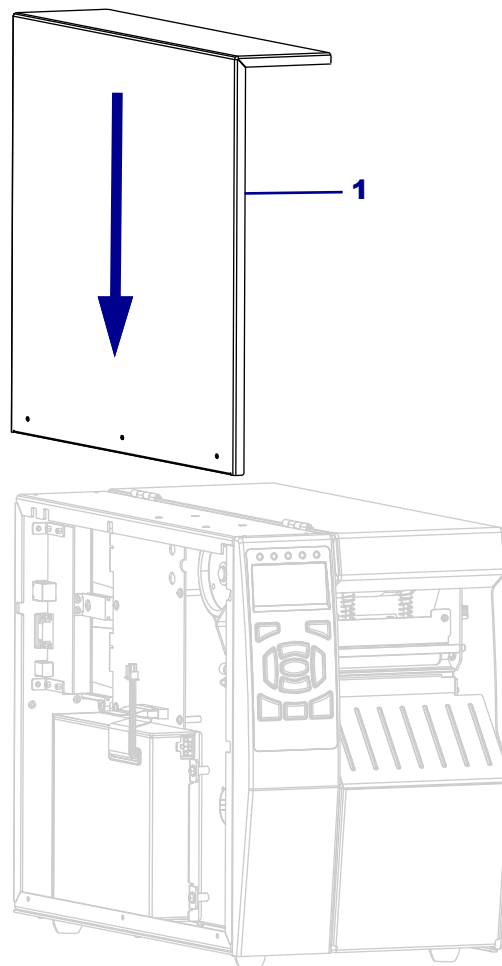
- See [Figure 10](#). While holding the platen roller assembly in from the media side, slide the new pulley onto the upper platen roller shaft until it stops.
- Tighten the pulley mounting screw.
- See [Figure 9 on page 10](#) and [Figure 7 on page 8](#). Slide the new drive belt onto the drive motor outside pulley and around the upper platen pulley, and the around the rewind spindle pulley.
- Slide the rewind belt around the inside pulley on the stepper motor, around the lower platen pulley, and then around the rewind spindle pulley.
- Ensure that the belt is on the inside part of the idler pulley.
- Loosen the rewind tensioner locking screw.
- Rotate the belt several times to seat the belt on all the pulleys, and then tighten the locking screw on the rewind tensioner.
- Remove the proper pulley from the option kit.
- See [Figure 6 on page 7](#). While holding the platen roller assembly in from the media side, slide the new pulley onto the upper platen roller shaft until it stops.

18. Tighten the pulley mounting screw.
19. See [Figure 8 on page 9](#). Reinstall the main drive belt around the outside stepper motor pulley, the upper platen roller pulley, and then around the ribbon take-up spindle pulley.
20. Ensure that the belt is on the inside part of the idler pulley.
21. Loosen the main drive belt tensioner locking screw.
22. Rotate the belt several times to seat the belt on all the pulleys, and then tighten the locking screw on the main drive belt tensioner.

## Reinstall the Electronics Cover

1. See [Figure 11](#). Slide the electronics cover onto the printer.

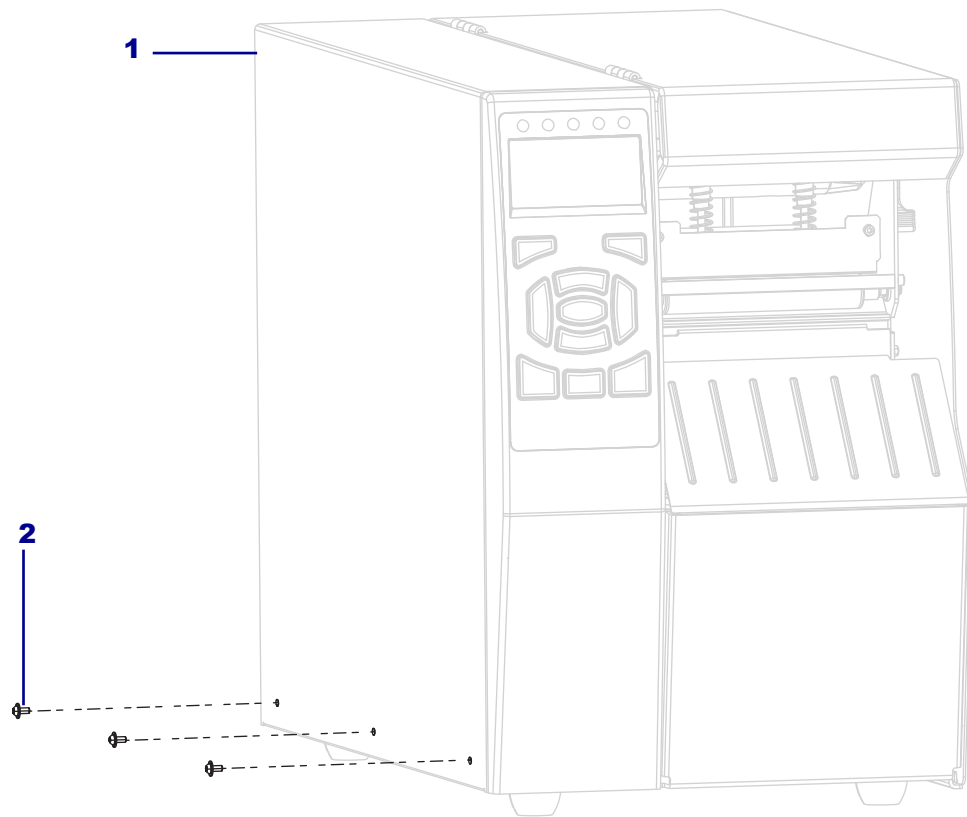
**Figure 11 • Slide the Electronics Cover onto the Printer**



|          |                   |
|----------|-------------------|
| <b>1</b> | Electronics cover |
|----------|-------------------|

2. See [Figure 12](#). Install the three mounting screws.

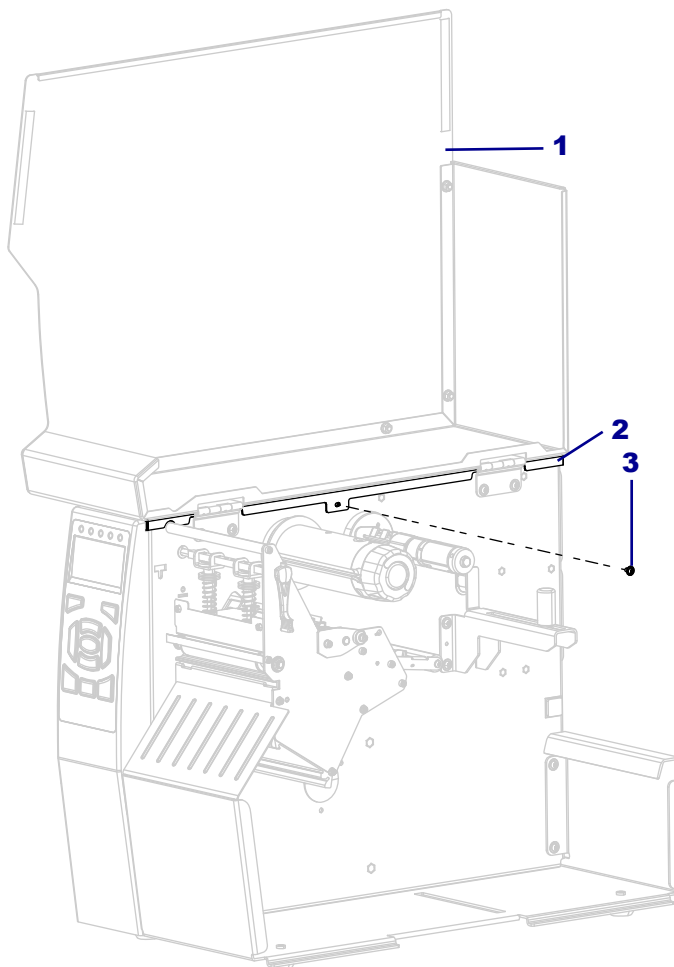
**Figure 12 • Install the Electronics Cover Mounting Screws**



|          |                     |
|----------|---------------------|
| <b>1</b> | Electronics cover   |
| <b>2</b> | Mounting screws (3) |

3. See [Figure 13](#). Install the media side electronics cover mounting screw.

**Figure 13 • Locate the Electronics Cover Mounting Screw**



|          |                                  |
|----------|----------------------------------|
| <b>1</b> | Media door                       |
| <b>2</b> | Electronics cover                |
| <b>3</b> | Electronics cover mounting screw |

## Remove the Old Printhead Assembly



1. **Caution** • Turn off (O) the printer and disconnect it from the power source before performing the following procedure.

Turn off (O) the printer and disconnect the AC power cord and all data cables.

2. **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.

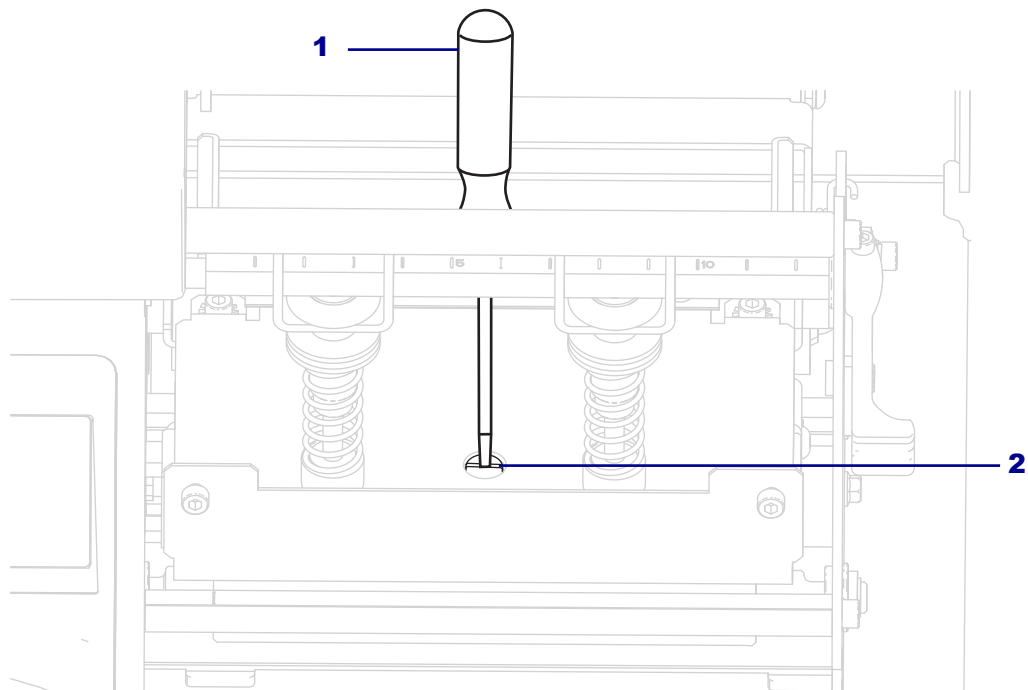
Remove the media and ribbon from the printer.



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

See [Figure 14](#). Loosen the printhead mounting screw.

**Figure 14 • Loosen the Printhead Mounting Screw**



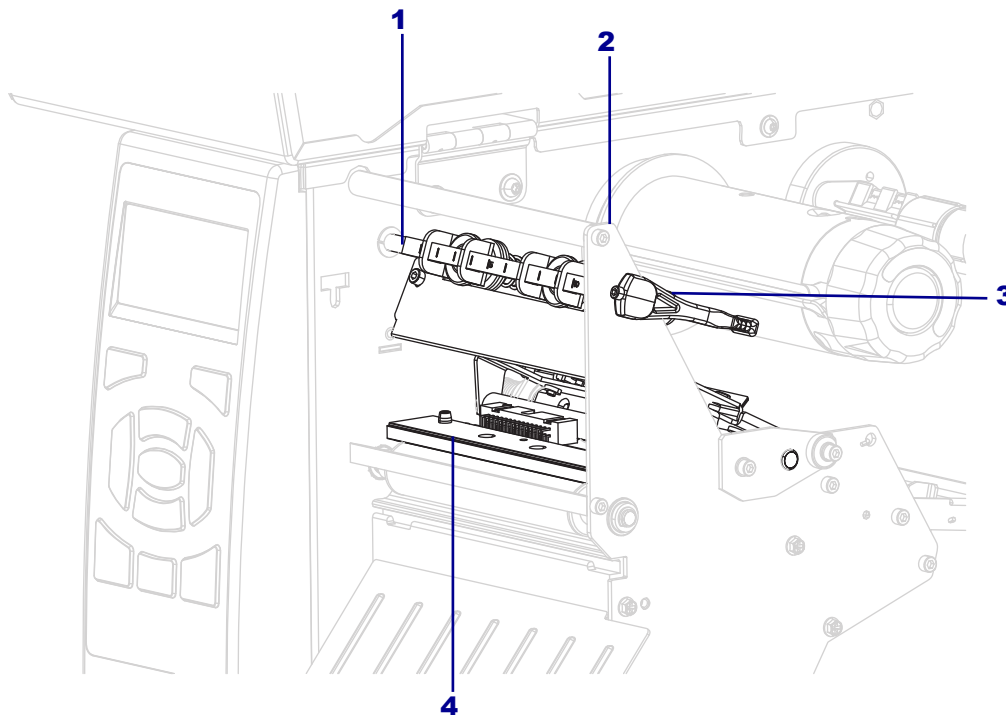
|   |                          |
|---|--------------------------|
| 1 | Flat-blade screwdriver   |
| 2 | Printhead mounting screw |

## 16 | Printhead Conversion

### Remove the Old Printhead Assembly

4. See [Figure 15](#). Open the upper print mechanism. The printhead should be still down on the platen roller.

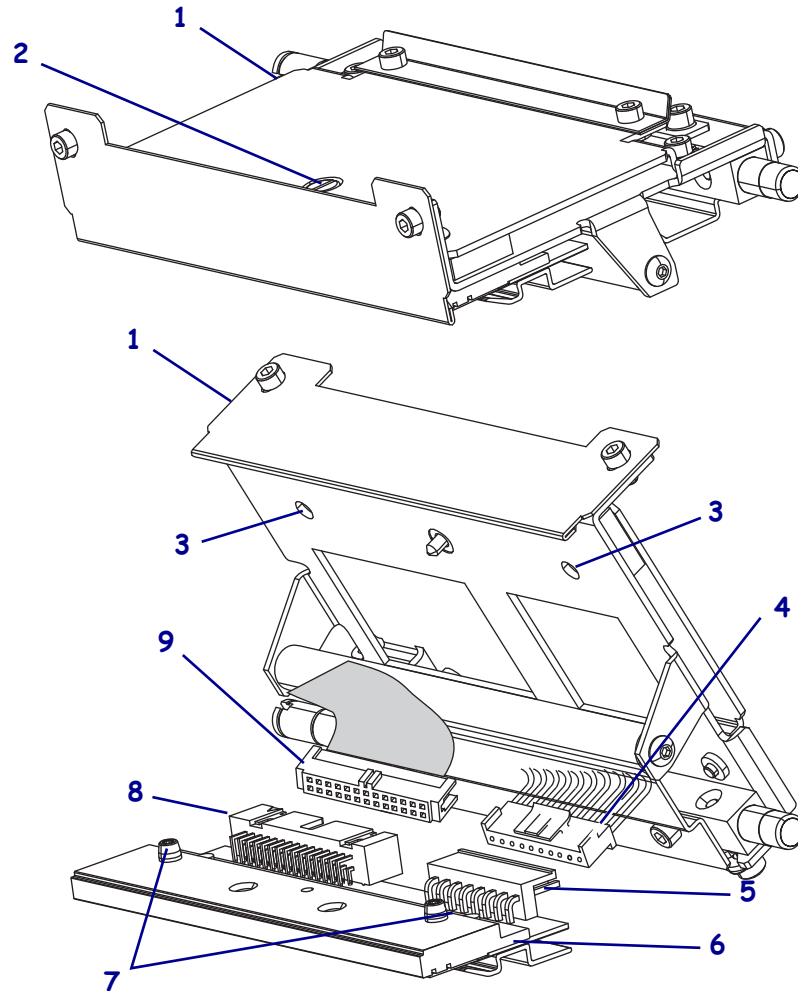
**Figure 15 • Open the Upper Print Mechanism**



|          |                        |
|----------|------------------------|
| <b>1</b> | Toggle assembly        |
| <b>2</b> | Toggle assembly handle |
| <b>3</b> | Upper print mechanism  |
| <b>4</b> | Printhead assembly     |

5. See [Figure 16](#). Disconnect the printhead cables, and then remove the printhead from the printer.

**Figure 16 • Remove the Printhead**



|          |                                 |
|----------|---------------------------------|
| <b>1</b> | Upper print mechanism           |
| <b>2</b> | Printhead mounting screw        |
| <b>3</b> | Printhead locating holes        |
| <b>4</b> | Printhead power cable           |
| <b>5</b> | Printhead power cable connector |
| <b>6</b> | Printhead assembly              |
| <b>7</b> | Printhead locating pins         |
| <b>8</b> | Printhead data cable connector  |
| <b>9</b> | Printhead data cable            |

## Install the New Printhead Assembly

1. Remove the new printhead assembly from the maintenance kit.
2. See [Figure 16 on page 17](#). Reconnect the power and data cables to the new printhead.
3. Insert the printhead locating pins into the printhead locating holes.
4. Ensure that the printhead is seated into the upper print mechanism, and then tighten the printhead mounting screw.
5. Clean the new printhead elements using Zebra's Preventive Maintenance Kit part number 47362. In place of the Preventive Maintenance Kit, you may use a clean swab dipped in a solution of isopropyl alcohol (minimum 99.7%) and deionized water (maximum 0.3%).

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

Reinstall the media and ribbon.

7. Reconnect the AC power cord and data cables.
8. Press and hold PAUSE while turning on (I) the printer.
9. Press PAUSE to pause the printer and check the labels for proper print quality. If the print quality is not acceptable, refer to the User Guide.

**The installation is complete.**





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on chlorine-free  
recycled paper.



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