



ZT200™ Series



ZT210, ZT220, and ZT230 Printers

Maintenance Manual

P1050513-002



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Routine Maintenance

This section provides routine cleaning and maintenance procedures.

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Cleaning Schedule and Procedures

Routine preventive maintenance is a crucial part of normal printer operation. By taking good care of your printer, you can minimize the potential problems that you might have with it and help to achieve and to maintain your standards for print quality.

Over time, the movement of media or ribbon across the printhead wears through the protective ceramic coating, exposing and eventually damaging the print elements (dots). To avoid abrasion:

- Clean the printhead frequently.
- Minimize printhead pressure and burn temperature (darkness) settings by optimizing the balance between the two.
- When using Thermal Transfer mode, ensure that the ribbon is as wide or wider than the media to prevent exposing the printhead elements to the more abrasive label material.



Important • Zebra is not responsible for damage caused by the use of cleaning fluids on this printer.

Specific cleaning procedures are provided on the following pages. [Table 1](#) shows the recommended cleaning schedule. These intervals are intended as guidelines only. You may have to clean more often, depending upon your application and media.

Table 1 • Recommended Cleaning Schedule

Area		Method	Interval
Printhead		Solvent*	Direct Thermal Mode: After every roll of media (or 500 feet of fanfold media). Thermal Transfer Mode: After every roll of ribbon.
Platen roller		Solvent*	
Media sensors		Air blow	
Ribbon sensor		Air blow	
Media path		Solvent*	
Ribbon path		Solvent*	
Pinch roller (part of Peel-Off option)		Solvent*	
Cutter module	If cutting continuous, pressure-sensitive media	Solvent*	After every roll of media (or more often, depending upon your application and media).
	If cutting tag stock or label liner material	Solvent* and air blow	After every two or three rolls of media.
Tear-off/peel-off bar		Solvent*	Once a month.
Take-label sensor		Air blow	Once every six months.

* Zebra recommends using Preventive Maintenance Kit (part number 47362). In place of this kit, you may use a clean swab dipped in a solution of isopropyl alcohol (minimum 99.7%) and deionized water (maximum 0.3%).

Clean the Exterior, the Media Compartment, and the Sensors

Over time, dust, grime, and other debris may build up on the outside and inside of your printer, particularly in a harsh operating environment.

Printer Exterior

You may clean the exterior surfaces of the printer with a lint-free cloth and a small amount of a mild detergent, if necessary. Do not use harsh or abrasive cleaning agents or solvents.

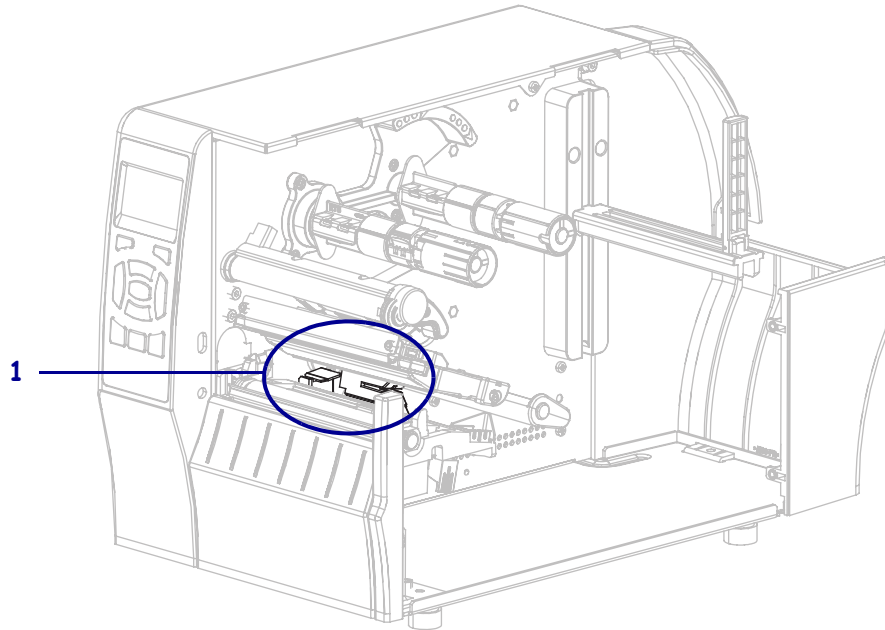


Important • Zebra is not responsible for damage caused by the use of cleaning fluids on this printer.

Media Compartment and Sensors

To clean the sensors, complete these steps:

1. Brush, air blow, or vacuum any accumulated paper lint and dust away from the media and ribbon paths.
2. Brush, air blow, or vacuum any accumulated paper lint and dust away from the sensors (1).



Clean the Printhead and Platen Roller

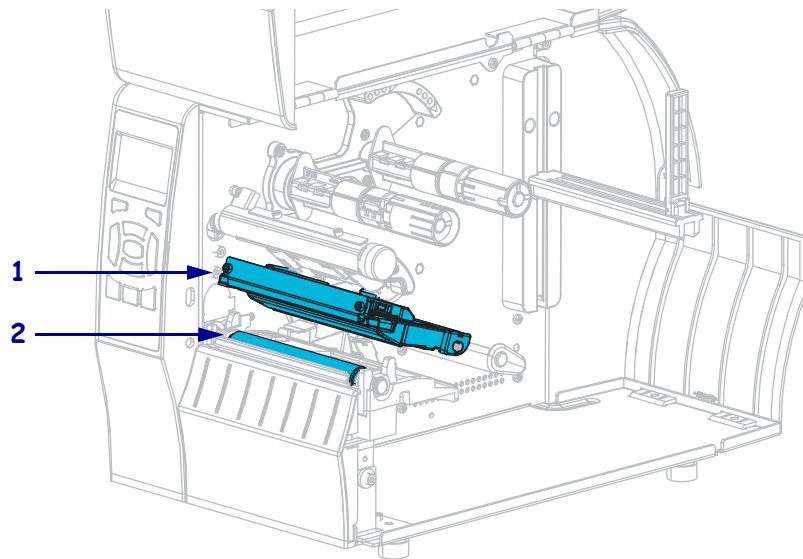
Inconsistent print quality, such as voids in the bar code or graphics, may indicate a dirty printhead. For the recommended cleaning schedule, see [Table 1 on page 8](#).

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.



Note • For printers with a peel assembly, keep the peel assembly closed while cleaning the platen roller to reduce the risk of bending the tear-off/peel-off bar.

Figure 1 • Location of the Printhead and Platen Roller



1	Printhead assembly
2	Platen roller



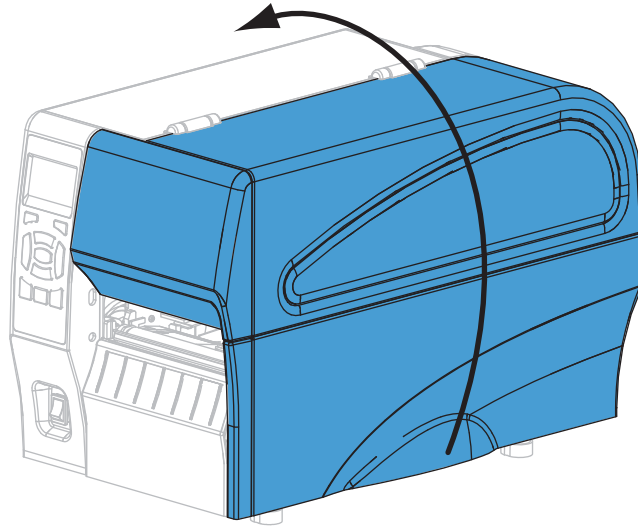
Caution • The printhead may be hot and could cause severe burns. Allow the printhead to cool.



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

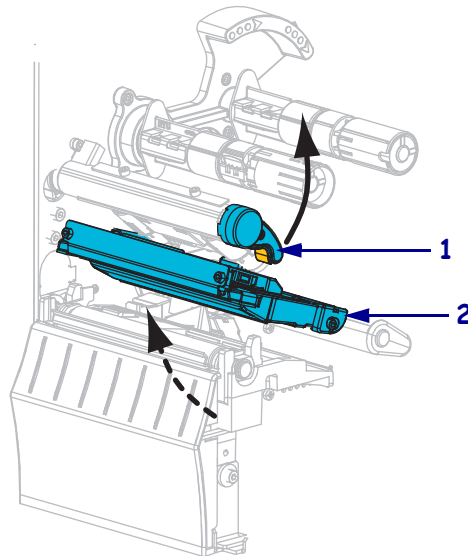
To clean the printhead and platen roller, complete these steps:

1. Raise the media door.



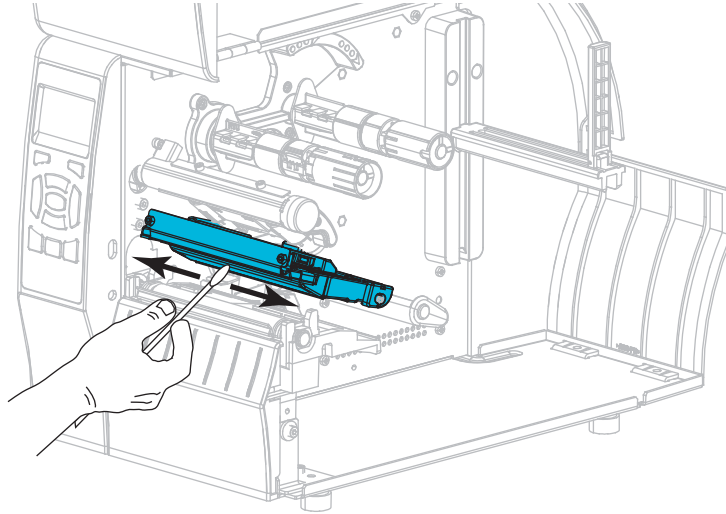
2. **Caution** • The printhead may be hot and could cause severe burns. Allow the printhead to cool.

Rotate the printhead-open lever (1) upward to release the print mechanism (2).

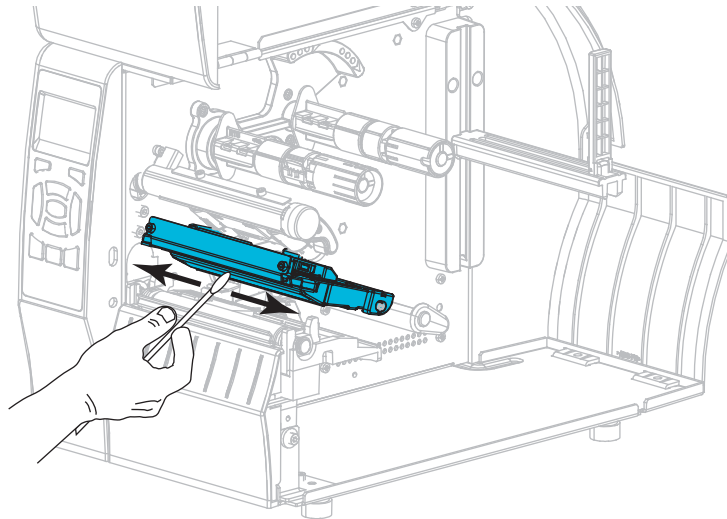


3. Remove the ribbon (if used) and the media.

4. Using the swab from a Zebra Preventive Maintenance Kit, wipe along the brown strip on the printhead assembly from end to end. 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%). Allow the solvent to evaporate.

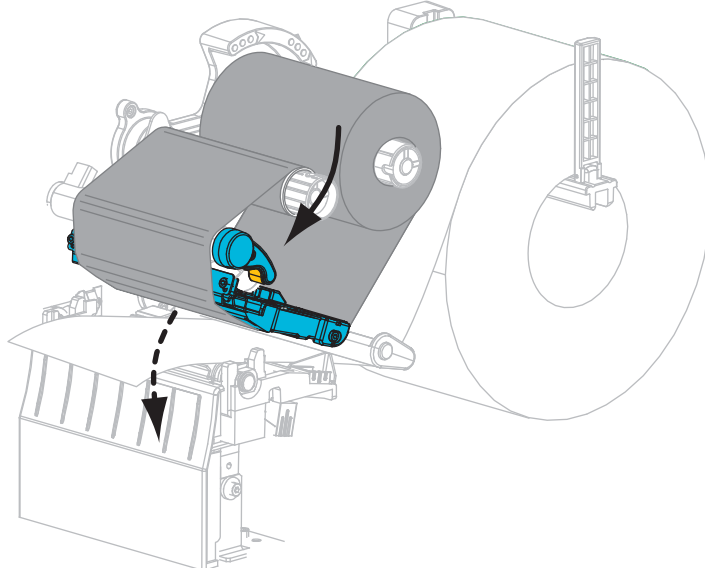


5. While manually rotating the platen roller, clean it thoroughly with the swab. Allow the solvent to evaporate.

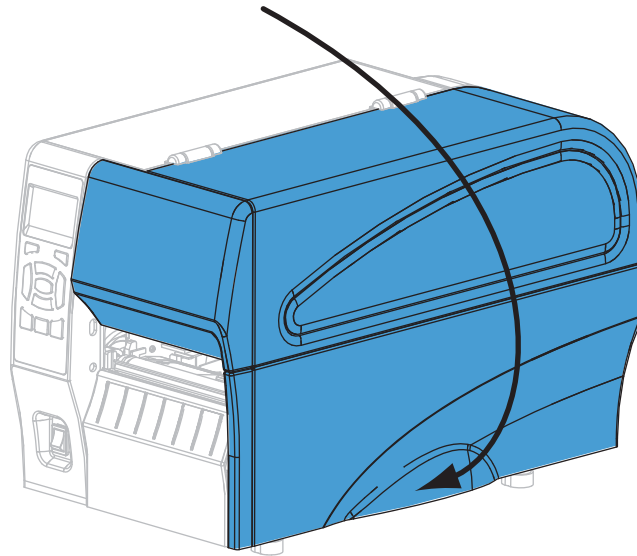


6. Reload the ribbon (if used) and the media. Refer to the User Guide for instructions.

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



8. Close the media door.



The printer is ready to operate.

9. Press **PAUSE** to exit pause mode and enable printing.

The printer may perform a label calibration or feed a label, depending on your settings.



Note • If performing this procedure does not improve print quality, try cleaning the printhead with *Save-A-Printhead* cleaning film. This specially coated material removes contamination buildup without damaging the printhead. Call your authorized Zebra reseller for more information.

Clean the Peel Assembly

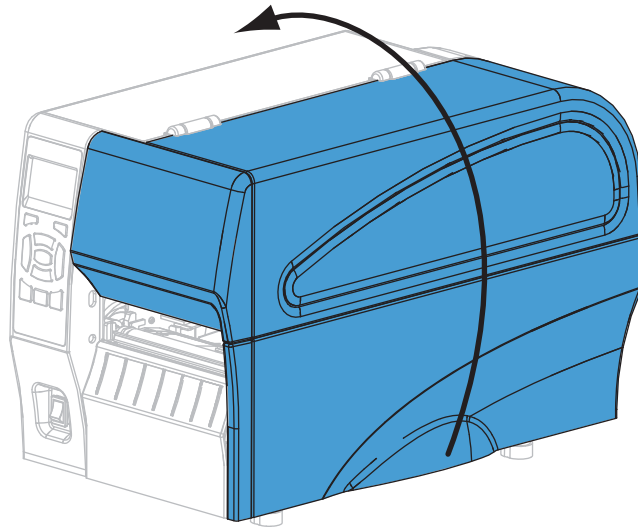
The peel assembly, which is part of the Peel-Off and Liner Take-Up options, consists of several spring-loaded rollers to ensure the proper roller pressure. Clean the pinch roller and tear-off/peel-off bar if adhesive buildup begins to affect peel performance.



Caution • Do not use your left hand to assist in closing the Peel assembly. The top edge of the Peel roller/assembly could pinch your fingers.

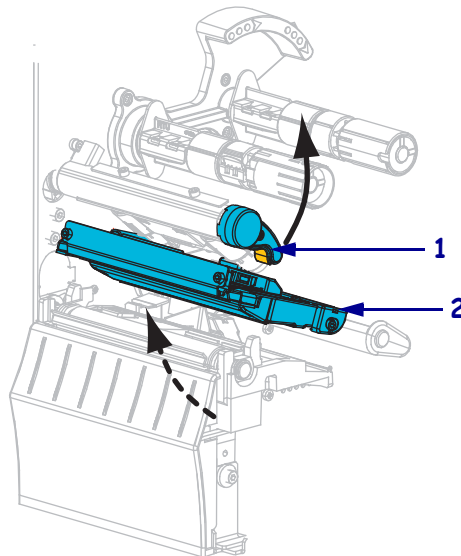
If adhesive buildup affects peel-off performance, complete these steps:

1. Raise the media door.

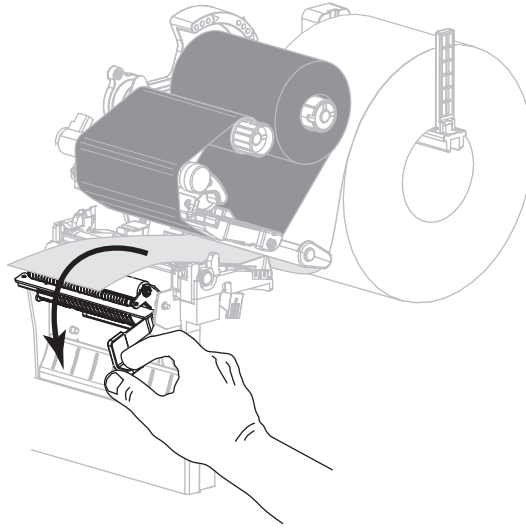


2. **Caution** • The printhead may be hot and could cause severe burns. Allow the printhead to cool.
-

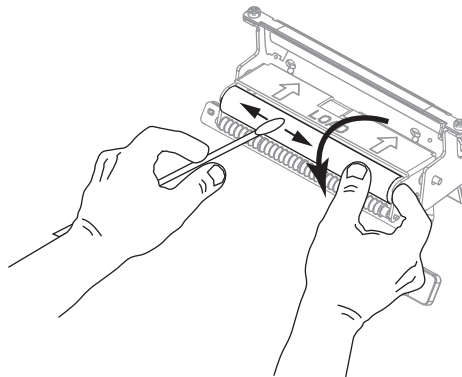
Rotate the printhead-open lever (1) upward to release the print mechanism (2).



3. Push down the peel-off mechanism release lever to open the peel assembly.



4. Remove any media liner to expose the pinch roller.
5. While manually rotating the pinch roller, clean it thoroughly with the swab from the 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%). Allow the solvent to evaporate.



6. Use the swab to remove excess adhesive from the tear-off/peel-off bar. Allow the solvent to evaporate.



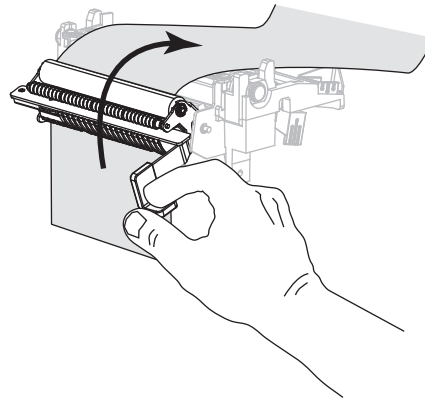
Important • Apply minimum force when cleaning the tear-off/peel-off bar. Excessive force can cause the tear-off/peel-off bar to bend, which could have a negative effect on peel performance.

7. Reload the media liner through the peel mechanism. Refer to the *User Guide* for instructions.

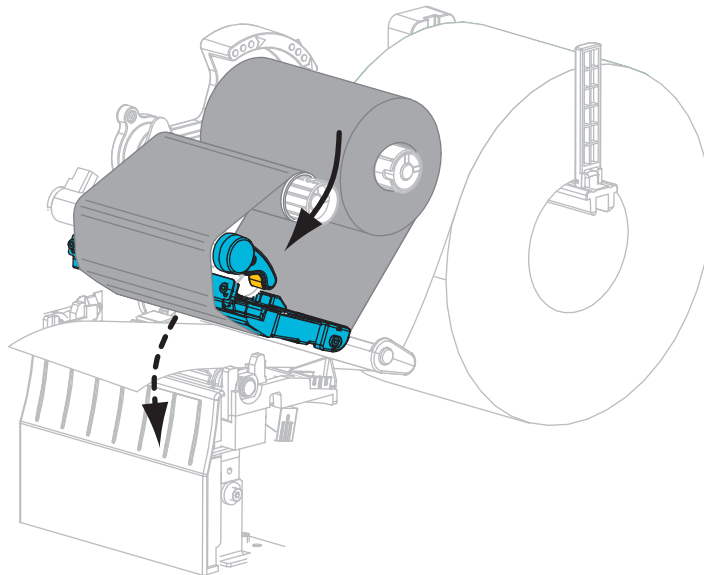


-
8. **Caution** • Use the peel release lever and your right hand to close the peel assembly. Do not use your left hand to assist in closing. The top edge of the peel roller/assembly could pinch your fingers.
-

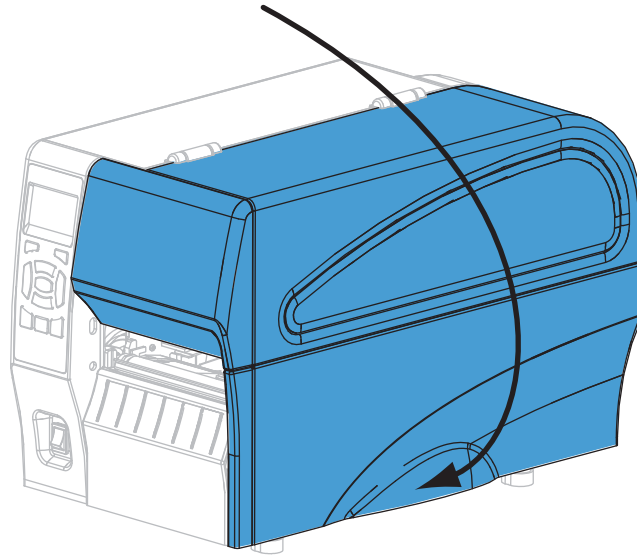
Close the peel assembly using the peel-off mechanism release lever.



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



10. Close the media door.



The printer is ready to operate.

11. Press **PAUSE** to exit pause mode and enable printing.

The printer may perform a label calibration or feed a label, depending on your settings.

Clean the Cutter Module

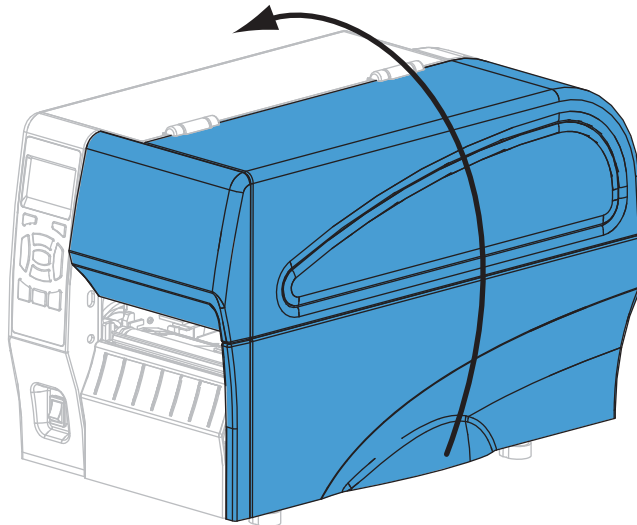
If the cutter is not cutting the labels cleanly or if it jams with labels, clean the cutter.



Caution • For personnel safety, always power off and unplug the printer before performing this procedure.

To clean the cutter module, complete these steps:

1. Raise the media door.

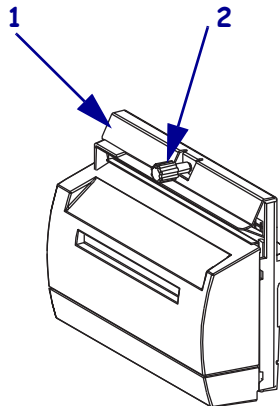


2. Turn the printer off (O), and unplug the printer from its power source.
3. Remove media that is loaded through the cutter module.

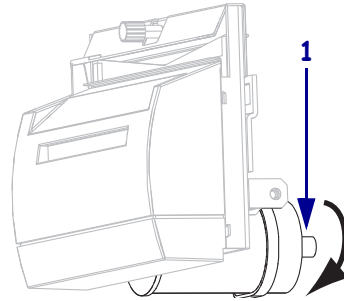


4. **Caution** • The cutter blade is sharp. Do not touch or rub the blade with your fingers.
-

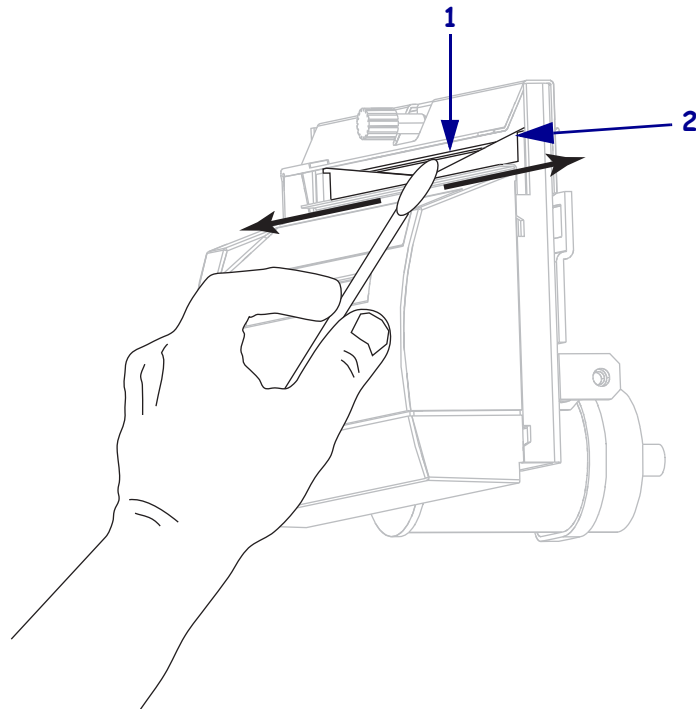
Remove the cutter shield (1) by removing the cutter shield thumbscrew and lock washer (2).



5. To expose the V-shaped cutter blade, rotate the cutter motor thumbscrew (1) as shown to lower the blade.

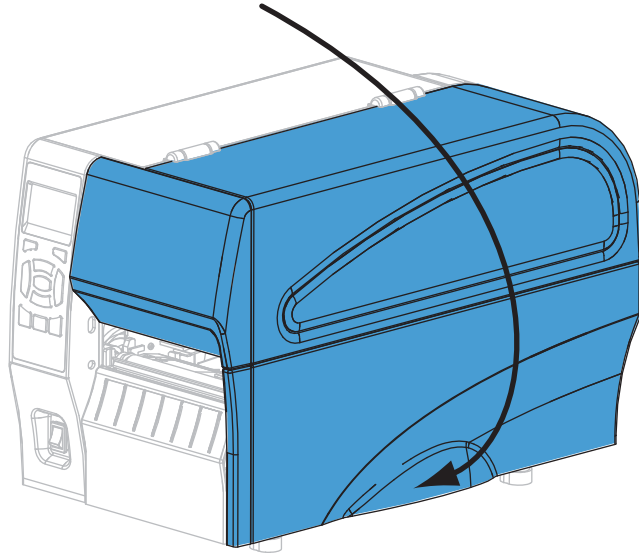


6. Using the swab from the Preventive Maintenance Kit (part number 47362), wipe along the upper cutting surface (1) and the cutter blade (2). In place of the Preventive Maintenance Kit, you may use a clean swab dipped in a solution of isopropyl alcohol (minimum 99.7%) and deionized water (maximum 0.3%). Allow the solvent to evaporate.



7. Replace the cutter shield and secure it with the thumbscrew and lock washer that you removed earlier.

8. Close the media door.



9. Plug the printer into its power source, and then turn on (I) the printer.
The cutter blade returns to its operating position.
10. If the cutter continues to perform unsatisfactorily, contact an authorized service technician.

Replacing Printer Components

Some printer components, such as the printhead and platen roller, may wear out over time and can be replaced easily. Regular cleaning may extend the life of some of these components. See [Table 1 on page 8](#) for the recommended cleaning intervals.

Ordering Replacement Parts

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 ZE500 print engines are designed to work only with genuine Zebra™ printheads, thus maximizing safety and print quality.

Recycling Printer Components



The majority of this printer's components are recyclable. The printer's main logic board may include a battery that you should dispose of properly.

Do not dispose of any printer components in unsorted municipal waste. Please dispose of the battery according to your local regulations, and recycle the other printer components according to your local standards. For more information, see <http://www.zebra.com/environment>.

Lubrication

No lubrication is needed for this printer.

Caution • Some commercially available lubricants will damage the finish and the mechanical parts if used on this printer.



Notes • _____

Troubleshooting

This section provides information about errors that you might need to troubleshoot. Assorted diagnostic tests are included.

For videos of some common procedures, go to <https://www.zebra.com/us/en/support-downloads/industrial/zt220.html>, or scan the QR code to the right.



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Meaning of Indicator Lights

The indicator lights on the control panel show the current status of the printer (Table 2).

Table 2 • Status of Printer As Shown by Indicator Lights

















































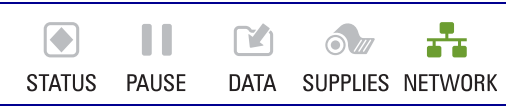

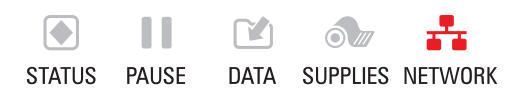
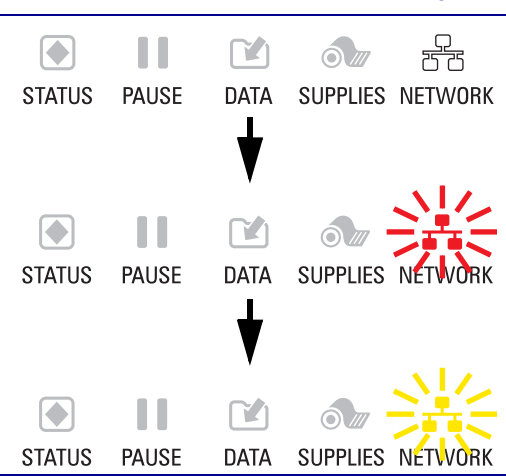


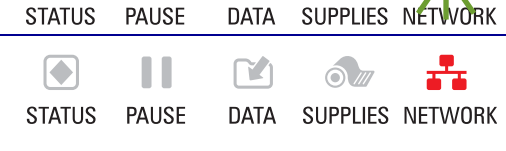
 STATUS  PAUSE  DATA  SUPPLIES  NETWORK	<p><i>STATUS light steady green (other lights steady yellow for 2 seconds during printer power-up)</i></p> <p>The printer is ready.</p>
 STATUS  PAUSE  DATA  SUPPLIES  NETWORK	<p><i>PAUSE light steady yellow.</i></p> <p>The printer is paused.</p>
 STATUS  PAUSE  DATA  SUPPLIES  NETWORK	<p><i>STATUS light steady red</i></p> <p><i>SUPPLIES light steady red</i></p> <p>The media supply is out. The printer needs attention and cannot continue without user intervention.</p>
 STATUS  PAUSE  DATA  SUPPLIES  NETWORK	<p><i>STATUS light steady red</i></p> <p><i>SUPPLIES light flashing red</i></p> <p>The ribbon supply is out. The printer needs attention and cannot continue without user intervention.</p>
 STATUS  PAUSE  DATA  SUPPLIES  NETWORK	<p><i>STATUS light steady yellow</i></p> <p><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>
 STATUS  PAUSE  DATA  SUPPLIES  NETWORK	<p><i>STATUS light steady red</i></p> <p><i>PAUSE light steady yellow</i></p> <p>The printhead is open. The printer needs attention and cannot continue without user intervention.</p>
 STATUS  PAUSE  DATA  SUPPLIES  NETWORK	<p><i>STATUS light steady yellow</i></p> <p>The printhead is over temperature.</p> <p> Caution • The printhead may be hot and could cause severe burns. Allow the printhead to cool.</p>
 STATUS  PAUSE  DATA  SUPPLIES  NETWORK	<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"> • The printhead is under temperature. • The power supply is over temperature. • The main logic board (MLB) is over temperature.
 STATUS  PAUSE  DATA  SUPPLIES  NETWORK	<p><i>STATUS light steady red</i></p> <p><i>PAUSE light steady red</i></p> <p><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 2 • 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>Printers with a ZebraNet wired Ethernet option</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>Printers with a ZebraNet wireless option</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>

Printing Issues

Table 3 identifies possible issues with printing or print quality, the possible causes, and the recommended solutions.

Table 3 • Printing Issues

Issue	Possible Cause	Recommended Solution
General print quality issues	The printer is set at the incorrect print speed.	For optimal print quality, set the print speed to the lowest possible setting for your application via control panel, the driver, or the software. You may want to perform the <i>FEED Self Test</i> on page 41 to determine the optimal settings for your printer. Refer to the <i>User Guide</i> for information about changing the print speed.
	You are using an incorrect combination of labels and ribbon for your application.	<ol style="list-style-type: none"> 1. Switch to a different type of media or ribbon to try to find a compatible combination. 2. If necessary, consult your authorized Zebra reseller or distributor for information and advice.
	The printer is set at an incorrect darkness level.	For optimal print quality, set the darkness to the lowest possible setting for your application. You may want to perform the <i>FEED Self Test</i> on page 41 to determine the ideal darkness setting. Refer to the <i>User Guide</i> for information about changing the darkness setting.
	The printhead is dirty.	Clean the printhead and platen roller. See <i>Clean the Printhead and Platen Roller</i> on page 10.
	Incorrect or uneven printhead pressure.	Set the printhead pressure to the minimum needed for good print quality. See <i>Adjust the Printhead Pressure</i> on page 53.
Loss of printing registration on labels. Excessive vertical drift in top-of-form registration.	The platen roller is dirty.	Clean the printhead and platen roller. See <i>Clean the Printhead and Platen Roller</i> on page 10.
	Media guides are positioned improperly.	Ensure that the media guides are properly positioned. Refer to the media loading section in the <i>User Guide</i> for information about adjusting the media guides.
	The media type is set incorrectly.	Set the printer for the correct media type (gap/notch, continuous, or mark). Refer to the <i>User Guide</i> for information about changing the media type.
	The media is loaded incorrectly.	Load media correctly. Refer to the <i>User Guide</i> for instructions for loading ribbon and media.

Table 3 • Printing Issues (Continued)

Issue	Possible Cause	Recommended Solution
Long tracks of missing print on several labels	Print element damaged.	Replace the printhead. See <i>Printhead Assembly Maintenance Kit</i> on page 68.
	Wrinkled ribbon.	See wrinkled ribbon causes and solutions in <i>Ribbon Problems</i> on page 29.
Fine, angular gray lines on blank labels	Wrinkled ribbon.	See wrinkled ribbon causes and solutions in <i>Ribbon Problems</i> on page 29.
Printing too light or too dark over the entire label	The media or ribbon is not designed for high-speed operation.	Replace supplies with those recommended for high-speed operation.
	You are using an incorrect combination of media and ribbon for your application.	Switch to a different type of media or ribbon to try to find a compatible combination.
	You are using ribbon with direct thermal media.	Direct thermal media does not require ribbon. Refer to the <i>User Guide</i> for information about when to use ribbon.
	Incorrect or uneven printhead pressure.	Set the printhead pressure to the minimum needed for good print quality. See <i>Adjust the Printhead Pressure</i> on page 53.
Smudge marks on labels	The media or ribbon is not designed for high-speed operation.	Replace supplies with those recommended for high-speed operation.
Misregistration/skips labels	The printer is not calibrated.	Calibrate the printer. See <i>Calibrate the Ribbon and Media Sensors</i> on page 48.
	Improper label format.	Check your label format and correct it as necessary.
Misregistration and misprint of one to three labels	The platen roller is dirty.	Clean the printhead and platen roller. See <i>Clean the Printhead and Platen Roller</i> on page 10.
	Media does not meet specifications.	Use media that meets specifications. Refer to the <i>User Guide</i> for media specifications.
Vertical drift in top-of-form position	The printer is out of calibration.	Calibrate the printer. See <i>Calibrate the Ribbon and Media Sensors</i> on page 48.
	The platen roller is dirty.	Clean the printhead and platen roller. See <i>Clean the Printhead and Platen Roller</i> on page 10.

Table 3 • Printing Issues (Continued)

Issue	Possible Cause	Recommended Solution
Vertical image or label drift	The printer is using non-continuous labels but is configured in continuous mode.	Set the printer for the correct media type (gap/notch, continuous, or mark) and calibrate the printer, if necessary (see Calibrate the Ribbon and Media Sensors on page 48). Refer to the <i>User Guide</i> for information on changing the media type.
	The media sensor is calibrated improperly.	Calibrate the printer. See Calibrate the Ribbon and Media Sensors on page 48 .
	The platen roller is dirty.	Clean the printhead and platen roller. See Clean the Printhead and Platen Roller on page 10 .
	Improper printhead pressure settings (toggles).	Adjust the printhead pressure to ensure proper functionality. See Adjust the Printhead Pressure on page 53 .
	The media or ribbon is loaded incorrectly.	Ensure that the media and ribbon are loaded correctly. Refer to the <i>User Guide</i> for instructions for loading ribbon and media.
	Incompatible media.	You must use media that meets the printer specifications. Ensure that the interlabel gaps or notches are 2 to 4 mm and consistently placed. Refer to the <i>User Guide</i> for media specifications.
The bar code printed on a label does not scan.	The bar code is not within specifications because the print is too light or too dark.	Perform the FEED Self Test on page 41 . Adjust the darkness or print speed settings as necessary.
	There is not enough blank space around the bar code.	Leave at least 1/8 in. (3.2 mm) between the bar code and other printed areas on the label and between the bar code and the edge of the label.
Auto Calibrate failed.	The media or ribbon is loaded incorrectly.	Ensure that the media and ribbon are loaded correctly. Refer to the <i>User Guide</i> for instructions for loading ribbon and media.
	The sensors could not detect the media or ribbon.	Calibrate the printer. See Calibrate the Ribbon and Media Sensors on page 48 .
	The sensors are dirty or positioned improperly.	Ensure that the sensors are clean and properly positioned.
	The media type is set incorrectly.	Set the printer for the correct media type (gap/notch, continuous, or mark). Refer to the <i>User Guide</i> for information about changing the media type.

Ribbon Problems

Table 4 identifies problems that may occur with ribbon, the possible causes, and the recommended solutions.

Table 4 • Ribbon Problems

Problem	Possible Cause	Recommended Solution
Broken or melted ribbon	Darkness setting too high.	<ol style="list-style-type: none"> 1. Reduce the darkness setting. Refer to the <i>User Guide</i> for information about changing the darkness setting. 2. Clean the printhead thoroughly. See <i>Clean the Printhead and Platen Roller</i> on page 10.
	The ribbon is coated on the wrong side and cannot be used in this printer.	Replace the ribbon with one coated on the correct side. Refer to the <i>User Guide</i> for information about determining the coated side of ribbon.
Ribbon slips or does not advance correctly	Ribbon tension is set incorrectly.	Change the tension settings on the ribbon spindles. See <i>Adjust Ribbon Tension</i> on page 56.
Wrinkled ribbon	Ribbon was loaded incorrectly.	Load the ribbon correctly. Refer to the <i>User Guide</i> for instructions for loading ribbon and media.
	Incorrect burn temperature.	<p>For optimal print quality, set the darkness to the lowest possible setting for your application. You may want to perform the <i>FEED Self Test</i> on page 41 to determine the ideal darkness setting.</p> <p>Refer to the <i>User Guide</i> for information about changing the darkness setting.</p>
	Incorrect or uneven printhead pressure.	Set the printhead pressure to the minimum needed for good print quality. See <i>Adjust the Printhead Pressure</i> on page 53.
	Media not feeding properly; “walking” from side to side.	Make sure that media is snug by adjusting the media guide. Check that the printhead and platen roller are installed correctly. See <i>Printhead Assembly Maintenance Kit</i> on page 68 and <i>Platen Roller Assembly Maintenance Kit</i> on page 302.
	The printhead or platen roller may be installed incorrectly.	Check that the printhead and platen roller are installed correctly. See <i>Printhead Assembly Maintenance Kit</i> on page 68 and <i>Platen Roller Assembly Maintenance Kit</i> on page 302.

Table 4 • Ribbon Problems (Continued)

Problem	Possible Cause	Recommended Solution
<p>The printer does not detect when the ribbon runs out.</p> <p>In thermal transfer mode, the printer did not detect the ribbon even though it is loaded correctly.</p>	<p>The printer may have been calibrated without ribbon. Later, ribbon was inserted without the user recalibrating the printer or loading printer defaults.</p>	<p>Calibrate the printer, this time using ribbon, or load printer defaults. See Calibrate the Ribbon and Media Sensors on page 48 or refer to the <i>User Guide</i> for information about loading printer defaults.</p>
<p>The printer indicates that ribbon is out, even though ribbon is loaded correctly.</p>	<p>The printer was not calibrated for the label and ribbon being used.</p>	<p>Calibrate the printer. See Calibrate the Ribbon and Media Sensors on page 48.</p>

LCD Error Messages

The LCD displays messages when there is an error. See [Table 5](#) for LCD errors, the possible causes, and the recommended solutions.

Table 5 • LCD Error Messages

LCD Display/ Indicator Lights	Possible Cause	Recommended Solution
<div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center;"> HEAD OPEN CLOSE HEAD </div> STATUS light steady red PAUSE light steady yellow	The printhead is not fully closed.	Close the printhead completely.
	The printhead open sensor is not working properly.	Call a service technician to replace the sensor.
<div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center;"> MEDIA OUT LOAD MEDIA </div> STATUS light steady red SUPPLIES light steady red	The media is not loaded or is loaded incorrectly.	Load media correctly.
	Misaligned media sensor.	Check the position of the media sensor.
	The printer is set for noncontinuous media, but continuous media is loaded.	<ol style="list-style-type: none"> 1. Install the proper media type, or reset printer for the current media type. 2. Calibrate the printer. Refer to the <i>User Guide</i>.
<div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center;"> WARNING RIBBON IN </div> STATUS light steady yellow SUPPLIES light flashing yellow	Ribbon is loaded, but the printer is set for direct thermal mode.	Ribbon is not required with direct thermal media. If you are using direct thermal media, remove the ribbon. This error message will not affect printing.
		If you are using thermal transfer media, which requires ribbon, set the printer for Thermal Transfer mode. Refer to the <i>User Guide</i> for information about changing the print method.

Table 5 • LCD Error Messages (Continued)

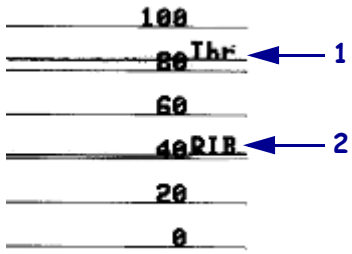
LCD Display/ Indicator Lights	Possible Cause	Recommended Solution
<div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 10px;"> ALERT RIBBON OUT </div> <p>STATUS light steady yellow SUPPLIES light flashing yellow</p>	<p>In thermal transfer mode:</p> <ul style="list-style-type: none"> • ribbon is not loaded • ribbon is loaded incorrectly • the ribbon sensor is not detecting ribbon • media is blocking the ribbon sensor <p>In thermal transfer mode, the printer did not detect the ribbon even though it is loaded correctly.</p>	<ol style="list-style-type: none"> 1. Load ribbon correctly. Refer to the <i>User Guide</i> for instructions for loading ribbon and media. 2. Calibrate the printer. Refer to the <i>User Guide</i>. <ol style="list-style-type: none"> 1. Print a sensor profile (see the <i>User Guide</i> for instructions). The ribbon out threshold (1) is likely too high, above the line that indicates where the ribbon is detected (2).  <p>Calibrate the printer or load printer defaults. Refer to the <i>User Guide</i> for information about loading printer defaults.</p>
<div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 10px;"> PH NOT AUTHENTICATED REPLACE PRINTHEAD </div> <p>STATUS light steady red PAUSE light steady red DATA light steady red</p>	<p>If you are using direct thermal media, the printer is waiting for ribbon to be loaded because it is incorrectly set for thermal transfer mode.</p> <p>The printhead was replaced with one that is not a genuine Zebra™ printhead.</p>	<p>Set the printer for Direct Thermal mode. Refer to the <i>User Guide</i> for information about changing the print method.</p> <p>Install a genuine Zebra™ printhead.</p>

Table 5 • LCD Error Messages (Continued)





LCD Display/ Indicator Lights	Possible Cause	Recommended Solution
<div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 10px;"> PRINT HEAD OVERTEMP PRINTING HALTED </div> <p>STATUS light steady yellow</p>	 <p>Caution • The printhead may be hot enough to cause severe burns. Allow the printhead to cool.</p>	<p>The printhead is over temperature.</p> <p>Allow the printer to cool. Printing automatically resumes when the printhead elements cool to an acceptable operating temperature.</p> <p>If this error persists, consider changing where the printer is located or using a slower print speed.</p>
<div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 10px;"> HEAD COLD PRINTING HALTED </div> <div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 10px;"> THERMISTOR REPLACE PRINthead </div> <p>STATUS light steady yellow</p> <p>The printer shows one of these messages or cycles between them.</p>	 <p>Caution • An improperly connected printhead data or power cable can cause these error messages. The printhead may be hot enough to cause severe burns. Allow the printhead to cool.</p>	<p>The printhead data cable is not properly connected.</p> <p>Hook up the printhead properly. See <i>Printhead Assembly Maintenance Kit</i> on page 68.</p> <p>The printhead has a faulty thermistor.</p> <p>Replace the printhead. See <i>Printhead Assembly Maintenance Kit</i> on page 68.</p>
<div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 10px;"> HEAD COLD PRINTING HALTED </div> <p>STATUS light flashing yellow</p>	 <p>Caution • An improperly connected printhead data or power cable can cause this error message. The printhead may be hot enough to cause severe burns. Allow the printhead to cool.</p>	<p>The printhead temperature is approaching its lower operating limit.</p> <p>Continue printing while the printhead reaches the correct operating temperature. If the error remains, the environment may be too cold for proper printing. Relocate the printer to a warmer area.</p> <p>The printhead data cable is not properly connected.</p> <p>Hook up the printhead properly. See <i>Printhead Assembly Maintenance Kit</i> on page 68.</p> <p>The printhead has a faulty thermistor.</p> <p>Replace the printhead. See <i>Printhead Assembly Maintenance Kit</i> on page 68.</p>

Table 5 • LCD Error Messages (Continued)

LCD Display/ Indicator Lights	Possible Cause	Recommended Solution
<div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 10px;">CUT ERROR</div> <p>STATUS light steady red PAUSE light steady yellow</p>	 <p>Caution • The cutter blade is sharp. Do not touch or rub the blade with your fingers.</p> <p>The cutter blade is in the media path.</p>	<p>Turn off the printer power and unplug the printer. Inspect the cutter module for debris and clean as needed following the cleaning instructions in Clean the Cutter Module on page 18.</p>
<div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 5px;">OUT OF MEMORY STORING GRAPHIC</div> <div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 5px;">OUT OF MEMORY STORING FORMAT</div> <div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 5px;">OUT OF MEMORY STORING BITMAP</div> <div style="border: 1px solid black; padding: 5px; text-align: center;">OUT OF MEMORY STORING FONT</div>	<p>There is not enough memory to perform the function specified on the second line of the error message.</p>	<p>Free up some of the printer's memory by adjusting the label format or printer parameters. One way to free up memory is to adjust the print width to the actual width of the label instead of leaving the print width set to the default. Refer to the <i>User Guide</i> for information about changing the print width.</p> <p>Ensure that the data is not directed to a device that is not installed or is unavailable.</p>

Communications Problems

Table 6 identifies problems with communications, the possible causes, and the recommended solutions.

Table 6 • Communications Problems

Problem	Possible Cause	Recommended Solution
A label format was sent to the printer but was not recognized. The DATA light does not flash.	The communication parameters are incorrect.	Check the printer driver or software communications settings (if applicable).
		If you are using serial communication, check the serial port settings.
		If you are using serial communication, make sure that you are using a null modem cable or a null modem adapter.
		Check the printer's handshake protocol setting. The setting used must match the one being used by the host computer.
		If a driver is used, check the driver communication settings for your connection.
A label format was sent to the printer. Several labels print, then the printer skips, misplaces, misses, or distorts the image on the label.	The serial communication settings are incorrect.	Ensure that the flow control settings match.
		Check the communication cable length. See the <i>User Guide</i> for requirements.
		Check the printer driver or software communications settings (if applicable).
A label format was sent to the printer but was not recognized. The DATA light flashes but no printing occurs.	The prefix and delimiter characters set in the printer do not match the ones in the label format.	Verify the prefix and delimiter characters.
	Incorrect data is being sent to the printer.	Check the communication settings on the computer. Ensure that they match the printer settings.
		If the problem continues, check the label format.

Miscellaneous Issues

Table 7 identifies miscellaneous issues with the printer, the possible causes, and the recommended solutions.

Table 7 • Miscellaneous Printer Problems


Problem	Possible Cause	Recommended Solution
The control panel display shows a language that I cannot read	The language parameter was changed through the control panel or a firmware command.	<ol style="list-style-type: none"> On the control panel display, scroll to LANGUAGE Menu.  Press OK to access the items in this menu. Use the UP ARROW or DOWN ARROW to scroll through the language selections. The selections for this parameter are displayed in the actual languages to make it easier for you to find one that you are able to read. Select the language that you want to display.
The display is missing characters or parts of characters	The display may need replacing.	Replace the display. See <i>Control Panel Maintenance Kit</i> on page 346 or <i>Printer Control Panel Maintenance Kit</i> on page 353.
Changes in parameter settings did not take effect	Parameters are set incorrectly.	<ol style="list-style-type: none"> Set parameters and save permanently. Turn the printer off (O) and then on (I).
	A firmware command turned off the ability to change the parameter.	Refer to the <i>Programming Guide for ZPL, ZBI, Set-Get-Do, Mirror, and WML</i> or call a service technician.
	A firmware command changed the parameter back to the previous setting.	
	If the problem persists, there may be a problem with the main logic board.	Replace the main logic board. See <i>Main Logic Board Maintenance Kit</i> on page 362.
Non-continuous labels are being treated as continuous labels.	The printer was not calibrated for the media being used.	Calibrate the printer. See <i>Calibrate the Ribbon and Media Sensors</i> on page 48.
	The printer is configured for continuous media.	Set the printer for the correct media type (gap/notch, continuous, or mark). Refer to the <i>User Guide</i> for information about changing the media type.

Table 7 • Miscellaneous Printer Problems (Continued)

Problem	Possible Cause	Recommended Solution
All indicator lights are on, nothing is on the display (if the printer has a display), and the printer locks up.	Internal electronic or firmware failure.	Try reloading firmware. If problem remains. Replace the main logic board. See <i>Main Logic Board Maintenance Kit</i> on page 362.
The printer locks up while running the Power-On Self Test.	Main logic board failure.	Replace the main logic board. See <i>Main Logic Board Maintenance Kit</i> on page 362.

Printer Diagnostics

Self tests and other diagnostics provide specific information about the condition of the printer. The self tests produce sample printouts and provide specific information that helps determine the operating conditions for the printer.



Important • Use full-width media when performing self tests. If your media is not wide enough, the test labels may print on the platen roller. To prevent this from happening, check the print width, and ensure that the width is correct for the media that you are using.

Each self test is enabled by pressing a specific control panel key or combination of keys while turning on (I) the printer power. Keep the key(s) pressed until the first indicator light turns off. The selected self test automatically starts at the end of the Power-On Self Test.



Note •

- When performing these self tests, do not send data to the printer from the host.
- If your media is shorter than the label to be printed, the test label continues on the next label.
- When canceling a self test prior to its actual completion, always reset the printer by turning it off (O) and then on (I).

Power-On Self Test

A Power-On Self Test (POST) is performed each time the printer is turned on (I). During this test, the control panel lights (LEDs) turn on and off to ensure proper operation. At the end of this self test, only the STATUS LED remains lit. When the Power-On Self Test is complete, the media is advanced to the proper position.

To initiate the Power-On Self Test, complete these steps:

1. Turn on (I) the printer.

The POWER LED illuminates. The other control panel LEDs and the LCD monitor the progress and indicate the results of the individual tests. All messages during the POST display in English; however, if the test fails, the resulting messages cycle through the international languages as well.

CANCEL Self Test

The CANCEL self test prints a printer configuration label and a network configuration label. For other ways to print these labels, refer to the *User Guide*.

To perform the CANCEL Self Test, complete these steps:

1. Turn off (O) the printer.
2. Press and hold CANCEL while turning on (I) the printer. Hold CANCEL until the first control panel light turns off.

The printer prints a printer configuration label (Figure 2) and then a network configuration label (Figure 3).

Figure 2 • Sample Printer Configuration Label

PRINTER CONFIGURATION	
Zebra Technologies ZTC ZT230-300dpi ZPL XXXXXX-XX-XXXX	
+30.....	DARKNESS
4.0 IPS.....	PRINT SPEED
+000.....	TEAR OFF
TEAR OFF.....	PRINT MODE
GAP/NOTCH.....	MEDIA TYPE
REFLECTIVE.....	SENSOR SELECT
THERMAL-TRANS.....	PRINT METHOD
1249.....	PRINT WIDTH
1817.....	LABEL LENGTH
No Serial Number Available.....	HEAD ID
38.0IN 986MM.....	MAXIMUM LENGTH
NOT CONNECTED.....	USB COMM.
BIDIRECTIONAL.....	PARALLEL COMM.
R9232.....	SERIAL COMM.
9800.....	BAUD
8 BITS.....	DATA BITS
NONE.....	PARITY
XON/XOFF.....	HOST HANDSHAKE
NONE.....	PROTOCOL
NORMAL MODE.....	COMMUNICATIONS
<=> 7EH.....	CONTROL PREFIX
<^> 5EH.....	FORMAT PREFIX
< > 2CH.....	DELIMITER CHAR
ZPL II.....	ZPL MODE
CALIBRATION.....	MEDIA POWER UP
CALIBRATION.....	HEAD CLOSE
DEFAULT.....	BACKFEED
+000.....	LABEL TOP
+0000.....	LEFT POSITION
DISABLED.....	REPRINT MODE
020.....	WEB S.
050.....	MEDIA S.
040.....	RIBBON S.
255.....	TAKE LABEL
085.....	MARK S.
128.....	TRANS GAIN
000.....	TRANS BASE
141.....	TRANS BRIGHT
128.....	RIBBON GAIN
002.....	MARK GAIN
DPCSWFXM.....	MODES ENABLED
.....	MODES DISABLED
1248 12/MM FULL.....	RESOLUTION
V72.18.12P14006 <-.....	FIRMWARE
1.8.....	XML SCHEMA
8.4.1 0.....	HARDWARE ID
NONE.....	OPTION BOARD
408K.....	R: RAM
85538K.....	E: ONBOARD FLASH
NONE.....	FORMAT CONVERT
FW VERSION.....	IDLE DISPLAY
05/30/11.....	RTC DATE
10:20.....	RTC TIME
DISABLED.....	ZBI
.....	ZBI VERSION
READY.....	ZBI STATUS
196 IN.....	NONRESET CNTR
196 IN.....	RESET CNTR1
196 IN.....	RESET CNTR2
488 CH.....	NONRESET CNTR
488 CH.....	RESET CNTR1
488 CH.....	RESET CNTR2
FIRMWARE IN THIS PRINTER IS COPYRIGHTED	

Figure 3 • Sample Network Configuration Label

Network Configuration	
Zebra Technologies ZTC ZT230-300dpi ZPL XXXXXX-XX-XXXX	
PrintServer.....	LOAD LAN FROM?
UNKNOWN.....	ACTIVE PRINTSRVR
Wired	
ALL.....	IP PROTOCOL
000.000.000.000.....	IP ADDRESS
255.255.255.000.....	SUBNET
000.000.000.000.....	GATEWAY
000.000.000.000.....	WINN SERVER IP
YES.....	TIMEOUT CHECKING
300.....	TIMEOUT VALUE
000.....	ARP INTERVAL
8100.....	BAGE RAW 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.....	WINN SERVER IP
YES.....	TIMEOUT CHECKING
300.....	TIMEOUT VALUE
000.....	ARP INTERVAL
8100.....	BAGE RAW 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.....	POOR SIGNAL
LONG.....	PREAMBLE
NO.....	ASSOCIATED
ON.....	PULSE ENABLED
15.....	PULSE RATE
OFF.....	INTL MODE
0x3FFFFFFF.....	CHANNEL MASK
FIRMWARE IN THIS PRINTER IS COPYRIGHTED	

PAUSE Self Test

This self test can be used to provide the test labels required when making adjustments to the printer's mechanical assemblies or to determine if any printhead elements are not working. [Figure 4](#) shows a sample printout.

To perform a PAUSE self test, complete these steps:

1. Turn off (O) the printer.
2. Press and hold **PAUSE** while turning on (I) the printer. Hold **PAUSE** until the first control panel light turns off.
 - The initial self test prints 15 labels at the printer's slowest speed, and then automatically pauses the printer. Each time **PAUSE** is pressed, an additional 15 labels print. [Figure 4](#) shows a sample of the labels.

Figure 4 • PAUSE Test Label



- While the printer is paused, pressing **CANCEL** alters the self test. Each time **PAUSE** is pressed, 15 labels print at 6 in. (152 mm) per second.
 - While the printer is paused, pressing **CANCEL** again alters the self test a second time. Each time **PAUSE** is pressed, 50 labels print at the printer's slowest speed
 - While the printer is paused, pressing **CANCEL** again alters the self test a third time. Each time **PAUSE** is pressed, 50 labels print at 6 in. (152 mm) per second.
 - While the printer is paused, pressing **CANCEL** again alters the self test a fourth time. Each time **PAUSE** is pressed, 15 labels print at the printer's maximum speed.
3. To exit this self test at any time, press and hold **CANCEL**.

FEED Self Test

Different types of media may require different darkness settings. This section contains a simple but effective method for determining the ideal darkness for printing bar codes that are within specifications.

During the FEED self test, labels are printed at different darkness settings at two different print speeds. The relative darkness and the print speed are printed on each label. The bar codes on these labels may be ANSI-graded to check print quality.

During this test, one set of labels is printed at 2 ips, and another set is printed at 6 ips. The darkness value starts at three settings lower than the printer's current darkness value (relative darkness of -3) and increase until the darkness is three settings higher than the current darkness value (relative darkness of +3).

To perform a FEED self test, complete these steps:

1. Print a configuration label to show the printer's current settings.
2. Turn off (O) the printer.
3. Press and hold **FEED** while turning on (I) the printer. Hold **FEED** until the first control panel light turns off.

The printer prints a series of labels (Figure 5) at various speeds and at darkness settings higher and lower than the darkness value shown on the configuration label.

Figure 5 • FEED Test Label



4. See Figure 6 and Table 8. Inspect the test labels and determine which one has the best print quality for your application. If you have a bar code verifier, use it to measure bars/spaces and calculate the print contrast. If you do not have a bar code verifier, use your eyes or the system scanner to choose the optimal darkness setting based on the labels printed in this self test.

Figure 6 • Bar Code Darkness Comparison

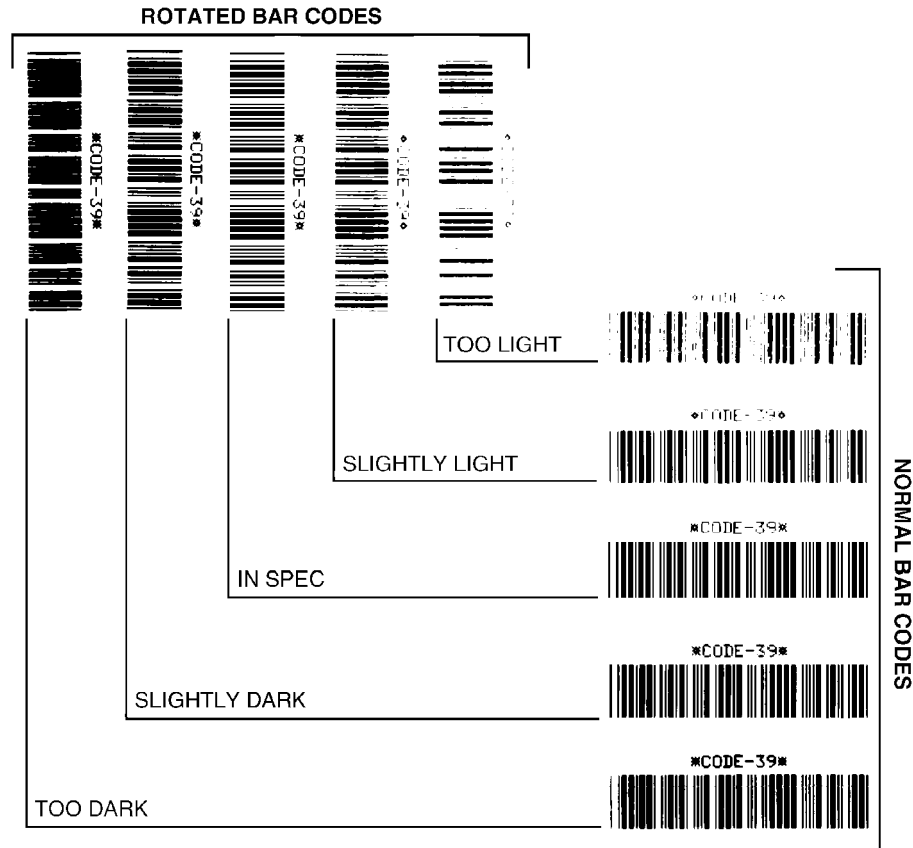


Table 8 • Judging Bar Code Quality

Print Quality	Description
Too dark	<p>Labels that are too dark are fairly obvious. They may be readable but not “in-spec.”</p> <ul style="list-style-type: none"> • The normal bar code bars increase in size. • The openings in small alphanumeric characters may fill in with ink. • Rotated bar code bars and spaces run together.
Slightly dark	<p>Slightly dark labels are not as obvious.</p> <ul style="list-style-type: none"> • The normal bar code will be “in-spec.” • Small character alpha numerics will be bold and could be slightly filled in. • The rotated bar code spaces are small when compared to the “in-spec” code, possibly making the code unreadable.

Table 8 • Judging Bar Code Quality (Continued)

Print Quality	Description
“In-spec”	<p>The “in-spec” bar code can only be confirmed by a verifier, but it should exhibit some visible characteristics.</p> <ul style="list-style-type: none"> • The normal bar code will have complete, even bars and clear, distinct spaces. • The rotated bar code will have complete, even bars and clear, distinct spaces. Although it may not look as good as a slightly dark bar code, the bar code will be “in-spec.” • In both normal and rotated styles, small alphanumeric characters look complete.
Slightly light	<p>Slightly light labels are, in some cases, preferred to slightly dark ones for “in-spec” bar codes.</p> <ul style="list-style-type: none"> • Both normal and rotated bar codes will be in spec, but small alphanumeric characters may not be complete.
Too light	<p>Labels that are too light are obvious.</p> <ul style="list-style-type: none"> • Both normal and rotated bar codes have incomplete bars and spaces. • Small alphanumeric characters are unreadable.

5. Note the relative darkness value and the print speed printed on the best test label.
6. Add or subtract the relative darkness value from the darkness value specified on the configuration label. The resulting numeric value is the best darkness value for that specific label/ribbon combination and print speed.
7. If necessary, change the darkness value to the darkness value on the best test label.
8. If necessary, change the print speed to the same speed as on the best test label.

FEED + PAUSE Self Test

Performing this self test resets the printer configuration to the factory default values. Perform a sensor calibration after this self test. (See [Calibrate the Ribbon and Media Sensors on page 48.](#))

To perform a FEED and PAUSE self test, complete these steps:

1. Turn off (O) the printer.
2. Press and hold **FEED + PAUSE** while turning on (I) the printer.
3. Hold **FEED + PAUSE** until the first control panel light turns off.
The printer configuration is reset to the factory default values. No labels print at the end of this test.

CANCEL + PAUSE Self Test

Performing this self test resets the network configuration to the factory default values.

To perform a CANCEL and PAUSE self test, complete these steps:

1. Turn off (O) the printer.
2. Press and hold **CANCEL + PAUSE** while turning on (I) the printer.
3. Hold **CANCEL + PAUSE** until the first control panel light turns off.
The printer's network configuration is reset to the factory default values. No labels print at the end of this test.

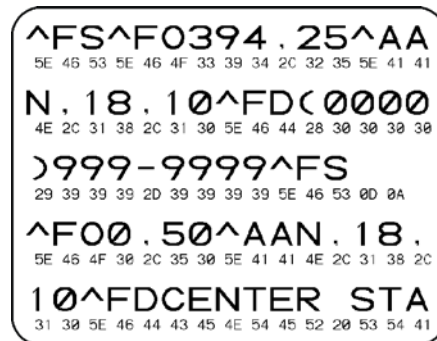
Communications Diagnostics Test

The communication diagnostics test is a troubleshooting tool for checking the interconnection between the printer and the host computer. When the printer is in diagnostics mode, it prints all data received from the host computer as straight ASCII characters with the hex values below the ASCII text. The printer prints all characters received, including control codes such as CR (carriage return). [Figure 7](#) shows a typical test label from this test.



Note • The test label prints upside-down.

Figure 7 • Communications Diagnostics Test Label



To use communications diagnostics mode, complete these steps:

1. Set the print width equal to or less than the label width being used for the test.
2. Set the DIAGNOSTICS MODE option to ENABLED. See the *User Guide* for methods for changing this setting.

The printer enters diagnostics mode and prints any data received from the host computer on a test label

3. Check the test label for error codes. For any errors, check that your communication parameters are correct.

Errors show on the test label as follows:

- FE indicates a framing error.
- OE indicates an overrun error.
- PE indicates a parity error.
- NE indicates noise.

4. Turn the printer off (O) and then back on (I) to exit this self test and return to normal operation.

Sensor Profile

Use the sensor profile image (which will extend across several actual labels or tags) to troubleshoot the following situations:

- The printer experiences difficulty in determining gaps (web) between labels.
- The printer incorrectly identifies preprinted areas on a label as gaps (web).
- The printer cannot detect ribbon.

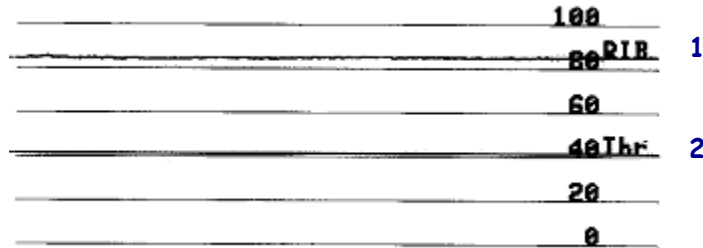
With the printer in the Ready state, print a sensor profile in one of these ways:

Using the buttons on the control panel	<ol style="list-style-type: none"> Turn off (O) the printer. Press and hold FEED + CANCEL while turning on (I) the printer. Hold FEED + CANCEL until the first control panel light turns off.
Using ZPL	<ol style="list-style-type: none"> Send the ~JG command to the printer. See the <i>Zebra Programming Guide</i> for more information about this command.
ZT230 printer only	<ol style="list-style-type: none"> On the control panel display, navigate to the following item under the SENSORS menu. See the <i>User Guide</i> for information about using the control panel and accessing the menus. <div> <p>The image shows a rectangular display area. At the top, it says "PRINT INFORMATION". Below that, it says "SENSOR PROFILE". On the left side of the "SENSOR PROFILE" line, there is a downward-pointing triangle (▼), and on the right side, there is an upward-pointing triangle (▲). At the bottom of the display area, there is a horizontal bar containing a home icon (🏠) on the left and the word "PRINT" on the right.</p> </div> Press RIGHT SELECT to select PRINT.

Compare your results to the examples shown in this section. If the sensitivity of the sensors must be adjusted, calibrate the printer (see [Calibrate the Ribbon and Media Sensors on page 48](#)).

Ribbon Sensor Profile (Figure 8) The line labeled RIB (1) on the sensor profile indicates the ribbon sensor readings. The ribbon sensor threshold setting is indicated by Thr (2). If the ribbon readings are below the threshold value, the printer does not acknowledge that ribbon is loaded.

Figure 8 • Sensor Profile (Ribbon Section)



Media Sensor Profile (Figure 9) The line labeled PAP (1) on the sensor profile indicates the media sensor readings. The downward spikes (2) indicate gaps between labels (the web), and the lines between the spikes (3) indicate where labels are located. The media sensor threshold settings is indicated by Thr (4).

If you compare the sensor profile printout to a length of your media, the spikes should be the same distance apart as the gaps on the media. If the distances are not the same, the printer may be having difficulty determining where the gaps are located.

Figure 9 • Sensor Profile (Media Section)



Calibrate the Ribbon and Media Sensors

Use the procedure in this section to calibrate the printer, which adjusts the sensitivity of the media and ribbon sensors.

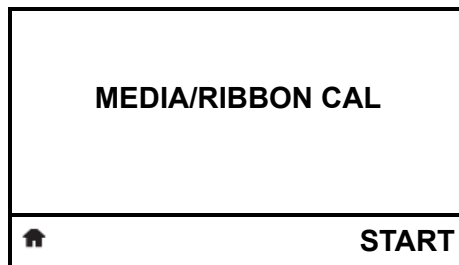
- For issues that may be resolved by sensor calibration, see the *User Guide*.
- For a summary of the options for initiating calibration, see the *User Guide*.



Important • Follow the calibration procedure exactly as presented. All of the steps must be performed even if only one of the sensors requires adjustment. You may press and hold CANCEL at any step in this procedure to cancel the process.

To perform sensor calibration, complete these steps:

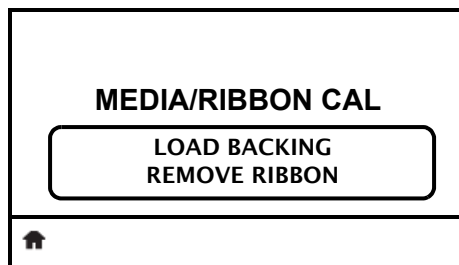
1. With the printer in the Ready state, initiate media and ribbon calibration in one of these ways:
 - Press and hold **PAUSE + FEED + CANCEL** for 2 seconds.
 - Send the `ezpl.manual_calibration` SGD command to the printer. See the *Zebra Programming Guide* for more information about this command.
 - ZT230 printer only:
 - a. Navigate to the following menu item on the control panel display. This item is located under the TOOLS menu and the SENSORS menu. See the *User Guide* for information about using the control panel and accessing the menus.



- b. Press **RIGHT SELECT** to select START.

The printer does the following:

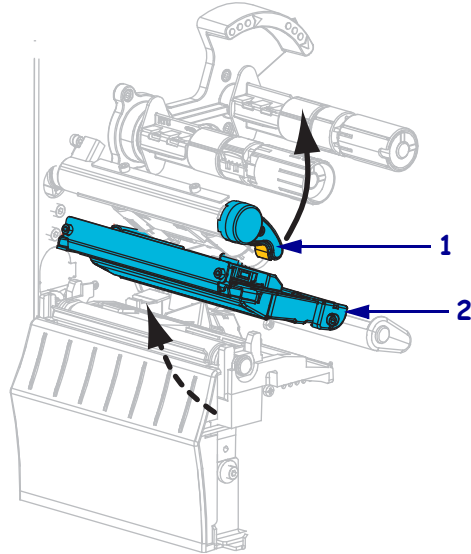
- The **STATUS light** and **SUPPLIES light** flash yellow once.
- The **PAUSE light** blinks yellow.
- The control panel (ZT230 printer only) displays:



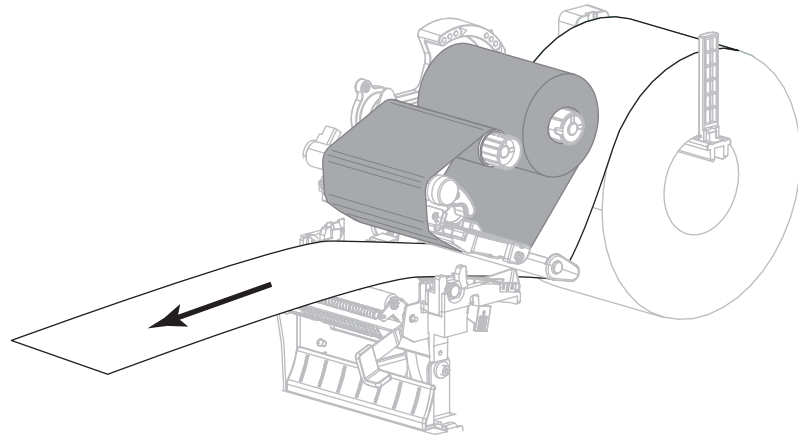


2. **Caution** • The printhead may be hot and could cause severe burns. Allow the printhead to cool.

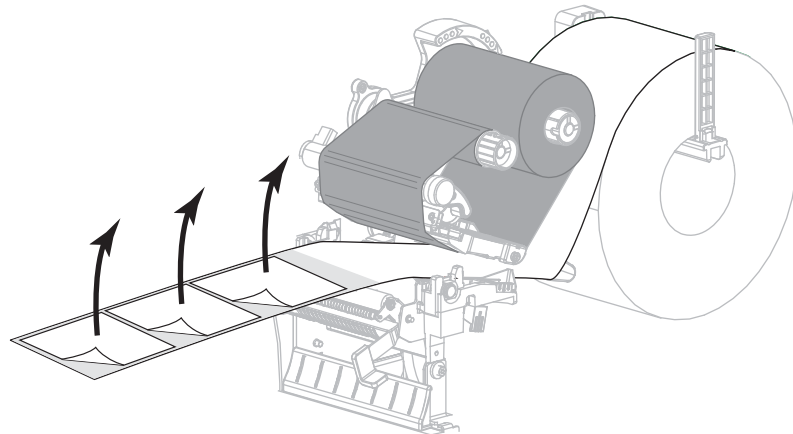
Rotate the printhead-open lever (1) counterclockwise to release the print mechanism (2).



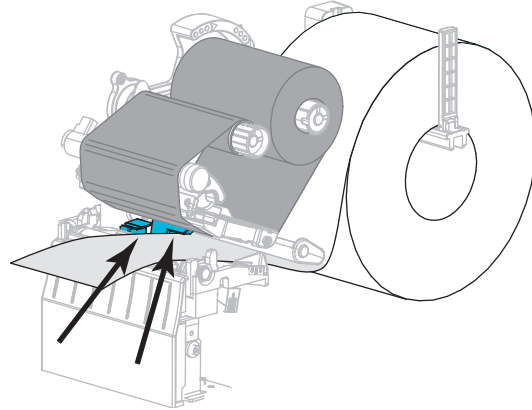
3. Extend the media approximately 8 in. (203 mm) out of the printer.



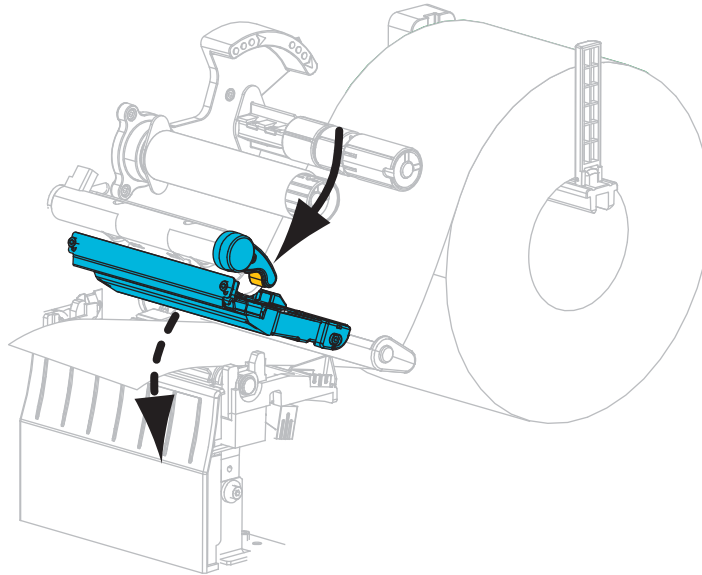
4. Remove the exposed labels so that only the liner remains.



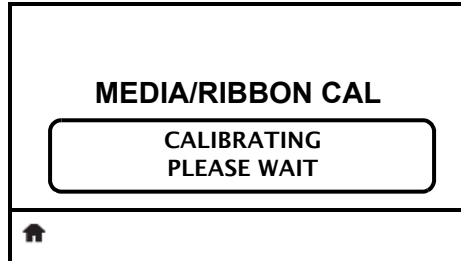
5. Pull the media into the printer so that only the backing is between the media sensors.



6. Remove the ribbon (if used).
7. Rotate the printhead-open lever clockwise until it locks the printhead in place.

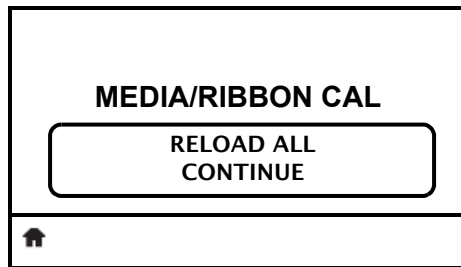


8. Press **PAUSE** to begin the media calibration process.
 - The PAUSE light turns off.
 - The SUPPLIES light flashes.
 - The control panel (ZT230 printer only) displays:

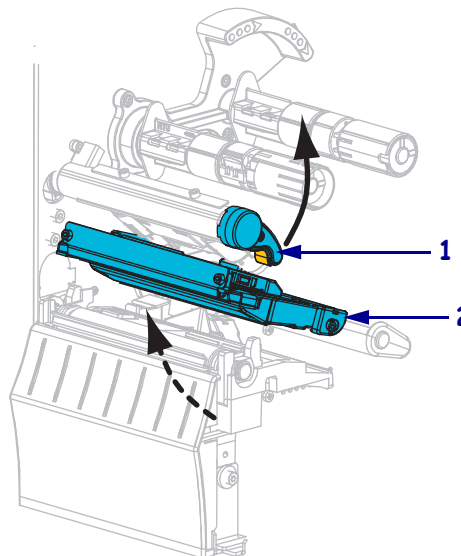


When the process is complete:

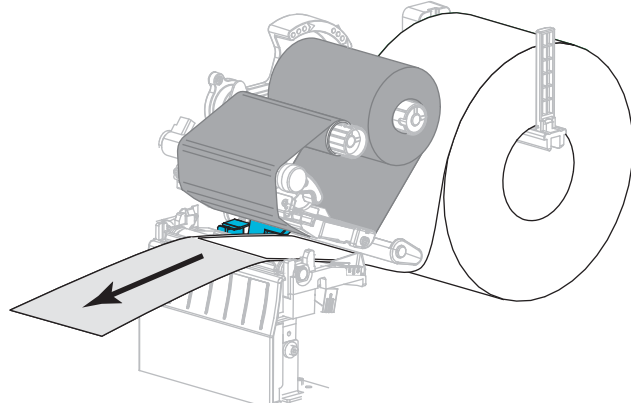
- The SUPPLIES light stops flashing.
- The PAUSE light flashes yellow.
- The control panel (ZT230 printer only) displays:



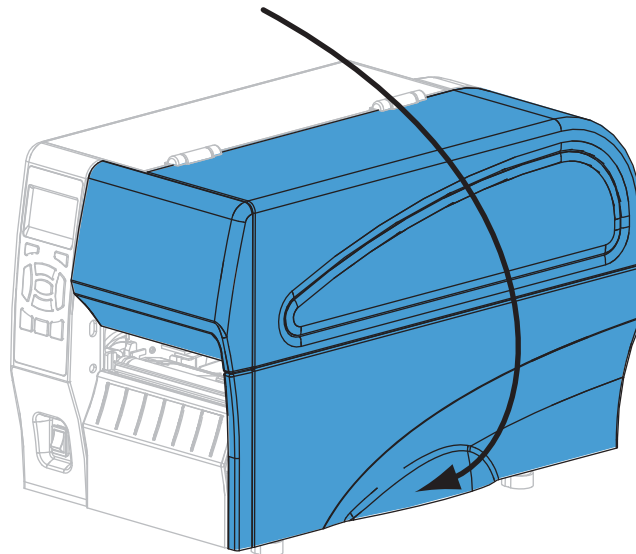
9. Rotate the printhead-open lever (1) counterclockwise to release the print mechanism (2).



10. Pull the media forward until a label is positioned under the media sensors.



11. Reload the ribbon (if used).
12. Close the printhead.
13. Close the media door.



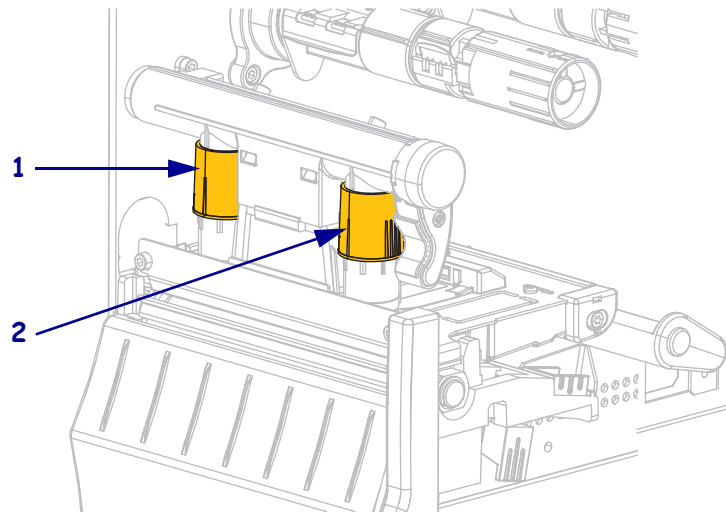
14. Press **PAUSE** to enable printing.

Adjust the Printhead Pressure

You may need to adjust printhead pressure if printing is too light on one side, if you use thick media, or if the media drifts from side to side during printing. Use the lowest printhead pressure necessary to produce good print quality.

See [Figure 10](#). The printhead pressure adjustment dials have setting marks from 1 to 4 in half-mark increments.

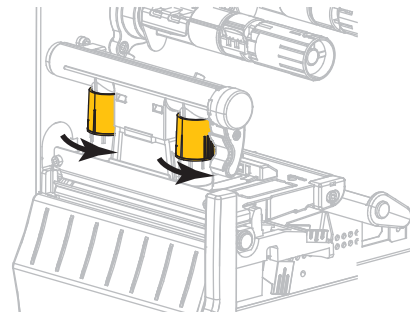
Figure 10 • Printhead Pressure Adjustment Dials

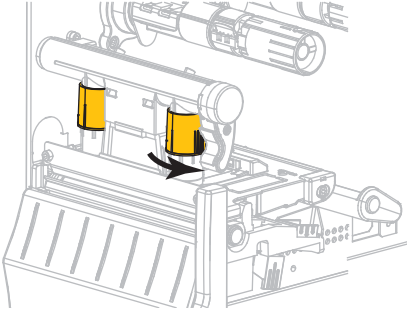
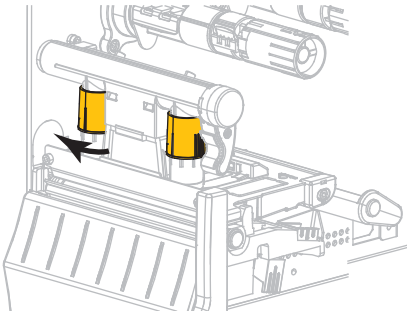
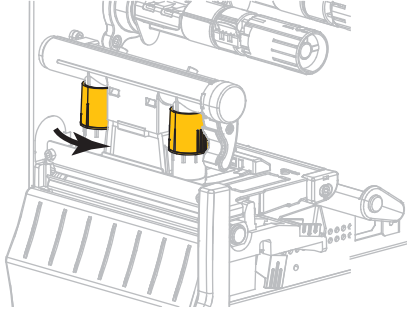
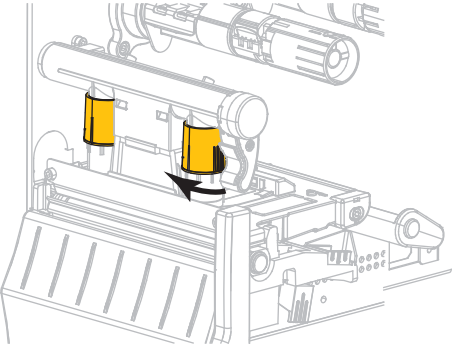


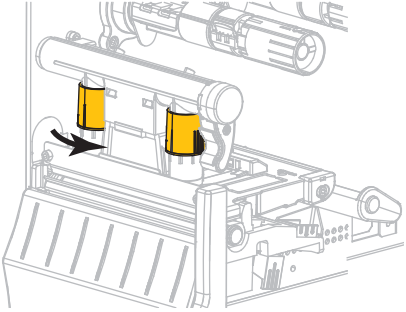
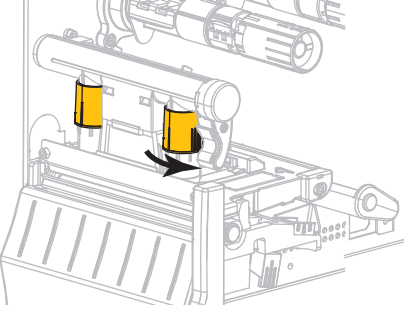
1	Inside dial
2	Outside dial

If necessary, adjust the printhead pressure adjustment dials as follows:

If the media...	Then...
Requires higher pressure to print well	Increase both dials one position.



If the media...	Then...
Shifts left while printing	<p>Increase the outside dial setting one position.</p>  <p>OR</p> <p>Decrease the inside dial setting one position.</p> 
Shifts right while printing	<p>Increase the inside dial setting one position.</p>  <p>OR</p> <p>Decrease the outside dial setting one position.</p> 

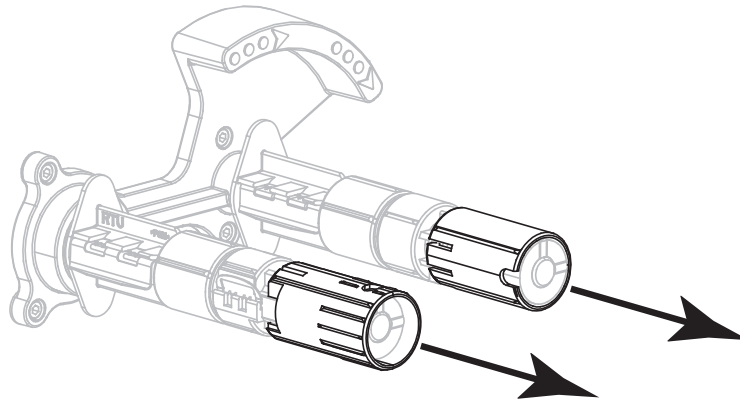
If the media...	Then...
Prints too lightly on the left side of the label.	Increase the inside dial setting one position. 
Prints too lightly on the right side of the label.	Increase the outside dial setting one position. 

Adjust Ribbon Tension

For the printer to operate correctly, the ribbon supply spindle and ribbon take-up spindle must use the same tension setting (normal or low tension). Use the normal tension setting (Figure 11) for most applications. If you are using narrow ribbon or experience certain ribbon issues, you may need to lower the ribbon tension (Figure 12).

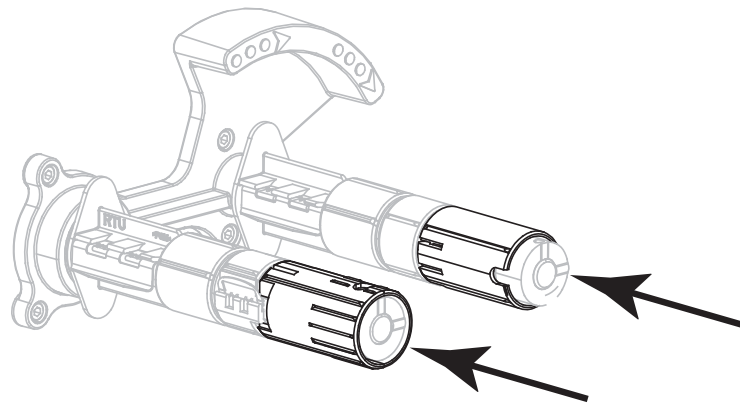
Normal Tension Setting To place the ribbon spindles in the **normal position**, firmly pull out each spindle end cap until it extends and clicks in place, as shown in Figure 11. Use this setting for most applications.

Figure 11 • Normal Tension Setting (Spindle End Caps Pulled Out)



Low Tension Setting To place a spindle in the **low-tension position**, firmly push in the end cap until it retracts and clicks in place, as shown in Figure 12. Use this setting only when necessary, such as if the ribbon causes scuff marks at the beginning of a roll or if normal tension causes the ribbon to stall at the end of the roll.

Figure 12 • Ribbon Spindles— Low Tension Setting (Spindle End Caps Pushed In)

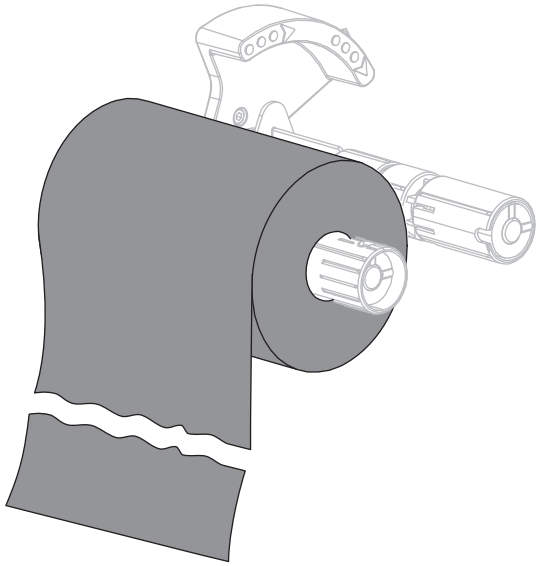


Remove Used Ribbon

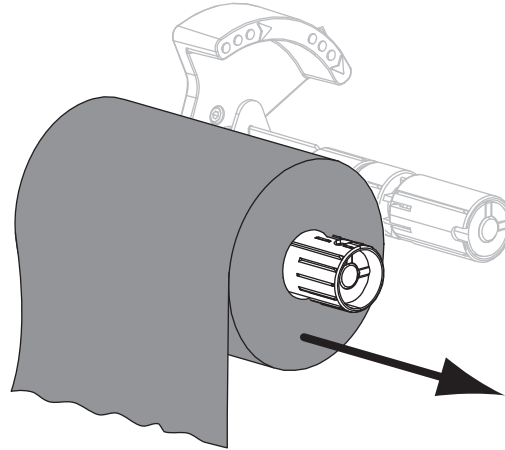
Remove used ribbon from the ribbon take-up spindle each time you change the roll of ribbon.

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	<ol style="list-style-type: none"> a. Cut or break the ribbon before the ribbon take-up spindle.  <ol style="list-style-type: none"> b. Continue with the next step.

2. Slide the core with the used ribbon off of the ribbon take-up spindle.



3. Discard the used ribbon. You may reuse the empty core from the ribbon supply spindle by moving it to the ribbon take-up spindle.
4. Reload the ribbon. For instructions, refer to the *User Guide*.

Data Ports

This section describes the standard communication ports available to connect the printer to your computer or network.

Contents

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Hardware Control Signal Descriptions	60
Pin Configuration	60
RS-232 Interface Connections	61
Parallel Data Port	64
Parallel Cabling Requirements	64
Parallel Port Interconnections	64
USB 2.0 Port	66

Serial Data Port

To communicate using the serial data port of the printer, you must choose the number of data bits, parity, and handshaking. Parity applies only to data transmitted by the printer because the parity of received data is ignored.

The values selected must be the same as those used by the host equipment connected to the printer. Default printer settings are 9600 baud, 8 data bits, no parity, and XON/XOFF. The printer will accept any host setting for stop bits.

Hardware Control Signal Descriptions

For all RS-232 input and output signals, the printer follows both the Electronics Industries Association (EIA) RS-232 and the Consultative Committee for International Telegraph and Telephone (CCITT) V.24 standard signal level specifications.

When DTR/DSR handshaking is selected, the Data Terminal Ready (DTR) control signal output from the printer controls when the host computer may send data. DTR ACTIVE (positive voltage) permits the host to send data. When the printer places DTR in the INACTIVE (negative voltage) state, the host must not send data.



Note • When XON/XOFF handshaking is selected, data flow is controlled by the ASCII Control Codes DC1 (XON) and DC3 (XOFF). The DTR Control lead has no effect.

Request To Send (RTS) is a control signal from the printer that is connected to the Clear To Send (CTS) input at the host computer.

Pin Configuration


Connect the serial data cable to the female DB-9 connector on the back of the printer. For all RS-232 connections through a DB-25 cable, use a DB-9 to DB-25 interface module (see [DB-9 to DB-25 Connections](#) on page 62).

Table 9 shows the pin configuration of the serial data connector.

Table 9 • Serial Connector Pin Configuration

Pin No.	Name	Description
1	–	Unused and unterminated
2	RXD	Receive data—data input to printer
3	TXD	Transmit data—data output from printer
4	DTR	Data terminal ready—output from printer
5	SG	Signal ground
6	DSR	Data set ready—input to printer
7	RTS	Request to send—output from printer

Table 9 • Serial Connector Pin Configuration (Continued)

Pin No.	Name	Description
8	CTS	Clear to send—input to printer
9	+5 VDC	+5 VDC at 750 mA The maximum current draw may be limited by option configuration.  Important • To enable this capability, a qualified service technician must install a jumper on the printer's main logic board on JP1, pins 2 and 3.

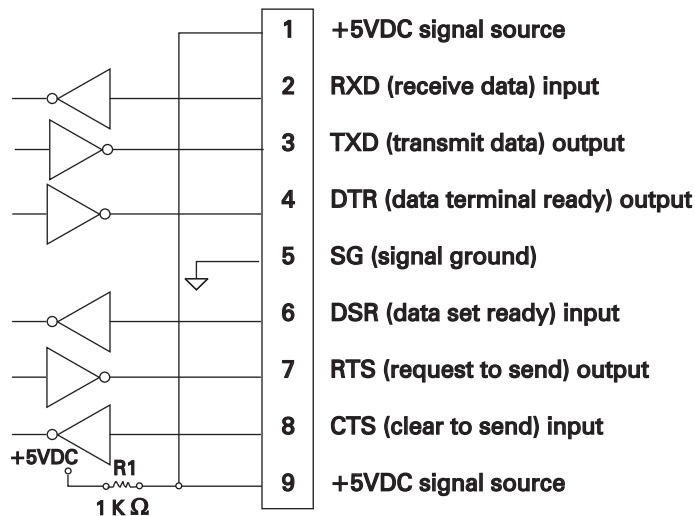
RS-232 Interface Connections

The printer is configured as Data Terminal Equipment (DTE). [Figure 13](#) shows the internal connections of the printer's RS-232 connector.



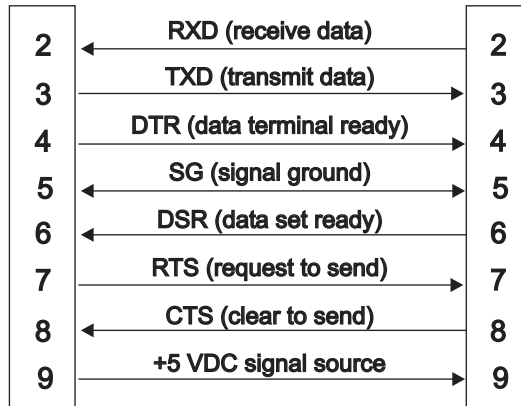
Note • Use a null modem (crossover) cable to connect the printer to a computer or any other DTE device.

Figure 13 • RS-232 DB9 MLB Connections



When the printer is connected via its RS-232 interface to Data Communication Equipment (DCE) such as a modem, use a standard RS-232 (straight-through) interface cable. [Figure 14](#) illustrates the connections required for this cable.

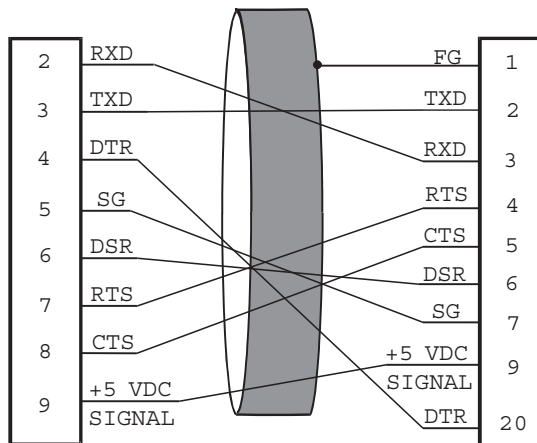
Figure 14 • RS-232 to DCE Cable Connectors



DB-9 to DB-25 Connections

To connect the printer’s RS-232 DB-9 interface to a DB-25 connector, an interface adapter is required. A generic DB-25 adapter can be used, although the +5 VDC signal source would not be passed through the adapter. Figure 15 shows the connections required for the DB-9 to DB-25 interface.

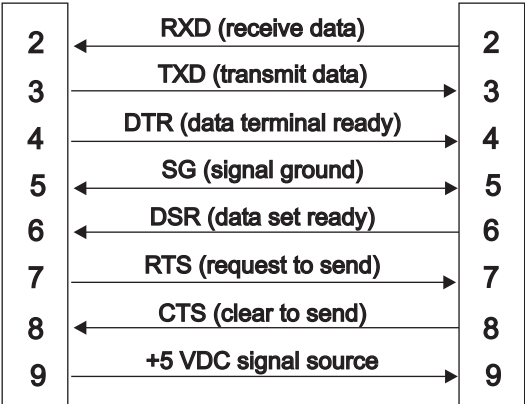
Figure 15 • DB-9 to DB-25 Cable Connections



Modem Connection

When the printer is connected via its RS-232 interface to Data Communication Equipment (DCE) such as a modem, use a standard RS-232 (straight-through) interface cable. Figure 16 shows the connections required for this cable.

Figure 16 • RS-232 Cable Connections



Parallel Data Port

The parallel data interface supports IEEE 1284 bidirectional parallel communications in nibble mode. The parallel interface provides a means of communication that typically is faster than the serial interface methods. In this method, the bits of data that make up a character are sent all at one time over several wires in the cable, one bit per wire.

When communicating via the parallel port, the values selected on the printer must be the same as those used by the host equipment connected to the printer. Port selection for status information is determined by the channel sending the request. The parallel port can be set for bidirectional or unidirectional communication. The default setting is bidirectional.

Parallel Cabling Requirements

A standard 36-pin parallel connector is available on the back of the printer for connection to the data source. An IEEE-1284 compatible bidirectional parallel data cable is required when this communication method is used. The required cable must have a standard 36-pin parallel connector on one end that is plugged into the mating connector located at the rear of the printer. The other end of the cable connects to the printer connector at the host computer. Port selection for status information is determined each time the printer is turned on.

Parallel Port Interconnections

Table 10 shows the pin configuration and function of a standard computer-to-printer parallel cable.

Table 10 • Parallel Cable Pin Configuration


36-Pin Connectors	Description
1	nStrobe/HostClk
2–9	Data Bits 1–8
10	nACK/PtrClk
11	Busy/PtrBusy
12	PError/ACKDataReq
13	Select/Xflag
14	nAutoFd/HostBusy
15	Not used
16, 17	Ground
18	+5 V at 750 mA The maximum current draw may be limited by option configuration.
	 To enable this capability, a qualified service technician must install a jumper on the printer's main logic board on JP1, pins 2 and 3.
19–30	Ground

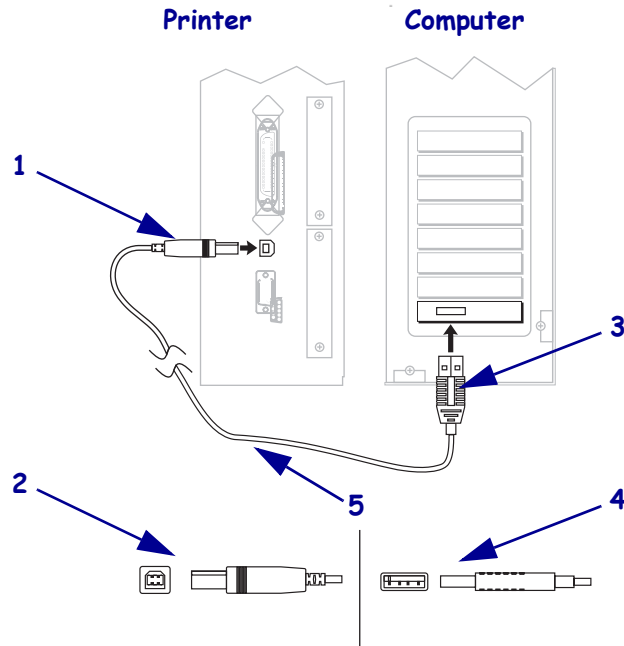
Table 10 • Parallel Cable Pin Configuration (Continued)

36-Pin Connectors	Description
31	nInit
32	nFault/NDataAvail
33, 34	Not used
35	+5 V through a 1.8 K Ω Resistor
36	NSelectin/1284 active

USB 2.0 Port

A USB 2.0 port (which is USB 1.1 and 1.0 compatible) is available to connect your printer to the host equipment. The industry-standard USB cable has an A-male connector on one end and a B-male connector on the other end as shown in [Figure 17](#).

Figure 17 • USB Connectors



1	"B" male connector, attaching to printer
2	"B" male connector, detail
3	"A" male connector, attaching to computer
4	"A" male connector, detail
5	Maximum cable length = 16.4 ft. (5 m)



Note • Use a USB 2.0-certified compliant cable no longer than 16.4 ft (5 m) long. A cable that meets these requirements is available from Zebra (part number 33011).

Print System

Contents

Printhead Assembly Maintenance Kit	68
ZT230™ Printhead Conversion Kit	74
Toggle Bar Maintenance Kit	84
Print Mechanism Maintenance Kit	95
Grounding Contact Maintenance Kit	110
Ribbon Strip Plate and Ribbon Antistatic Brush Kit	114

Printhead Assembly Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the printhead assembly Maintenance Kit in the ZT200™ series printers.

Read these instructions thoroughly before installing this kit.

Parts List

Before proceeding, verify that your kit contains one or the other of the kits for your printer listed below.

Figure 18 • Kit Contents

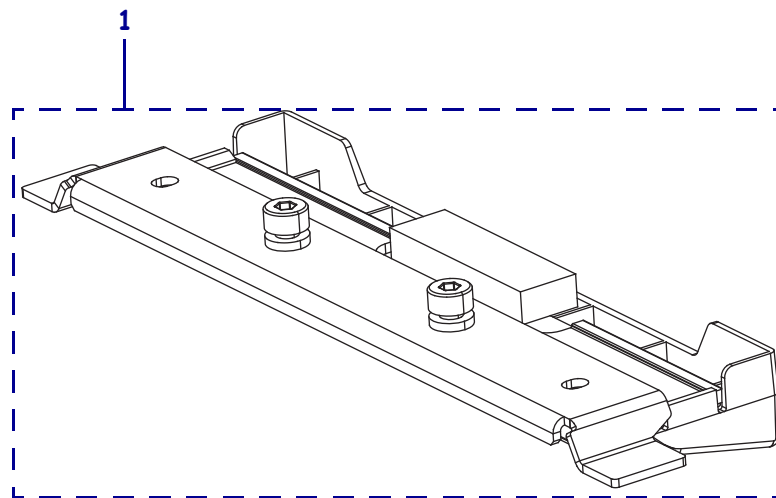


Table 11 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-010	ZT200 series 203 dpi Printhead Maintenance Kit
		1	P1037974-011	ZT200 series 300 dpi Printhead Maintenance Kit

Tools Required

Tools • You need these tools to complete this procedure:

- 47362* Zebra Preventive Maintenance Kit Antistatic Wriststrap and Mat

* 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%).

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.

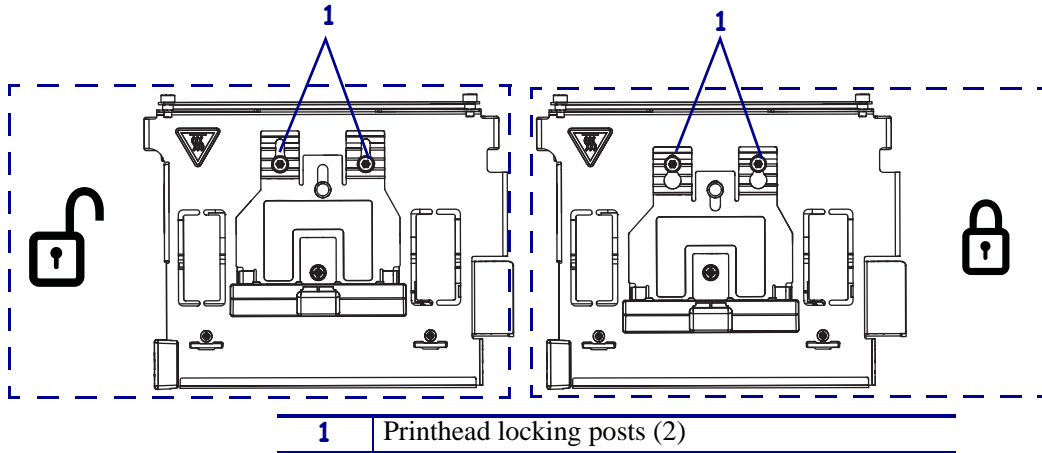
Remove media and ribbon from the printer.



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

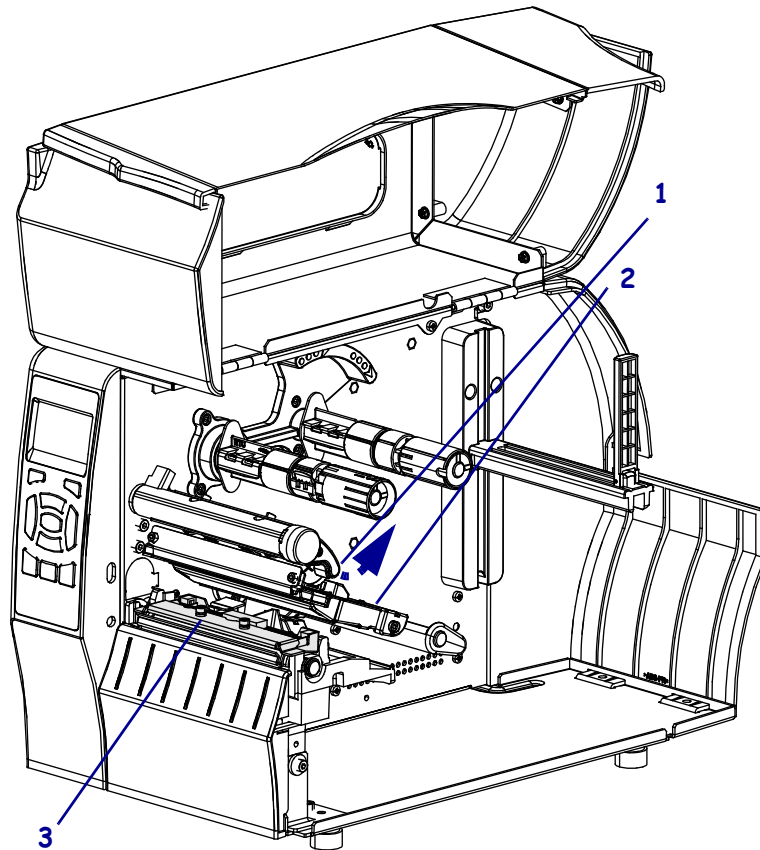
See [Figure 19](#). Slide the printhead latch forward until the large hole is aligned with the two printhead locking posts.

Figure 19 • Slide the Printhead Latch



4. See [Figure 20](#). Open the upper print mechanism.

Figure 20 • Open the Print Mechanism



1	Toggle bar handle
2	Upper print mechanism assembly
3	Printhead

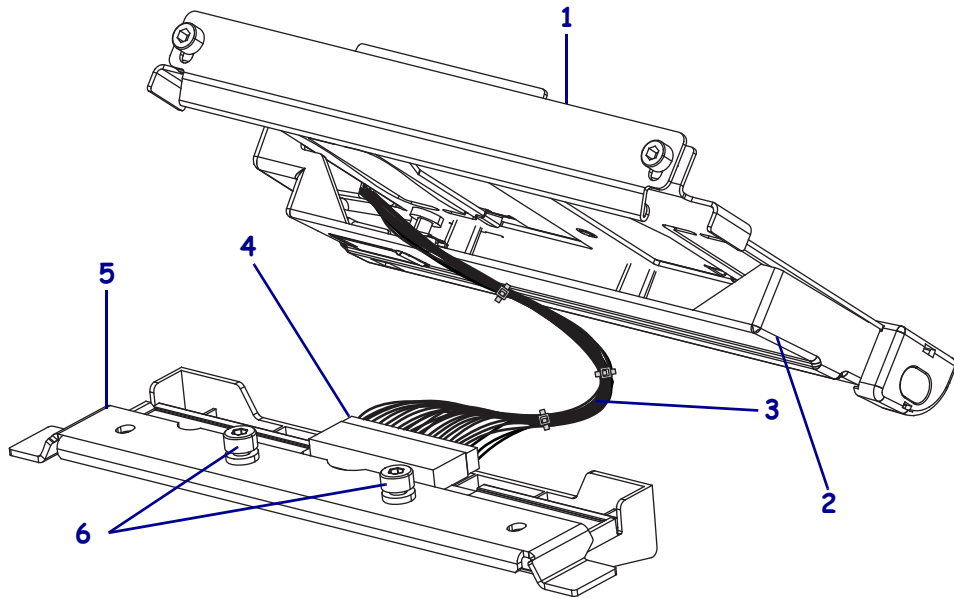


-
5. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.
-

Connect yourself to an antistatic device.

6. See [Figure 21](#). Pull the printhead out of the upper print mechanism, and then disconnect the printhead cable.

Figure 21 • Disconnect the Printhead Cable



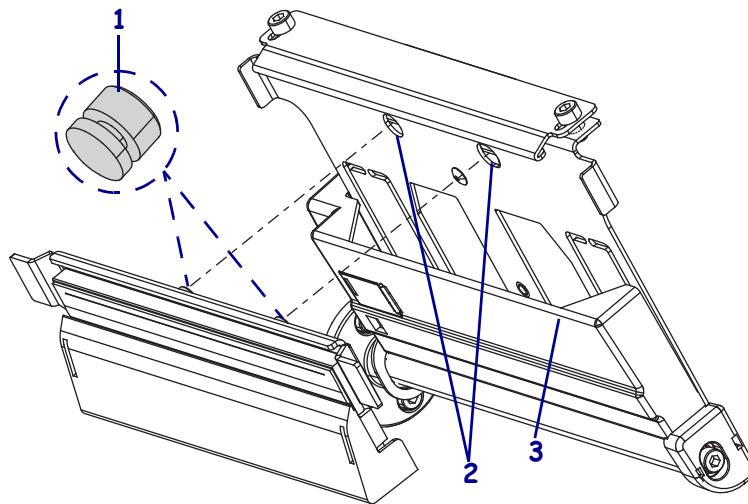
1	Upper print mechanism assembly
2	Printhead cable cover
3	Printhead cable
4	Printhead cable connector
5	Printhead assembly
6	Printhead locking posts (2)

7. Remove the printhead from the printer.

Install the New Printhead Assembly

1. See [Figure 21 on page 72](#). Connect the printhead to the printhead cable.
2. See [Figure 22](#). Carefully slide the printhead cable back into the printhead cable cover, and then insert the printhead assembly locking posts into the printhead latch holes. Ensure the printhead assembly is making full contact with the upper print mechanism support bracket.

Figure 22 • Install the Printhead



1	Locking posts (2)
2	Printhead latch holes (2)
3	Printhead cable cover

3. See [Figure 19 on page 70](#). While holding the printhead in place, lock the printhead into the upper print mechanism by sliding the printhead latch toward the rear of the printer.
4. See your *User Guide* and clean the new printhead.
5. **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.

6. Reconnect the AC power cord and all data cables.
7. Turn on (I) the printer.

The installation is complete.

ZT230™ Printhead Conversion Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the printhead conversion in the following printers:

- ZT230

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 23 • Kit Contents

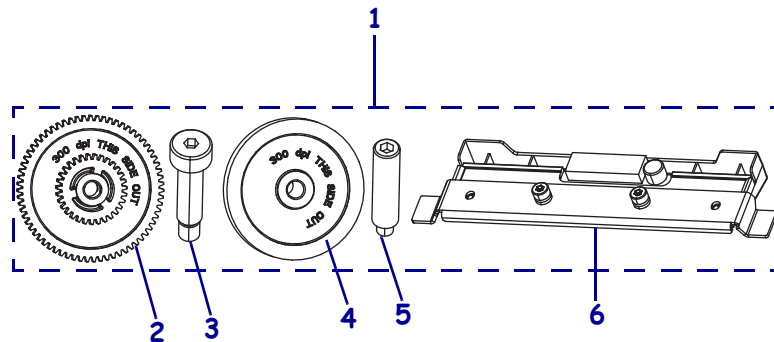


Table 12 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-005	ZT230 Printhead 203 to 300 dpi Conversion Kit
		1	P1037974-006	ZT230 Printhead 300 to 203 dpi Conversion Kit
	2	1	N/A	203 dpi Upper Compound Gear
		1	N/A	300 dpi Upper Compound Gear
	3	1	N/A	Shoulder Screw, M5 × 0.8 × 20
	4	1	N/A	203 dpi Lower Compound Gear
		1	N/A	300 dpi Lower Compound Gear
	5	1	N/A	Shaft
	6	1	N/A	ZT230 203 dpi Printhead Maintenance
		1	N/A	ZT230 300 dpi Printhead Maintenance

N/A = Not available as a separate part for purchase (listed for identification purposes only).

Tools Required

Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Metric Hex Key (Allen wrench) Kit
- 47362* Zebra Preventive Maintenance Kit

* In place of the Preventive Maintenance Kit, you may use clean swabs and a solution containing isopropyl alcohol (minimum 99.7%) with deionized water (maximum 0.3%).

Remove the Electronics Cover



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.



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

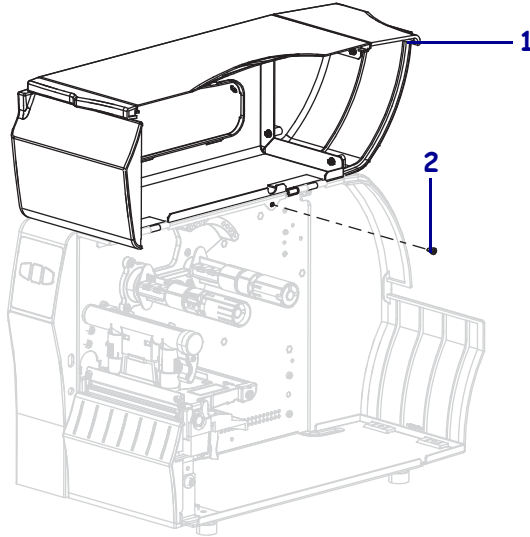
Turn off (O) the printer and disconnect the AC power cord and all data cables.

3. **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.

Open the media door and remove the media and ribbon.

4. See [Figure 24](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

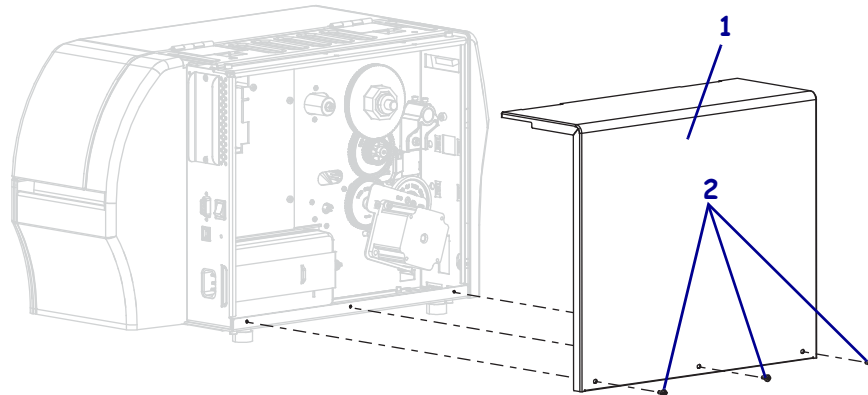
Figure 24 • Open the Media Door



1	Media door
2	Media side mounting screw

5. See [Figure 25](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 25 • Remove the Electronics Cover



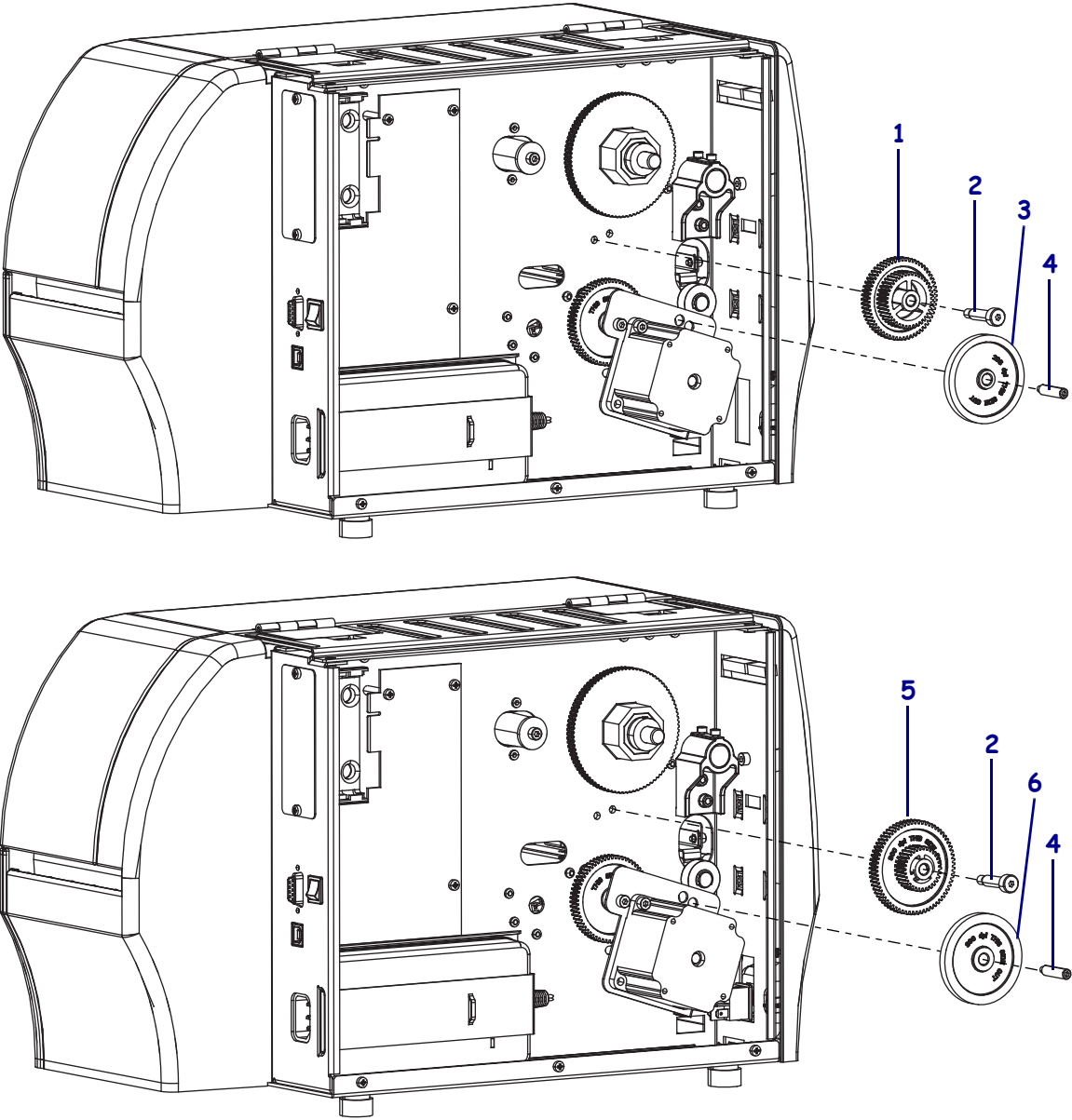
1	Electronics cover
2	Mounting screws (3)

6. Lift the electronics cover off of the printer.

Install the Gears

1. See [Figure 26](#). Remove the shoulder screw securing the upper compound gear, and then remove it.

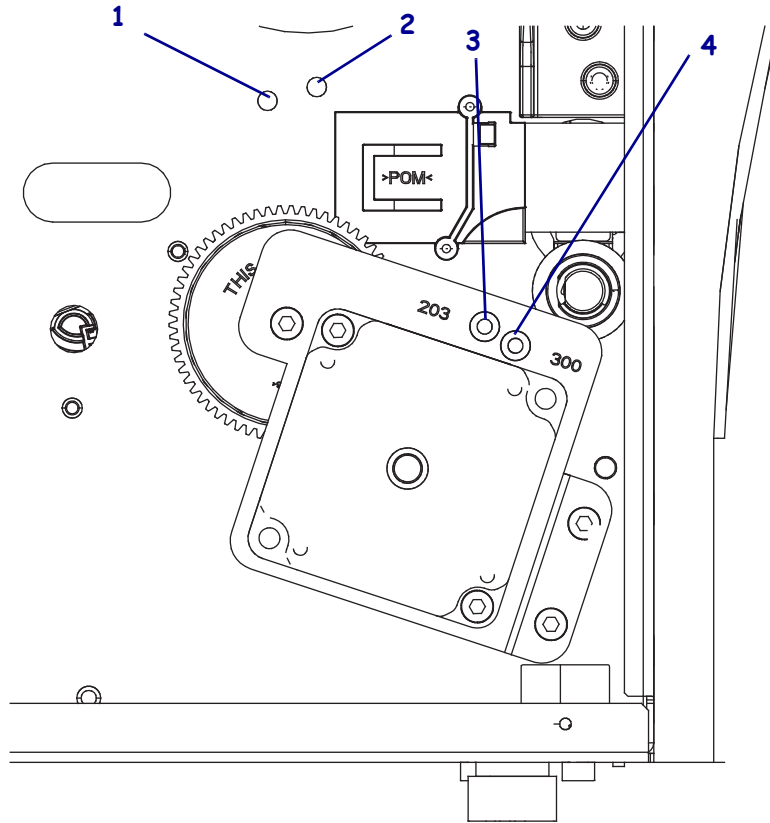
Figure 26 • Remove the Old Gears



1	203 dpi upper compound gear
2	Mounting shoulder screw, M5 × 8 × 20
3	203 dpi lower compound gear
4	Shaft, M4 × 0.7
5	300 dpi upper compound gear
6	300 dpi lower compound gear

2. Remove the shaft securing the lower compound gear, and then lift the gear out of the printer.
3. See [Figure 27](#) for the location of the proper mounting holes.

Figure 27 • Hole Locations



1	203 dpi upper compound gear mounting hole
2	300 dpi upper compound gear mounting hole
3	203 dpi lower compound gear mounting hole
4	300 dpi lower compound gear mounting hole

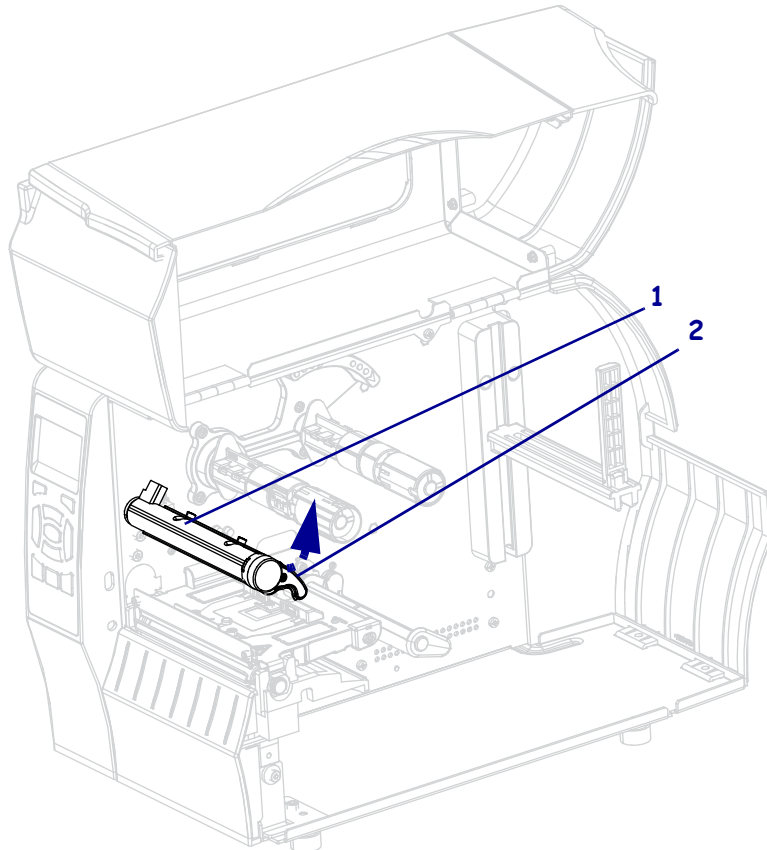
4. See [Figure 26 on page 77](#). With the identification facing out slide the lower compound gear into the printer behind the stepper motor mounting plate.
Align the mounting hole in the gear with the proper hole in the stepper motor mounting plate, and then install and tighten the lower mounting shaft.
5. Align the new upper compound SPUR gear, with the identification facing out, to the proper mounting hole in the printer main frame.
Ensure that the gears are meshed properly, and then install the upper compound SPUR gear mounting shoulder screw.
6. See [Figure 25 on page 76](#). Slide the electronics cover onto the printer.
7. Reinstall the three electronics side mounting screws.

8. See [Figure 24 on page 76](#). Open the media cover and reinstall the media side mounting screw.

Remove the Old Printhead

1. Open the toggle bar.

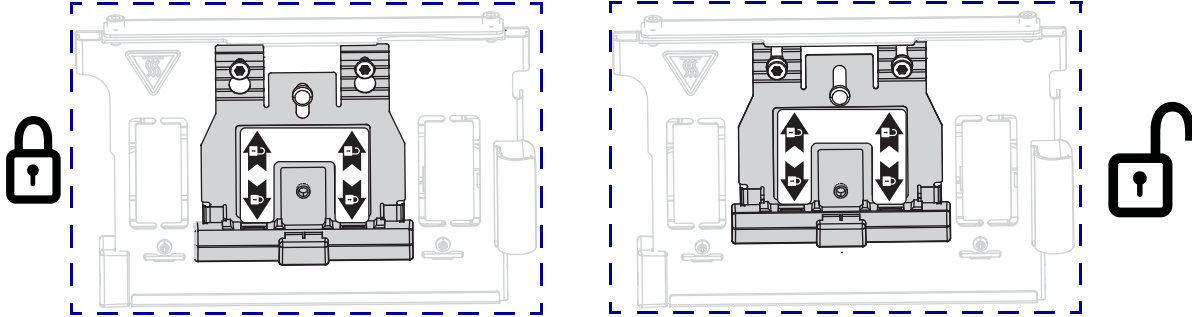
Figure 28 • Open the Toggle Bar



1	Toggle bar
2	Toggle bar handle

2. See [Figure 29](#). Slide the printhead latch forward until the large hole is aligned with the two printhead locking posts.

Figure 29 • Slide the Printhead Latch



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

See [Figure 30 on page 81](#). Remove the printhead from the upper printhead assembly.

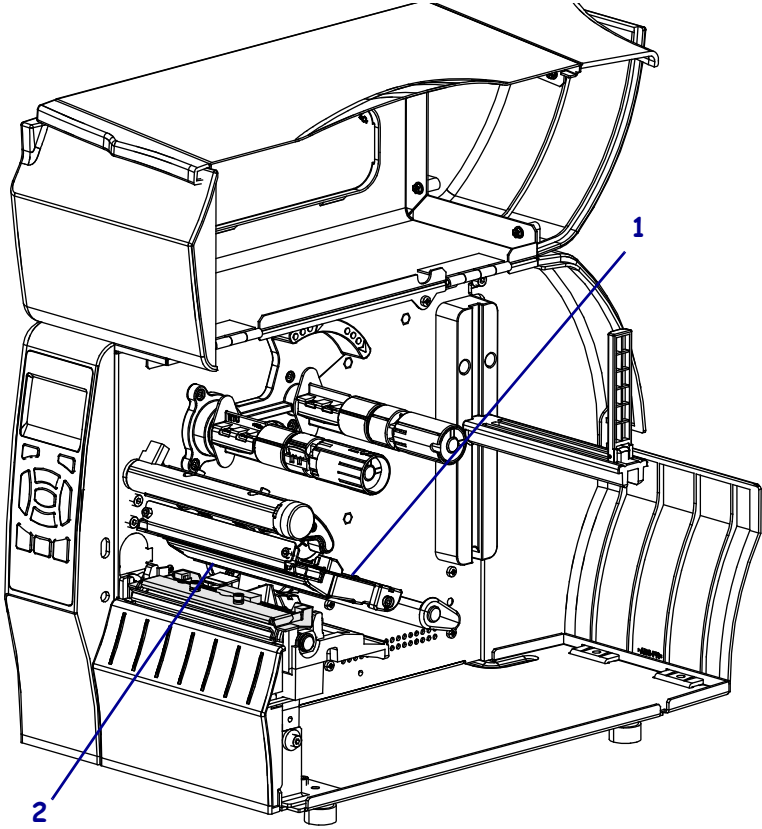


4. **Caution •** Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

5. See [Figure 30](#). Pull the printhead out of the upper print mechanism.

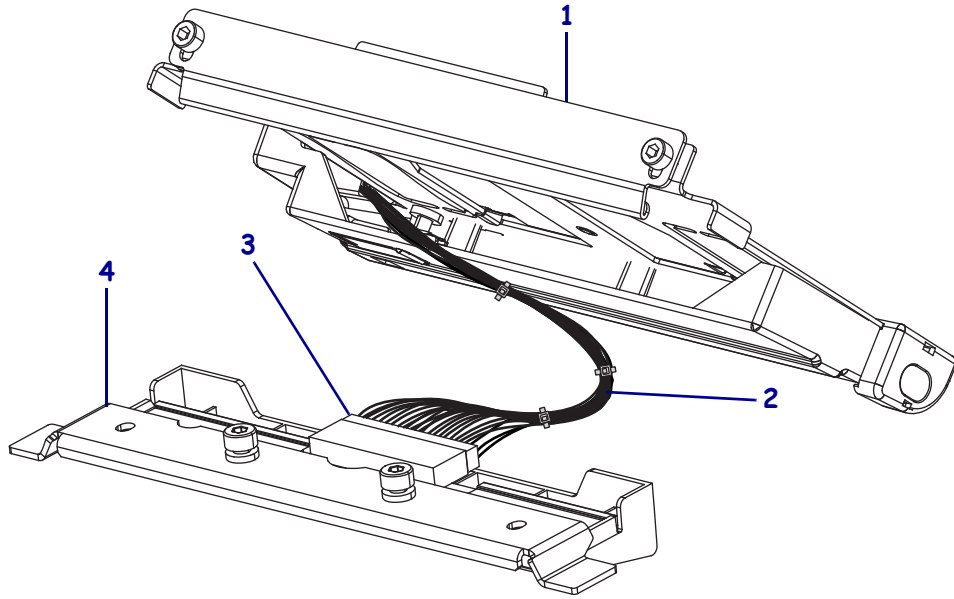
Figure 30 • Remove the Printhead



1	Upper print mechanism assembly
2	Printhead

6. See [Figure 31](#). Disconnect the printhead cable from the printhead.

Figure 31 • Disconnect the Printhead Cable



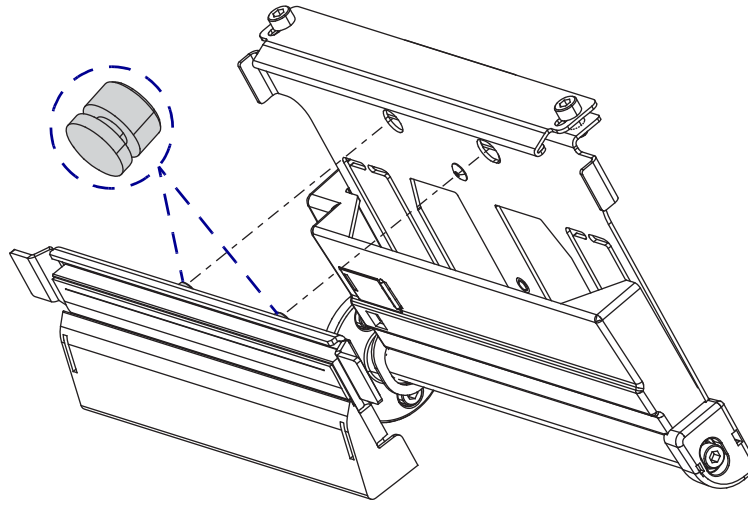
1	Upper print mechanism assembly
2	Printhead cable
3	Printhead cable connector
4	Printhead assembly

7. Remove the printhead from the printer.

Install the New Printhead

1. See [Figure 31 on page 82](#). Set the new printhead assembly into the printer and connect the printhead cable.
2. See [Figure 32](#). Slide the printhead into the upper print mechanism and through the printhead latch holes.

Figure 32 • Install the Printhead



3. See [Figure 29 on page 80](#). While holding the printhead in place, lock the printhead into the upper print mechanism by sliding the printhead latch toward the rear of the printer.
4. Clean the new printhead.
5.

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.

6. Reinstall the AC power cord and all data cables.
7. Turn on (I) the printer.

The installation is complete.



Toggle Bar Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the toggle bar in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 33 • Kit Contents

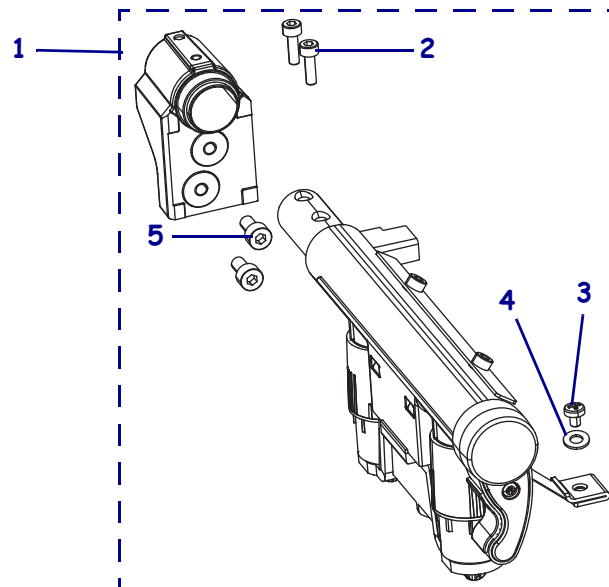


Table 13 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-014	Toggle Bar Maintenance Kit
	2	2	<i>N/A</i>	Screw, M3 × 0.5 × 10
	3	1	HW78803	Screw, M3 × 0.5 × 4 (sold in quantities of 50)
	4	1	HW79041	Washer, 0.250 × 0.125 × 0.023 (sold in quantities of 25)
	5	2	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)

N/A = Not available as a separate part for purchase part (listed for identification purposes only).

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Metric Hex Key (Allen wrench) Set

Remove the Electronics Cover



- 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.

- 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 ribbon and media.

- Which model of printer are you working on?

If have a...	Then...
ZT220	Continue with <i>ZT220 Electronics Cover</i> .
ZT230 ZT210	Go to <i>ZT230 and ZT210 Electronics Cover on page 87</i> .

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

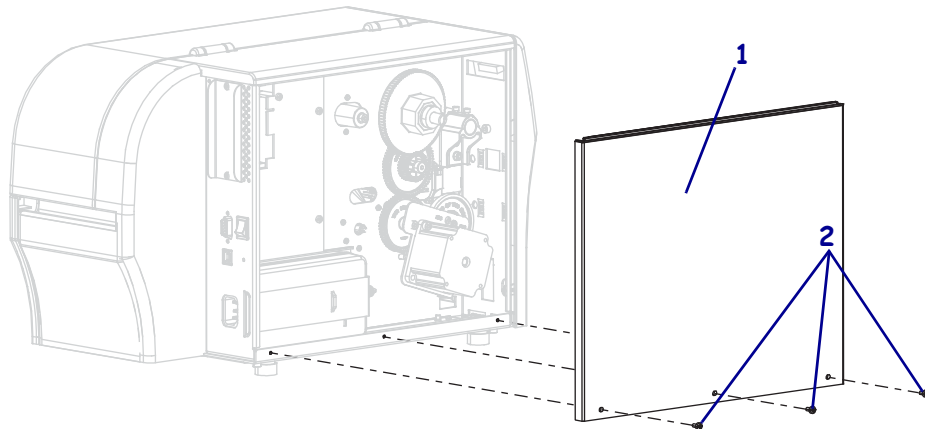
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

3. See [Figure 34](#). Remove the three screws securing the electronics cover.

Figure 34 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

4. Lift the electronics cover off of the printer.
5. Go to [Remove the Toggle Bar on page 89](#).

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

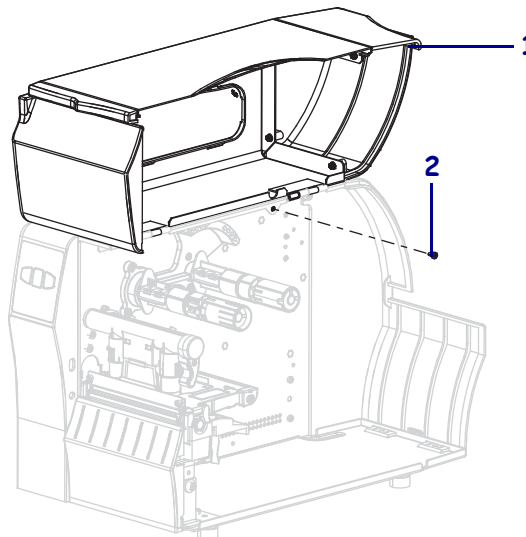
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

3. See [Figure 35](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

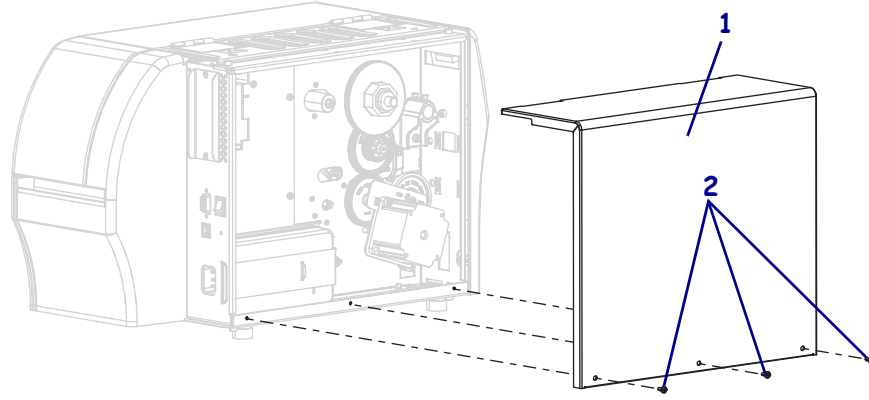
Figure 35 • Open the Media Door



1	Media door
2	Media side mounting screw

4. See [Figure 36](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 36 • Remove the Electronics Cover



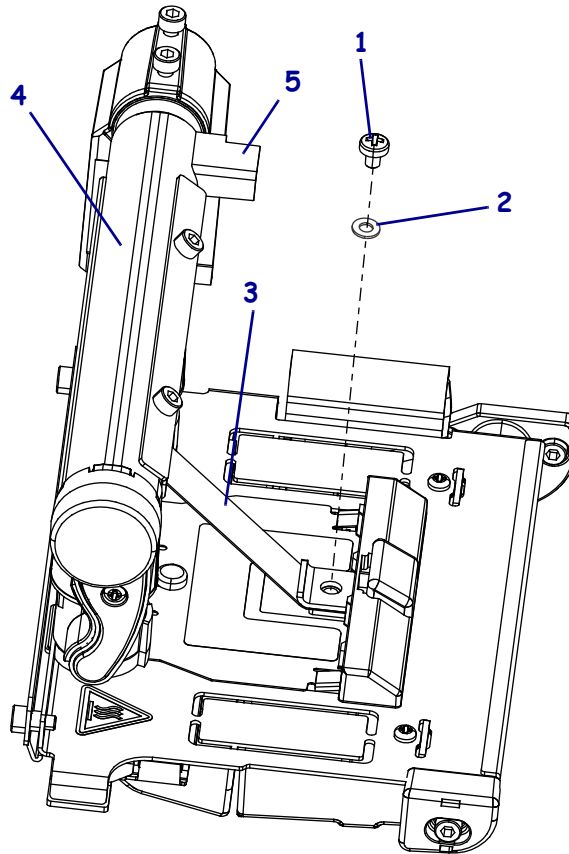
1	Electronics cover
2	Mounting screws (3)

5. Lift the electronics cover off of the printer.
6. Continue with [Remove the Toggle Bar](#).

Remove the Toggle Bar

1. Open the media door.
2. See [Figure 37](#). Remove the lift strap mounting screw and washer.

Figure 37 • Remove the Lift Strap



1	Lift strap mounting screw
2	Lift strap mounting flat washer
3	Lift strap
4	Toggle bar
5	Head-open flag

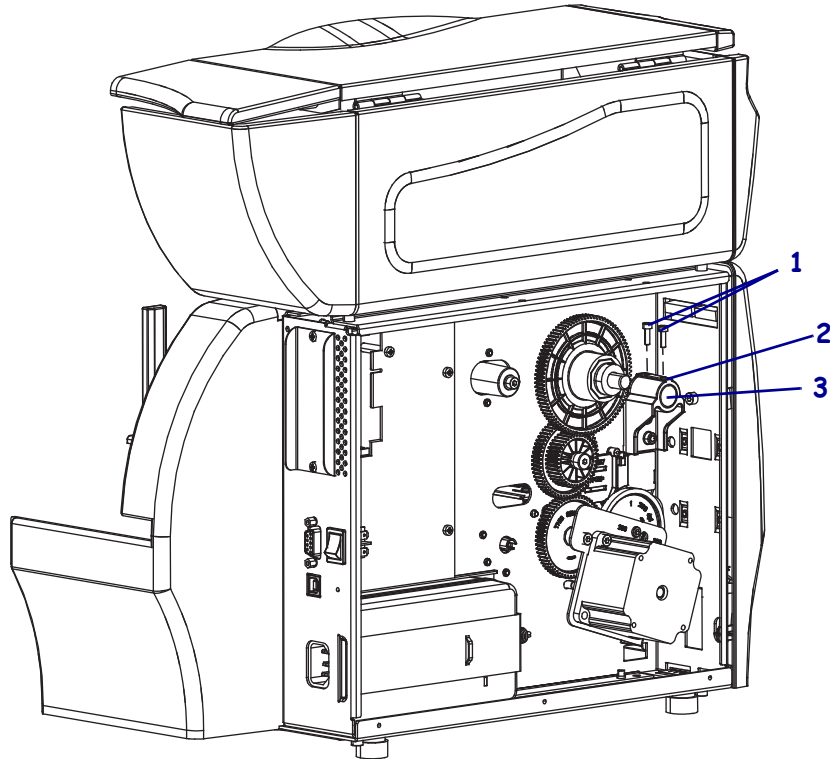


-
3. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.
-

Connect yourself to an antistatic device.

4. See [Figure 38](#). Remove and discard the two toggle bar shaft mounting screws.

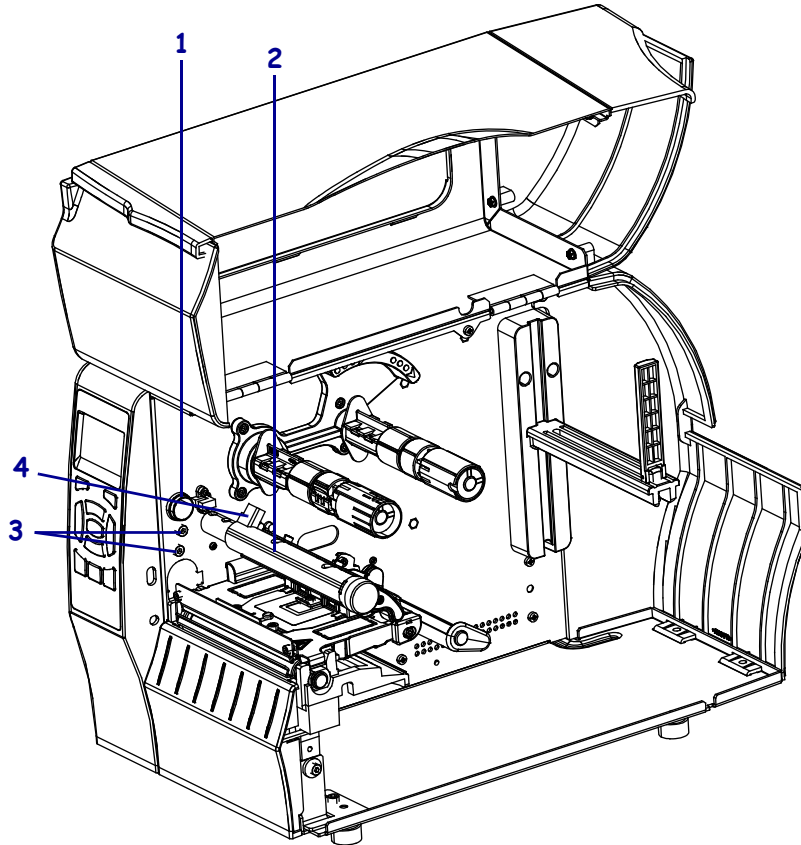
Figure 38 • Remove the Shaft Mounting Screw



1	Toggle bar shaft mounting screws (2)
2	Toggle bar shaft mounting bracket
3	Toggle bar shaft

5. See [Figure 39](#). Turn the toggle bar until the head-open clears the head-open sensor, and then slide it out of the printer.

Figure 39 • Remove the Toggle Bar

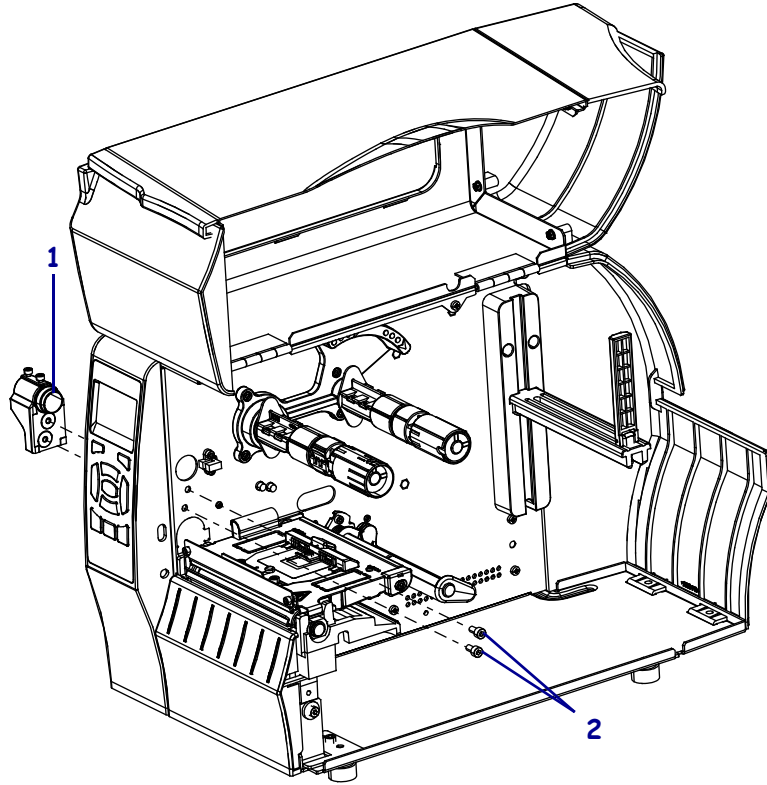


1	Toggle bar mounting bracket
2	Toggle bar
3	Mounting screws (2)
4	Head open flag

6. Discard the toggle bar.

7. See [Figure 40](#). Remove and discard the two toggle bar mounting bracket mounting screws.

Figure 40 • Remove the Toggle Bar Mounting Bracket

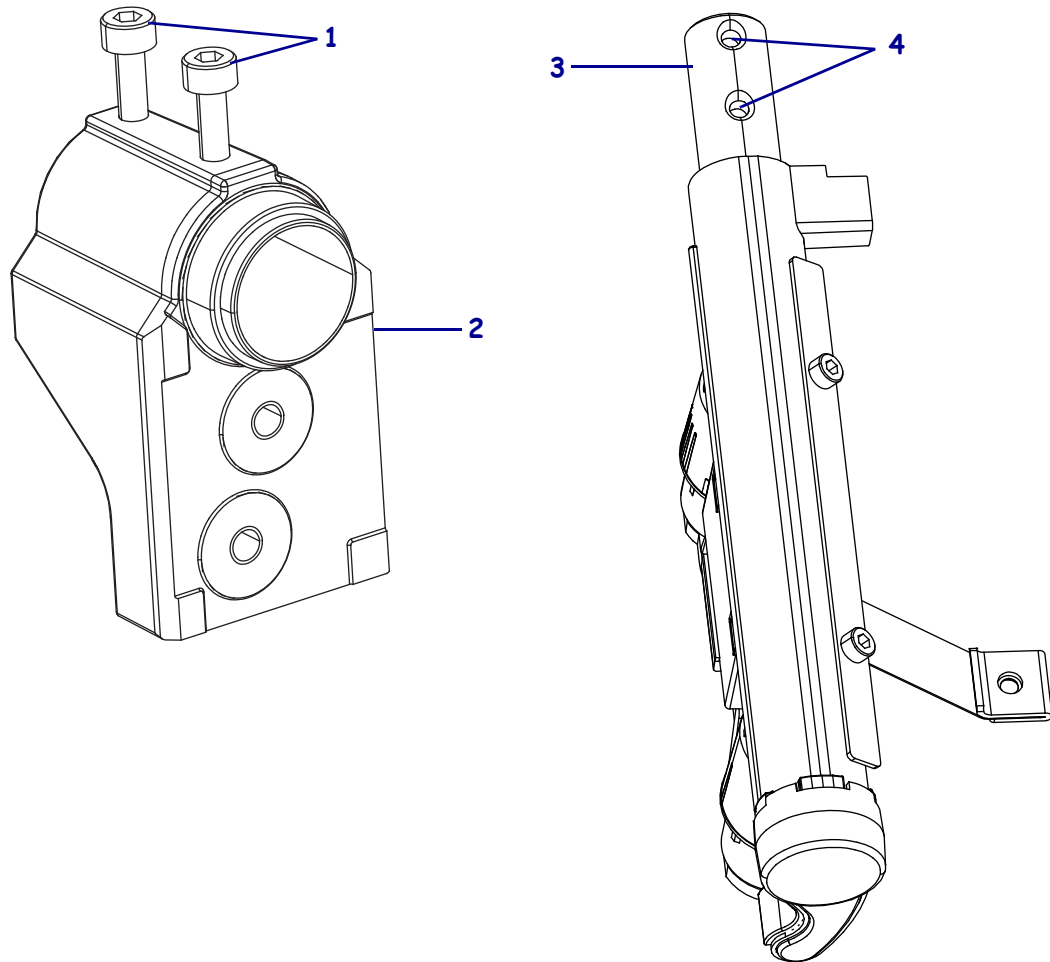


1	Toggle bar mounting bracket
2	Mounting screws (2)

Install the New Toggle Bar

1. See [Figure 41](#). Start the two new toggle bar shaft mounting screws into the top, approximately 3 mm (1/8 in.).

Figure 41 • Start Shaft Mounting Screws



1	Toggle bar shaft mounting screws (2)
2	Toggle bar mounting bracket
3	Toggle bar shaft
4	Toggle bar shaft mounting holes (2)

2. See [Figure 40 on page 92](#). From the electronics side, insert the new toggle bar mounting bracket, and then install the two new toggle bar bracket mounting screws.
3. See [Figure 39 on page 91](#). With the toggle bar at approximately 45°, slide the new toggle bar shaft into the mounting bracket as far as it will go.
4. See [Figure 38 on page 90](#). Ensure that the shaft mounting holes are aligned with the two mounting screws, tighten the mounting screws.

5. See [Figure 37 on page 89](#). Install the new lift strap mounting screw and washer into the print mechanism.

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none">a. See Figure 34 on page 86. Insert the electronics cover into the printer.b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none">a. See Figure 36 on page 88. Slide the electronics cover onto the printer.b. Reinstall the three electronics side mounting screws.c. See Figure 35 on page 87. Open the media cover and reinstall the media side mounting screw.

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.

Reinstall the media and ribbon the printer.

3. Reconnect the AC power cord and all data cables.
4. Turn on (I) the printer.

The installation is complete.



Print Mechanism Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Print Mechanism Maintenance Kit in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 42 • Kit Contents

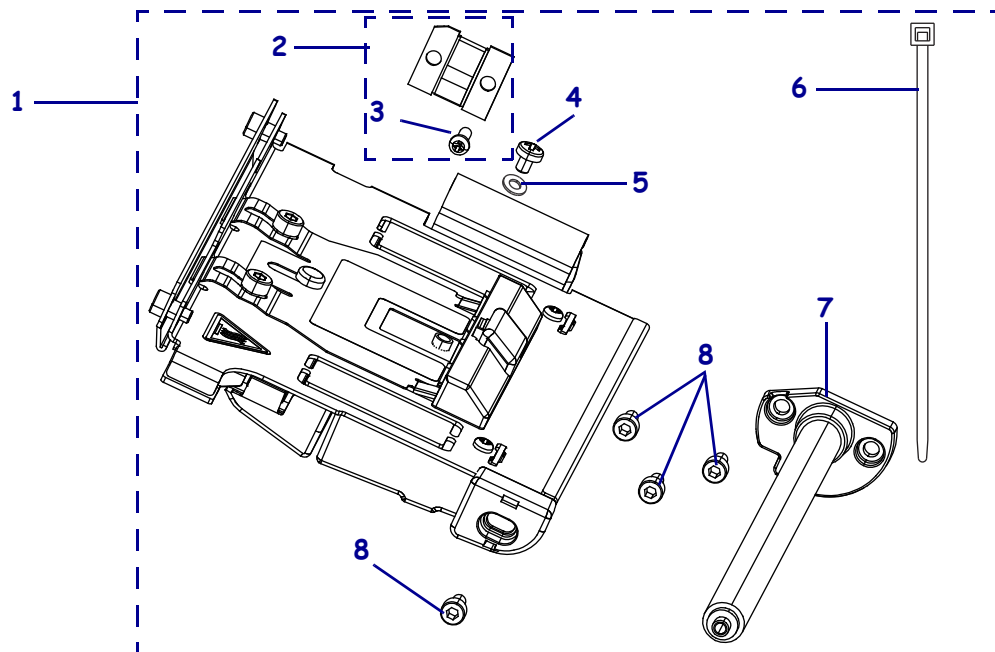


Table 14 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-013	Thermal Transfer Print Mechanism Maintenance Kit
		1	P1037974-056	Direct Thermal Print Mechanism Maintenance Kit
	2	1	P1037974-015	Ground Contact Maintenance Kit
	3	1	N/A	Screw, M2.5 × 8 Thread Forming
	4	1	HW78803	Screw, M3 × 0.5 × 4 (sold in quantities of 50)
	5	1	HW79041	Washer, 0.250 × 0.125 × 0.023 (sold in quantities of 20)
	6	1	HWQ06020	Cable Tie, 0.09 × 3.62 (sold in quantities of 20)
	7	1	N/A	Print Mechanism Pivot Shaft
	8	4	HW78805	Screws, M3 × 0.5 × 6 (sold in quantities of 25)

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Metric Hex Key (Allen wrench) Set
- Wire Cutters
- 47362* Zebra Preventive Maintenance Kit
- Safety Glasses
- Antistatic Writ Strap and Mat

* In place of the Preventive Maintenance Kit, you may use clean swabs and a solution containing isopropyl alcohol (minimum 99.7%) with deionized water (maximum 0.3%).

Remove the Electronics Cover

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

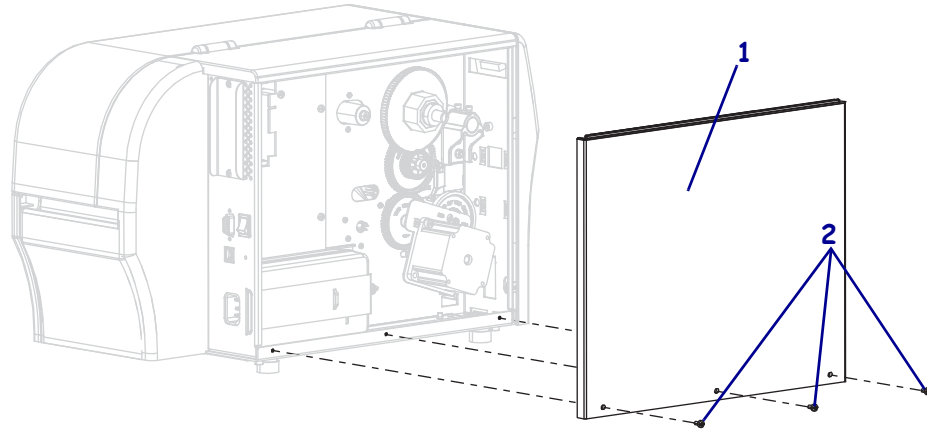
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 43](#). Remove the three screws securing the electronics cover.

Figure 43 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Go to [Remove the Print Mechanism on page 100](#).

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

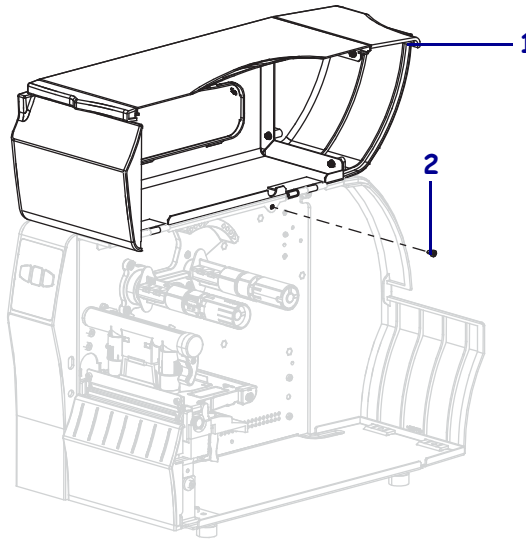
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

3. See [Figure 44](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

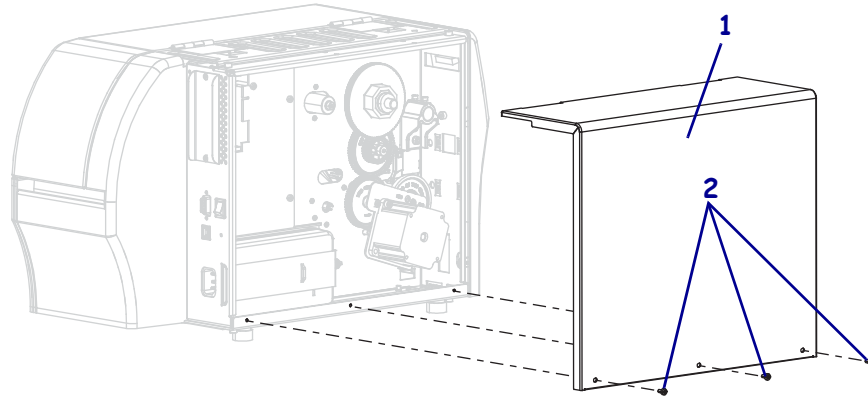
Figure 44 • Open the Media Door



1	Media door
2	Media side mounting screw

- See [Figure 45](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 45 • Remove the Electronics Cover



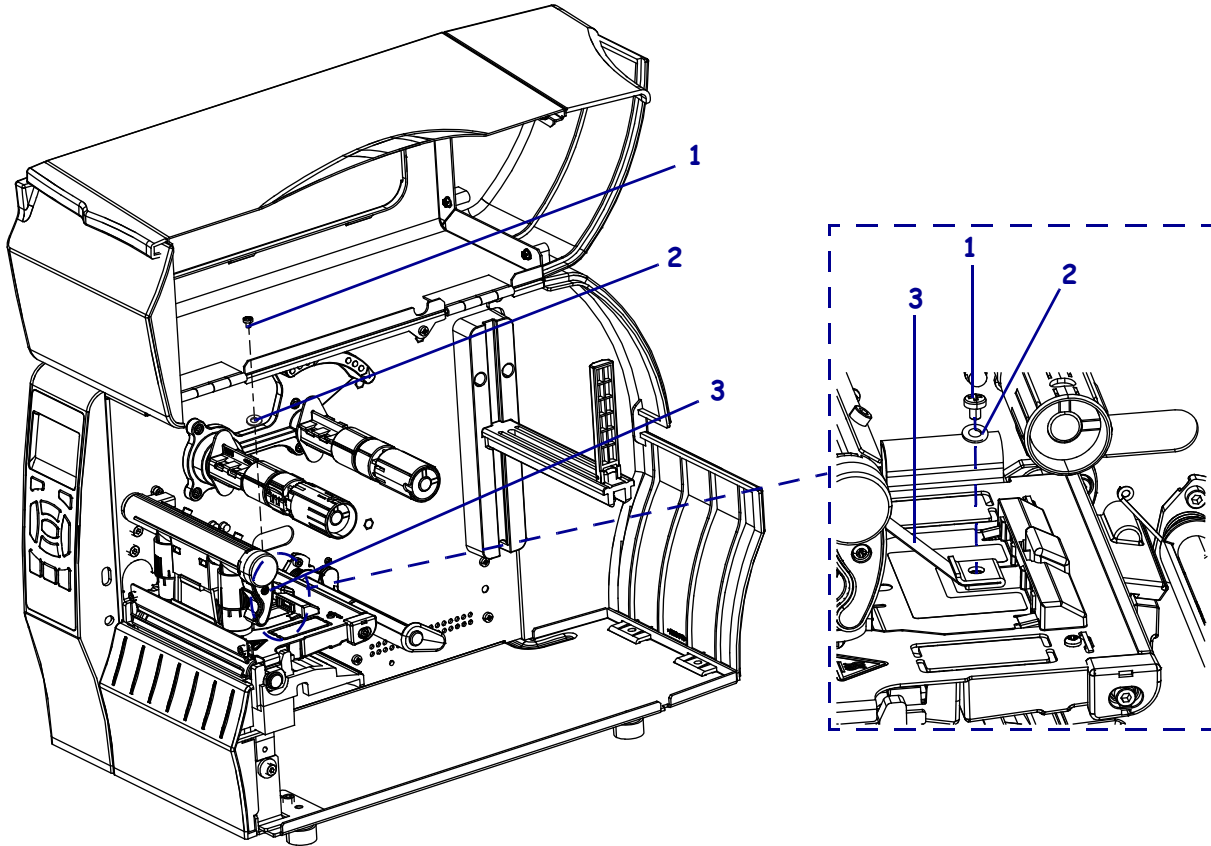
1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Continue with [Remove the Printhead](#).

Remove the Print Mechanism

1. See [Figure 46](#). Disconnect the print mechanism lift strap by removing the mounting screw and washer.

Figure 46 • Disconnect the Print Mechanism Lift Strap



1	Mounting screw
2	Mounting washer
3	Lift strap



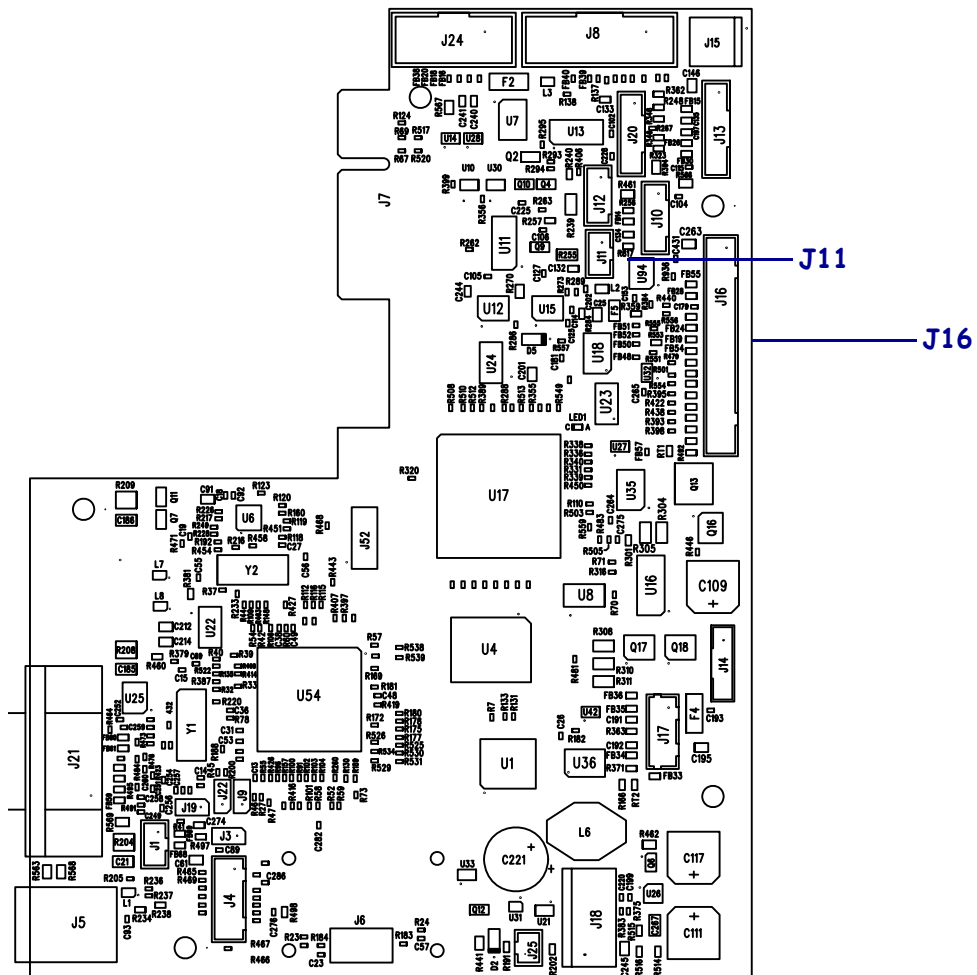
2. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

3. What type of printer are you working on?

If...	Then...
Thermal Transfer	Disconnect the printhead cable from J16 and the ribbon sensor cable from J11 on the main logic board (MLB).
Direct Thermal	Disconnect the printhead cable from J16 on the MLB.

Figure 47 • Disconnect the Cables

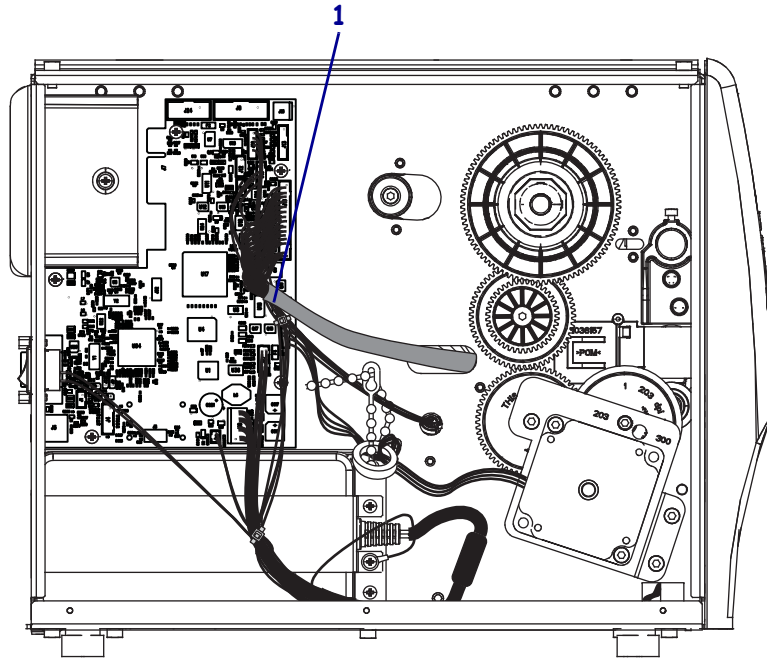




4. **Caution** • Wear protective eyewear when installing or removing E-rings, C-clips, snap rings, springs, and mounting buttons. These are under tension and could fly off.

See [Figure 48](#). Cut the cable tie around the bundle of wires with the printhead cable and ribbon sensor cable.

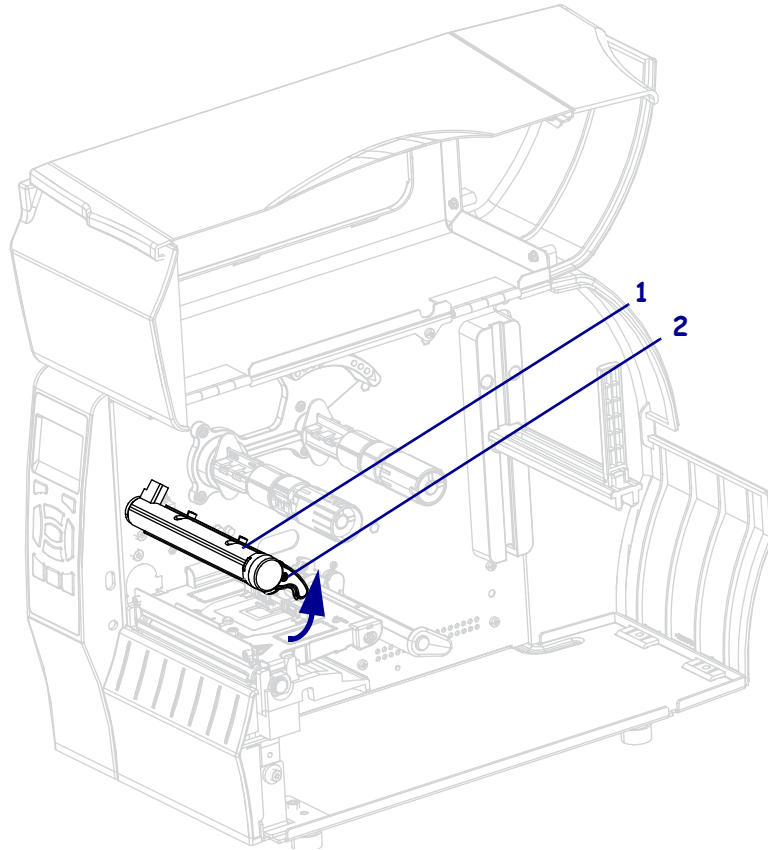
Figure 48 • Cut the Cable Tie



1	Cable tie
----------	-----------

5. See [Figure 49](#). Open the toggle bar.

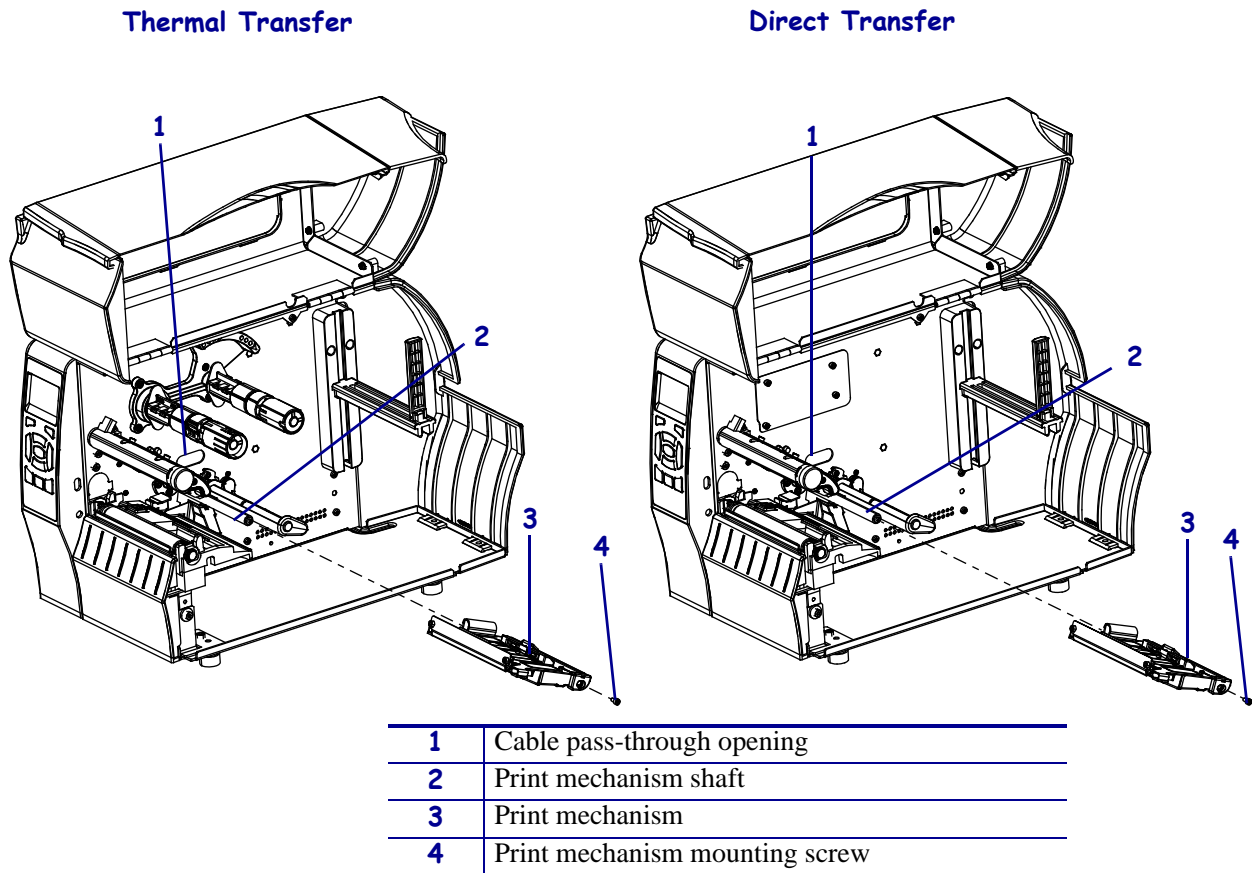
Figure 49 • Open the Toggle Bar



1	Toggle bar handle
2	Toggle bar

6. See [Figure 50](#). Remove the print mechanism mounting screw.

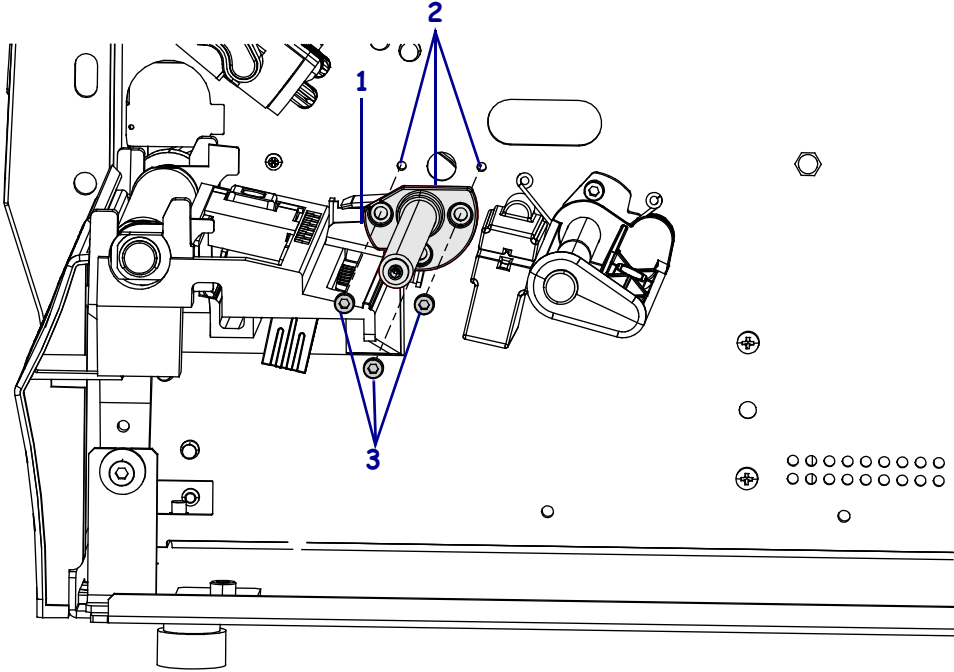
Figure 50 • Remove the Print Mechanism Mounting Screw



7. While guiding the printhead cable through the cable pass-through opening, slide the print mechanism off the shaft.

- 8. See [Figure 51](#). Remove the print mechanism shaft and mounting bracket by removing the three mounting screws, and then sliding the shaft assembly out of the printer.

Figure 51 • Remove the Print Mechanism Shaft



1	Print mechanism shaft assembly
2	Print mechanism shaft assembly mounting holes (3)
3	Print mechanism shaft assembly mounting screws (3)

Remove the Printhead

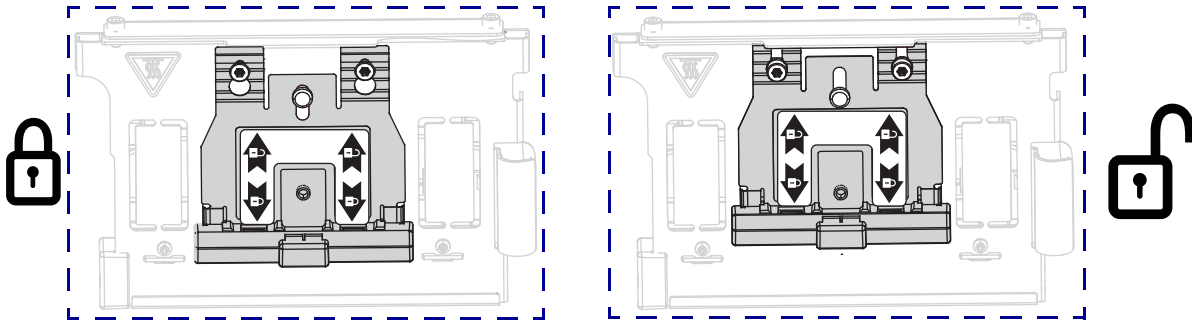


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. See [Figure 52](#). Slide the printhead latch forward until the large hole is aligned with the two printhead locking posts.

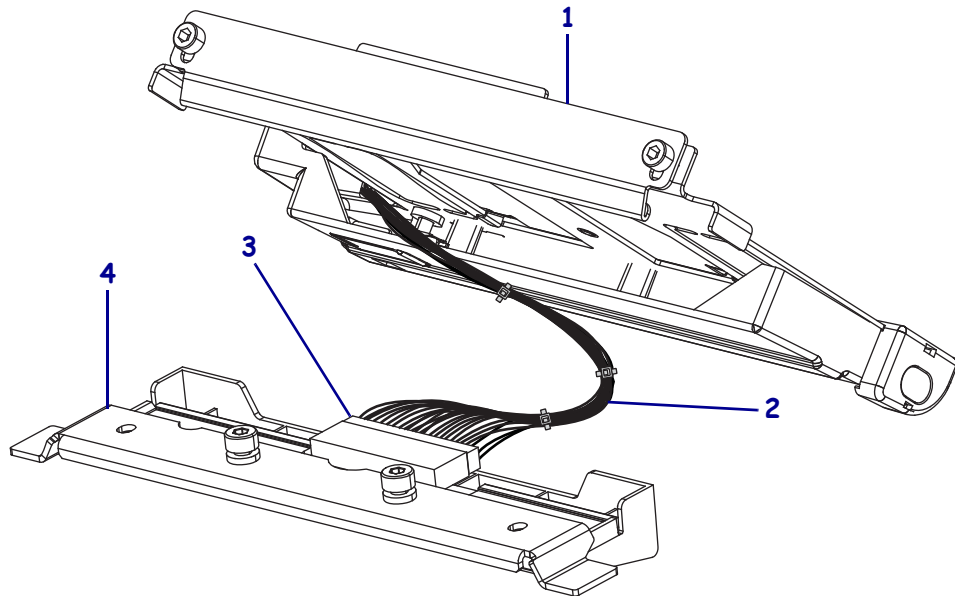
Figure 52 • Slide the Printhead Latch



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

See [Figure 53](#). Pull the printhead out of the print mechanism, and then disconnect the printhead cable.

Figure 53 • Disconnect the Printhead Cable



1	Print mechanism assembly
2	Printhead cable
3	Printhead cable connector
4	Printhead assembly

Install the New Print Mechanism

1. See [Figure 51 on page 105](#). Align the new print mechanism shaft and bracket with the three mounting holes, and then install the three new mounting screws.
2. See [Figure 50 on page 104](#). Slide the new print mechanism onto the print mechanism shaft while guiding the printhead cable through the cable pass-through opening.
3. Install the new mounting screw.
4. See [Figure 46 on page 100](#). Install the lift strap washer and mounting screw.
5. What Type of printer are you working on?

If you have a...	Then...
Thermal Transfer	See Figure 47 on page 101 . Connect the printhead cable to J16 on the main logic board (MLB).
Direct Thermal	See Figure 47 on page 101 . Connect the printhead cable to J16 and the ribbon sensor cable to J11 on the MLB.

6. Install the cable tie around the print mechanism wire bundle shield and the media sensor cable and the tighten the cable tie.

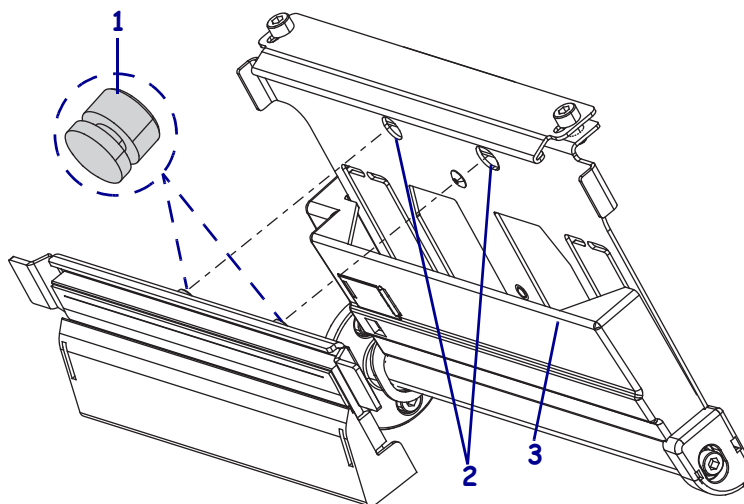


Note • When replacing the cable tie, make sure the print mechanism bundle is not pulling on the print mechanism either open or closed. Making it taut will affect printing.

Reinstall the Printhead

1. See [Figure 53 on page 107](#). Connect the printhead cable to the printhead.
2. See [Figure 54](#). Carefully slide the printhead cable back into the printhead cable cover and then insert the printhead assembly locking posts into the printhead latch holes. Ensure the printhead assembly is making full contact with the print mechanism support bracket.

Figure 54 • Install the Printhead



1	Locking posts (2)
2	Printhead latch holes (2)
3	Printhead cable cover

3. See [Figure 52 on page 106](#). While holding the printhead in place, lock the printhead into the print mechanism by sliding the printhead latch toward the rear of the printer.
4. Using Preventative Maintenance Kit 48726, clean the new printhead. Refer to the *User Guide* for more information.

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none"> a. See Figure 43 on page 97. Insert the electronics cover into the printer. b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none"> a. See Figure 45 on page 99. Slide the electronics cover onto the printer. b. Reinstall the three electronics side mounting screws. c. See Figure 44 on page 98. Open the media cover and reinstall the media side mounting screw.

2. **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.

3. Reconnect the AC power cord and all data cables.
4. Turn on (I) the printer.

The installation is complete.

Grounding Contact Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Grounding Contact in the following printers:

- ZT200™ series

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 55 • Kit Contents

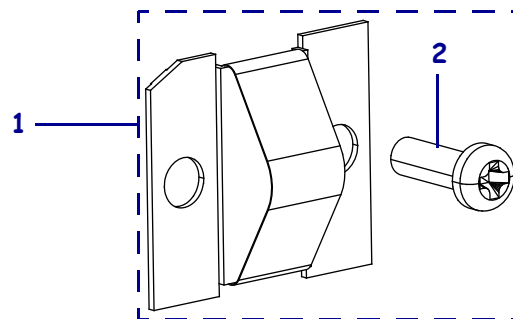


Table 15 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-015	Grounding Contact Maintenance Kit
	2	1	<i>N/A</i>	Thread Forming Screw, M2.5 × 8

N/A = Not available as a separate part for purchase part (listed for identification purposes only).

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Flat-blade Screwdriver Set
- Adhesive Cleaner

Replace the Grounding Contact

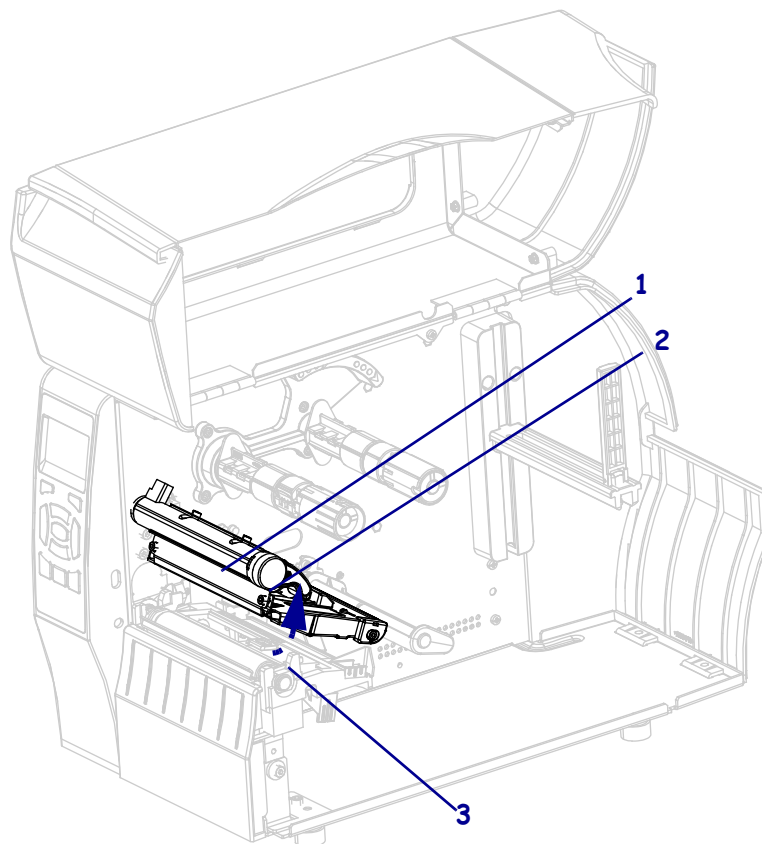


1. **Caution** • Turn off (O) the printer and disconnect it from the power source before performing the following procedure.

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

2. See [Figure 56](#). Open the toggle bar and printhead.

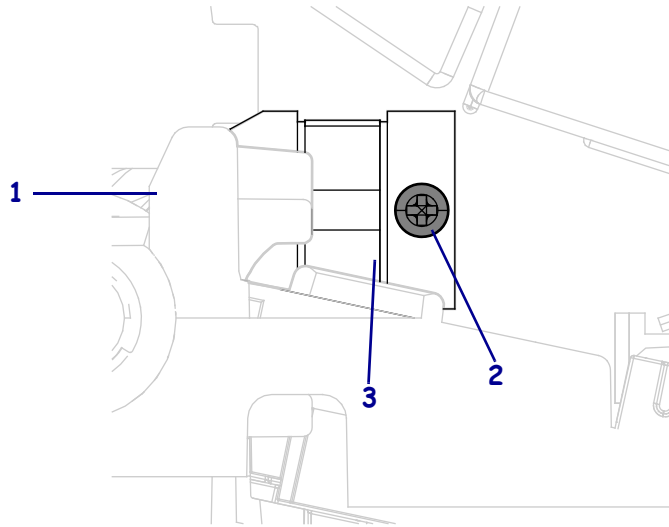
Figure 56 • Open the Toggle Bar (ZT230 shown)



1	Toggle bar
2	Toggle bar handle
3	Platen housing

3. See [Figure 57](#). Remove the grounding contact mounting screw.

Figure 57 • Remove the Grounding Contact Mounting Screw (ZT230 shown)

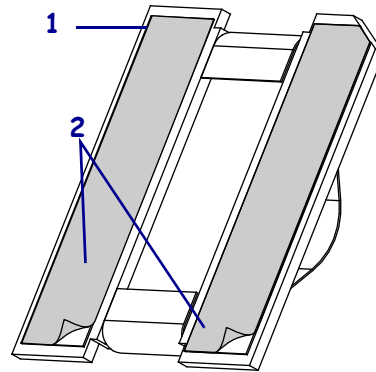


1	Platen housing
2	Grounding contact mounting screw
3	Grounding contact

4. Peel the old grounding contact from the main frame.
5. Using adhesive cleaner, clean the main frame of any tape remnants.

6. See [Figure 58](#). Peel the double-sided tape backing off the new grounding contact, and then align the mounting hole(s).

Figure 58 • Grounding Contact



1	Grounding contact
2	Backing

7. See [Figure 57 on page 112](#). Install the grounding contact mounting screw.
8. Reconnect the AC power cord
9. Turn on (I) the printer.

The installation is complete.

Ribbon Strip Plate and Ribbon Antistatic Brush Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the ribbon strip plate and antistatic brush kit in the following printers:

- ZT210™
- ZT220™
- ZT230™

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 59 • Kit Contents

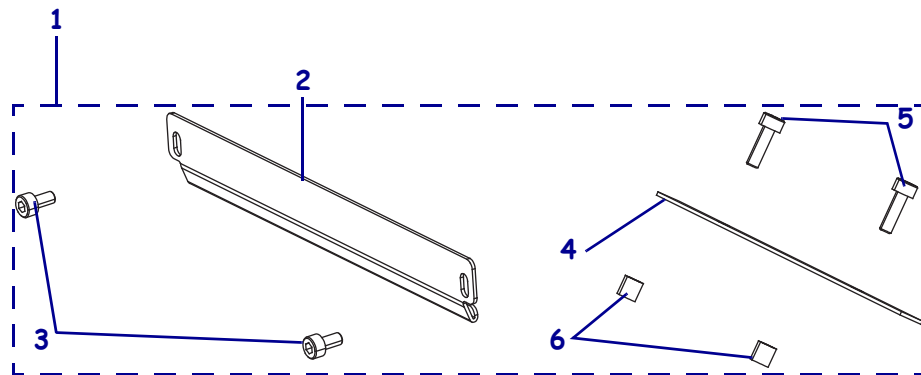


Table 16 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-047	Ribbon Strip Plate and Antistatic Brush
	2	1	N/A	Ribbon Strip Plate
	3	2	HW78805	Screw, M3 × 0.5 × 6 (sold in quantities of 50)
	4	1	N/A	Antistatic Brush
	5	2	N/A	Screw, M3 × 0.5 × 10
	6	2	N/A	Antistatic Brush Standoff

N/A = Not available as a separate part for purchase (listed for identification purposes only).

Tools Required



Tools • You need these tools to complete this procedure:

- Metric Hex Key (Allen wrench) Set

Replace the Ribbon Strip Plate



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

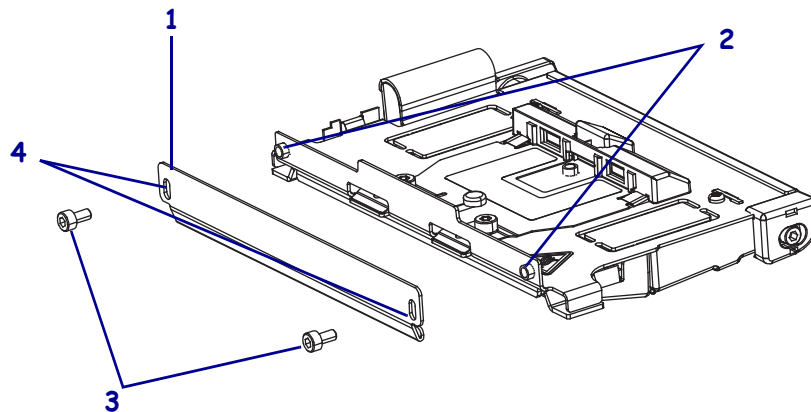
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door, and then remove the media and ribbon the printer.

3. See [Figure 60](#). Remove the two mounting screws, and then lift the strip plate out of the printer.

Figure 60 • Remove the Strip Plate



1	Ribbon strip plate
2	Mounting holes (2)
3	Mounting screws (2)
4	Elongated holes (2)

4. Align the new ribbon strip plate with the mounting holes, and then start the mounting screws.

5. Align the strip plate with the screw heads in the center of the elongated holes in the ribbon strip plate.
6. Slightly tighten the mounting screws.
7. **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.

8. Reinstall the AC power cord and data cables.
9. Press and hold PAUSE while turning on (I) the printer.
10. After the Power On Self Test (POST), the printer will start to print the Pause test labels.
11. Press PAUSE. After the printer pauses, observe the ribbon for possible problems such as wrinkling.
12. Does the ribbon wrinkle or track incorrectly?

If...	Then...
No	<ol style="list-style-type: none">a. Tighten the mounting screws.b. Installation is complete.
Yes	Continue with <i>Adjust the Strip Plate</i> .

Adjust the Strip Plate

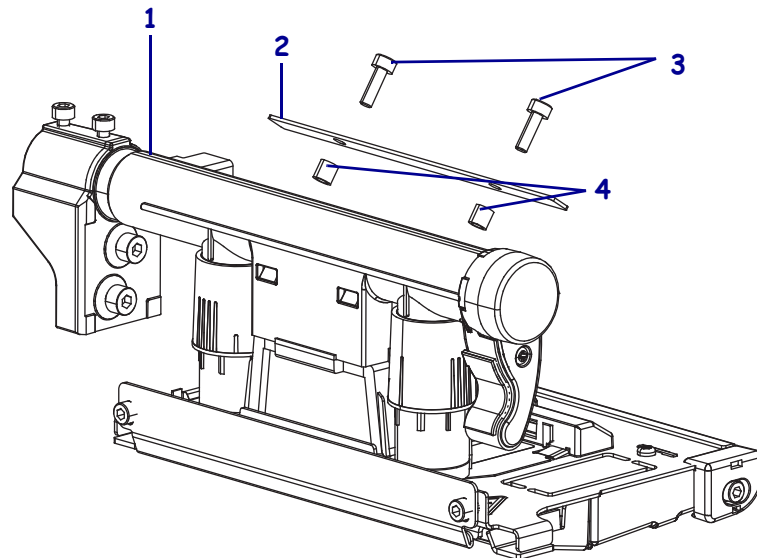
1. The strip plate can be adjusted for proper tracking and separation of the ribbon from the media after printing.
2. With the outside screw remaining centered in the slot, loosen the inside mounting screw that secures the strip plate to the front of the print mechanism assembly.
3. Raise the inside end of the strip plate upward to just hide the bottom of the slot behind the screw.
4. Tighten both screws.
5. Press PAUSE to restart the printing.
6. While the printer is running, observe the ribbon for tracking without wrinkle when fed to the ribbon take-up spindle.
7. Print a minimum of 25 labels while checking for ribbon wrinkle, tracking and media/ribbon separation problems.
8. Press PAUSE to stop the printing.
9. If tracking and separation are not correct, raise or lower the inside end of the strip plate slightly.
10. Press PAUSE to restart the printing.

11. Print a minimum of 25 labels while checking for ribbon wrinkle, tracking and media/ribbon separation problems.
12. If problem persists repeat [step 9](#) through [step 11](#).

Replace the Ribbon Antistatic Brush

1. See [Figure 61](#). Remove and discard the two mounting screws, two standoffs and antistatic brush.

Figure 61 • Remove the Ribbon Antistatic Brush



1	Toggle bar assembly
2	Ribbon antistatic brush assembly
3	Mounting screws (2)
4	Standoffs (2)

2. Install the new ribbon antistatic brush with the brush facing forward and the standoffs between the antistatic brush and the toggle bar assembly.
3. **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.

4. Reinstall the AC power cord and data cables.
5. Turn the printer on (I).

The installation is complete.

118 | **Ribbon Strip Plate and Antistatic Brush**
Replace the Ribbon Antistatic Brush



Notes • _____

Sensors

Contents

Media Sensor Maintenance Kit 120
Black Mark Sensor Maintenance Kit 128
Ribbon Sensor Assembly Maintenance Kit 142
Head-Open Sensor Maintenance Kit 151
Take-Label Sensor Maintenance Kit 161

Media Sensor Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the media sensor in the following printers:

- ZT210™
- ZT220™
- ZT230™

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 62 • Kit Contents

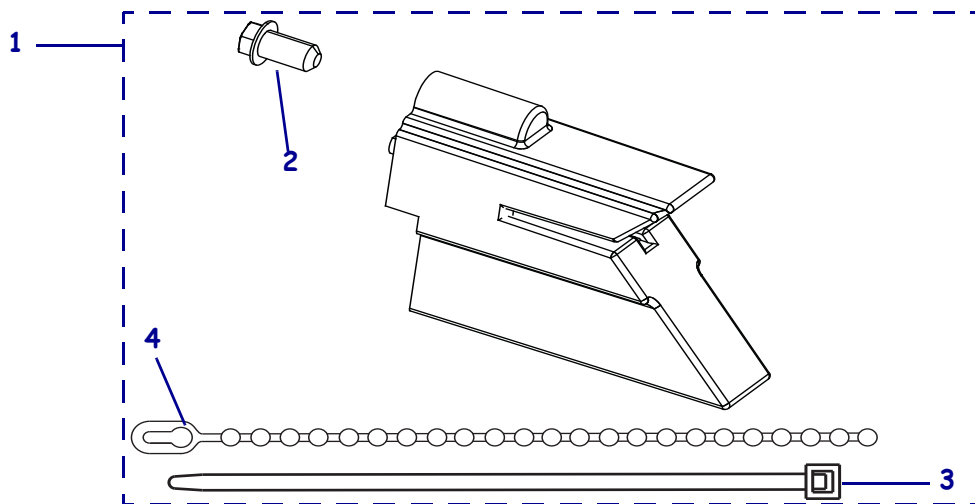


Table 17 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-021	Media Sensor Maintenance Kit
	2	1	HW44114	Screw, M4.2 × 8 (sold in quantities of 50)
	3	1	HWQ06020	Cable Tie, 0.09 × 3.62 (sold in quantities of 20)
	4	1	N/A	Beaded Cable Tie, 4.225 in. (108mm)
N/A = Not available as a separate part for purchase (listed for identification purposes only).				

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Metric Hex Key (Allen wrench) Set
- Wire Cutters
- Antistatic Wriststrap and Mat

Remove the Electronics Cover



- 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.

- Which type of electronics cover do you have?

If have a...	Then...
ZT220	Continue with <i>ZT220 Electronics Cover</i> .
ZT210 ZT230	Go to <i>ZT230 and ZT210 Electronics Cover on page 122</i> .

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

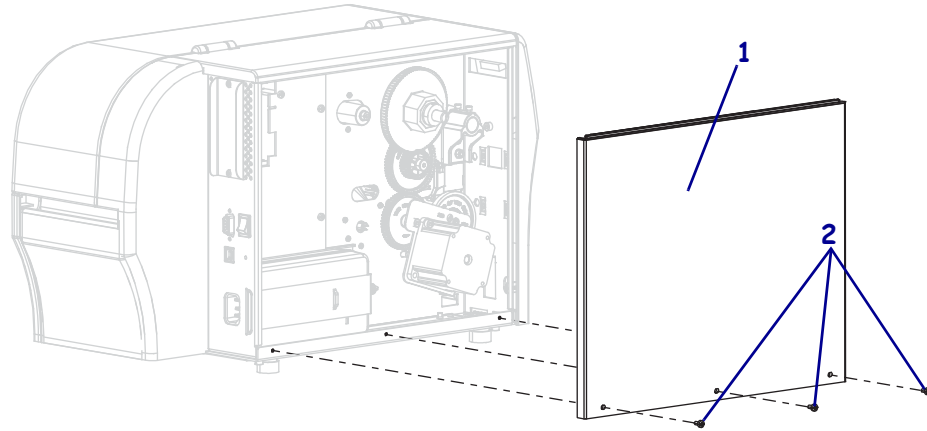
Turn off (O) the printer and disconnect the AC power cord and all data cables.

- 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.

Open the media door and remove the media and ribbon.

3. See [Figure 63](#). Remove the three screws securing the electronics cover.

Figure 63 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

4. Lift the electronics cover off of the printer.
5. Go to [Remove the Old Media Sensor Assembly on page 124](#).

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

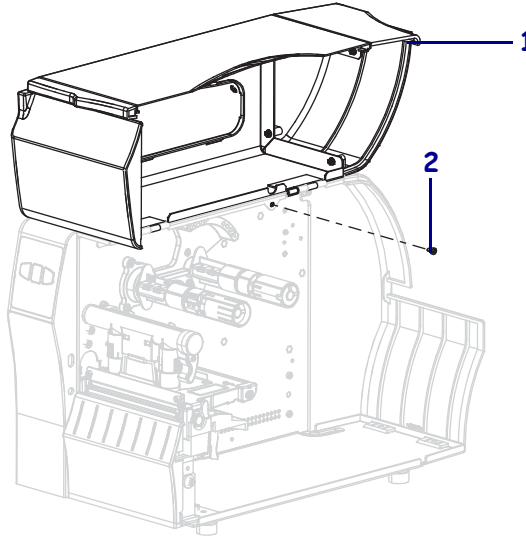
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 64](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

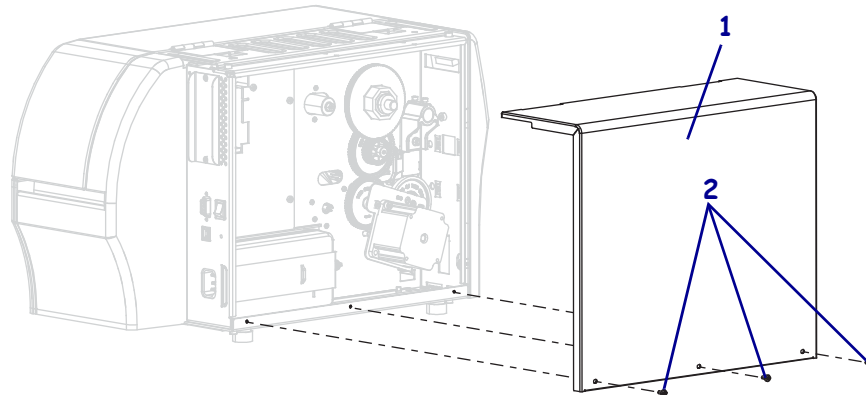
Figure 64 • Open the Media Door



1	Media door
2	Media side mounting screw

- See [Figure 65](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 65 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.

- 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.

- Continue with *Remove the Old Media Sensor Assembly*.

Remove the Old Media Sensor Assembly

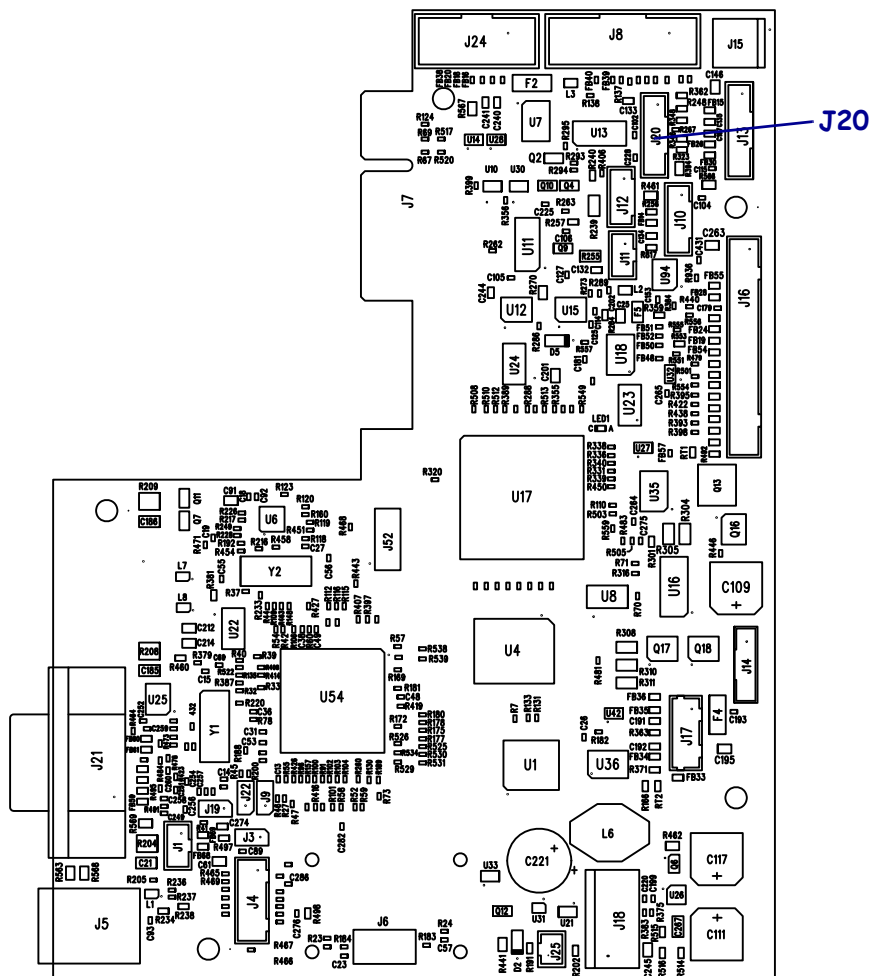


- Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

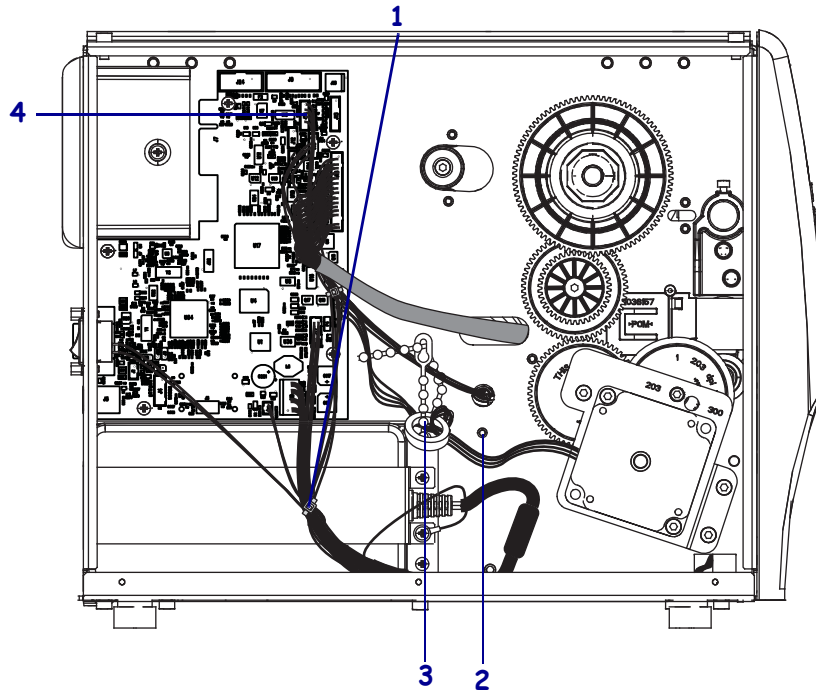
- See [Figure 66](#). Disconnect the media sensor from J20 on the main logic board (MLB).

Figure 66 • Disconnect the Media Sensor Cable



- See [Figure 67](#). Cut the cable tie securing the media sensor cable to the bundle of cables.

Figure 67 • Cable Routing

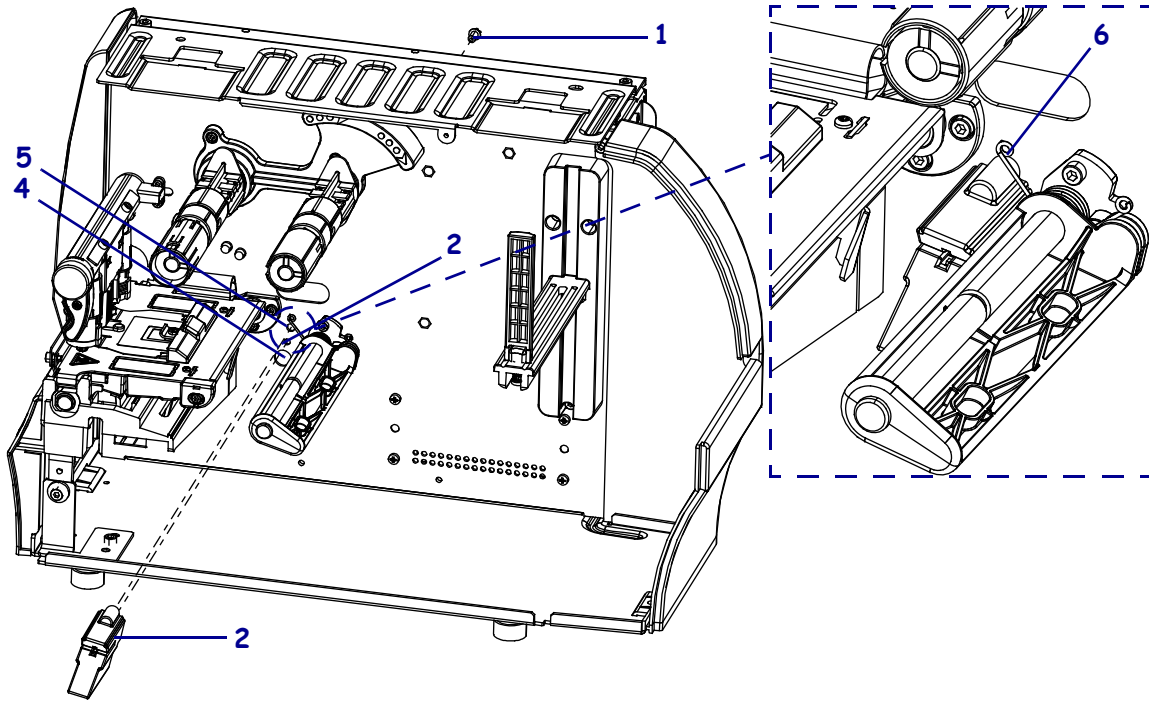


1	Cable tie
2	Media sensor cable
3	Beaded cable tie
4	Media sensor cable connector
5	Power supply mounting bracket
6	Beaded cable tie mounting hole

- Open the beaded cable tie to gain access to the media sensor cable.

- See [Figure 68](#). Remove the media sensor mounting screw.

Figure 68 • Remove the Media Sensor



1	Media sensor
2	Guide post hole
3	Mounting screw
4	Media sensor cable access hole
5	Mounting hole
6	Dancer spring

- Remove the media sensor while guiding the media sensor cable through the access hole.

Install the New Media Sensor Assembly

- See [Figure 68](#). Guide the new media sensor cable through the access hole.
- Ensure that the dancer spring is on top of the media sensor assembly. Insert the locating post into the locating hole in the main frame.
- Install the mounting screw.
- See [Figure 66 on page 124](#). Connect the media sensor cable to J20 on the main logic board (MLB).
- Bundle the cables, and then install the cable tie around the bundle.
- Reinsert all cables removed from the beaded cable tie, and then loosely close the beaded cable tie.

7. If the beaded cable is broken or is too short, replace it.
8. See [Figure 67 on page 125](#). Feed the beaded cable through the hole in the power supply mounting bracket and around the cables, and then loosely close the beaded cable tie.

Reinstall the Electronics Cover

1. Which type of electronics cover do you have?

If you have a...	Then...
ZT220	<ol style="list-style-type: none"> a. See Figure 63 on page 122. Insert the electronics cover into the printer. b. Reinstall the three mounting screws.
ZT210 ZT230	<ol style="list-style-type: none"> a. See Figure 65 on page 123. Slide the electronics cover onto the printer. b. Reinstall the three electronics side mounting screws. c. See Figure 64 on page 123. Open the media cover and reinstall the media side mounting screw.

2. **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.

3. Reconnect the AC power cord and all data cables.
4. Turn on (I) the printer. The installation is complete.

The installation is complete.



Black Mark Sensor Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Black Mark Sensor Maintenance Kit in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 69 • Kit Contents

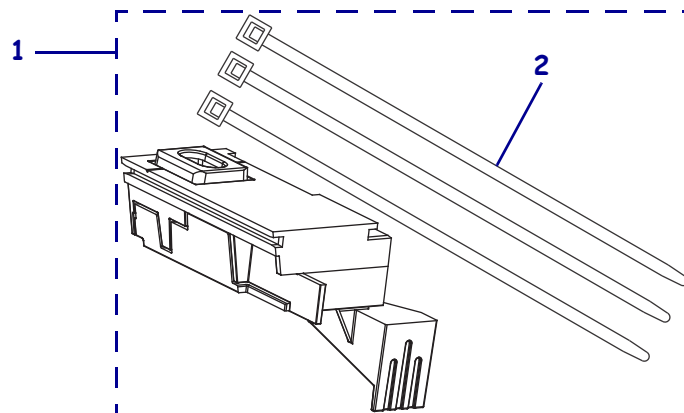


Table 18 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-022	Black Mark Sensor Maintenance Kit
	2	3	HWQ06020	Cable Tie, 0.9 × 3.62 (sold in quantities of 20)

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Antistatic Wrist Strap and Mat
- Wire Cutter
- Safety Glasses

Remove the Electronics Cover



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. Which model of printer are you working on?

If have a...	Then...
ZT220	Continue with <i>ZT220 Electronics Cover</i> .
ZT230 and ZT210	Go to <i>ZT230 and ZT210 Electronics Cover on page 130</i> .

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

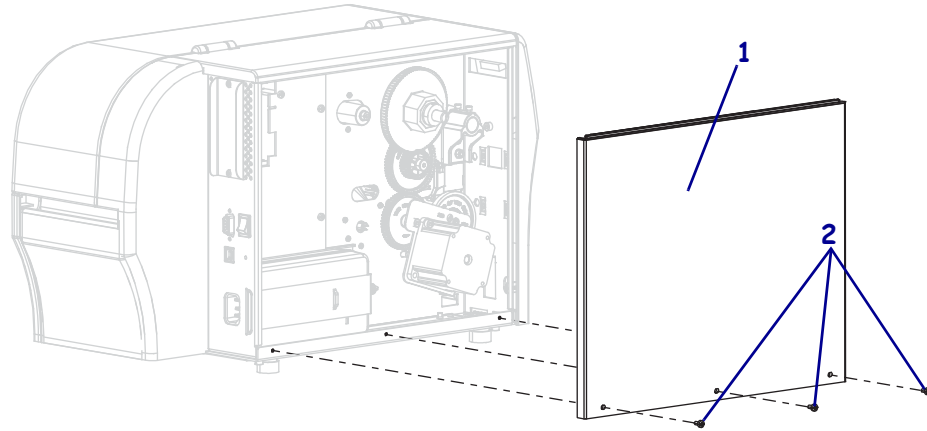
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

3. See [Figure 70](#). Remove the three screws securing the electronics cover.

Figure 70 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

4. Lift the electronics cover off of the printer.
5. Go to [Remove the Old Black Mark Sensor on page 132](#).

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

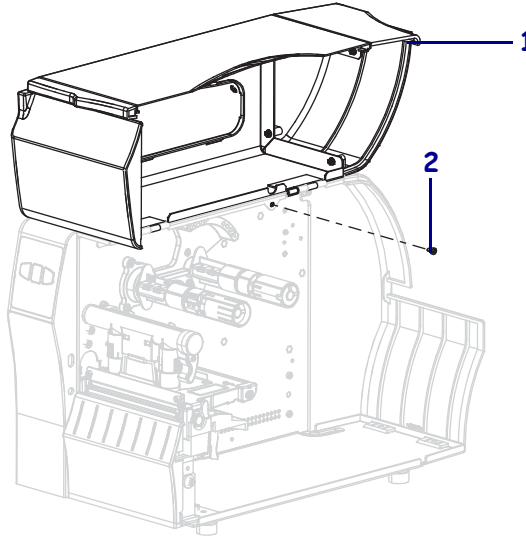
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 71](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

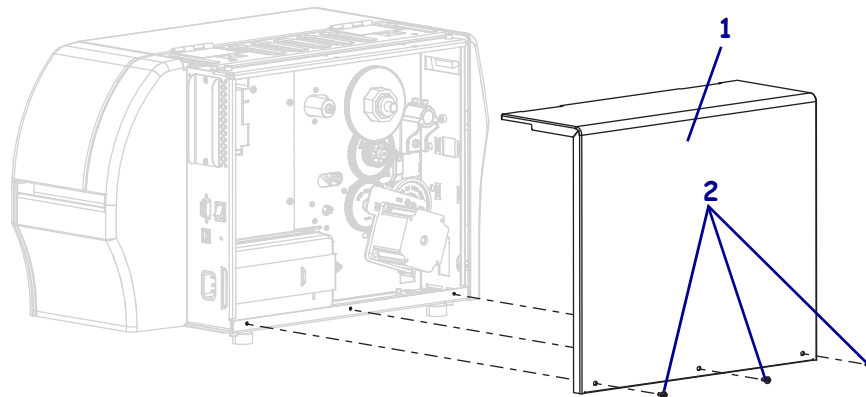
Figure 71 • Open the Media Door



1	Media door
2	Media side mounting screw

- See [Figure 72](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 72 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Continue with [Remove the Old Black Mark Sensor](#).

Remove the Old Black Mark Sensor

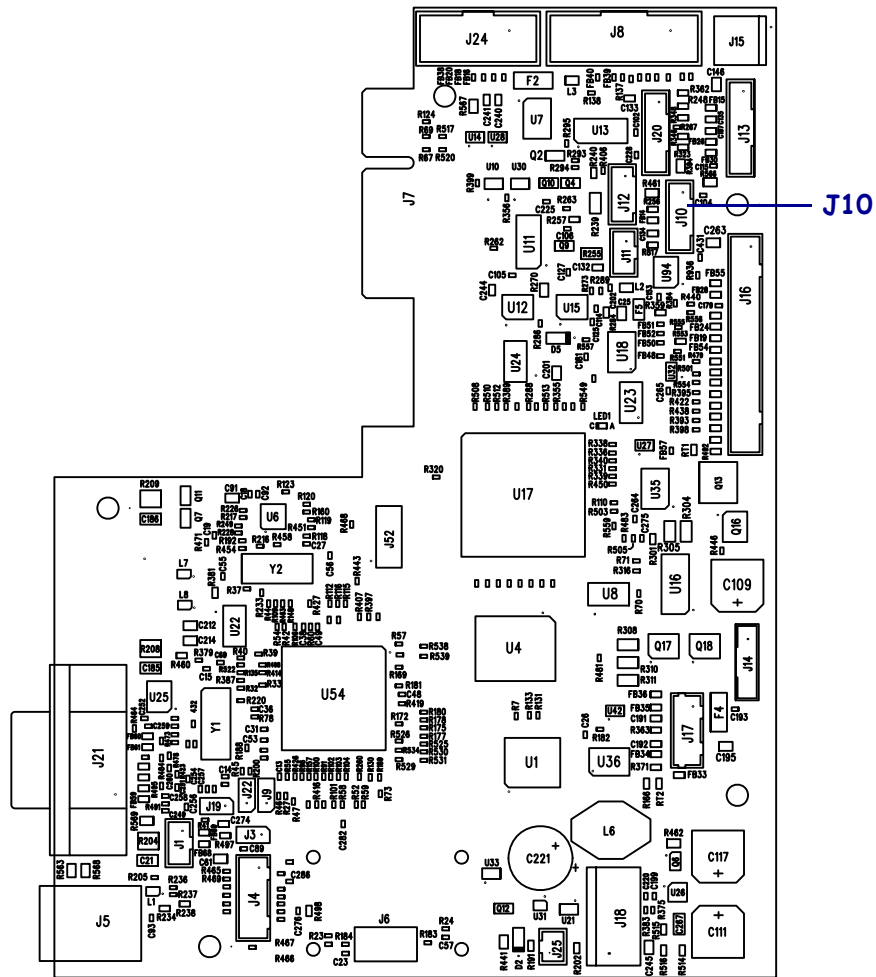


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. See [Figure 73](#). Disconnect the black mark sensor cable from J10 on the main logic board (MLB).

Figure 73 • Disconnect the Black Mark Sensor Cable



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

Cut the cable tie securing the black mark sensor cable to the cable bundle.

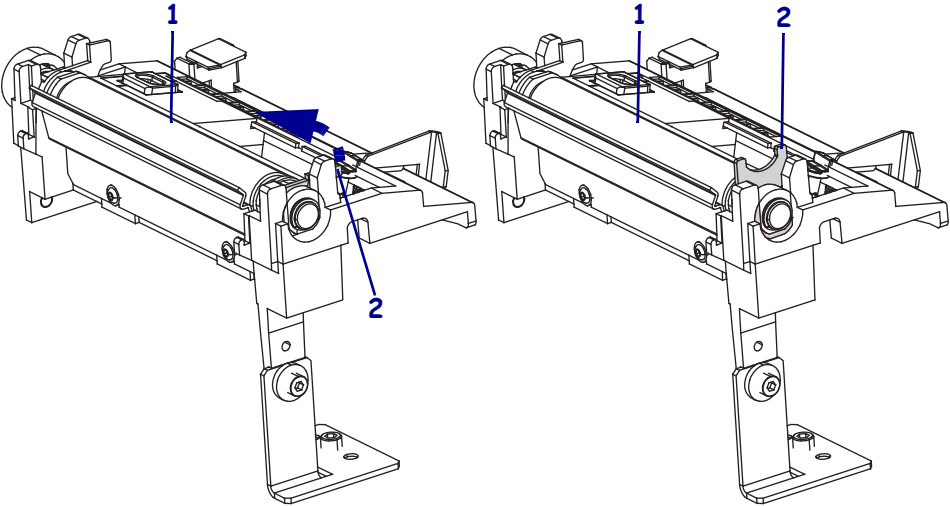
4. Cut the cable tie securing the black mark cable to the power supply tab.

-
5. **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.
-

Open the media cover and remove the media and ribbon.

6. See [Figure 74](#). Turn the platen roller outside lock counterclockwise until it stops.

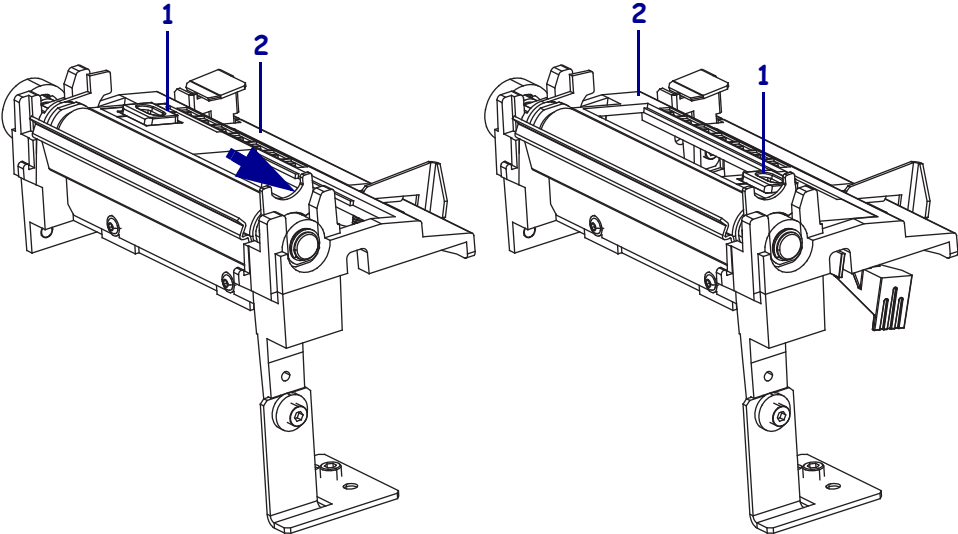
Figure 74 • Unlock the Outside Platen Bearing Lock



1	Platen roller
2	Platen roller outside bearing lock

7. See [Figure 75](#). Slide the black mark sensor to the outside of the platen housing.

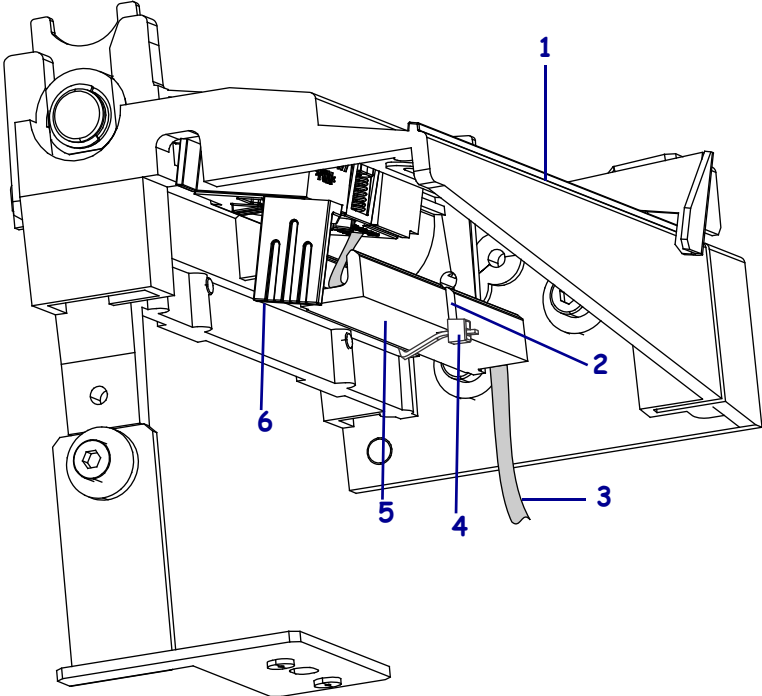
Figure 75 • Slide the Black Mark Sensor



1	Black mark sensor
2	Platen housing

8. See [Figure 76](#). Cut the black mark sensor cable tie securing it to the platen housing cable channel.

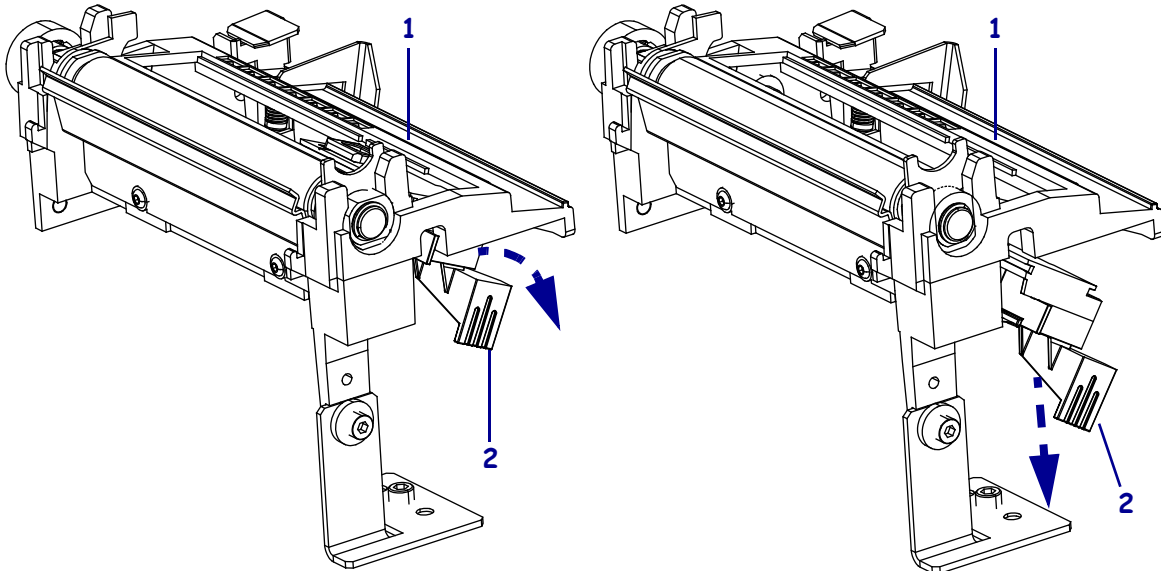
Figure 76 • Remove the Cable Tie



1	Platen housing
2	Platen housing cable channel cable tie mounting slot
3	Black mark sensor cable
4	Cable tie
5	Platen housing cable channel
6	Black mark sensor

9. See [Figure 77](#). Rotate the black mark sensor clockwise.

Figure 77 • Remove the Black Mark Sensor



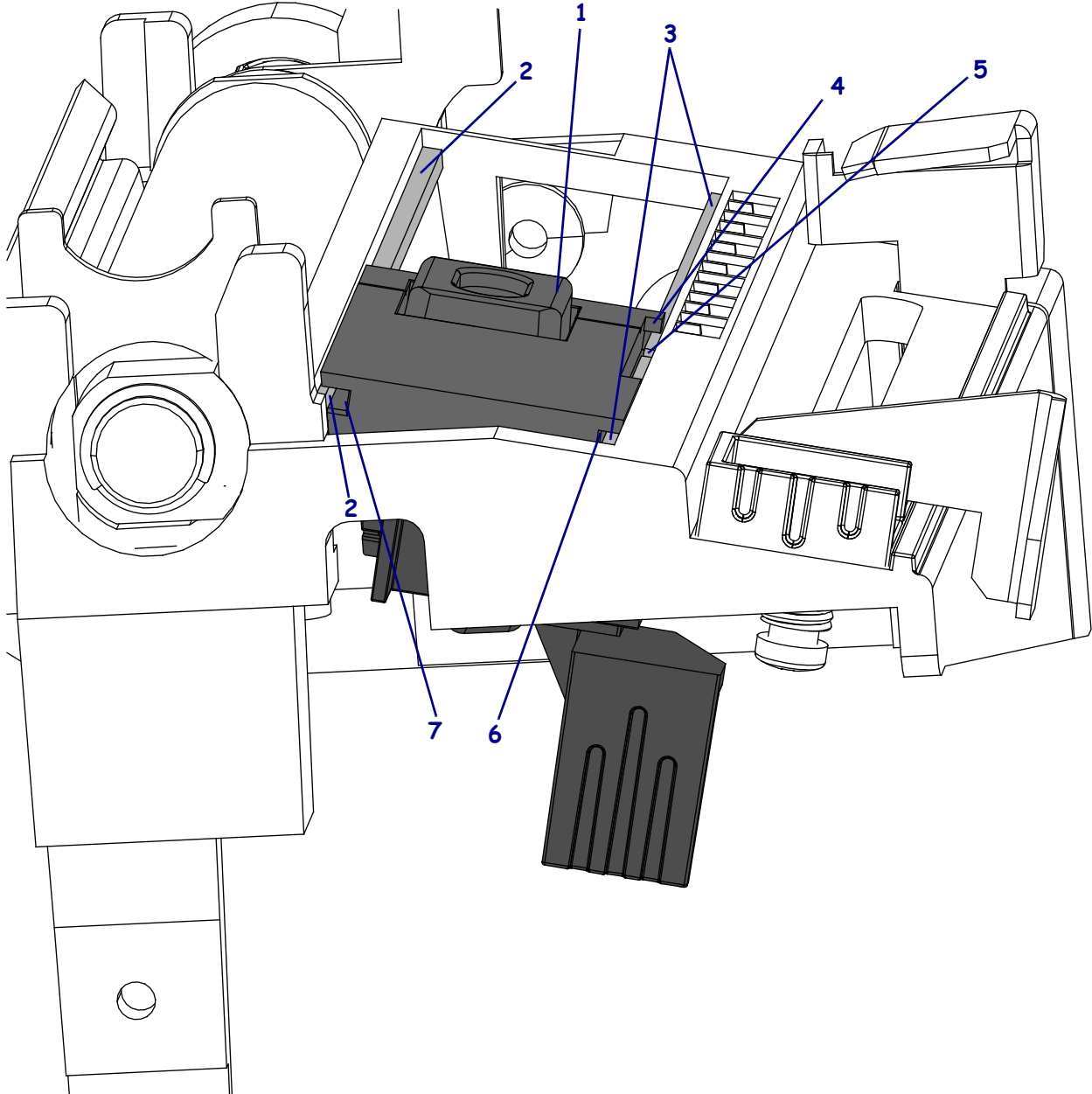
1	Platen housing
2	Black mark sensor

10. Pull the black mark sensor down and out of the platen housing.
11. Guide the black mark sensor cable out of the printer, and then discard the black mark sensor.

Install the New Black Mark Sensor

1. See [Figure 78](#). Set the black mark sensor on the front groove onto the front tongue.

Figure 78 • Install the Black Mark Sensor



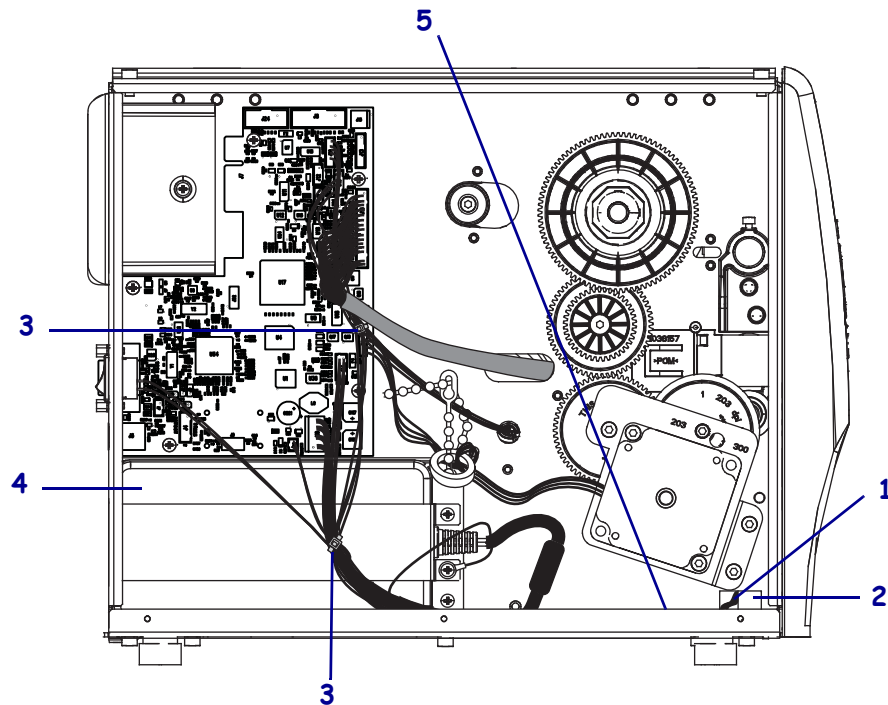
1	Black mark sensor
2	Front tongue
3	Rear tongue
4	Black mark sensor installation tab
5	Black mark sensor installation slot
6	Rear groove
7	Front groove

2. Lift the rear of the black mark sensor while aligning the black mark sensor installation tab with the black mark sensor installation slot.

3. Raise the rear of the black mark sensor until the groove aligns with rear tongue.
4. Slide the black mark sensor toward the inside of the printer until it slides freely on the front and rear tongues.
5. See [Figure 76 on page 135](#). Insert the black mark sensor cable into the platen housing cable channel.
6. Guide the cable tie through the platen housing cable channel mounting slot and around the black mark sensor cable.
Loosely install the cable tie. The black mark sensor cable must have slack to allow for movement. The cable tie will be tightened later.
7. Move the black mark sensor to the outside of the platen housing as far as it will go, and then tighten the cable tie.
8. Slide the black mark sensor toward the inside of the platen housing until it is past the outside platen roller bearing.
9. See [Figure 74 on page 133](#). Turn the outside platen roller lock clockwise until it stops and the platen roller is secure.
10. Guide the black mark sensor cable through the access hole and route it to the MLB.
11. See [Figure 73 on page 132](#). Connect the black mark cable to J10 on the MLB.

12. See [Figure 79](#). Install a new cable tie around the cable bundle, and then tighten the cable tie.
13. Insert a new cable tie through the power supply tab and around the cable bundle, and then tighten the cable tie.

Figure 79 • Cable Routing



1	Black mark sensor cable
2	Access hole
3	Cable ties (2)
4	Power supply
5	Cable clamp

14. Insert the black mark cable into the cable clamp on the base of the printer.

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none"> a. See Figure 70 on page 130. Insert the electronics cover into the printer. b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none"> a. See Figure 72 on page 131. Slide the electronics cover onto the printer. b. Reinstall the three electronics side mounting screws. c. See Figure 71 on page 131. Open the media cover and reinstall the media side mounting screw.

2. **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.

3. Reconnect the AC power cord and all data cables.
4. Turn on (I) the printer

The installation is complete.



Ribbon Sensor Assembly Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Ribbon Sensor Assembly Maintenance Kit on the following printers:

- ZT230™
- ZT220™
- ZT210™

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 80 • Kit Contents

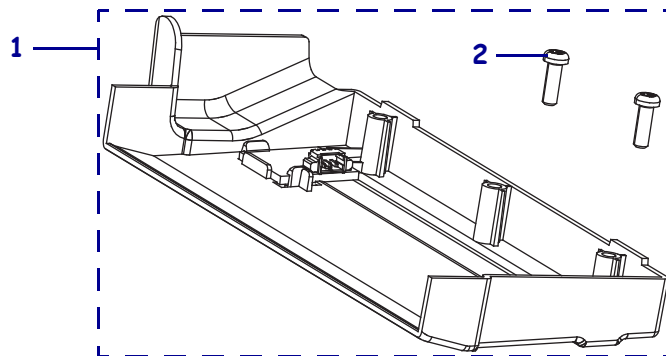


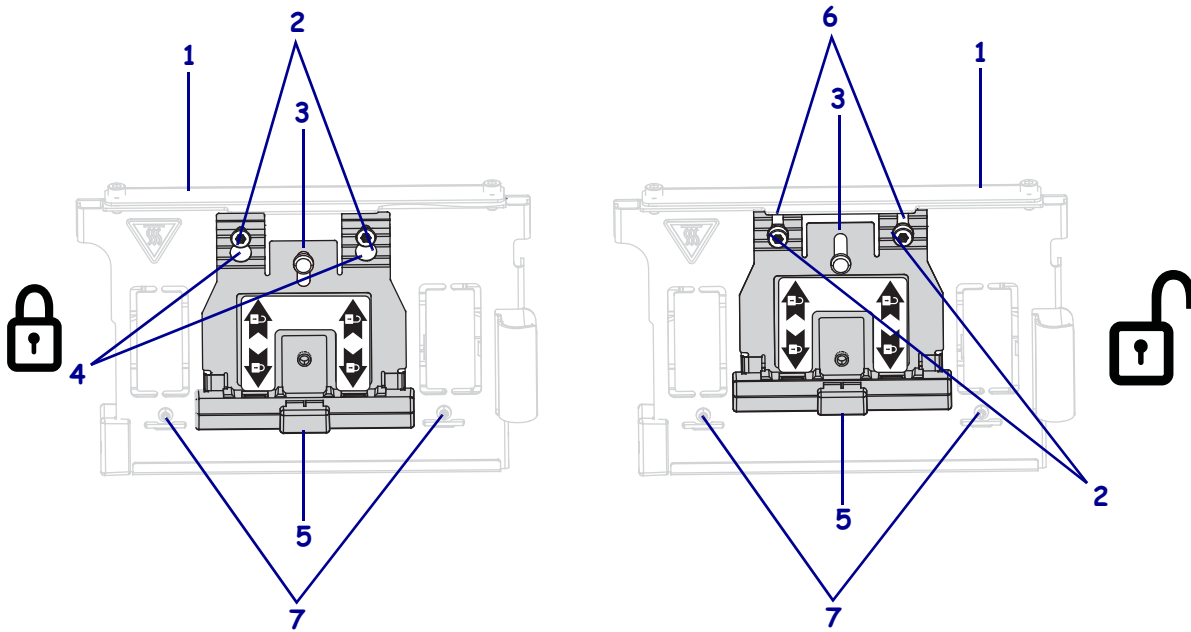
Table 19 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-023	Ribbon Sensor Assembly Maintenance Kit
	2	2	N/A	Screw, M2.5 × 8

N/A = Not available as a separate part for purchase (listed for identification purposes only).

3. See [Figure 81](#). Slide the printhead latch forward to release the printhead.

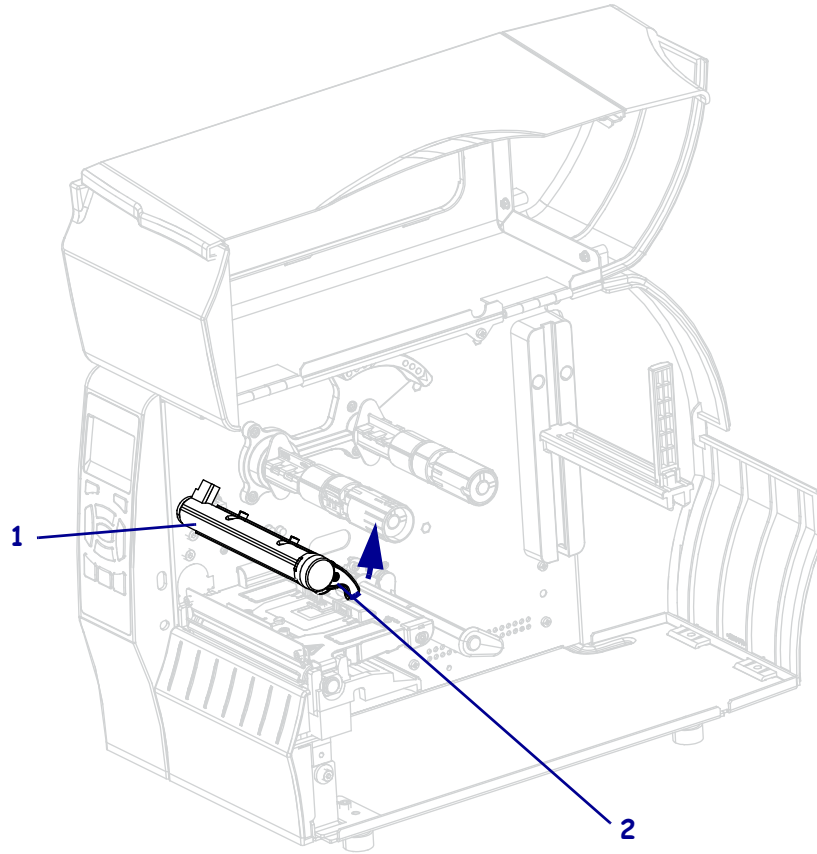
Figure 81 • Unlatch the Printhead



1	Print mechanism
2	Printhead assembly shoulder screws (2)
3	Printhead latch
4	Keyhole (large hole) (2)
5	Latch handle
6	Keyhole (small hole) (2)
7	Printhead cable cover and ribbon sensor mounting screws (2)

4. See [Figure 82](#). Swing the toggle bar assembly to the open position.

Figure 82 • Open the Toggle Bar



1	Toggle bar
2	Toggle bar handle



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

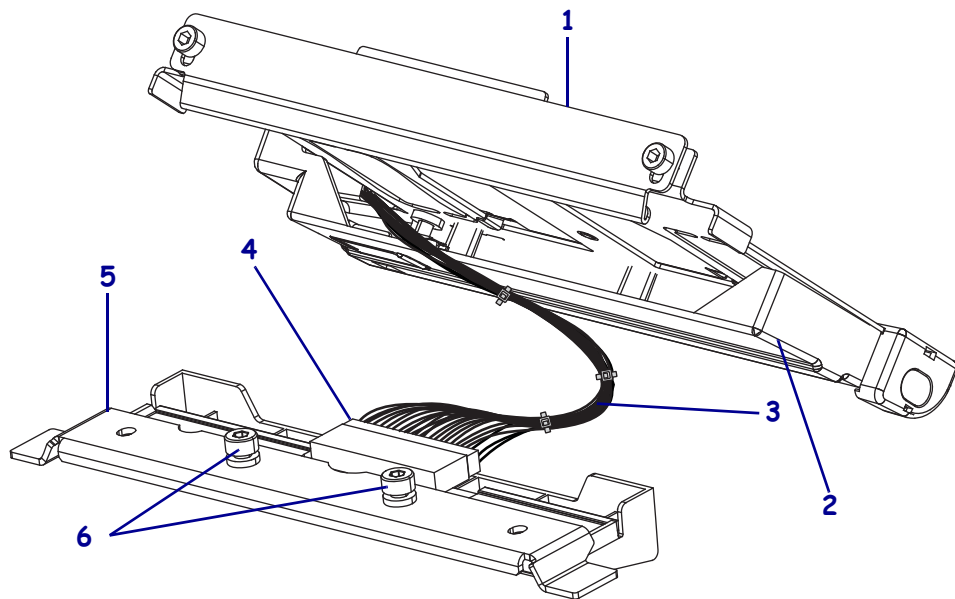
Connect yourself to an antistatic device.



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

See [Figure 83](#). Pull the printhead out of the print mechanism, and then disconnect the printhead cable.

Figure 83 • Disconnect the Printhead Cable

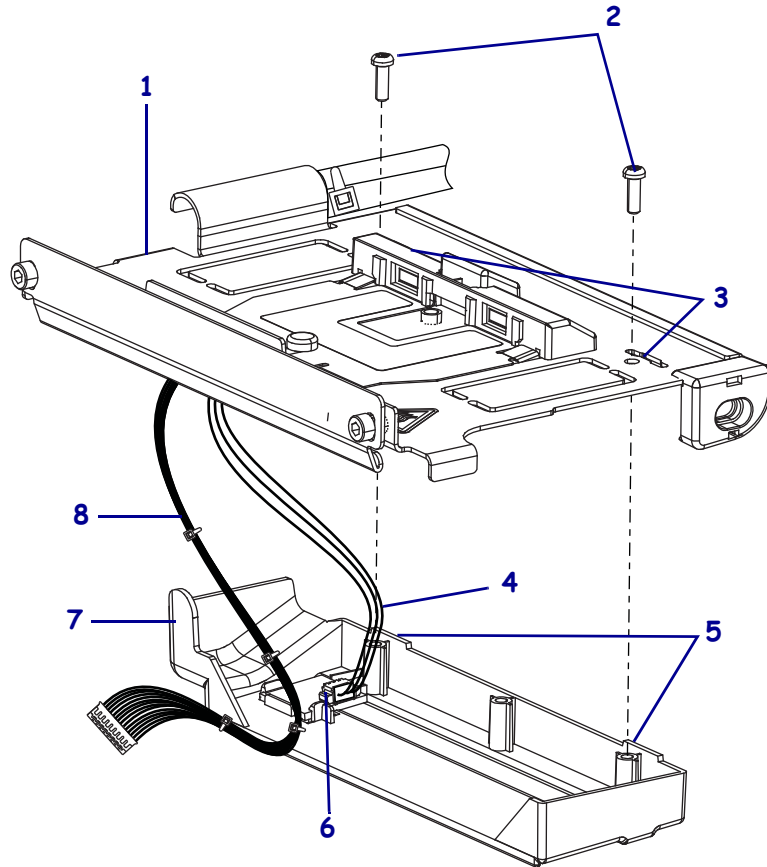


1	Print mechanism assembly
2	Printhead cable cover and ribbon sensor assembly
3	Printhead cable
4	Printhead cable connector
5	Printhead assembly
6	Printhead assembly shoulder screws (2)

7. Remove the printhead from the printer.

8. See [Figure 84](#). Remove and discard the two printhead cable cover mounting screws.

Figure 84 • Remove the Mounting Screws



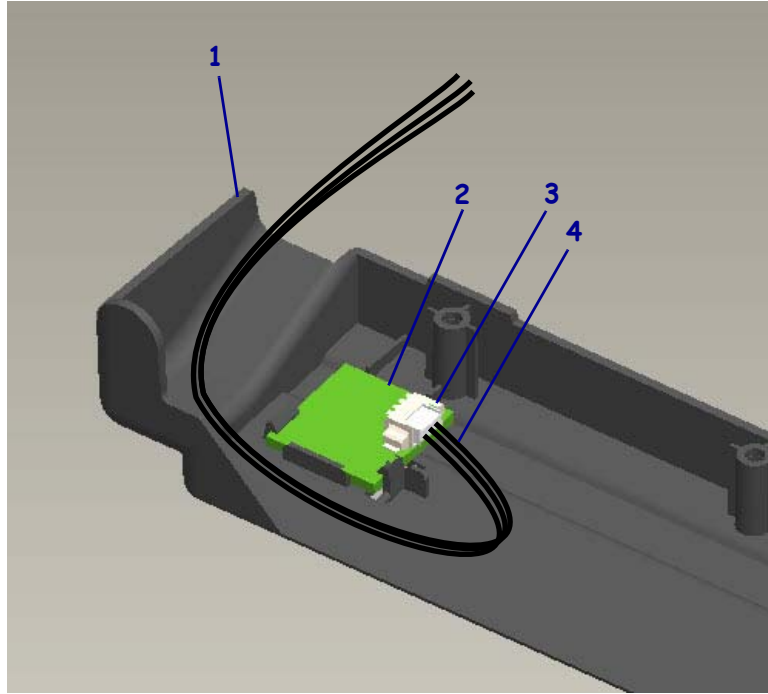
1	Print mechanism support bracket
2	Mounting screws (2)
3	Slots (2)
4	Ribbon sensor cable
5	Tabs (2)
6	Ribbon sensor cable connector
7	Printhead cable cover
8	Printhead cable

9. Drop the printhead cable cover and ribbon sensor out of the print mechanism and disconnect the ribbon sensor cable.
10. Remove and discard the printhead cable cover and ribbon sensor.

Install the Printhead Cable Cover and Ribbon Sensor Assembly

1. See [Figure 85](#). Connect the ribbon sensor cable to the new ribbon sensor assembly cable connector.

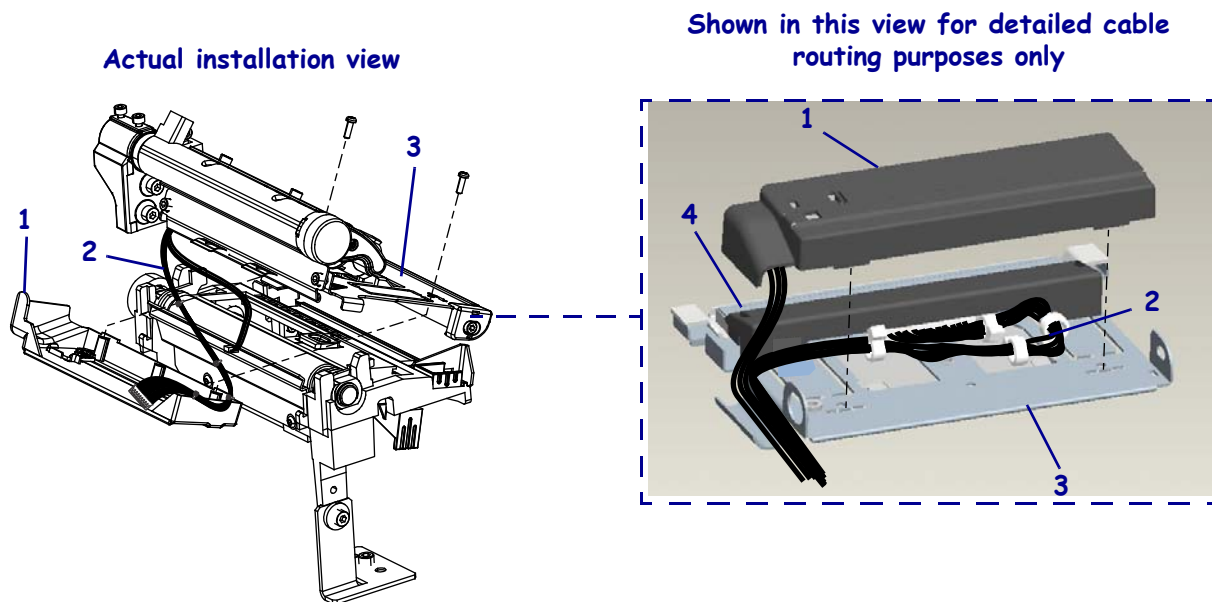
Figure 85 • Ribbon Sensor Cable Routing



1	Printhead cable cover
2	Ribbon sensor assembly
3	Ribbon sensor cable connector
4	Ribbon sensor cable

- See [Figure 86](#). Route the printhead cable as shown.

Figure 86 • Printhead Cable Routing



1	Printhead cable cover and ribbon sensor
2	Printhead cable
3	Print mechanism support bracket
4	Printhead assembly

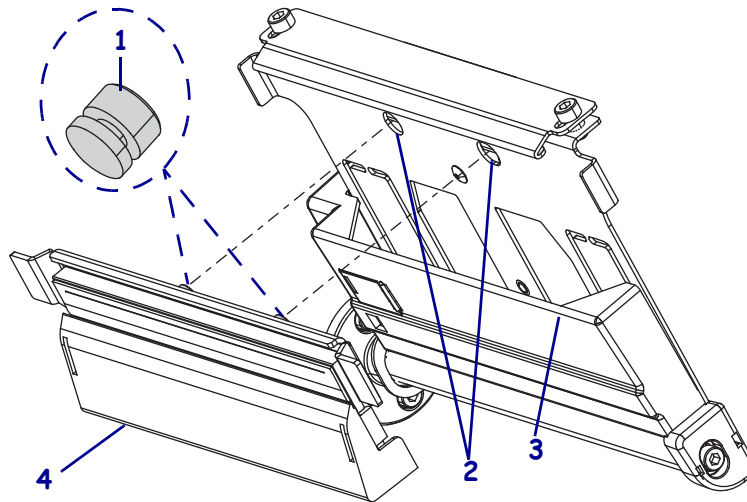


Note • Ensure that the printhead and ribbon sensor cables are not pinched between the print mechanism support bracket and the printhead cable cover.

- Set the printhead cable cover and ribbon sensor assembly into the print mechanism.
- See [Figure 81 on page 144](#). Install the two mounting screws ensuring that the tabs on the printhead cable cover are inserted in the slots in the print mechanism.
- See [Figure 83 on page 146](#). Reconnect the printhead cable assembly to the printhead assembly.
- Carefully slide the printhead cable into the space between the printhead support bracket and the printhead cable cover and ribbon sensor.

7. See [Figure 81 on page 144](#). Ensure that the printhead latch is in the unlatched position.
See [Figure 87](#). Insert the printhead assembly shoulder screws through the print mechanism support bracket mounting holes and the large keyholes in the printhead latch.

Figure 87 • Install the Printhead



1	Shoulder screws (2)
2	Print mechanism support bracket mounting holes (2)
3	Printhead cable cover and ribbon sensor
4	Printhead assembly

8. Ensure the printhead assembly is making full contact with the print mechanism support bracket.
9. See [Figure 81 on page 144](#). While holding the printhead in place, lock the printhead into the print mechanism by sliding the printhead latch toward the rear of the printer.
10. Refer to the printer's user guide for instructions on cleaning the printhead.
11. **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.

12. Reconnect the AC power cord and all data cables, and then turn on (I) the printer.

The installation is complete.

Head-Open Sensor Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Head-Open Sensor Maintenance Kit in the ZT200™ series printers.

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 88 • Kit Contents

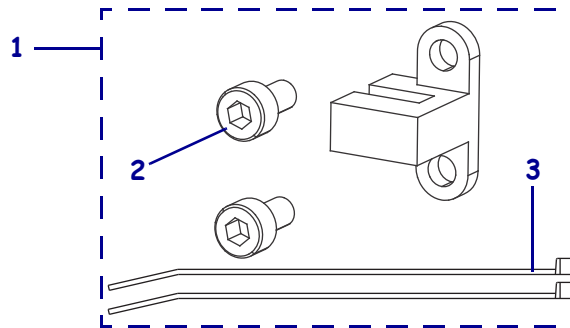


Table 20 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-025	Head-Open Sensor Maintenance Kit
	2	2	HW78805	Screw, M3 × 0.5 × 6 (sold in quantities of 50)
	3	2	HWQ06020	Cable Tie, 0.09 × 3.62 (sold in quantities of 20)

Tools Required



Tools • You need these tools to complete this procedure:

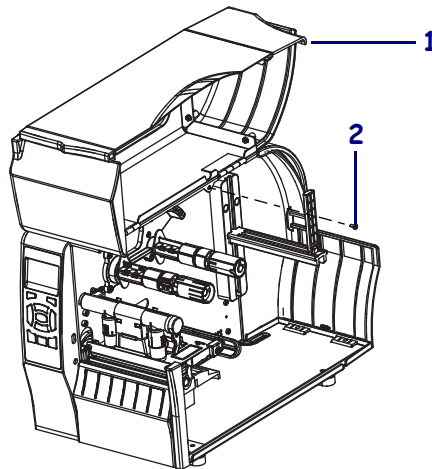
- Phillips Screwdriver Set
- Antistatic Wriststrap and Mat
- Wire Cutters

Remove the Electronics Cover

ZT230 and ZT210 Electronics Cover

1. See [Figure 89](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

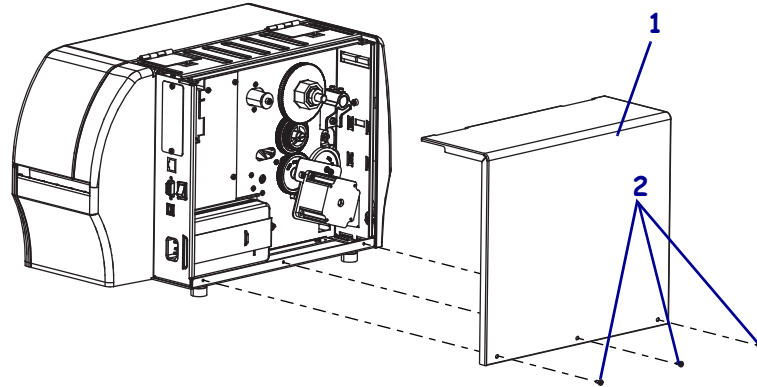
Figure 89 • Open the Media Door



1	Media door
2	Media door mounting screw

2. See [Figure 90](#). Close the media cover and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 90 • Remove the Metal Electronics Cover



1	Electronics cover
2	Mounting screws (3)

3. Lift the electronics cover off of the printer.

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

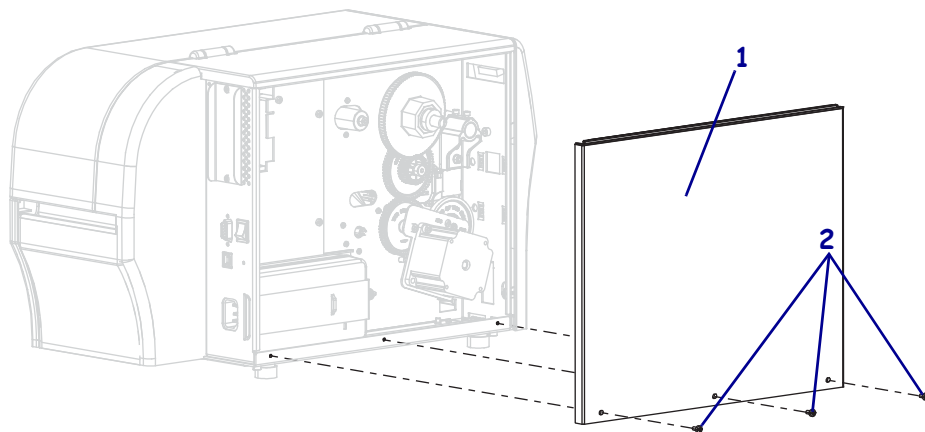
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

3. See [Figure 91](#). Remove the three screws securing the electronics cover.

Figure 91 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

4. Lift the electronics cover off of the printer.

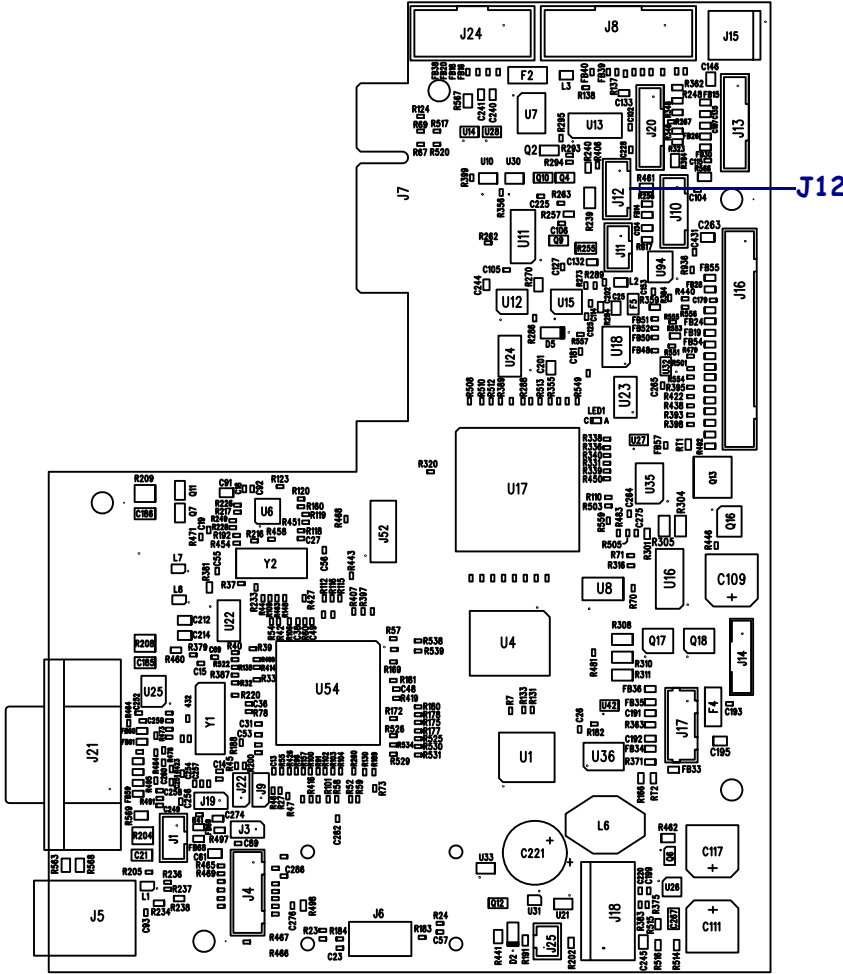
Remove the Old Printhead Open Sensor



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

Connect yourself to an antistatic device.

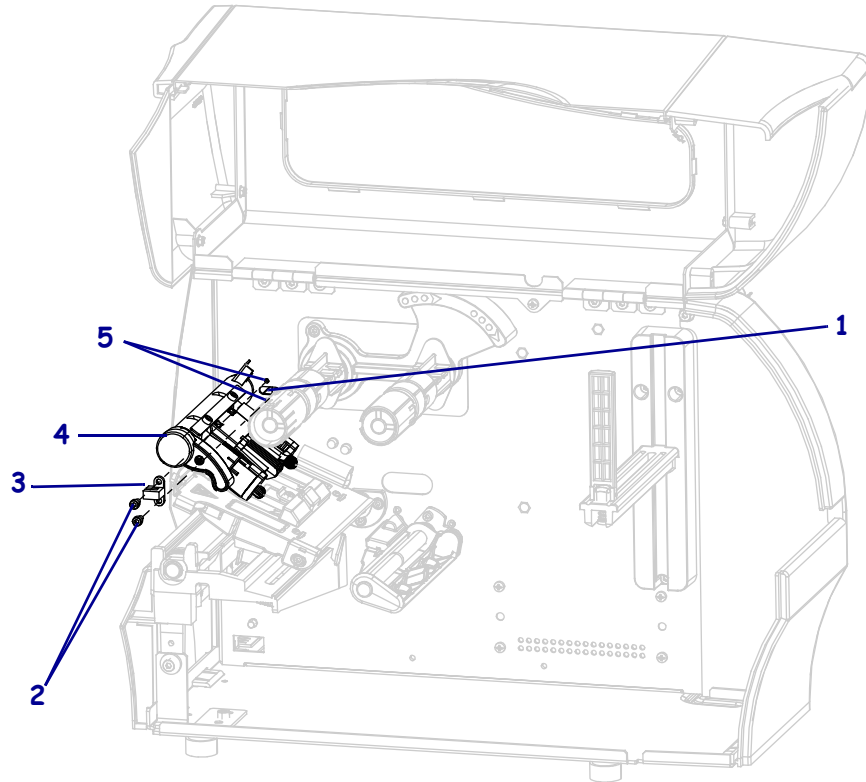
Figure 92 • Disconnect the Head Open Cable



2. Make a note of the cable routing, and then remove any cable ties and open any cable clamps securing the head-open sensor cable.

3. See [Figure 93](#). Open the pressure bar to access the head-open sensor.
4. Remove the two head-open sensor mounting screws.

Figure 93 • Remove the Head-Open Sensor



1	Access hole
2	Mounting screws (2)
3	Head-open sensor
4	Toggle bar
5	Mounting holes (2)

5. Remove the head-open sensor while guiding the cable through the access hole.

Install the New Head Open Sensor

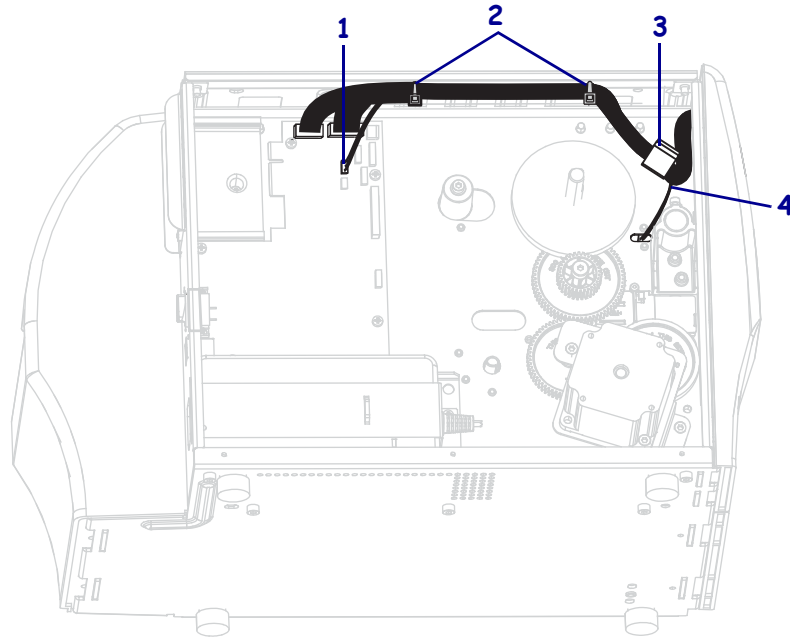
1. See [Figure 93](#). Guide the head-open cable through the access hole.
2. Align the head-open sensor with the mounting holes in the printer, and then install the two mounting screws.
3. Which model of printer are you working on?

If you have a...	Then...
ZT210 ZT230	Continue with ZT230 and ZT210 Cable Routing .
ZT220	Go to ZT220 Cable Routing on page 159.

ZT230 and ZT210 Cable Routing

1. See [Figure 94](#). Route the cable through the cable clamp, and then install the two cable ties removed previously.

Figure 94 • ZT230 and ZT210 Cable Routing



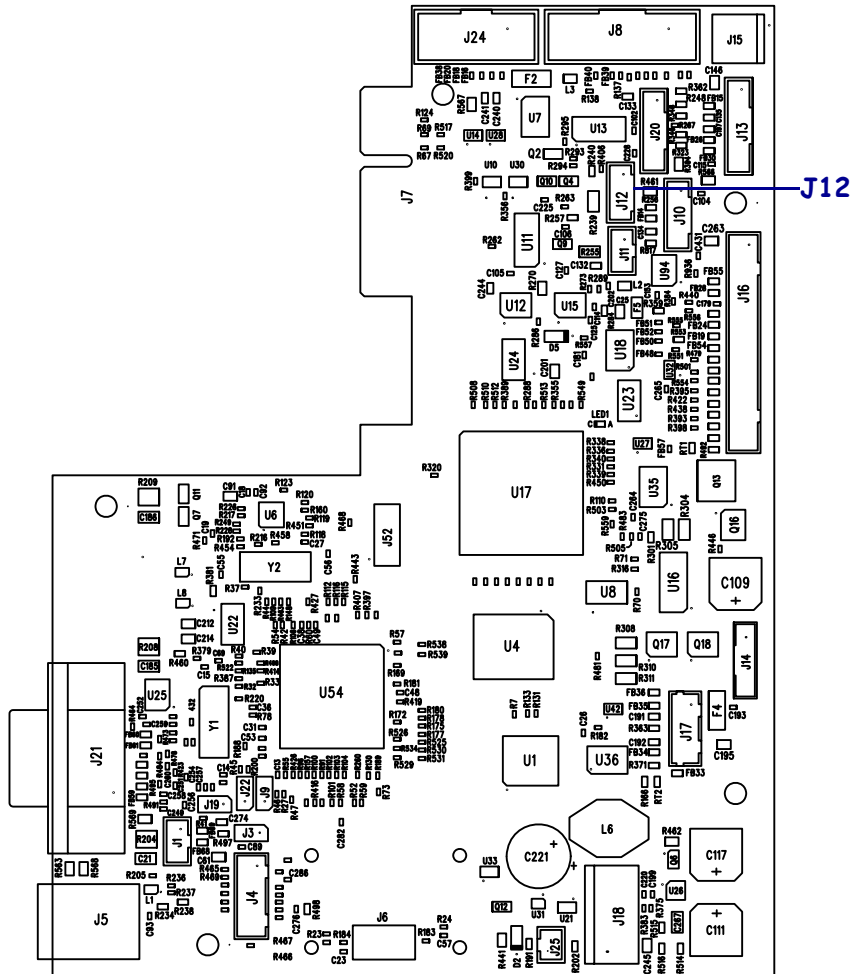
1	J12 MLB connector
2	Cable ties (2)
3	Cable clamp
4	Head-open sensor cable



Important • Ensure that the cable will not interfere with any moving parts and that it will not be pinched in anyway.

2. See [Figure 95](#). Connect the head-open sensor cable to J12 on the main logic board (MLB).

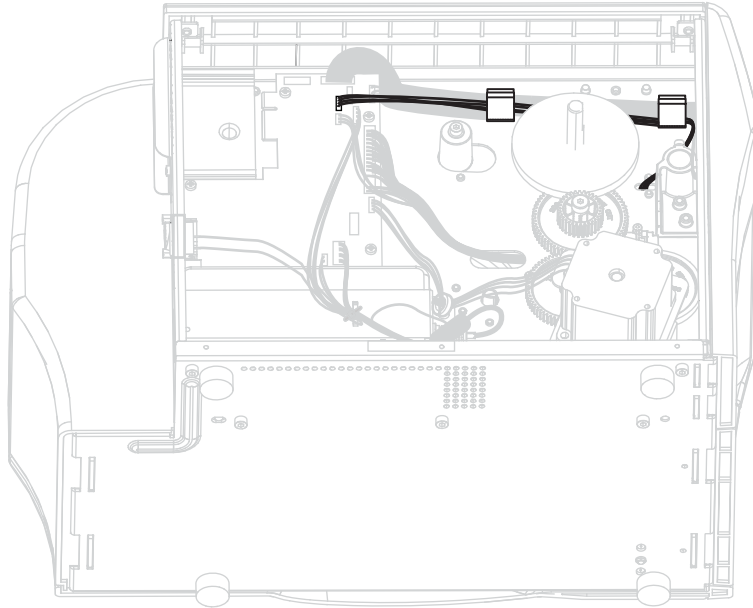
Figure 95 • Disconnect the Head-Open Cable



ZT220 Cable Routing

1. See [Figure 96](#). Route the cable through the cable clamps

Figure 96 • ZT220 Cable Routing



2. See [Figure 95 on page 158](#). Connect the head-open sensor cable to J12 on the main logic board (MLB).

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none">a. See Figure 91 on page 154. Insert the electronics cover into the printer.b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none">a. See Figure 90 on page 153. Slide the electronics cover onto the printer.b. Reinstall the three electronics side mounting screws.c. See Figure 89 on page 152. Open the media cover and reinstall the media side mounting screw.

2. **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.

3. Reconnect the AC power cord and all data cables.
4. Turn on (I) the printer.

The installation is complete.

Take-Label Sensor Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the peel option in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 97 • Kit Contents

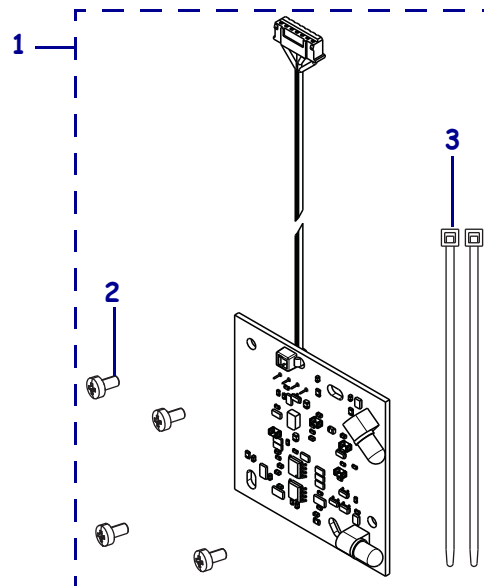


Table 21 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-024	Take-Label Sensor Maintenance Kit
	2	4	HW43968	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
	3	2	HWQ06020	Cable Tie, 0.09 × 3.62 (sold in quantities of 20)

Tools Required

Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Antistatic Wriststrap and Pad
- Metric Hex Key (Allen wrench) Set
- Wire Cutters

Remove the Electronics Cover



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. Which model of printer are you working on?

If have a...	Then...
ZT220	Continue with <i>ZT220 Electronics Cover</i> .
ZT230 ZT210	Go to <i>ZT230 and ZT210 Electronics Cover</i> on page 163.

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

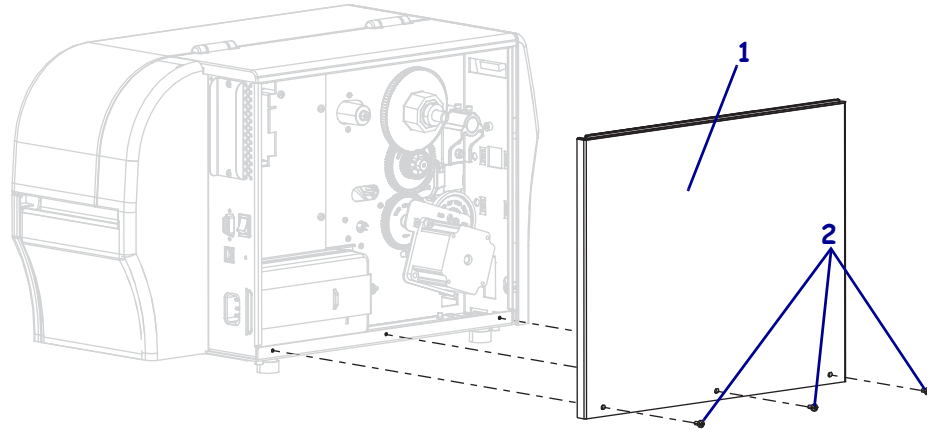
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 98](#). Remove the three screws securing the electronics cover.

Figure 98 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Go to [Remove the Control Panel on page 165](#).

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

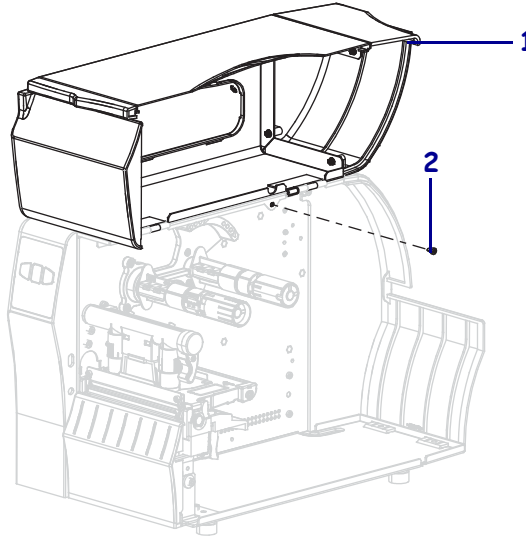
Turn off (O) the printer and disconnect the AC power cord and all data cables.

- 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.

Open the media door and remove the media and ribbon.

3. See [Figure 99](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

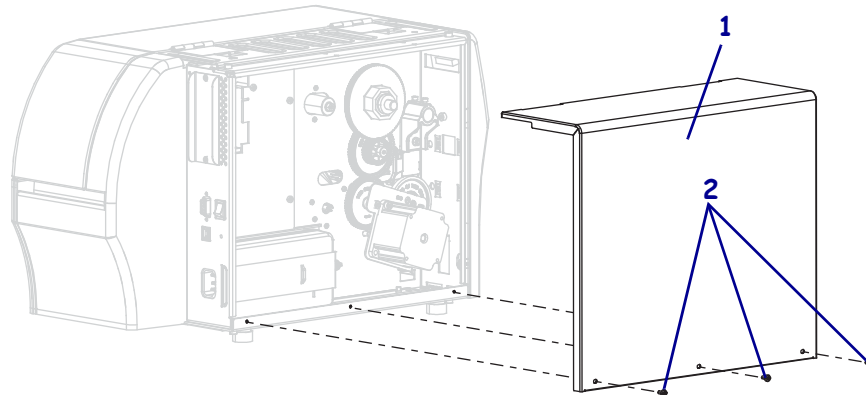
Figure 99 • Open the Media Door



1	Media door
2	Media side mounting screw

4. See [Figure 100](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 100 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

5. Lift the electronics cover off of the printer.
6. Continue with [Remove the Control Panel](#) on page 165.

Remove the Control Panel



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

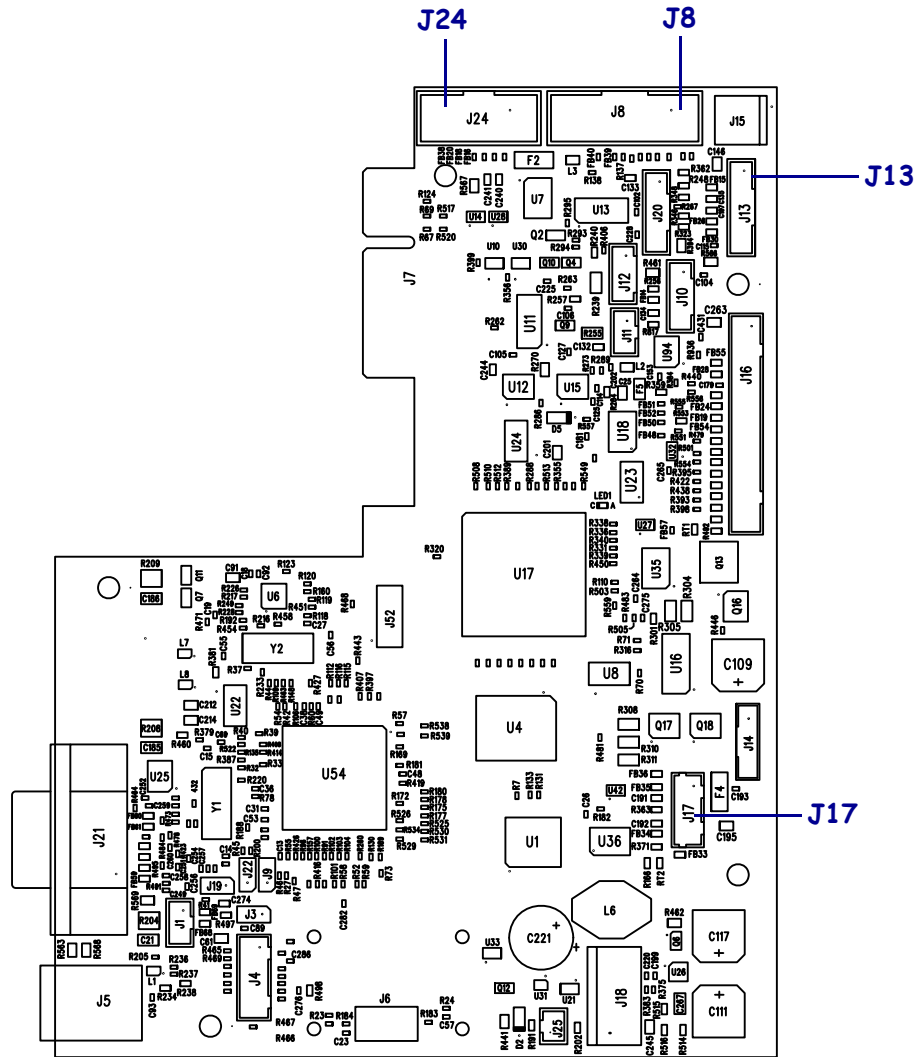
Connect yourself to an antistatic device.

2. Which model of printer are you working on?

If you have a...	Then...
ZT220 ZT210	See Figure 101 . Disconnect the control panel data cable from J8 on the main logic board (MLB).
ZT230	See Figure 101 . Disconnect the control panel cables from J8 and J24 on the main logic board (MLB).

3. Disconnect the take-label sensor cable from J13 on the MLB.

Figure 101 • Disconnect the Control Panel

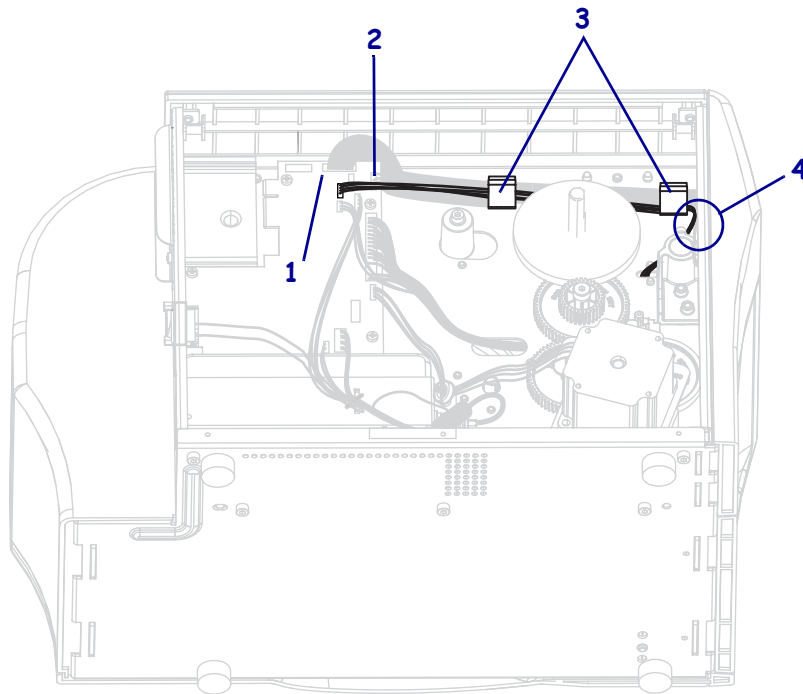


J8	ZT220/ZT230/ZT210 control panel data cable connector
J13	Take-label sensors cable connector
J17	Liner take-up cable connector
J24	ZT230 control panel data cable connector

4. Which model of printer are you working on?

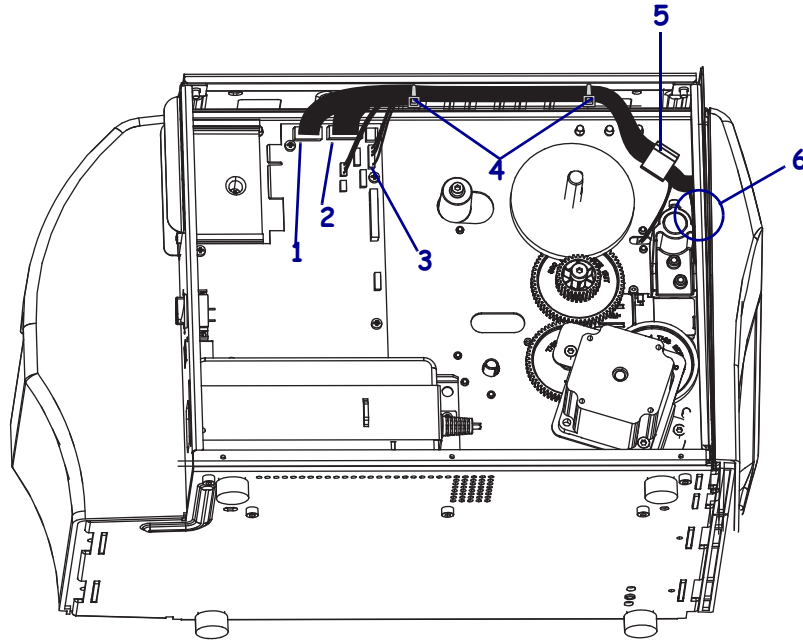
If you have a...	Then...
ZT220	<p>a. See Figure 102 on page 167. Remove the control panel and take-label cables from the two cable clamps.</p> <p>b. Continue with step 5 on page 169.</p>
ZT230 ZT210	<p>a. See Figure 103 on page 168. Cut the two cable ties securing the cables to the top plate.</p> <p>b. Remove the control panel and take-label cables from the cable clamp.</p> <p>c. Continue with step 5 on page 169.</p>

Figure 102 • ZT220 Cable Routing



1	J8, ZT220 control panel connector (MLB)
2	J13, Take-label sensor cable connector (MLB)
3	Cable clamps (2)
4	Take-label sensor cable

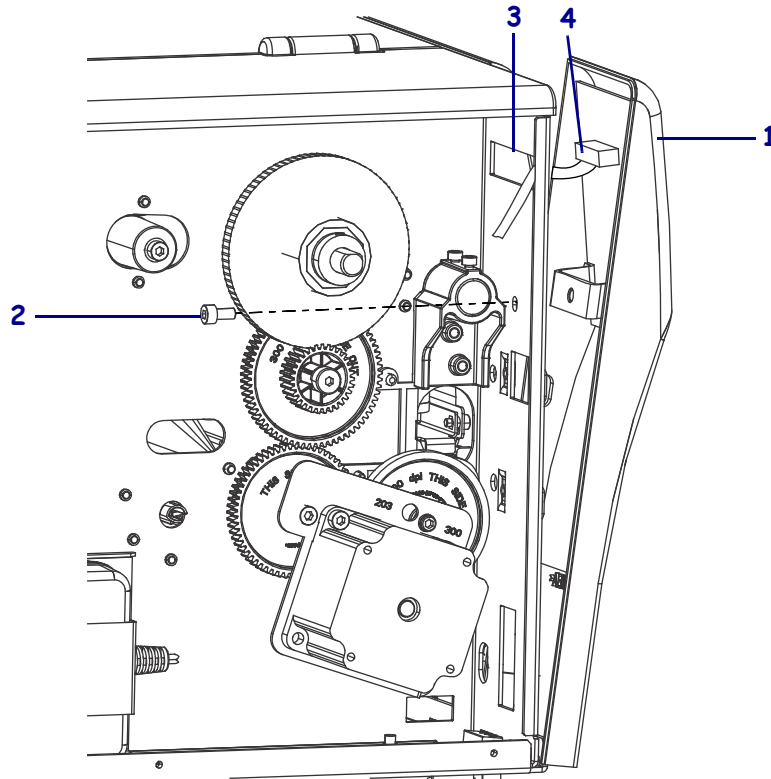
Figure 103 • ZT230 and ZT210 Cable Routing



1	J24, ZT230 10-pin control panel connector
2	J8, ZT220 and ZT210 control panel connector
3	J13, Take-label sensor cable connector (MLB)
4	Cable ties (2)
5	Cable clamp
6	Take-label sensor cable

5. See [Figure 104](#). Remove the control panel mounting screw.

Figure 104 • Remove the Control Panel



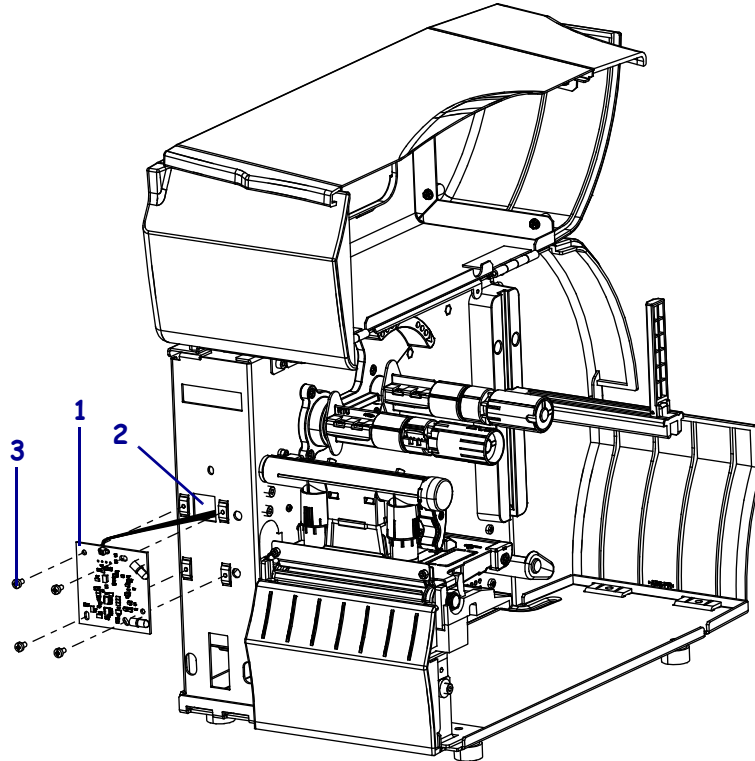
1	Control panel
2	Mounting screw
3	Control panel cable access hole
4	Control panel cable

6. Tip the top of the control panel forward, and then slide the control panel out of the printer.

Remove the Old Take-Label Sensor Board

1. See [Figure 105](#). Remove and discard the four take-label sensor mounting screws.

Figure 105 • Remove the Take-Label Sensor Board



1	Take-label sensor board
2	Access hole
3	Mounting screws (4)

2. Remove and discard the old take-label sensor board from the printer.

Install the New Take-Label Sensor

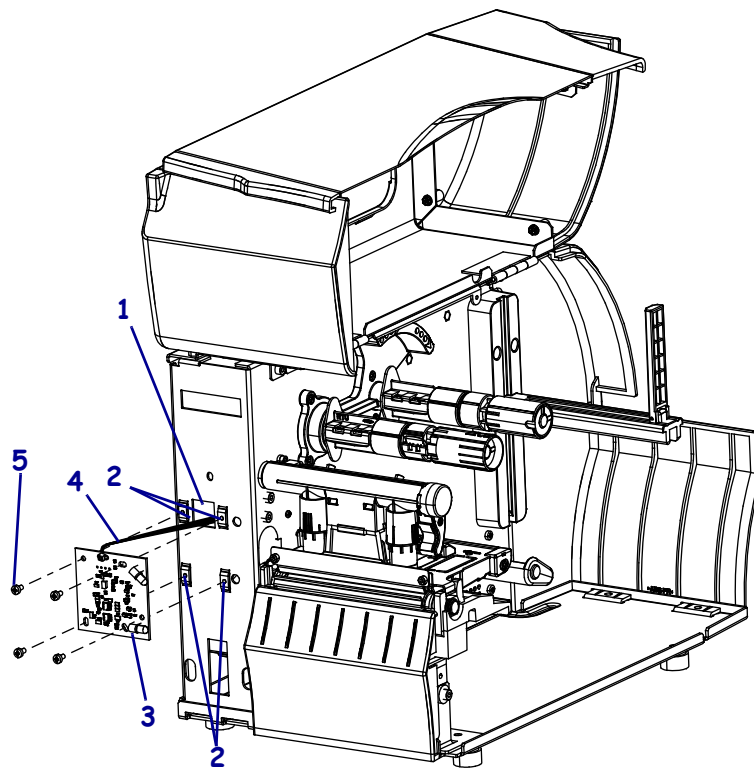


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. See [Figure 106](#). Guide the take-label cable through the access hole.
3. Align the take-label sensor board, with sensors facing out and to the right, with the four mounting holes.

Figure 106 • Install the Take-Label Sensors



1	Access hole
2	Mounting holes (4)
3	Take-label sensor board
4	Take-label sensor board cable
5	Mounting screws (4)

4. Install the upper left mounting screw first, and then the lower right mounting screw.
5. Install the other two mounting screws.

Reinstall the Control Panel



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. Which model of printer are you working on?

If you have a...	Then...
ZT230 ZT210	<ol style="list-style-type: none"> a. See Figure 106 on page 171. Guide the control panel cable through the access hole. b. Slide the control panel into the printer, and then install the mounting screw. c. Figure 101 on page 166. Connect the control panel cables to J8 and J24 on the MLB. d. See Figure 103 on page 168. Route the control panel and take-label cables through the cable clamp. e. Install the two cable ties through the holes in the top plate. f. Wrap the cable ties around the control panel, ribbon sensor, and take-label sensor cables, and then tighten the cable ties. g. See Figure 101 on page 166. Connect the open end of the take-label sensor cable to J13 on the MLB. h. Continue with <i>Reinstall the Electronics Cover</i>.
ZT220	<ol style="list-style-type: none"> a. See Figure 104 on page 169. Guide the control panel cable through the access hole. b. Slide the control panel into the printer, and then install the mounting screw. c. See Figure 102 on page 167. Connect the control panel cable to J8 on the MLB. d. Route the control panel and take-label cables through the two cable clamps ensuring that the cables do not contact any moving parts. e. See Figure 101 on page 166. Connect the open end of the take-label sensor cable to J13 on the MLB. f. Continue with <i>Reinstall the Electronics Cover</i>.

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none"> a. See Figure 98 on page 163. Insert the electronics cover into the printer. b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none"> a. See Figure 100 on page 164. Slide the electronics cover onto the printer. b. Reinstall the three electronics side mounting screws. c. See Figure 99 on page 164. Open the media cover and reinstall the media side mounting screw.

2. Reconnect the AC power cord and all data cables.
3. Turn on (I) the printer.

The installation is complete.



Notes • _____

Drive System

Contents

Drive System Maintenance Kit	176
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Drive System Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the drive system gears in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 107 • Kit Contents

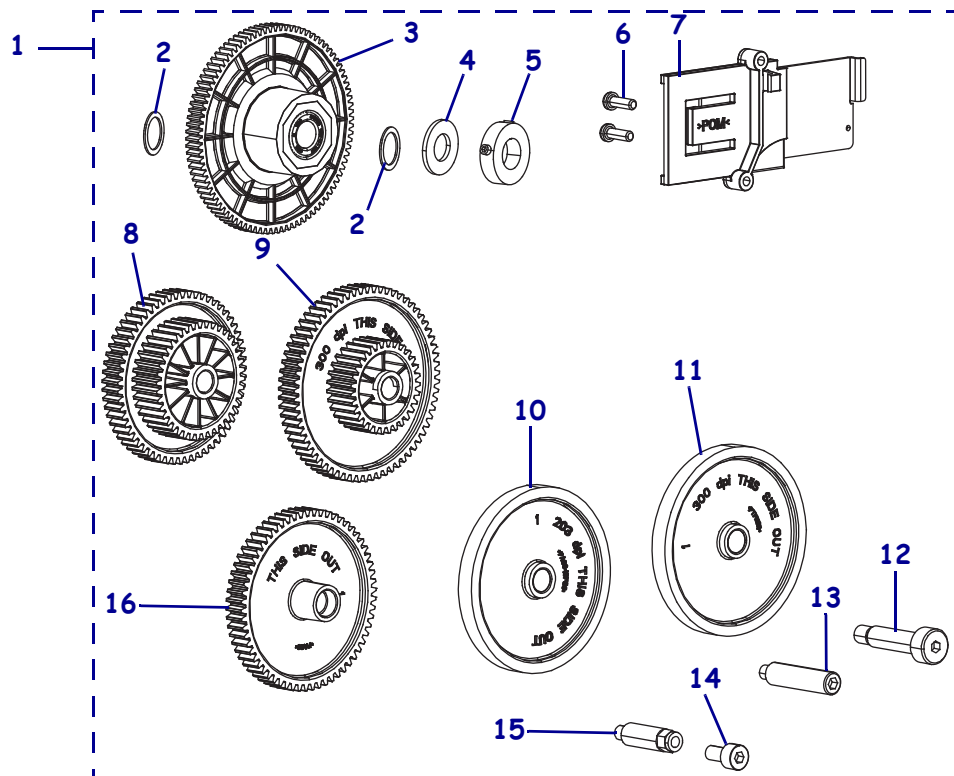


Table 22 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-029	Drive Gear Maintenance Kit (includes gears for 203 dpi and 300 dpi) for serial numbers less than 52J141101521
			P1037974-061	Drive Gear Maintenance Kit (includes gears for 203 dpi and 300 dpi) for serial numbers greater than 52J141101521
	2	2	HW33808	Washer, 0.500 × 0.377 × 0.020 (sold in quantities of 25)
	3	1	N/A	RTU Clutch
	4	1	N/A	Washer, 0.750 × 0.375 × 0.062
	5	1	N/A	Shaft Collar 0.379 × 0.750 × 0.200
	6	2	N/A	Screw, M2.5 × 8
	7	1	N/A	Gear Cover and Guide
	8	1	N/A	203 dpi Upper Compound Gear
	9	1	N/A	300 dpi Upper Compound Gear
	10	1	N/A	203 dpi Lower Compound Gear
	11	1	N/A	300 dpi Lower Compound Gear
	12	1	N/A	Shoulder Screw, M5 × 0.8 × 20
	13	1	N/A	Compound Gear Shaft
	14	1	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)
	15	1	N/A	RTU Idler Shaft
	16	1	N/A	RTU Idler Gear
Bold = Part available for purchase. N/A = Not available as a separate part for purchase (listed for identification purposes only).				

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Metric Hex Key (Allen wrench) Set
- Metric Nutdriver Set

Remove the Electronics Cover



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. Which type of electronics cover do you have?

If you have a...	Then...
ZT220	Continue with <i>ZT220 Electronics Cover</i> .
ZT210 ZT230	Go to <i>ZT230 and ZT210 Electronics Cover</i> on page 179.

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

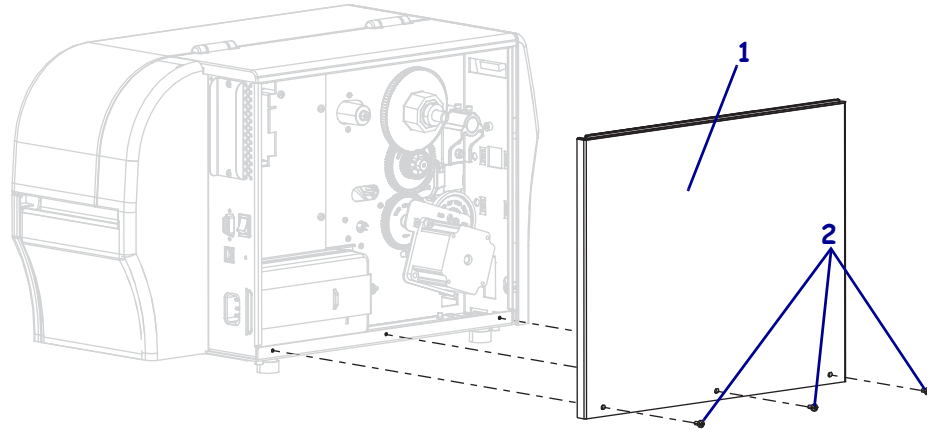
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 108](#). Remove the three screws securing the electronics cover.

Figure 108 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Go to [Remove the Old Gears and Gear Cover and Guide](#) on page 181.

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

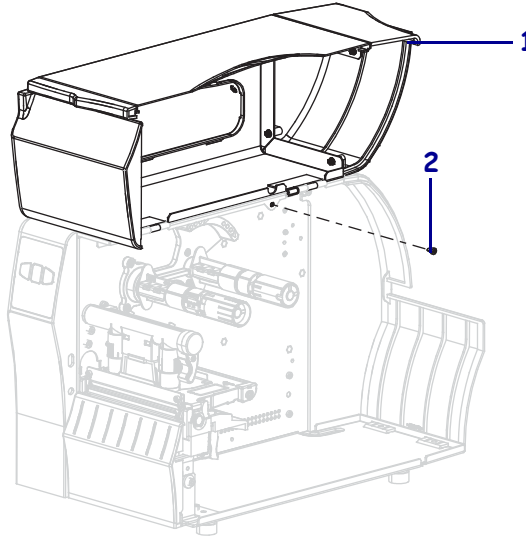
Turn off (O) the printer and disconnect the AC power cord and all data cables.

- 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.

Open the media door and remove the media and ribbon.

3. See [Figure 109](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

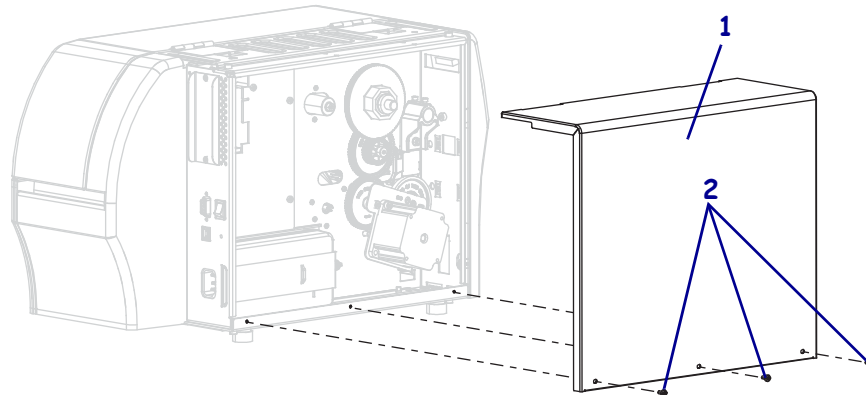
Figure 109 • Open the Media Door



1	Media door
2	Media side mounting screw

4. See [Figure 110](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 110 • Remove the Electronics Cover



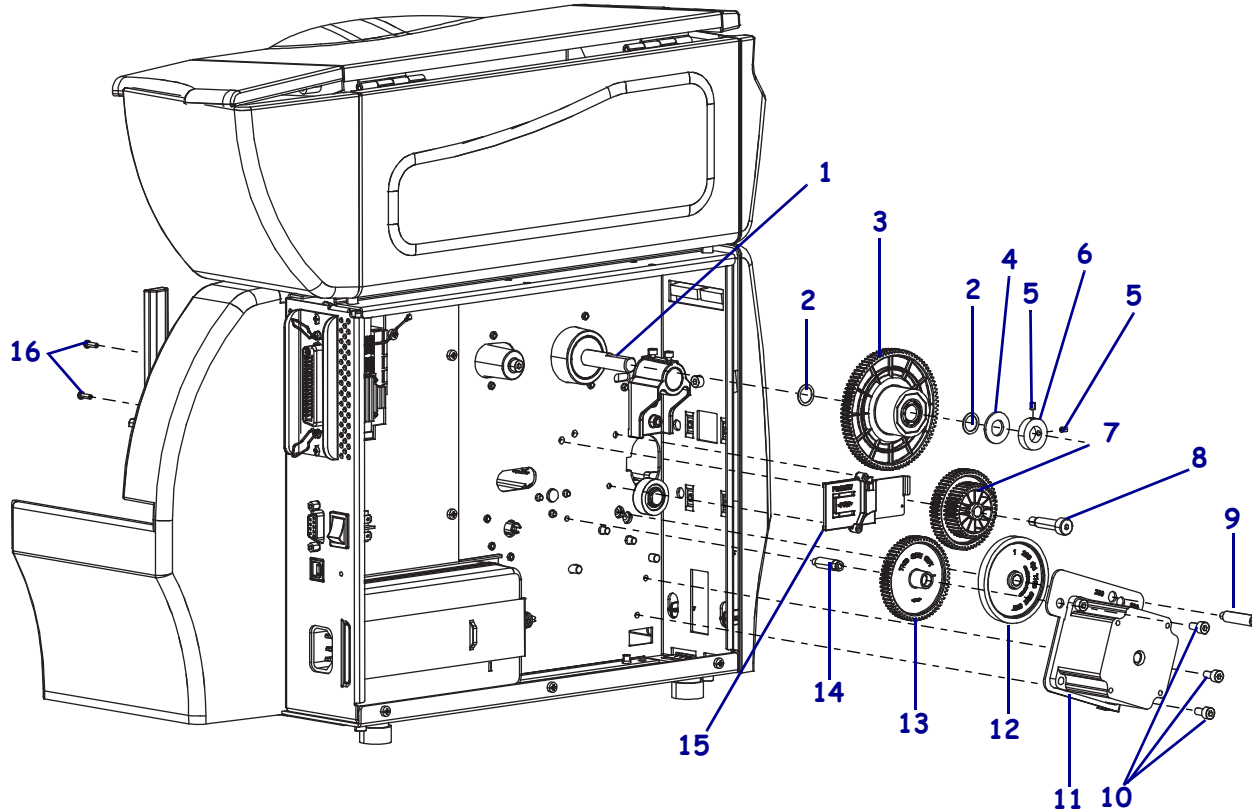
1	Electronics cover
2	Mounting screws (3)

5. Lift the electronics cover off of the printer.
6. Continue with [Remove the Old Gears and Gear Cover and Guide](#) on page 181.

Remove the Old Gears and Gear Cover and Guide

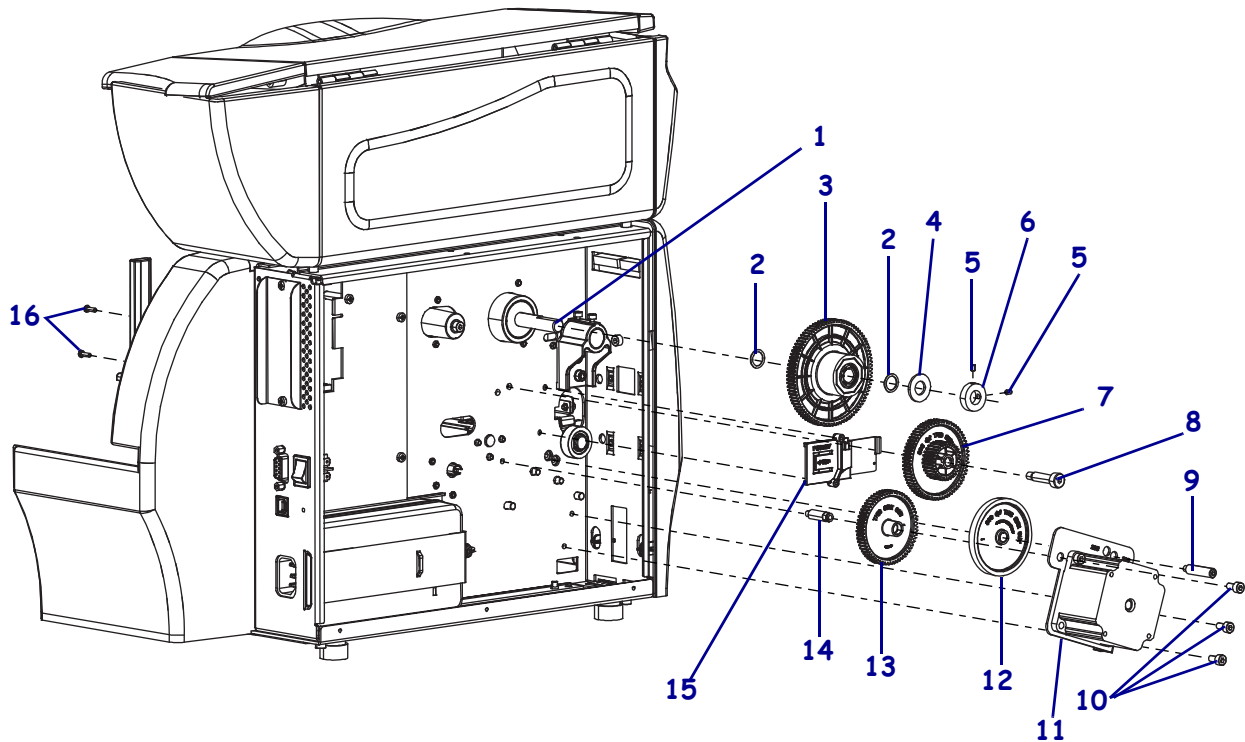
1. See [Figure 111](#). Loosen the two set screws securing the collar to the ribbon take-up spindle (RTU) shaft.

Figure 111 • Remove the Old 203 dpi Gears



1	Ribbon take-up shaft
2	Thin washer (2)
3	Ribbon take-up spindle clutch
4	Nylon washer
5	Set screws (2)
6	Collar
7	203 dpi upper compound gear
8	Shoulder screw, M5 × 8 × 20
9	Shaft compound gear, M4 × 0.7
10	Mounting screws (3)
11	Drive motor assembly
12	Idler gear
13	203 dpi lower compound gear
14	Shaft idler gear
15	Gear cover
16	Gear cover mounting screws (2)

Figure 112 • Remove the Old 300 dpi Gears



1	Ribbon take-up shaft
2	Thin washer (2)
3	Ribbon take-up spindle clutch
4	Nylon washer
5	Set screws (2)
6	Collar
7	300 dpi Upper compound gear
8	Shoulder screw, M5 × 8 × 20
9	Shaft compound gear, M4 × 0.7
10	Mounting screws (3)
11	Drive motor assembly
12	Idler gear
13	300 dpi Lower compound gear
14	Shaft idler gear
15	Gear cover
16	Gear cover mounting screws (2)

2. Slide the collar, nylon washer, thin washer, clutch, and other thin washer off the ribbon take-up shaft.
3. Remove the screw securing the upper compound gear, and then lift the upper compound gear out of the printer.
4. Remove the shaft securing the lower compound gear, and then remove the gear from the printer.

5. Remove the three drive motor assembly mounting screws and lift the drive motor assembly out of the printer.
6. Slide the idler gear off the idler gear shaft, and then remove the shaft.
7. From the media side, remove the two gear cover and guide mounting screws, and then remove the gear cover and guide from the printer.

Install the New Gear Cover and Gears

1. Which dpi gear are you installing?

If...	Then...
203 dpi gear	Refer to Figure 111 on page 181 .
300 dpi gear	Refer to Figure 112 on page 182 .

2. From the electronics side, with the cover tab facing the media side, align the new gear cover and guide with the two mounting holes.
3. From the media side, install the two new gear cover mounting screws.
4. Install and tighten the lower compound gear mounting shaft.
5. Install and tighten the idler gear mounting shaft.
6. With the identification facing out, slide the lower compound gear onto the lower compound gear shaft.
Ensure that the gear meshes properly with the platen roller gear.
7. With the identification facing out, slide the idler gear onto the idler gear shaft.
8. Reinstall the drive motor assembly.
9. Reinstall the drive motor assembly three mounting screws.
10. Using the new shoulder screw, install the new upper compound gear, with the identification facing out.
11. Ensure that the gears mesh properly.
12. While holding the RTU spindle, slide a thin washer, clutch, thin washer, flat nylon washer, and collar onto the RTU shaft from the electronics side.
13. Align the two set screws of the collar with the two flats on the RTU shaft, and then tighten both set screws.

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none">a. See Figure 108 on page 179. Insert the electronics cover into the printer.b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none">a. See Figure 110 on page 180. Slide the electronics cover onto the printer.b. Reinstall the three electronics side mounting screws.c. See Figure 109 on page 180. Open the media cover and reinstall the media side mounting screw.

2. **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.

3. Reinstall the AC power cord and all data cables.
4. Turn on (I) the printer.

The installation is complete.

Drive Motor Assembly Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Drive Motor Assembly Maintenance Kit in the following printers:

- ZT210™
- ZT220™
- ZT230™

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 113 • Kit Contents

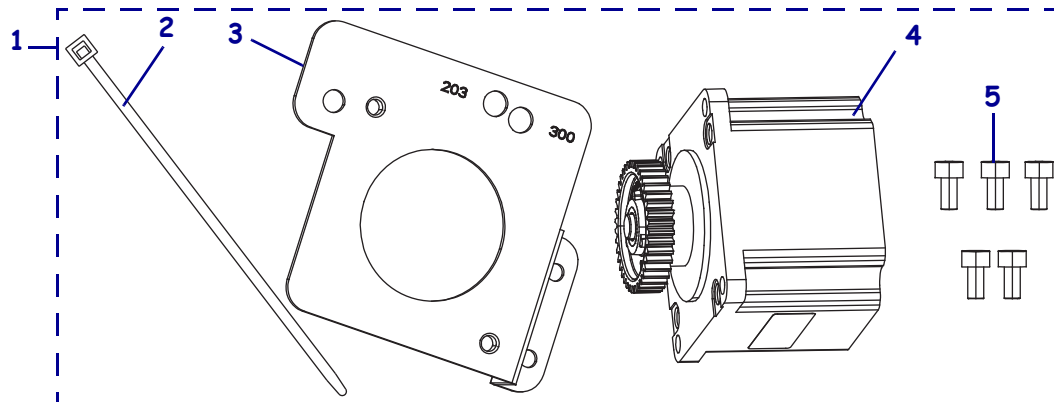


Table 23 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-030	ZT200 series Drive Motor Assembly Maintenance Kit for 200dpi and 300 dpi only for serial numbers less than TT143003088
			P1037974-062	ZT200 series Drive Motor Assembly Maintenance Kit for 200dpi and 300 dpi only for serial numbers greater than TT143003088
	2	1	HWQ06020	Cable Tie 0.09 × 3.62
	3	1	N/A	Drive Motor Mounting Bracket
	4	1	N/A	Drive Motor Assembly
	5	5	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)
N/A = Not available as a separate part for purchase (listed for identification purposes only).				

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Metric Hex Key (Allen wrench) Set

Remove the Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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. Which type of printer do you have?

If you have a...	Then...
ZT220	Continue with ZT220 Electronics Cover on page 186 .
ZT230 ZT210	Go to ZT230 and ZT210 Electronics Cover on page 187 .

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

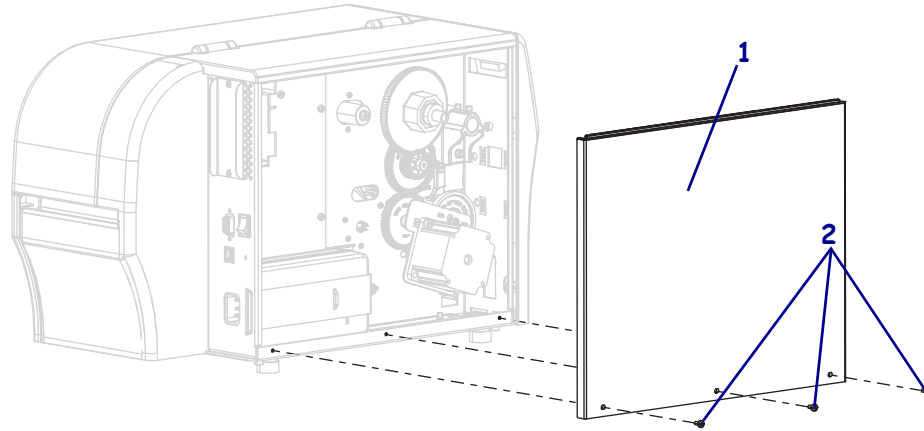
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 114](#). Remove the three screws securing the electronics cover.

Figure 114 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Go to [Remove the Old Drive Motor Assembly on page 189](#).

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

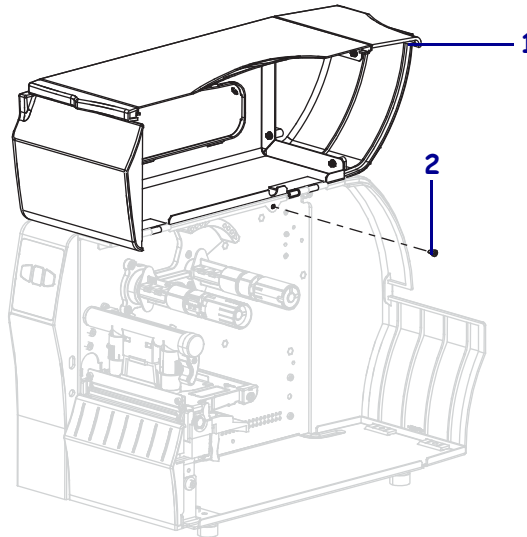
Turn off (O) the printer and disconnect the AC power cord and all data cables.

- 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.

Open the media door and remove the media and ribbon.

3. See [Figure 115](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

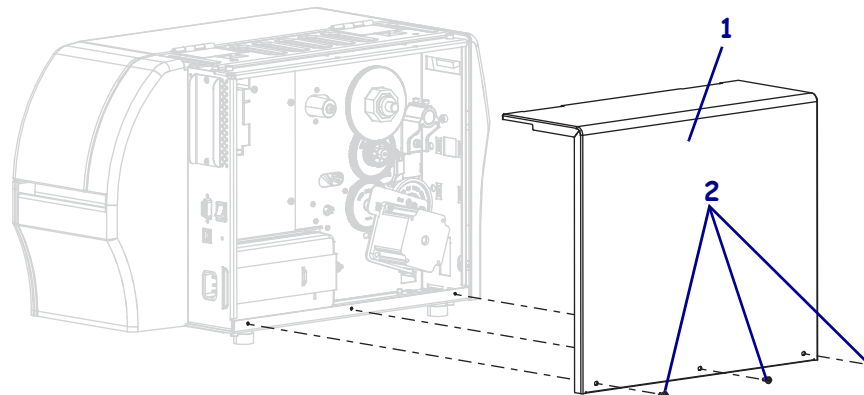
Figure 115 • Open the Media Door



1	Media door
2	Media side mounting screw

4. See [Figure 116](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 116 • Remove the Electronics Cover



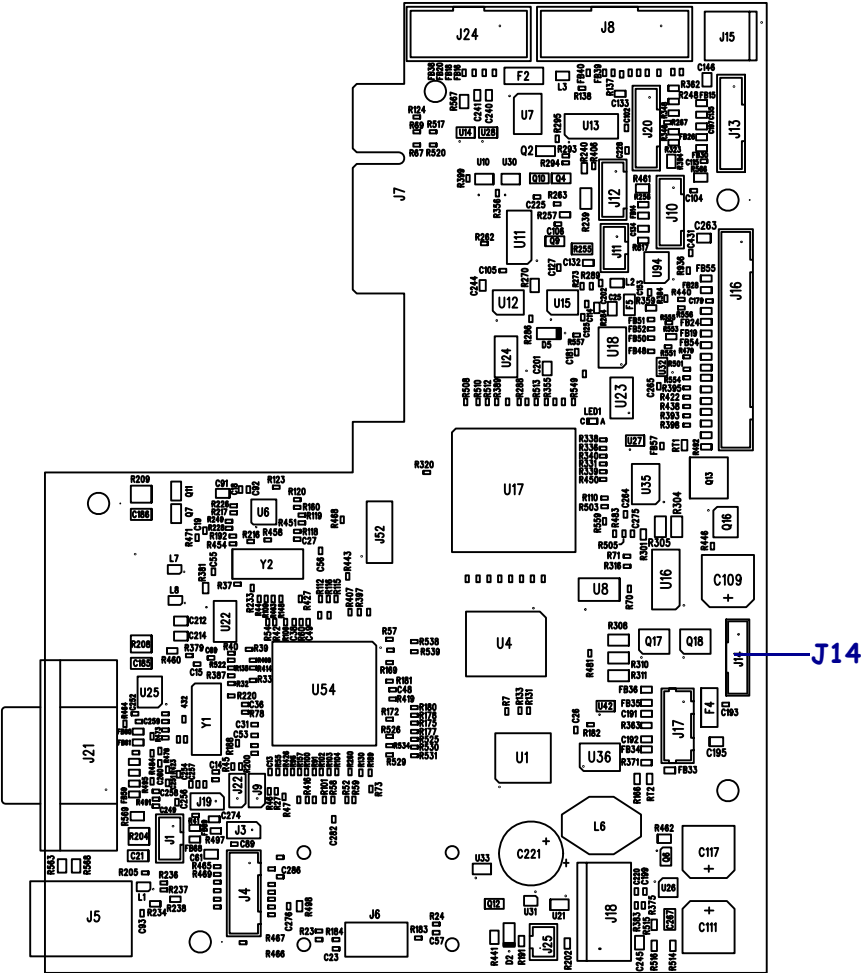
1	Electronics cover
2	Mounting screws (3)

5. Lift the electronics cover off of the printer.
6. Continue with [Remove the Old Drive Motor Assembly](#) on page 189.

Remove the Old Drive Motor Assembly

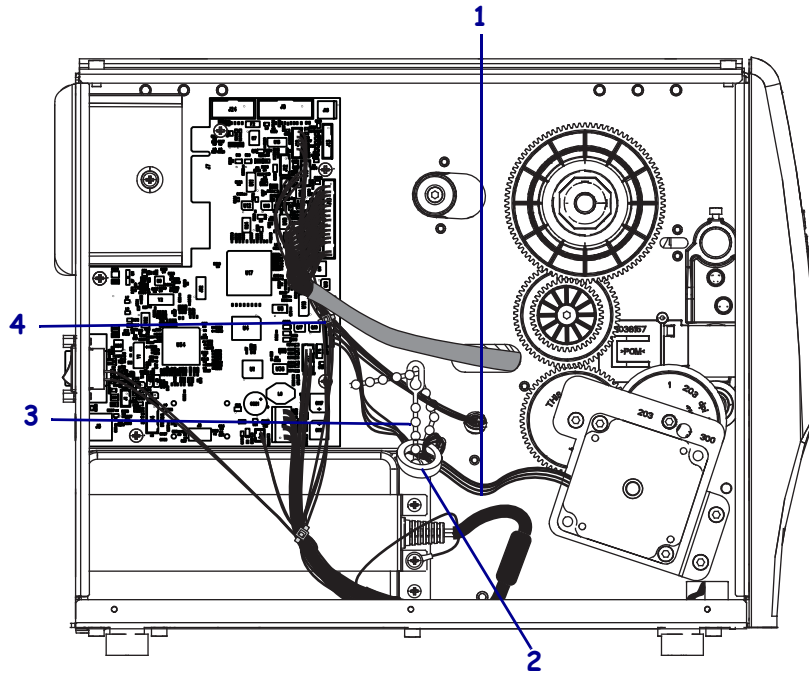
- 1. See [Figure 117](#). Disconnect the drive motor cable from J14 on the main logic board (MLB).

Figure 117 • Disconnect the Drive Motor Cable



2. See [Figure 118](#). Note the cables included in the cable tie, and then cut the cable tie.

Figure 118 • Cut Cable Tie and Open Beaded Cable Tie



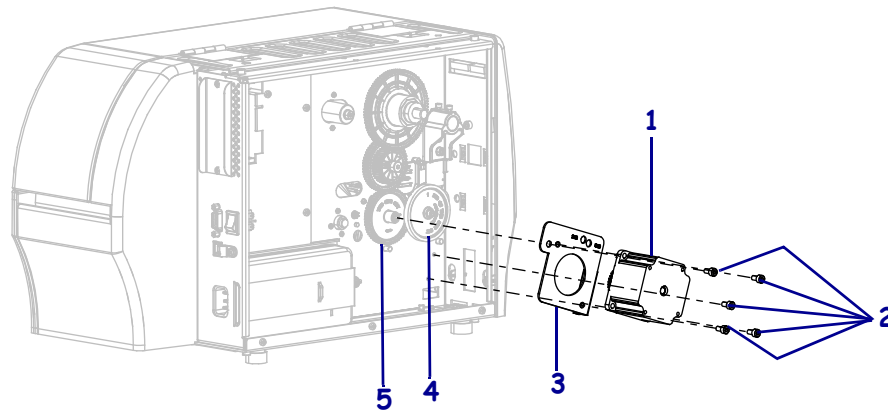
1	Drive motor cable
2	Ferrite
3	Beaded cable tie
4	Cable tie

3. Open the beaded cable tie, and then remove the drive motor cable.
Retain the beaded cable tie for securing the cables later in the installation.

4. Which model of printer are you working on?

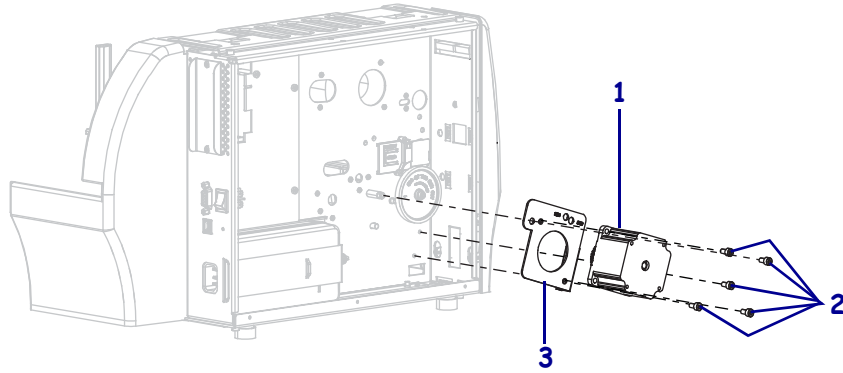
If you have a...	Then...
Thermal Transfer	<p>a. See Figure 119. Remove and discard the two drive motor mounting screws, and then remove and discard the drive motor assembly.</p> <p>b. Do you need to replace the drive motor mounting bracket?</p> <ol style="list-style-type: none"> 1. If yes, remove and discard the three drive motor mounting bracket mounting screws, and then remove and discard the drive motor mounting bracket. 2. If no go to Install the New Drive Motor Assembly on page 193.
Direct Thermal	<p>a. See Figure 120 on page 192. Remove and discard the two drive motor mounting screws, and then remove and discard the drive motor assembly.</p> <p>b. Do you need to replace the drive motor mounting bracket?</p> <ol style="list-style-type: none"> 1. If yes, remove and discard the three drive motor mounting bracket mounting screws, and then remove and discard the drive motor mounting bracket. 2. If no, go to Install the New Drive Motor Assembly on page 193.

Figure 119 • Remove the Thermal Transfer Drive Motor



1	Drive motor assembly
2	Mounting screws (5)
3	Drive motor mounting bracket
4	Lower compound gear
5	Idler gear

Figure 120 • Remove the Direct Thermal Drive Motor



1	Drive motor assembly
2	Mounting screws (5)
3	Drive motor mounting bracket

Install the New Drive Motor Assembly

1. Which model of printer are you working on?

If you have a...	Then...
Thermal Transfer	<ol style="list-style-type: none"> See Figure 119 on page 191. Align the new drive motor mounting bracket with the mounting holes, and then install the three mounting screws. Feed the new drive motor through the drive motor mounting bracket. Ensure that the drive motor gear meshes with both the lower compound gear and the idler gear. Align the drive motor with the two mounting holes in the drive motor mounting bracket, and then install the two mounting screws. See Figure 118 on page 190. Reinstall the drive motor cable into the beaded cable tie. Guide the beaded cable tie through the ferrite and around all cables, as seen in Figure 118 on page 190. See Figure 117 on page 189. Connect the drive motor cable to J14 on the MLB. Close the beaded cable tie. Install the cable tie around the drive motor cable and all wires that it was securing previously. Go to Reinstall the Electronics Cover on page 194.
Direct Thermal	<p>Do you need to replace the drive motor mounting bracket?</p> <p>If yes, start at step a.</p> <ol style="list-style-type: none"> Align the new drive motor mounting bracket with the mounting holes. Install the three mounting screws. Continue with step c. <p>If No, start at step c.</p> <ol style="list-style-type: none"> Feed the new drive motor through the drive motor mounting bracket. Ensure that the drive motor gear meshes with both the lower compound gear and the idler gear. Align the drive motor with the two mounting holes in the drive motor mounting bracket. Install the two mounting screws. See Figure 117 on page 189. Connect the drive motor cable to J14 on the MLB. See Figure 118 on page 190. Reinstall the drive motor cable into the beaded cable tie. Guide the beaded cable tie through the ferrite and around all cables, as seen in Figure 118 on page 190. Close the beaded cable tie. Install the cable tie around the drive motor cable, and all wires that it was securing previously. Continue with Reinstall the Electronics Cover on page 194.

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none">a. See Figure 114 on page 187. Insert the electronics cover into the printer.b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none">a. See Figure 116 on page 188. Slide the electronics cover onto the printer.b. Reinstall the three electronics side mounting screws.c. See Figure 115 on page 188. Open the media cover and reinstall the media side mounting screw.

2. Reconnect the AC power cord and all data cables.
3. Turn on (I) the printer.

The installation is complete.

Ribbon Supply Spindle Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Ribbon Supply Spindle Maintenance Kit in the following printers:

- ZT200™ series

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 121 • Kit Contents

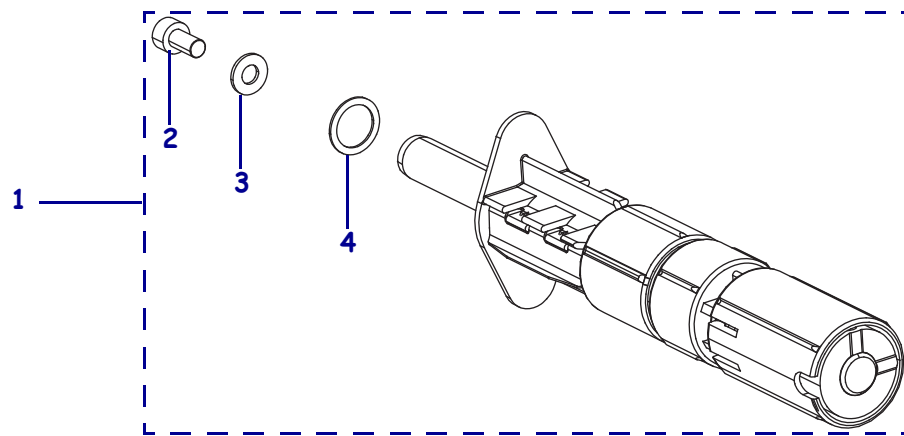


Table 24 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-050	ZT200 series Ribbon Supply Spindle Maintenance Kit
	2	1	HW23827	Screw, M4 × 0.7 (sold in quantities of 25)
	3	1	HW78806	Washer, M4 × 0.8 (sold in quantities of 25)
	4	1	HW33808	Washer, 0.5 × 0.377 × 0.02 (sold in quantities of 25)

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Metric Hex Key (Allen wrench) Set
- Antistatic Wriststrap and Mat

Remove the Electronics Cover



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. Which type of electronics cover do you have?

If have a...	Then...
ZT2220	Continue with <i>ZT220 Electronics Cover</i> .
ZT230 ZT210	Go to <i>ZT230 and ZT210 Electronics Cover on page 197</i> .

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

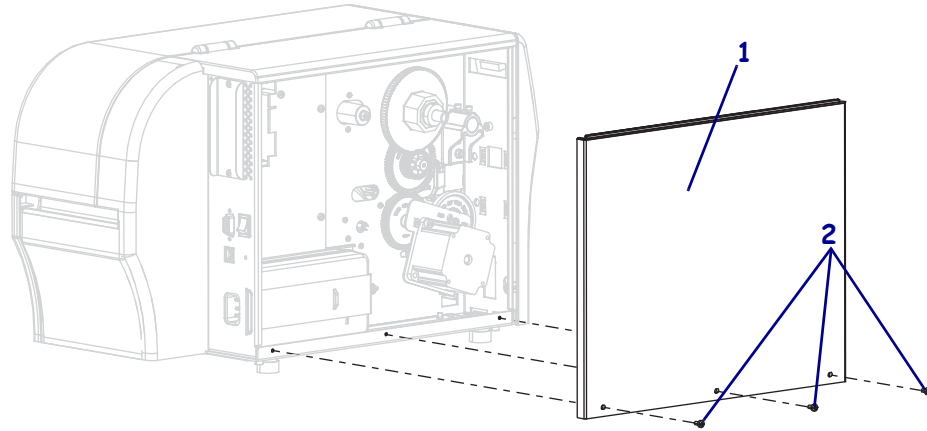
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 122](#). Remove the three screws securing the electronics cover.

Figure 122 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Go to [Remove the Old Ribbon Supply Spindle on page 199](#).

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

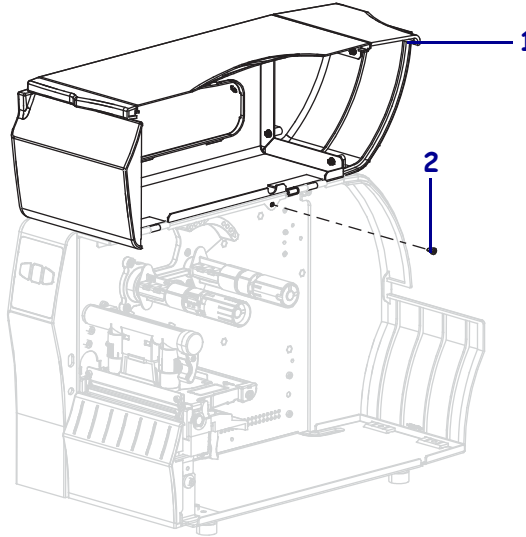
Turn off (O) the printer and disconnect the AC power cord and all data cables.

- 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.

Open the media door and remove the media and ribbon.

3. See [Figure 123](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

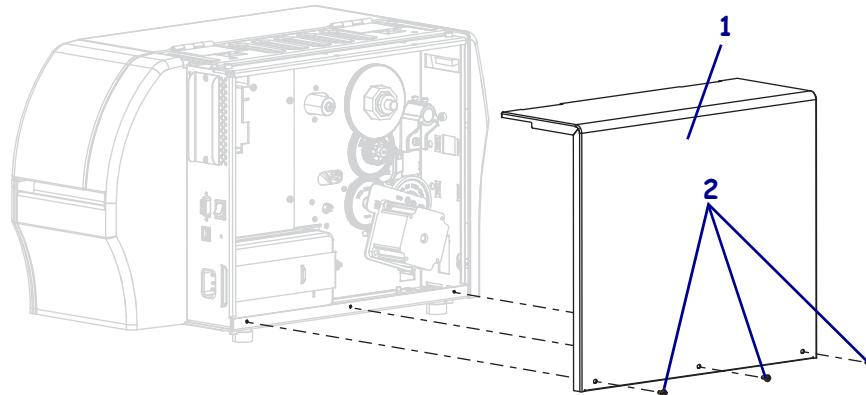
Figure 123 • Open the Media Door



1	Media door
2	Media side mounting screw

4. See [Figure 124](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 124 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

5. Lift the electronics cover off of the printer.

Remove the Old Ribbon Supply Spindle

1. **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.

Open the media door and remove the media and ribbon from the printer.

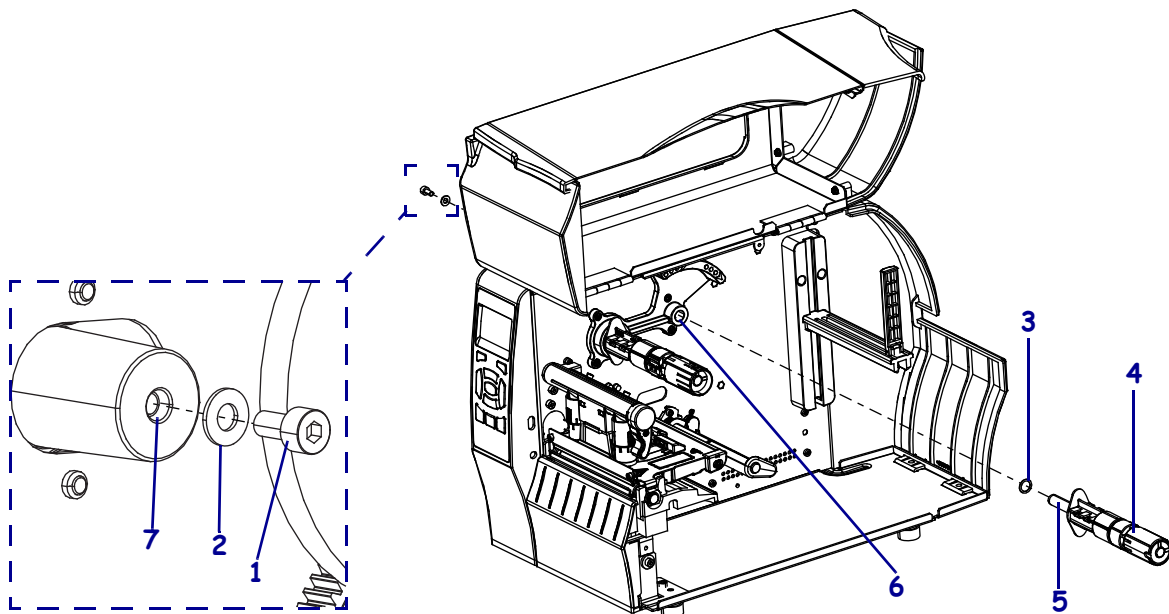


2. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

3. See [Figure 125](#). Remove the mounting screw and washer that secures the ribbon supply spindle.

Figure 125 • Remove the Ribbon Supply Spindle



1	Mounting screw
2	Flat washer
3	Thin flat washer
4	Ribbon supply spindle
5	Ribbon supply spindle shaft
6	Mounting hole (media side)
7	Mounting hole (electronics side)

4. Pull the old ribbon supply spindle and thin washer out of the printer.

Install the New Ribbon Supply Spindle

1. See [Figure 125](#). Slide the thin flat washer onto the ribbon supply spindle shaft, and then slide the spindle into the printer mounting hole.
2. From the electronics side, install the new flat washer and mounting screw into the ribbon supply spindle shaft.
3. Tighten the mounting screw.

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none">a. See Figure 122 on page 197. Insert the electronics cover into the printer.b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none">a. See Figure 124 on page 198. Slide the electronics cover onto the printer.b. Reinstall the three electronics side mounting screws.c. See Figure 123 on page 198. Open the media cover and reinstall the media side mounting screw.

2. **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.

3. Reconnect the AC power cord and all data cables.
4. Turn on (I) the printer.

The installation is complete.

Ribbon Take-Up (RTU) Spindle Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Ribbon Take-up Spindle Maintenance Kit in the following printers:

- ZT210™
- ZT220™
- ZT230™

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 126 • Kit Contents

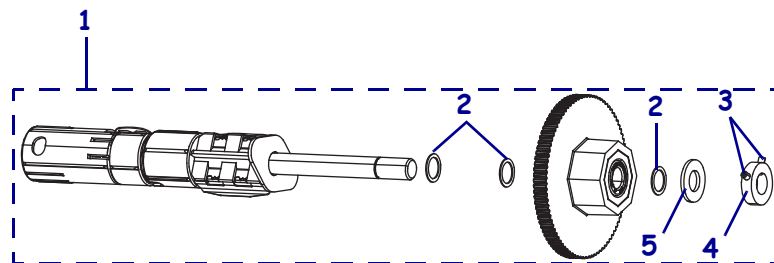


Table 25 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-051	Ribbon Take-Up Spindle Maintenance Kit
	2	3	HW33808	Media side washer,0.500×0.377×0.020 (sold in quantities of 25)
	3	2	HW44147	Set Screw,M3×0.050(sold in quantities of 25)
	4	1	N/A	Collar
	5	1	N/A	Nylon washer,0.750 ×0.375×0.200
N/A= Not available as a separate part for purchase (listed for identification purposes only).				

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Flat-blade Screwdriver Set
- Metric Hex Key (Allen wrench)

* In place of the Preventive Maintenance Kit, you may use a clean swab dipped in 99.7% isopropyl alcohol.

Remove the Electronics Cover



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. Which type of electronics cover do you have?

If you have a...	Then...
ZT220	Continue with ZT220 Electronics Cover on page 202 .
ZT210 ZT230	Go to ZT230 and ZT210 Electronics Cover on page 203 .

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

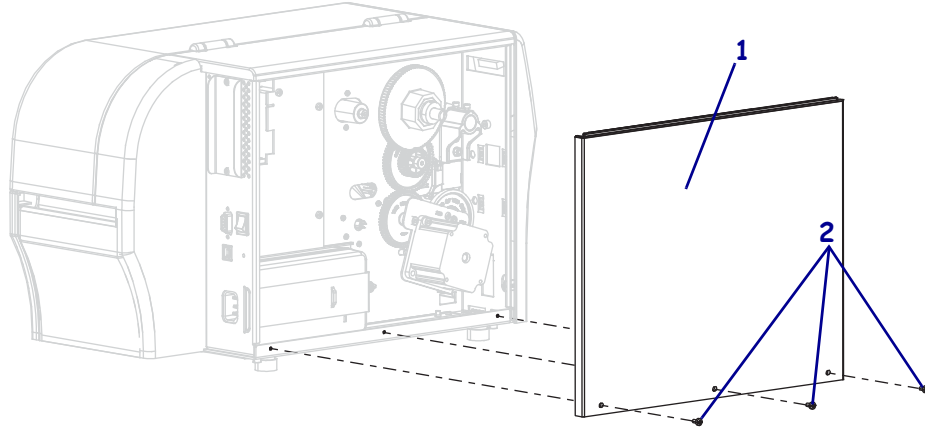
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 127](#). Remove the three screws securing the electronics cover.

Figure 127 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Go to [Remove Old Ribbon Take-up \(RTU\) Spindle on page 203](#).

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

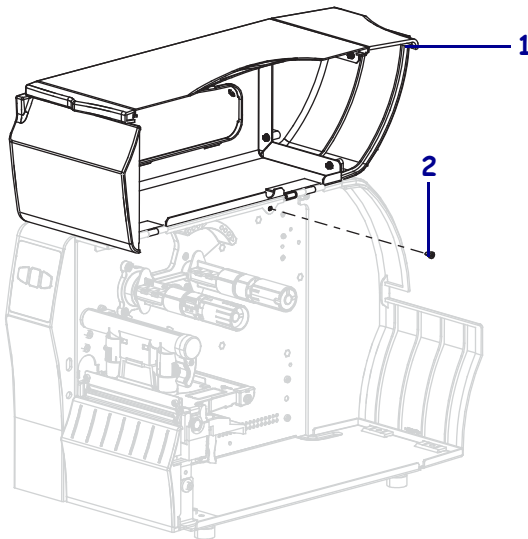
Turn off (O) the printer and disconnect the AC power cord and all data cables.

- 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.

Open the media door and remove the media and ribbon.

3. See [Figure 128](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

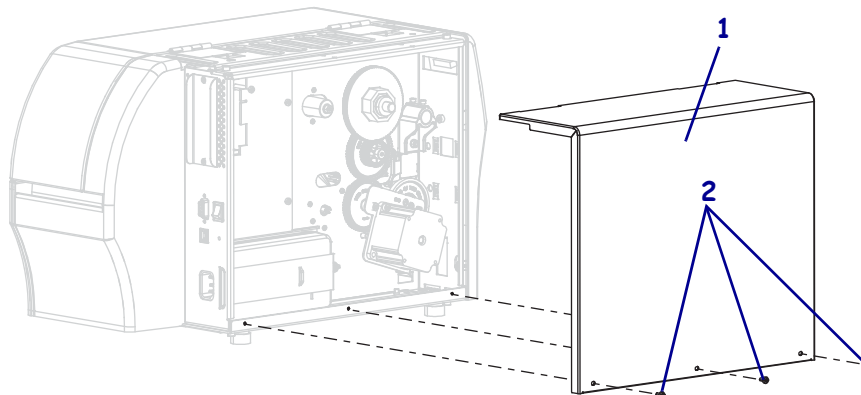
Figure 128 • Open the Media Door



1	Media door
2	Media side mounting screw

4. See [Figure 129](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 129 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

5. Lift the electronics cover off of the printer.
6. Continue with [Remove the Old Ribbon Take-up \(RTU\) Spindle on page 205](#).

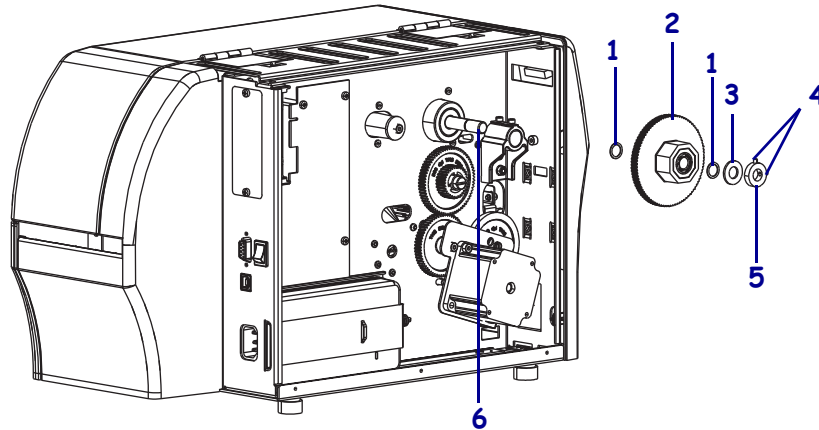
Remove the Old Ribbon Take-up (RTU) Spindle

1. **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.

2. See [Figure 130](#). Loosen the two set screws in the collar.

Figure 130 • Remove the RTU Clutch

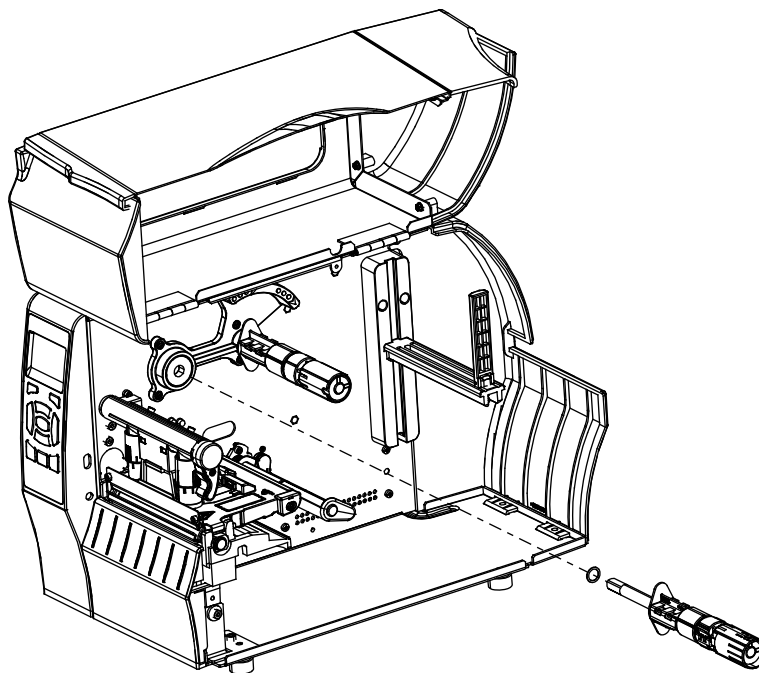


1	Thinwasher(2)
2	RTU clutch
3	Flat washer
4	Setscrews(2)
5	Collar
6	RTU shaft

3. Remove and discard the collar from RTU shaft.
4. Remove and discard the collar, flat washer, thin washer, clutch, and other thin washer.

5. See [Figure 131](#). Open the media door, and then slide the old ribbon take-up spindle and thin washer out of the printer.

Figure 131 • Remove the RTU Spindle



1	Ribbon take-up spindle mounting hole
2	Thin washer
3	Ribbon take-up spindle

Install the New Ribbon Take-Up (RTU) Spindle

1. See [Figure 131](#). Slide a thin washer onto the new RTU spindle shaft, and then slide the spindle into the spindle mounting hole.
2. See [Figure 130 on page 205](#). While holding the new RTU spindle, slide a thin washer, clutch, thin washer, flat nylon washer, and collar onto the RTU shaft from the electronics side.
3. Align the two screws of the collar with the two flats on the RTU shaft, and then tighten both set screws.

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ul style="list-style-type: none">a. See Figure 127 on page 203. Insert the electronics cover into the printer.b. Reinstall the three mounting screws.
ZT230 ZT210	<ul style="list-style-type: none">a. See Figure 129 on page 204. Slide the electronics cover onto the printer.b. Reinstall the three electronics side mounting screws.c. See Figure 128 on page 204. Open the media cover and reinstall the media side mounting screw.

2. **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.

- 3. Reconnect the AC power cord and all data cables.
- 4. Turn on (I) the printer.

The installation is complete.

Ribbon System Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the peel option in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 132 • Kit Contents

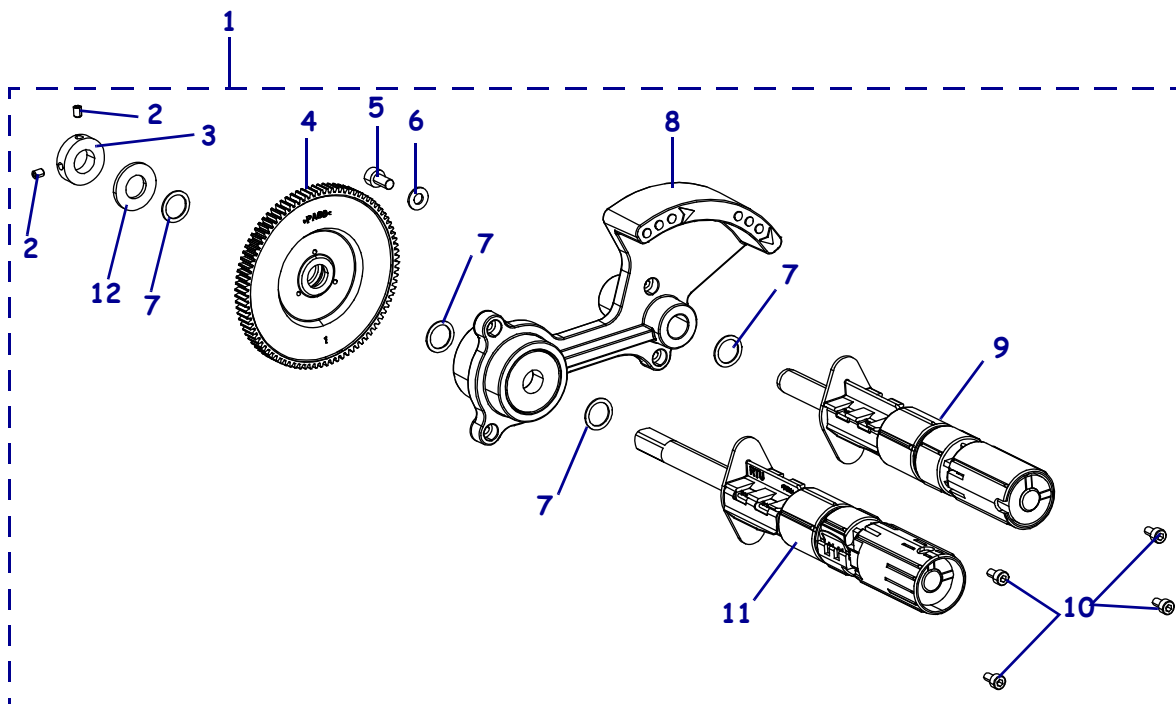


Table 26 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-026	ZT230 Ribbon System Maintenance Kit
		1	P1037990-001	ZT210 and ZT220 Ribbon System Maintenance Kit
	2	2	HW44147	Set Screw, M3 × 0.5 × 4,
	3	1	N/A	Collar
	4	1	N/A	Ribbon Take-up Gear Assembly
	5	1	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)
	6	1	HW78806	Flat Washer, M4 (sold in quantities of 25)
	7	4	HW33808	Thin Washer, 0.500 × 0.377 × 0.020 (sold in quantities of 25)
	8	1	N/A	Ribbon System Hub Assembly
	9	1	P1037974-050	Ribbon Supply Spindle (RSS) Maintenance Kit
	10	4	HW78805	M3 × 0.05 × 6 (sold in quantities of 50)
	11	1	P1037974-051	Ribbon Take-up (RTU) Spindle Maintenance Kit
	12	1	N/A	Nylon Washer, 0.375 × 0.750 × 0.062

N/A = Not available as a separate part for purchase (listed for identification purposes only).

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Antistatic Wriststrap and Mat
- Metric Hex Key (Allen wrench) Set

Remove the Electronics Cover



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

Connect yourself to an antistatic device.

3. **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 and ribbon from printer.

4. Which model of printer are you working on?

If you have a...	Then...
ZT220	Continue with <i>ZT220 Electronics Cover</i> .
ZT230 ZT210	Go to <i>ZT230 and ZT210 Electronics Cover</i> on page 211

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

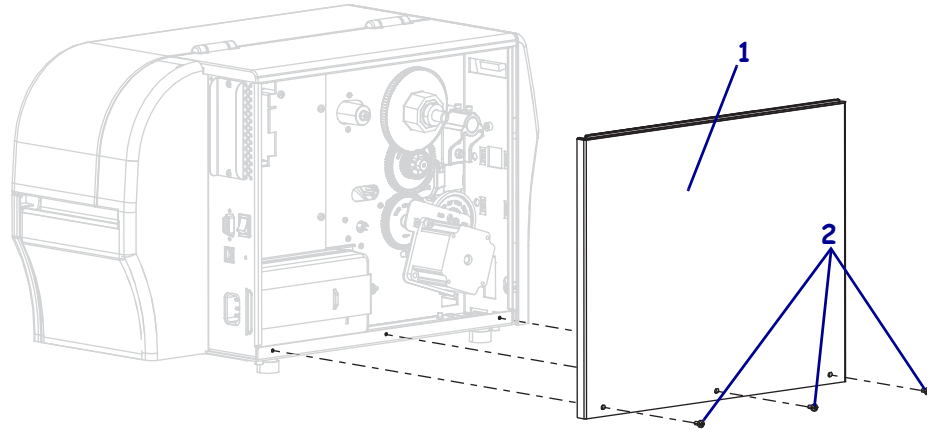
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 133](#). Remove the three screws securing the electronics cover.

Figure 133 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Go to [Remove the Old Ribbon Spindle Assembly on page 213](#).

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

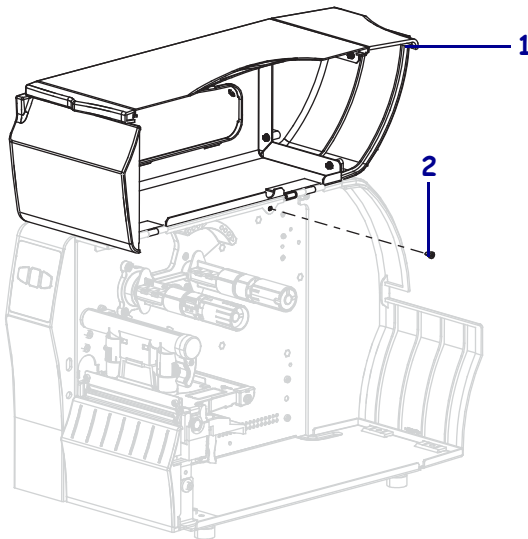
Turn off (O) the printer and disconnect the AC power cord and all data cables.

- 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.

Open the media door and remove the media and ribbon.

3. See [Figure 134](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

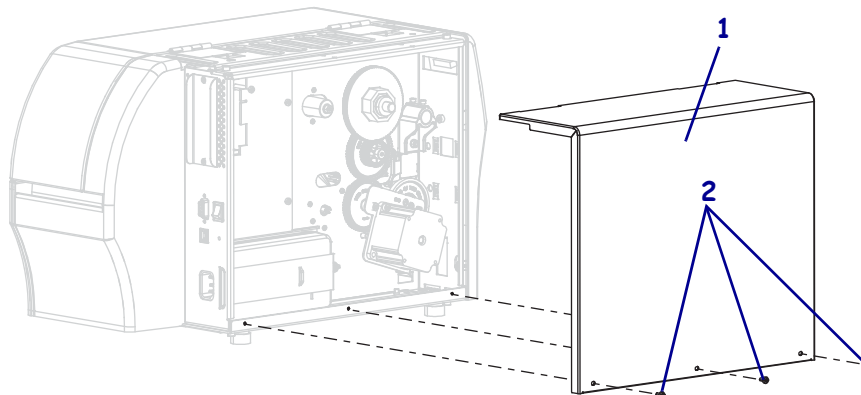
Figure 134 • Open the Media Door



1	Media door
2	Media side mounting screw

4. See [Figure 135](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 135 • Remove the Electronics Cover



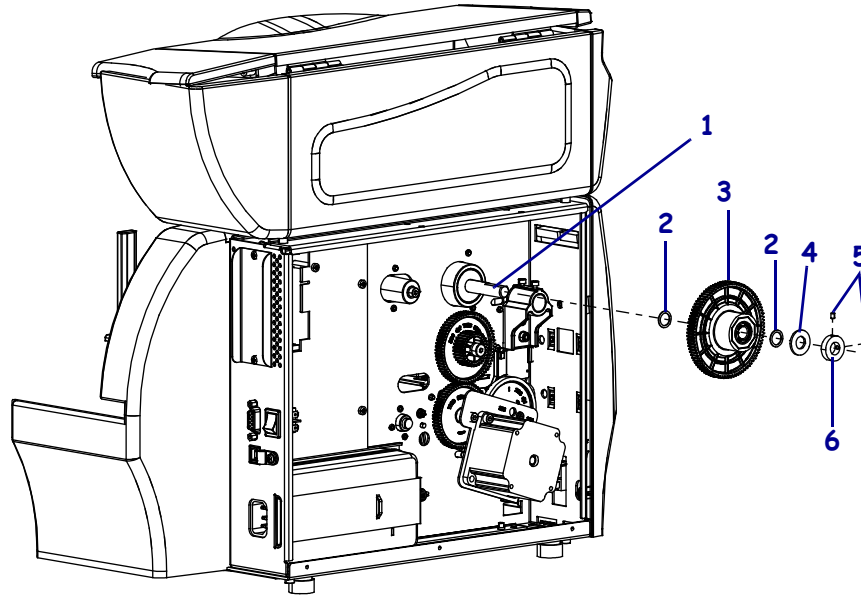
1	Electronics cover
2	Mounting screws (3)

5. Lift the electronics cover off of the printer.
6. Continue with [Remove the Old Ribbon Spindle Assembly](#) on page 211.

Remove the Old Ribbon Spindle Assembly

1. See [Figure 136](#). Remove the two set screws that secure the collar to the ribbon take-up shaft.

Figure 136 • Remove the Ribbon Spindle Assembly

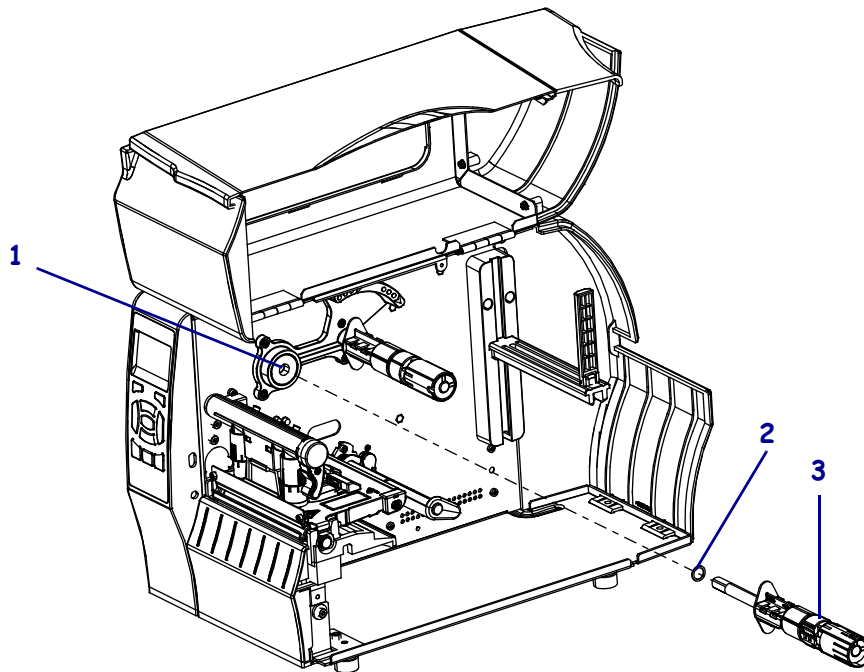


1	Ribbon take-up shaft
2	Thin washer
3	Ribbon take-up clutch
4	Nylon washer
5	Set screws
6	Collar

2. Slide the collar, nylon washer, thin washer, clutch, and thin washer off the RTU spindle shaft.

3. See [Figure 137](#). Open the media door, and then slide the old RTU spindle and thin washer out of the printer.

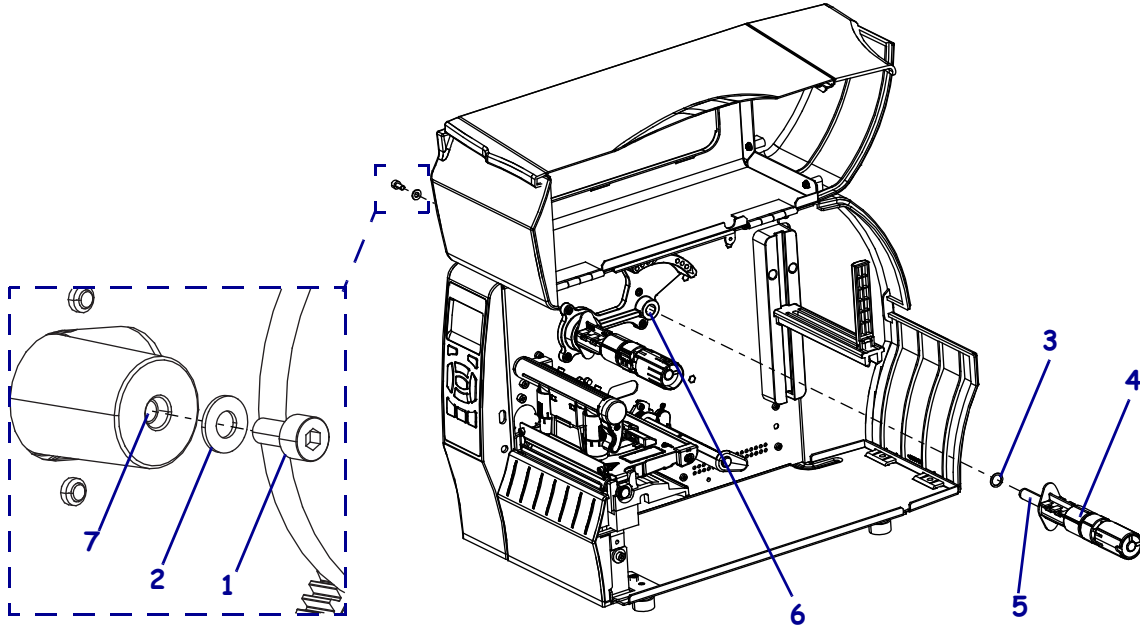
Figure 137 • Remove the RTU Spindle



1	Ribbon take-up spindle mounting hole
2	Thin washer
3	Ribbon take-up spindle

- See [Figure 138](#). Remove the mounting screw and washer that secures the ribbon supply spindle.

Figure 138 • Remove the Ribbon Supply Spindle

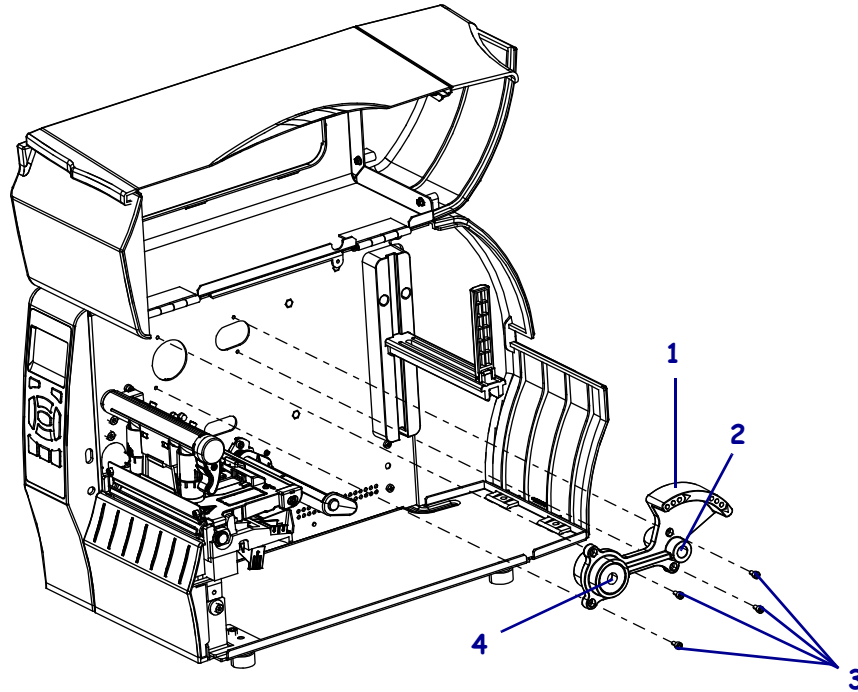


1	Mounting screw
2	Flat washer
3	Thin flat washer
4	Ribbon supply spindle
5	Ribbon supply spindle shaft
6	Mounting hole (media side)
7	Mounting hole (electronics side)

- Slide the ribbon supply spindle and thin washer out of the printer.

6. See [Figure 139](#). From the media side, remove the four ribbon spindle hub assembly mounting screws.

Figure 139 • Remove the Ribbon System Hub Assembly



1	Ribbon hub assembly
2	Ribbon supply spindle mounting hole
3	Mounting screws (4)
4	Ribbon take-up spindle mounting hole

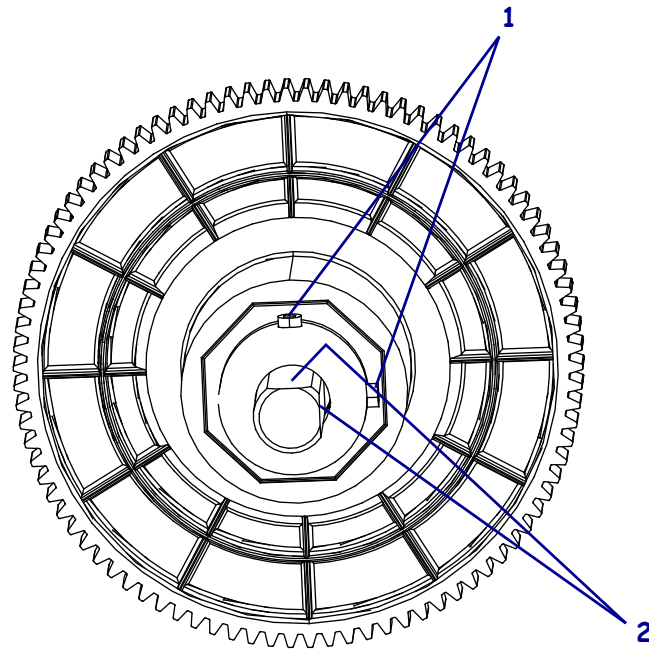
7. Slide the ribbon hub assembly out of the printer.

Install the New Ribbon Spindle Assembly

1. Remove the new hub assembly and four mounting screws from the kit.
2. See [Figure 139](#). Slide the new hub assembly into the printer, and then install the four new mounting screws.
3. See [Figure 138 on page 215](#). Slide the thin flat washer onto the ribbon supply spindle shaft, and then slide the spindle into the printer mounting hole.
4. From the electronics side, install the new flat washer and mounting screw into the ribbon supply spindle shaft.
5. Tighten the mounting screw.

6. See [Figure 137 on page 214](#). Slide a thin washer onto the new RTU spindle shaft, and then slide the spindle into the spindle mounting hole.
7. See [Figure 138 on page 215](#). While holding the new RTU spindle, slide a thin washer, clutch, thin washer, flat nylon washer, and collar onto the RTU shaft from the electronics side.
8. See [Figure 140](#). Align the two set screws of the collar with the two flats on the RTU shaft, and then tighten both set screws.

Figure 140 • RTU Shaft Flats



1	Set screws (2)
2	Shaft flats (2)

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none">a. See Figure 133 on page 211 Insert the electronics cover into the printer.b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none">a. See Figure 135 on page 212. Slide the electronics cover onto the printer.b. Reinstall the three electronics side mounting screws.c. See Figure 134 on page 212. Open the media cover and reinstall the media side mounting screw.

2. **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.

3. Reconnect the AC power cord and all data cables.
4. Turn on (I) the printer.

The installation is complete.

Outside Media Guide Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Outside media guide in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 141 • Kit Contents

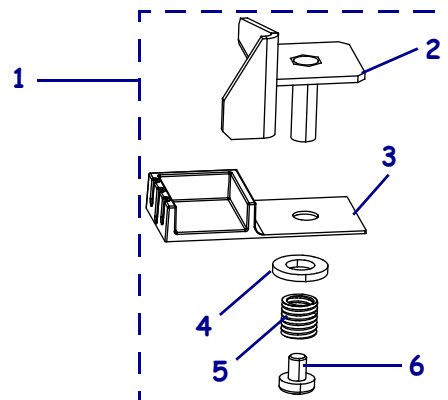


Table 27 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-016	Outside Media Guide Maintenance Kit
	2	1	<i>N/A</i>	Outside Media Guide
	3	1	<i>N/A</i>	Outside Media Guide Handle
	4	1	HW46128	Washer, 0.37 × 0.5 × 4 (sold in quantities of 25)
	5	1	<i>N/A</i>	Compression Spring, 0.19 × 0.24 × 0.35
	6	1	HW78803	Screw, M3 × 0.5 × 4 (sold in quantities of 50)

N/A = Not available as a separate part for purchase (listed for identification purposes only).

Tools Required



Tools • You need these tools to complete this procedure:

Phillips Screwdriver Set

Safety Glasses

Remove the Old Outside Media Guide

1. **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.

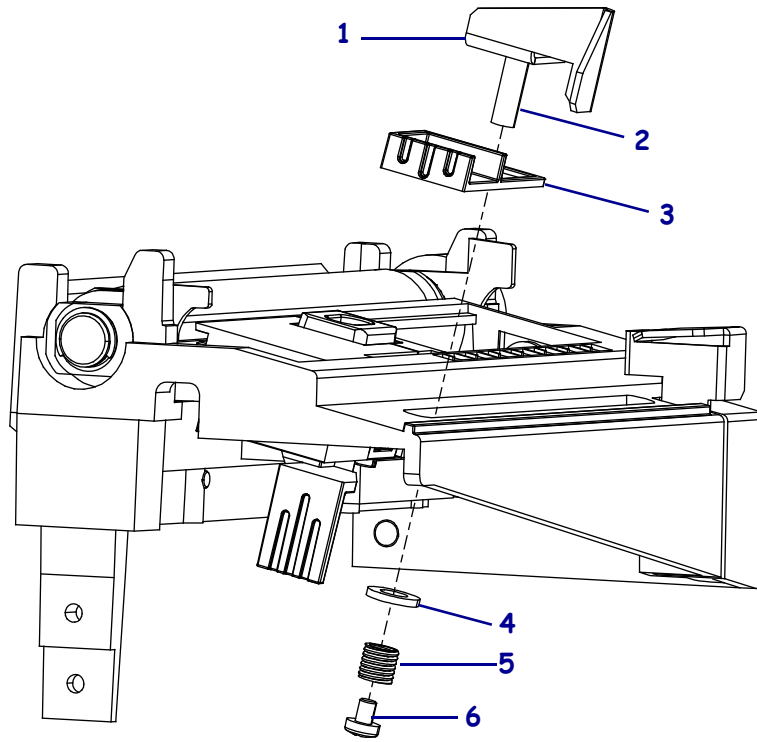
2. See [Figure 142](#). Slide the outside media guide as far as possible to the outside of the printer.



3. **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.

Remove the mounting screw, spring, and washer from the outside media guide.

Figure 142 • Remove the Out side Media Guide



1	Outside media guide
2	Outside media guide mounting stud
3	Media guide handle
4	Washer
5	Spring
6	Outside media guide mounting screw

4. Lift the outside media guide and handle out of the printer.

Install the New Outside Media Guide

1. See [Figure 142 on page 221](#). Slide the outside media guide and handle into the platen housing.
2. Slide the flat washer and spring over the outside media guide mounting stud, and then install the mounting screw.
3.

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.

4. Reconnect the AC power cord and all data cables.
5. Turn on (I) the printer.

The installation is complete.

Media Hanger Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Media Hanger Maintenance Kit in the following printers:

- ZT210™
- ZT220™
- ZT230™

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 143 • Kit Contents

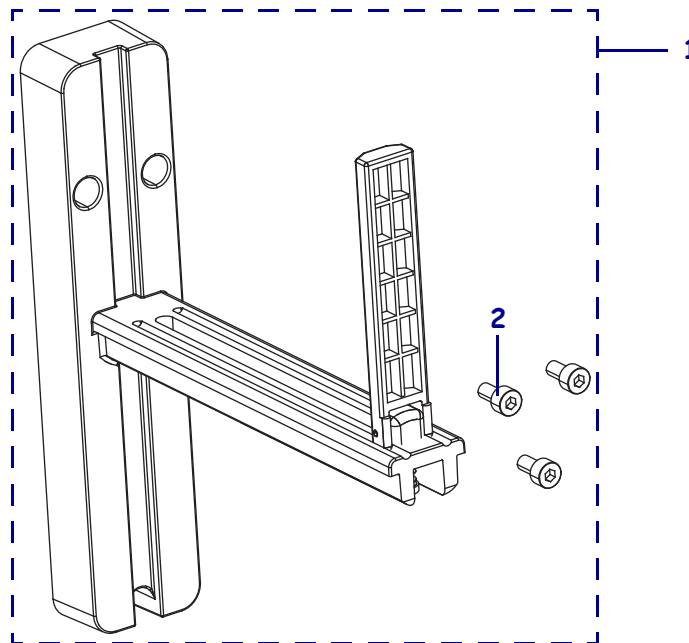


Table 28 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-027	Media Hanger Maintenance Kit
	2	3	HW23827	Screws, M4 × 0.7 × 8

Tools Required



Tools • You need these tools to complete this procedure:

- Metric Hex Key (Allen wrench) Set

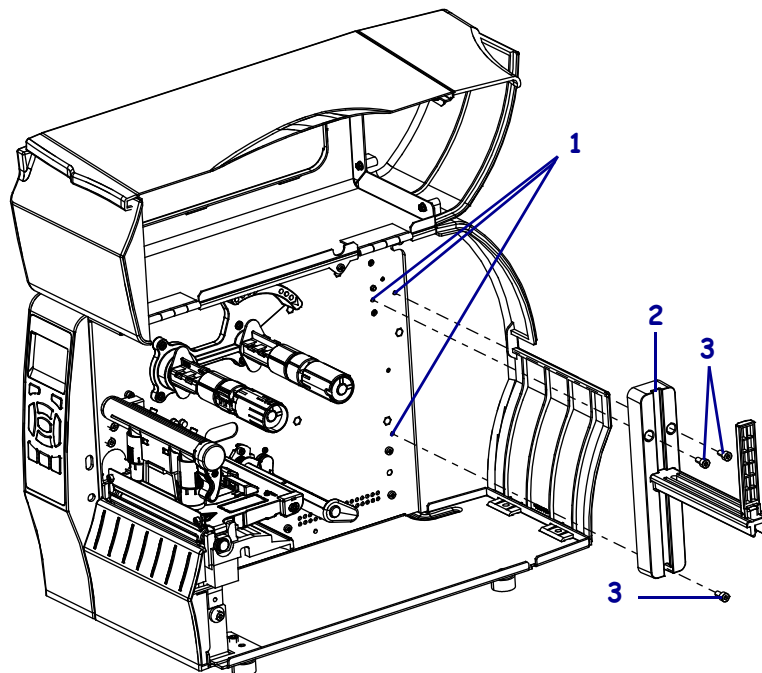
Remove the Old Media Hanger

1. **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.

Open the media cover and remove the media and ribbon.

2. See [Figure 144](#). Remove the three media hanger mounting screws, and then remove the old media hanger.

Figure 144 • Remove and Install the Media Hanger



1	Media hanger mounting holes (3)
2	Media hanger
3	Media hanger mounting screws (3)

Install the New Media Hanger

1. See [Figure 144](#). Align the new media hanger with the three mounting holes, and then install the three mounting screws.

2. **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 and close the media door.

The installation is complete.

Dancer Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Dancer in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 145 • Kit Contents

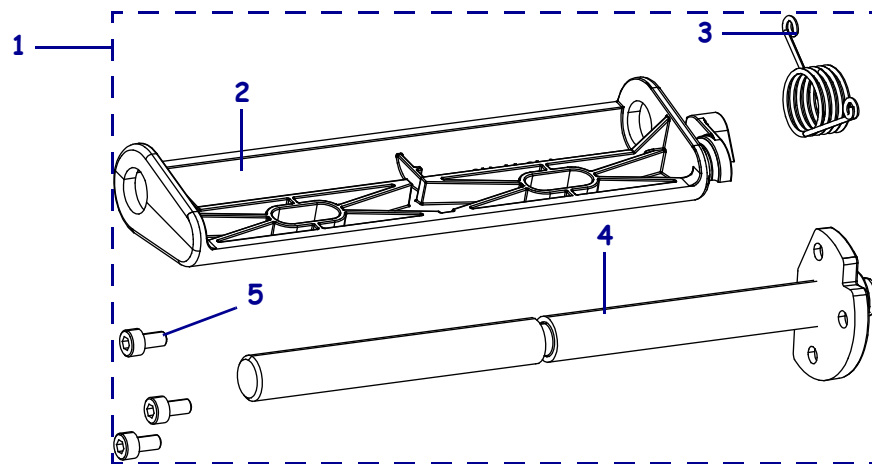


Table 29 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-057	Dancer Maintenance Kit
	2	1	N/A	Dancer
	3	2	N/A	Torsion Spring
	4	1	N/A	Dancer Pivot Shaft Assembly
	5	3	HW44924	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
N/A = Not available as a separate part (listed for identification purposes only).				

Tools Required



Tools • You need these tools to complete this procedure:

- Metric Hex Key (Allen wrench) Set
- Safety Glasses

Remove the Old Dancer Assembly



- 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.

- 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.

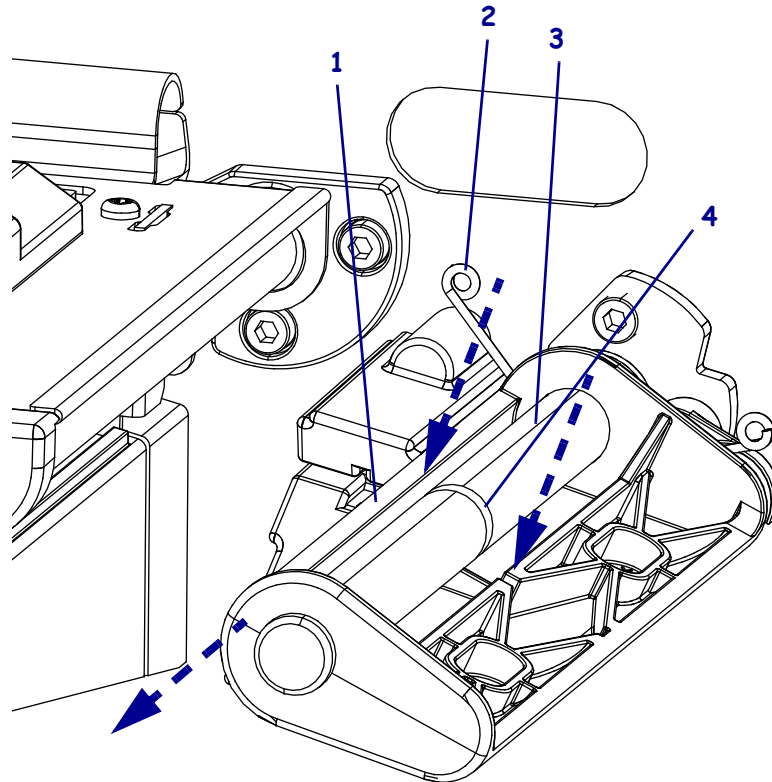
Remove the media and ribbon.



3. **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.

See [Figure 146](#). To remove the dancer, push down on the center of the dancer on both sides of the pivot shaft, to release it from the notch, while sliding the dancer off the pivot shaft.

Figure 146 • Remove the Dancer

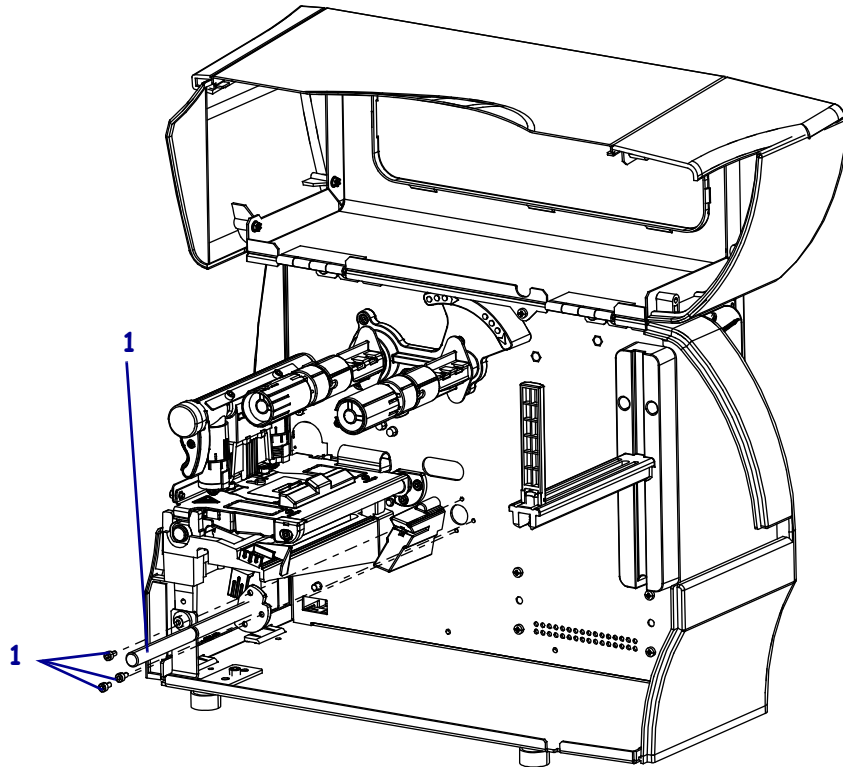


1	Dancer
2	Torsion spring
3	Pivot shaft
4	Notch

4. Remove the old spring.

5. See [Figure 147](#). Remove the three mounting screws that secure the dancer shaft to the printer.

Figure 147 • Remove the Dancer Shaft

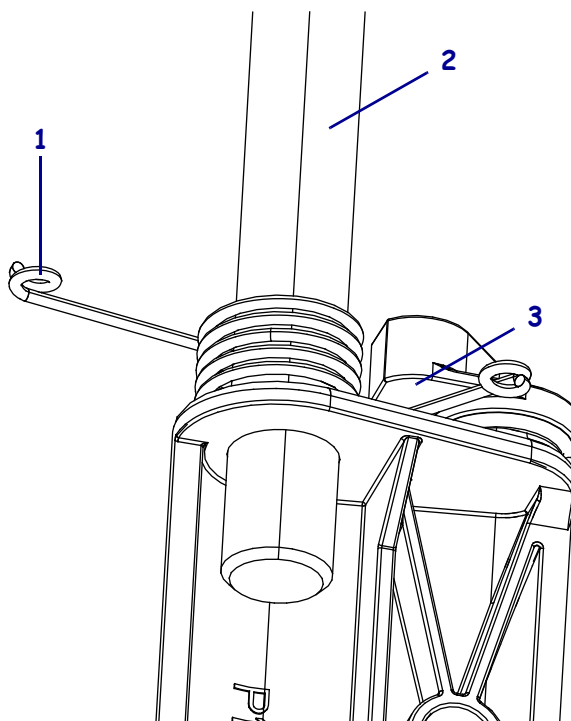


6. Remove the shaft from the printer.

Install the New Dancer

1. See [Figure 147 on page 229](#). Align the three mounting holes in the new shaft with the three mounting holes in the printer.
2. Install the three mounting screws.
3. See [Figure 148](#). Slide the new spring onto the shaft as shown.

Figure 148 • Locate the New spring

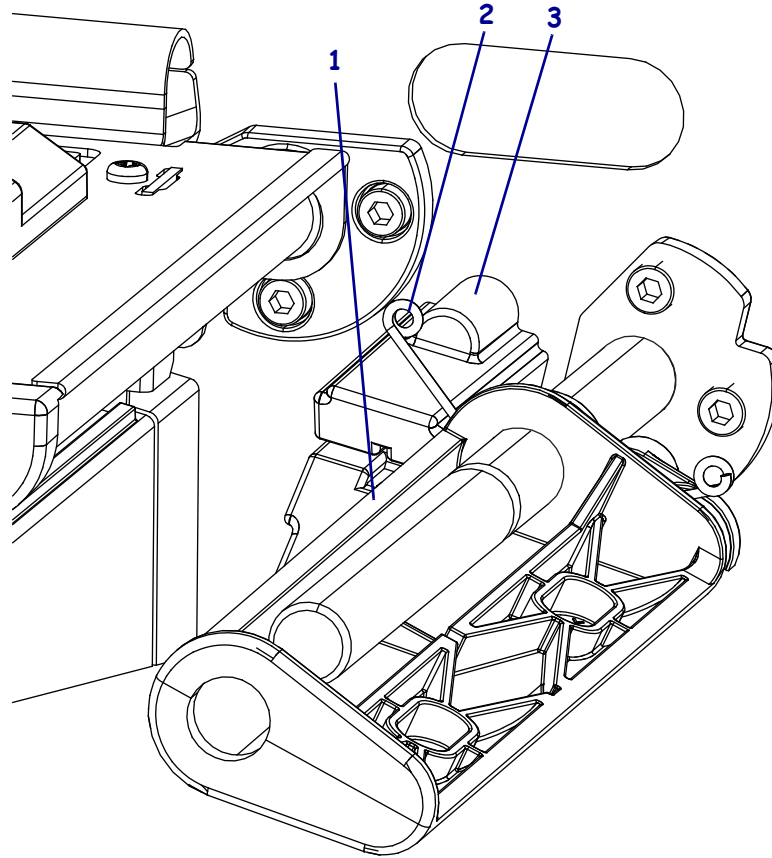


1	Dancer spring
2	Dancer shaft
3	Dancer slot

4. Slide the new dancer part way onto the shaft, and then insert the end of the spring into the slot on the dancer.

- See [Figure 149](#). Slide the dancer and spring onto the shaft; ensure that the other end of the spring is on the top of the media sensor.

Figure 149 • Slide the Dancer and Spring



1	Dancer
2	Dancer spring
3	Media sensor

- Lift the dancer when you reach the outer hole to align the shaft with the hole, and then push the dancer and spring onto the shaft until it snaps into place.
- Ensure that the dancer moves up and down freely.
- 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.

- Reconnect the AC power cord and all data cables.
- Turn on (I) the printer.

The installation is complete.

Cutter Option Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the cutter option in the following printers:

- ZT210™
- ZT220™
- ZT230™

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 150 • Kit Contents

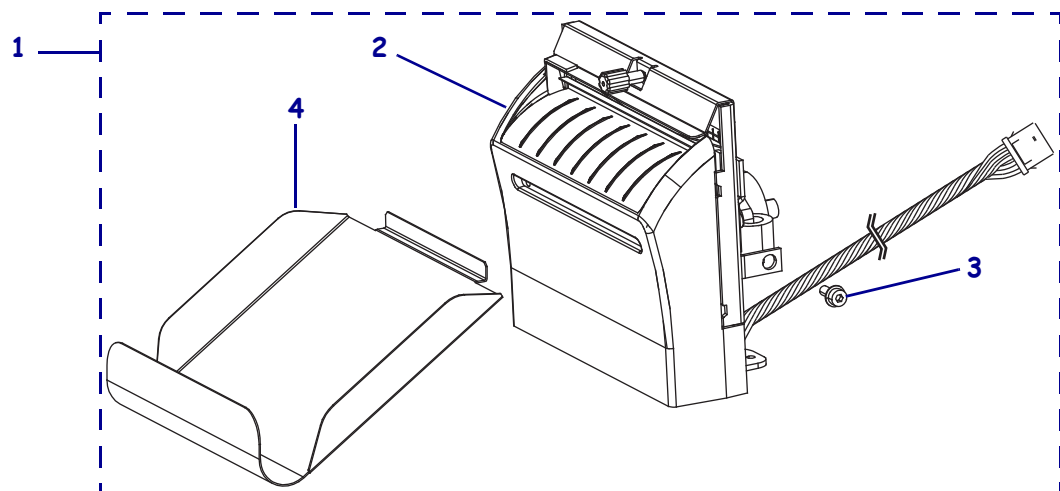


Table 30 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-063	Cutter Option Kit
	2	1	N/A	Cutter Assembly
	3	1	HW43894	Screw, M4 × 0.7 × 10 (sold in quantities of 25)
	4	1	P1037974-037	Cutter Tray Kit

N/A = Not available as a separate part for purchase (listed for identification purposes only).

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Metric Hex Key (Allen wrench) Set
- Antistatic Wriststrap and Mat

Remove the Electronics Cover

1. **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.



2. **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.

3. Which type of electronics cover do you have?

If have a...	Then...
ZT220	Continue with ZT220 Electronics Cover
ZT230 and ZT210	Go to ZT230 and ZT210 Electronics Cover on page 235

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

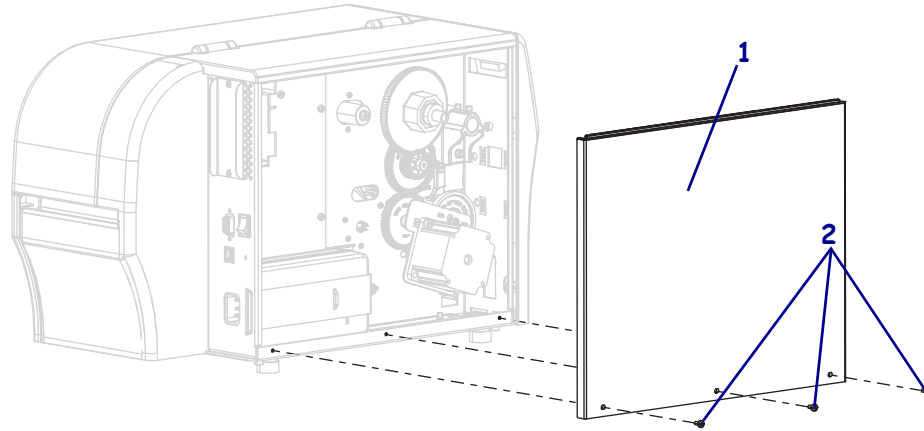
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 151](#). Remove the three screws securing the electronics cover.

Figure 151 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

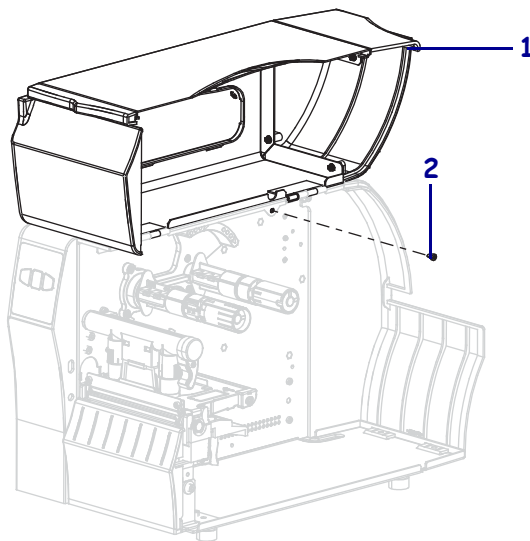
Turn off (O) the printer and disconnect the AC power cord and all data cables.

- 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.

Open the media door and remove the media and ribbon.

3. See [Figure 152](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

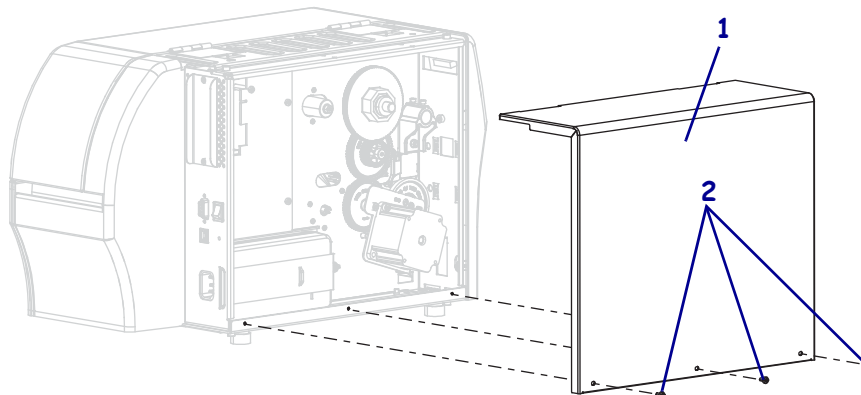
Figure 152 • Open the Media Door



1	Media door
2	Media side mounting screw

4. See [Figure 153](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 153 • Remove the Electronics Cover



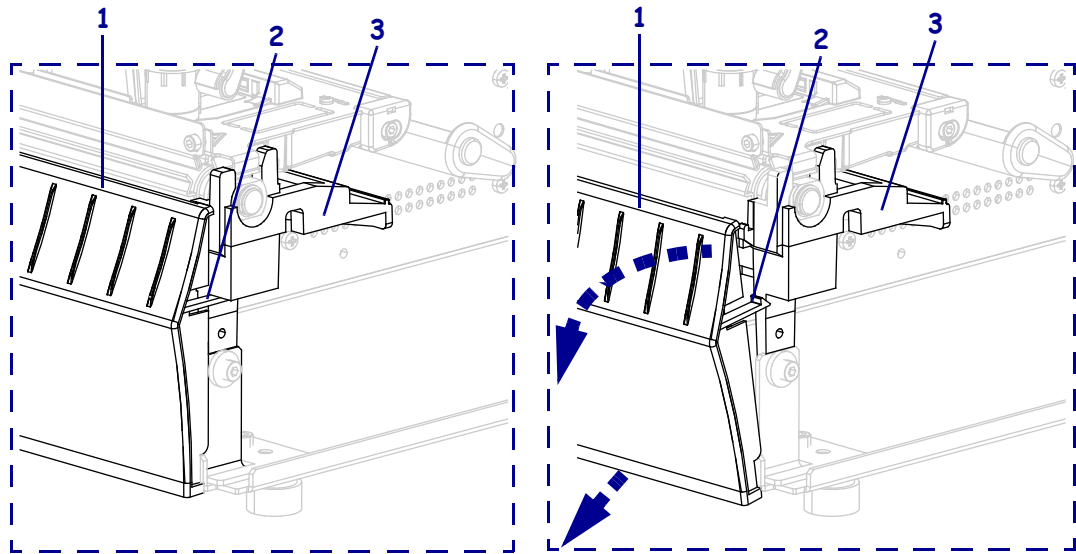
1	Electronics cover
2	Mounting screws (3)

5. Lift the electronics cover off of the printer.
6. Continue with [Install the Cutter Assembly on page 237](#).

Install the Cutter Assembly

1. See [Figure 154](#). Remove the tear front panel by pushing down on the two hooks securing it to the lower print mechanism, and then pulling the lower panel out of the printer base.

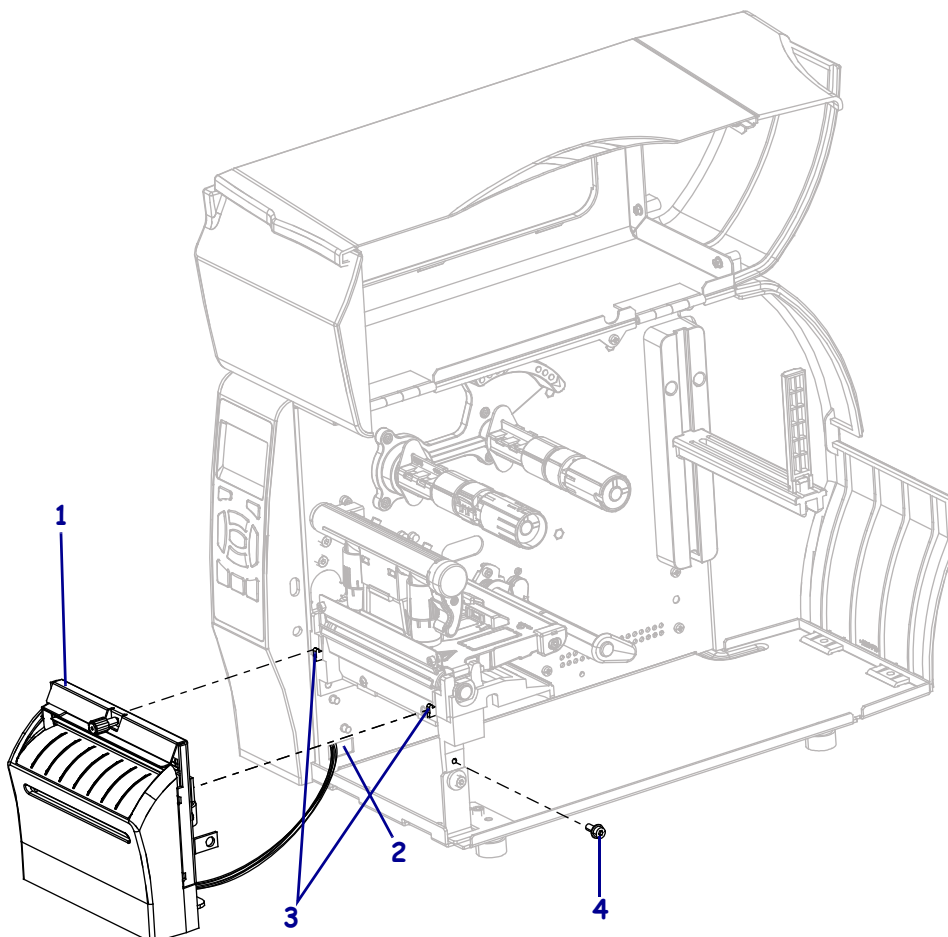
Figure 154 • Remove the Tear Front Panel



1	Front panel
2	Hooks (2)
3	Lower print mechanism

2. See [Figure 155](#). Align the cutter assembly mounting brackets with the mounting hooks.

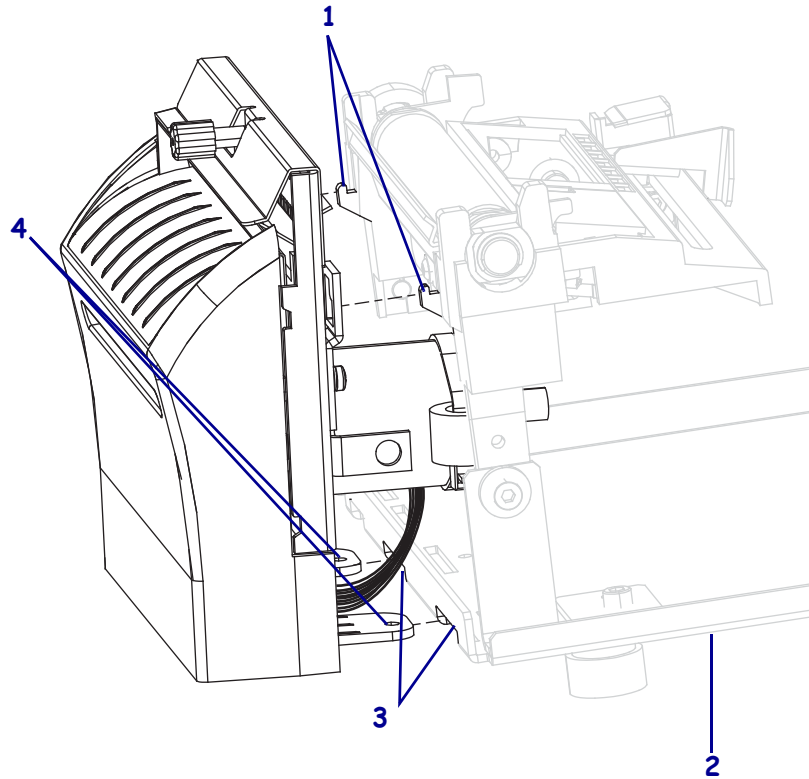
Figure 155 • Install the Cutter Assembly



1	Cutter assembly
2	Access hole
3	Mounting hooks (2)
4	Mounting screw

- See [Figure 156](#). Slide the cutter assembly onto the mounting hooks, ensuring that the mounting tabs slide into the sheet metal base slots.

Figure 156 • Mounting Brackets

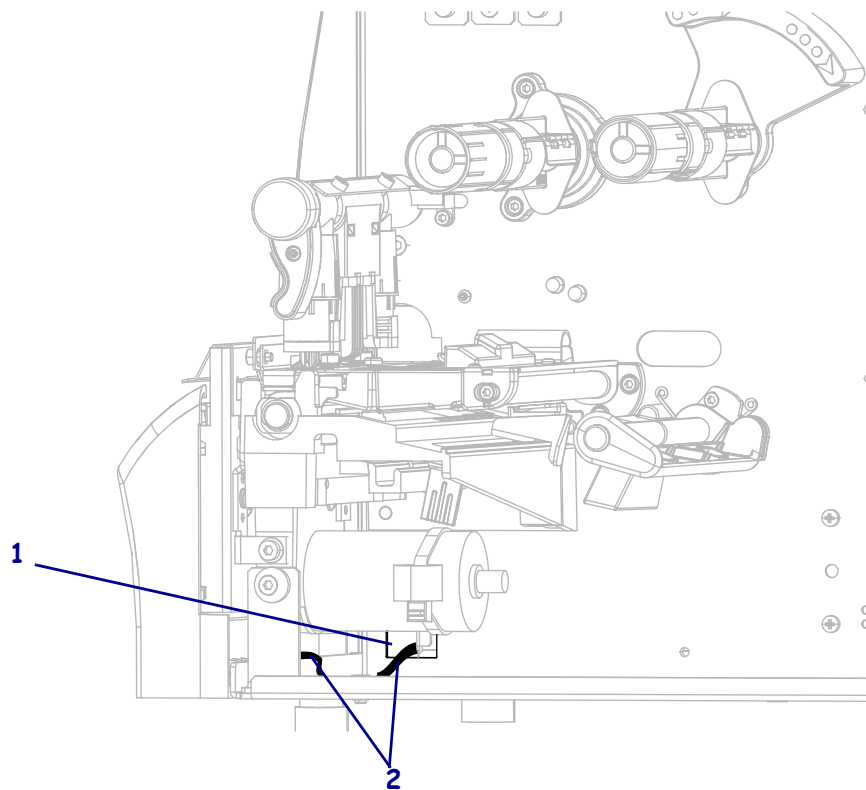


1	Mounting hooks (2)
2	Sheet metal base
3	Mounting slots (2)
4	Mounting tabs (2)

- Slide the cutter assembly toward the printer.
- See [Figure 155 on page 238](#). Install and tighten the mounting screw.

6. See [Figure 157](#). Route the cable through the access hole, and then route it to the main logic board.

Figure 157 • Route the Cutter Cable



1	Access hole
2	Cutter cable

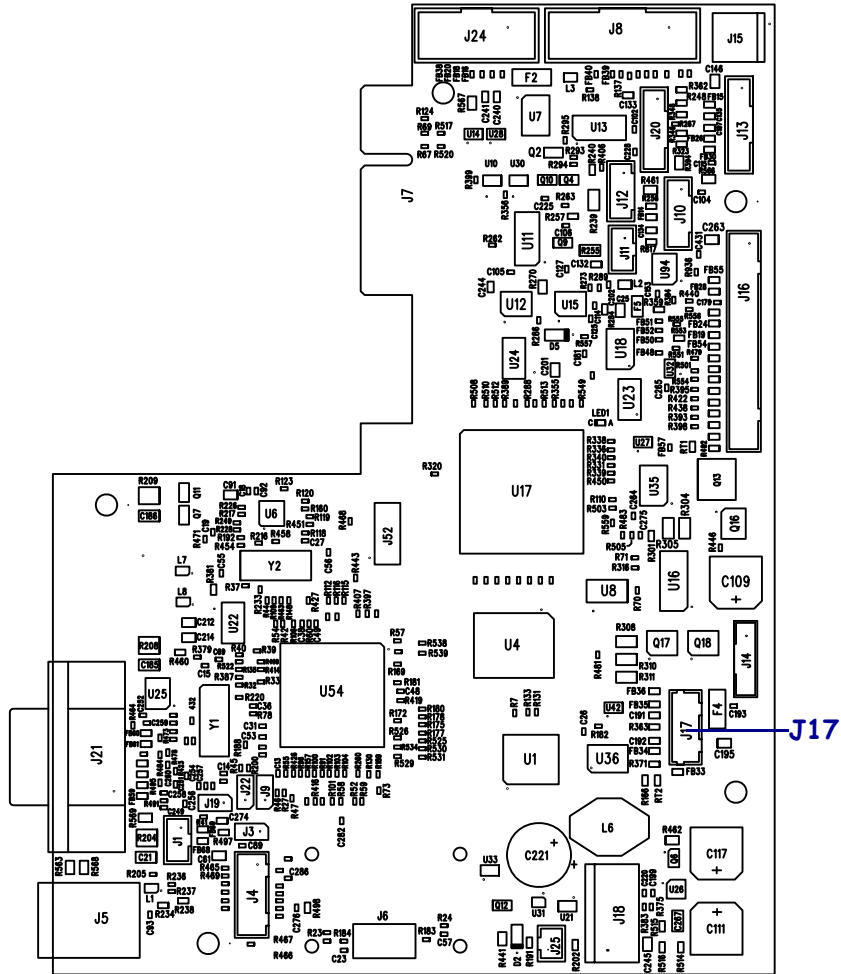


7. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

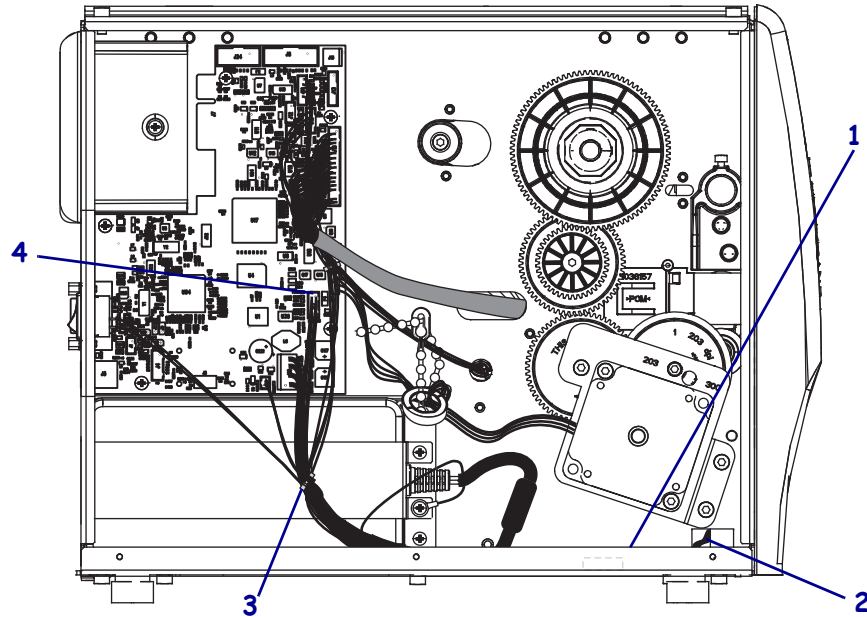
8. See [Figure 158](#). Connect the open end of the cable to J17 on the main logic board (MLB).

Figure 158 • Connect the Cutter Cable to MLB



9. See [Figure 159](#). Route the cutter cable through the cable clamp on the base of the printer, and then connect it to J17 on the main logic board (MLB).

Figure 159 • Cutter Cable Routing



1	Cable clamp
2	Cutter cable
3	Cable tie
4	J17

10. See [Figure 151 on page 235](#). Insert the electronics cover into the printer.
11. Reinstall the three mounting screws.
12. See [Figure 153 on page 236](#). Slide the electronics cover onto the printer.
13. Reinstall the three electronics side mounting screws.
14. See [Figure 152 on page 236](#). Open the media cover and reinstall the media side mounting screw.
15. Which model of printer are you working on?

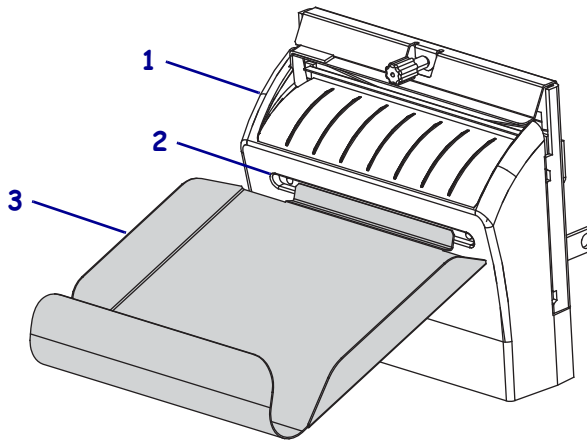
If you have a...	Then...
ZT220	<ol style="list-style-type: none"> a. See Figure 151 on page 235. Insert the electronics cover into the printer. b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none"> a. See Figure 153 on page 236. Slide the electronics cover onto the printer. b. Reinstall the three electronics side mounting screws. c. See Figure 152 on page 236. Open the media cover and reinstall the media side mounting screw.

-
16. **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.

17. Install the cutter catch tray onto the cutter assembly by hooking the catch tray in the slot in the front cover of the cutter assembly.

Figure 160 • Install Cutter Catch Tray



1	Cutter assembly
2	Slot
3	Cutter catch tray

18. Reconnect the AC power cord and all data cables.
19. Turn on (I) the printer.

The installation is complete.

Cutter Cover and PCB Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the cutter cover and PCB in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 161 • Kit Contents

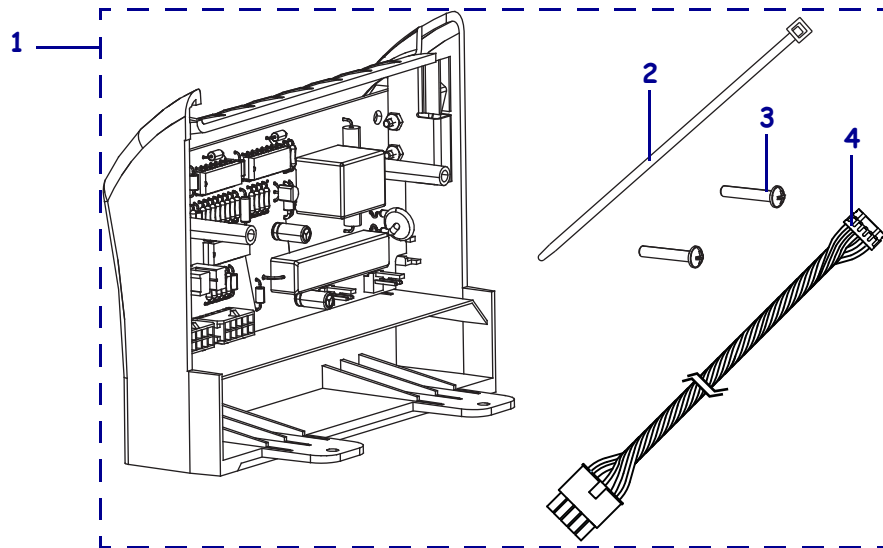


Table 31 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-035	Cutter Cover and PCB Maintenance Kit
	2	1	HWQ06020	Cable Tie 0.09 × 3.62 (sold in quantities of 20)
	3	2	N/A	Screw, M3 × 18
	4	1	N/A	Cutter Cable
N/A = Not available as a separate part for purchase (listed for identification purposes only).				

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Metric Hex Key (Allen wrench) Set
- Antistatic Wriststrap and Mat
- Wire Cutters

Remove the Electronics Cover

1. **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.



2. **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.

3. Which type of printer are you working on?

If have a...	Then...
ZT220	Continue with <i>ZT220 Electronics Cover on page 245</i> .
ZT230 ZT210	Go to <i>ZT230 and ZT210 Electronics Cover on page 246</i> .

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

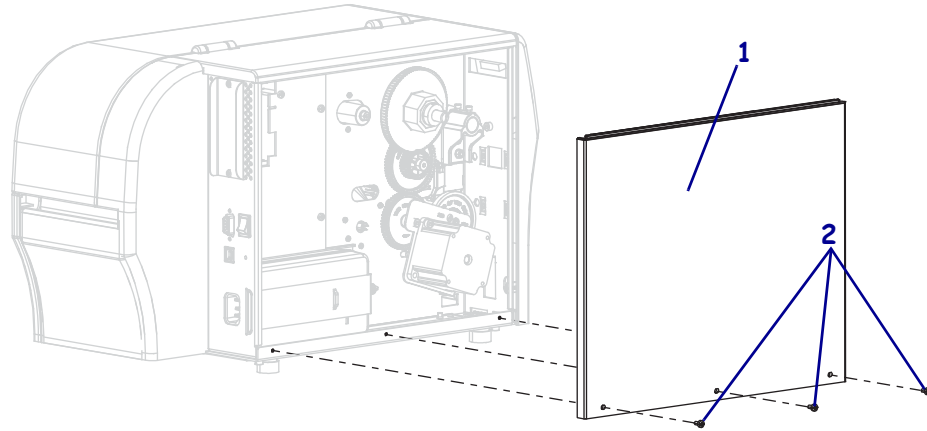
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

3. See [Figure 162](#). Remove the three screws securing the electronics cover.

Figure 162 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

4. Lift the electronics cover off of the printer.
5. Go to [Remove the Cutter Cover and PCB Assembly on page 248](#).

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

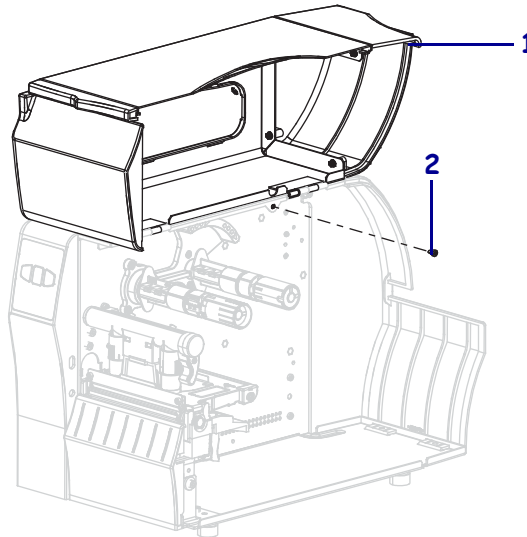
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 163](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

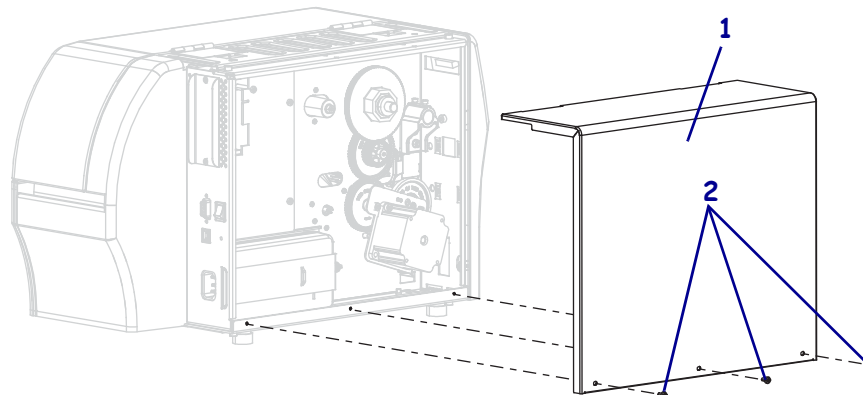
Figure 163 • Open the Media Door



1	Media door
2	Media side mounting screw

- See [Figure 164](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 164 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Continue with [Remove the Cutter Cover and PCB Assembly](#).

Remove the Cutter Cover and PCB Assembly

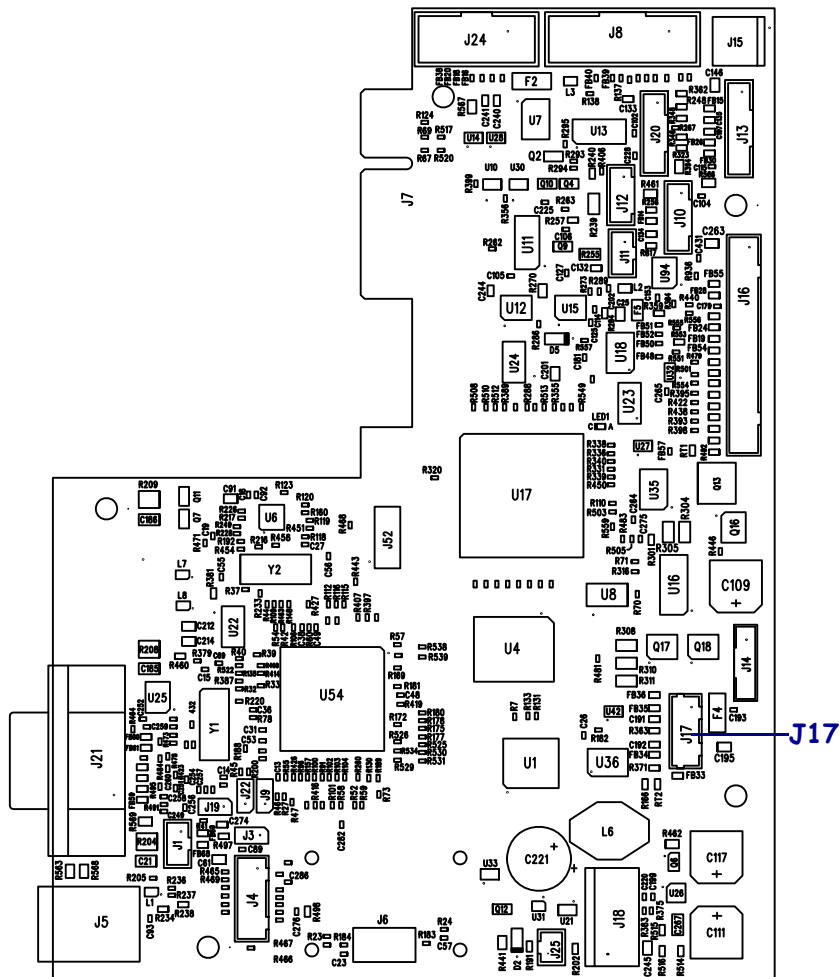


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

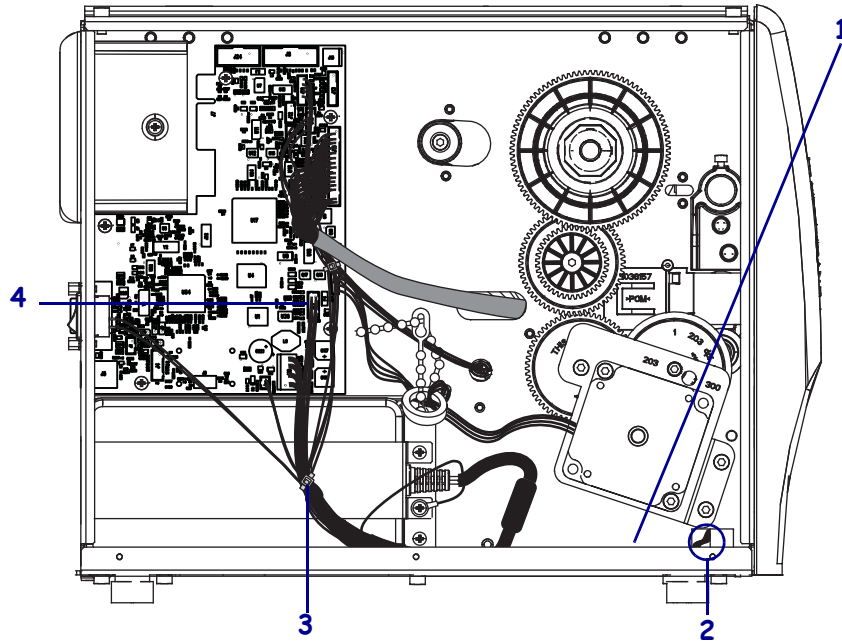
2. See [Figure 165](#). Disconnect the cutter cable from J17 on the main logic board (MLB).

Figure 165 • Connect the Cutter Cable to MLB



- See [Figure 166](#). Cut the cable tie that secures the cutter cable and others to the power supply mounting bracket.

Figure 166 • Cutter Cable Routing



1	Cable clamp (located on the base of the printer)
2	Cutter cable
3	Cable tie
4	J17

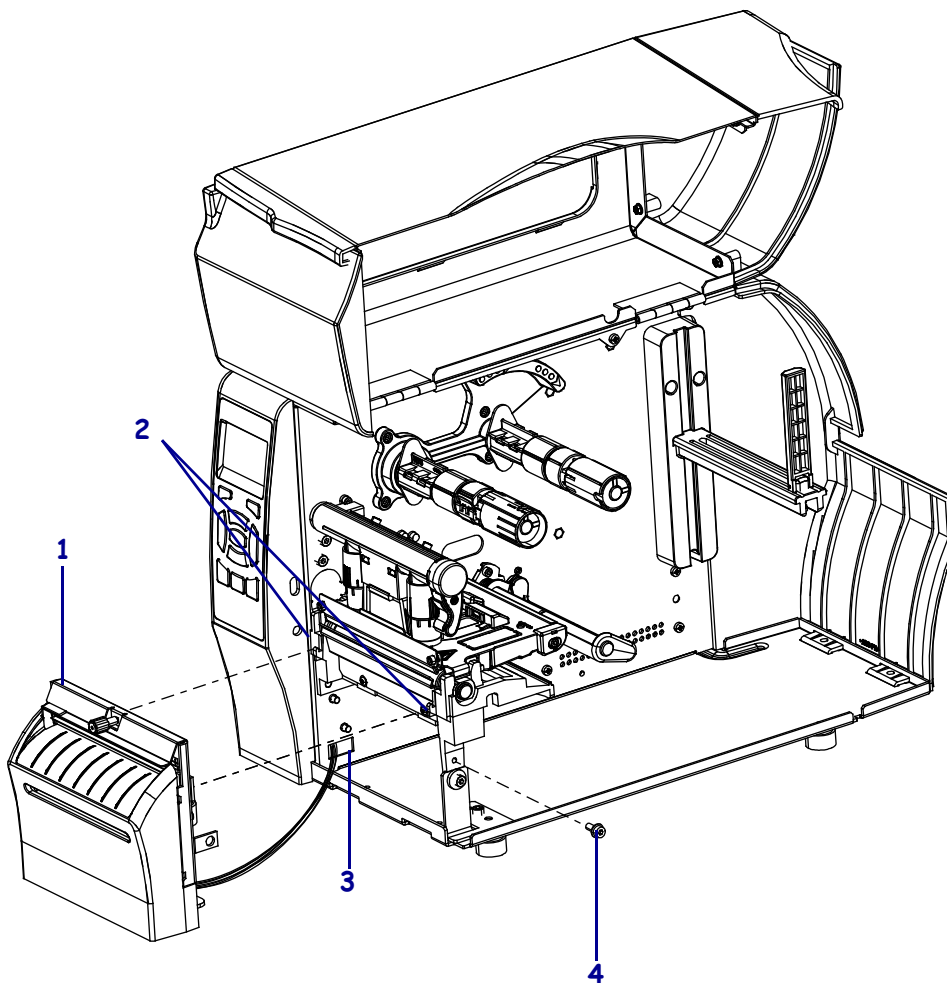
- Remove the cutter cable from the cable clamp.



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

See [Figure 167](#). Remove the cutter mounting screw.

Figure 167 • Remove the Cutter Assembly

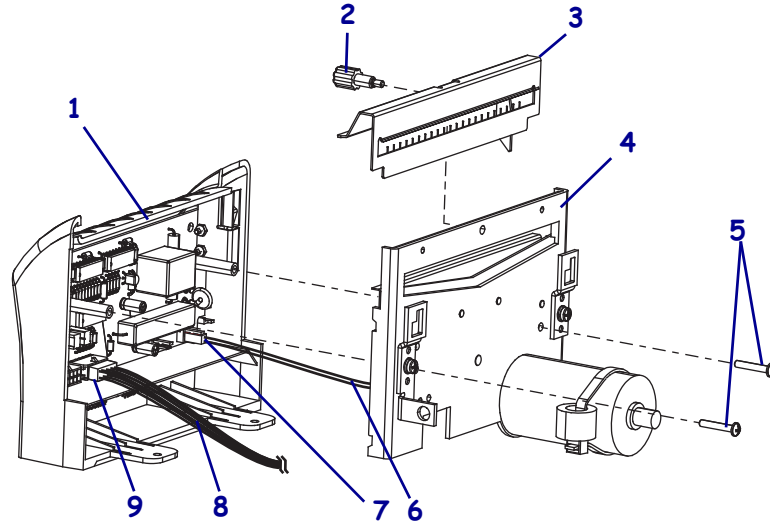


1	Cutter assembly
2	Mounting hooks (2)
3	Access hole
4	Mounting screw

6. Slide the cutter assembly to the right.
7. Lift and slide the cutter off of the mounting hooks and out of the printer.
8. Guide the cutter cable through the access hole.

9. See [Figure 168](#). Remove the safety cover and antistatic brush by loosening the mounting screw.

Figure 168 • Remove the Cutter Cover and Board



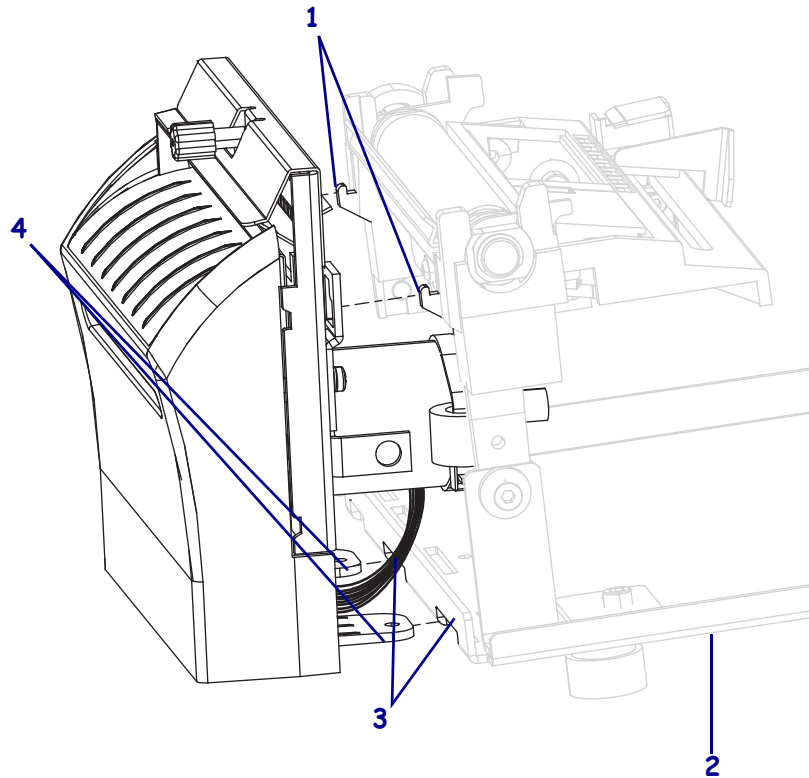
1	Cutter cover and PCB
2	Safety cover mounting screw
3	Safety cover and antistatic brush
4	Cutter mechanism
5	Mounting screws (2)
6	Cutter motor cable
7	Cutter motor cable PCB connector, J3
8	Cutter cable
9	Cutter cable connector, J2

10. Remove the two screws that secure the cover to the cutter mechanism.
11. Carefully pull the cutter mechanism from the cover and PCB until the cutter motor cable connector is accessible.
12. Disconnect the cutter motor cable from J3 connector on the cutter PCB.
13. Discard the cover, PCB, and cutter cable.

Install the New Cutter Cover and PCB

1. See [Figure 168 on page 251](#). Connect the new cutter cable to J2 on the PCB in the cover.
2. Connect the motor cable to J3 on the PCB.
3. Slide the new cutter cover and PCB onto the cutter mechanism, and then install the two new mounting screws.
4. Reinstall the safety cover.
5. See [Figure 169](#). Slide the cutter assembly onto the mounting hooks, ensuring that the mounting tabs slide into the sheet metal base slots.

Figure 169 • Mounting Brackets

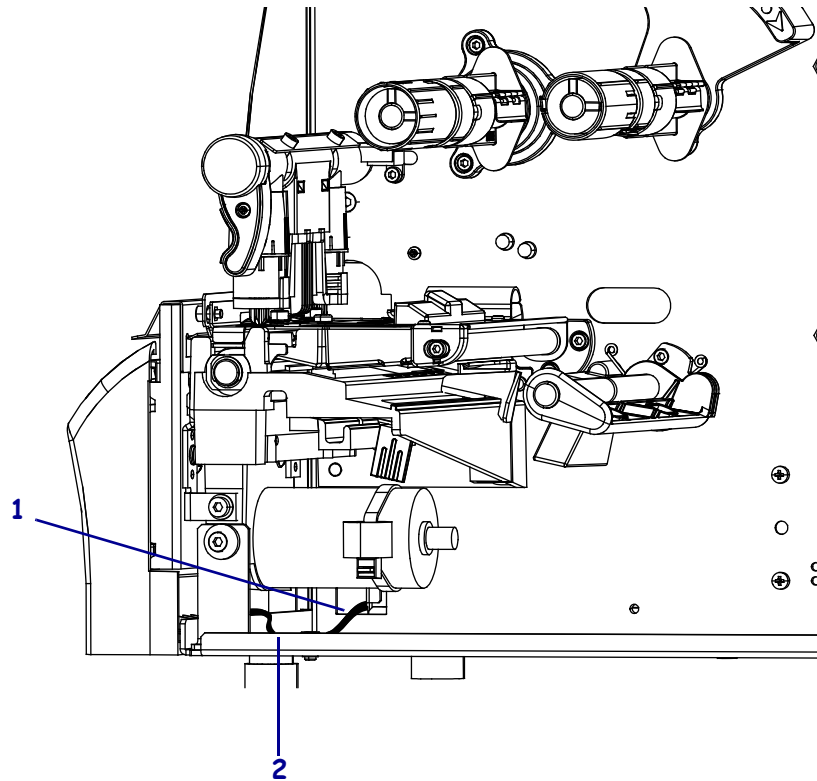


1	Mounting hooks (2)
2	Sheet metal base
3	Mounting slots (2)
4	Mounting tabs (2)

6. Slide the cutter assembly to the left.
7. See [Figure 167 on page 250](#). Install and tighten the mounting screw.

8. See [Figure 170](#). Route the cable through the access hole, and then to the MLB.

Figure 170 • Route the Cutter Cable



1	Access hole
2	Cutter cable

9. See [Figure 166 on page 249](#). Route the cutter cable through the cable clamp on the base of the printer, and then connect it to J17 on the main logic board (MLB).
10. Install a new cable tie through the power supply mounting bracket, around all cables, and tighten the cable tie.
11. Which model of printer are you working on?

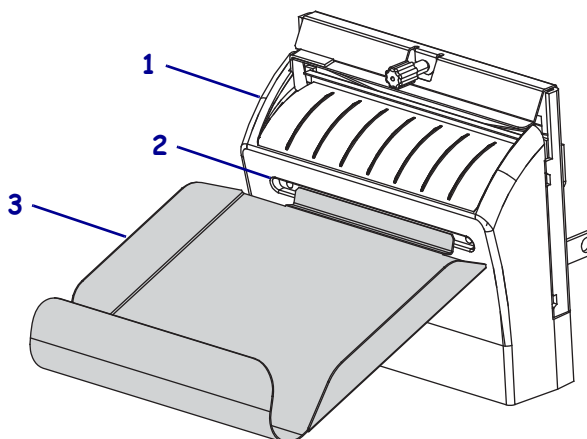
If you have a...	Then...
ZT220	<ol style="list-style-type: none"> a. See Figure 162 on page 246. Insert the electronics cover into the printer. b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none"> a. See Figure 164 on page 247. Slide the electronics cover onto the printer. b. Reinstall the three electronics side mounting screws. c. See Figure 163 on page 247. Open the media cover and reinstall the media side mounting screw.

-
12. **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.

13. Install the cutter catch tray onto the cutter assembly by hooking the catch tray in the slot in the front cover of the cutter assembly.

Figure 171 • Install Cutter Catch Tray



1	Cutter assembly
2	Slot
3	Cutter catch tray

14. Reconnect the AC power cord and all data cables.
15. Turn on (I) the printer.

The installation is complete.



Cutter Cover, PCB, and Flat Flag Cutter Guard Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the cutter cover and PCB in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 172 • Kit Contents

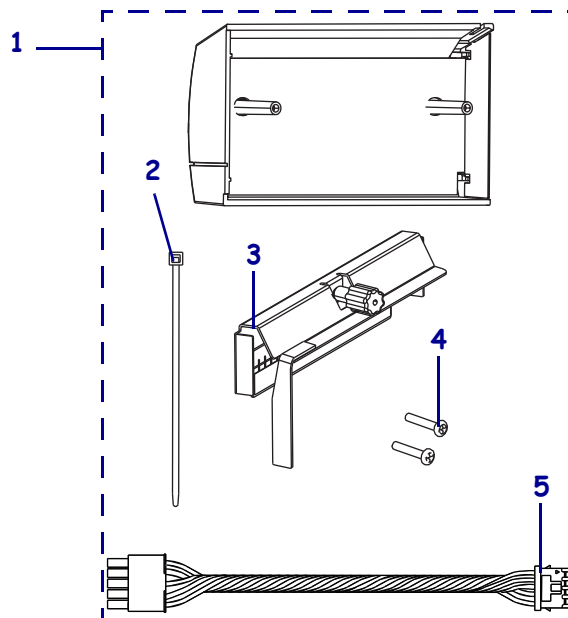


Table 32 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-064	Cutter Cover and PCB Maintenance Kit
	2	1	HWQ06020	Cable Tie 0.09 × 3.62 (sold in quantities of 20)
	3	1	P1066612	Static Brush and Guard Flat End
	4	2	N/A	Screw, M3 × 18
	5	1	P1037974-020	Cutter Cable (Sold in Electronics Cables Kit)

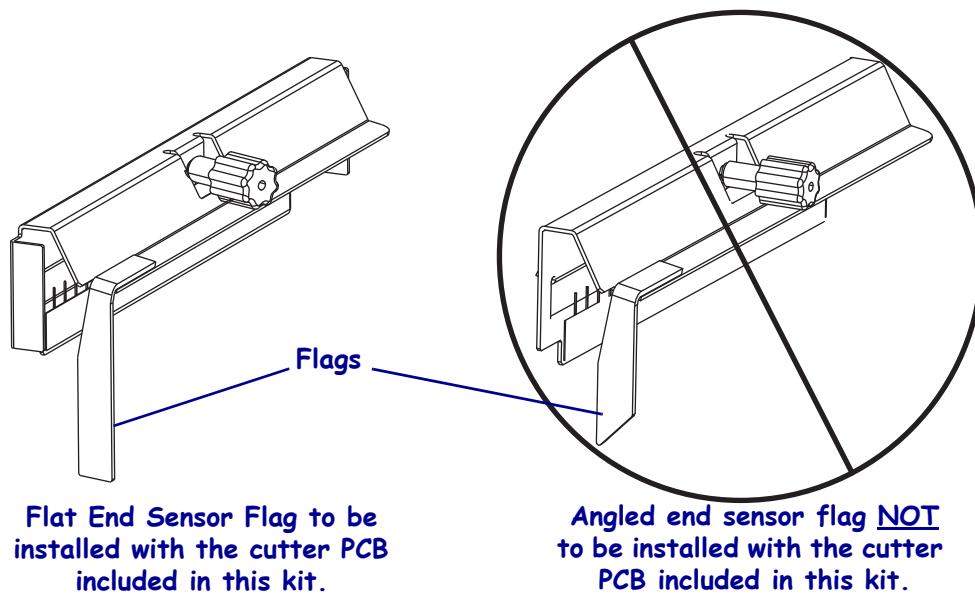
N/A = Not available as a separate part for purchase (listed for identification purposes only).



Note • When installing the cutter PCB and cover included in this kit, the cutter guard and static brush included should also be installed.

The Cutter PCB included in this kit is designed to function with the cutter guard and static brush that has the flat end sensor flag. Cutter guard and static brush's that have the angled end will not function with the PCB included in this kit.

Figure 173 • Difference Between the Two Cutter Guards



Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Antistatic Wriststrap and Mat
- Metric Hex Key (Allen wrench) Set
- Wire Cutters

Remove the Electronics Cover

1. **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.



2. **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.

3. Which type of printer are you working on?

If have a...	Then...
ZT220	Continue with <i>ZT220 Electronics Cover</i> on page 257.
ZT230 ZT210	Go to <i>ZT230 and ZT210 Electronics Cover</i> on page 259.

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

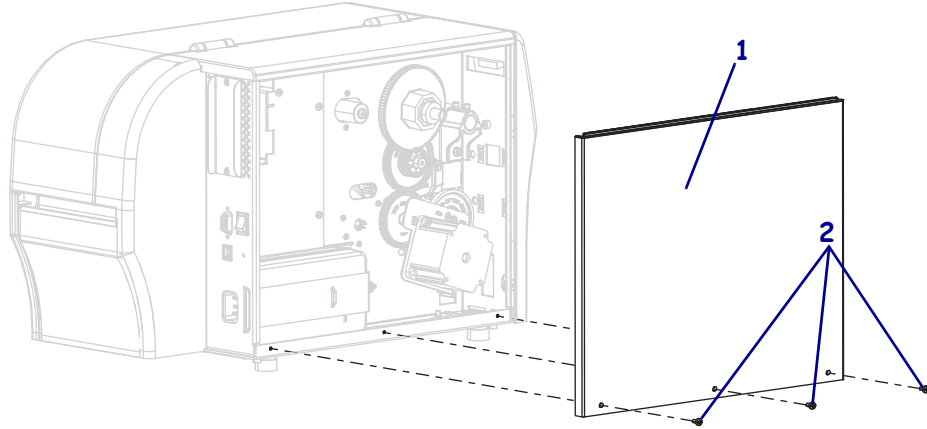
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

3. See [Figure 174](#). Remove the three screws securing the electronics cover.

Figure 174 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

4. Lift the electronics cover off of the printer.
5. Go to [Remove the Cutter Cover and PCB Assembly](#) on page 261.

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

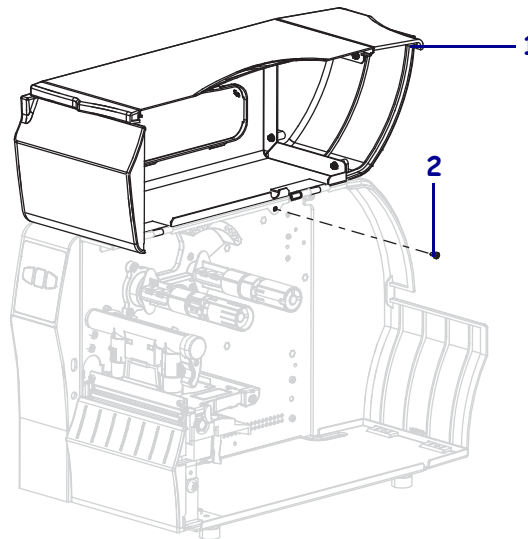
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

3. See [Figure 175](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

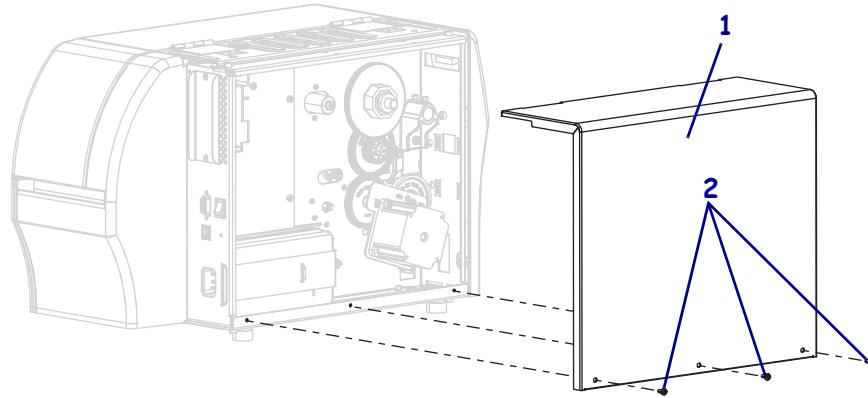
Figure 175 • Open the Media Door



1	Media door
2	Media side mounting screw

4. See [Figure 176](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 176 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

5. Lift the electronics cover off of the printer.
6. Continue with [Remove the Cutter Cover and PCB Assembly](#).

Remove the Cutter Cover and PCB Assembly

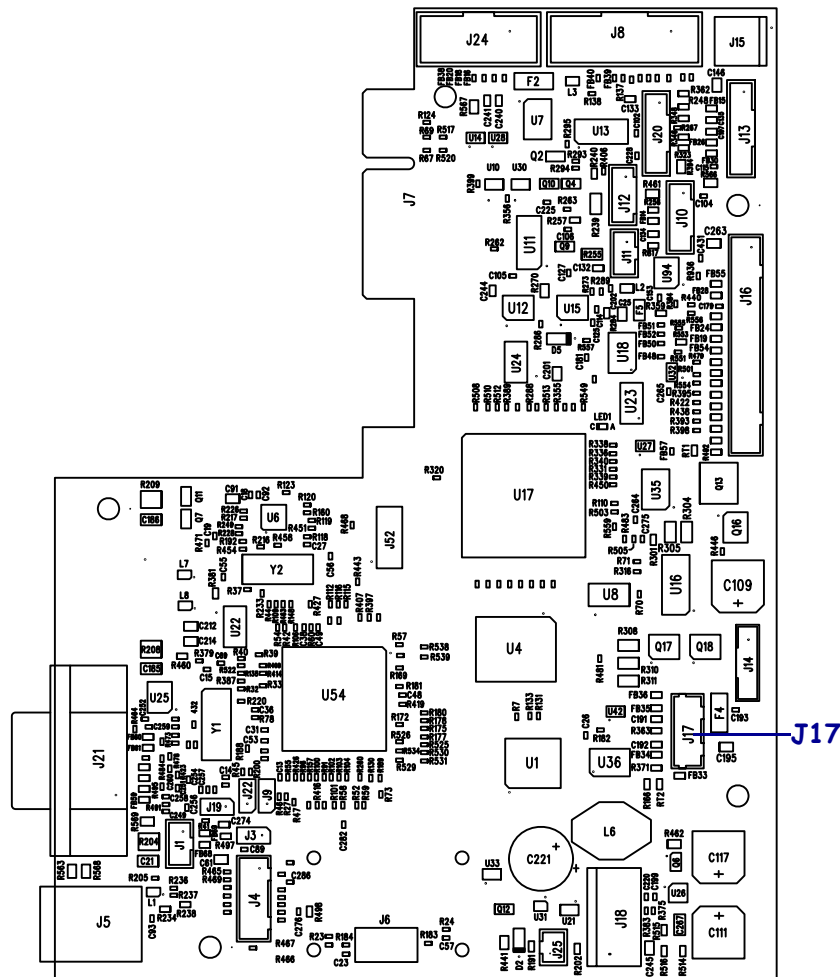


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

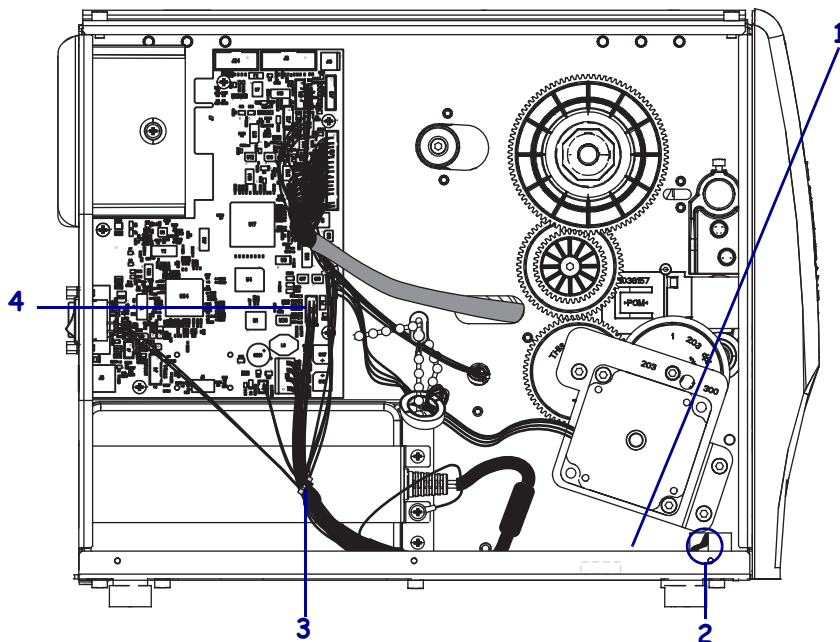
2. See [Figure 177](#). Disconnect the cutter cable from J17 on the main logic board (MLB).

Figure 177 • Connect the Cutter Cable to MLB



3. See [Figure 178](#). Cut the cable tie that secures the cutter cable and others to the power supply mounting bracket.

Figure 178 • Cutter Cable Routing



1	Cable clamp (located on the base of the printer)
2	Cutter cable
3	Cable tie
4	J17

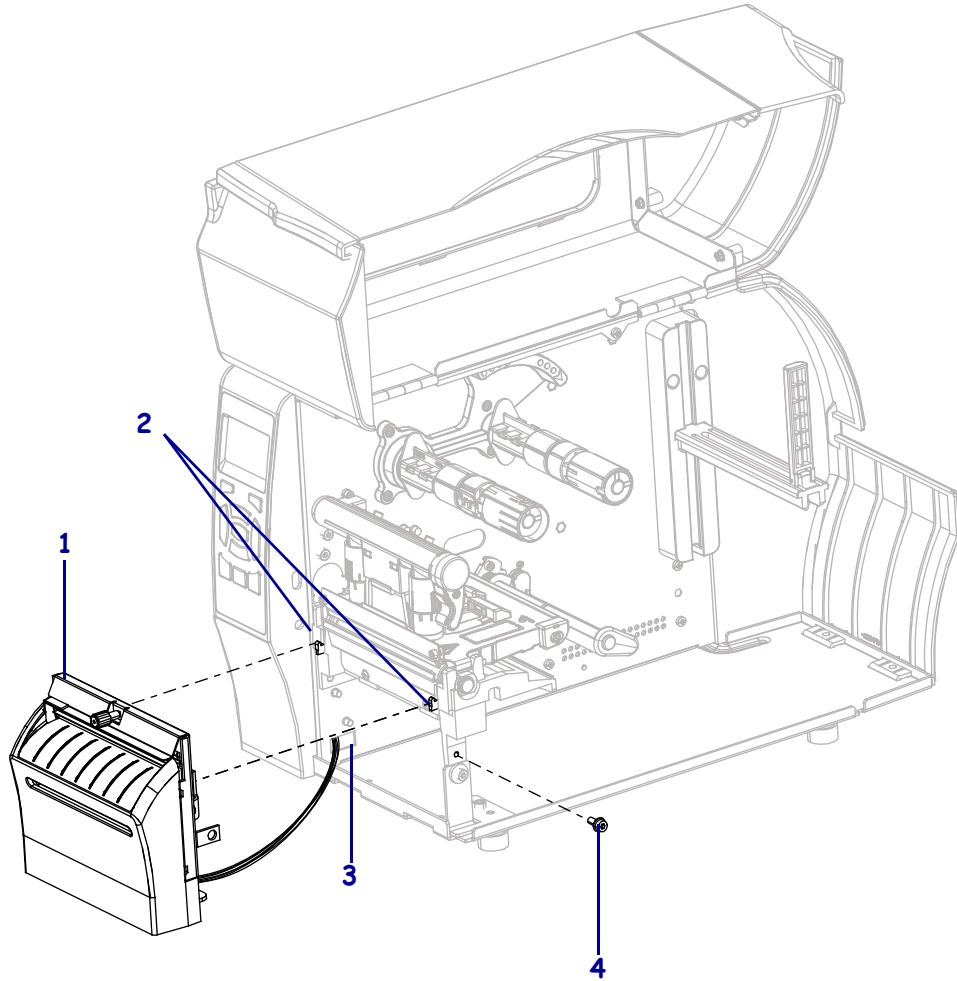
4. Remove the cutter cable from the cable clamp.



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

See [Figure 179](#). Remove the cutter mounting screw.

Figure 179 • Remove the Cutter Assembly

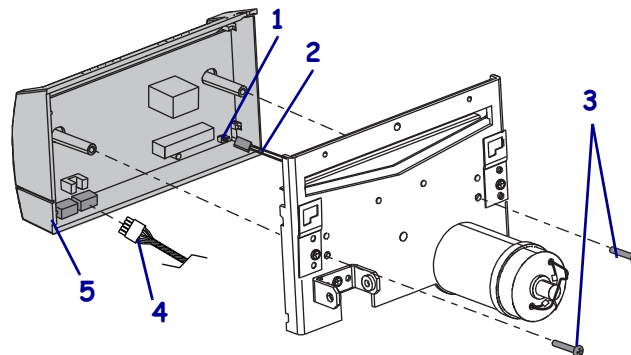


1	Cutter assembly
2	Mounting hooks (2)
3	Access hole
4	Mounting screw

6. Slide the cutter assembly to the right.
7. Lift and slide the cutter off of the mounting hooks and out of the printer.
8. Guide the cutter cable through the access hole.

9. See [Figure 180](#). Remove the safety cover and antistatic brush by loosening the mounting screw.

Figure 180 • Remove the Cutter Cover and Board



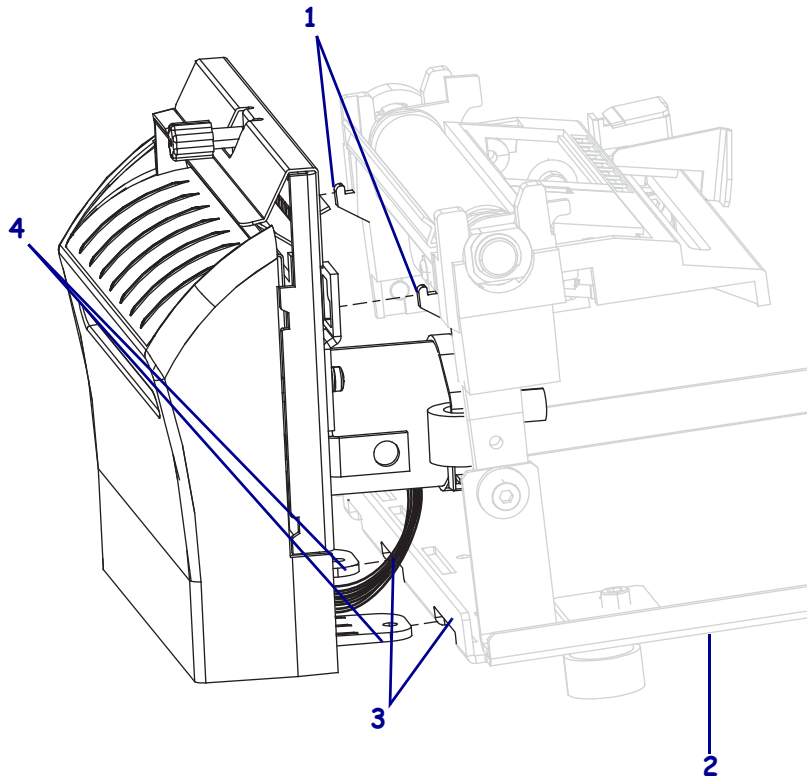
1	Motor connector
2	Motor cable
3	Cover mounting screws (2)
4	Cutter cable assembly
5	4 inch cutter cover/PCB

10. Remove the two screws that secure the cover to the cutter mechanism.
11. Carefully pull the cutter mechanism from the cover and PCB until the cutter motor cable connector is accessible.
12. Disconnect the cutter motor cable from J3 connector on the cutter PCB.
13. Discard the cover, PCB, and cutter cable.

Install the New Cutter Cover and PCB

1. See [Figure 180 on page 264](#). Connect the new cutter cable to J2 on the PCB in the cover.
2. Connect the motor cable to J3 on the PCB.
3. Slide the new cutter cover and PCB onto the cutter mechanism, and then install the two new mounting screws.
4. Install the safety cover.
5. See [Figure 181](#). Slide the cutter assembly onto the mounting hooks, ensuring that the mounting tabs slide into the sheet metal base slots.

Figure 181 • Mounting Brackets

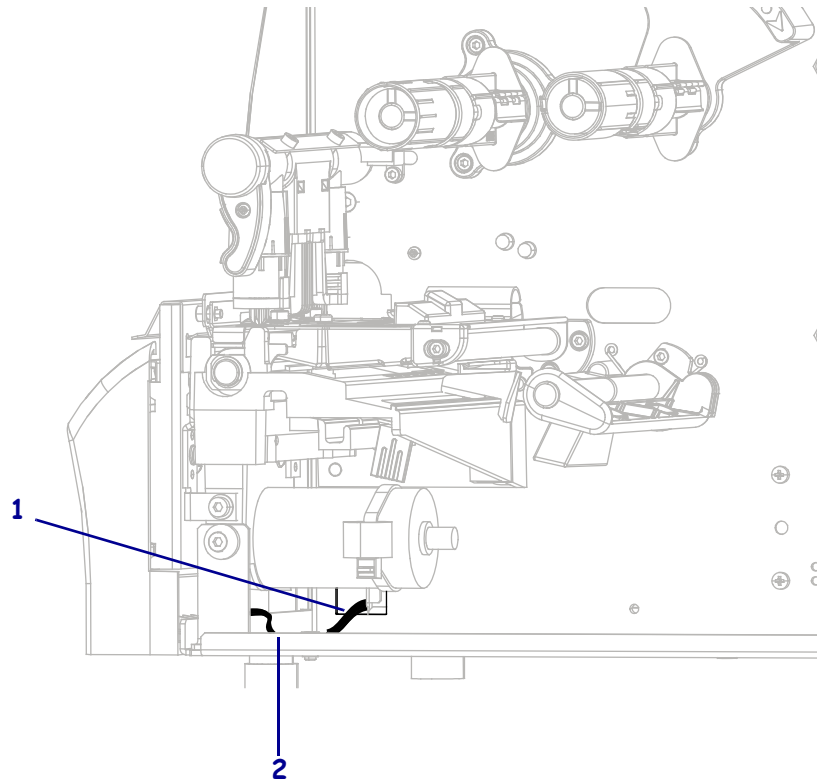


1	Mounting hooks (2)
2	Sheet metal base
3	Mounting slots (2)
4	Mounting tabs (2)

6. Slide the cutter assembly to the left.
7. See [Figure 179 on page 263](#). Install and tighten the mounting screw.

8. See [Figure 182](#). Route the cable through the access hole, and then to the MLB.

Figure 182 • Route the Cutter Cable



1	Access hole
2	Cutter cable

9. See [Figure 178 on page 262](#). Route the cutter cable through the cable clamp on the base of the printer, and then connect it to J17 on the main logic board (MLB).
10. Install a new cable tie through the power supply mounting bracket, around all cables, and tighten the cable tie.
11. Which model of printer are you working on?

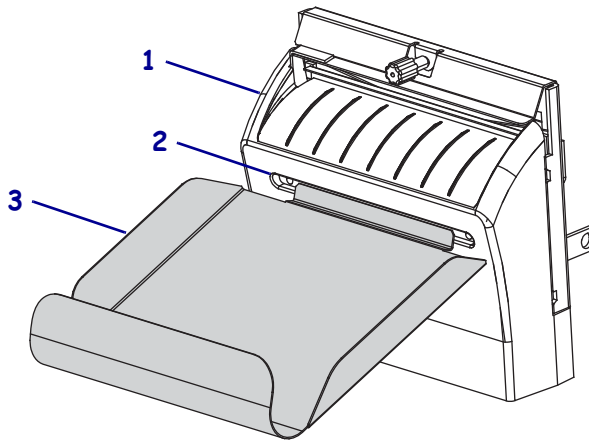
If you have a...	Then...
ZT220	<p>a. See Figure 174 on page 258. Insert the electronics cover into the printer.</p> <p>b. Reinstall the three mounting screws.</p>
ZT230 ZT210	<p>a. See Figure 176 on page 260. Slide the electronics cover onto the printer.</p> <p>b. Reinstall the three electronics side mounting screws.</p> <p>c. See Figure 175 on page 259. Open the media cover and reinstall the media side mounting screw.</p>

-
12. **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.

13. Install the cutter catch tray onto the cutter assembly by hooking the catch tray in the slot in the front cover of the cutter assembly.

Figure 183 • Install Cutter Catch Tray



1	Cutter assembly
2	Slot
3	Cutter catch tray

14. Reconnect the AC power cord and all data cables.
15. Turn on (I) the printer.

The installation is complete.

Cutter Antistatic Brush Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the cutter option in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 184 • Kit Contents

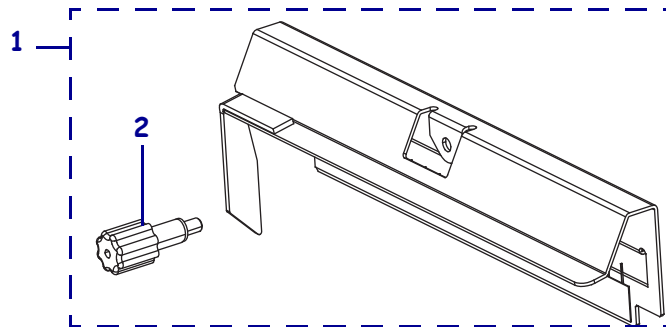


Table 33 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-036	Cutter Antistatic Brush Maintenance Kit
	2	1	N/A	Thumb Screw

N/A = Not available as a separate part (listed for identification purposes only).

Remove the Old Cutter Static Brush

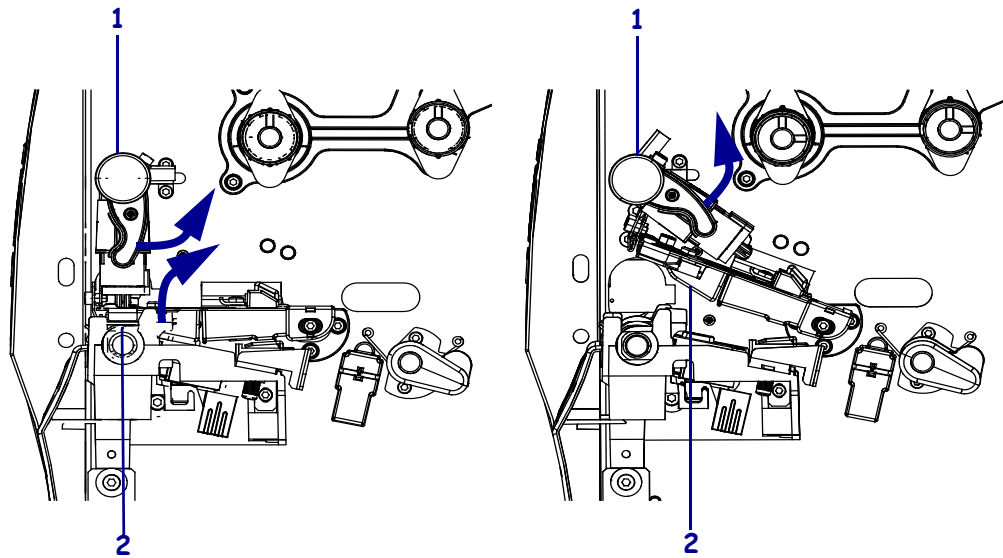


1. **Caution** • Turn off (O) the printer and disconnect it from the power source before performing the following procedure.

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

2. Turn the toggle bar counterclockwise to open the printhead.

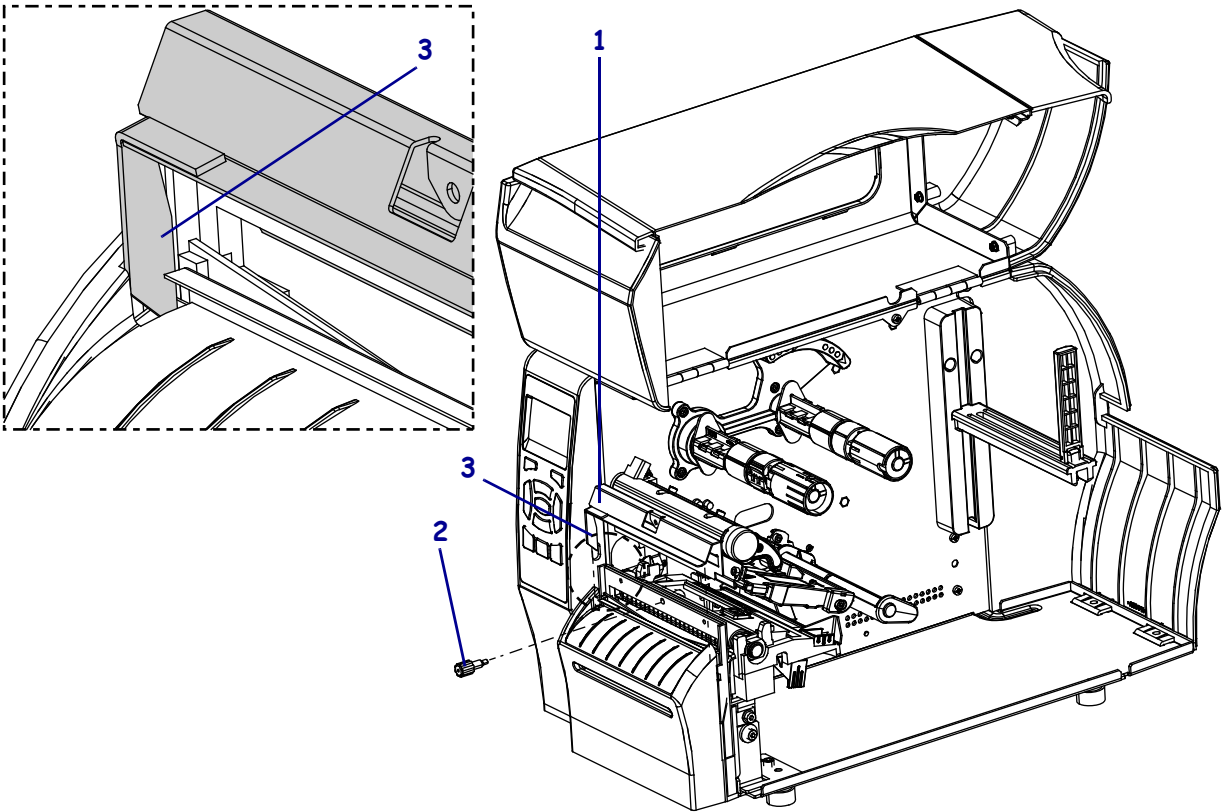
Figure 185 • Open the Printhead



1	Toggle bar
2	Print mechanism

3. See [Figure 186](#). Remove the thumbscrew that secures the cutter antistatic brush.

Figure 186 • Remove the Cutter Antistatic Brush Assembly



1	Cutter antistatic brush assembly
2	Thumbscrew
3	Safety switch activation arm

Install the New Cutter Antistatic Brush

1. See [Figure 186](#). Align the safety switch activation arm with the slot in the cover, and then slide the cutter antistatic brush down onto the cutter mechanism.
2. Install the thumbscrew.
3. Reconnect the AC power cord and all data cables.
4. Turn (I) on the printer.

The installation is complete.



Cutter Catch Tray Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the cutter catch tray on the following printers:

- ZT230™
- ZT220™
- ZT210™

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 187 • Kit Contents

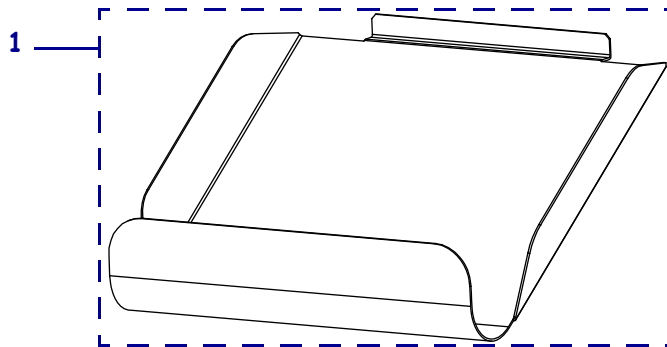


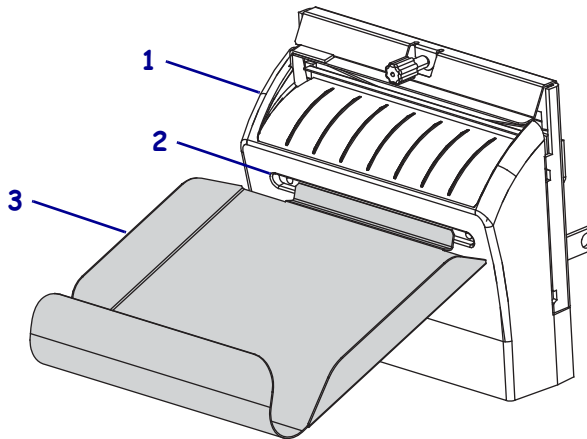
Table 34 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-037	Cutter Catch Tray Kit

Install the Cutter Catch Tray

1. Install the cutter catch tray by hooking the catch tray in the slot on the front cover of the cutter assembly.

Figure 188 • Install Cutter Catch Tray



1	Cutter assembly
2	Slot
3	Cutter catch tray

The installation is complete.

Peel Option Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the peel option in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 189 • Kit Contents

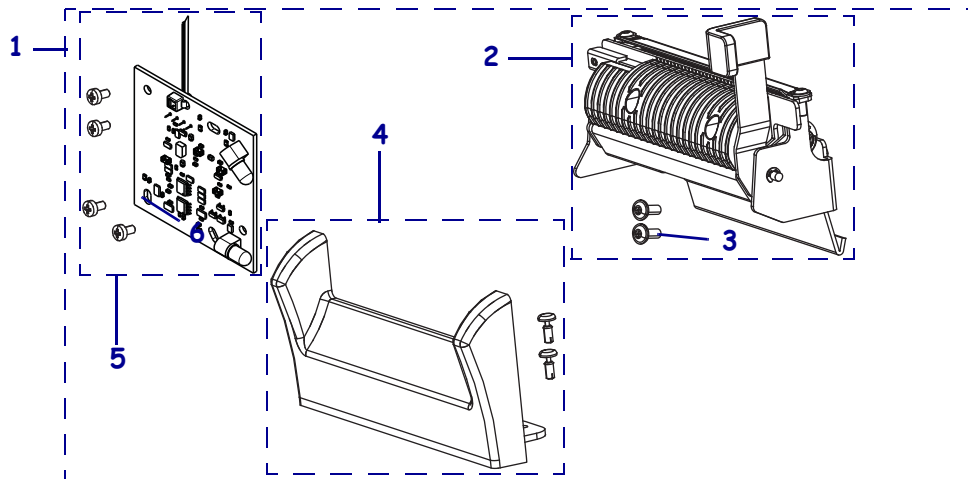


Table 35 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-008	Peel Option Kit
	2	1	P1037974-038	Peel Assembly Maintenance Kit
	3	2	HW77231	Screw, M3 × 8 (sold in quantities of 25)
	4	1	P1037974-033	Front Lower Panel Maintenance Kit ZT230
		1	P1037990-004	Front Lower Panel Maintenance Kit ZT210 and ZT220
	5	1	P1037974-024	Take-Label Sensor Maintenance Kit
	6	4	HW43968	Screw, M3 × 0.5 × 6 (sold in quantities of 25)

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Antistatic Wriststrap and Pad
- Metric Hex Key (Allen wrench) Set

Remove the Electronics Cover



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. Which type of electronics cover do you have?

If have a...	Then...
ZT210	Continue with <i>ZT220 Electronics Cover</i> .
ZT220 ZT230	Go to <i>ZT230 and ZT210 Electronics Cover on page 275</i> .

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

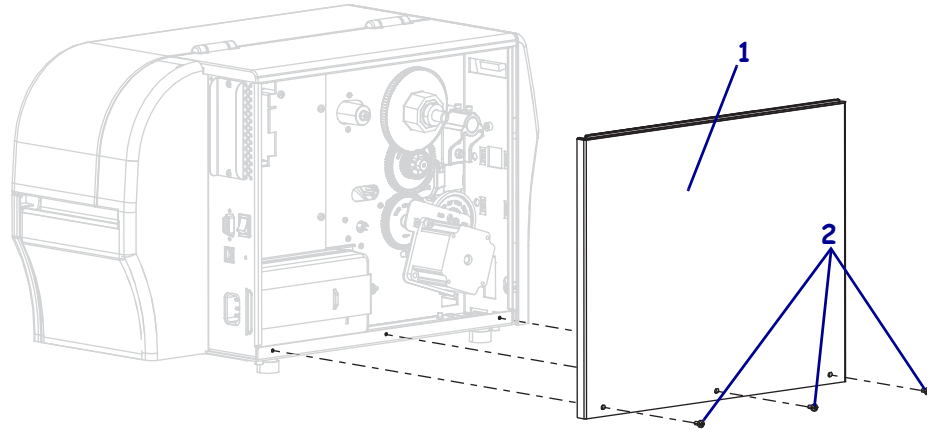
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 190](#). Remove the three screws securing the electronics cover.

Figure 190 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Go to [Remove the Control Panel on page 277](#).

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

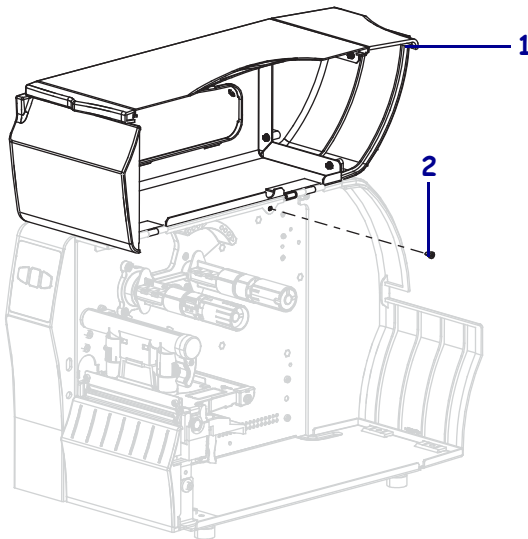
Turn off (O) the printer and disconnect the AC power cord and all data cables.

- 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.

Open the media door and remove the media and ribbon.

3. See [Figure 191](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

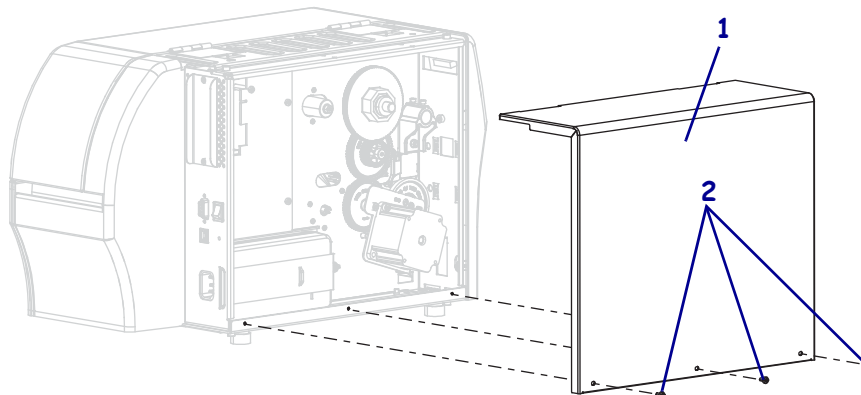
Figure 191 • Open the Media Door



1	Media door
2	Media side mounting screw

4. See [Figure 192](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 192 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

5. Lift the electronics cover off of the printer.
6. Continue with [Remove the Control Panel on page 277](#).

Remove the Control Panel

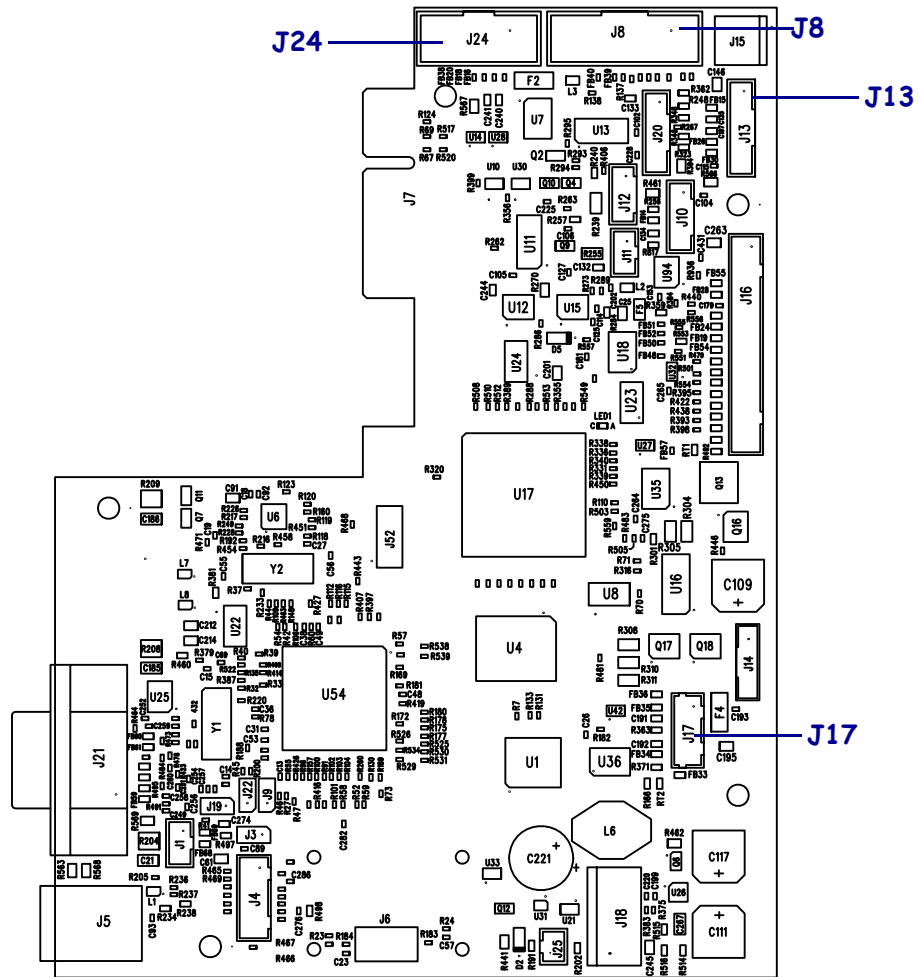


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. See [Figure 193](#). Disconnect the control panel data cable(s) from J8 and/or J24 on the main logic board.

Figure 193 • Disconnect the Control Panel



J8	ZT210/ZT220/ZT230 control panel data cable connector
J13	Take-label sensors cable connector
J17	Liner take-up cable connector
J24	ZT230 control panel data cable connector

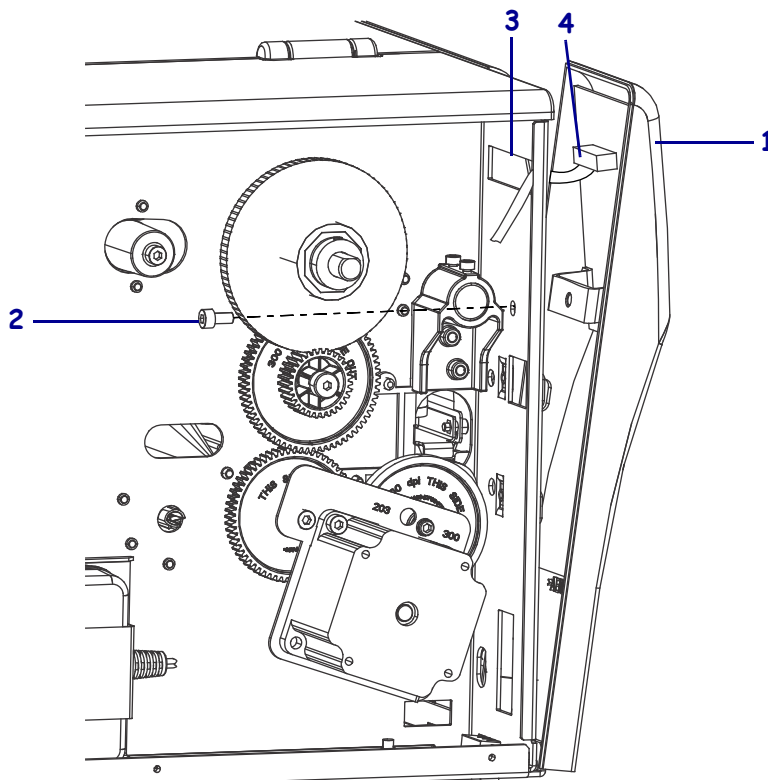
3. Which model of printer are you working on?

If you have a...	Then...
ZT210 ZT220	Continue with <i>ZT210 and ZT220 Control Panel</i> .
ZT230	Go to <i>ZT230 Control Panel on page 279</i> .

ZT210 and ZT220 Control Panel

1. See [Figure 194](#). Remove the control panel mounting screw.

Figure 194 • Remove the Control Panel



1	Control panel
2	Mounting screw
3	Control panel cable access hole
4	Control panel cable

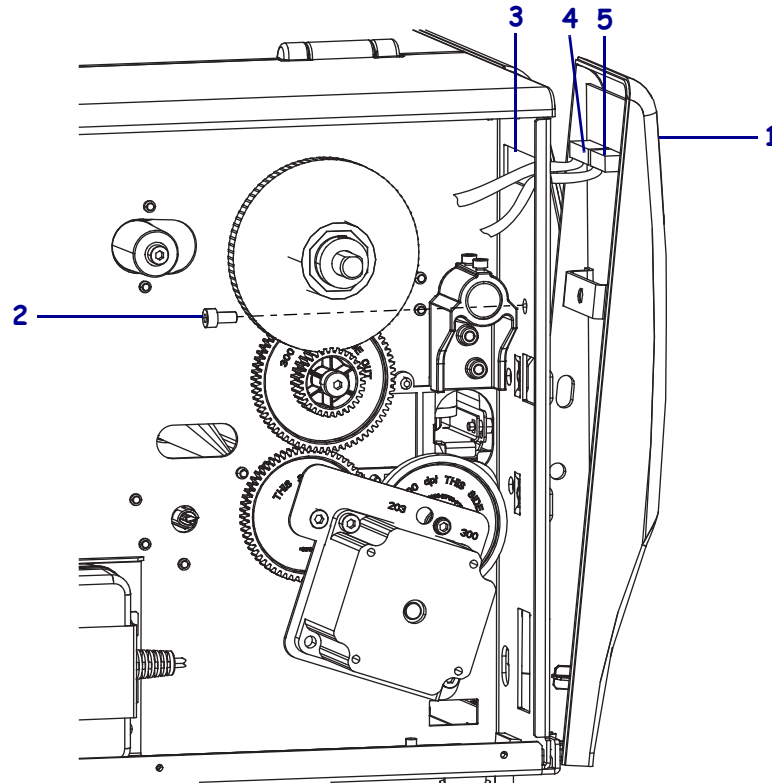
2. Tip the top of the control panel forward, and then slide the control panel out of the printer.

3. Go to [Install the Take-Label Sensors on page 280](#).

ZT230 Control Panel

1. See [Figure 195](#). Remove the control panel mounting screw.

Figure 195 • Remove the Control Panel



1	Control panel
2	Mounting screw
3	Control panel cable access hole
4	Control panel 14 wire cable
5	Control panel 10 wire cable

2. Remove the control panel from the printer.
3. Continue with [Install the Take-Label Sensors](#) on page 280.

Install the Take-Label Sensors

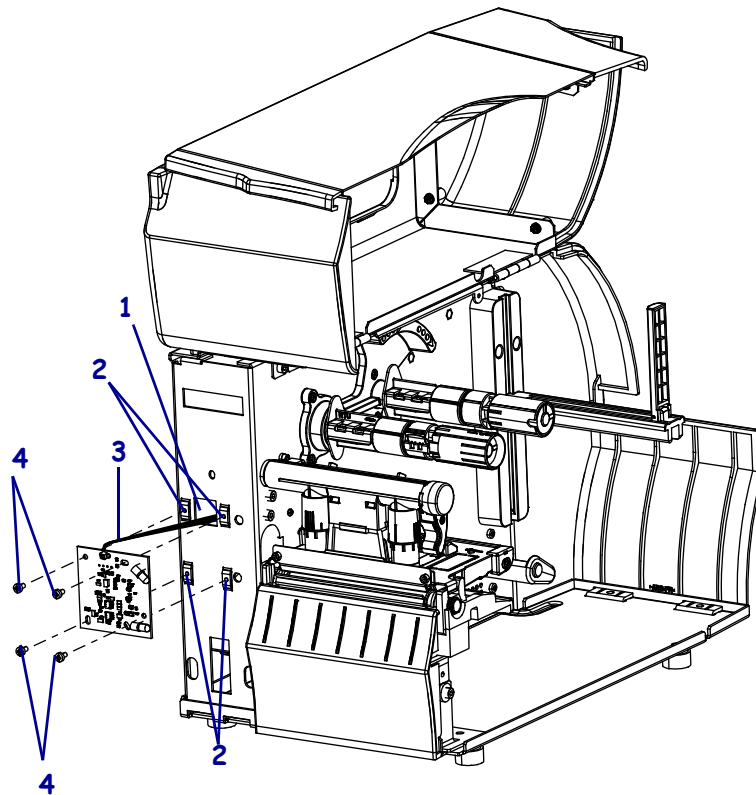


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. See [Figure 196](#). Guide the take-label cable through the access hole, and then align the take-label sensor board, with sensors facing out and to the right, with the four mounting holes.

Figure 196 • Install the Take-Label Sensors



1	Access hole
2	Mounting holes (4)
3	Take-label sensor board
4	Mounting screws (4)

3. Install the upper left mounting screw first, and then the lower right mounting screw.
4. Install the other two mounting screws.

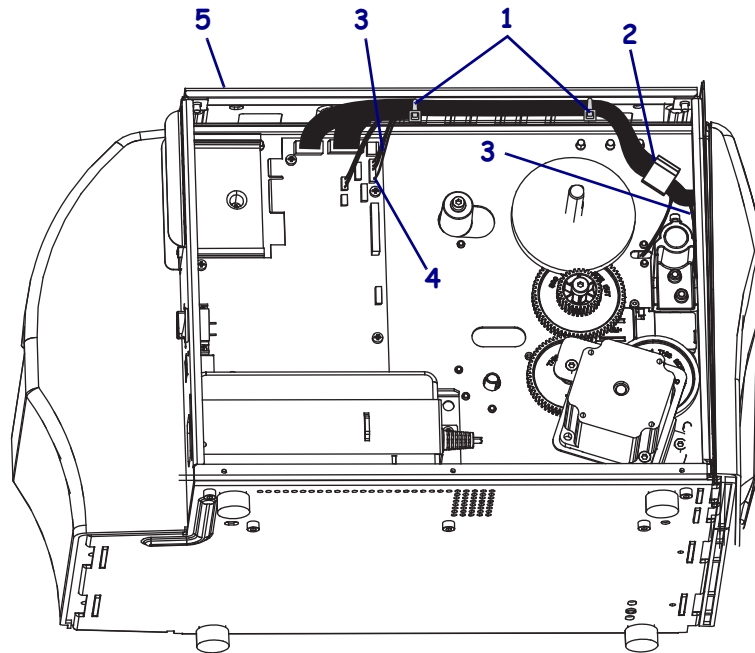
5. Which model of printer are working on?

If you have a...	Then...
ZT210 ZT230	Continue with <i>ZT230 and ZT210 Cable Routing</i> .
ZT220	Go to <i>ZT220 Cable Routing</i> on page 282.

ZT230 and ZT210 Cable Routing

1. See [Figure 197](#). Cut the two cable ties securing the bundle of cables to the printer.

Figure 197 • Control Panel Cable Bundle



1	Cable ties (2)
2	Cable clamp
3	Take-label cable
4	J13 take-label sensor connector
5	Top plate

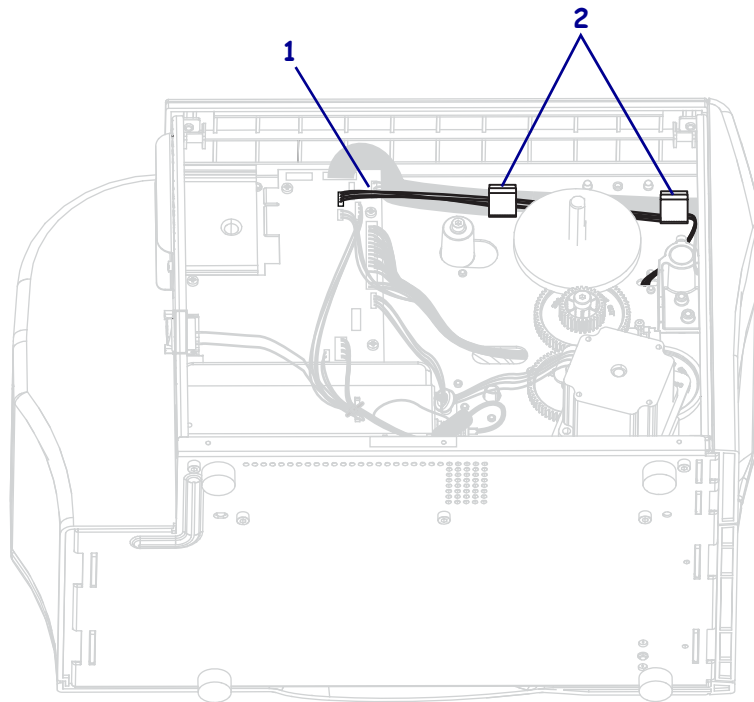
- Route the cable through the cable clamp.
- Install the two cables ties around the bundle of cables, including the take-label sensor cable, and through the two mounting tabs on the top plate.
- Tighten the cable ties, and then cut off the extra length of cable tie.

5. Install the four mounting screws through the four holes in the sensor board and into the printer mounting holes.
As viewed from the front, install the upper left screw first, and then the lower right screw.
Install the two remaining screws.
6. See [Figure 193 on page 277](#). Connect the open end of the cable to J13 on the main logic board (MLB).
7. Continue with [Reinstall the Control Panel on page 283](#).

ZT220 Cable Routing

1. See [Figure 198](#). Route the cable through the cable clamps.

Figure 198 • ZT220 Cable Routing



1	J13
2	Cable clamps (2)

2. See [Figure 193 on page 277](#). Connect the open end of the cable to J13 on the main logic board (MLB).

Reinstall the Control Panel

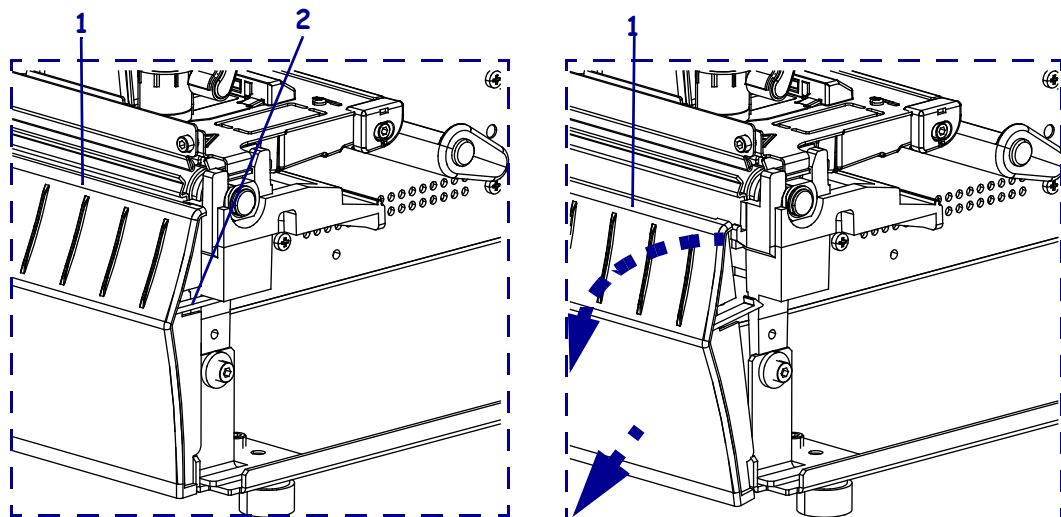
Which model of printer are you working on?

If you have a...	Then...
ZT210 ZT220	<ol style="list-style-type: none"> See Figure 194 on page 278. Guide the control panel and power cable through their access holes. Slide the control panel into the printer, and then install the mounting screw. Connect the control panel cables to J8 on the main logic board (MLB). Connect the power cable to J25 on the MLB. Continue with Install the Peel Assembly.
ZT230	<ol style="list-style-type: none"> See Figure 195 on page 279. Guide the control panel and power cables through their access holes. Slide the control panel into the printer, and then install the mounting screw. Connect the control panel cables to J8 and J24 on the main logic board (MLB). Connect the power cable to J25 on the MLB. Continue with Install the Peel Assembly.

Install the Peel Assembly

- See [Figure 199](#). Remove the tear front panel by pushing down on the two hook securing it to the platen housing, and then pulling it out of the printer base.

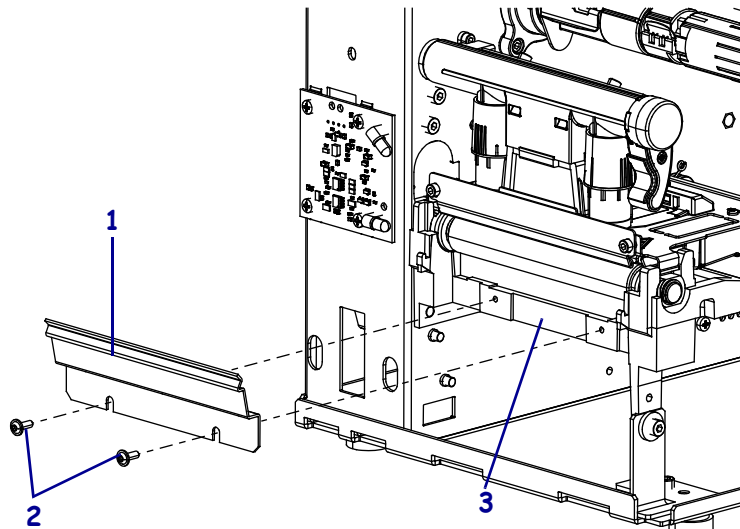
Figure 199 • Remove the Tear Front Panel



1	Front panel
2	Hooks (2)

2. See [Figure 200](#). Remove and discard the two tear bar mounting screws, and then lift the tear bar from the platen housing.

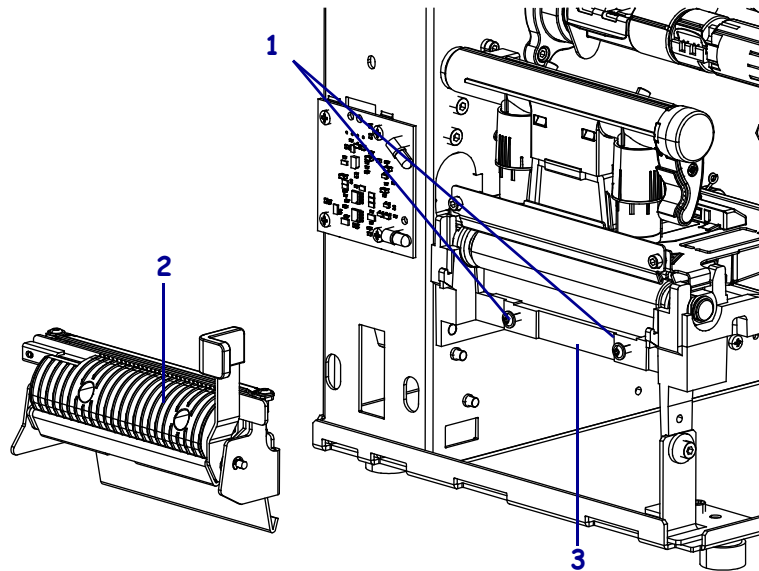
Figure 200 • Remove the Tear Bar



1	Tear bar
2	Mounting screws (2)
3	Platen housing

- See [Figure 201](#). Start the two mounting screws into the mounting holes.
 Tighten them to within 3.2 mm (1/8 in.) of the platen housing.

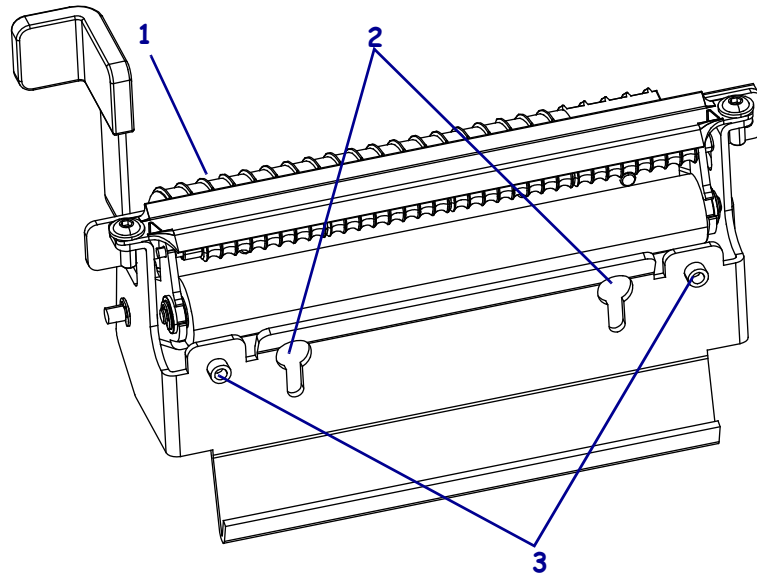
Figure 201 • Install the Peel Assembly



1	Mounting screws (2)
2	Peel assembly
3	Platen housing

4. See [Figure 202](#). Take note of the pems and the mounting slots.

Figure 202 • Locate the Pems



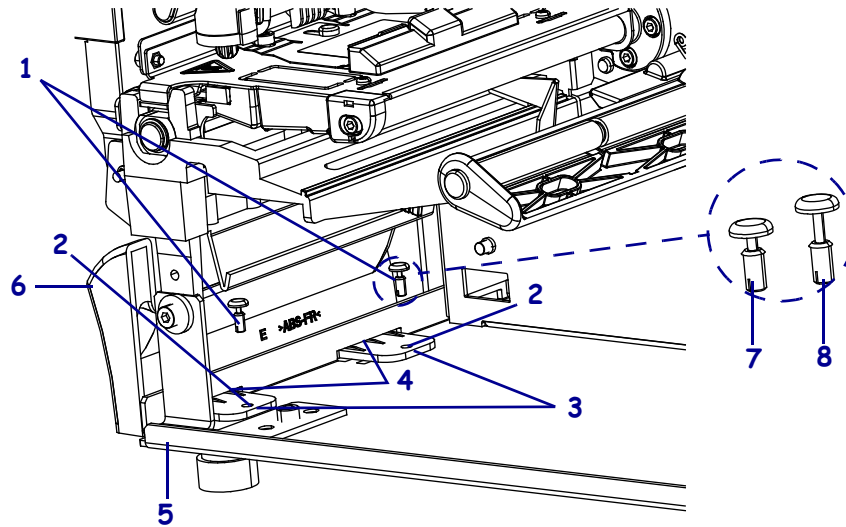
1	Peel assembly
2	Mounting slots (2)
3	Pems (2)

5. See [Figure 201](#) on [page 285](#). Install the peel assembly with the pems to the rear and the opening in the mounting slot to the top.
6. Insert the mounting slot opening over the two screws and lift up on the assembly.
7. Push the assembly back against the vertical surface of the platen assembly, and then down so that the pems are resting on the horizontal surface of the platen housing.
8. Maintain a slight pressure downward on the peel assembly to keep the pems on the horizontal surface, and tighten the mounting screws.
9. Continue with [Install the Peel Lower Front Panel](#) on [page 287](#).

Install the Peel Lower Front Panel

1. See [Figure 203](#). Slide the peel lower panel into the base mounting holes.

Figure 203 • Install the Lower Front Panel



1	Rivets (2)
2	Rivet holes (2)
3	Lower peel front panel tabs (2)
4	Lower peel front panel mounting slots (2)
5	Base
6	Lower peel font panel
7	Closed rivet
8	Open rivet

2. Open the rivets as shown in [Figure 203](#).
3. Slide the rivets through the mounting holes in the lower peel panel tabs and into the base.
4. Close the rivets as shown until they snap into place.

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none">a. See Figure 190 on page 275. Insert the electronics cover into the printer.b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none">a. See Figure 192 on page 276. Slide the electronics cover onto the printer.b. Reinstall the three electronics side mounting screws.c. See Figure 191 on page 276. Open the media cover and reinstall the media side mounting screw.

2. Reconnect the AC power cord and all data cables.
3. Turn on (I) the printer.

The installation is complete.

Peel Assembly Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the peel option in the following printers:

- ZT210™
- ZT220™
- ZT230™

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 204 • Kit Contents

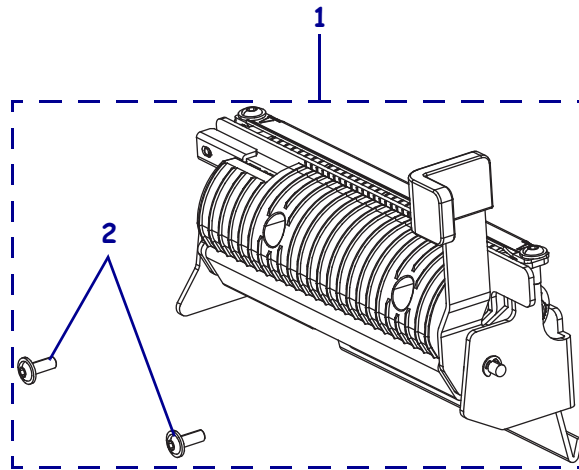


Table 36 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-038	Peel Assembly Maintenance Kit
	2	2	HW77231	Screw, M3 × 8 (sold in quantities of 25)

Tools Required



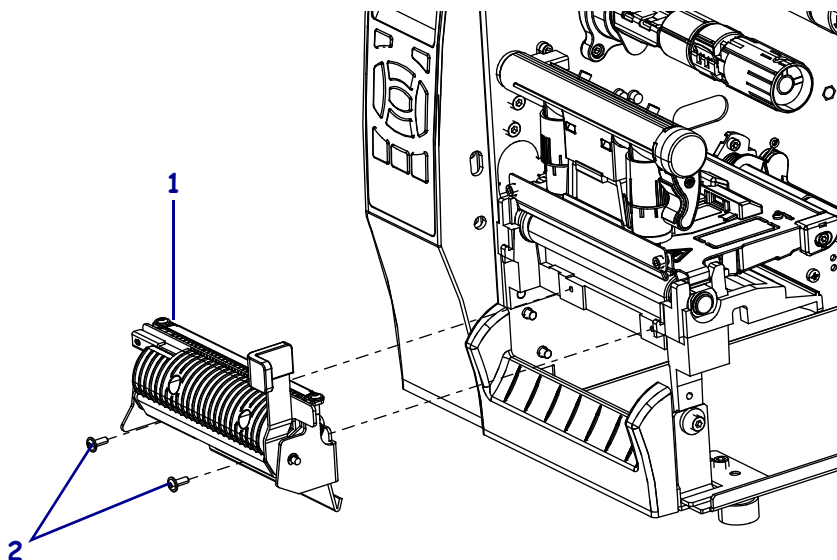
Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Antistatic Wriststrap and Pad
- Metric Hex Key (Allen wrench) Set

Remove the Old Peel Assembly

1. See [Figure 205](#). Remove the two mounting screws, and then remove the peel assembly.

Figure 205 • Remove the Peel Assembly

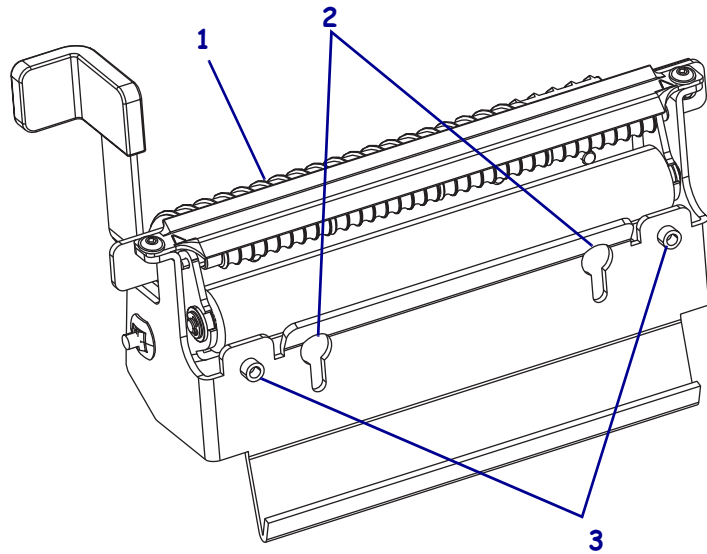


1	Peel assembly
2	Mounting screws (2)

Install the New Peel Assembly

1. See [Figure 206](#). Take note of the pems and the mounting slots.

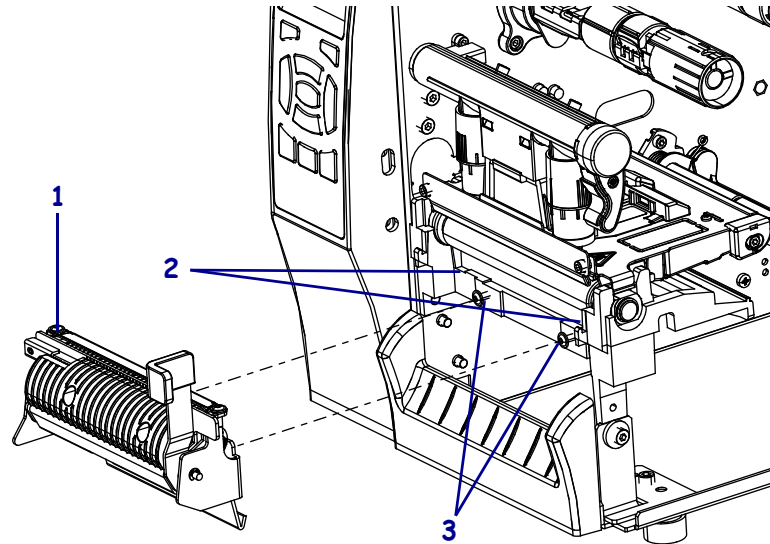
Figure 206 • Locate the Pems



1	Peel assembly
2	Mounting slots (2)
3	Pems (2)

2. See [Figure 207](#). Start the two mounting screws into the mounting holes.
Tighten them to within 3.2 mm (1/8 in.) of the platen housing.

Figure 207 • Install the Peel Assembly



1	Peel assembly
2	Set pins here
3	Mounting screws (2)

3. Install the peel assembly with the pins to the rear and the opening in the mounting slot to the top.
 - a. Insert the mounting slot opening over the two screws and lift up on the assembly.
 - b. Push the assembly back against the vertical surface of the platen assembly, and then down so that the pins are resting on the horizontal surface of the platen housing.
4. Maintain a slight pressure downward on the peel assembly to keep the pins on the horizontal surface, and tighten the mounting screws.

The installation is complete.

Liner Take-Up PCB/Motor and Spindle Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the liner take-up PCB/motor and spindle kit in the ZT230™ 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 208 • Kit Contents

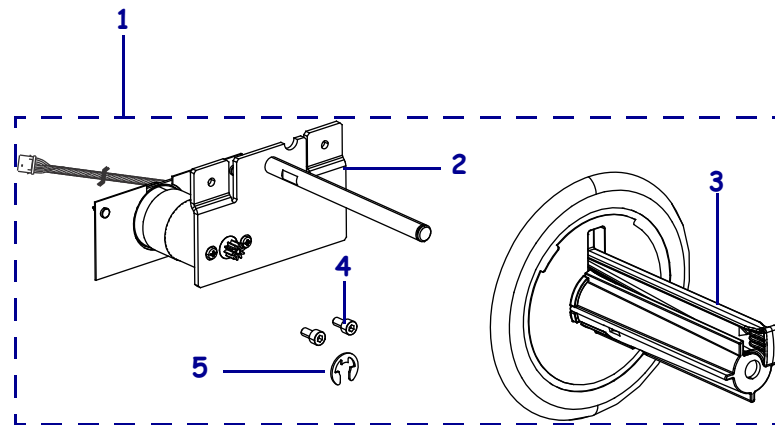


Table 37 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-040	LTU PCB/Motor and Spindle Maintenance Kit
	2	1	N/A	LTU Assembly
	3	1	N/A	Spindle Assembly
	4	2	HW23827	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
	5	1	HW06313	E-ring

N/A = Not available as a separate part for purchase (listed for identification purposes only).

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Flat-blade Screwdriver Set
- Metric Hex Key (Allen wrench)
- Antistatic Wrist Strap and Mat
- Safety Glasses

* In place of the Preventive Maintenance Kit, you may use a clean swab dipped in 99.7% isopropyl alcohol.

Remove the Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

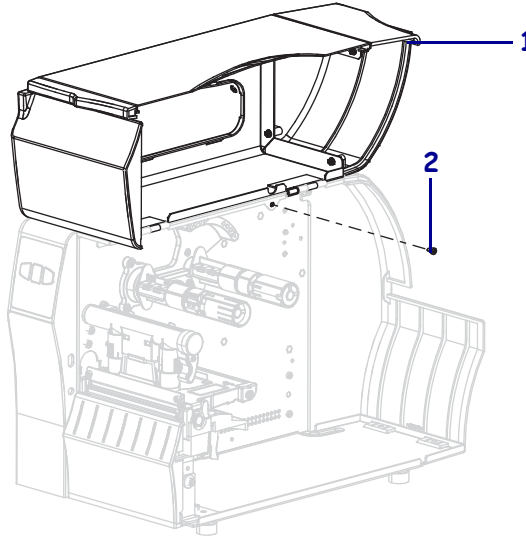
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 209](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

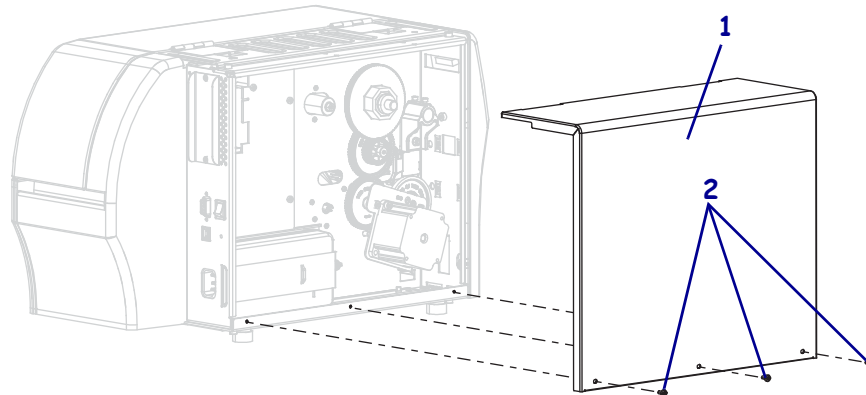
Figure 209 • Open the Media Door



1	Media door
2	Media side mounting screw

- See [Figure 210](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 210 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Continue with [Remove the LTU Assembly](#).

Remove the LTU Assembly

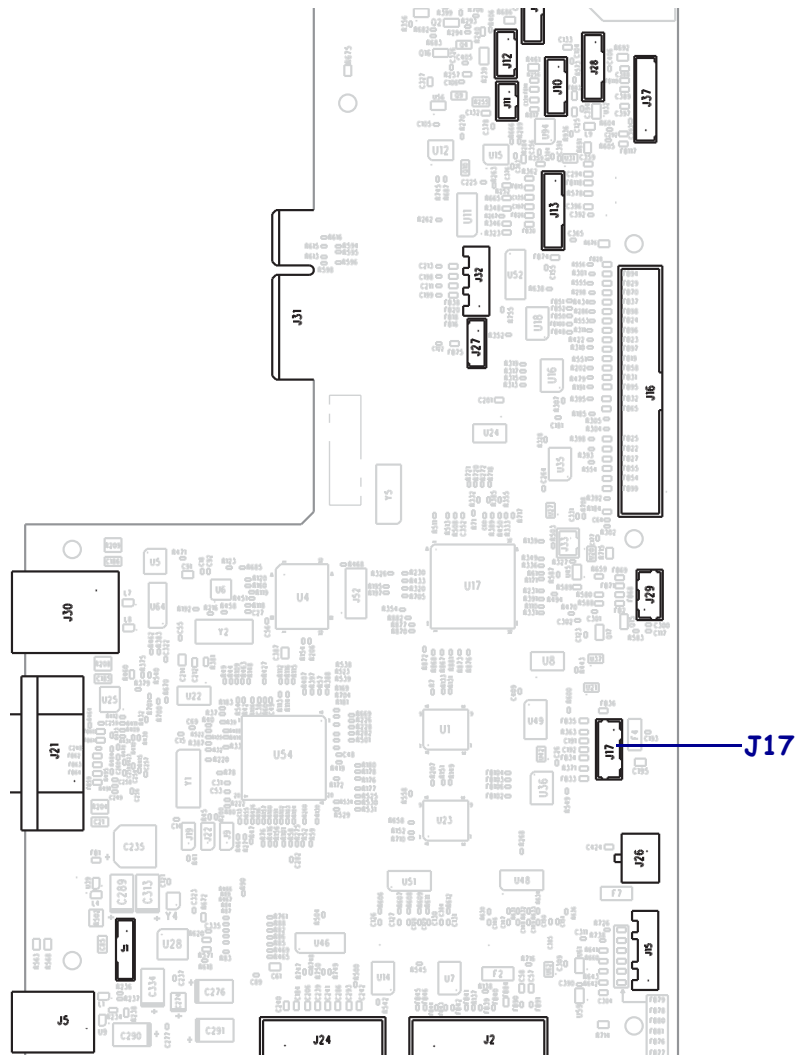


1. **Caution** • Turn off (O) the printer and disconnect it from the power source before performing the following procedure.

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

2. See [Figure 211](#). Disconnect the LTU cable from J17 on the main logic board (MLB).

Figure 211 • Figure 211 • Connect the Cutter Cable to MLB

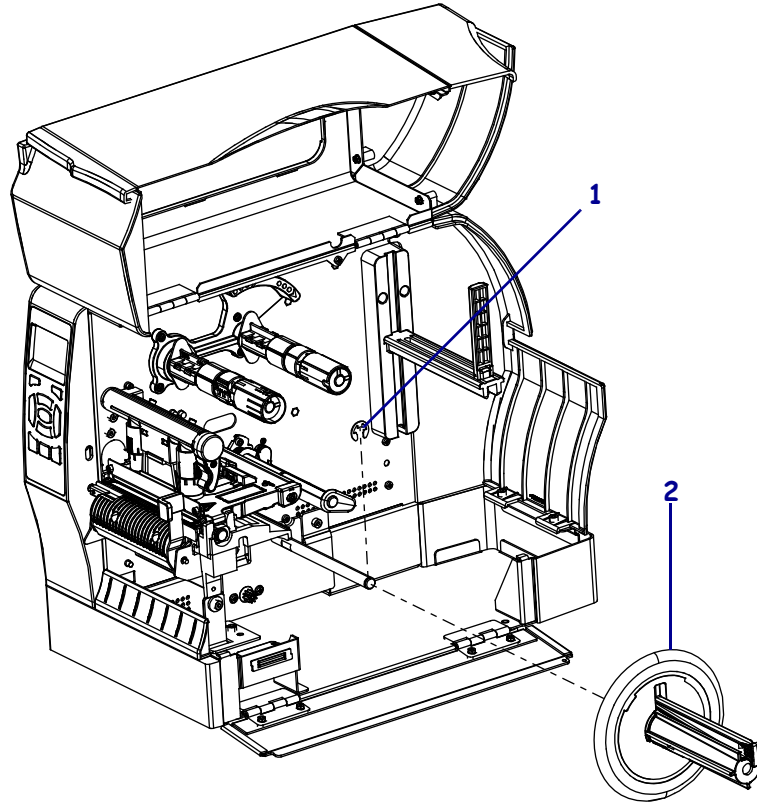


3. **Caution** • Wear protective eyewear when installing or removing E-rings, C-clips, snap rings, springs, and mounting buttons. These are under tension and could fly off.

Cut all cable ties that secure the liner take-up cable.

4. See [Figure 212](#). Remove the e-ring from the liner take-up spindle.

Figure 212 • Figure 212 • Remove the Liner Take-Up (LTU) Spindle

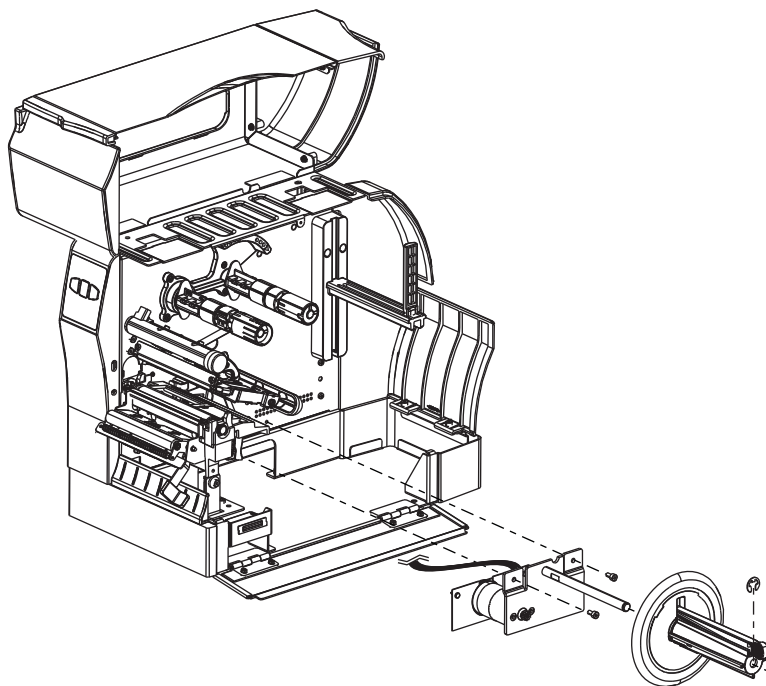


1	E-ring
2	Liner take-up spindle

5. Slide the liner take-up spindle off of the liner take-up motor assembly.

6. See [Figure 213](#). Remove the two liner take-up motor assembly mounting screws.
7. Slide the liner take-up assembly out of the printer while carefully guiding the LTU cable through the access hole.

Figure 213 • Figure 213 • Remove the Liner Take-Up Motor Assembly



1	Liner take-up motor assembly
2	Mounting screws (2)

8. Continue with [Install the Liner Take-Up Motor Assembly](#).

Install the Liner Take-Up Motor Assembly



-
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. If the liner take-up cable is not connected to the PCB and motor assembly, connect it now.
3. Guide the liner take up cable through the access hole.
4. See [Figure 213 on page 296](#). Align the liner take-up assembly mounting holes, and then reinstall the two mounting screws.
5. See [Figure 212 on page 295](#). Slide the liner take-up spindle onto the liner take-up assembly, and then install the e-ring.
6. See [Figure 211 on page 294](#). Connect the liner take-up cable to J17 on the MLB.
7. Install any cable ties removed.
8. Continue with [Reinstall the Electronics Cover](#).

Reinstall the Electronics Cover

1. See [Figure 210 on page 293](#). Slide the electronics cover onto the printer.
 2. Reinstall the three electronics side mounting screws.
 3. See [Figure 209 on page 292](#). Open the media cover and reinstall the media side mounting screw.
 4. **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.

5. Reconnect the AC power cord and all data cables.
6. Turn on (I) the printer.

The installation is complete.

300 | **Liner Take-Up PCB/Motor and Spindle**
Reinstall the Electronics Cover

Roller System

ContentsT

Platen Roller Assembly Maintenance Kit	302
Platen Housing Kit	308
Peel Roller Maintenance Kit	339

Platen Roller Assembly Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Platen Roller Assembly Maintenance Kit in the following printers:

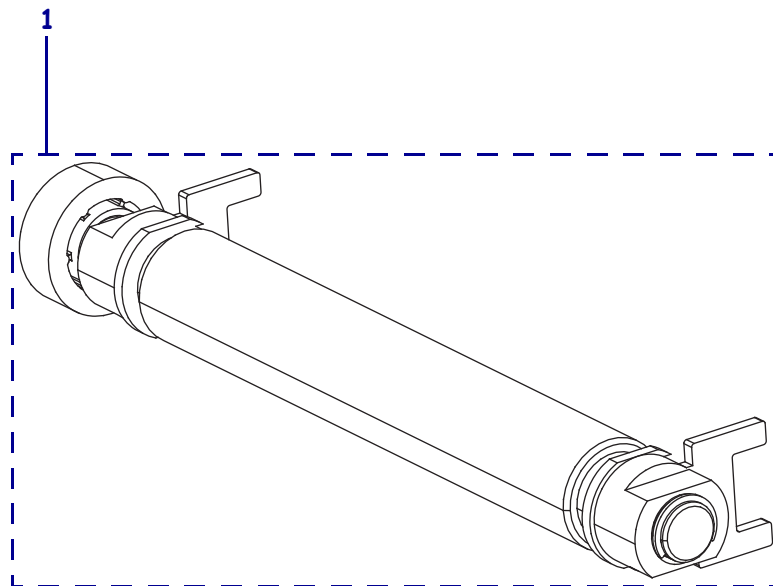
- ZT210™
- ZT220™
- ZT230™

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 214 • Kit Contents



✓	Item	Qty	Part Number	Description
	1	1	P1037974-028	Platen Roller Assembly Maintenance Kit

Tools Required



Tools • You need these tools to complete this procedure:

- 47362* Zebra Preventive Maintenance Kit

* In place of the Preventive Maintenance Kit, you may use clean swabs and a solution containing isopropyl alcohol (minimum 99.7%) with deionized water (maximum 0.3%).

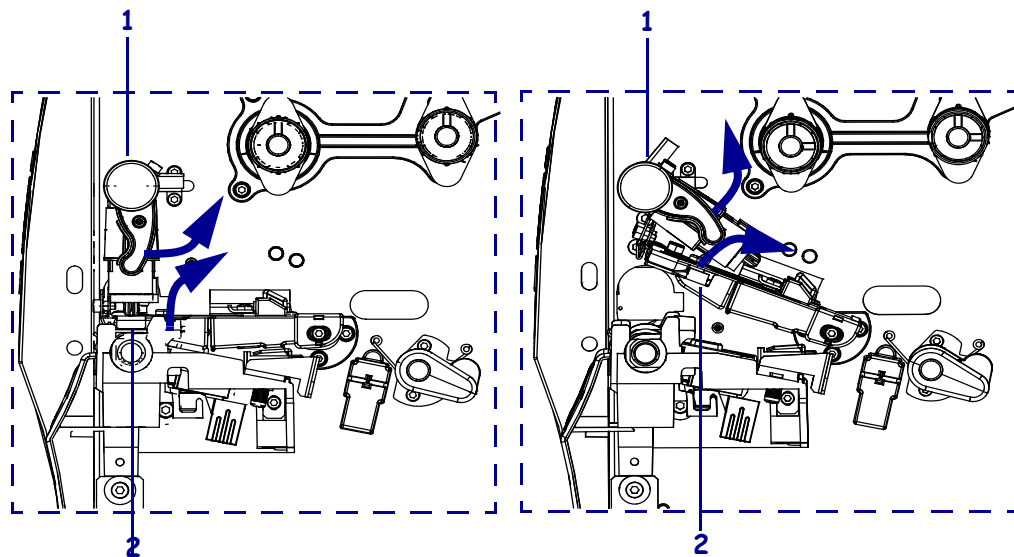
Remove the Old Platen Roller Assembly



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

2. Open the toggle bar.

Figure 215 • Open the Toggle Bar and Print Mechanism



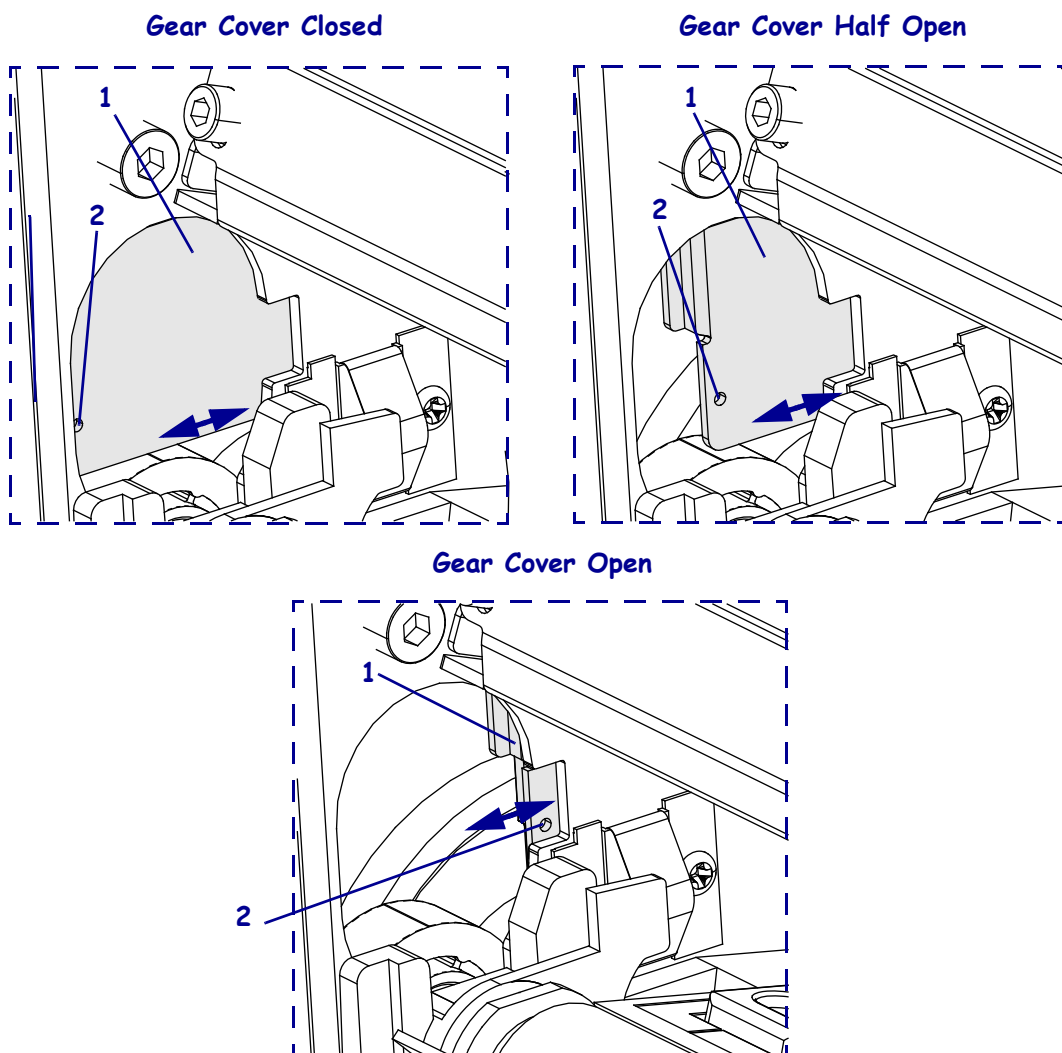
1	Pressure bar
2	Upper print mechanism

3. **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.

4. See [Figure 216](#). Using an awl or the something inserted into the slide hole, open the gear cover by sliding it toward the rear of the printer.

Figure 216 • Open/Close the Gear Cover



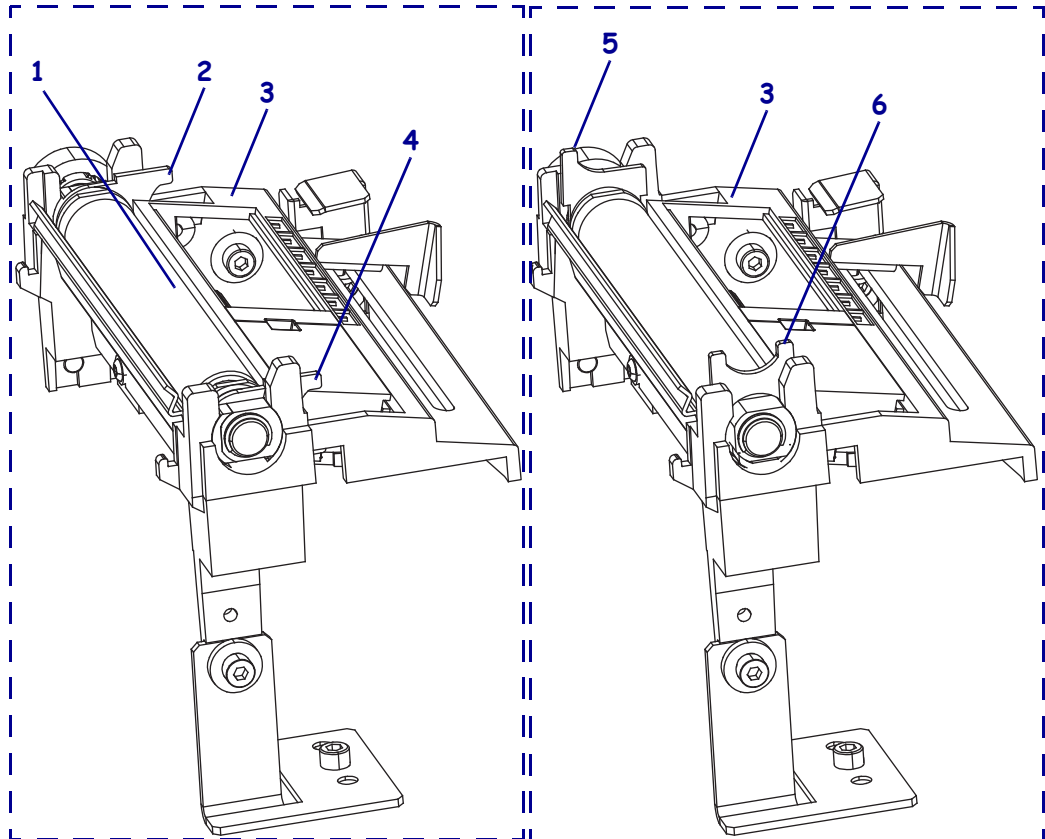
1	Gear cover
2	Gear cover slide hole

- See [Figure 217](#). Turn the tabs of platen roller assembly inside and outside locks toward the front of the printer to unlock the platen roller assembly from the lower print mechanism.

Figure 217 • Unlock and Lock the Platen Roller Assembly

Locked Platen Roller Assembly

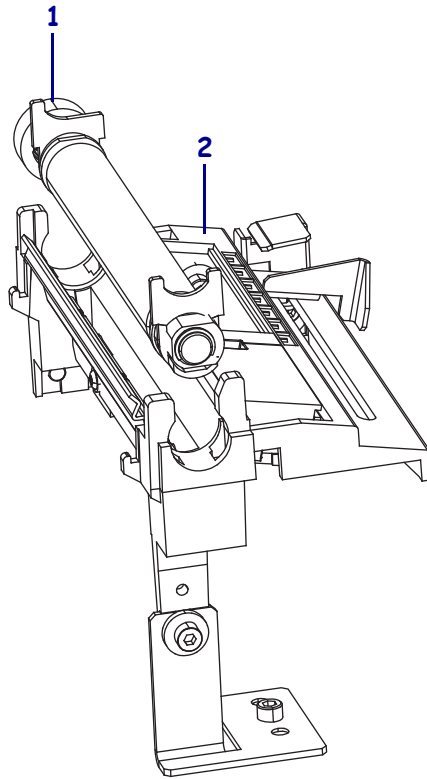
Unlocked Platen Roller Assembly



1	Platen roller assembly
2	Inner platen locked position
3	Lower print mechanism
4	Outer platen locked position
5	Inner platen unlocked position
6	Outer platen unlocked position

6. See [Figure 218](#). Lift the old platen assembly out of the lower print mechanism.

Figure 218 • Remove the Platen Roller Assembly

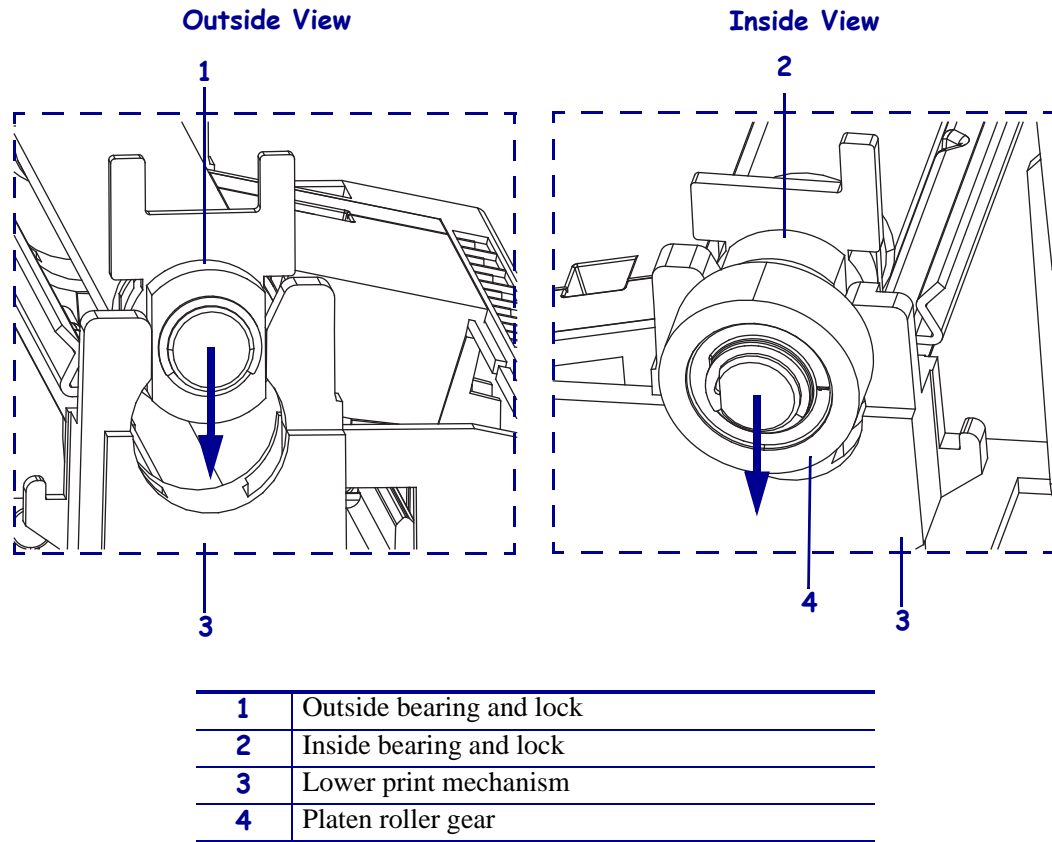


1	Platen roller assembly
2	Lower print mechanism

Install the New Platen Roller Assembly

1. See [Figure 219](#). Align the bearings with the holes in the lower print mechanism.

Figure 219 • Align the Bearings



2. Slide the platen roller assembly into the lower print mechanism, ensuring the platen roller gear meshes with the drive gear.
3. See [Figure 217 on page 305](#). Turn the tabs of the platen toward the rear of the printer to lock the platen roller assembly into the lower print mechanism.
4. See [Figure 216 on page 304](#). Close the gear cover.
5. Clean the platen roller with the Zebra preventative maintenance kit or equivalent.
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. Close the upper print mechanism and pressure bar.
8. Reinstall the AC power cord and all data cables.
9. Turn on (I) the printer.

The installation is complete.

Platen Housing Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Platen Housing Maintenance Kit in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 220 • Kit Contents

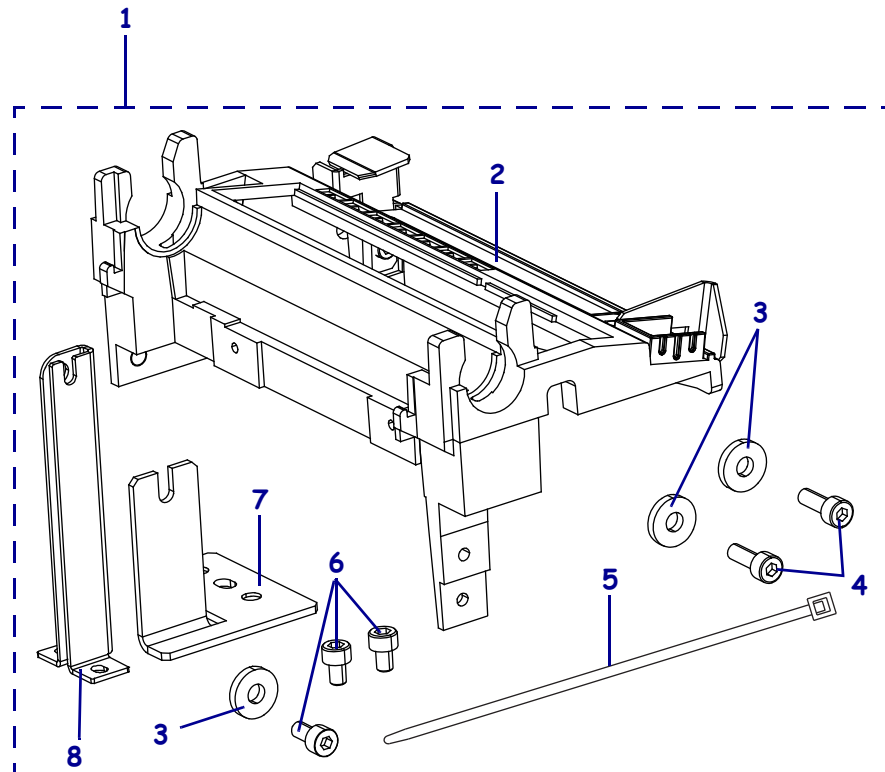


Table 38 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-059	Platen Housing Maintenance Kit
	2	1	N/A	Platen Casting Assembly
	3	3	N/A	Flat Washer, 0.500 × 0.195 × 0.090
	4	2	HW10432	Screw, M4 × 0.7 × 12 (sold in quantities of 25)
	5	1	HWQ06020	Cable Tie, 0.9 × 3.62 (sold in quantities of 20)
	6	3	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)
	7	1	N/A	Platen Housing Support Bracket
	8	1	N/A	Liner Take-up (LTU) Platen Housing Support Bracket

N/A = Not available as a separate part (listed for identification purposes only).

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Antistatic Wriststrap and Mat
- Awl
- Metric Hex Key (Allen wrench) Set
- 47362* Zebra Preventive Maintenance Kit

* 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%).

Replace the Old Platen Housing



Caution • This installation must be performed by a qualified service technician.



Note • Retain all parts removed during disassembly, unless otherwise directed.



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.

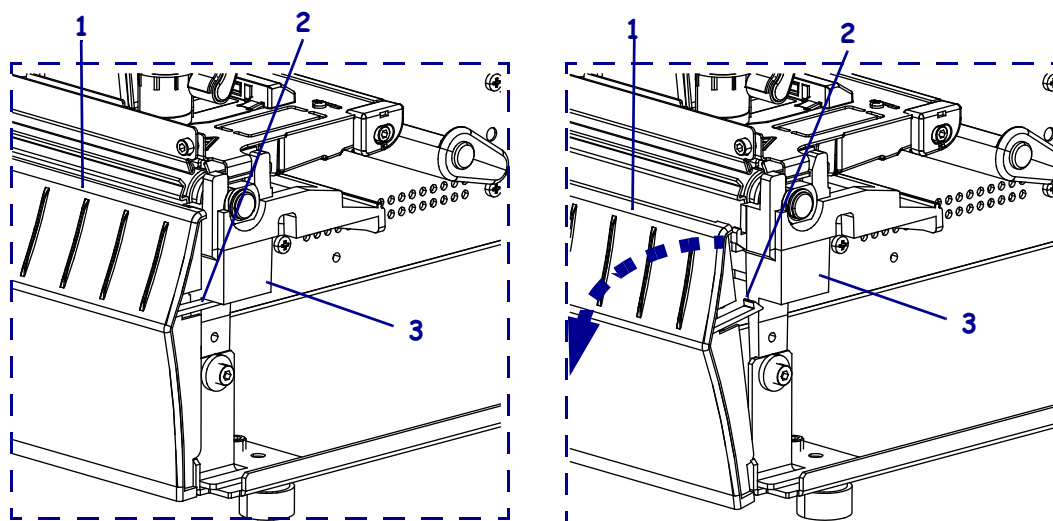
3. Which option do you have installed in you printer?

If you have a...	Then...
Tear Bar	Continue with <i>Remove the Tear Bar</i> .
Cutter option	Go to <i>Remove the Cutter Assembly</i> on page 311.
Peel option	Go to <i>Remove the Platen Roller</i> on page 318.

Remove the Tear Bar

1. See [Figure 221](#). Release the tear lower trim panel by pushing down on the two hooks securing it to the platen housing.

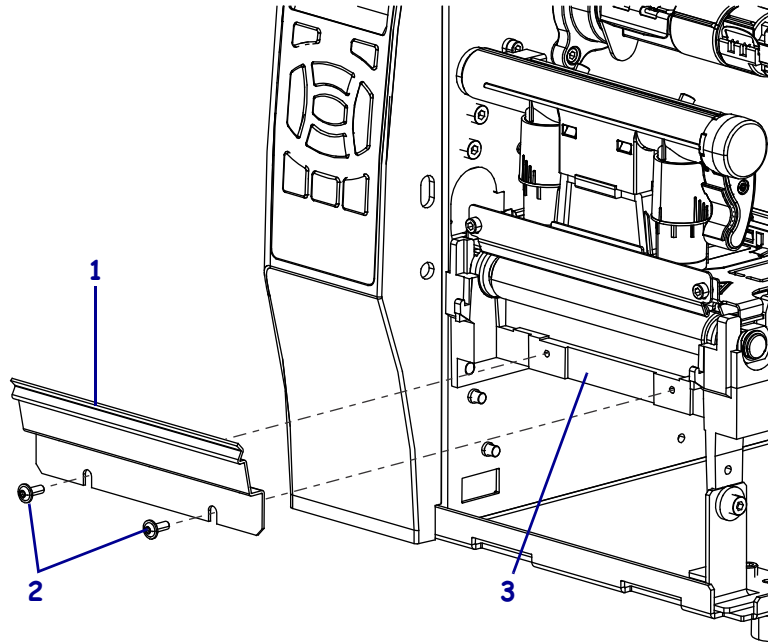
Figure 221 • Release the Tear Lower Front Panel



1	Tear lower trim panel
2	Hooks (2)
3	Platen housing

- See [Figure 222](#). Remove the two tear bar mounting screws, and then lift the tear bar from the platen housing.

Figure 222 • Remove the Tear Bar



1	Tear bar
2	Mounting screws (2)
3	Platen housing

- Go to [Remove the Platen Roller on page 318](#).

Remove the Cutter Assembly



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

Connect yourself to an antistatic device.

- Which type of printer are you working on?

If have a...	Then...
ZT220	Continue with ZT220 Electronics Cover on page 312 .
ZT210 ZT230	Go to ZT230 and ZT210 Electronics Cover on page 313 .

Remove the Electronics Cover

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

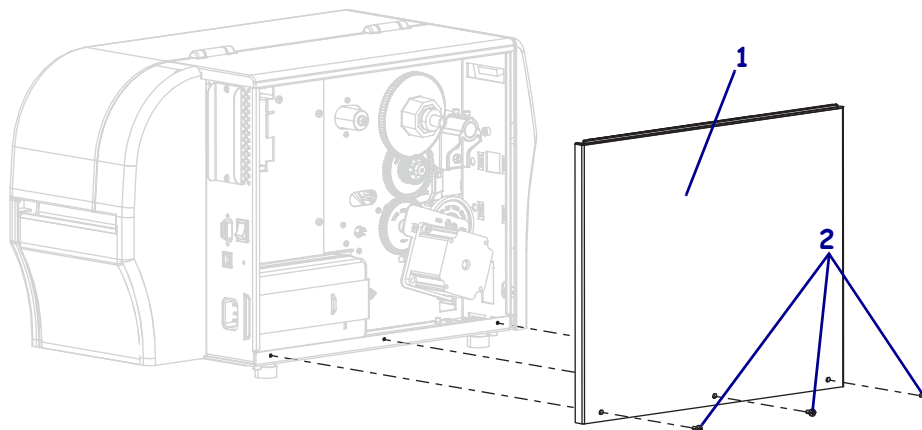
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

3. See [Figure 223](#). Remove the three screws securing the electronics cover.

Figure 223 • Remove the Electronics Cover



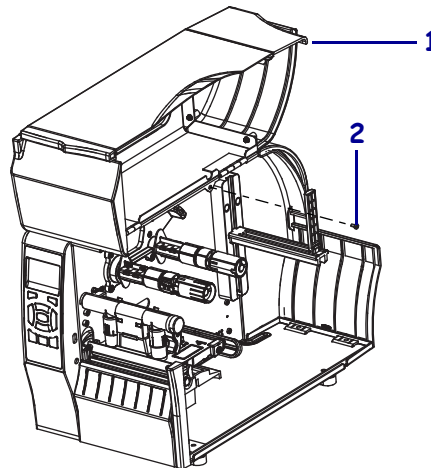
1	Electronics cover
2	Mounting screws (3)

4. Lift the electronics cover off of the printer.

ZT230 and ZT210 Electronics Cover

1. See [Figure 224](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

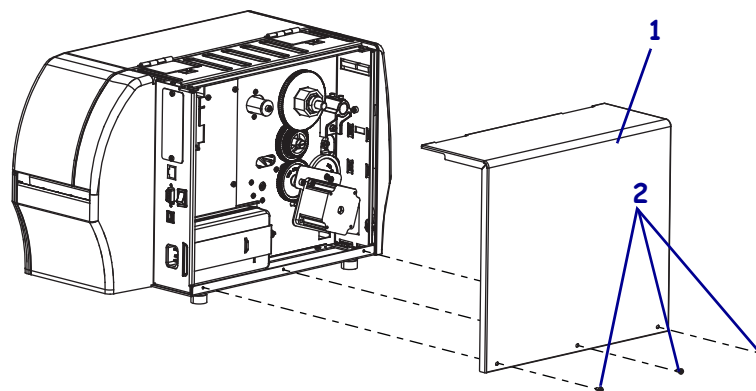
Figure 224 • Open the Media Door



1	Media door
2	Media door mounting screw

2. See [Figure 225](#). Close the media cover and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 225 • Remove the Metal Electronics Cover



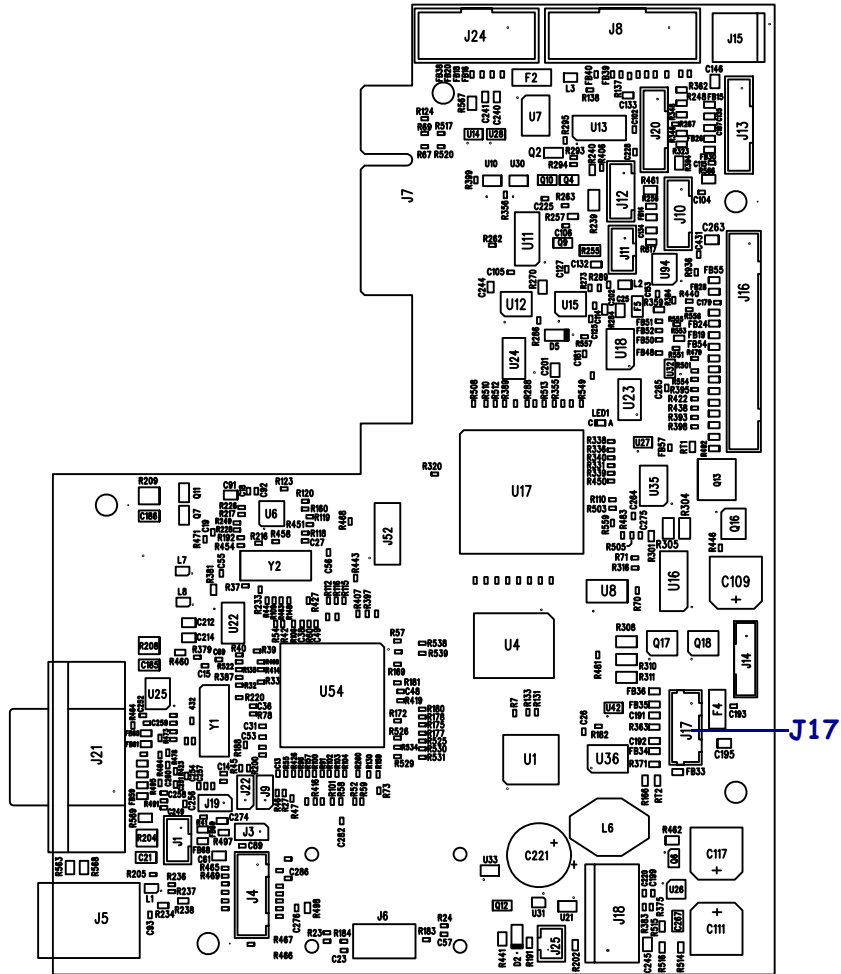
1	Electronics cover
2	Mounting screws (3)

3. Lift the electronics cover off of the printer.

Remove the Cutter Module

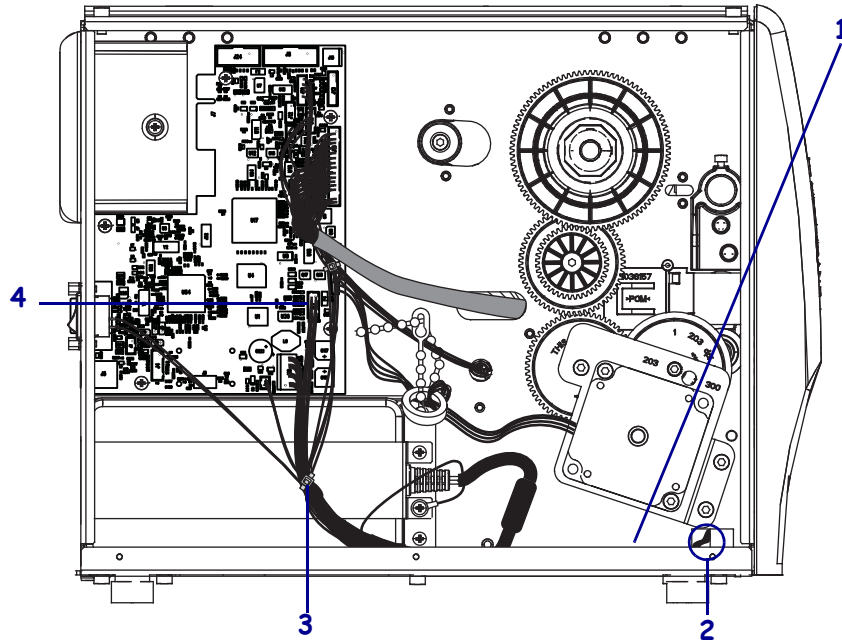
1. See [Figure 226](#). Disconnect the cutter cable from J17 on the main logic board (MLB).

Figure 226 • Connect the Cutter Cable to MLB



- See [Figure 227](#). Cut the cable tie that secures the cutter cable and others to the power supply mounting bracket.

Figure 227 • Cutter Cable Routing



1	Cable clamp (located on the base of the printer)
2	Cutter cable
3	Cable tie
4	J17

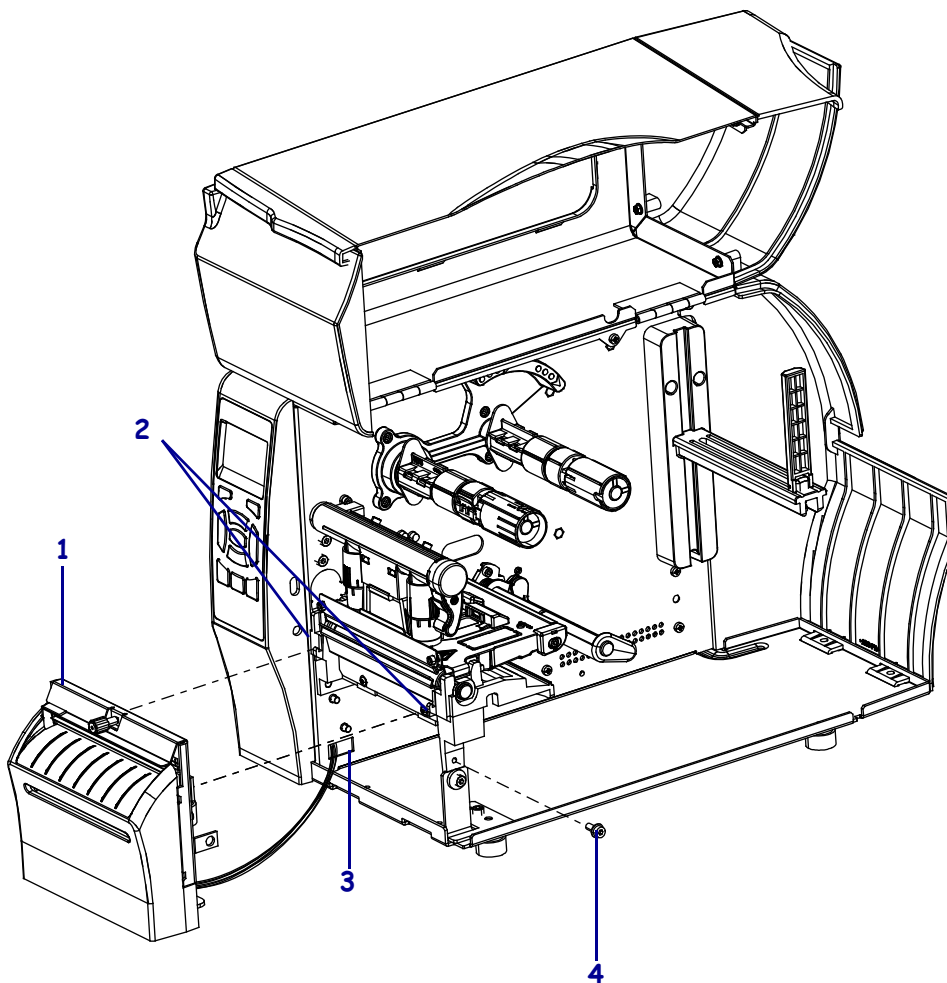
- Remove the cutter cable from the cable clamp.



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

See [Figure 228](#). Remove the cutter mounting screw.

Figure 228 • Remove the Cutter Assembly



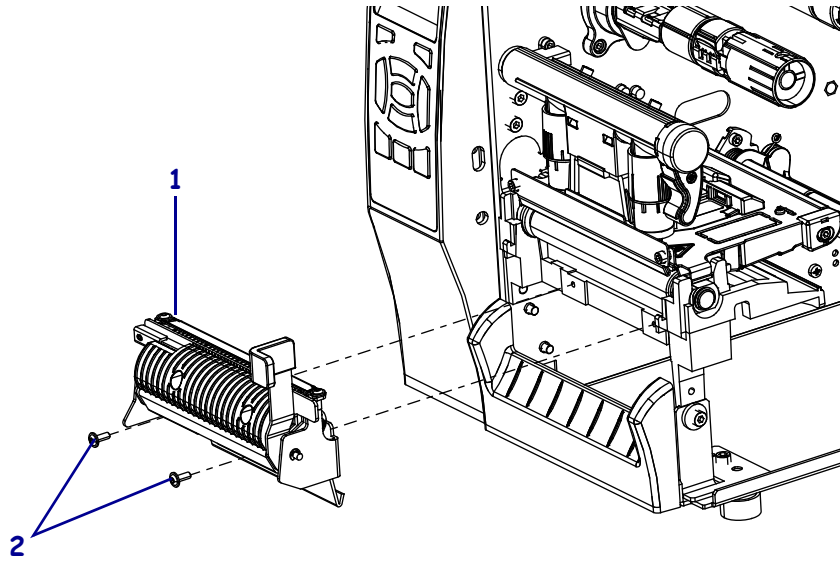
1	Cutter assembly
2	Mounting hooks (2)
3	Access hole
4	Mounting screw

5. Slide the cutter assembly to the right.
6. Lift and slide the cutter off of the mounting hooks and out of the printer.
7. Guide the cutter cable through the access hole.
8. Go back to [Remove the Tear Bar on page 310](#).

Remove the Peel Assembly

1. See [Figure 229](#). Remove the two mounting screws, and then remove the peel assembly.

Figure 229 • Remove the Peel Assembly



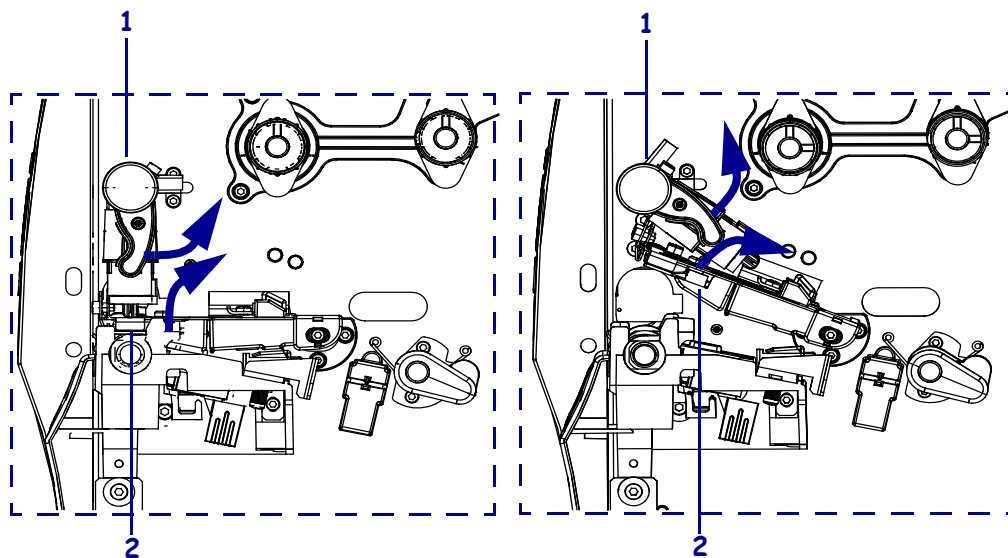
1	Peel assembly
2	Mounting screws (2)

2. Continue with [Remove the Platen Roller](#) on page 318.

Remove the Platen Roller

1. See [Figure 230](#). Open the toggle bar.

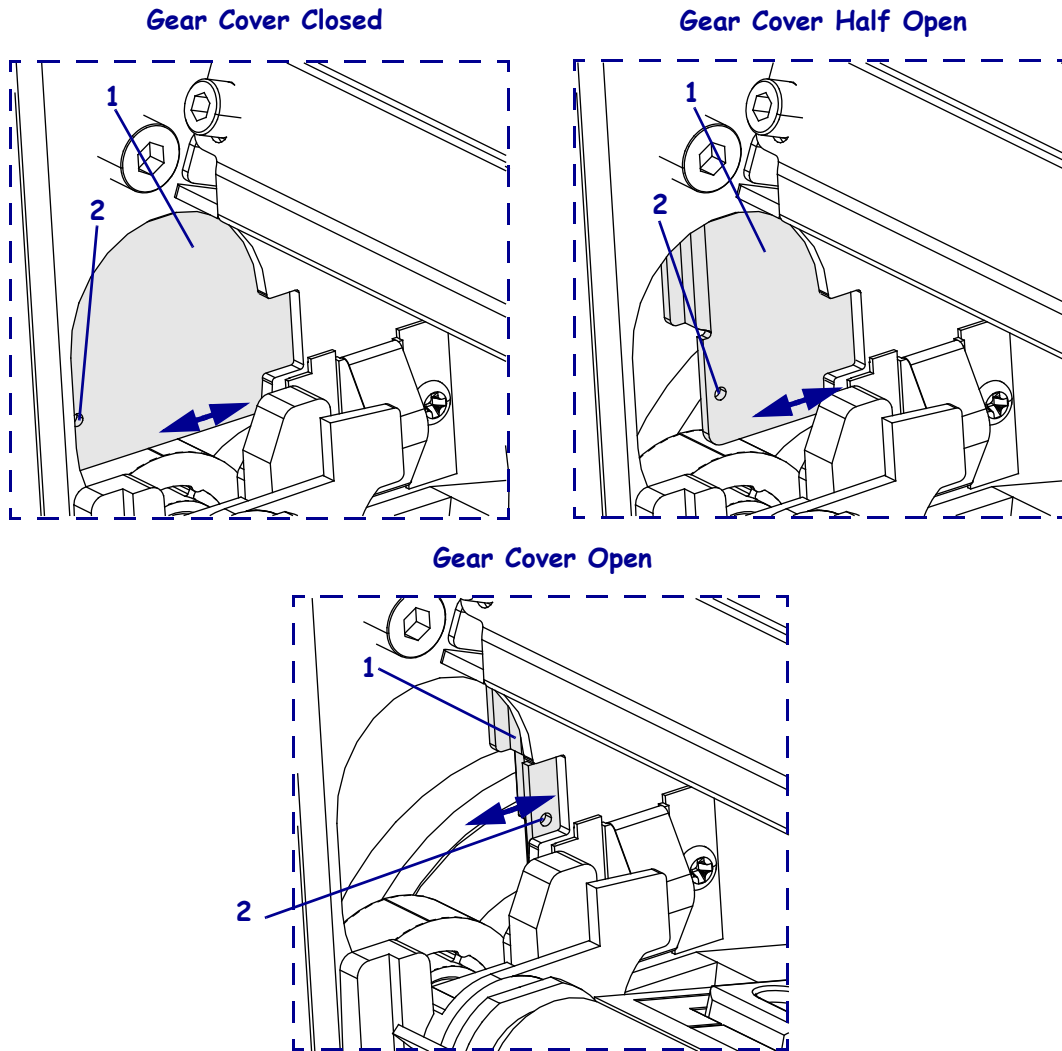
Figure 230 • Open the Toggle Bar and Print Mechanism



1	Toggle bar
2	Upper print mechanism

- See [Figure 231](#). Using an awl or something inserted into the slide hole, open the gear cover by sliding it toward the rear of the printer.

Figure 231 • Open/Close the Gear Cover



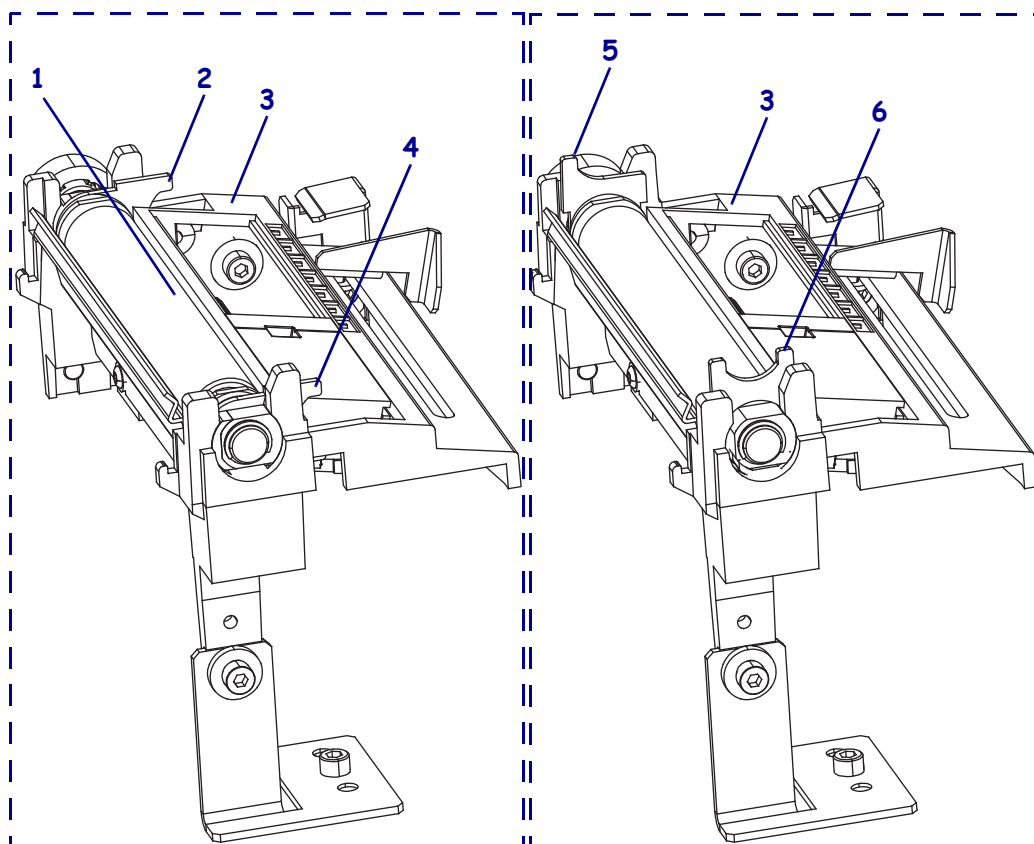
1	Gear cover
2	Gear cover slide hole

3. See [Figure 232](#). Turn the tabs of the platen roller assembly locks toward the front of the printer to unlock the platen roller assembly from the platen housing.

Figure 232 • Unlock and Lock the Platen Roller Assembly

Locked Platen Roller Assembly

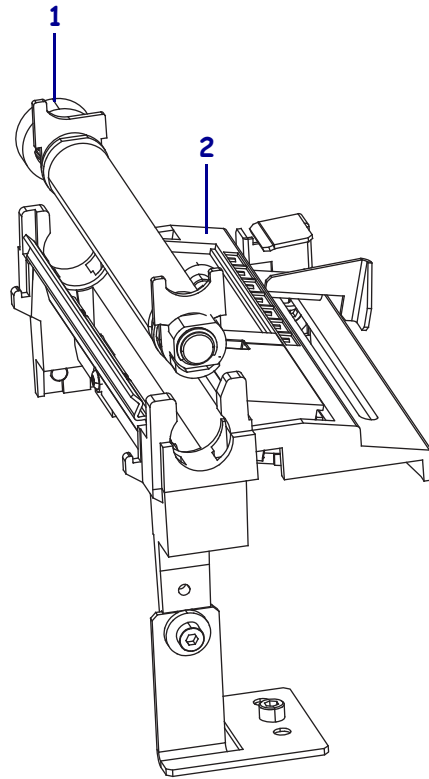
Unlocked Platen Roller Assembly



1	Platen roller assembly
2	Inner platen locked position
3	Platen housing
4	Outer platen locked position
5	Inner platen unlocked position
6	Outer platen unlocked position

4. See [Figure 233](#). Lift the platen roller assembly out of the platen housing.

Figure 233 • Remove the Platen Roller Assembly

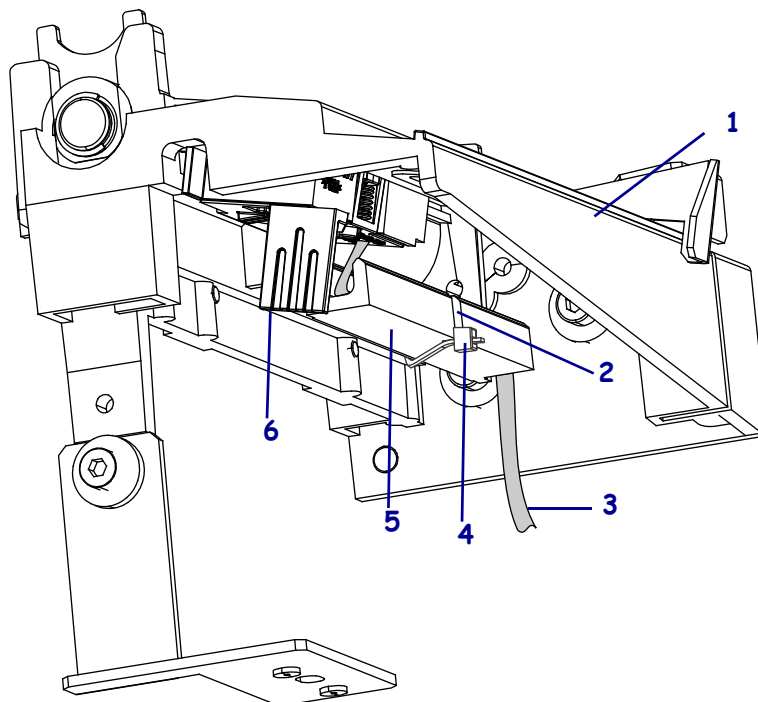


1	Platen roller assembly
2	Platen housing

Remove the Black Mark Sensor

1. See [Figure 234](#). Cut the cable tie securing the black mark sensor cable to the platen housing cable channel.

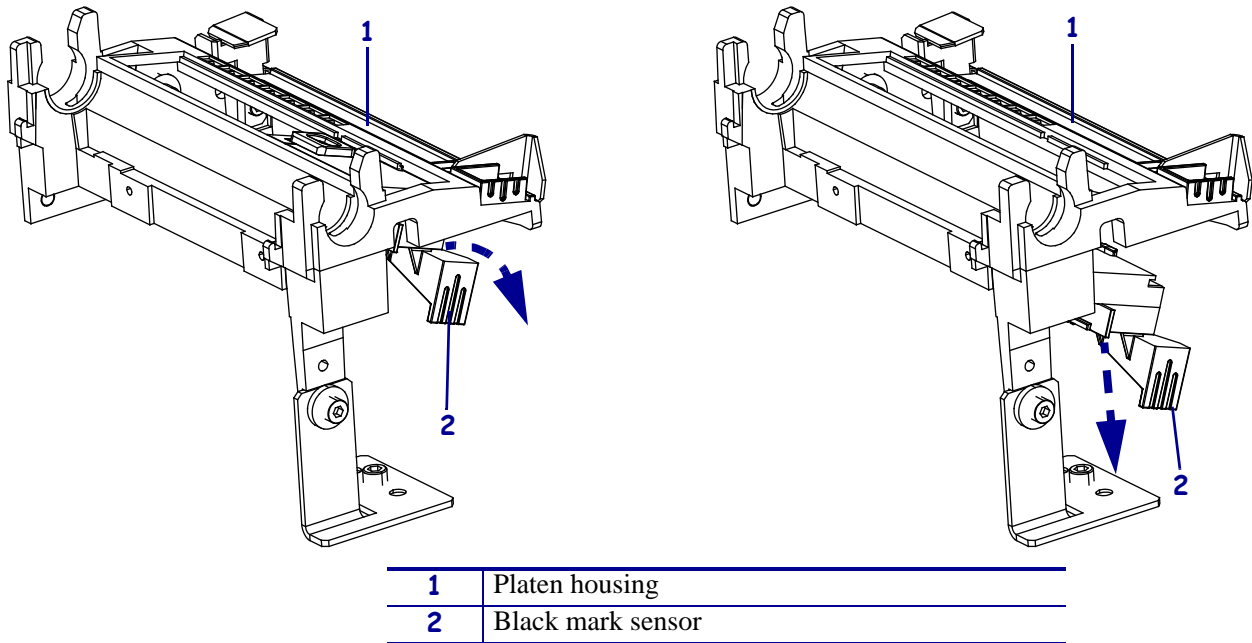
Figure 234 • Remove the Cable Tie



1	Platen housing
2	Platen housing cable channel cable tie mounting slot
3	Black mark sensor cable
4	Cable tie
5	Platen housing cable channel
6	Black mark sensor

- See [Figure 235](#). Pull the black mark sensor to the outside of the printer as far as it will go.

Figure 235 • Remove the Black Mark Sensor



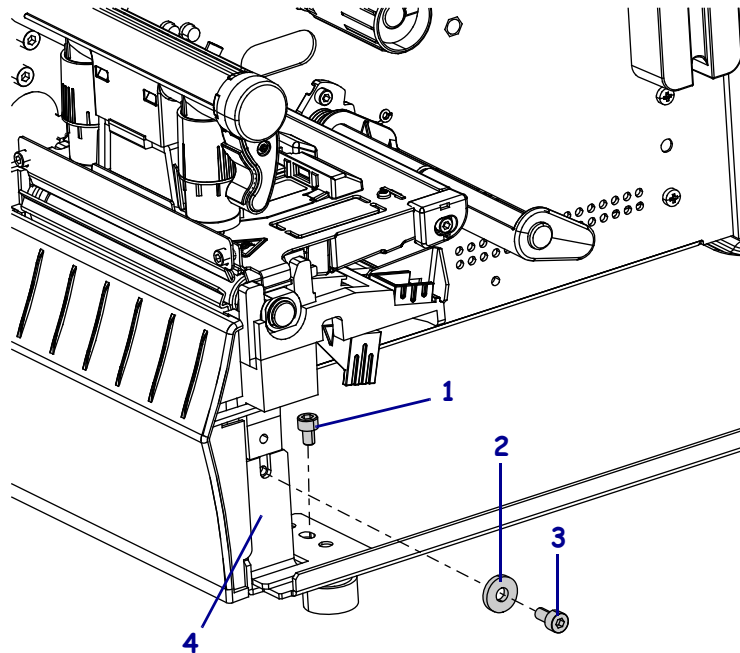
- Rotate the black mark sensor clockwise.
- Pull the black mark sensor down and out of the platen housing.
- Leave it resting on the printer base for easy reinstallation.

Remove the Old Platen Housing and Support Bracket

1. Which version of the ZT200 series printer are you working on?

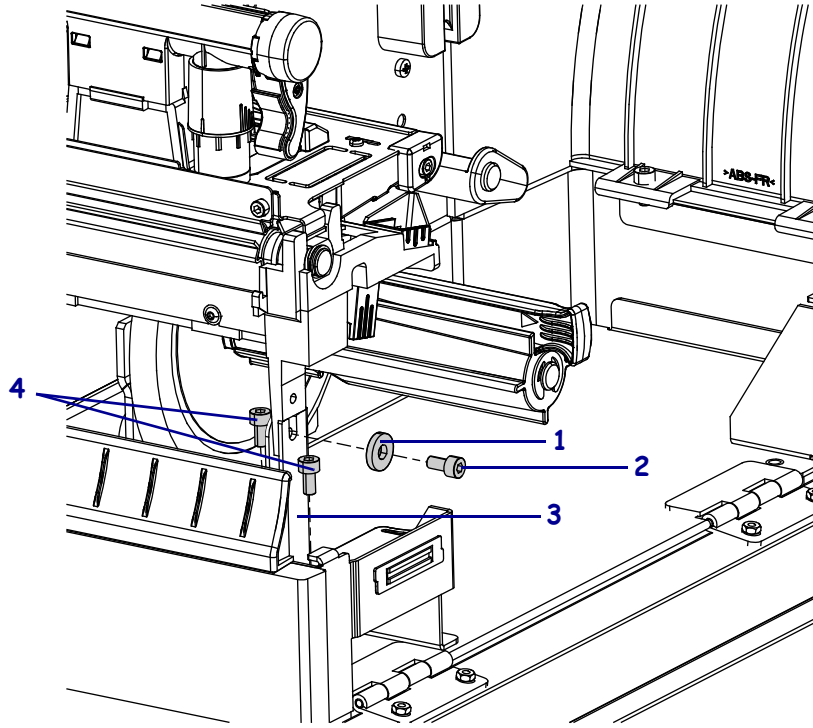
If you have a...	Then...
Tear bar Cutter Peel only	<ol style="list-style-type: none"> a. See Figure 236. Remove the screw securing the support bracket to the printer base. b. Slide the bracket out of the printer.
Liner take-up	<ol style="list-style-type: none"> a. See Figure 237 on page 325. Remove the two screws securing the support bracket to the printer base. b. Slide the bracket out of the printer.

Figure 236 • Remove the Tear, Cutter, and Peel Support Mounting Screws



1	Support bracket mounting screw
2	Platen housing mounting washer
3	Platen housing mounting screw
4	Support bracket

Figure 237 • Remove the Liner Take-up Support Bracket

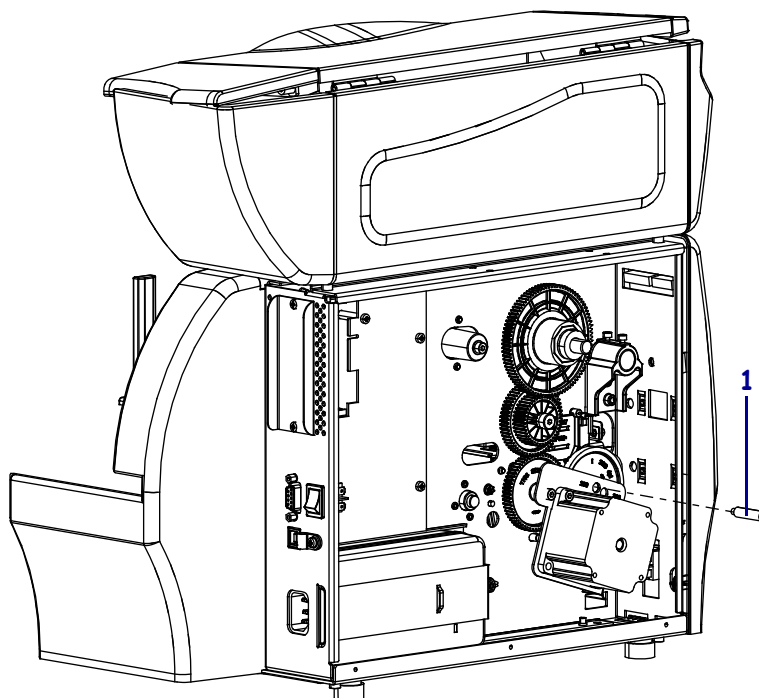


1	Mounting washer
2	Platen housing mounting screw
3	Support bracket
4	Support bracket mounting screws (2)

Remove the Old Platen Housing

1. See [Figure 238](#). On the electronics side, remove the compound gear shaft.

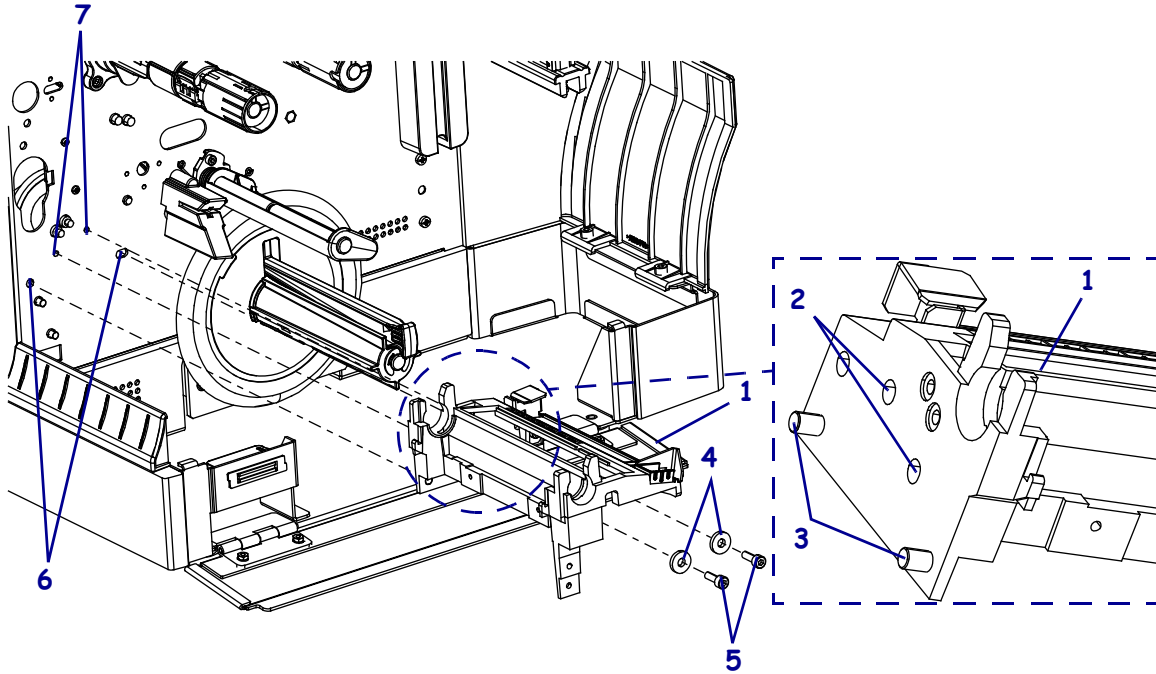
Figure 238 • Remove the Compound Gear Shaft



1	Compound gear shaft (300 dpi shown)
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- See [Figure 239](#). On the media side, remove and discard the two platen mounting screws and washers.

Figure 239 • Install the New Platen Housing



1	Platen housing
2	Platen housing mounting holes (2)
3	Platen housing locator pins (2)
4	Flat washers (2)
5	Mounting screws (2)
6	Platen housing locator pin holes (2)
7	Mounting holes (2)

- Pull the platen housing out of the printer and discard it.

Install the New Platen Housing

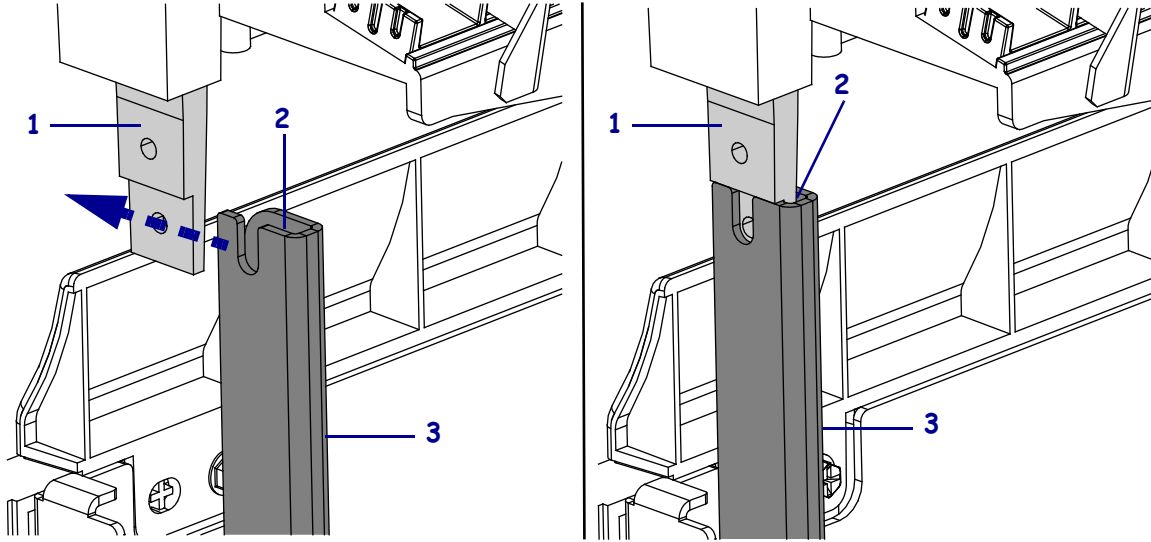
1. See [Figure 239](#). Align the platen housing locator pins with the locator pin holes in the printer.
2. Slide the pins into the locator holes, and then install the new mounting washers and screws into the two mounting holes on the printer.
3. Tighten the two mounting screws.

Install the New Support Bracket

1. Which version of the ZT200 series printer are you working on?

If you have a...	Then...
Tear bar Cutter Peel only	<ol style="list-style-type: none">a. See Figure 236 on page 324. Slide the support bracket into the printer, and then loosely install the screw securing the support bracket to the printer base.b. Slide the support bracket against the platen housing, and then install the platen housing mounting washer and screw.c. Tighten the mounting screw to the printer base.
Liner take-up	<ol style="list-style-type: none">a. See Figure 240 on page 329. Slide the support bracket into the printer.b. Slide the support bracket forward until the platen housing is in the slot and aligned with the hole in the platen housing.c. See Figure 237 on page 325. Install the platen housing mounting washer and screw.d. Install the two mounting screws that secure the support bracket to the printer base.

Figure 240 • Install the LTU Support Bracket

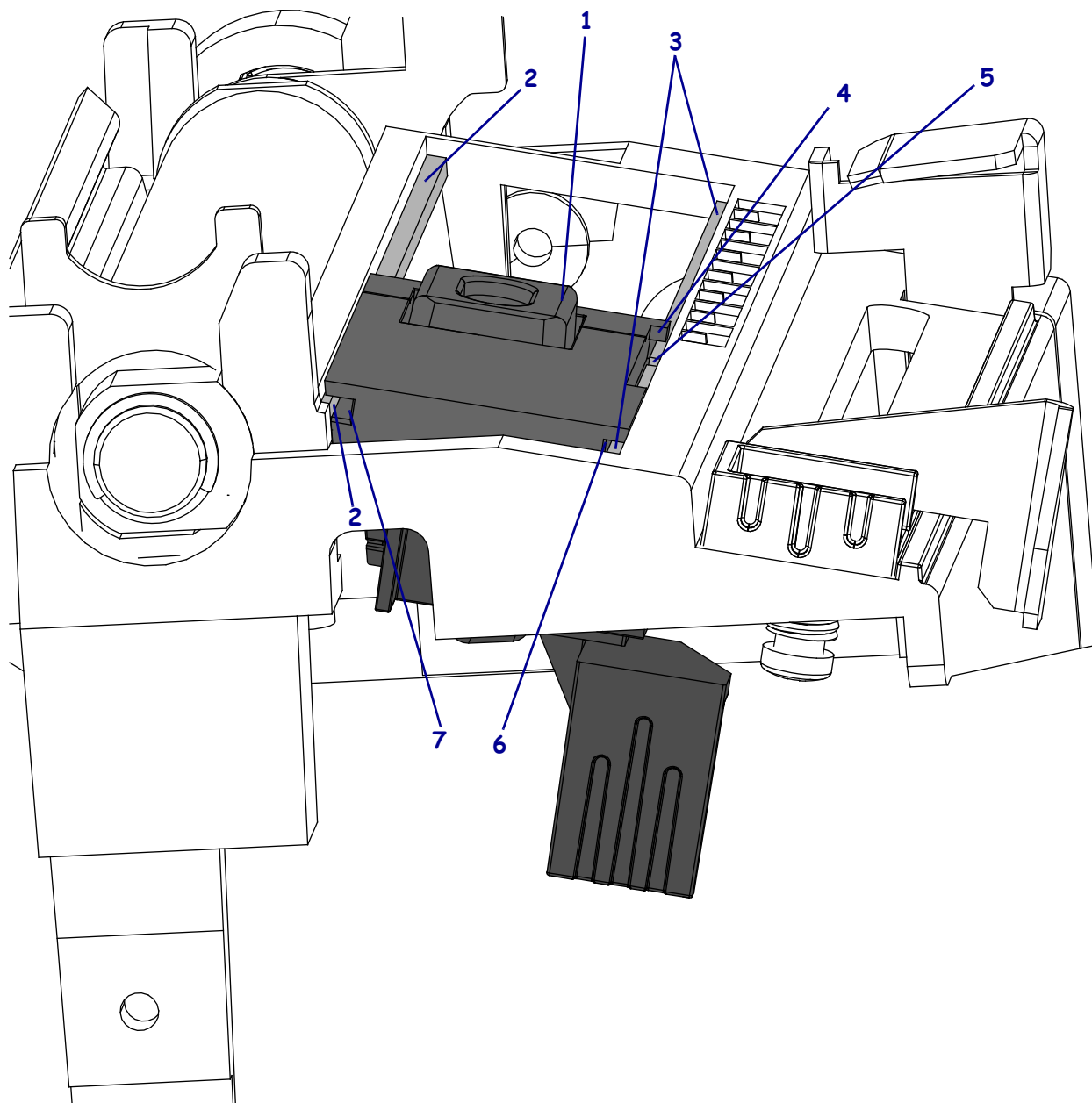


1	Platen housing
2	Slot
3	LTU support bracket

Reinstall the Black Mark Sensor

1. See [Figure 241](#). Set the front groove of the black mark sensor onto the front tongue of the platen housing.

Figure 241 • Install the Black Mark Sensor



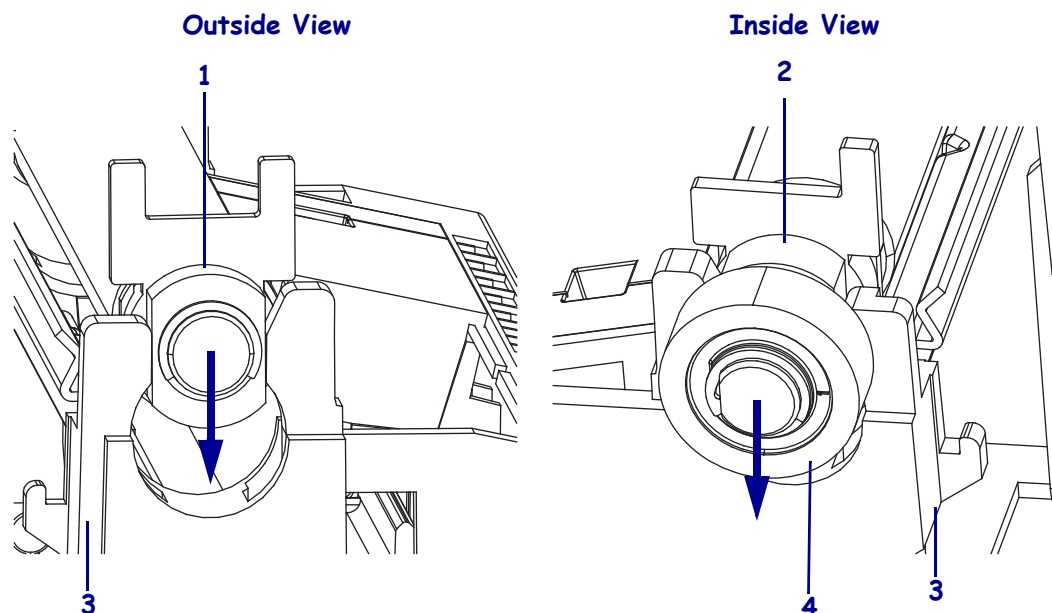
1	Black mark sensor
2	Front tongue
3	Rear tongue
4	Black mark sensor installation tab
5	Black mark sensor installation slot
6	Rear groove
7	Front groove

2. Lift the rear of the black mark sensor while aligning the black mark sensor installation tab with the black mark sensor installation slot.
3. Raise the rear of the black mark sensor until the rear groove aligns with rear tongue.
4. Slide the black mark sensor toward the inside of the printer until it slides freely on the front and rear tongues.
5. See [Figure 234 on page 322](#). Insert the black mark sensor cable into the platen housing cable channel.
6. Guide the cable tie through the platen housing cable channel mounting slot and around the black mark sensor cable.
Loosely install the cable tie. The black mark sensor cable must have slack to allow for movement. The cable tie will be tightened later.
7. Move the black mark sensor to the outside of the platen housing as far as it will go, and then tighten the cable tie.
8. Slide the black mark sensor toward the inside of the platen housing until it is past the outside platen roller bearing location.

Reinstall the Platen Roller

1. See [Figure 242](#). Align the bearings with the holes in the lower print mechanism.

Figure 242 • Align the Bearings



1	Outside bearing and lock
2	Inside bearing and lock
3	Platen housing
4	Platen roller gear

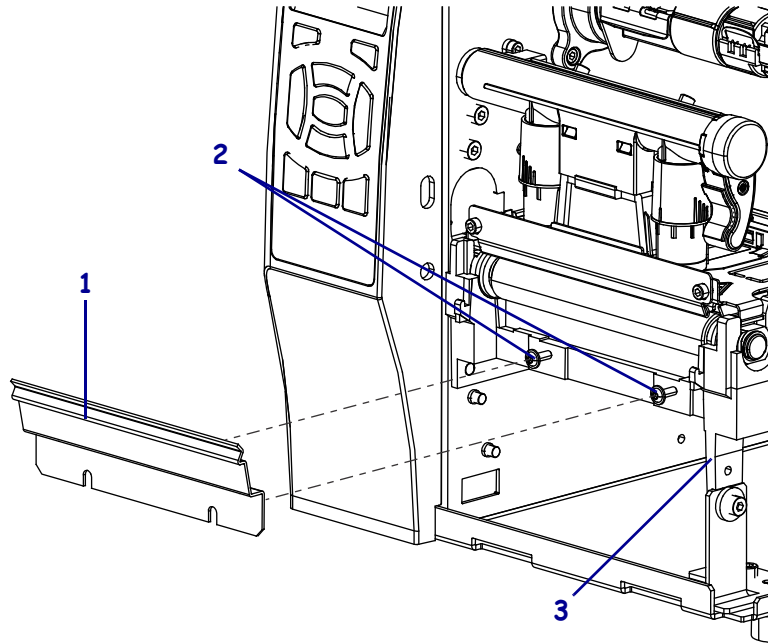
2. Slide the platen roller assembly into the platen housing, ensuring the platen roller gear meshes with the drive gear.
3. See [Figure 232 on page 320](#). Turn the tabs of the platen toward the rear of the printer to lock the platen roller assembly into the platen housing.
4. See [Figure 231 on page 319](#). Close the gear cover.
5. Clean the platen roller with the Zebra preventative maintenance kit or equivalent.
6. Which option did you remove?

If you removed a...	Then...
Cutter Tear bar	Go to Reinstall the Tear Bar on page 333 .
Peel	Go to Reinstall the Peel Assembly on page 336

Reinstall the Tear Bar

1. Start the two mounting screws into the mounting holes.
Tighten them to within 3.2 mm (1/8 in.) of the platen housing.

Figure 243 • Install the Tear Bar



1	Tear bar
2	Mounting screws (2)
3	Platen housing

2. Slide the tear bar onto the two mounting screws, and then tighten the mounting screws.
3. Did you remove a cutter module?

If...	Then...
Yes	Continue with <i>Reinstall the Cutter Module</i> on page 334.
No	Go to <i>Complete the Installation</i> on page 338.

Reinstall the Cutter Module

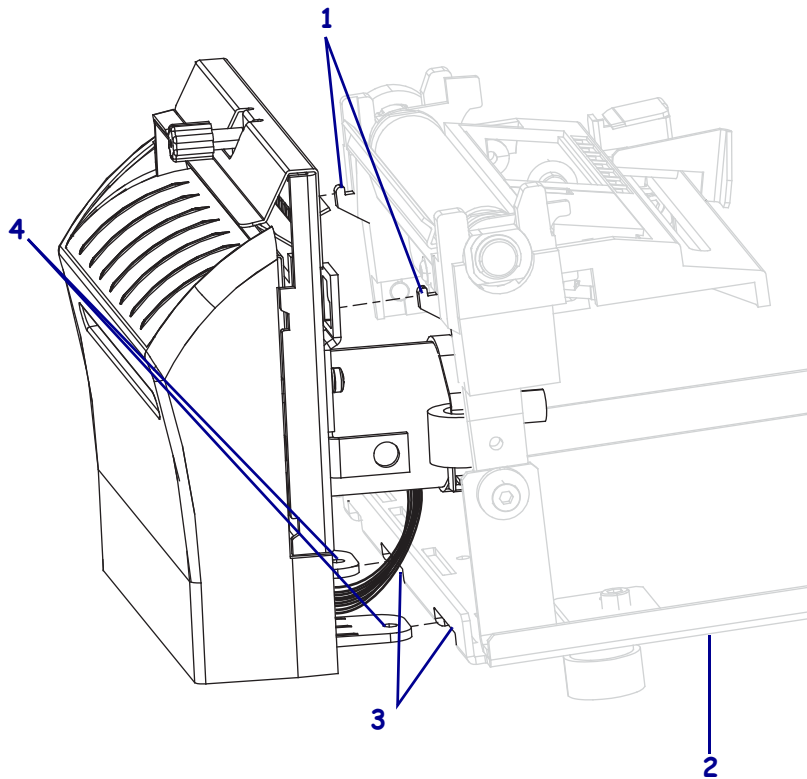


1. **Caution** • The cutter blade is sharp. Do not touch or rub the blade with your fingers.

See [Figure 228 on page 316](#). Align the cutter assembly mounting brackets with the mounting hooks.

2. See [Figure 244](#). Slide the cutter assembly onto the mounting hooks, ensuring that the mounting tabs slide into the sheet metal base slots.

Figure 244 • Mounting Brackets

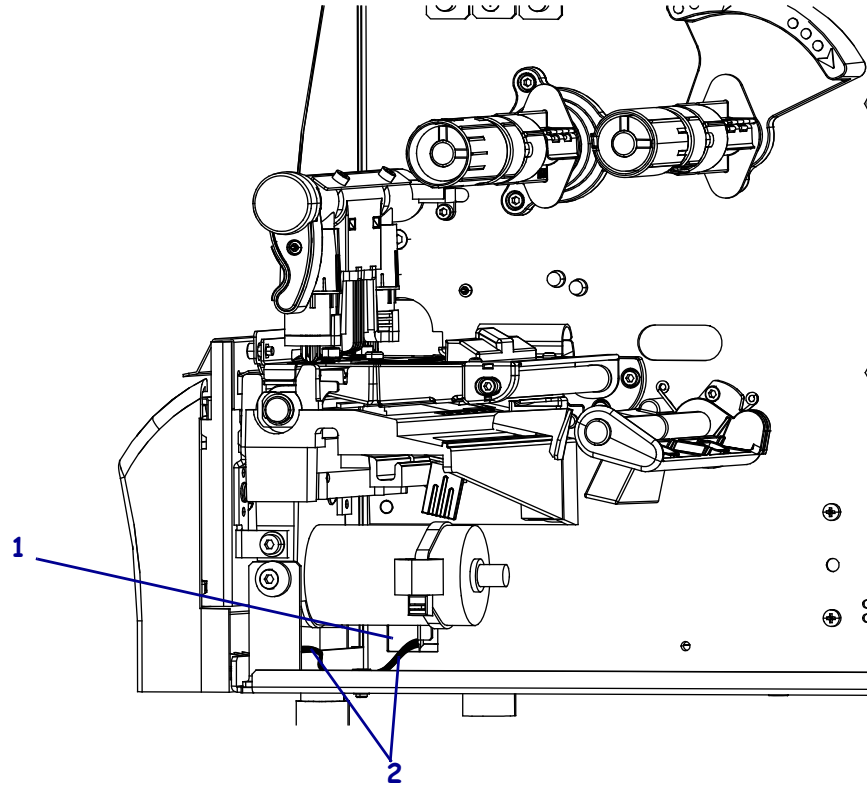


1	Mounting hooks (2)
2	Sheet metal base
3	Mounting slots (2)
4	Mounting tabs (2)

3. Slide the cutter assembly toward the printer.
4. See [Figure 228 on page 316](#). Install and tighten the mounting screw.

- See [Figure 245](#). Route the cable through the access hole, and then route it to the main logic board.

Figure 245 • Route the Cutter Cable



1	Access hole
2	Cutter cable



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

Connect yourself to an antistatic device.

- See [Figure 227 on page 315](#). Route the cutter cable through the cable clamp on the base of the printer, and then connect it to J17 on the main logic board (MLB).
- Install the cable tie securing the cutter cable and the wire bundle to the power supply mounting bracket.

9. Which model of printer are you working on?

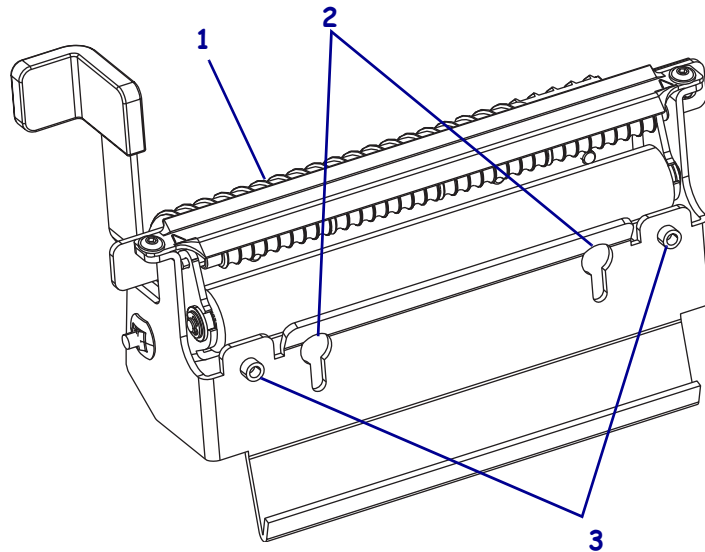
If you have a...	Then...
ZT220	<ol style="list-style-type: none"> See Figure 223 on page 312. Insert the electronics cover into the printer. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none"> See Figure 225 on page 313. Slide the electronics cover onto the printer. Reinstall the three electronics side mounting screws. See Figure 224 on page 313. Open the media cover and reinstall the media side mounting screw.

10. Go to [Complete the Installation on page 338](#).

Reinstall the Peel Assembly

1. See [Figure 246](#). Take note of the pems and the mounting slots.

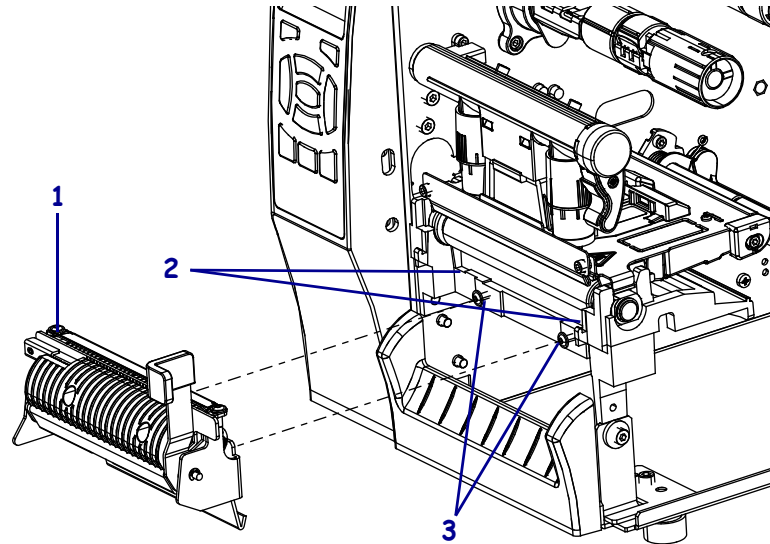
Figure 246 • Locate the Pems



1	Peel assembly
2	Mounting slots (2)
3	Pems (2)

2. See [Figure 247](#). Start the two mounting screws into the mounting holes.
Tighten them to within 3.2 mm (1/8 in.) of the platen housing.

Figure 247 • Install the Peel Assembly



1	Peel assembly
2	Set pems here
3	Mounting screws (2)

3. Install the peel assembly with the pems to the rear and the opening in the mounting slot to the top.
 - a. Insert the mounting slot opening over the two screws and lift up on the assembly.
 - b. Push the assembly back against the vertical surface of the platen assembly, and then down so that the pems are resting on the horizontal surface of the platen housing.
4. Maintain a slight pressure downward on the peel assembly to keep the pems on the horizontal surface, and tighten the mounting screws.
5. Continue with [Complete the Installation on page 338](#).

Complete the Installation

1.

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.

2. Reconnect the AC power cord and all data cables.
3. Turn on (I) the printer.

The installation is complete.

Peel Roller Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the peel roller into the following printers:

- ZT230™
- ZT220™
- ZT210™

Read these instructions thoroughly before attempting to install this kit.

Parts List

Figure 248 • Kit Contents

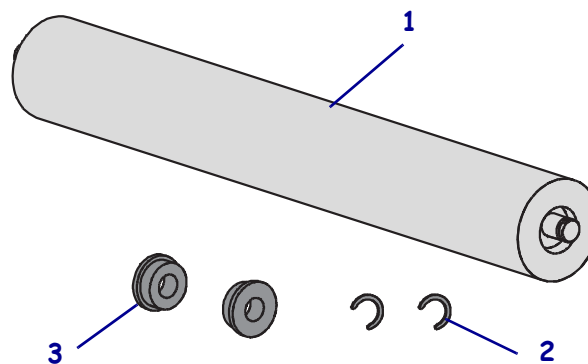


Table 39 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-039	Peel Roller
	2	2	HW10094	E-Ring, 3 mm (available in quantities of 25)
	3	2	N/A	Flanged Ball Bearing

N/A = Not available as a separate part for purchase (listed for identification purposes only).

Tools Required



Tools • You need these tools to complete this procedure:

- Flat-blade Screwdriver Set
- Safety Goggles
- Metric Hex Key (Allen Wrench) Set

Remove the Peel Roller



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

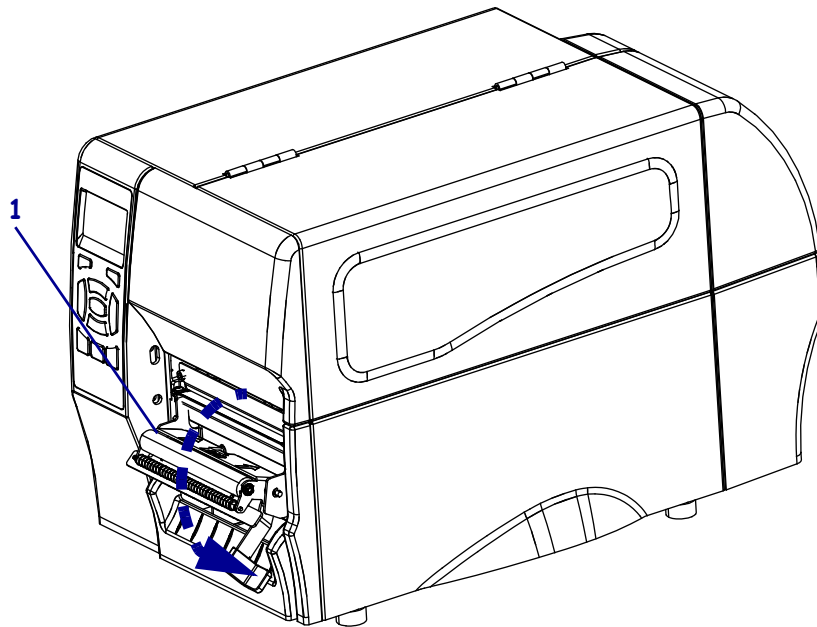
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon from the printer.

3. See [Figure 249](#). Open the peel roller assembly.

Figure 249 • Open the Peel Assembly



1	Peel roller assembly open
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4. **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.

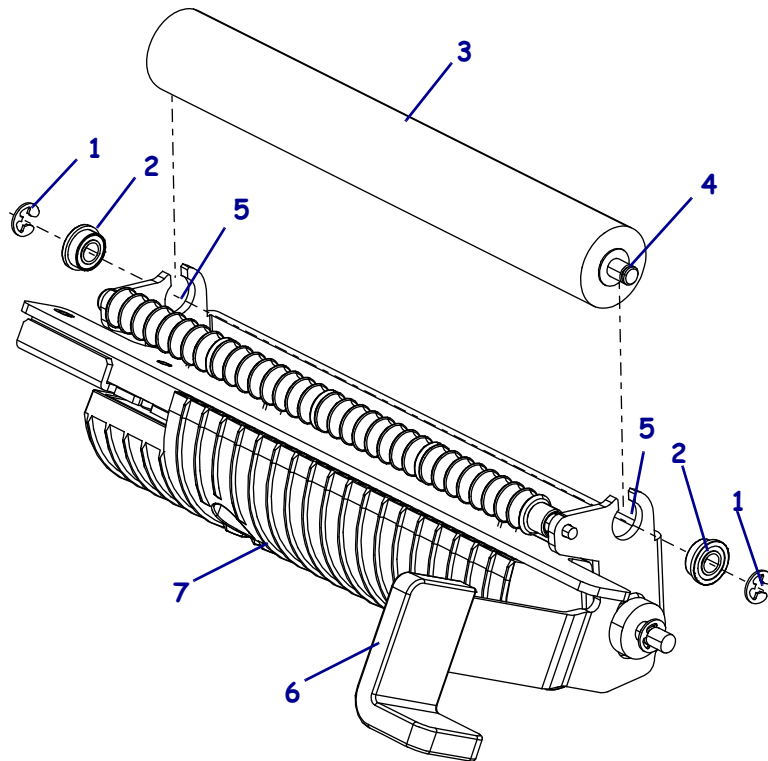
See [Figure 250](#). Using a small flat-blade screwdriver, remove and discard the two e-rings.



Note • If you have trouble reaching the E-rings and have a peel assembly installed, you may have to remove it to access the E-rings. See [Figure 252 on page 343](#). Loosen the two mounting screws, and then remove the peel assembly from the printer.

5. Remove and discard the bearings and old peel roller.

Figure 250 • Removing and Installing E-rings and Bearings

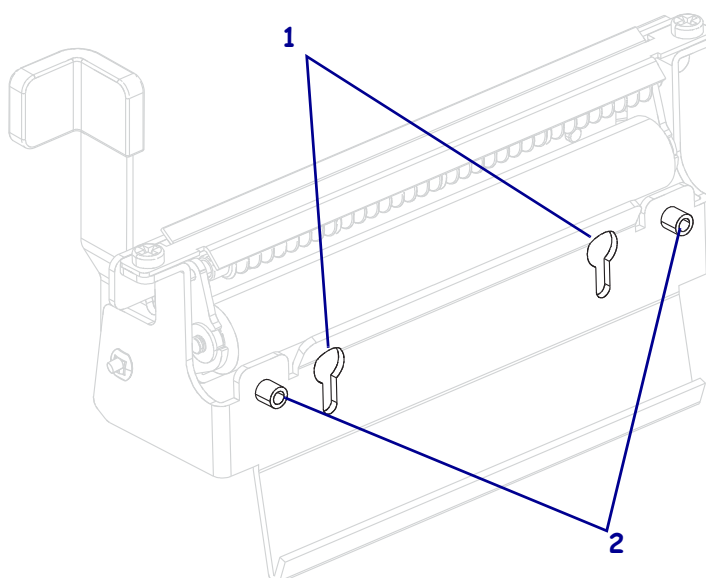


1	E-rings
2	Roller bearings (2)
3	Peel roller
4	Groove for E-ring
5	Peel roller mounting hole
6	Peel roller lever (shown in the open position)
7	Peel roller holder assembly

Install the Peel Roller

1. See [Figure 250 on page 341](#). Install the new peel roller in the notches in the peel roller holder assembly.
2. Install the two new bearings on the shaft of the peel roller, flange facing out, as shown.
3. Install two new E-rings in the grooves on the roller shaft.
4. See [Figure 251](#). Notice the pems and the mounting slots.

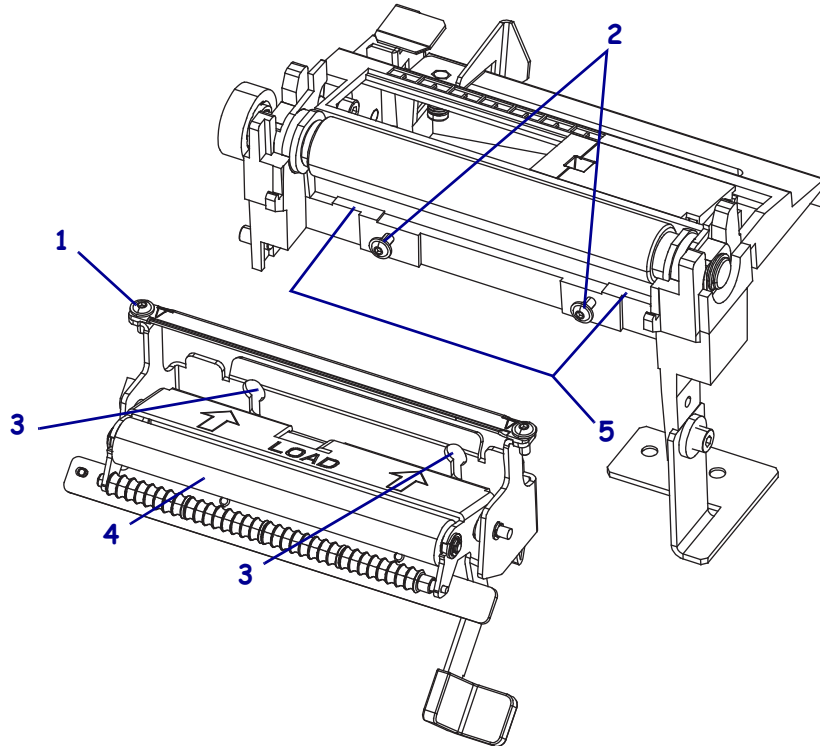
Figure 251 • Rear View of Peel Assembly



1	Mounting slots (2)
2	Pems (2)
3	Peel roller lever (shown in the closed position)

5. See [Figure 252](#). Reinstall the two peel mounting screws into the two mounting holes, to within 3.175 mm (of the platen housing).

Figure 252 • Installing Peel Assembly



1	Peel assembly
2	Mounting screw
3	Mounting holes
4	Peel roller
5	Rest the pems on the housing here.

6. Install the new peel assembly with the pems to the rear and the opening in the mounting slot to the top.
 - a. Insert the mounting slot over the two screws, and then lift up on the assembly.
 - b. Push the assembly back against the vertical surface of the platen housing, and then down, so that the pems are resting on the horizontal surface of the platen housing.
7. Maintain a slight downward pressure on the peel assembly to keep the pems on the horizontal surface, and tighten the mounting screws.
8. See [Figure 251 on page 342](#). Raise the peel roller lever to the closed position. Ensure the peel holder assembly snaps into position and exerts force on the platen roller.

-
9. **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.

10. Reconnect the AC power cord and turn on (I) the printer.
11. Verify proper printer operation.

The installation is complete.

Circuit Boards

ContentsT

Control Panel Maintenance Kit	346
Printer Control Panel Maintenance Kit	353
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Power Supply Maintenance Kit	406
Power Supply Brackets Maintenance Kit	415
Power Switch Maintenance Kit	425
Electronics Cables Maintenance Kit	433

Control Panel Maintenance Kit

Installation Instructions

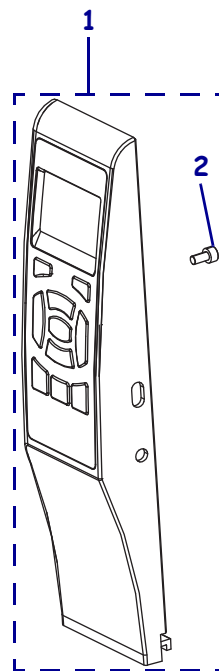
This kit includes the parts and documentation necessary to install the Control Panel Maintenance Kit on the ZT230™ printer.

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 253 • Kit Contents



✓	Item	Qty	Part Number	Description
	1	1	P1037974-031	ZT230 Printer Control Panel Maintenance Kit
	2	1	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Metric Hex Key (Allen wrench) Set
- Antistatic Wriststrap and Mat

Remove the Electronics Cover



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.



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

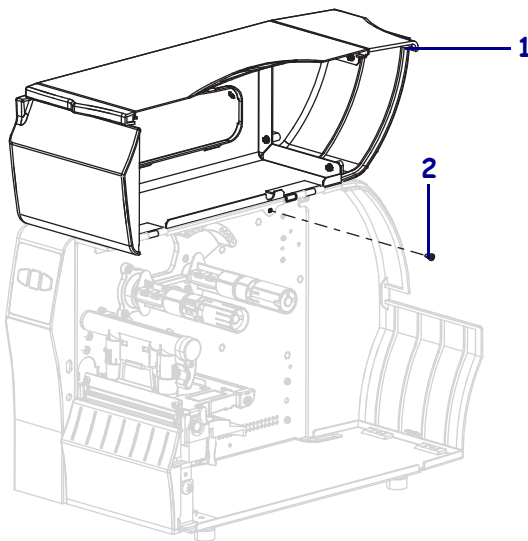
Turn off (O) the printer and disconnect the AC power cord and all data cables.

3. **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.

Open the media door and remove the media and ribbon.

4. See [Figure 254](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

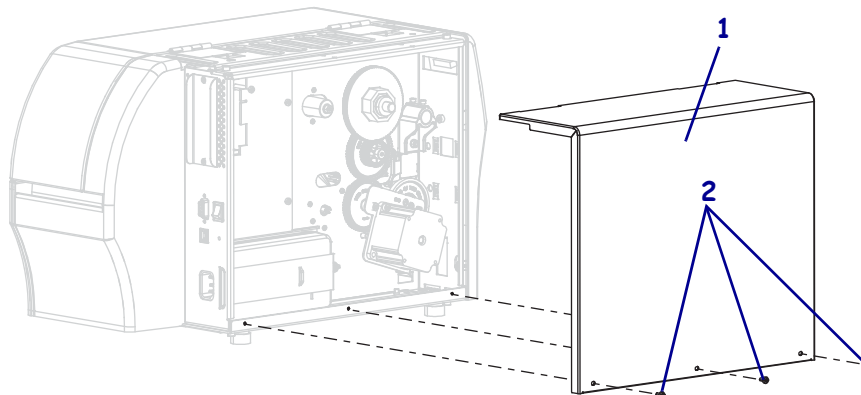
Figure 254 • Open the Media Door



1	Media door
2	Media side mounting screw

5. See [Figure 255](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 255 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

6. Lift the electronics cover off of the printer.

Remove the Control Panel

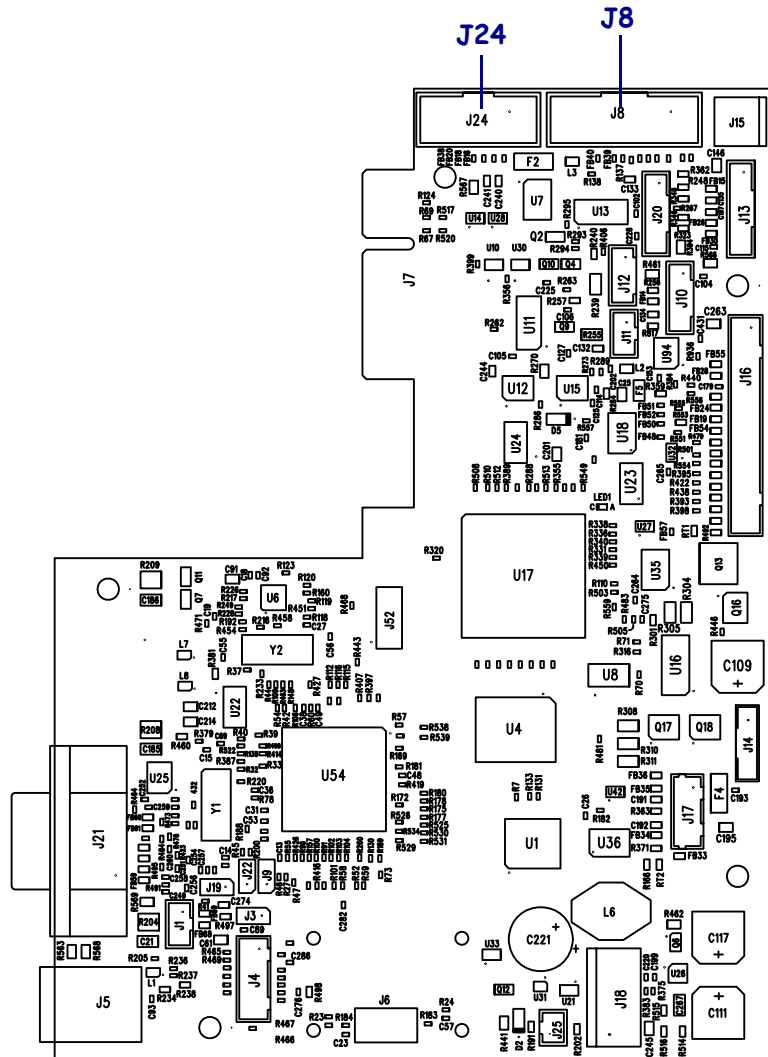


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

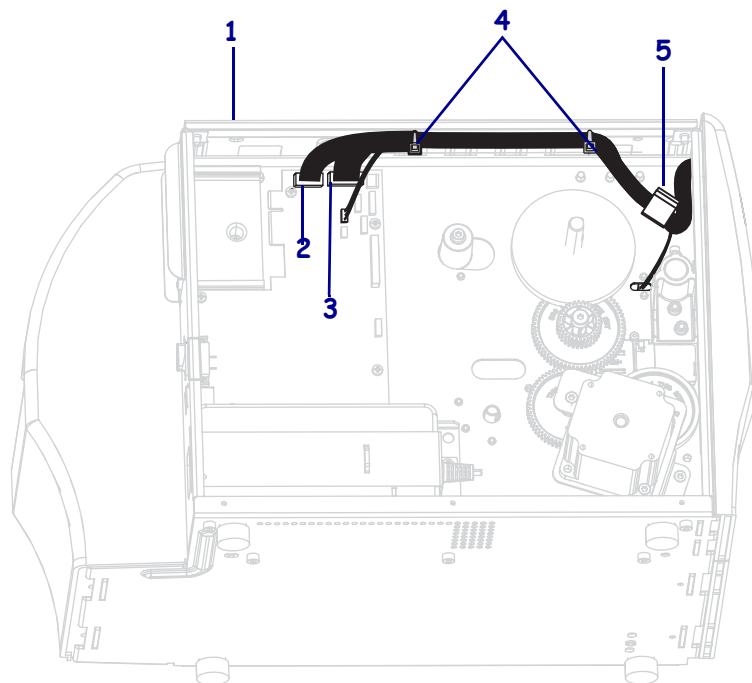
2. See [Figure 256](#). Disconnect the two control panel cables from J8 and J24 on the main logic board (MLB).

Figure 256 • Disconnect the Control Panel



3. See [Figure 257](#). Cut the two cable ties securing the cable bundle to the top plate.

Figure 257 • Cable Routing

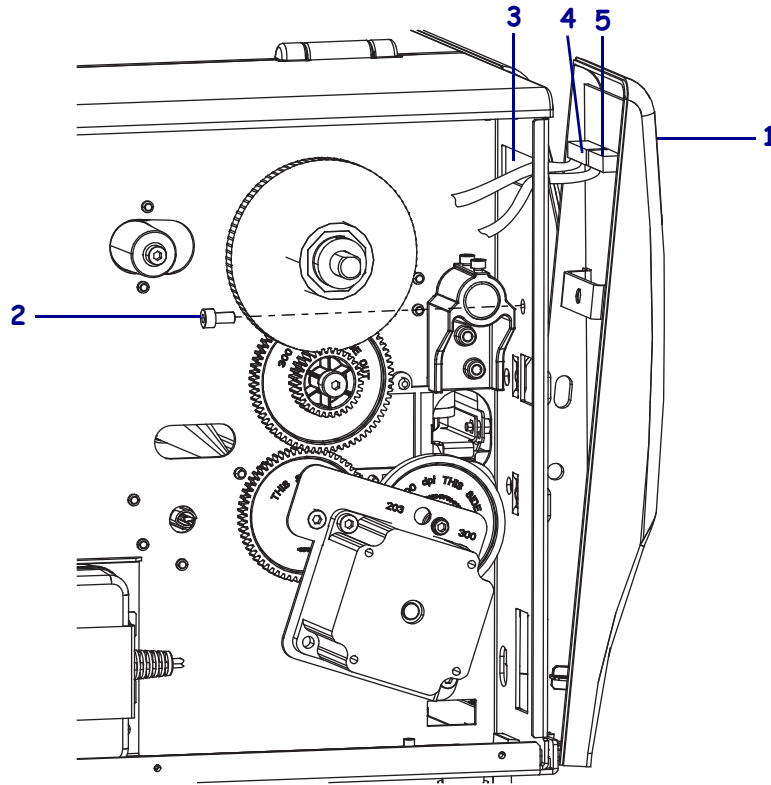


1	Top plate
2	J24 on the MLB
3	J8 on the MLB
4	Cable ties (2)
5	Cable clamp

4. Remove the two control panel cables from the cable clamp.

5. See [Figure 258](#). Remove the control panel mounting screw.

Figure 258 • Remove the Control



1	Control panel
2	Mounting screw
3	Control panel cable access hole
4	Control panel 14-wire cable
5	Control panel 10-wire cable

6. Tip the top of the control panel forward, and then slide the control panel out of the printer.

Install the New Control Panel

1. See [Figure 258 on page 351](#). Guide the control panel cables through the access hole.
2. Slide the control panel into the printer, and then install the mounting screw.
3. Route the cable through the cable clamp.
4. Install the two new cable ties through the holes in the top plate.
5. See [Figure 257 on page 350](#). Wrap the cable ties around all cables, and then tighten the cable ties.
6. See [Figure 256 on page 349](#). Connect the control panel cables to J8 and J24 on the MLB.

Reinstall the Electronics Cover

1. See [Figure 255 on page 348](#). Slide the electronics cover onto the printer.
2. Reinstall the three electronics side mounting screws.
3. See [Figure 254 on page 348](#). Open the media cover and reinstall the media side mounting screw.
4. Reconnect the AC power cord and all data cables.
5. Turn on (I) the printer.

The installation is complete.

Printer Control Panel Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Control Panel Maintenance Kit on the following printers:

- ZT220™
- ZT210™

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 259 • Kit Contents

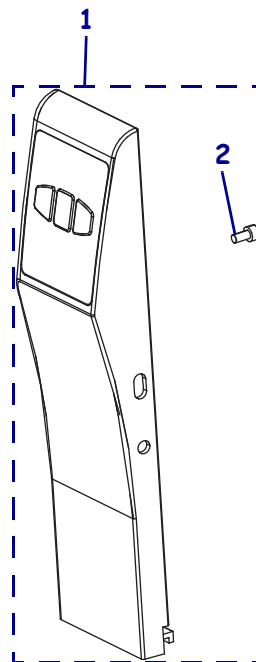


Table 40 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037990-002	ZT220 Printer Control Panel Maintenance Kit
		1	P1037991-001	ZT210 Printer Control Panel Maintenance Kit
	2	1	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Metric Hex Key (Allen wrench) Set
- Antistatic Wriststrap and Mat

Remove the Electronics Cover



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. Which type of electronics cover do you have?

If have a...	Then...
ZT220	Continue with <i>ZT220 Electronics Cover</i> .
ZT210	Go to <i>ZT210 Electronics Cover on page 355</i> .

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

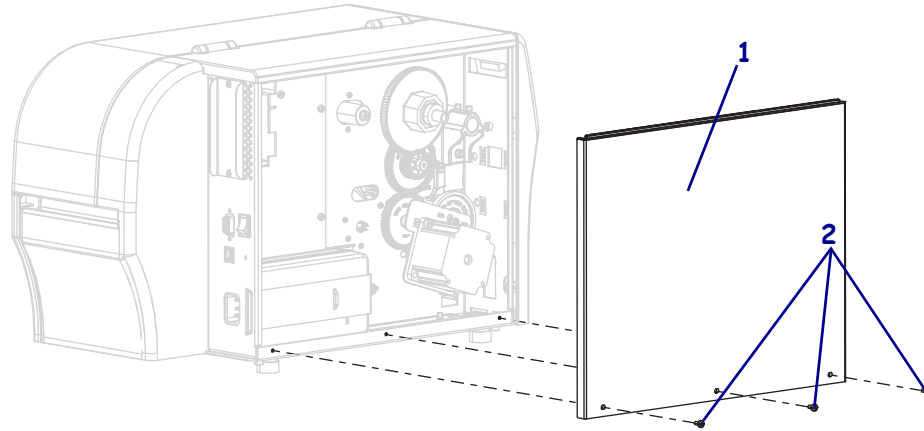
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 260](#). Remove the three screws securing the electronics cover.

Figure 260 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Go to [Remove the Control Panel on page 357](#).

ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

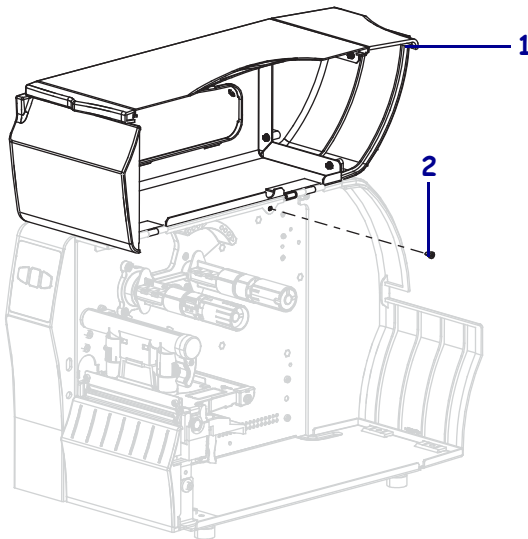
Turn off (O) the printer and disconnect the AC power cord and all data cables.

- 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.

Open the media door and remove the media and ribbon.

3. See [Figure 261](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

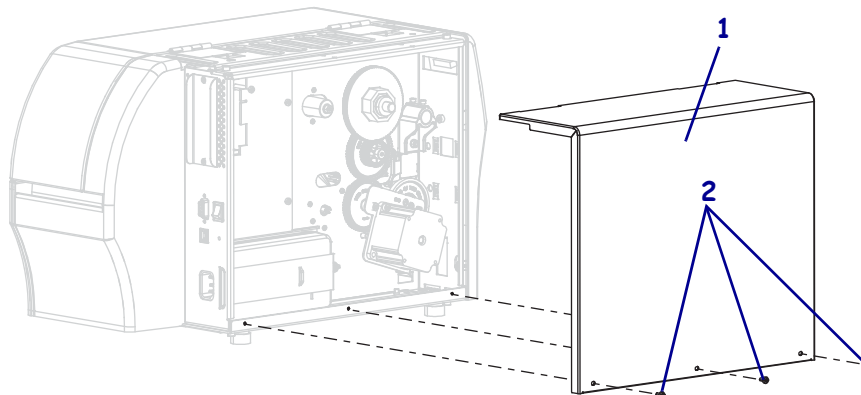
Figure 261 • Open the Media Door



1	Media door
2	Media side mounting screw

4. See [Figure 262](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 262 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

5. Lift the electronics cover off of the printer.
6. Continue with [Remove the Control Panel](#).

Remove the Control Panel

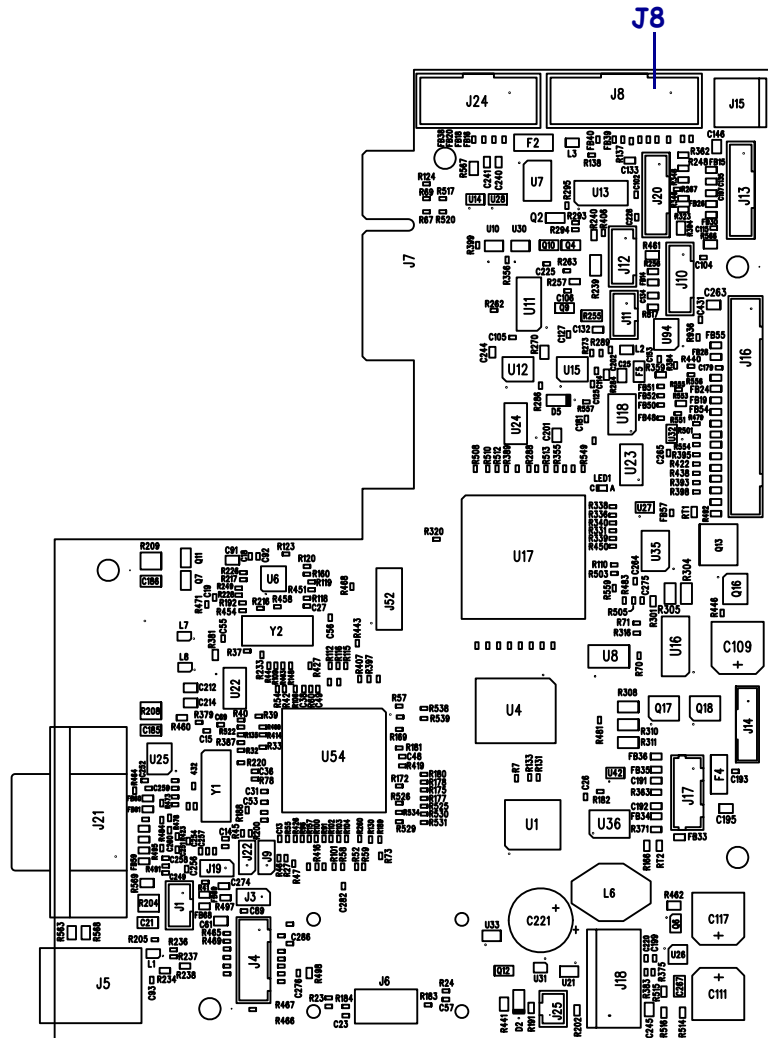


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. See [Figure 263](#). Disconnect the control panel cable from J8 on the main logic board (MLB).

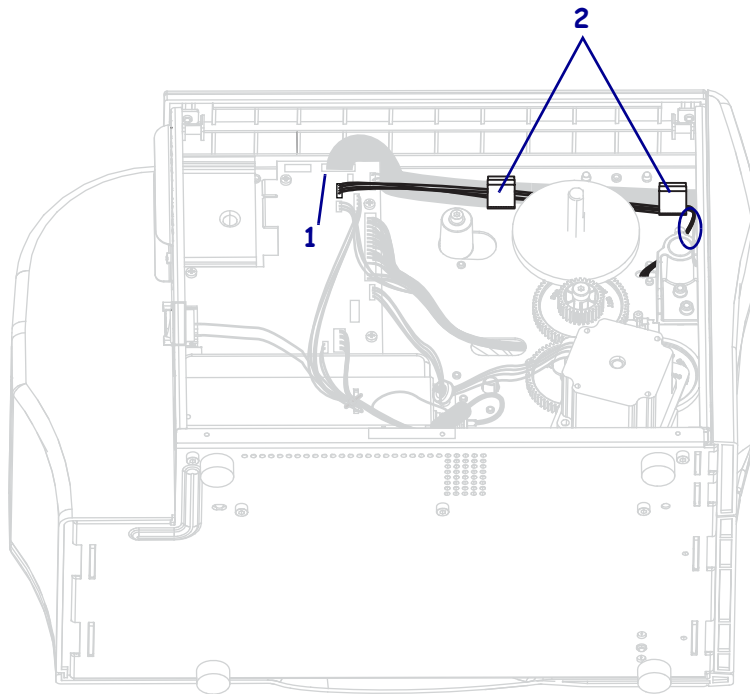
Figure 263 • Disconnect the Control Panel



3. Which model of printer are you working on?

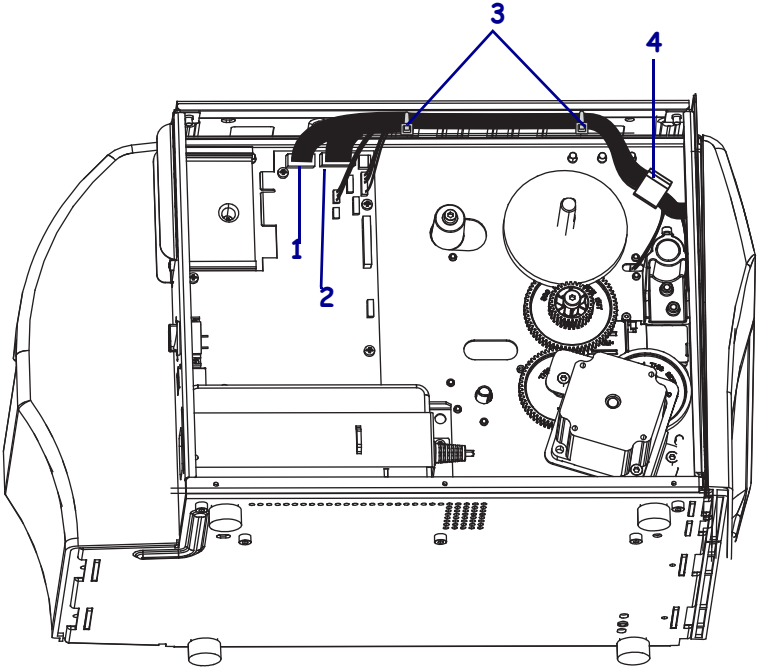
If you have a...	Then...
ZT220	<ul style="list-style-type: none"> a. See Figure 264. Disconnect the control panel cable from J8 on the MLB. b. Remove the control panel cable from the two cable clamps. c. Go to step 4 on page 360.
ZT210	<ul style="list-style-type: none"> a. See Figure 265 on page 359. Cut the two cable ties securing the cables to the top plate. b. Remove the control panel cable from the cable clamp. c. Disconnect the control panel cable from J8 on the MLB. d. Go to step 4 on page 360.

Figure 264 • ZT220 Cable Routing



1	J8, control panel connector on the (MLB)
2	Cable clamps (2)

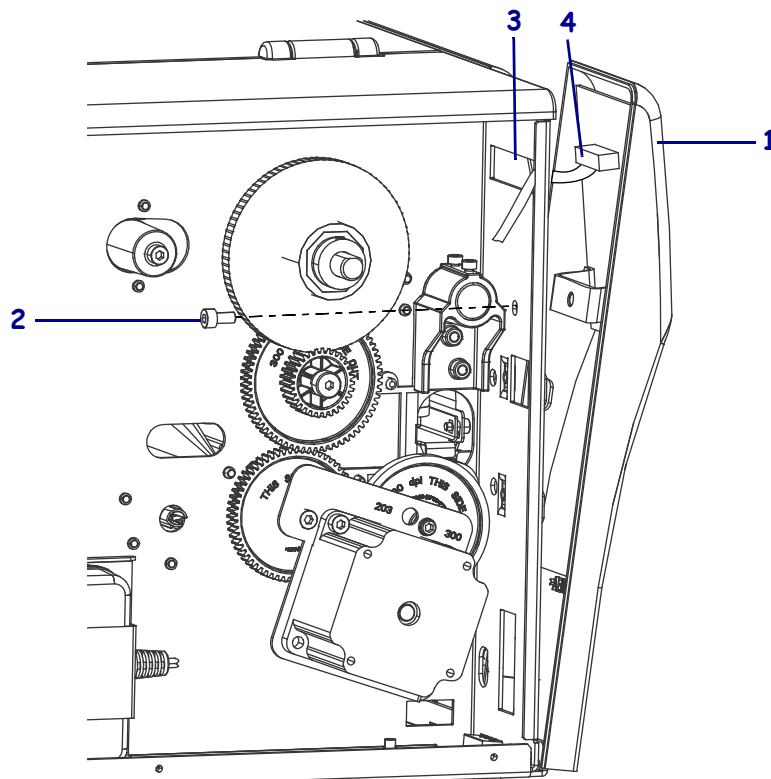
Figure 265 • ZT210 Cable Routing



1	Cable ties (2)
2	Cable clamp

4. See [Figure 266](#). Remove the control panel mounting screw.

Figure 266 • Remove the Control Panel



1	Control panel
2	Mounting screw
3	Control panel cable access hole
4	Control panel cable

5. Tip the top of the control panel forward, and then slide the control panel out of the printer.

Install the New Control Panel

1. See [Figure 266 on page 360](#). Guide the control panel cable through the access hole.
2. Slide the control panel into the printer, and then install the mounting screw.
3. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none"> a. See Figure 264 on page 358. Insert the control panel cable into the two cable clamps. b. Continue with Reinstall the Electronics Cover.
ZT210	<ol style="list-style-type: none"> a. See Figure 265 on page 359. Route the cable through the cable clamp, and then along the top. b. Install the two new cable ties through the holes in the top plate. c. Wrap the cable ties around all cables, and then tighten the cable ties. d. Continue with Reinstall the Electronics Cover.

4. Connect the control panel cable to J8 on the (MLB).

Reinstall the Electronics Cover

1. Which type of electronics cover do you have?
2. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none"> a. See Figure 260 on page 355. Insert the electronics cover onto the printer. b. Reinstall the three mounting screws.
ZT210	<ol style="list-style-type: none"> a. See Figure 262 on page 356. Slide the electronics cover into the printer. b. Reinstall the three electronics side mounting screws. c. See Figure 261 on page 356. Open the media cover and reinstall the media side mounting screw.

3. Reconnect the AC power cord and all data cables.
4. Turn on (I) the printer.

The installation is complete.



Main Logic Board Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the main logic board (MLB) in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 267 • Kit Contents

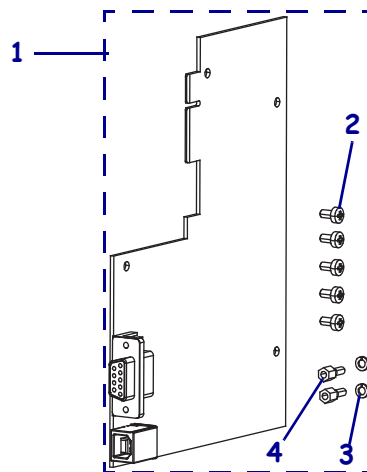


Table 41 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-017	Main Logic Board (MLB) Maintenance Kit
	2	5	HW43968	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
	3	2	HW45945	Lock Washer, (sold in quantities of 100)
	4	2	HW32406	Standoff, 4-40 (sold in quantities of 25)

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Safety Glasses
- Antistatic Wrist Strap and Mat

Remove the Electronics Cover



- 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.

- Which model of printer are you working on?

If have a...	Then...
ZT220	Continue with <i>ZT220 Electronics Cover</i> .
ZT210 ZT230	Go to <i>ZT230 and ZT210 Electronics Cover on page 365</i> .

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

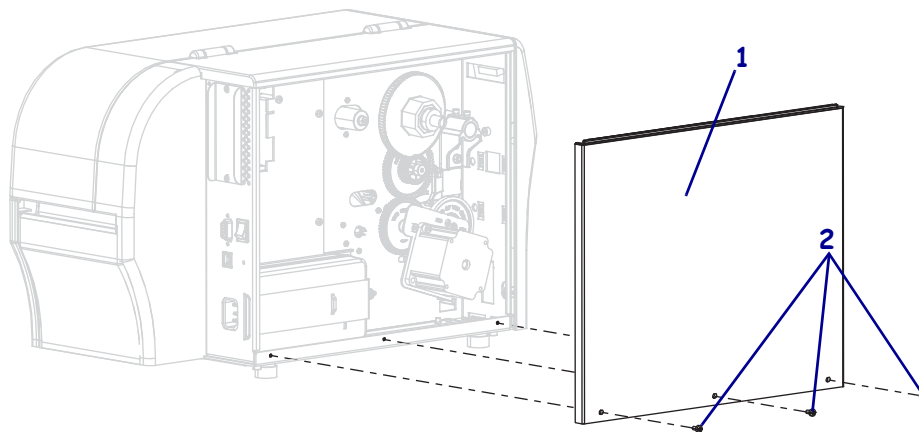
Turn off (O) the printer and disconnect the AC power cord and all data cables.

- 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.

Open the media door and remove the media and ribbon.

3. See [Figure 268](#). Remove the three screws securing the electronics cover.

Figure 268 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

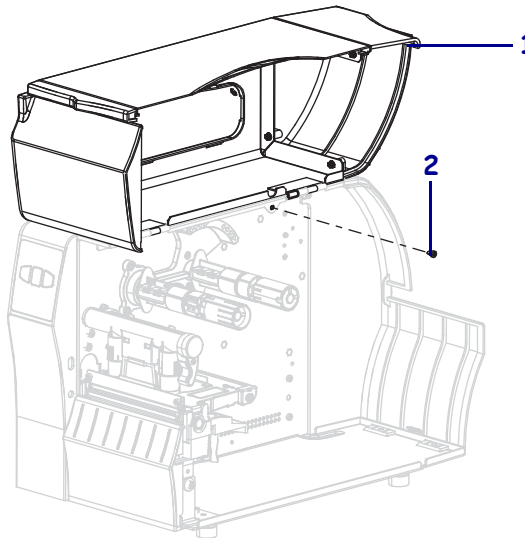
4. Lift the electronics cover off of the printer.
5. Is there an option card installed?

If...	Then...
Yes	Continue with <i>Remove the Option Card</i> .
No	Go to <i>Remove the Old Main Logic Board (MLB)</i> on page 367.

ZT230 and ZT210 Electronics Cover

1. See [Figure 269](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

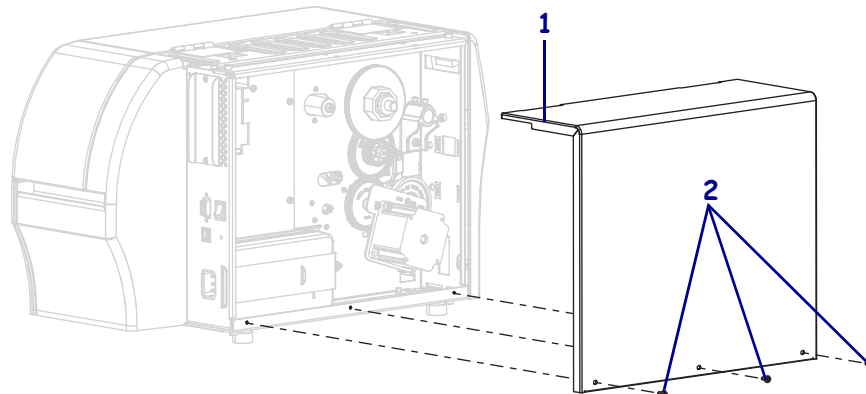
Figure 269 • Open the Media Door



1	Media door
2	Media door mounting screw

2. See [Figure 270](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 270 • Remove the ZT230 and ZT210 Electronics Cover



1	Electronics cover
2	Mounting screws (3)

3. Lift the electronics cover off of the printer.

4. Is there an option card installed?

If...	Then...
Yes	Continue with <i>Remove the Option Card</i> .
No	Go to <i>Remove the Old Main Logic Board (MLB)</i> on page 367.

Remove the Option Card



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.

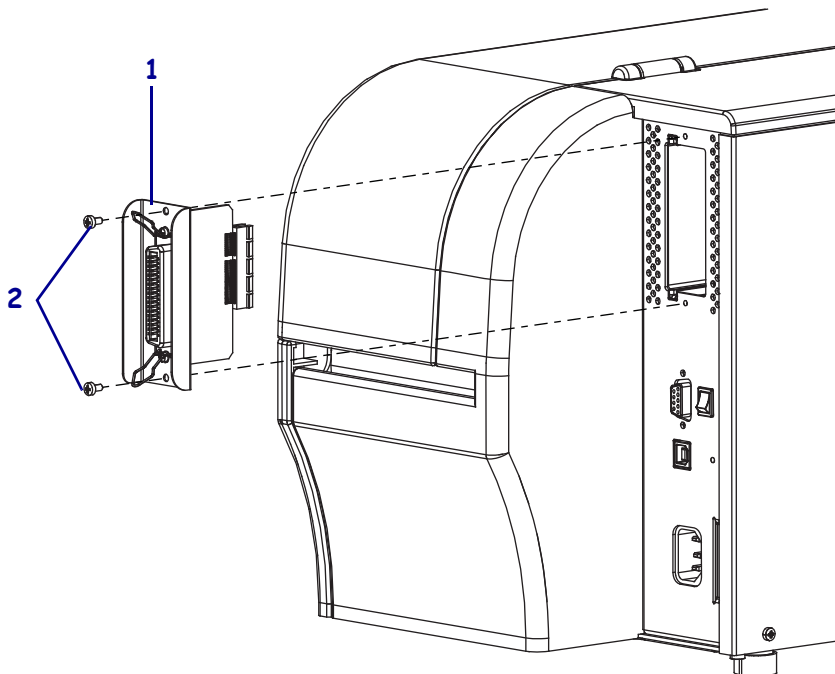


2. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

3. See [Figure 271](#). Remove the two option card mounting screws.

Figure 271 • Remove the Option Card



1	Option card
2	Mounting screws (2)

4. Pull the Option card out of the printer.

Remove the Old Main Logic Board (MLB)

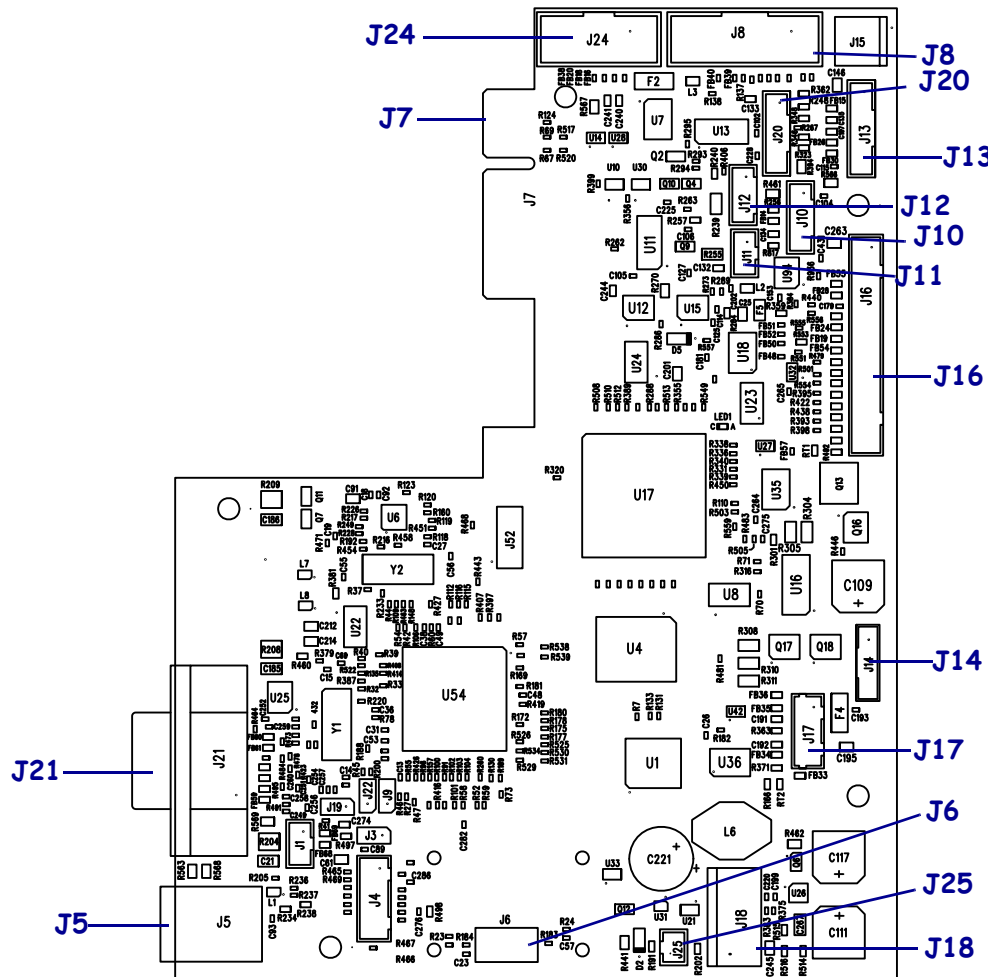


- Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

- See [Figure 272](#). Disconnect all cables from the main logic board (MLB).

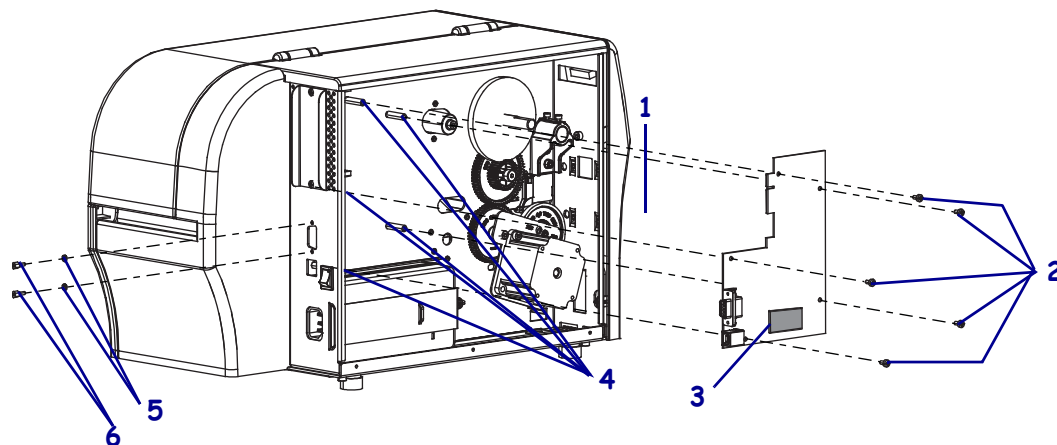
Figure 272 • Disconnect the Cables



J5	USB-Type B	J15	Auxiliary Power
J6	RTC Option	J16	Smart Printhead
J7	Option card Connector	J17	LTU/Rewind/Cutter
J8	Control Panel	J18	Power Supply
J10	Reflective Sensor	J20	Transmissive Sensor
J11	Ribbon Sensor	J21	Serial Port Interface
J12	Head Open Sensor	J24	Smart LCD Control Panel
J13	Take-Label Sensor	J25	Power Switch
J14	Stepper Motor		

- See [Figure 273](#). Remove the two serial port mounting standoffs and lock washers.

Figure 273 • Remove the MLB



1	Main logic board
2	Mounting screws (5)
3	Real time clock option board
4	Printer standoffs (5)
5	Lock washers (2)
6	Serial port standoffs (2)

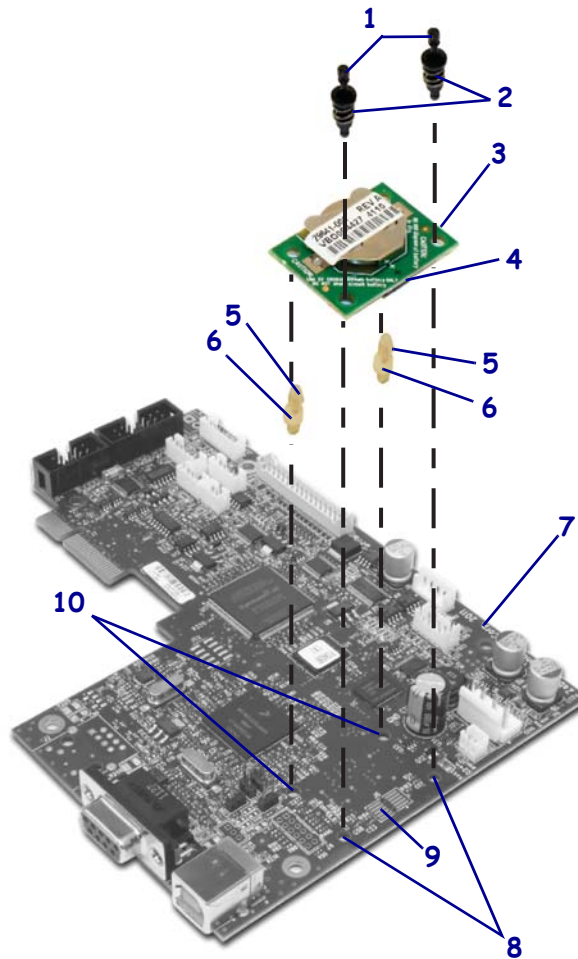
- Remove the five mounting screws, and then remove the MLB.
- Slide the MLB out of the printer.
- Is there a real time clock board (RTC) option installed on the MLB?

If...	Then...
Yes	Continue with Remove the Real Time Clock (RTC)
No	Go to Install the New Main Logic Board (MLB) on page 370.

Remove the Real Time Clock (RTC)

1. See [Figure 274](#). To remove the standoffs, use a long needle nose pliers to pull out the pins in each of the standoffs, and then pull out the body of each to remove them from the MLB and the RTC board.

Figure 274 • Remove and Install the Spacers and Standoffs



1	Heat sink standoff pins (2)
2	Heat sink standoff body (2)
3	RTC option board
4	J1 on RTC board
5	Locking spacer tab
6	Locking spacers (2)
7	Main logic board (MLB)
8	Bottom two mounting holes
9	J6 on MLB
10	Top two mounting holes

2. Squeeze the spacer locking tab with the needle nose pliers while lifting the board slightly. Repeat the process on the other spacer to remove the RTC option board.
3. Turn the MLB over and squeeze the tabs securing the spacer into the MLB, and then pull the spacer out.
4. Repeat the process to remove the other spacer.

Install the RTC on the New MLB

1. Are you installing the RTC option board for the first time?

If...	Then...
Yes	See Figure 274 on page 369 . Install the two locking spacers into the top two holes in the MLB.
No	Continue step 2 .

2. Install the RTC option board on to the two locking spacers, J1 of the RTC board facing J6 on the MLB, and then press down until it snaps in place.
3. Install the heat sink standoff through the RTC board and into the bottom two holes in MLB until they snap into the MLB.

Install the New Main Logic Board (MLB)

1. See [Figure 273 on page 368](#). Slide the new MLB with the serial port through the mounting hole into the printer.
2. Loosely install the two serial port mounting standoffs and lock washers.
3. Align the new MLB with the five standoffs, and then loosely install the five mounting screws.
4. Tighten the serial port standoffs, and then tighten the five mounting screws.
5. See [Figure 272 on page 367](#). Install all cables to the new MLB.
6. See [Figure 271 on page 366](#). Reinstall any option board you removed.

Reinstall the Electronics Cover

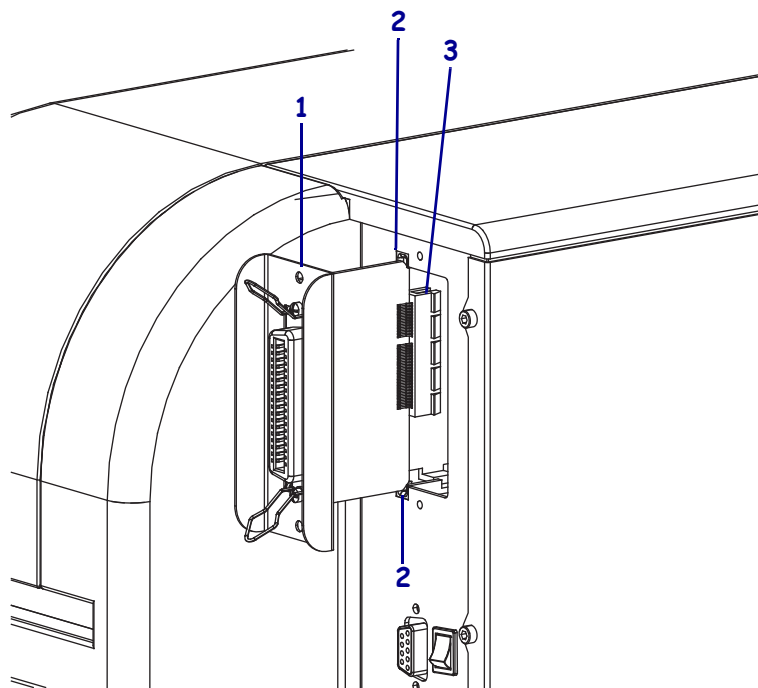
1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none"> See Figure 268 on page 364. Insert the electronics cover into the printer. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none"> See Figure 270 on page 365. Slide the electronics cover onto the printer. Reinstall the three electronics side mounting screws. See Figure 269 on page 365. Open the media cover and reinstall the media side mounting screw.

2. Did you remove an option card?

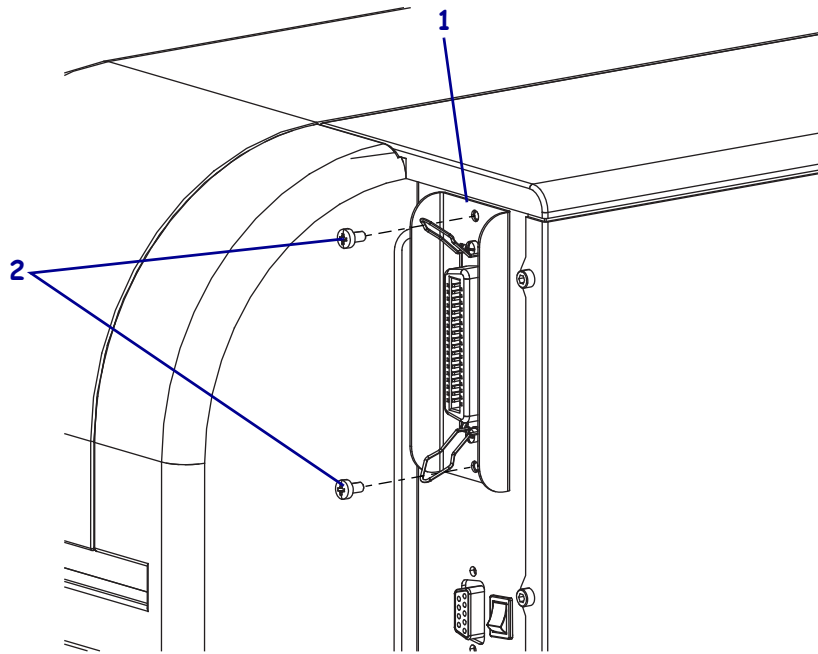
If...	Then...
Yes	<p>a. See Figure 275. Align the option card with the main logic board guides.</p> <p>b. Slowly slide the wired Ethernet option card into the printer until it stops.</p> <p>c. Ensure that the option card is aligned with the main logic board connector, and then push it in on the top and bottom until it is against the printer.</p> <p>d. See Figure 276 on page 373. Install the two mounting screws.</p> <p>e. Go to step 3 on page 373.</p>
No	Go to step 3 on page 373 .

Figure 275 • Install the Option Card



1	Wired Ethernet option card
2	Main logic board guide (2)
3	Wired Ethernet option card to main logic board connector

Figure 276 • Install the Mounting Screws



1	Option card
2	Mounting screws (2)

3. Reconnect the AC power cord and all data cables.
4. Turn on (I) the printer.

The installation is complete.



Real Time Clock (RTC) Option/Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the real time clock (RTC) in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 277 • Kit Contents

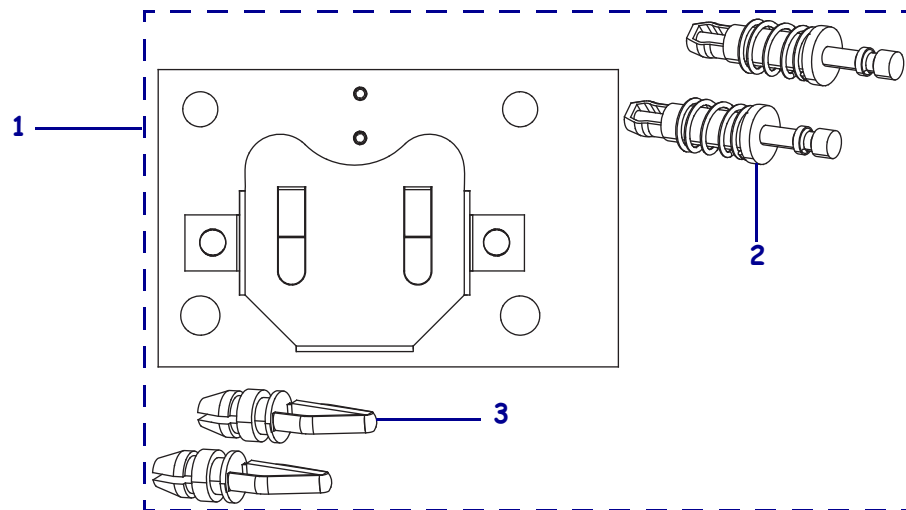


Table 42 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-004	RTC Option/Maintenance Kit
	2	2	N/A	Heat Sink Standoffs with Spring
	3	2	N/A	Locking Spacers

N/A = Not available as a separate part for purchase (listed for identification purposes only).

Tools Required

Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Antistatic Wriststrap and Mat
- Needle Nose Pliers
- Needle Nose Pliers

Remove the Electronics Cover



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. Which model of printer are you working on?

If have a...	Then...
ZT220	Continue with <i>ZT220 Electronics Cover</i> .
ZT210 ZT230	Go to <i>ZT230 and ZT210 Electronics Cover on page 376</i> .

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

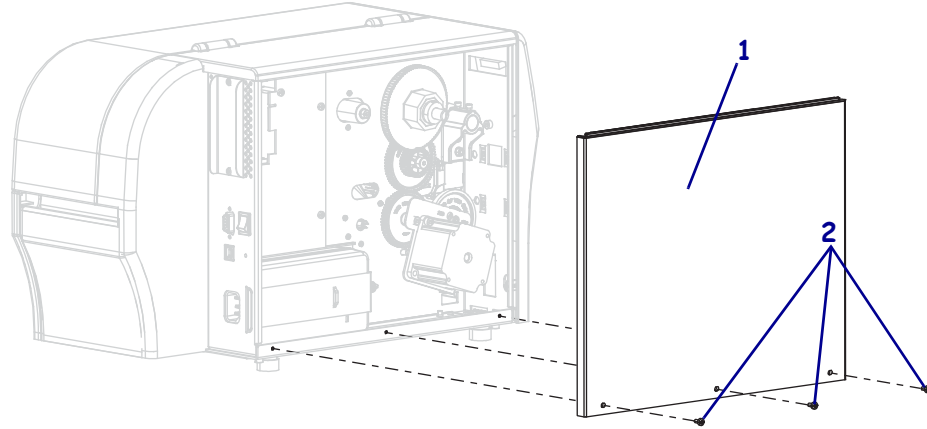
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 278](#). Remove the three screws securing the electronics cover.

Figure 278 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Are you replacing an existing RTC option board?

If...	Then...
Yes	Continue with Remove the Old Real Time Clock (RTC) Board on page 378.
No	Go to Install the Real Time Clock (RTC) Board on page 380.

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

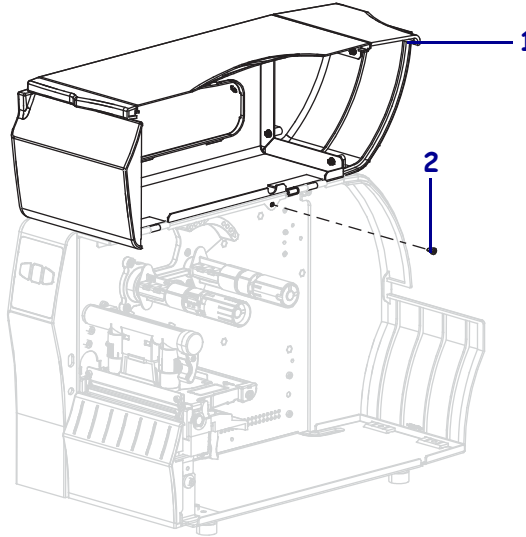
Turn off (O) the printer and disconnect the AC power cord and all data cables.

- 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.

Open the media door and remove the media and ribbon.

- See [Figure 279](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

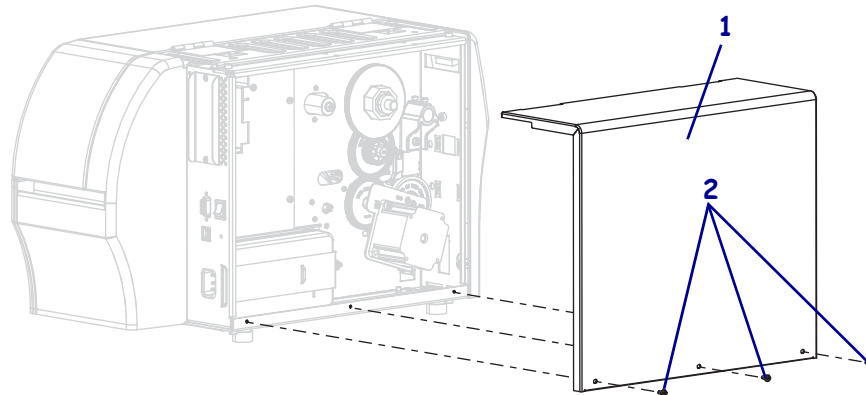
Figure 279 • Open the Media Door



1	Media door
2	Media side mounting screw

- See [Figure 280](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 280 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.

6. Are you replacing an existing RTC option board?

If...	Then...
Yes	Continue with <i>Remove the Old Real Time Clock (RTC) Board</i> .
No	Go to <i>Install the Real Time Clock (RTC) Board</i> on page 380.

Remove the Old Real Time Clock (RTC) Board



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



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

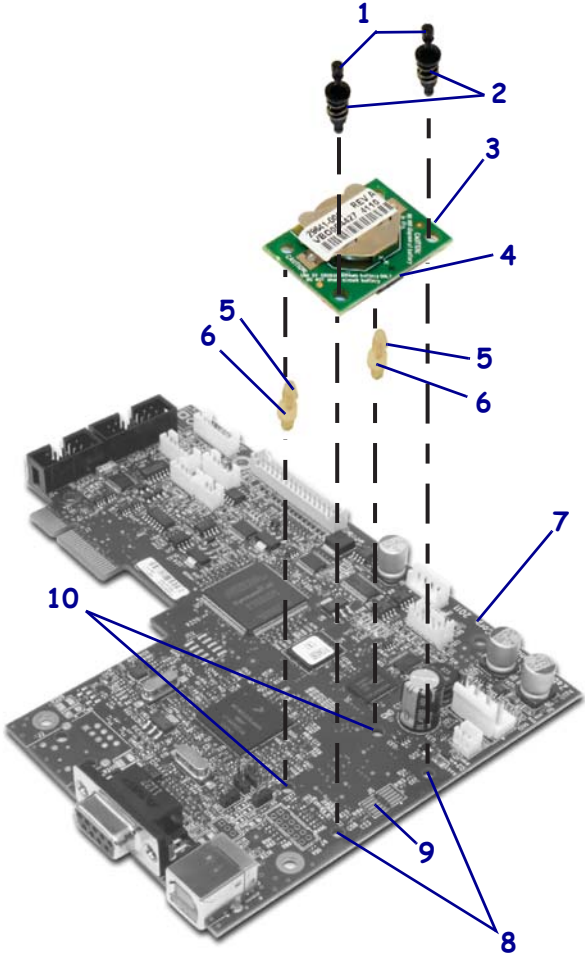
Connect yourself to an antistatic device.



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

See [Figure 281](#). To remove the standoffs, use a needle nose pliers to pull out the pins in each of the heat sink standoffs, and then pull the body of each to remove them from the MLB and the RTC board.

Figure 281 • Remove and Install the Spacers and Standoffs



1	Heat sink standoff pins (2)
2	Heat sink standoff body (2)
3	RTC option board
4	J1 on RTC board
5	Locking spacer tab
6	Locking spacers (2)
7	Main logic board (MLB)
8	Bottom two mounting holes
9	J6 on MLB
10	Top two mounting holes

4. Squeeze the locking spacer tab with the needle nose pliers while lifting the board slightly. Repeat the process on the other spacer locking tab, and then remove the old RTC option board.

Install the Real Time Clock (RTC) Board



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

Connect yourself to an antistatic device.

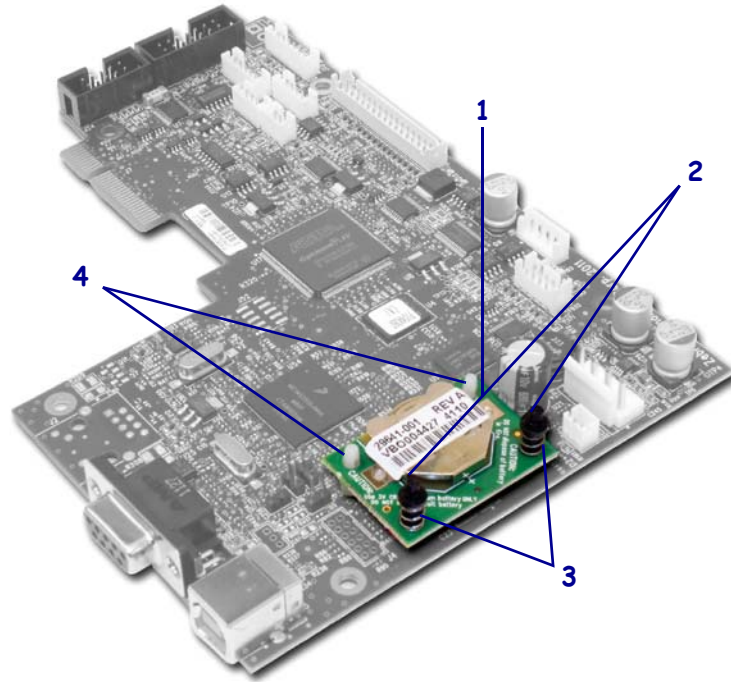
2. Are you installing the RTC option board for the first time?

If...	Then...
Yes	Continue to step 3 .
No	Go to step 4 .

3. See [Figure 281 on page 379](#). **First time installation only:** Install the two locking spacers into the top two holes in the MLB.
4. Install the RTC option board on to the two locking spacers, J1 of the RTC board facing J6 on the MLB, and then press down until it snaps in place.
5. Install the heat sink standoff through the RTC board and into the bottom two holes in MLB until they snap into the MLB.

- See [Figure 282](#). Verify that the RTC board is seated properly and that J1 on the RTC board is in contact with J6 on the MLB.

Figure 282 • RTC Installed



1	RTC board
2	Heat sink standoffs (2)
3	Heat sink standoff pins (2)
4	Locking spacers (2)

- Using the needle nose pliers, push down on the heat sink standoff pins until they snap into place.



Note • This may take some force.

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none">a. See Figure 278 on page 376. Insert the electronics cover into the printer.b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none">a. See Figure 280 on page 377. Slide the electronics cover onto the printer.b. Reinstall the three electronics side mounting screws.c. See Figure 279 on page 377. Open the media cover and reinstall the media side mounting screw.

2. Reconnect the AC power cord and all data cables.
3. Turn on **(I)** the printer.
4. Refer to the Real Time Clock (RTC) chapter for configuring and setting the RTC in the *Zebra Programming Guide for ZPLII, ZBI2, Set-Get-Do, Mirror, and WML*.

The installation is complete.



Parallel Port Option/Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the parallel port option in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 283 • Kit Contents

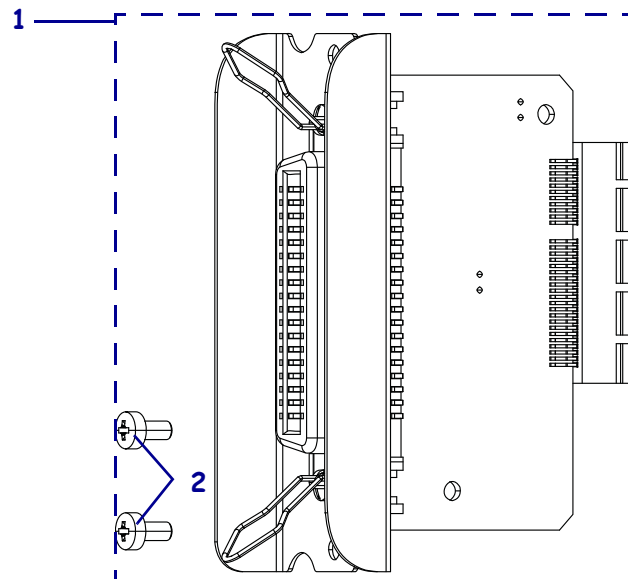


Table 43 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-002	Parallel Port Option/Maintenance Kit
	2	2	HW43968	Screws, M3 × 0.5 × 6 (sold in quantities of 25)

Tools Required

Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Antistatic Wriststrap and Mat

Are you replacing an existing option board?

If...	Then...
Yes	Continue with <i>Remove the Old Option Board</i> .
No	Go to <i>Remove the Cover Plate on page 386</i> .

Remove the Old Option Board



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.

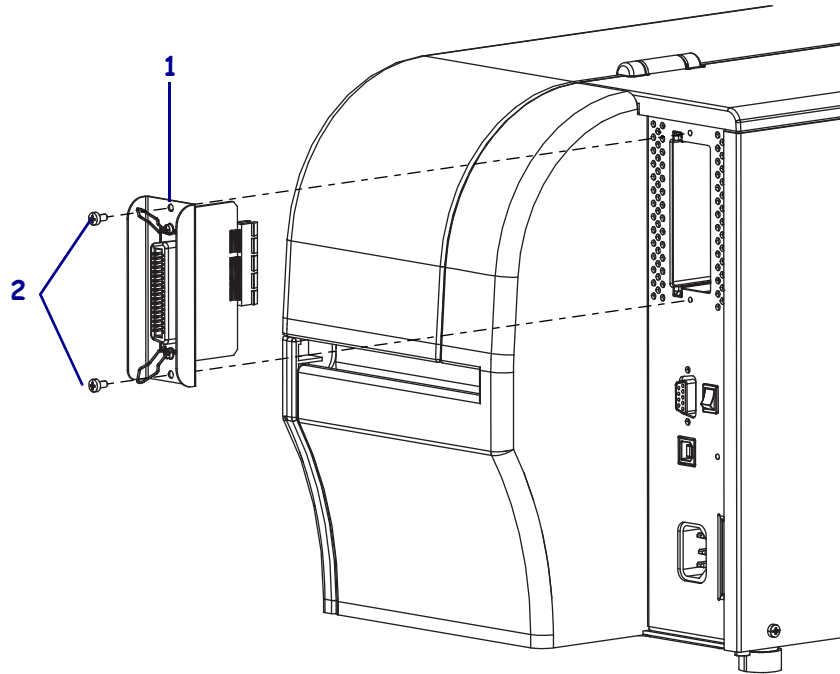


2. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

3. See [Figure 284](#). Remove the two option board mounting screws.

Figure 284 • Remove the Option Board



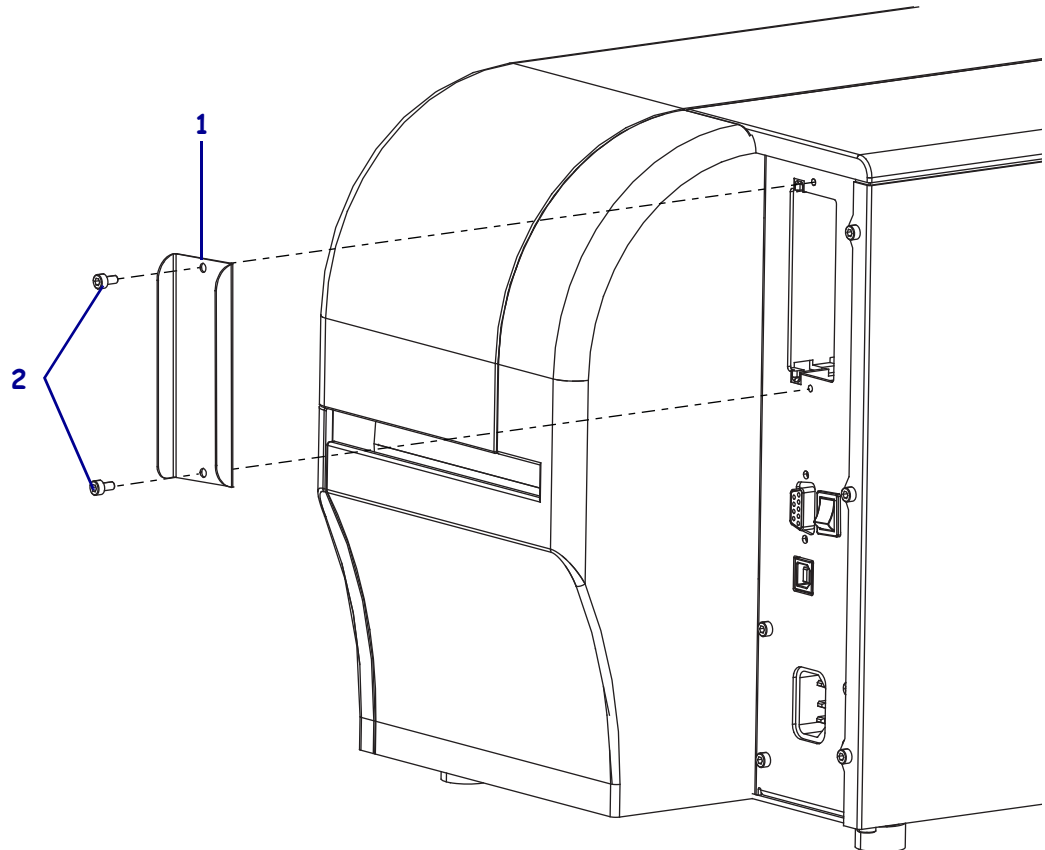
1	Option board
2	Mounting screws (2)

4. Go to [Install the New Parallel Port Board on page 387](#).

Remove the Cover Plate

1. See [Figure 285](#). Remove the blank cover by removing the two mounting screws.

Figure 285 • Remove the Blank Cover



1	Blank cover
2	Mounting screws (2)

2. Continue with [Install the New Parallel Port Board](#).

Install the New Parallel Port Board

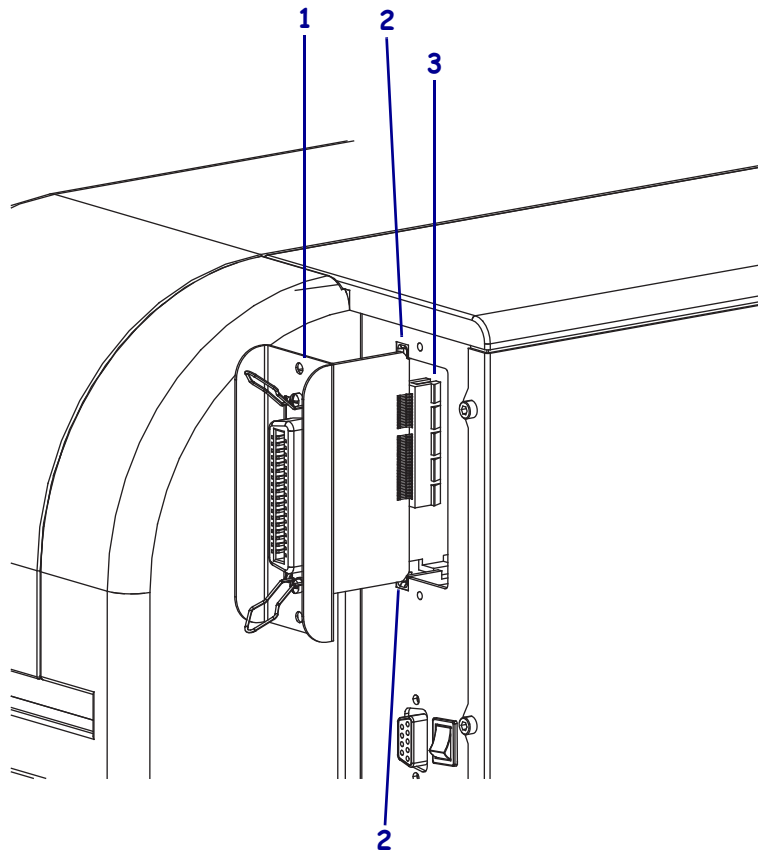


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. See [Figure 286](#). Align the parallel port option board with the main logic board guides.

Figure 286 • Install the New Parallel Port Option Board

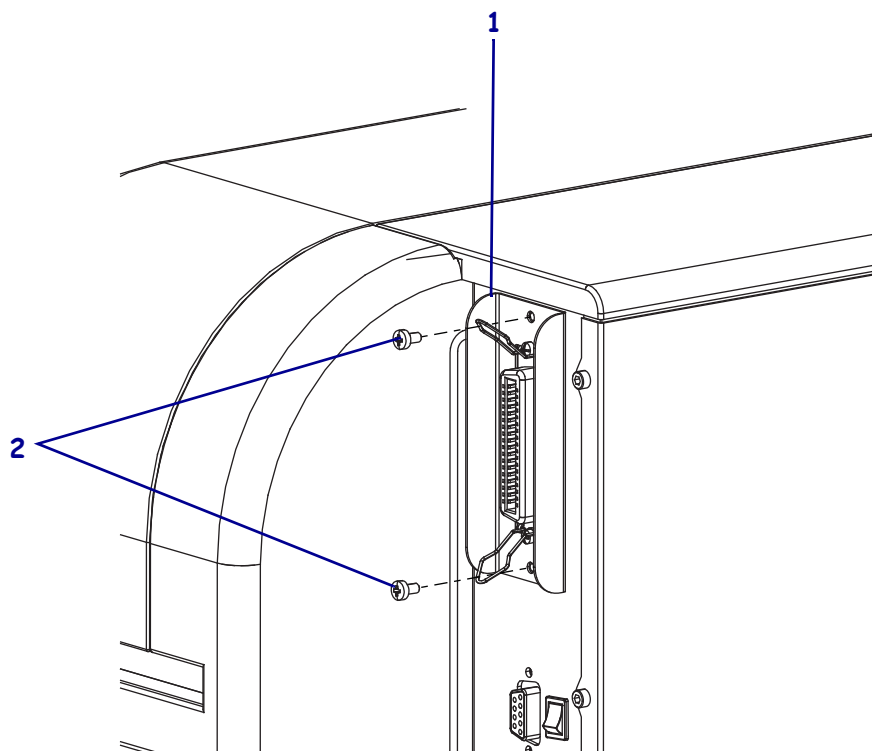


1	Parallel port option board
2	Main logic board guide (2)
3	Parallel option board to main logic board connector

3. Slowly slide the parallel port option board into the printer until it stops.
4. Ensure that the option board is aligned with the main logic board connector, and then push it in on the top and bottom until it is against the printer.

5. See [Figure 287](#). Install the two mounting screws.

Figure 287 • Install the Mounting Screws



1	Parallel port option board
2	Mounting screws (2)

6. Reconnect the AC power cord and all data cables.
7. Turn on (I) the printer.

The installation is complete.

Wired Ethernet Option/Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the wired Ethernet option in the following printers:

- ZT210™
- ZT220™
- ZT230™

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 288 • Kit Contents

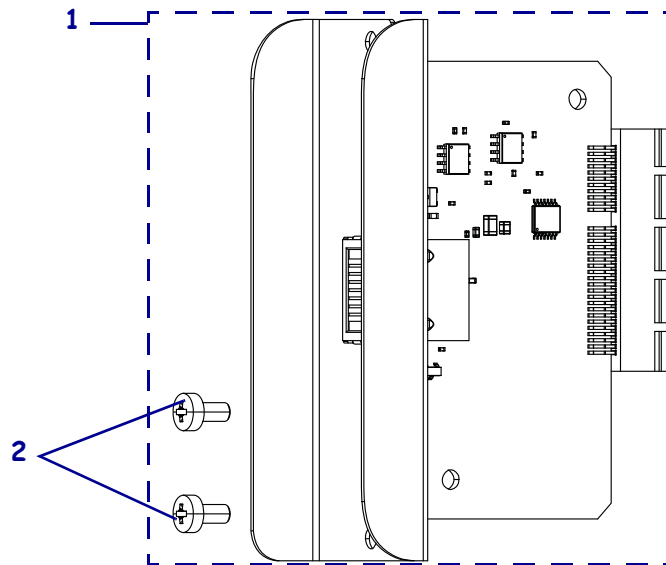


Table 44 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-001	Wired Ethernet Option/Maintenance Kit
	2	2	HW43968	Screws, M3 × 0.5 × 6 (sold in quantities of 25)

Tools Required

Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Antistatic Wriststrap and Mat

Are you replacing an existing option board?

If...	Then...
Yes	Continue with <i>Remove the Existing Option Board</i> .
No	Go to <i>Remove the Cover Plate</i> on page 392.

Remove the Existing Option Board



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

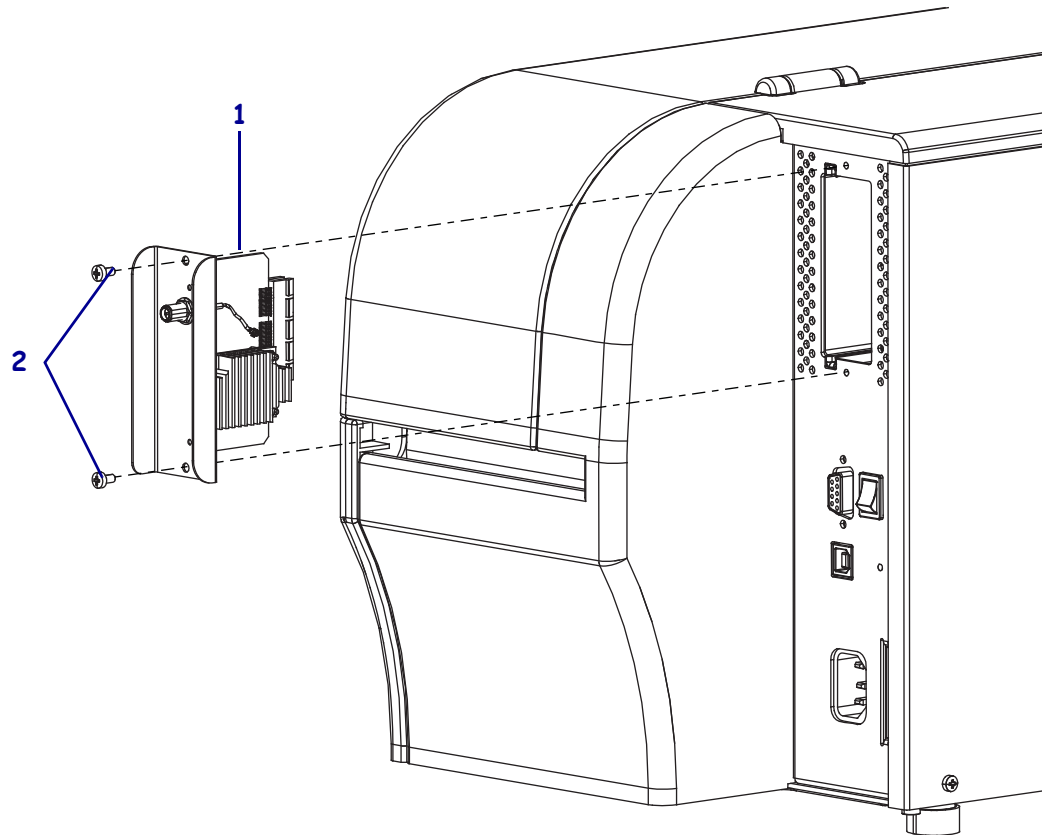


2. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

- See [Figure 289](#). Remove the two option board mounting screws.

Figure 289 • Remove the Option Board



1	Option board
2	Mounting screws (2)

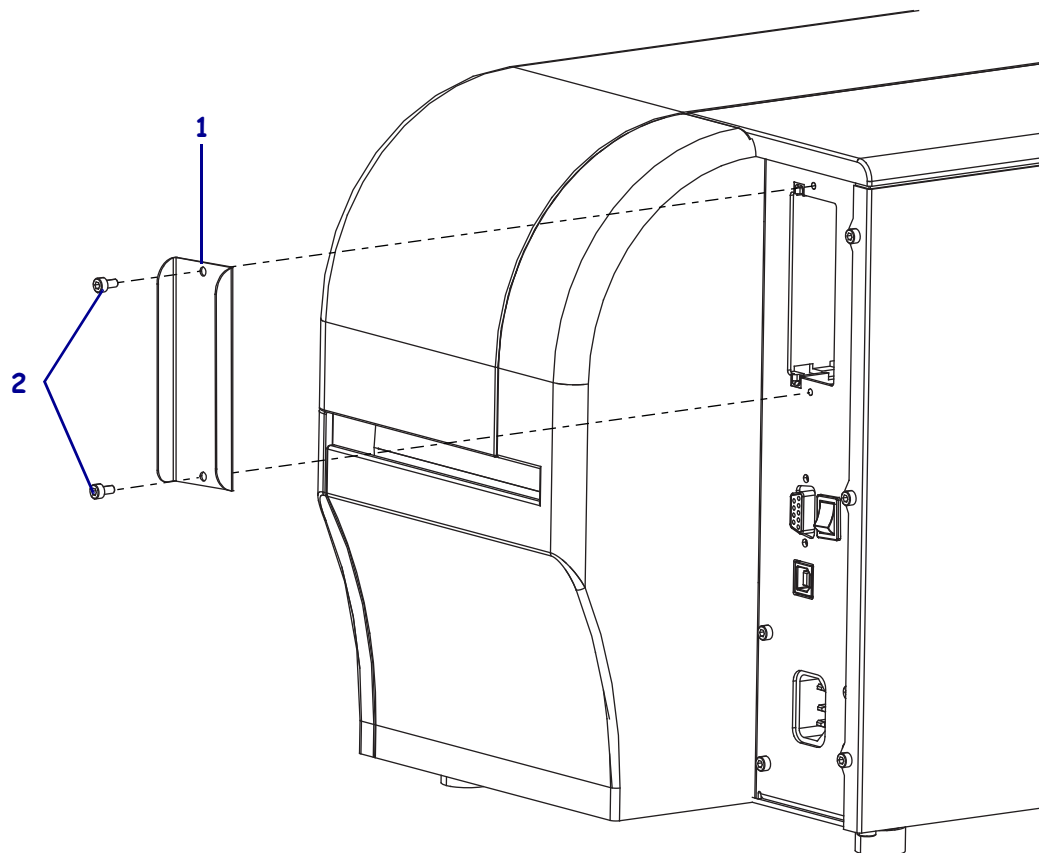
- Remove the existing option board from the rear by slightly moving the board up and down while pulling out on the assembly.
- Go to [Install the New Wired Ethernet Board](#) on page 393.

Remove the Cover Plate



1. **Caution** • Turn off (O) the printer and disconnect it from the power source before performing the following procedure.
2. See [Figure 290](#). Remove the blank cover by removing the two mounting screws.

Figure 290 • Remove the Blank Cover



1	Blank cover
2	Mounting screws (2)

3. Continue with [Install the New Wired Ethernet Board](#).

Install the New Wired Ethernet Board

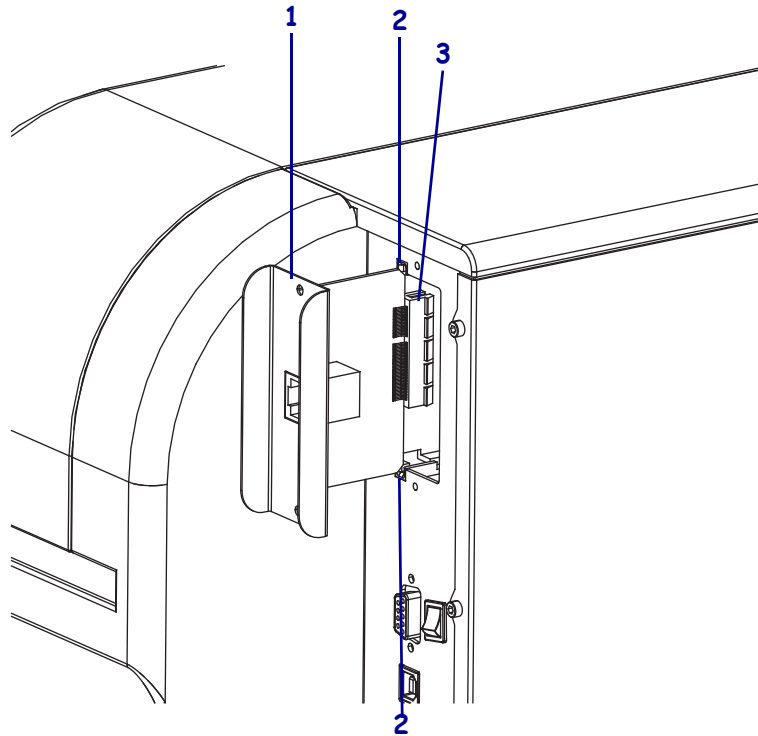


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. See [Figure 291](#). Align the wired Ethernet option board with the main logic board guides.

Figure 291 • Install the New Ethernet Option Board

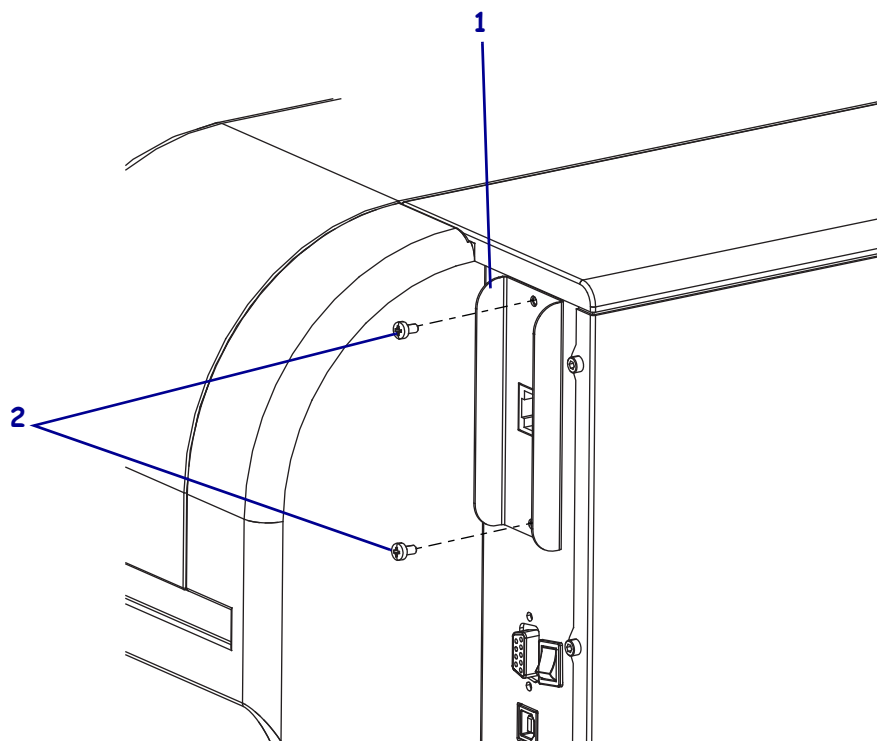


1	Wired Ethernet option board
2	Main logic board guide (2)
3	Wired Ethernet option board to main logic board connector

3. Slowly slide the wired Ethernet option board into the printer until it stops.
4. Ensure that the option board is aligned with the main logic board connector, and then push it in on the top and bottom until it is against the printer.

5. See [Figure 292](#). Install the two mounting screws.

Figure 292 • Install the Mounting Screws



1	Parallel port option board
2	Mounting screws (2)

6. Reconnect the AC power cord and all data cables.
7. Turn on (I) the printer.

The installation is complete.



ZebraNet n Print Server Option/Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the ZebraNet n Print Server in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 293 • Kit Contents

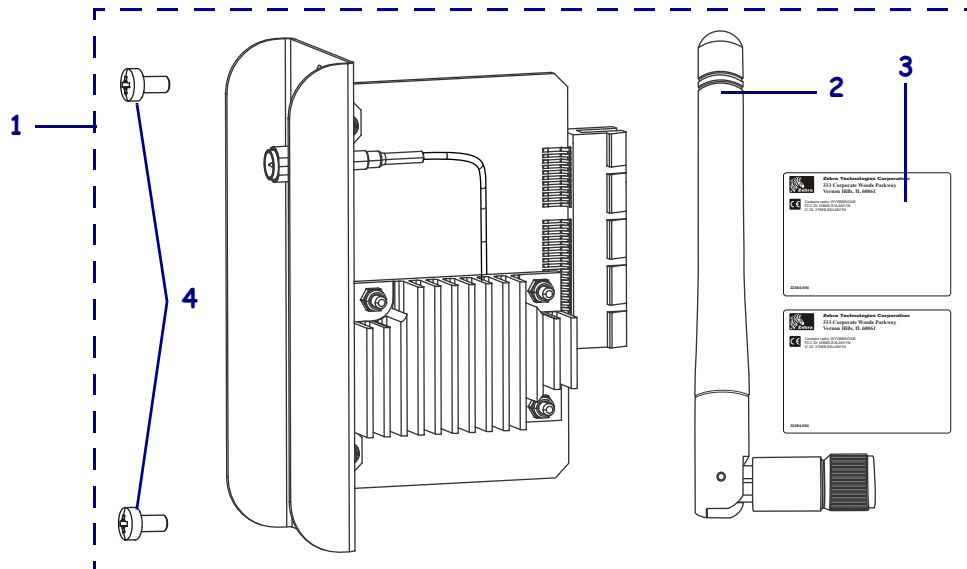


Table 45 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-003A	Wireless Print Server Option/Maintenance Kit, Region A (USA and Canada)
		1	P1037974-003B	Wireless Print Server Option/Maintenance Kit, Region B (Japan)
		1	P1037974-003C	Wireless Print Server Option/Maintenance Kit, Region C (All other countries other than A and B)
	2	1	P1037974-053	ZebraNet Print Server802.11n Antenna Maintenance Kit
	3	1	N/A	Compliance Label
	4	2	HW43968	Screws, M3 × 0.5 × 6 (sold in quantities of 25)

N/A = Not available as a separate part (listed for identification purposes only).

Tools Required

Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Antistatic Wriststrap and Mat
- Programming Guide for ZPL II, ZBI 2, Set-Get-Do, Mirror, and WML (P1012728-005 or later) or Internet access to download the guide from zebra.com.

Are you replacing an existing option board?

If...	Then...
Yes	Continue with <i>Remove the Old Option Board</i> .
No	Go to <i>Remove the Cover Plate</i> on page 398.

Remove the Old Option Board



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

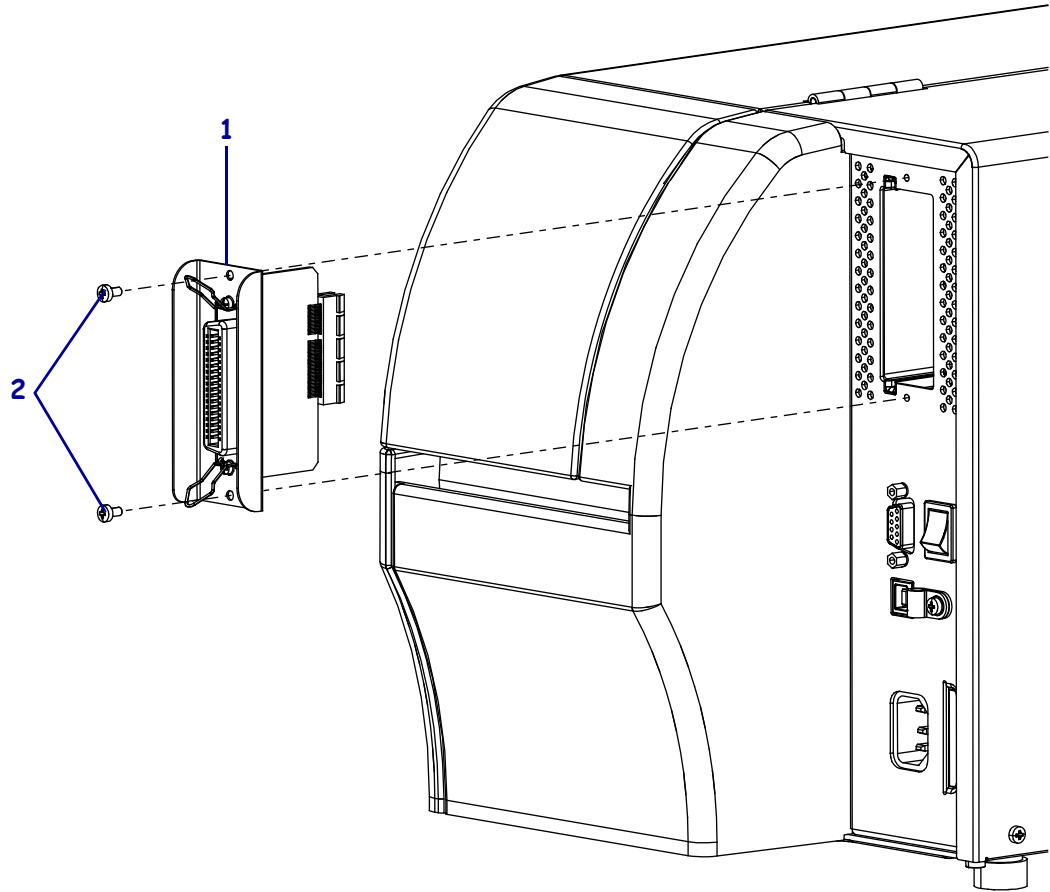


- Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

3. See [Figure 294](#). Remove the two option board mounting screws.

Figure 294 • Remove the Option Board



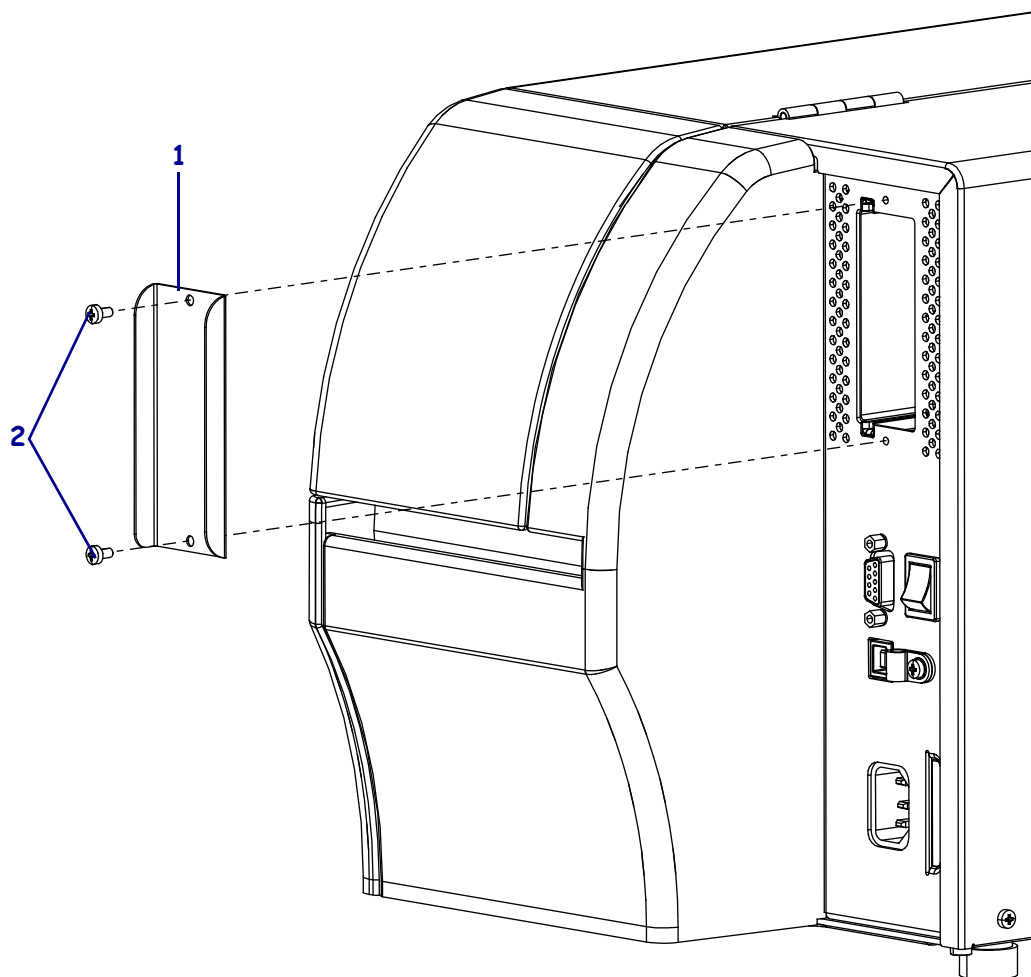
1	Option board
2	Mounting screws (2)

4. Go to [Install the ZebraNet n Print Server on page 399](#).

Remove the Cover Plate

1. See [Figure 295](#). Remove the blank cover by removing the two mounting screws.

Figure 295 • Remove the Blank Cover



1	Blank cover
2	Mounting screws (2)

2. Continue with [Install the ZebraNet n Print Server](#).

Install the ZebraNet n Print Server

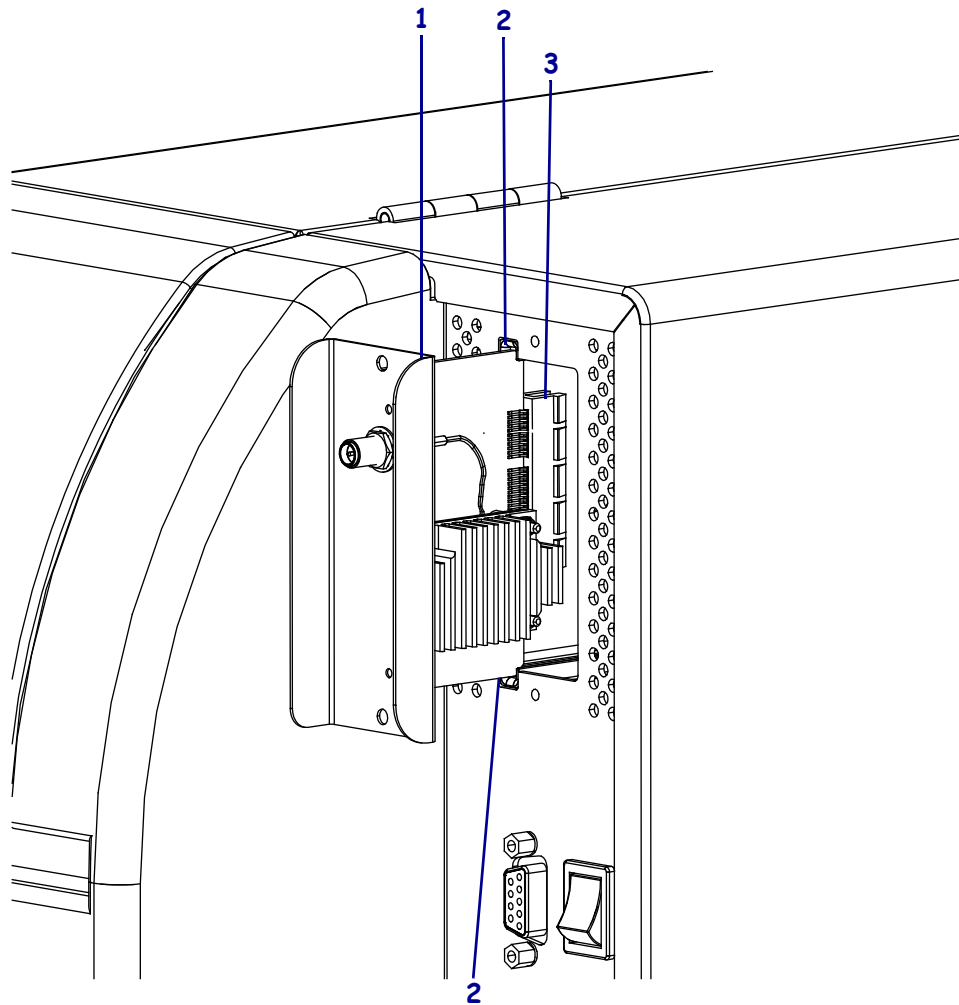


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. See [Figure 296](#). Align the ZebraNet n print server card with option card guide slots.

Figure 296 • Install the New ZebraNet Print Server Card

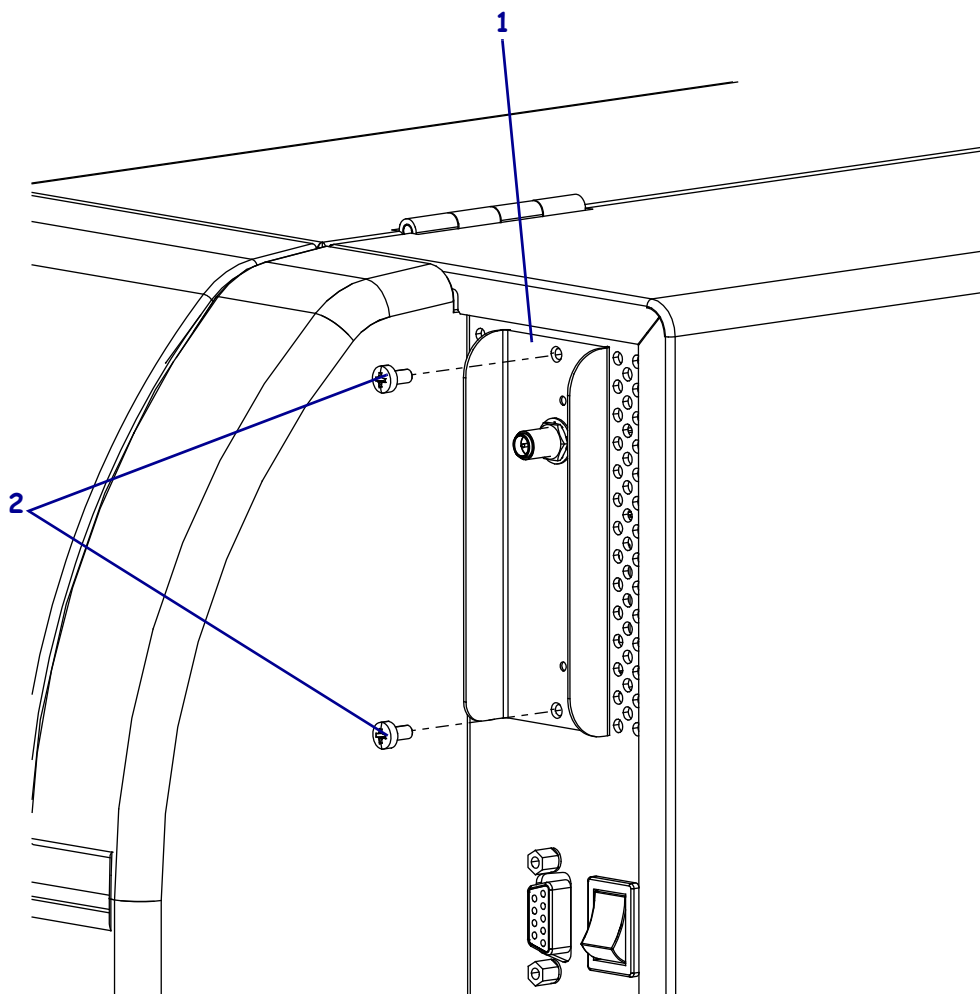


1	Wireless print server card
2	Option card guide slots (2)
3	Wireless print server card connector

3. Slowly slide the wireless option card into the printer until it stops.
4. Ensure that the option card connector is aligned with the main logic board connector, and then push it in on the top and bottom until it is against the printer.

5. See [Figure 297](#). Install the two mounting screws.

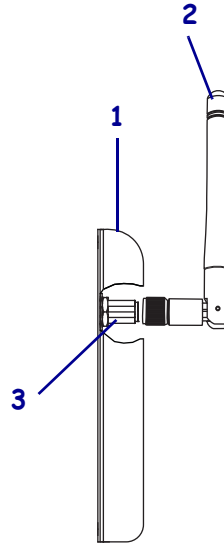
Figure 297 • Install the Mounting Screws



1	Wireless print server option card
2	Mounting screws (2)

6. See [Figure 298](#). To install the external antenna, screw the antenna onto the RF connector extending out from the back plate of the printer.

Figure 298 • Close-up of Antenna Installation



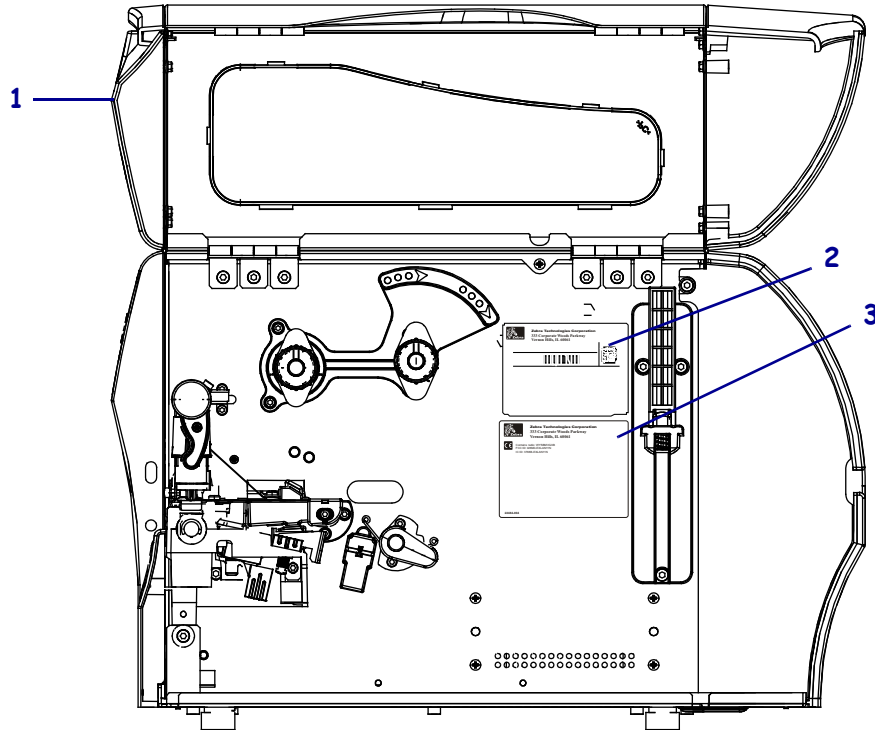
1	Back plate
2	RF antenna
3	RF connector

7. Reconnect the AC power cord and all data cables.
8. Turn on (I) the printer.

Install the Compliance Label

1. Open the media door and locate the product label.

Figure 299 • Locate the Product Label



1	Media door
2	Product label
3	Compliance label

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 to gain access to the product label.

3. Peel the backing off the compliance label, and then install it below the product label.

4. **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.

5. Reconnect the AC power cord and all data cables, and then turn on (I) the printer.

Programming the ZebraNet n Print Server

You may need to set your country code to enable the 5Ghz band for the ZebraNet n Print Server.

1. Is the printer to be used in the United States, Canada, or Japan?

If...	Then...
Yes	The country codes have been pre-set at the factory and can not be changed.
No	<p>You must send a Set-Get-Do (SGD) command to the printer to enable the 5Ghz band for the country in which the printer will be used.</p> <p>Send the following command:</p> <pre style="margin-left: 40px;">! U1 setvar "wlan.country_code" "insert country code"</pre> <p>See the <i>Programming Guide for ZPL II, ZBI 2, Set-Get-Do, Mirror, and WML</i> for a list of available country codes. (P1012728-005 or later)</p>

The installation is complete.



ZebraNet[®] Print Server Antenna Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the ZebraNet n Radio replacement antenna in the following printers:

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 300 • Kit Contents

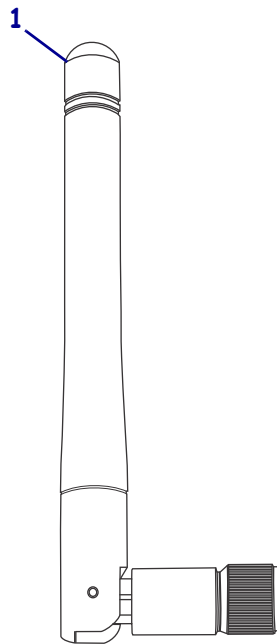


Table 46 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-053	Replacement Antenna for 802.11n Radios

Remove the Old Antenna



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

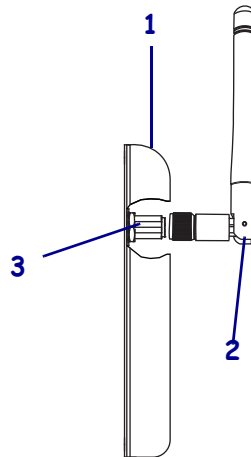


2. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

3. See [Figure 301](#). Remove the external antenna by unscrewing the antenna from the RF connector extending out from the back plate of the printer.

Figure 301 • Close-up of Antenna Installation



1	Cover
2	RF antenna
3	RF connector

Install the New Antenna

1. See [Figure 301](#). Install the external antenna by screwing the antenna onto the RF connector extending out from the back plate of the printer.
2. Reconnect the AC power cord and all data cables.
3. Turn on (I) the printer.

The installation is complete.

Power Supply Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the power supply in the following printers:

- ZT210™
- ZT220™
- ZT230™

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 302 • Kit Contents

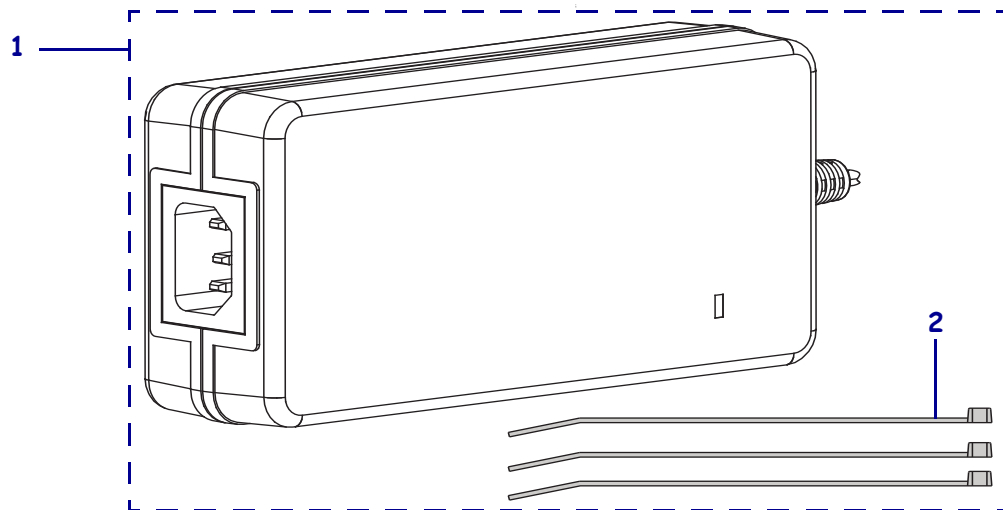


Table 47 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-018	Power Supply Maintenance Kit
	2	3	HWQ06020	Cable Tie, 0.9 × 3.62 (sold in quantities of 20)

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Metric Hex Key (Allen wrench) Set
- Antistatic Wriststrap and Mat

Remove the Electronics Cover



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. Which type of electronics cover do you have?

If have a...	Then...
ZT220	Continue with <i>ZT220 Electronics Cover</i> .
ZT230 and ZT210	Go to <i>ZT 230 and ZT210 Electronics Cover</i> on page 408.

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

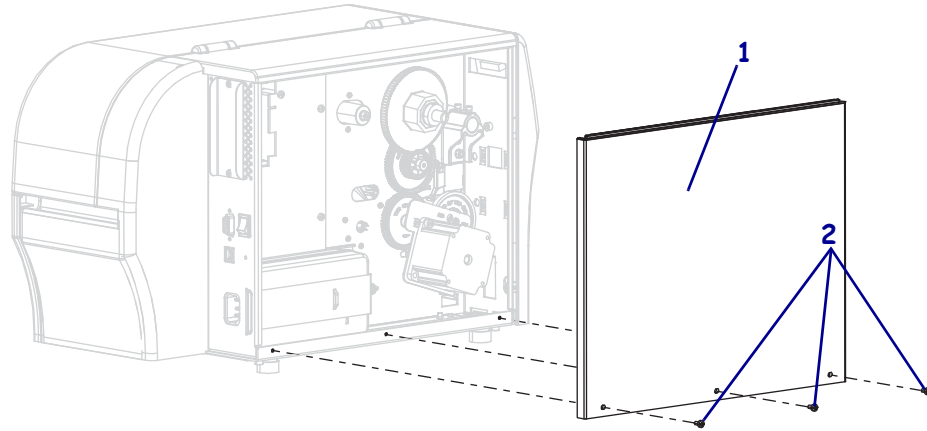
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

3. See [Figure 303](#). Remove the three screws securing the electronics cover.

Figure 303 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

4. Lift the electronics cover off of the printer.
5. Go to [Remove the Old Power Supply on page 410](#).

ZT 230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

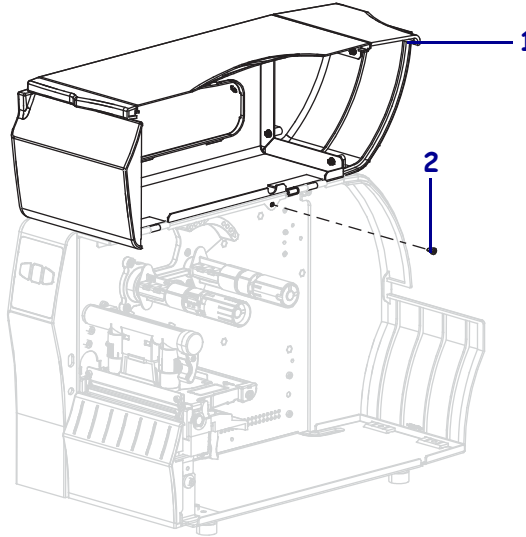
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 304](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

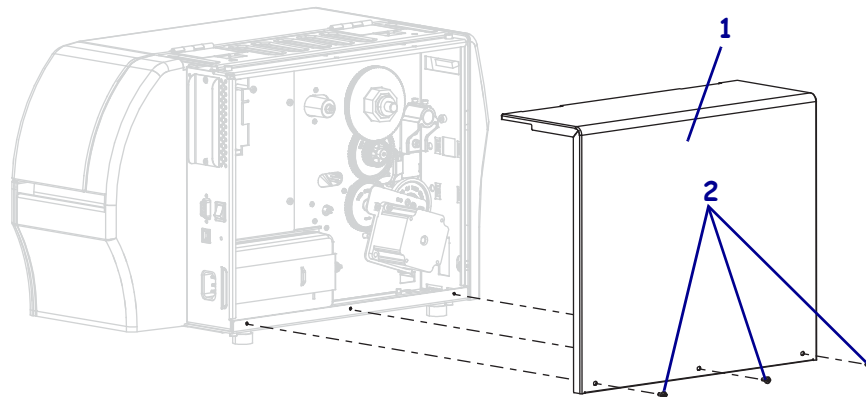
Figure 304 • Open the Media Door



1	Media door
2	Media side mounting screw

- See [Figure 305](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 305 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Continue with [Remove the Old Power Supply](#).

Remove the Old Power Supply

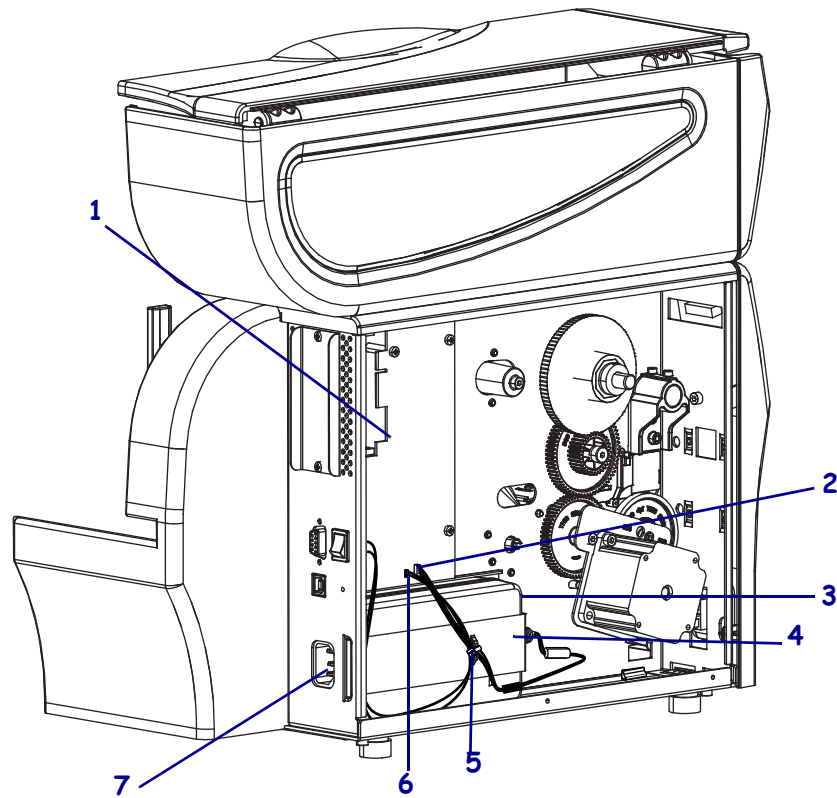


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. See [Figure 306](#). Disconnect the power cable from J18 and on/off switch cable from J25 on the main logic board (MLB).

Figure 306 • Disconnect the Power Cable

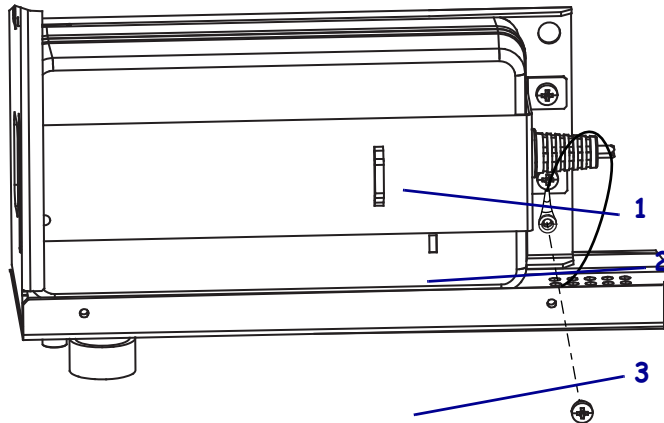


1	Main logic board (MLB)
2	MLB power connector
3	Power supply
4	Upper power supply mounting bracket
5	Cable tie
6	Power on/off cable
7	AC Receptacle

3. Cut the cable tie securing the cables to the upper power supply bracket.

- See [Figure 307](#). Remove the screw securing the ground wire to the power supply bracket.

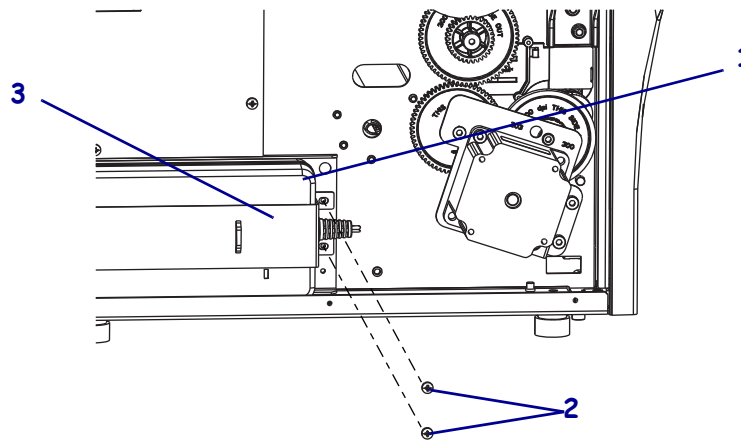
Figure 307 • Remove the Ground Wire



1	Lower mounting bracket
2	Ground wire
3	Mounting screw

- See [Figure 308](#). Remove the two mounting screws securing the upper power supply bracket.

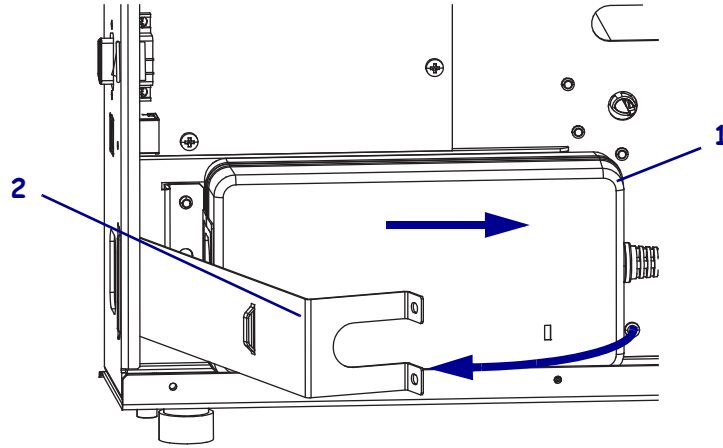
Figure 308 • Remove the Outside Bracket



1	Power supply
2	Mounting screws (2)
3	Upper mounting bracket

6. See [Figure 309](#). Swing the upper bracket away from the power supply, and then slide the power supply toward the front of the printer.

Figure 309 • Remove the Power Supply



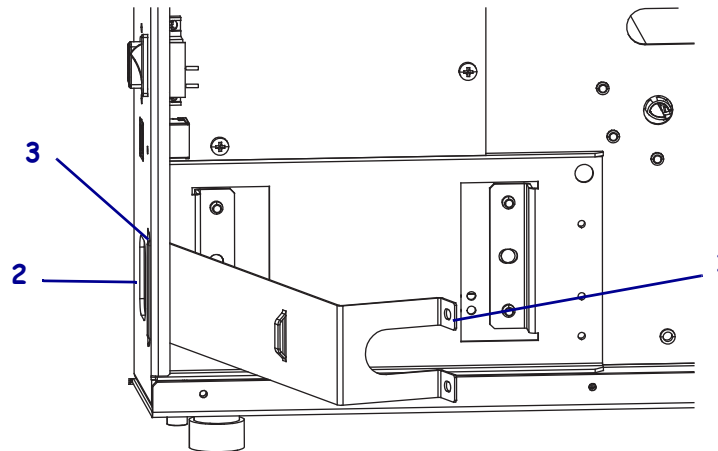
1	Power supply
2	Upper mounting bracket

7. Lift the power supply out of the printer.

Install the New Power Supply

1. See [Figure 310](#). Hook the upper bracket into the mounting slot in the rear panel of the printer.

Figure 310 • Hook Upper Bracket



1	Upper mounting bracket
2	Upper mounting bracket hook
3	Upper mounting bracket mounting slot

2. Hold the upper bracket in place while sliding the new power supply, with the AC receptacle to the rear and the LED facing out, into the printer.
3. See [Figure 309 on page 412](#). Swing the upper power supply bracket toward the printer.
4. See [Figure 308 on page 411](#). Press in on the upper mounting bracket, while aligning the mounting holes, and then reinstall the two mounting screws.
5. See [Figure 307 on page 411](#). Align the ground wire lug with the mounting hole in the lower mounting bracket and the reinstall the mounting screw.
6. Reconnect the power supply cable to J18 the main logic board (MLB).
7. Reconnect the on/off switch cable to J25 on the MLB.
8. See [Figure 306 on page 410](#). Gather all cables, and then install the cable tie to the upper mounting bracket.

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none">a. See Figure 303 on page 408. Insert the electronics cover into the printer.b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none">a. See Figure 305 on page 409. Slide the electronics cover onto the printer.b. Reinstall the three electronics side mounting screws.c. See Figure 304 on page 409. Open the media cover and reinstall the media side mounting screw.

Complete the Installation

1. **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.

2. Reinstall the AC power cord and all data cables.
3. Turn on (I) the printer.

The installation is complete.

Power Supply Brackets Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the power supply brackets in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 311 • Kit Contents

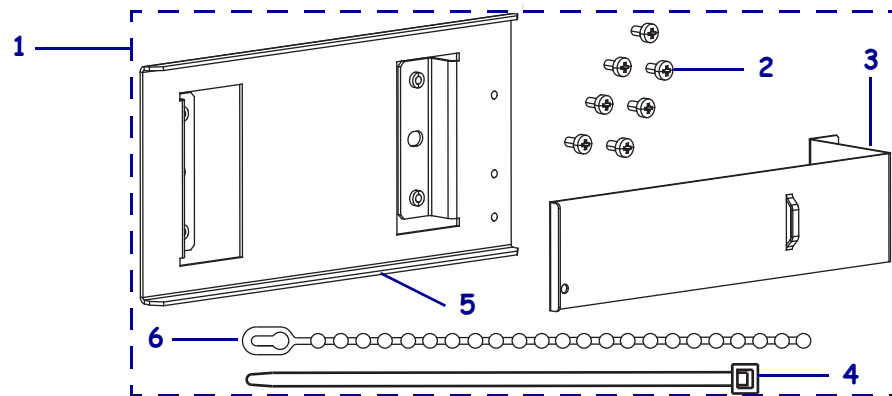


Table 48 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-043	Power Supply Brackets Maintenance Kit
	2	7	HW43968	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
	3	1	<i>N/A</i>	Upper Power Supply Mounting Bracket
	4	1	HWQ06020	Cable Tie, 0.9 × 3.62 (sold in quantities of 20)
	5	1	<i>N/A</i>	Lower Power Supply Mounting Bracket
	6	1	<i>N/A</i>	Beaded Cable Tie

N/A = Not available as a separate part for purchase (listed for identification purposes only).

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Metric Hex Key (Allen wrench) Set
- Antistatic Wriststrap and Mat

Remove the Electronics Cover



- 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.

- Which printer are you working on?

If have a...	Then...
ZT220	Continue with <i>ZT220 Electronics Cover</i> .
ZT230 ZT210	Go to <i>ZT230 and ZT210 Electronics Cover on page 417</i> .

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

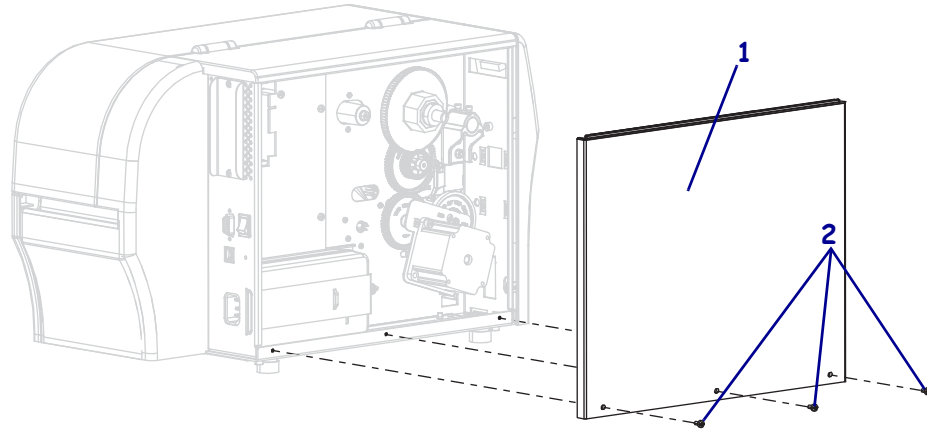
Turn off (O) the printer and disconnect the AC power cord and all data cables.

- 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.

Open the media door and remove the media and ribbon.

- See [Figure 312](#). Remove the three screws securing the electronics cover.

Figure 312 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Go to [Remove the Power Supply on page 419](#).

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

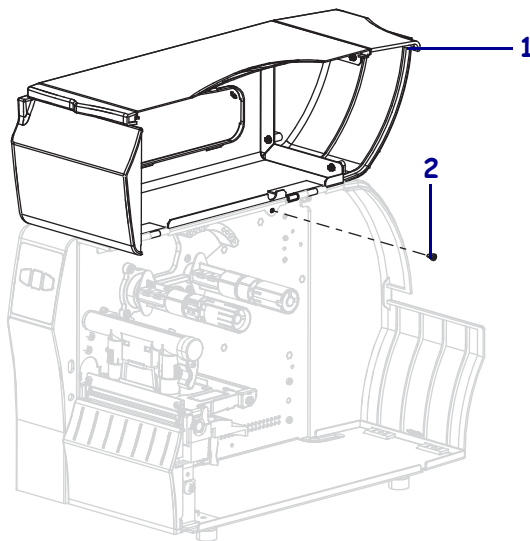
Turn off (O) the printer and disconnect the AC power cord and all data cables.

- 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.

Open the media door and remove the media and ribbon.

3. See [Figure 313](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

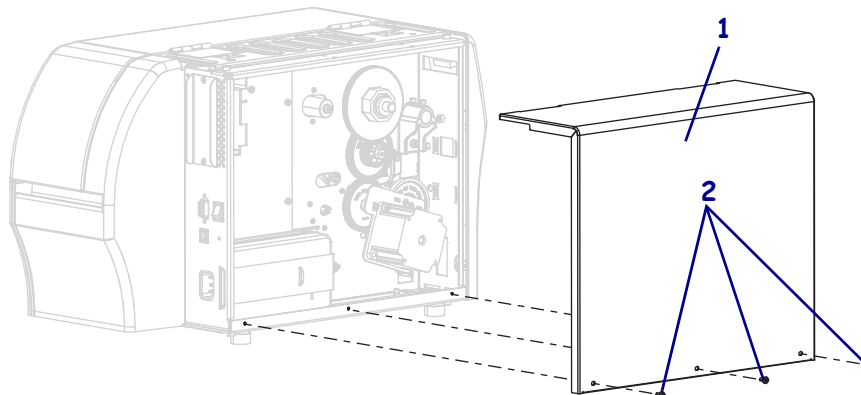
Figure 313 • Open the Media Door



1	Media door
2	Media side mounting screw

4. See [Figure 314](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 314 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

5. Lift the electronics cover off of the printer.
6. Continue with [Remove the Power Supply](#).

Remove the Power Supply

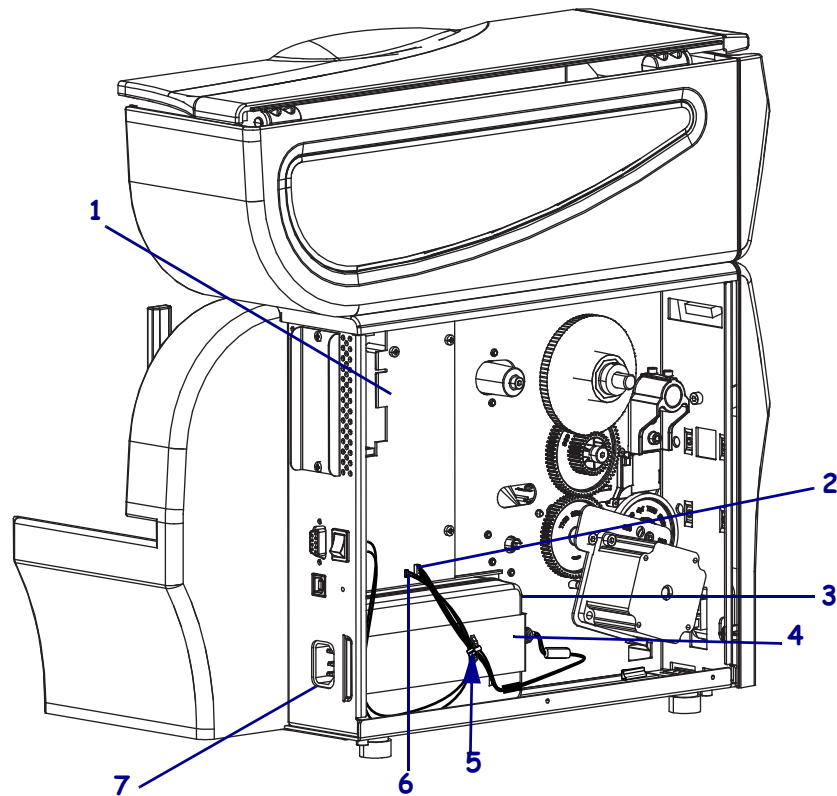


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. See [Figure 315](#). Disconnect the power cable from J18 and power on/off switch cable from J25 on the main logic board (MLB).

Figure 315 • Disconnect the Power On/Off Switch Cable

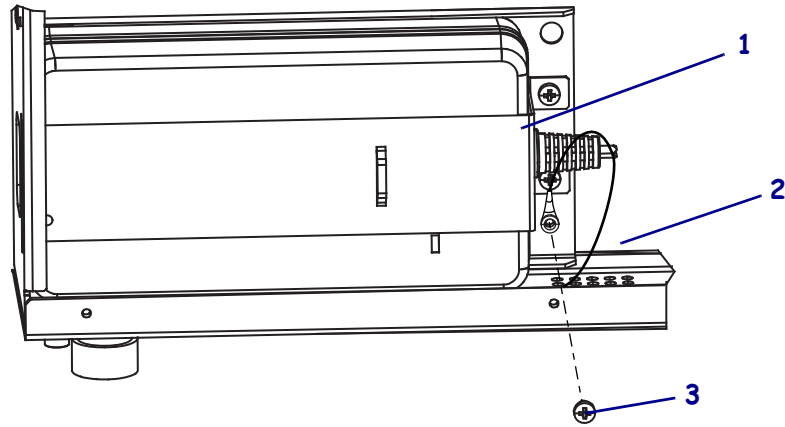


1	Main logic board (MLB)
2	MLB power connector
3	Power supply
4	Upper power supply mounting bracket
5	Cable tie
6	Power on/off cable
7	AC receptacle

3. Cut the cable tie securing the cables to the upper power supply bracket.

4. See [Figure 316](#). Remove the screw securing the ground wire to the power supply bracket.

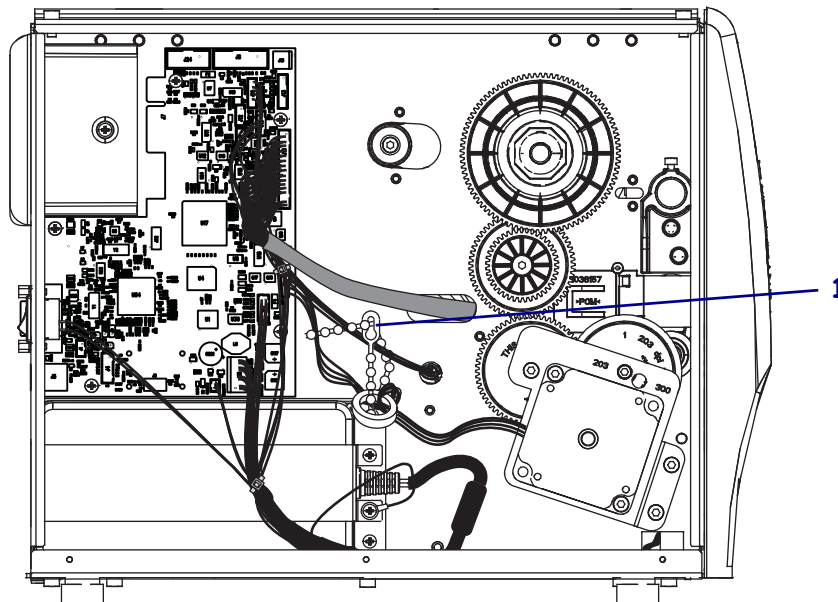
Figure 316 • Remove the Ground Wire



1	Lower power supply mounting bracket
2	Ground wire
3	Mounting screw

5. See [Figure 317](#). Remove the beaded cable tie.

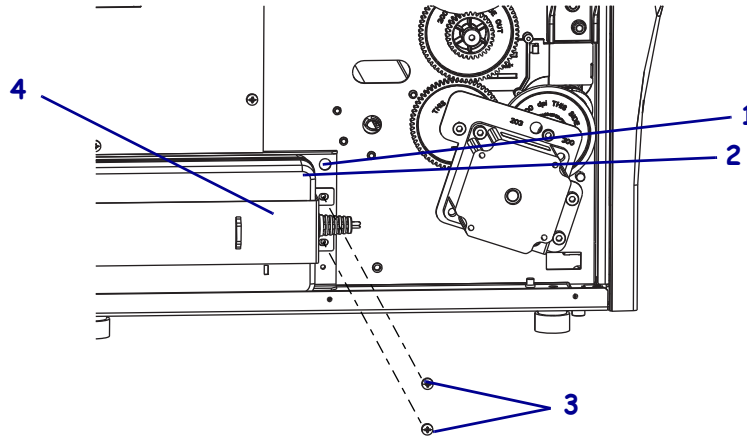
Figure 317 • Remove the Beaded Cable Tie



1	Beaded cable tie
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6. See [Figure 318](#). Remove the two mounting screws securing the upper power supply mounting bracket.

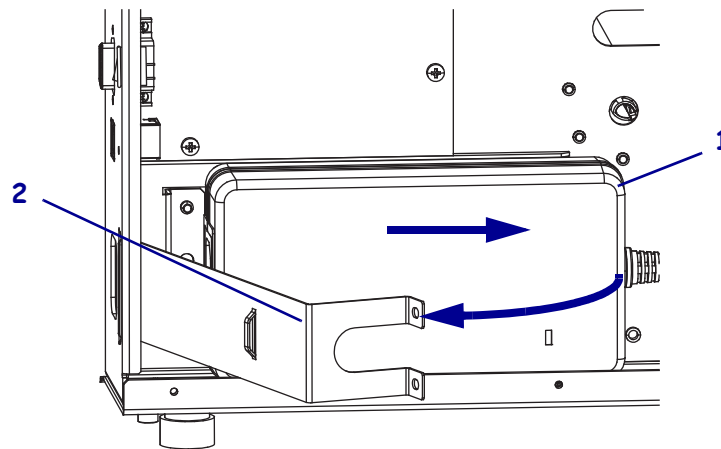
Figure 318 • Remove the Upper Power Supply Mounting Bracket



1	Beaded cable tie mounting hole
2	Power supply
3	Upper mounting bracket mounting screws (2)
4	Upper mounting bracket

7. See [Figure 319](#). Swing the upper power supply mounting bracket away from the power supply, and then slide the power supply toward the front of the printer.

Figure 319 • Remove the Power Supply



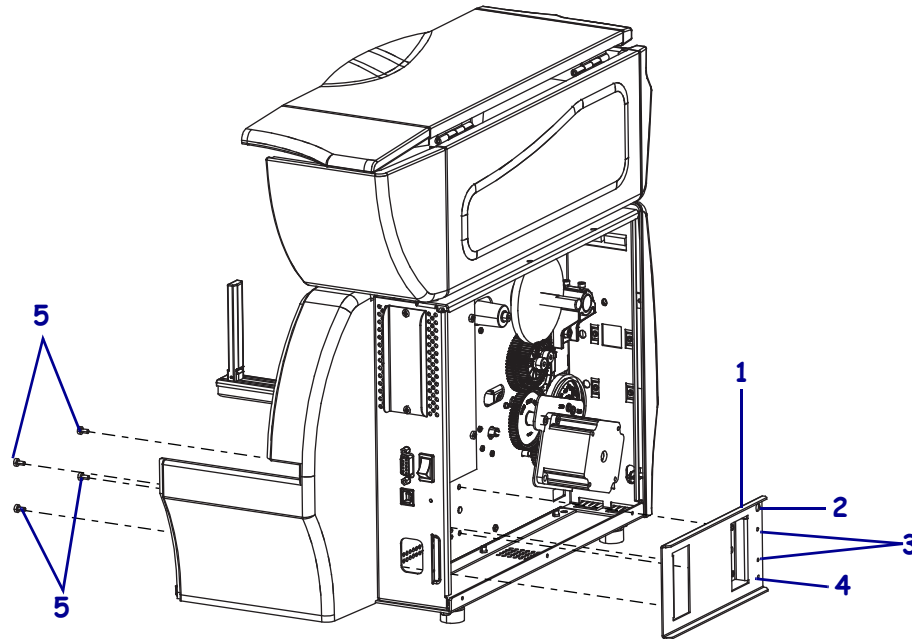
1	Power supply
2	Upper power supply mounting bracket

8. Lift the power supply out of the printer.

Remove the Lower Power Supply Bracket

1. See [Figure 320](#). Open the media door and remove and discard the four lower power supply bracket mounting screws.

Figure 320 • Remove Lower Power Supply Mounting Bracket



1	Lower power supply mounting bracket
2	Beaded cable tie mounting hole
3	Upper power supply mounting bracket mounting holes (2)
4	Ground cable mounting hole
5	Lower mounting bracket mounting screws (4)

2. Remove and discard the lower power supply mounting bracket.

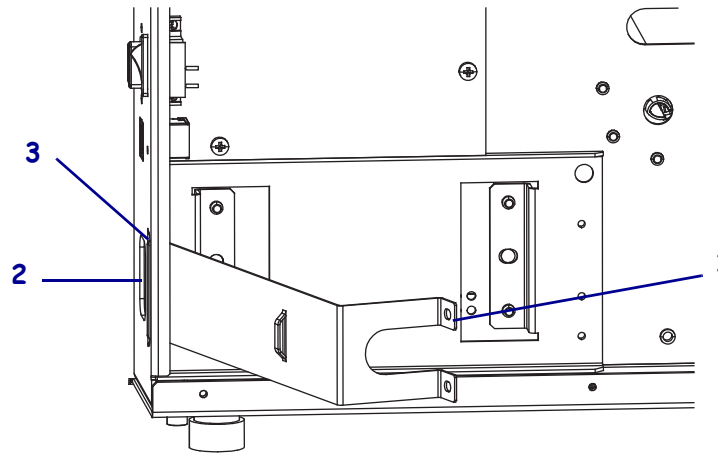
Install the Lower Power Supply Bracket

1. See [Figure 320](#). Align the four mounting holes, with the two upper power supply mounting holes to the front of the printer.
2. Install two new front mounting screws.
The installation of these two screws are for the lower power supply bracket alignment.
3. Install the other two rear mounting screws.

Reinstall the Power Supply

1. See [Figure 321](#). Hook the new upper power supply mounting bracket into the mounting slot in the rear panel of the printer.

Figure 321 • Hook the Upper Bracket



1	Upper mounting bracket
2	Upper mounting bracket hook
3	Upper mounting bracket mounting slot

2. Hold the upper bracket in place while sliding the power supply, with the AC receptacle to the rear and the LED facing out, into the printer.
3. See [Figure 319 on page 421](#). Swing the upper power supply bracket toward the printer.
4. See [Figure 318 on page 421](#). Press in on the upper mounting bracket, while aligning the mounting holes, and then install the two mounting screws.
5. See [Figure 316 on page 420](#). Align the ground wire lug with the mounting hole in the lower mounting bracket, and then install the mounting screw.
6. Reconnect the power supply cable to J18 on the main logic board (MLB).
7. Reconnect the power on/off switch cable to J25 on the MLB.
8. See [Figure 315 on page 419](#). Gather all cables, thread the cable tie through the mounting tab on the upper power supply bracket, and then secure the cable tie.
9. See [Figure 318 on page 421](#). Install the beaded cable tie into the mounting hole in the lower power supply mounting bracket.
10. Route the beaded cable tie through the drive motor ferrite, and then around all cables previously in the beaded cable tie.
11. Snap the beaded cable tie loosely together.

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none">a. See Figure 312 on page 417. Insert the electronics cover into the printer.b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none">a. See Figure 314 on page 418. Slide the electronics cover onto the printer.b. Reinstall the three electronics side mounting screws.c. See Figure 313 on page 418. Open the media cover and reinstall the media side mounting screw.

Complete the Installation

1. **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.

2. Reinstall the AC power cord and all data cables.
3. Turn on (I) the printer.

The installation is complete.

Power Switch Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the power switch in the following printers:

- ZT210™
- ZT220™
- ZT230™

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 322 • Kit Contents

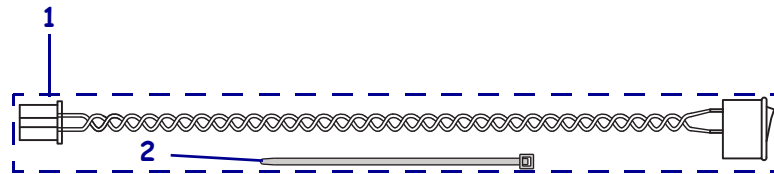


Table 49 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-019	Power Switch Maintenance Kit
	2	1	HWQ06020	Cable Tie, 0.09 × 3.62 (sold in quantities of 20)

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Antistatic Wriststrap and Mat
- Metric Hex Key (Allen wrench)
- Wire Cutter

Remove the Electronics Cover



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. Which type of electronics cover do you have?

If have a...	Then...
ZT220	Continue with <i>ZT220 Electronics Cover</i> .
ZT230 and ZT210	Go to <i>ZT230 and ZT210 Electronics Cover</i> on page 427.

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

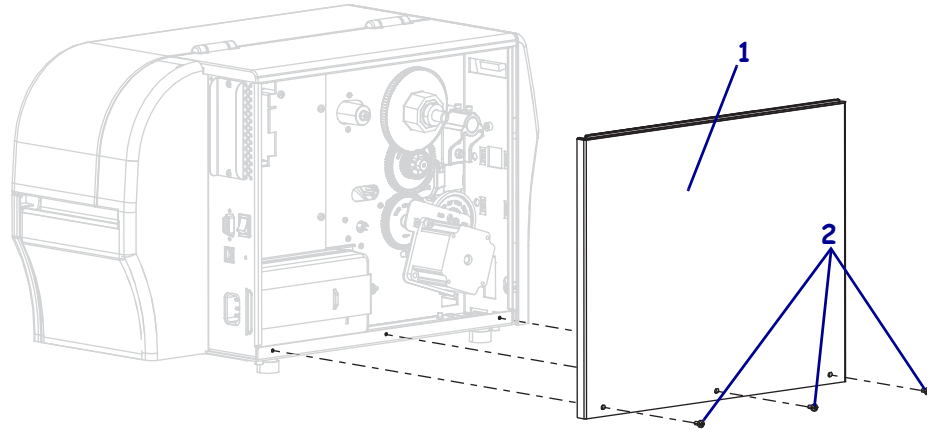
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

- See [Figure 323](#). Remove the three screws securing the electronics cover.

Figure 323 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.
- Go to [Remove the Power Switch on page 429](#).

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

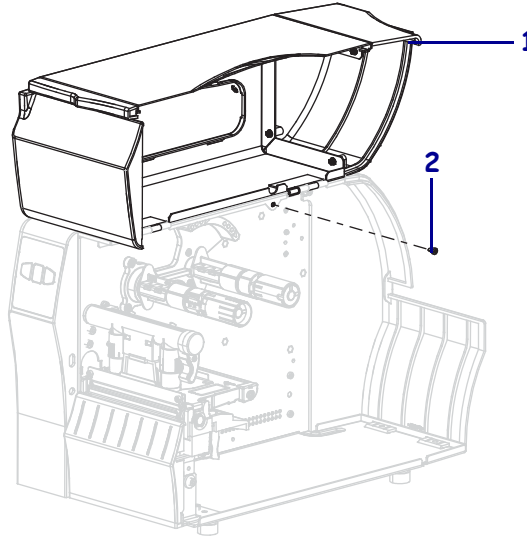
Turn off (O) the printer and disconnect the AC power cord and all data cables.

- 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.

Open the media door and remove the media and ribbon.

3. See [Figure 324](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

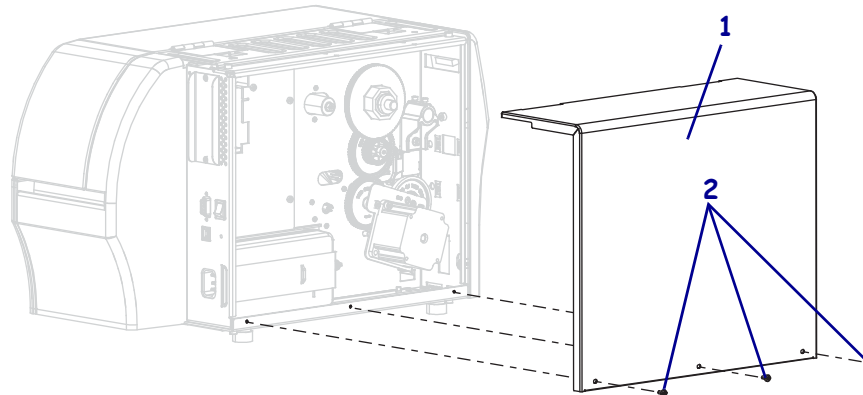
Figure 324 • Open the Media Door



1	Media door
2	Media side mounting screw

4. See [Figure 325](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 325 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

5. Lift the electronics cover off of the printer.
6. Continue with [Remove the Power Switch](#).

Remove the Power Switch

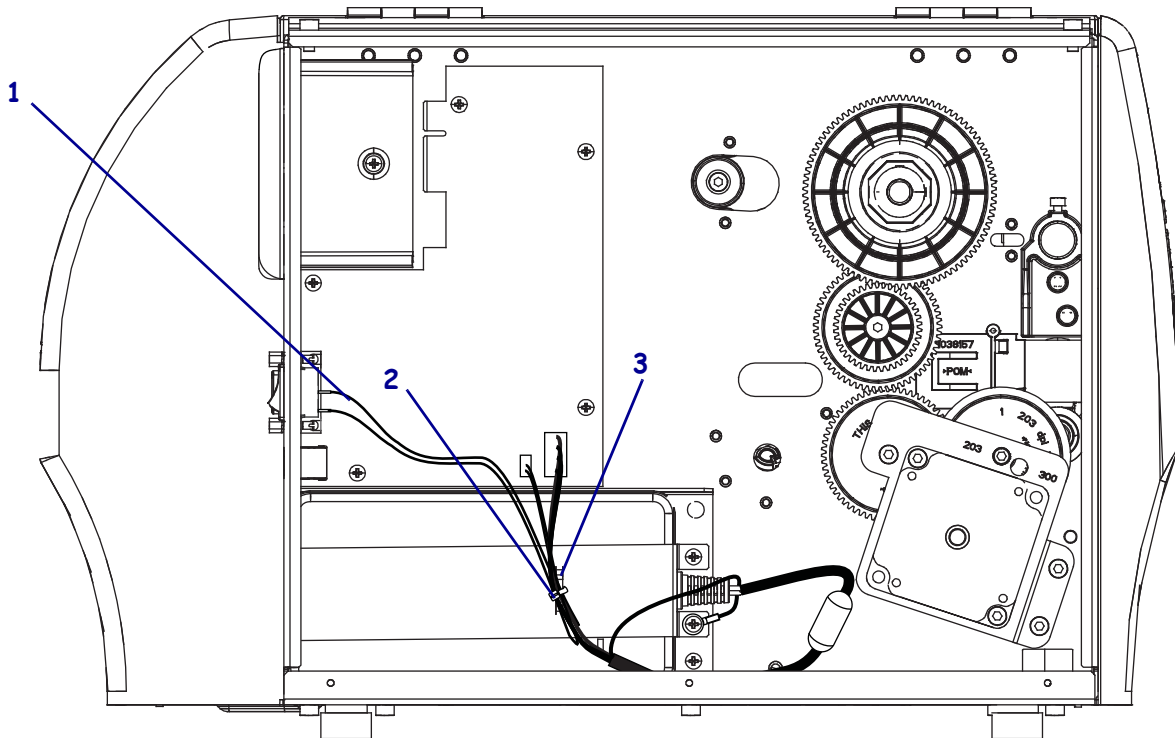


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. See [Figure 326](#). Cut the cable tie securing it to the bundle of cable and the power supply upper bracket.

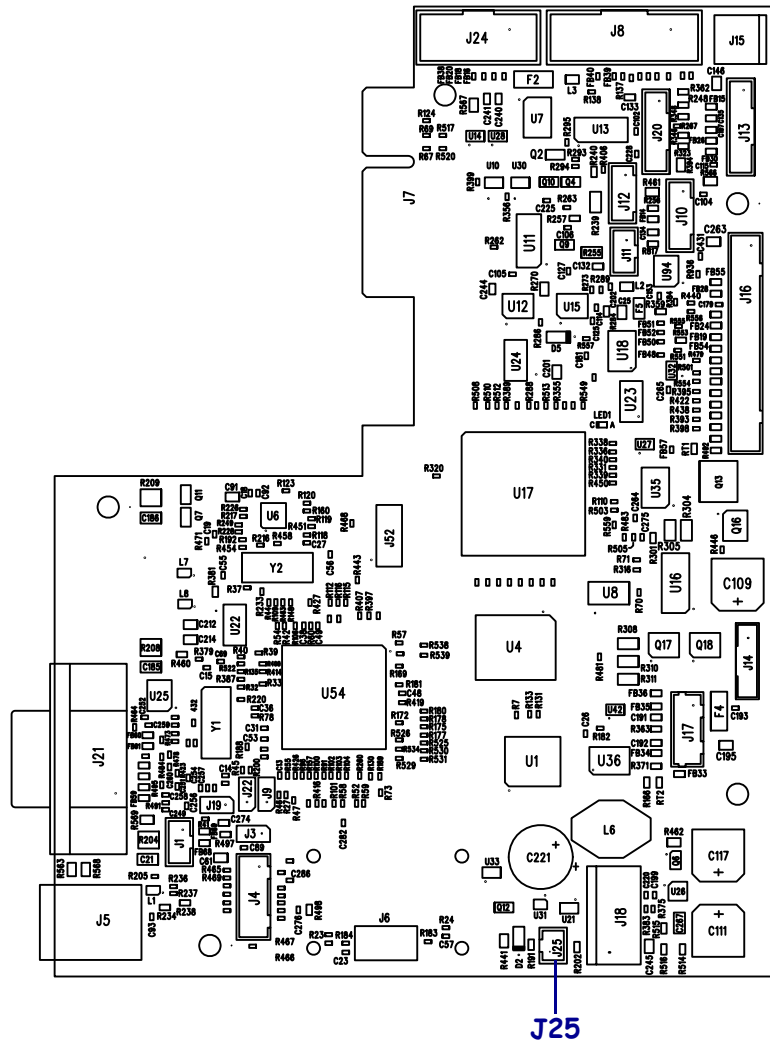
Figure 326 • Cut the Cable Tie



1	Power cable
2	Cable tie
3	Upper power supply bracket mounting tab

3. See [Figure 327](#). Disconnect the power switch cable from J25 on the main logic board.

Figure 327 • Main Logic Board

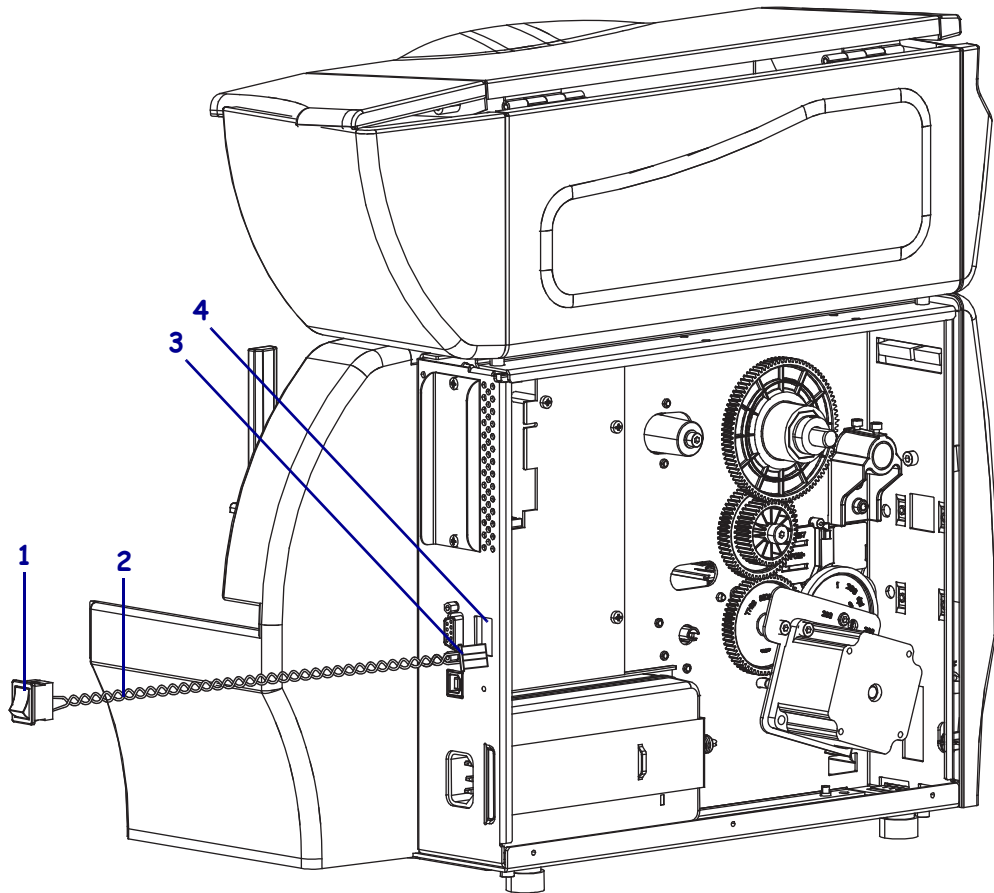


J25	Power switch connector
-----	------------------------

Install the New Power Switch

1. See [Figure 328](#). Feed the new power switch cable through the rear panel, and then push the power switch into the rear panel.

Figure 328 • Install the Power On/Off Switch



1	Power on/off switch
2	Power switch cable
3	Power switch cable connector
4	Power switch mounting hole

2. See [Figure 327 on page 430](#). Connect the power cable to J25 on the main logic board.
3. See [Figure 326 on page 429](#). Install the cable tie around all cables and through the upper power supply bracket mounting tab.
4. Continue with [Reinstall the Electronics Cover](#).

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none">a. See Figure 323 on page 427. Insert the electronics cover into the printer.b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none">a. See Figure 325 on page 428. Slide the electronics cover onto the printer.b. Reinstall the three electronics side mounting screws.c. See Figure 324 on page 428. Open the media cover and reinstall the media side mounting screw.

2. Reconnect the AC power cord and all data cables.
3. Turn on (I) the printer.

The installation is complete.

Electronics Cables Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the electronics cables in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 329 • Kit Contents

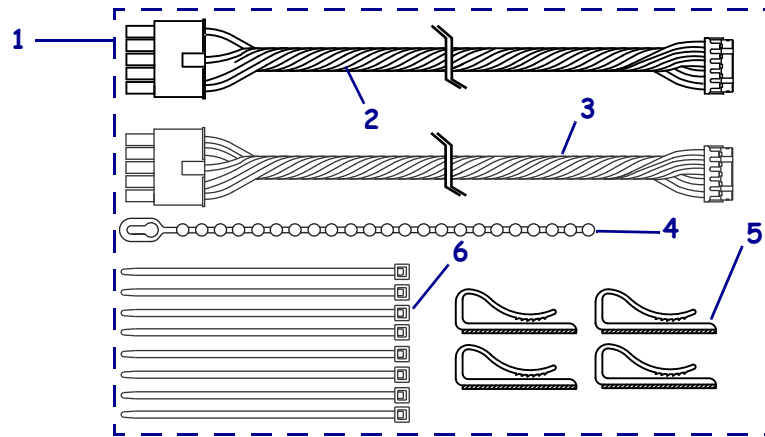


Table 50 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1027974-020	Electronics Cables Maintenance Kit
	2	1	N/A	Cutter Cable, 19.5in. (49.5cm)
	3	1	N/A	LTU Cable, 8.5in. (21.6cm)
	4	1	N/A	Beaded Cable
	5	4	N/A	Cable Clamp
	6	8	HWQ06020	Cable Tie, 0.9 × 3.62 (sold in quantities of 20)
N/A = Not available as a separate part for purchase part (listed for identification purposes only).				

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Wire Cutters
- Antistatic Wriststrap and Mat

Remove the Electronics Cover



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

Connect yourself to an antistatic device.

3. What model of printer are you working on?

If have a...	Then...
ZT220	Continue with <i>ZT220 Electronics Cover</i> .
ZT230 and ZT210	Go to <i>ZT230 and ZT210 Electronics Cover</i> on page 436.

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

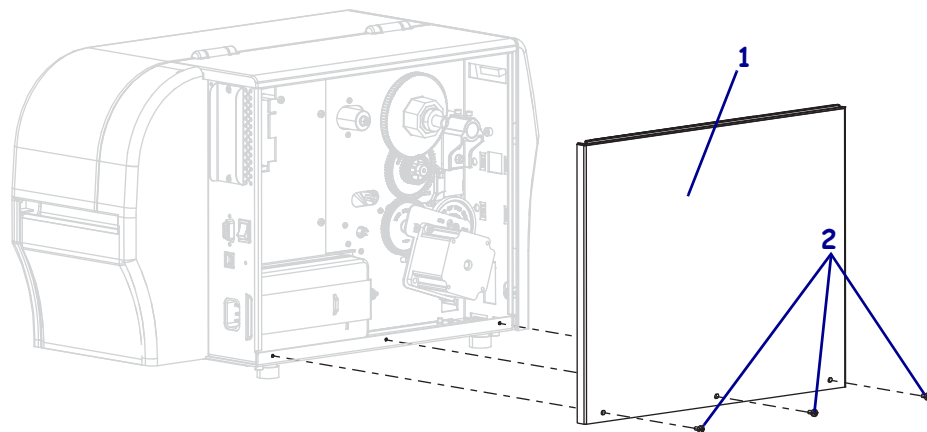
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

3. See [Figure 330](#). Remove the three screws securing the electronics cover.

Figure 330 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

4. Lift the electronics cover off of the printer.

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

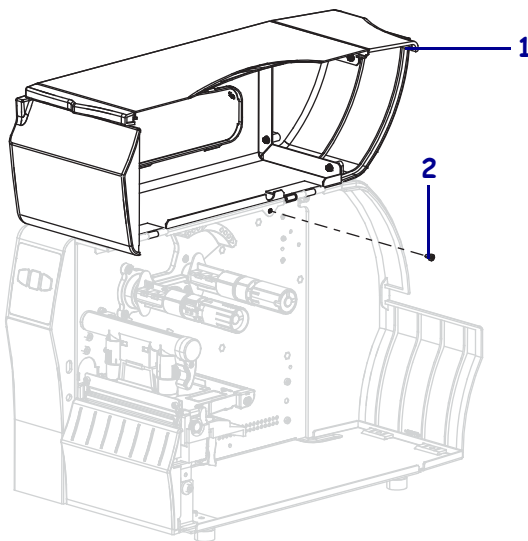
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

3. See [Figure 331](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

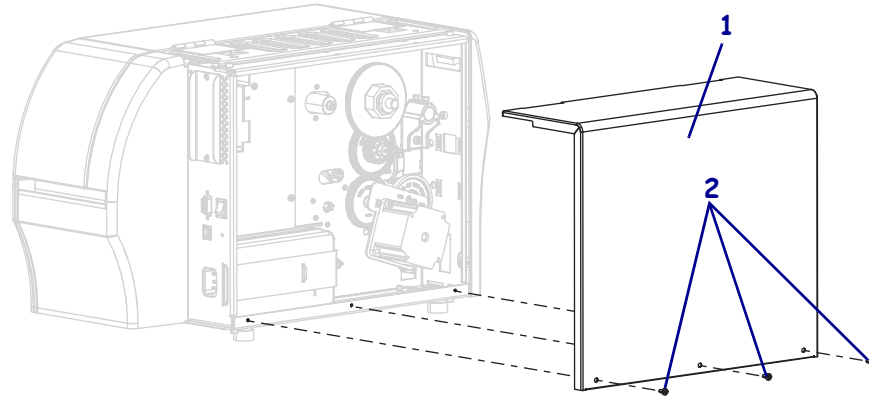
Figure 331 • Open the Media Door



1	Media door
2	Media side mounting screw

4. See [Figure 332](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 332 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

5. Lift the electronics cover off of the printer.

Remove the Old Cutter Cable

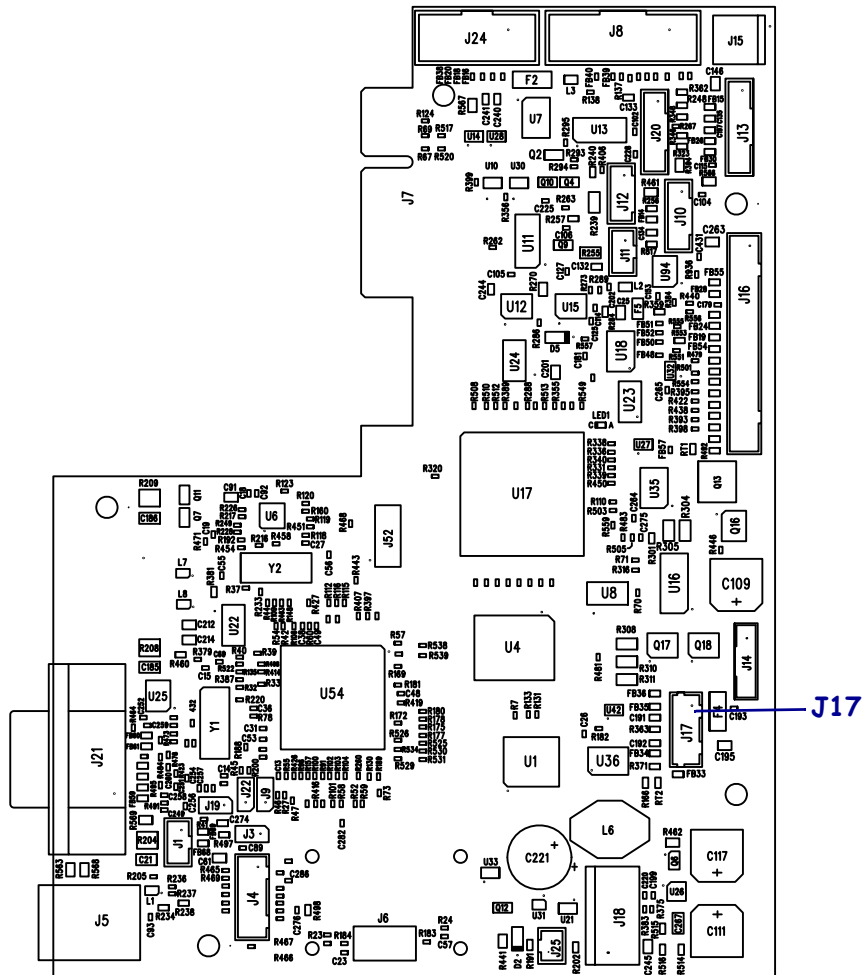


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

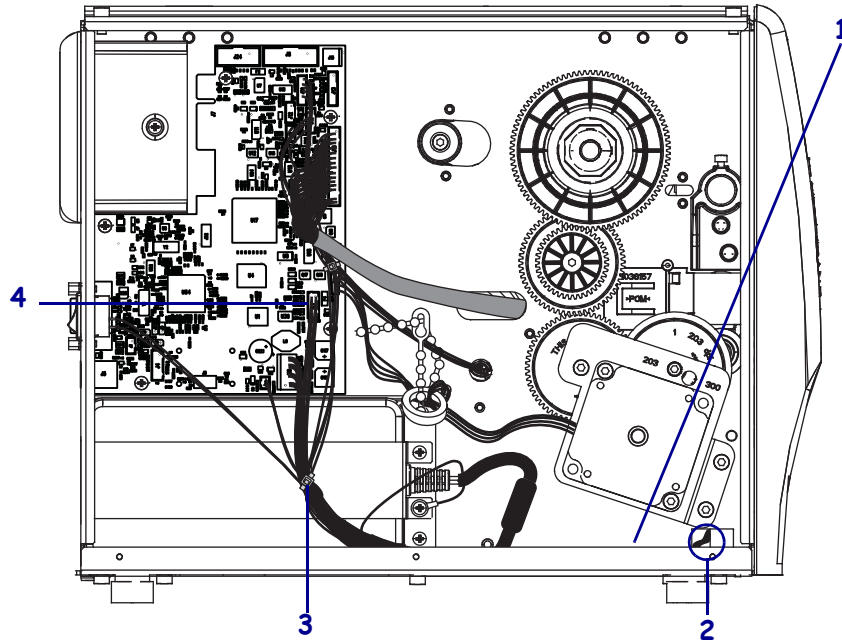
2. See [Figure 333](#). Disconnect the cutter cable from J17 on the main logic board (MLB).

Figure 333 • Disconnect the Cutter Cable



3. See [Figure 334](#). Cut the cable tie that secures the cutter cable and others to the power supply mounting bracket.

Figure 334 • Cutter Cable Routing



1	Cable clamp (located on the base of the printer)
2	Cutter cable
3	Cable tie
4	J17

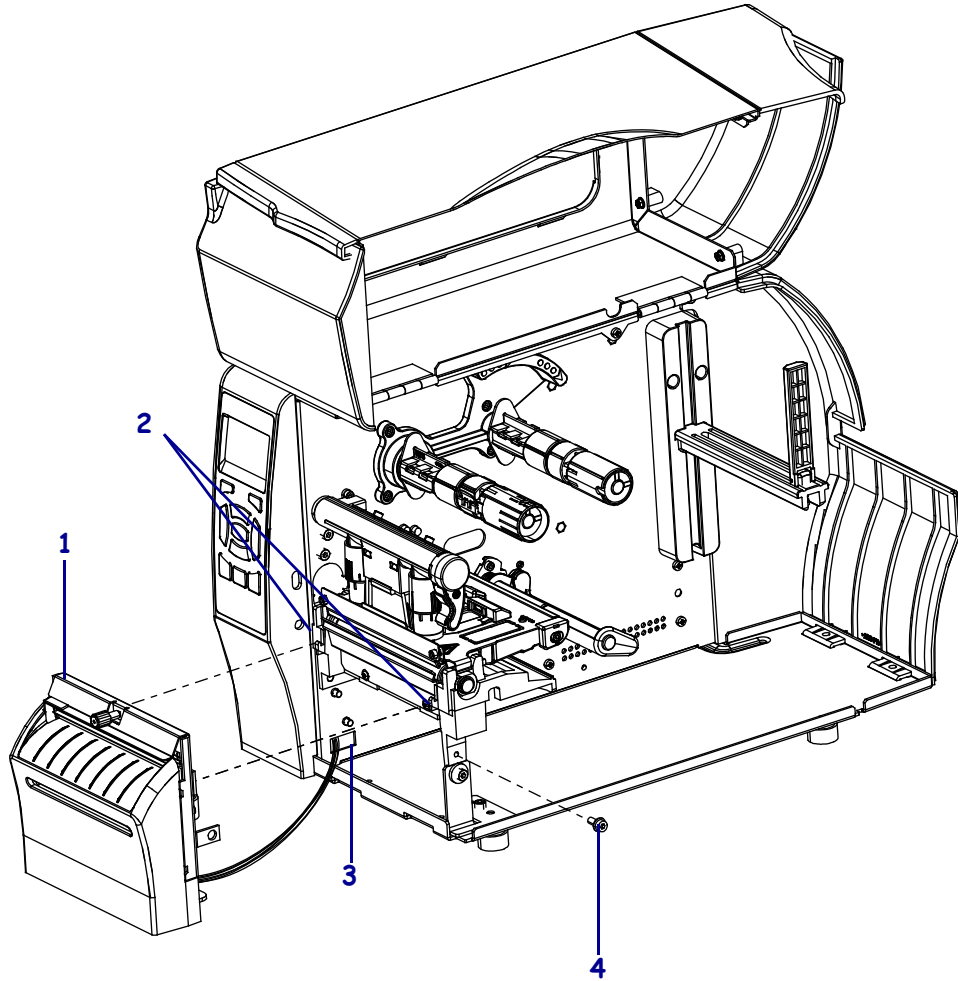
4. Remove the cutter cable from the cable clamp.



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

See [Figure 335](#). Remove the cutter mounting screw.

Figure 335 • Remove the Cutter Assembly

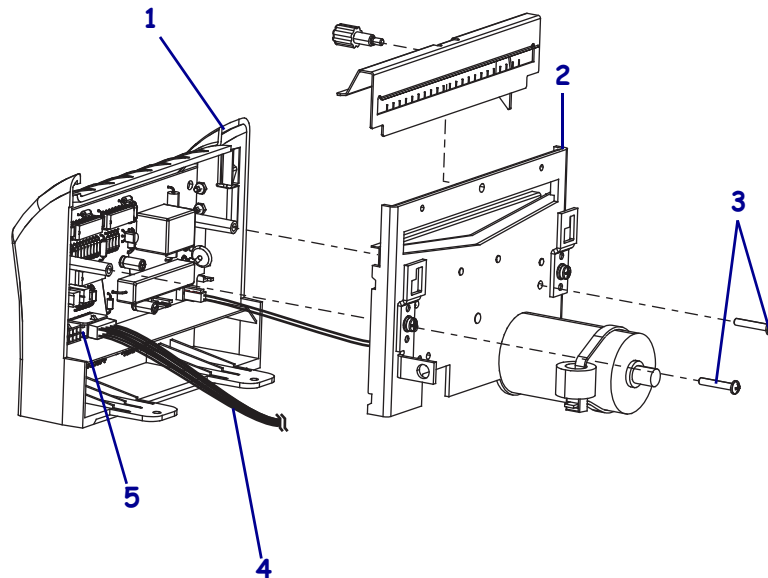


1	Cutter assembly
2	Mounting hooks (2)
3	Access hole
4	Mounting screw

6. Slide the cutter assembly to the right.
7. Lift and slide the cutter off of the mounting hooks and out of the printer.
8. Guide the cutter cable through the access hole.

9. See [Figure 336](#). Remove the two screws that secure the cover to the cutter mechanism.

Figure 336 • Remove the Cutter Cover and Printed Circuit Board (PCB)



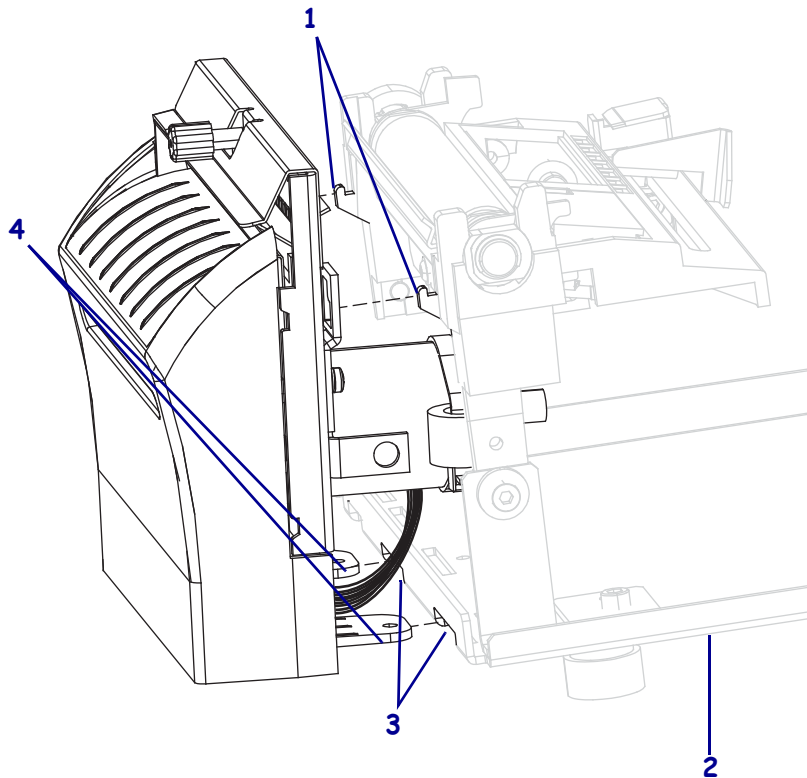
1	Cutter cover and PCB
2	Cutter mechanism
3	Mounting screws (2)
4	Cutter cable
5	Cutter cable connector, J2

10. Carefully pull the cutter mechanism from the cover and PCB until the cutter cable connector is accessible.
11. Disconnect the cutter cable from the J2 connector on the cutter PCB.

Install the New Cutter Cable

1. Connect the new cable to the J2 connector on the cutter PCB
2. Slide the cutter cover and PCB onto the cutter mechanism, and then reinstall the two mounting screws.
3. See [Figure 337](#). Slide the cutter assembly onto the mounting hooks, ensuring that the mounting tabs slide into the sheet metal base slots.

Figure 337 • Mounting Brackets

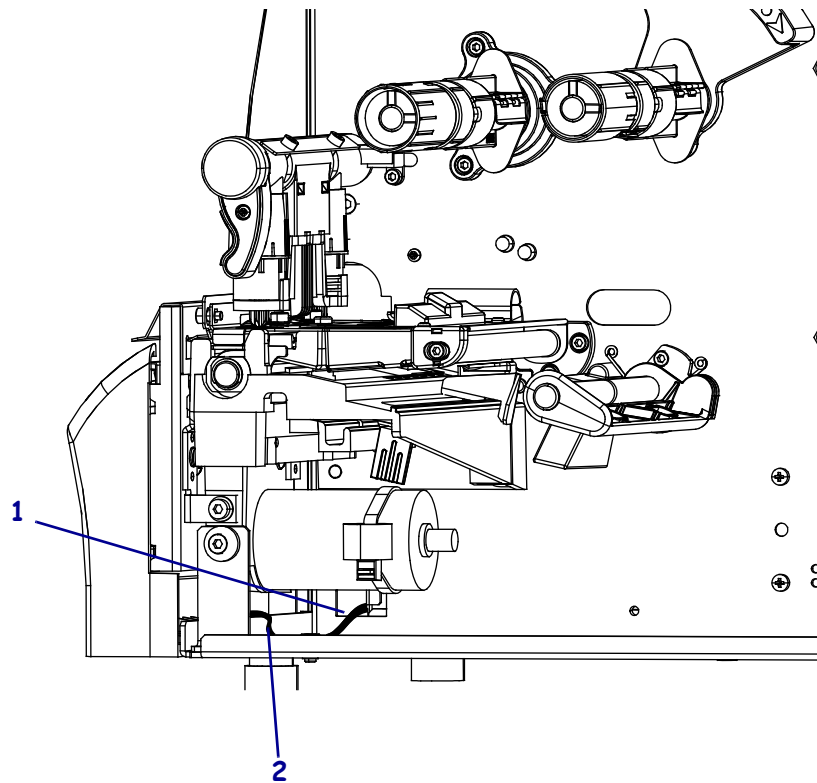


1	Mounting hooks (2)
2	Sheet metal base
3	Mounting slots (2)
4	Mounting tabs (2)

4. Slide the cutter assembly to the left.
5. See [Figure 335 on page 440](#). Install and tighten the mounting screw.

6. See [Figure 338](#). Route the cable through the access hole, and then to the MLB.

Figure 338 • Route the Cutter Cable



1	Access hole
2	Cutter cable

7. See [Figure 334 on page 439](#). Route the cutter cable through the cable clamp on the base of the printer, and then connect it to J17 on the main logic board (MLB).
8. Install a new cable clamp if broken or loose by peeling it out of the printer, and then cleaning the remaining tape off the printer.
9. Remove the backing off the new cable clamp and attach it to the same location as the old one.
10. Install a new cable tie through the power supply mounting bracket, around all cables, and then tighten the cable tie.

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none">a. See Figure 330 on page 435. Insert the electronics cover into the printer.b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none">a. See Figure 332 on page 437. Slide the electronics cover onto the printer.b. Reinstall the three electronics side mounting screws.c. See Figure 331 on page 436. Open the media cover and reinstall the media side mounting screw.

2. **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.

3. Reinstall the AC power cord and all data cables.
4. Turn on (I) the printer.

The installation is complete.

Remove the Old Liner Take-Up (LTU) Cable

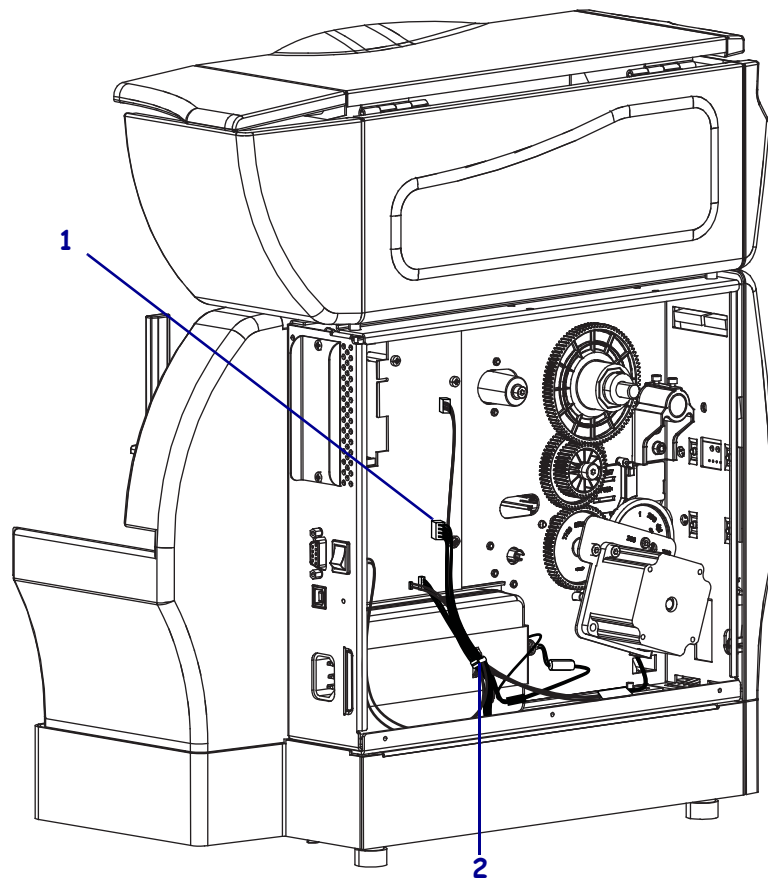


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. See [Figure 339](#). Disconnect the liner take-up cable from J17 on the main logic board (MLB).
3. Cut the cable tie from the power supply bracket tab.

Figure 339 • LTU Cable Routing

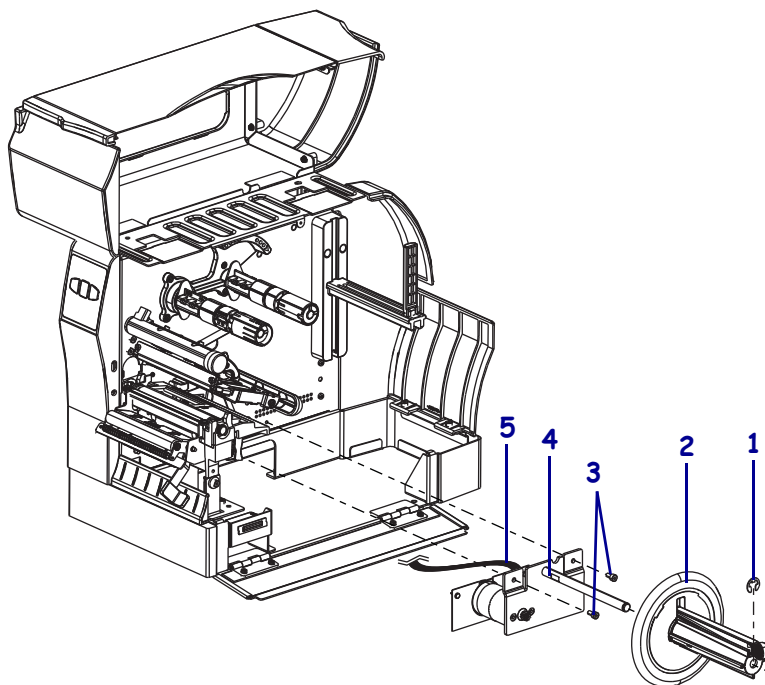


1	J17 on the main logic board (MLB)
2	Cable tie

4. Remove the LTU cable from the cable bundle.

5. See [Figure 340](#). From the media side, remove the e-clip securing the LTU spindle.

Figure 340 • Remove the LTU Spindle

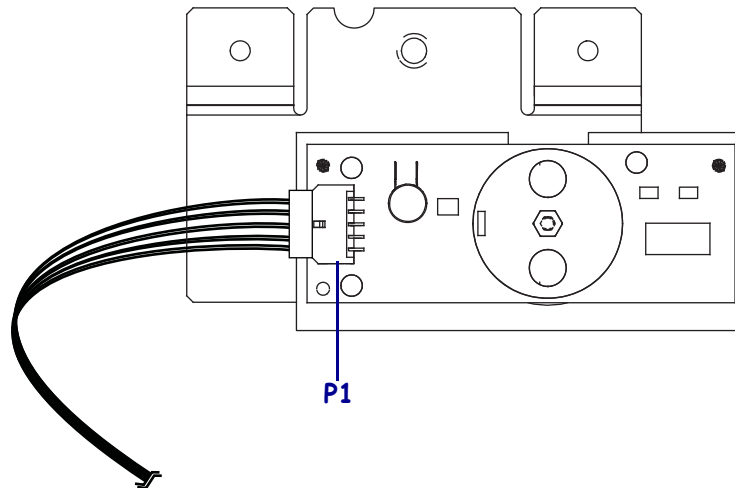


1	E-ring
2	LTU spindle
3	Mounting screws (2)
4	LTU drive assembly
5	LTU cable

6. Remove the two mounting screws securing the LTU drive assembly to the printer.
7. While guiding the LTU cable through the access hole, lift the LTU assembly out of the printer.

8. See [Figure 341](#). Remove the cable from the P1 connector on LTU drive assembly.

Figure 341 • Disconnect the LTU Cable



Install the New LTU Cable

1. See [Figure 341](#). Connect the cable to the P1 connector on the LTU drive assembly.
2. Guide the liner LTU cable up through the access hole.
3. See [Figure 340 on page 446](#). Align the LTU assembly mounting holes, and then reinstall the two mounting screws.
4. Slide the LTU spindle onto the LTU assembly, and then install the e-ring.
5. See [Figure 339 on page 445](#). Connect the LTU cable to J17 on the MLB.
6. Install any cable ties removed.

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none">a. See Figure 330 on page 435. Insert the electronics cover into the printer.b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none">a. See Figure 332 on page 437. Slide the electronics cover onto the printer.b. Reinstall the three electronics side mounting screws.c. See Figure 331 on page 436. Open the media cover and reinstall the media side mounting screw.

2. **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.

3. Reinstall the AC power cord and all data cables.
4. Turn on (I) the printer.

The installation is complete.

Exterior

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Metal Media Door Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Media Door Maintenance Kit on the following printers:

- ZT230™
- ZT210™

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 342 • Kit Contents

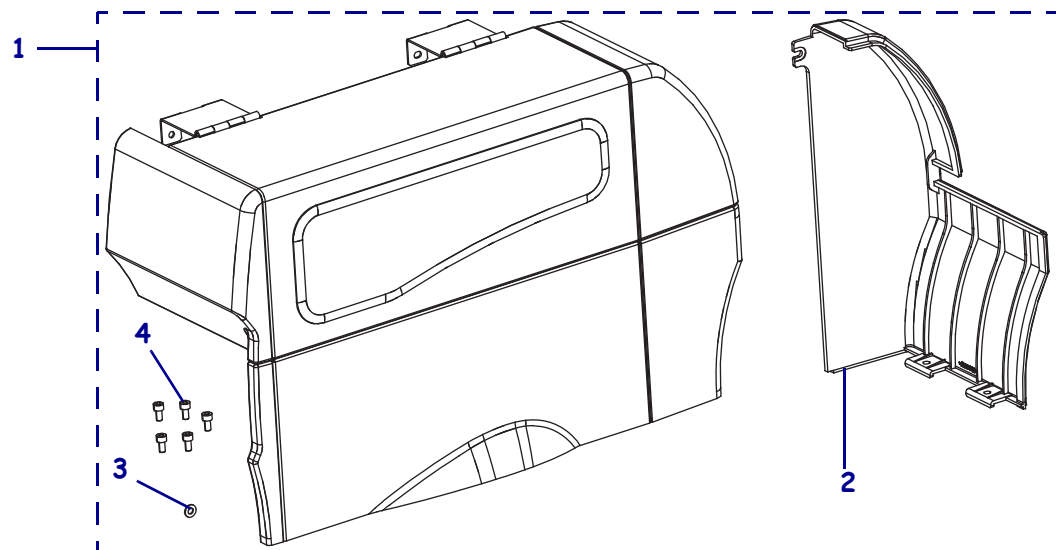


Table 51 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-032	ZT230 Metal Media Door Maintenance Kit
		1	P1037991-002	ZT210 Metal Media Door Maintenance Kit
	2	1	N/A	End Cap
	3	1	HW78806	Washer, M4 (sold in quantities of 25)
	4	5	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)
N/A = Not available as a separate part for purchase (listed for identification purposes only).				

Tools Required



Tools • You need these tools to complete this procedure:

Phillips Screwdriver Set

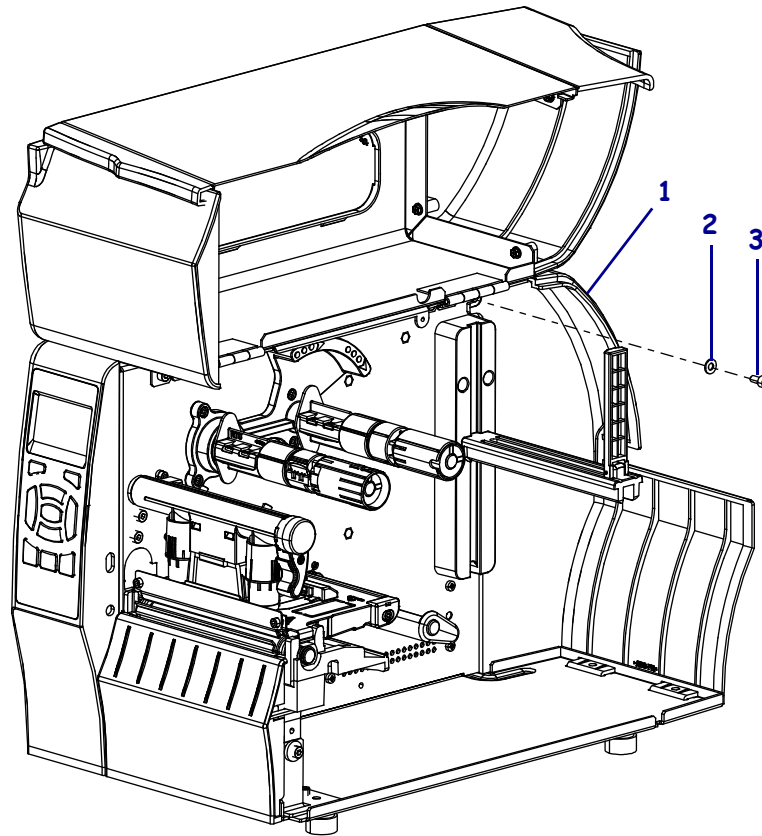
Metric Hex Key (Allen wrench) Set

Replace the End Cap

Remove the Old End Cap

1. See [Figure 344](#). Remove the end cap mounting screw and washer.

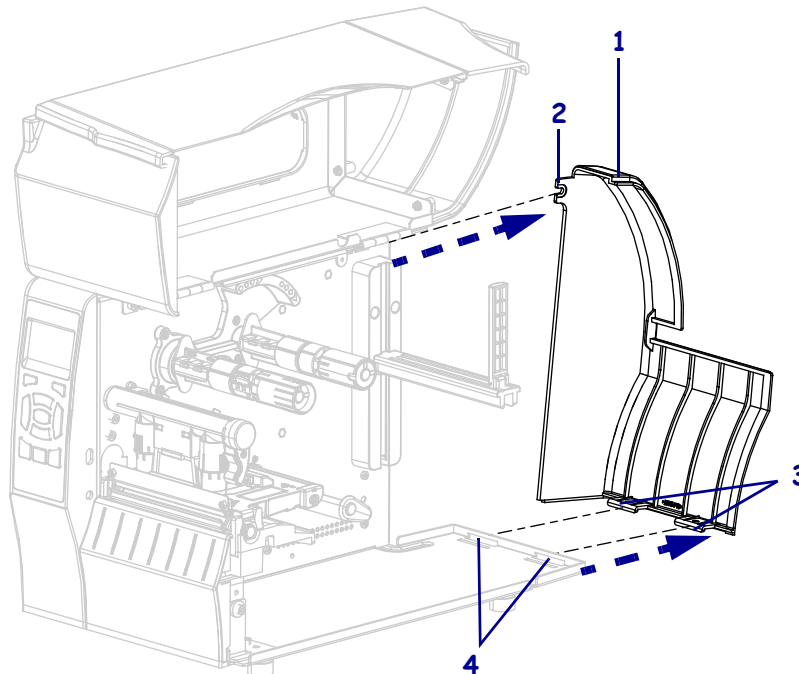
Figure 343 • Remove the End Cap Mounting Screw



1	End cap
2	Mounting washer
3	Mounting screw

2. Tip the end cap back, and then slide it out of the printer.

Figure 344 • Remove the End Cap



1	End cap
2	Top mounting tab
3	Mounting tabs (2)
4	Mounting slots (2)

Install the New End Cap

1. See [Figure 344 on page 452](#). Align the locating tabs on the end cap with the mounting holes in the printer.
2. See [Figure 2 on page 452](#). Lift the top of the end cap while allowing the tabs to locate in the mounting slots.
3. See [Figure 343 on page 451](#). Align the top mounting hole in the end cap with the mounting hole in the printer, and then install the mounting washer and screw.

Replace the Media Door

Remove the Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

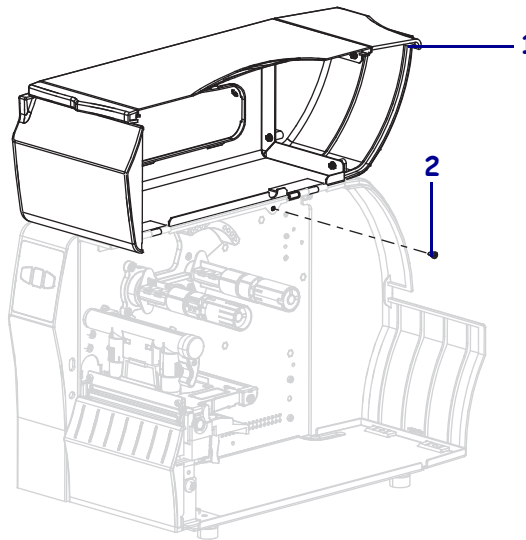
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

3. See [Figure 345](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

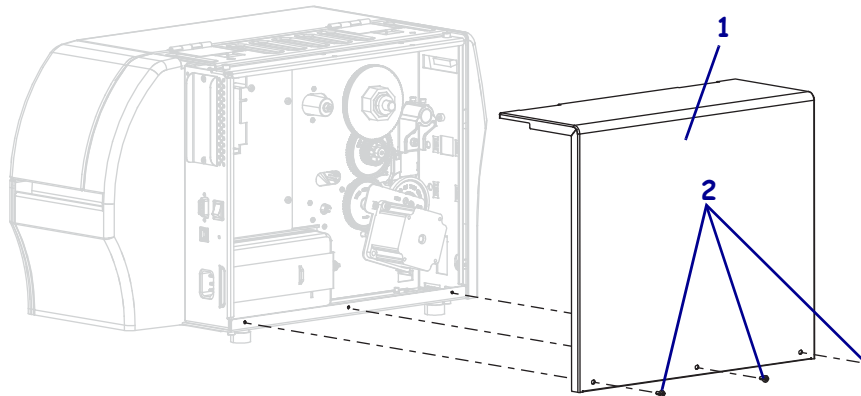
Figure 345 • Open the Media Door



1	Media door
2	Media side mounting screw

4. See [Figure 346](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 346 • Remove the Electronics Cover



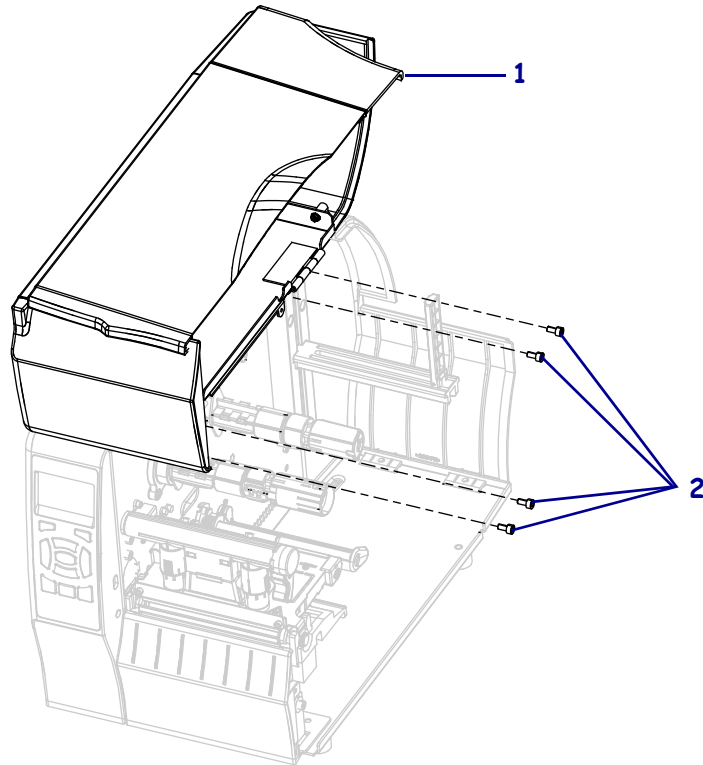
1	Electronics cover
2	Mounting screws (3)

5. Lift the electronics cover off of the printer.

Remove the Media Door

1. See [Figure 347](#). Remove the four hinge mounting screws.

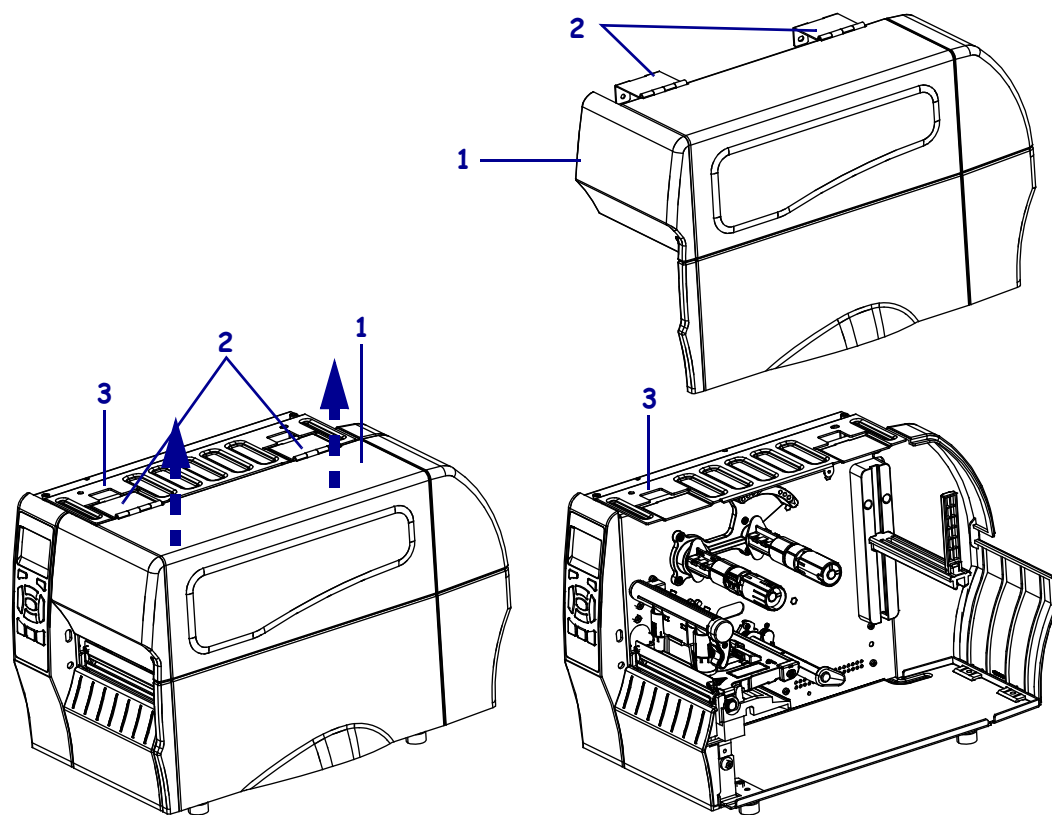
Figure 347 • Remove the Mounting Screws



1	Metal media door
2	Hinge mounting screws (4)

2. See [Figure 348](#). Close the media door, and then lift the media door off the printer.

Figure 348 • Remove the Media Door

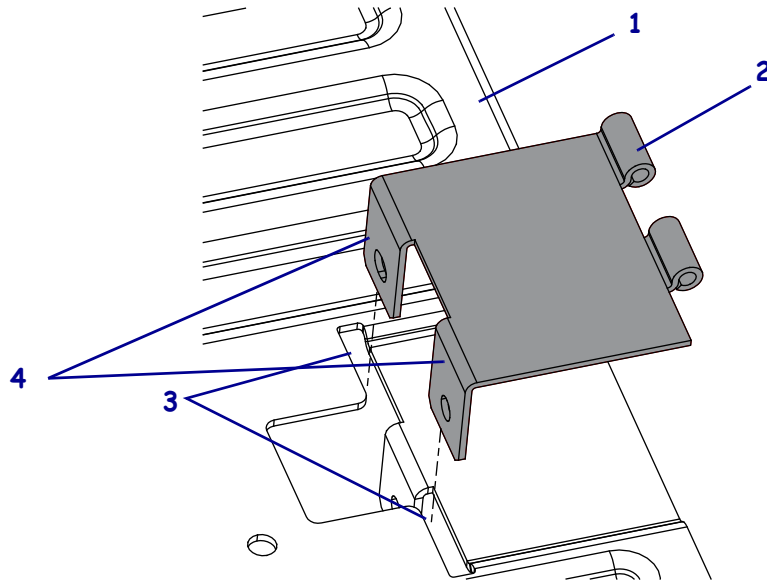


1	Media door
2	Media door hinges (2)
3	Top plate

Install the Media Door

1. See [Figure 349](#). Align the mounting tabs of the hinges with the mounting slots in the top plate.

Figure 349 • Align the Hinges



1	Top plate
2	Door hinge
3	Top plate slots
4	Door hinge mounting tabs

2. Slide the door hinge mounting tabs into the top plate slots, and then open the media door.
3. See [Figure 347 on page 455](#). Install the forward most screw.
This is the locating hole.
4. Install the other three hinge mounting screws.

Reinstall the Electronics Cover

1. See [Figure 346 on page 454](#). Slide the electronics cover onto the printer.
2. Reinstall the three electronics side mounting screws.
3. See [Figure 345 on page 453](#). Open the media cover and reinstall the media side mounting screw.
4. Reconnect the AC power cord and all data cables.
5. Turn on (I) the printer.

The installation is complete.

ZT220™ Media Door Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Media Door Maintenance Kit on the ZT220 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 350 • Kit Contents

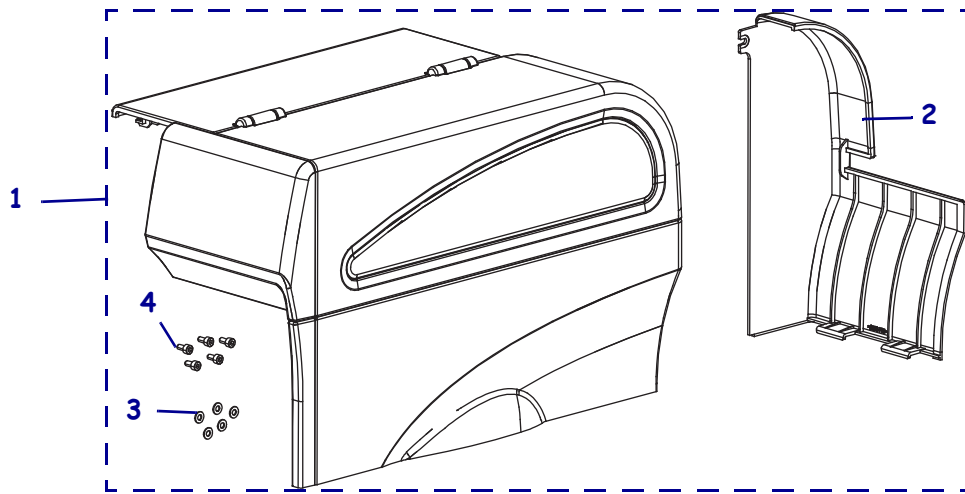


Table 52 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037990-003	ZT220 Media Door Maintenance Kit
	2	1	N/A	Rear Cover
	3	5	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)
	4	5	HW78806	Washer, M4 (sold in quantities of 25)
N/A = Not available as a separate purchase.				

Tools Required



Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Metric Hex Key (Allen wrench) Set



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.

Open the media door and remove the media and ribbon from the printer.

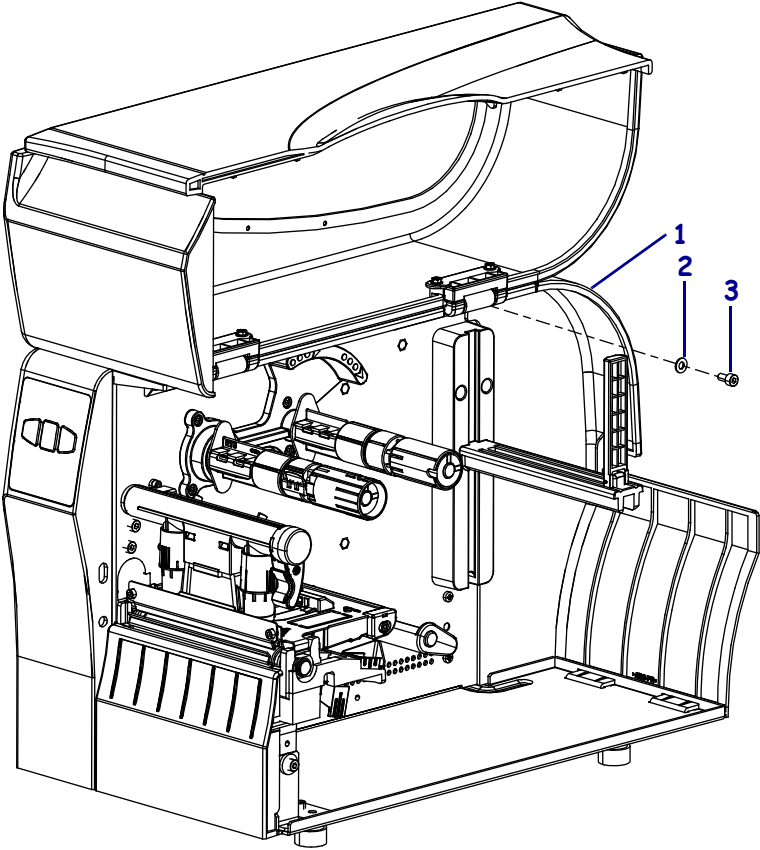
3. Which cover are you replacing?

If have a...	Then...
Rear Cover	Continue with <i>Replace the Rear Cover</i> .
Media Door	Go to <i>Remove the Electronics Cover</i> on page 463.

Replace the Rear Cover

- 1. Open the media door to access the rear cover mounting screw.
- 2. See [Figure 351](#). Remove the rear cover mounting screw and washer.

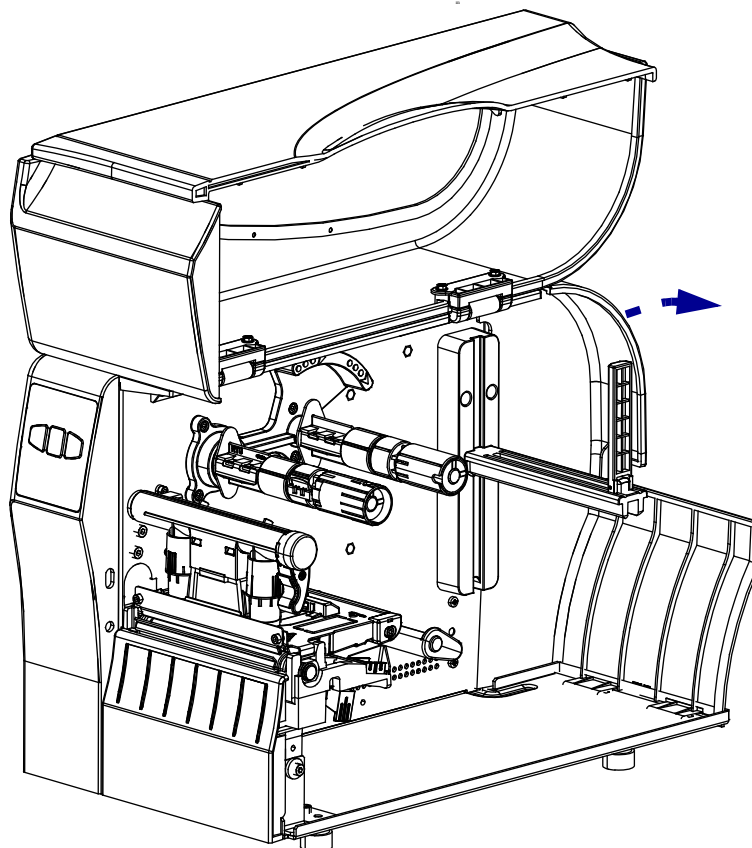
Figure 351 • Remove the Rear Cover



1	Rear cover
2	Mounting washer
3	Mounting screw

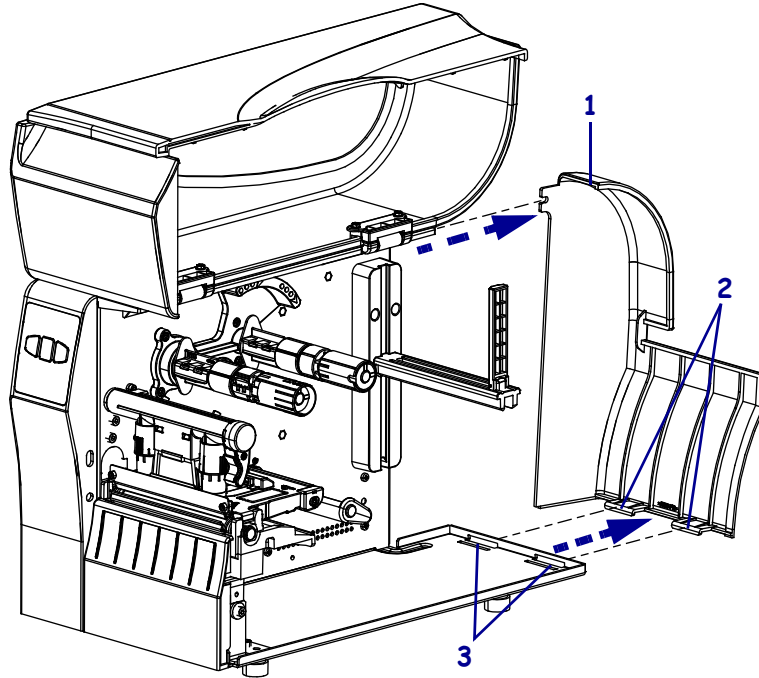
3. See [Figure 352](#). Tip the top of the rear cover back away from the printer.

Figure 352 • Tip the Rear Cover



- See [Figure 353](#). Slide the rear cover out of the printer.

Figure 353 • Remove the Rear Cover



1	Rear cover
2	Rear cover locating tabs
3	Rear cover locating tabs mounting holes

- See [Figure 353 on page 463](#). Align the locating tabs on the rear cover with the mounting holes in the printer.
- See [Figure 352 on page 462](#). Lift the top of the rear cover while allowing the tabs to locate in the holes.
- See [Figure 351 on page 461](#). Align the top mounting hole in the rear cover with the mounting hole in the printer, and then install the mounting washer and screw.

Remove the Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

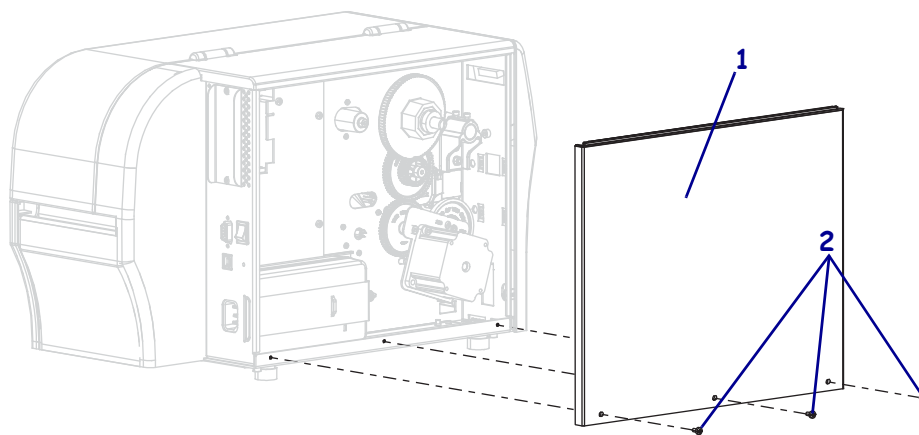
Turn off (O) the printer and disconnect the AC power cord and all data cables.

-
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.
-

Open the media door and remove the media and ribbon.

3. See [Figure 354](#). Remove the three screws securing the electronics cover.

Figure 354 • Remove the Electronics Cover



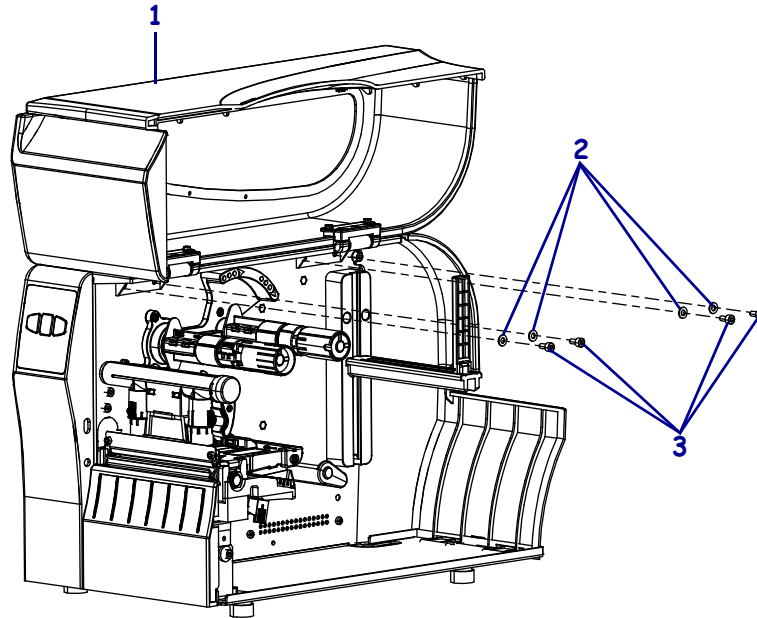
1	Electronics cover
2	Mounting screws (3)

4. Lift the electronics cover off of the printer.
5. Continue with [Replace the Media Door](#).

Replace the Media Door

1. See [Figure 355](#). Remove the four screws that secure the top cover to the printer.

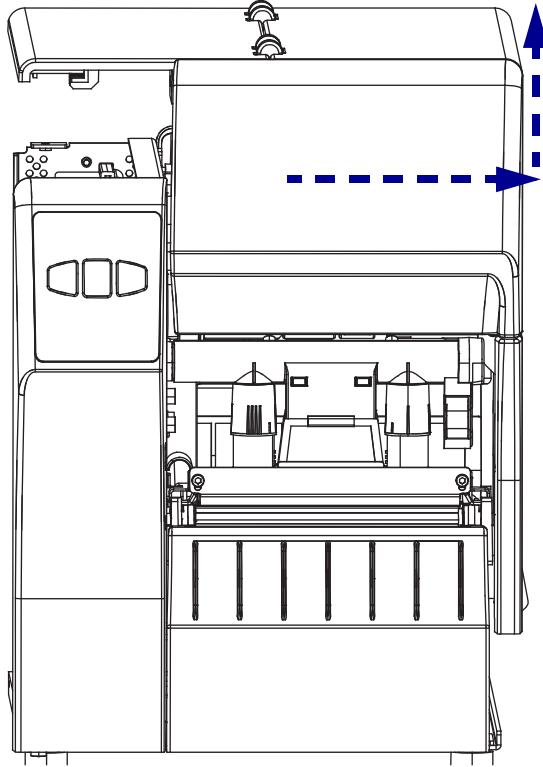
Figure 355 • Remove the Media Door Screws



1	Plastic media door
2	Mounting washers (4)
3	Mounting screws (4)

2. See [Figure 356](#). Slide the media door assembly to the right, and then lift the media door assembly off the printer.

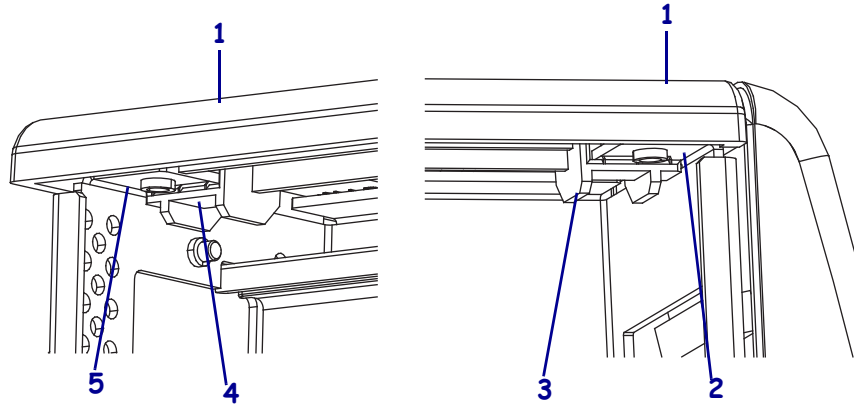
Figure 356 • Remove the Media Door



3. Slide the new media door onto the printer.

- See [Figure 357](#). Align the front and rear tabs of the new door so that they slide under the tabs on the printer main frame.

Figure 357 • Align Media Door Tabs



1	Top plate
2	Front main frame tab
3	Front top plate tab
4	Rear top plate tab
5	Rear main frame tab

- See [Figure 356](#) on page 466 and [Figure 357](#). Slide the new media door to the left ensuring that the two tabs on the top plate engage the two tabs on the main frame.
- See [Figure 355](#) on page 465. Align the four mounting holes in the new media door with the mounting holes in the main frame, and then install the four mounting washers and mounting screws.
- Continue with *Reinstall the Electronics Cover*.

Reinstall the Electronics Cover

- See [Figure 354](#) on page 464. Insert the electronics cover into the printer.
- Reinstall the three mounting screws.
- **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.

- Reconnect the AC power cord and all data cables.
- Turn on (I) the printer.

The installation is complete.

Media Door Window Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the media door window in the following printers:

- ZT210™
- ZT230™

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 358 • Kit Contents

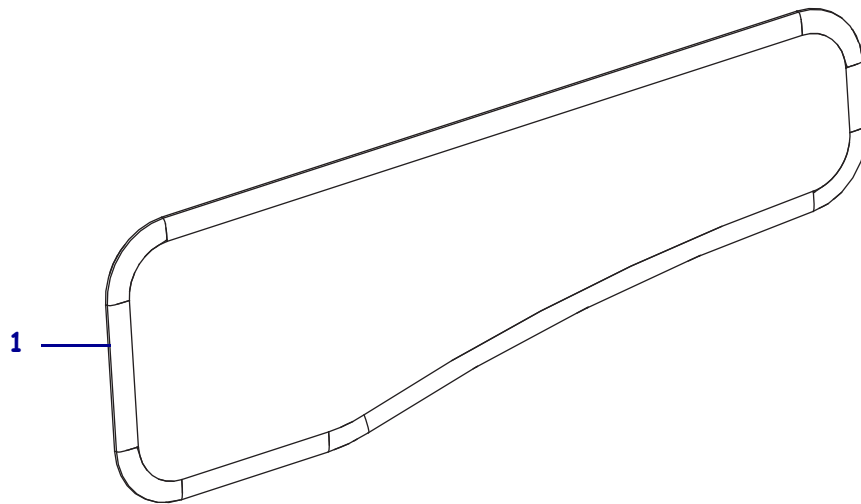


Table 53 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-049	Media Door Window Maintenance Kit

Tools Required



Tools • You need these tools to complete this procedure:

- Flat Blade Screwdriver Set

Remove the Old Media Door Window

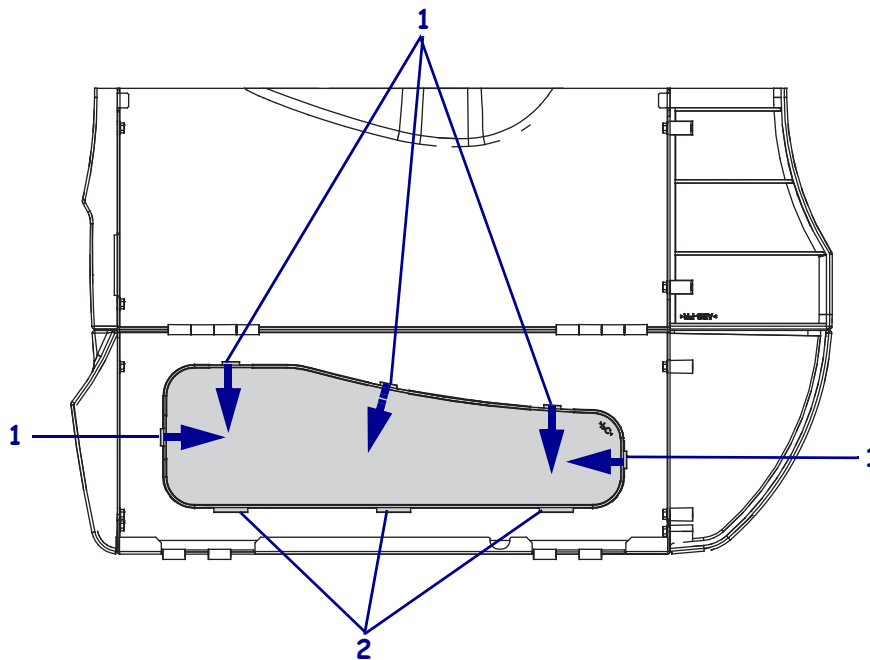


1. **Caution** • Turn off (O) the printer and disconnect it from the power source before performing the following procedure.

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

2. See [Figure 360](#). Open the media door and locate the flexible tabs securing the window in to the door.

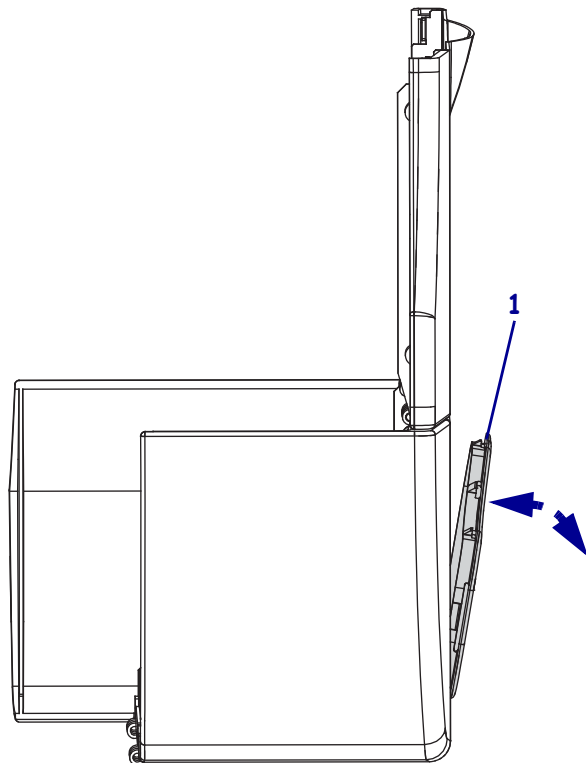
Figure 359 • Window Tabs



1	Flexible tabs (5)
2	Non-flexible tabs (3)

3. See [Figure 359](#) and [Figure 360](#). Push the tabs toward the center of the window while pushing the window out of the door.

Figure 360 • Remove and Install the Media Door Window



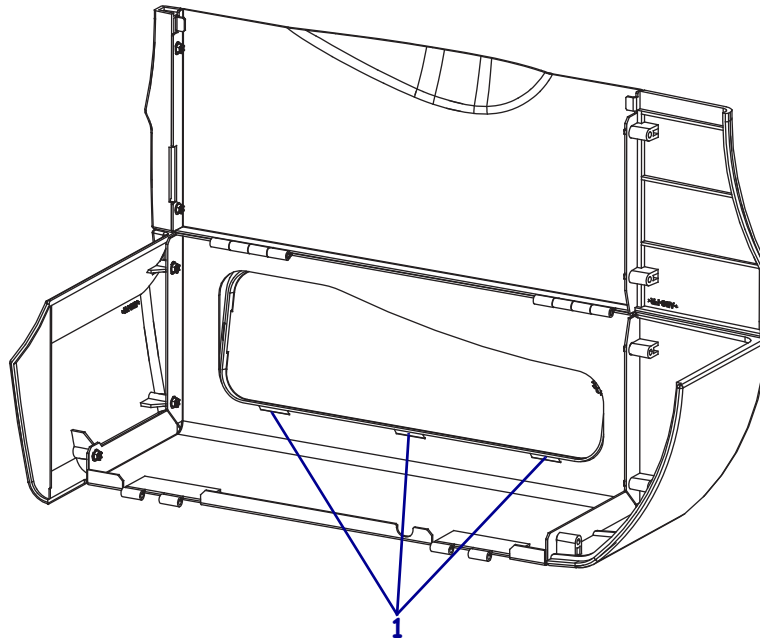
1	Media door window
----------	-------------------

4. Lift the window out of the media door.

Install the New Media Door Window

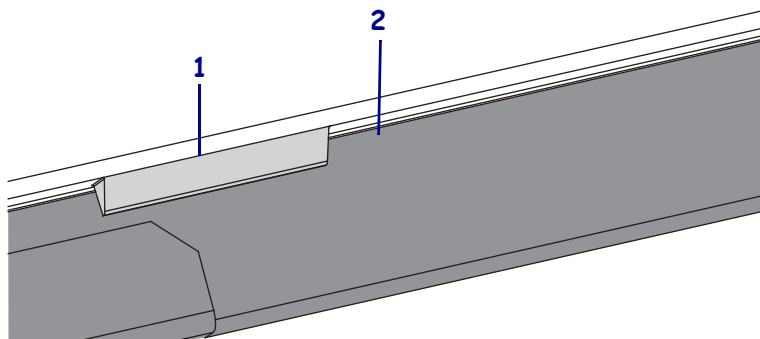
1. See [Figure 361](#) and [Figure 362](#). Hold the new window with top away from the windowless door and set the non-flexible tabs over the door edge.

Figure 361 • Align Non-Flexible Tabs



1	Non-flexible tabs (3)
----------	-----------------------

Figure 362 • Position Tab



1	Window stationary tab
2	Inside door edge

2. See [Figure 360 on page 470](#). Lift and press the window into place until all flexible tabs have snapped in place and the window is secure.

3. Clean the new window.
4. Reconnect the AC power cord and data cables.
5. Turn on (I) the printer.

The installation is complete.

Lower Front Panels Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the lower trim panels in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 363 • Kit Contents

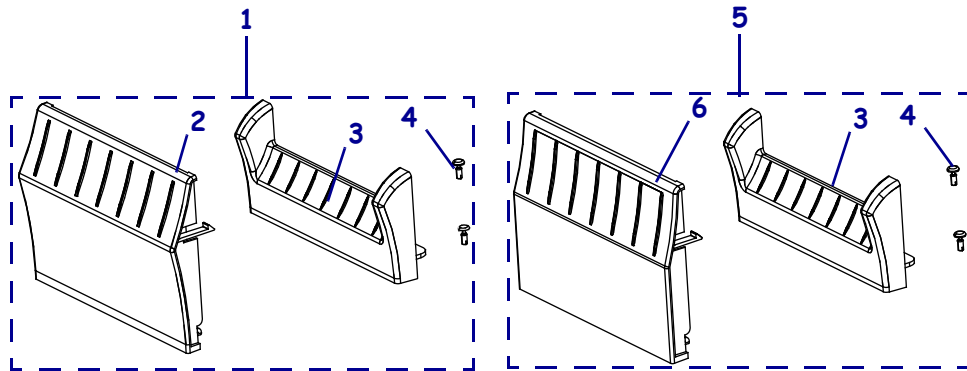


Table 54 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-033	ZT230 Lower Front Panel Maintenance Kit
	2	1	N/A	ZT230 Tear Lower Front Panel
	3	1	N/A	Peel Lower Front Panel
	4	2	N/A	Rivet
	5	1	P1037990-004	ZT220/ZT210 Lower Front Panel Maintenance Kit
	6	1	N/A	ZT220/ZT210 Tear Lower Front Panel

Tools Required

Tools • You need these tools to complete this procedure:

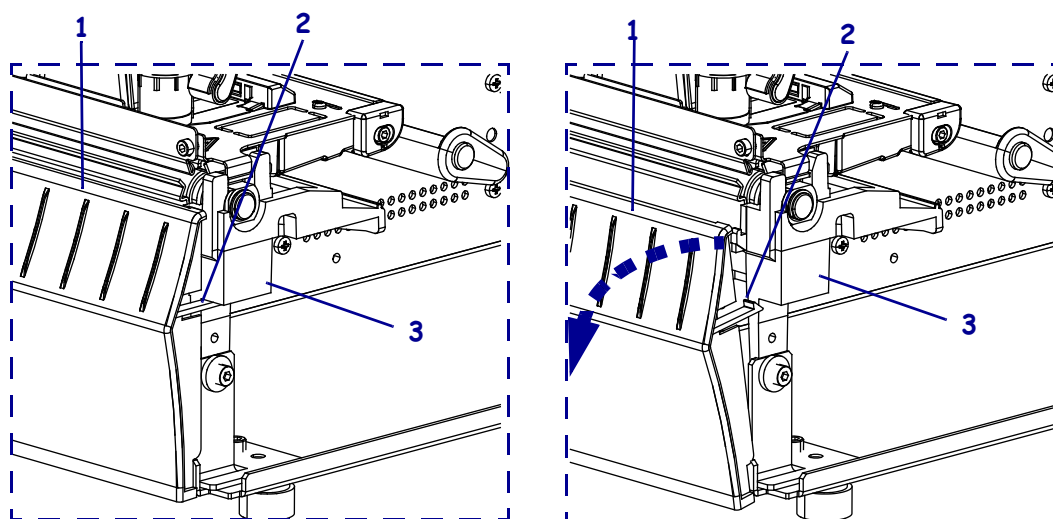
- ❑ Flatblade Screwdriver Set

Replace the Tear Lower Front Panel

Remove the Old Tear Lower Front Panel

1. See [Figure 364](#). Release the tear lower trim panel by pushing down on the two hooks securing it to the platen housing.

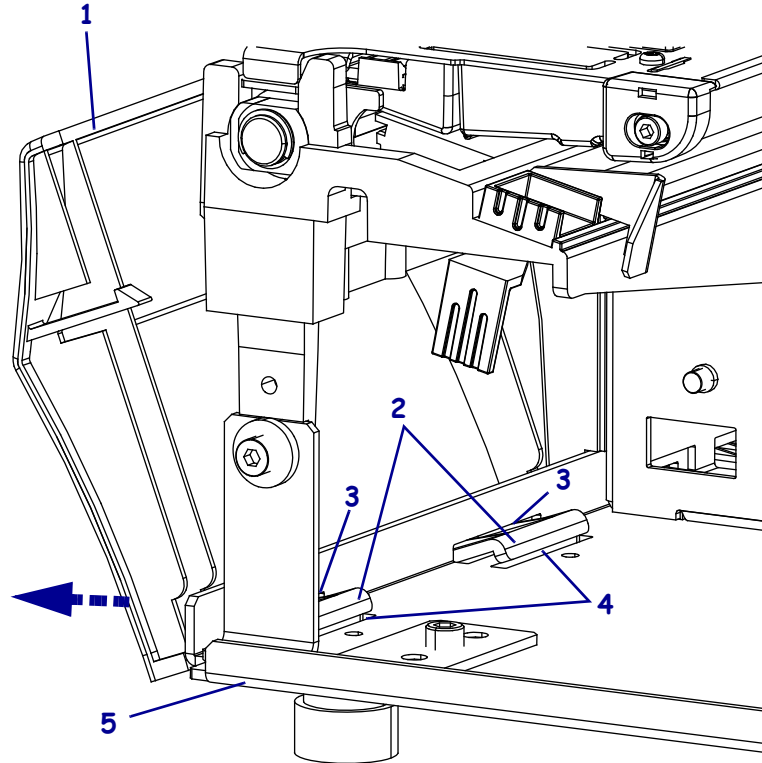
Figure 364 • Release the Tear Lower Front Panel



1	Tear lower trim panel
2	Hooks (2)
3	Platen housing

2. See [Figure 365](#). Tip the top of the tear lower trim panel away from the printer until the mounting tabs come out of the mounting holes.

Figure 365 • Remove the Old Tear Lower Front Panel



1	Lower tear front panel
2	Tabs (2)
3	Access holes (2)
4	Mounting holes (2)
5	Printer base

3. Slide the tear lower trim panel out of the printer.

Install the New Tear Lower Front Panel

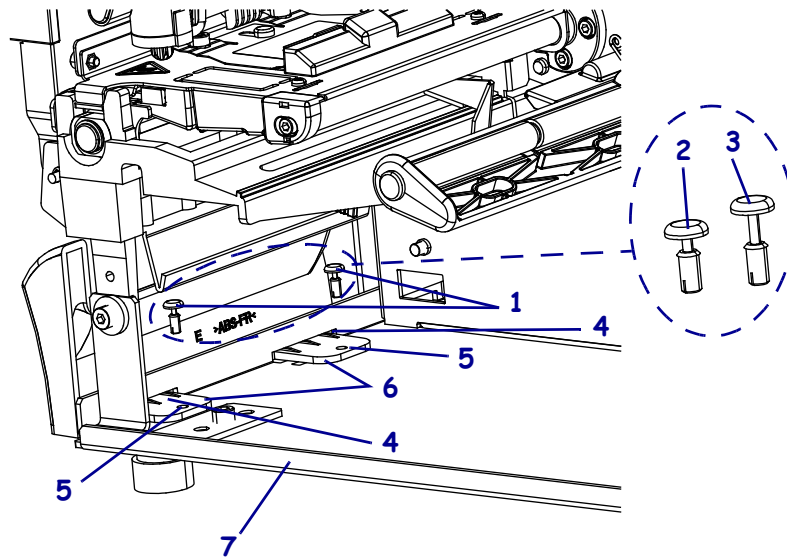
1. See [Figure 365](#). Slide the new tear lower trim panel into the access hole in the printer base.
2. Lift the tear lower trim panel while guiding the two tabs into the two mounting holes.
3. See [Figure 364](#). Snap the two hooks into the platen housing.

Replace the Peel Lower Front Panel

Remove the Old Peel Lower Front Panel

1. See [Figure 366](#). Using a flat-blade screwdriver, open the rivets by pulling the pins up on the two rivets securing the peel lower trim panel to the printer base.

Figure 366 • Remove the Peel Lower Front Panel



1	Rivets (2)
2	Closed rivet
3	Open rivet
4	Access holes (2)

5	Tabs (2)
6	Mounting holes (2)
7	Printer base

2. Remove the two rivets from the peel lower trim panel, and then slide the peel lower trim panel out of the printer base.

Install the Peel Lower Front Panel

1. See [Figure 366](#). Slide the new peel lower trim panel into the access holes in the printer base.
2. Install the new open rivets through the tabs and into the printer base.
It will take some force to push the new rivets into the printer base.
3. Press the new rivet pins down until they snaps in place.

The installation is complete.



Liner Take-Up Base Door and Front Trim Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the liner take-up (LTU) door and front trim kit in the ZT230™ printer with the liner take-up option installed.

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 367 • Kit Contents

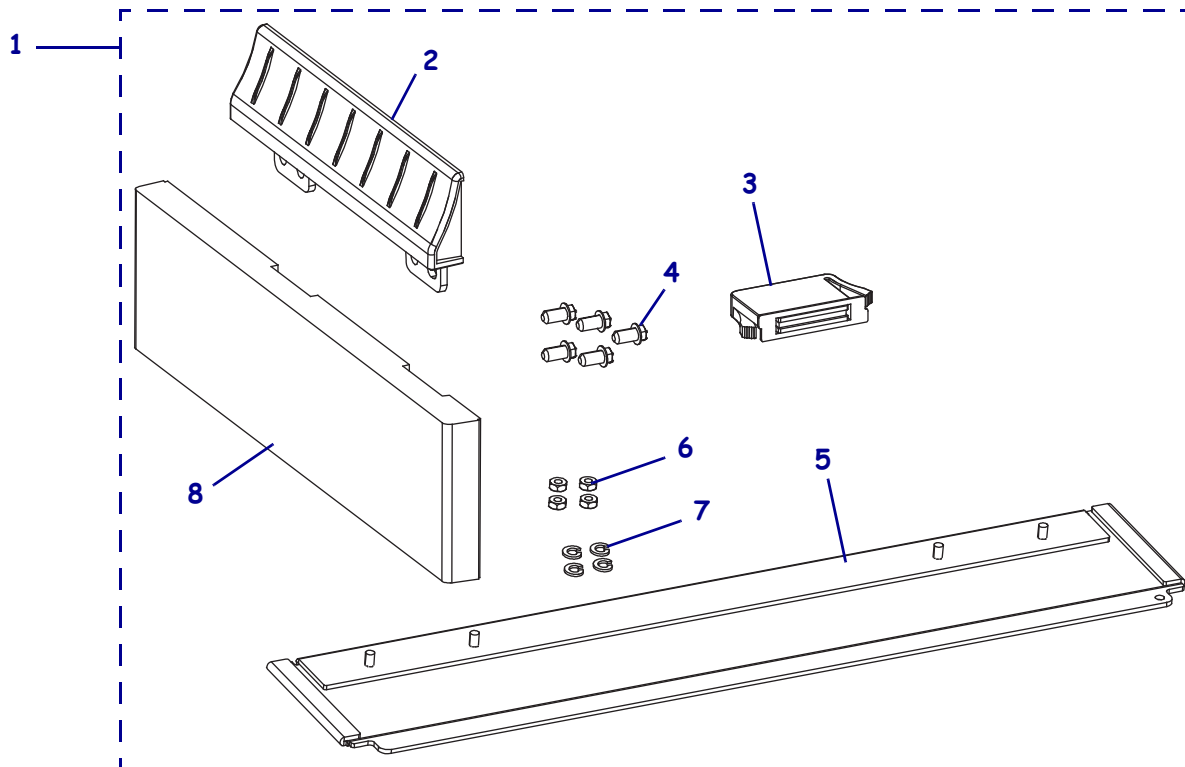


Table 55 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-054	Liner (LTU) Door and Trim Maintenance Kit
	2	1	N/A	LTU Base Upper Trim Panel
	3	1	N/A	Door Magnet
	4	5	HW44114	Screw, M4.2 × 8 (sold in quantities of 50)
	5	1	N/A	LTU Base Door
	6	4	HW10460	Nut, M3 × 2.4 × 5.5 (sold in quantities of 25)
	7	4	HW10471	Split Washer, M3 (sold in quantities of 50)
	8	1	N/A	LTU Base Lower Trim Panel

N/A = Not available as a separate part for purchase (listed for identification purposes only).

Tools Required

Tools • You need these tools to complete this procedure:

- Metric Nutdriver Set Metric Hex Key (Allen wrench) Set

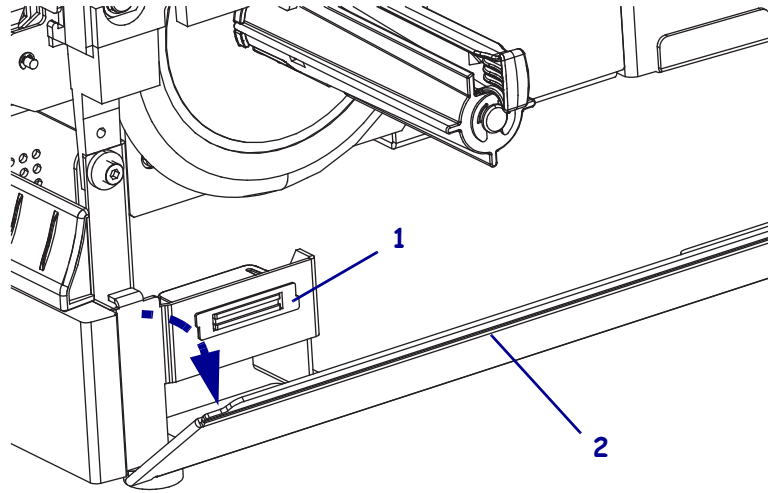
1. Which part are you replacing?

If...	Then...
LTU base door	Continue with <i>Replace the LTU Base Door on page 479.</i>
LTU base door magnet	Go to <i>Replace the LTU Base Door Magnet on page 481.</i>
LTU base lower trim panel	Go to <i>Replace the LTU Base Lower Trim Panel on page 483.</i>
LTU base upper trim panel	Go to <i>Replace the LTU Base Upper Trim Panel on page 488.</i>

Replace the LTU Base Door

1. See [Figure 368](#). Open the LTU base door.

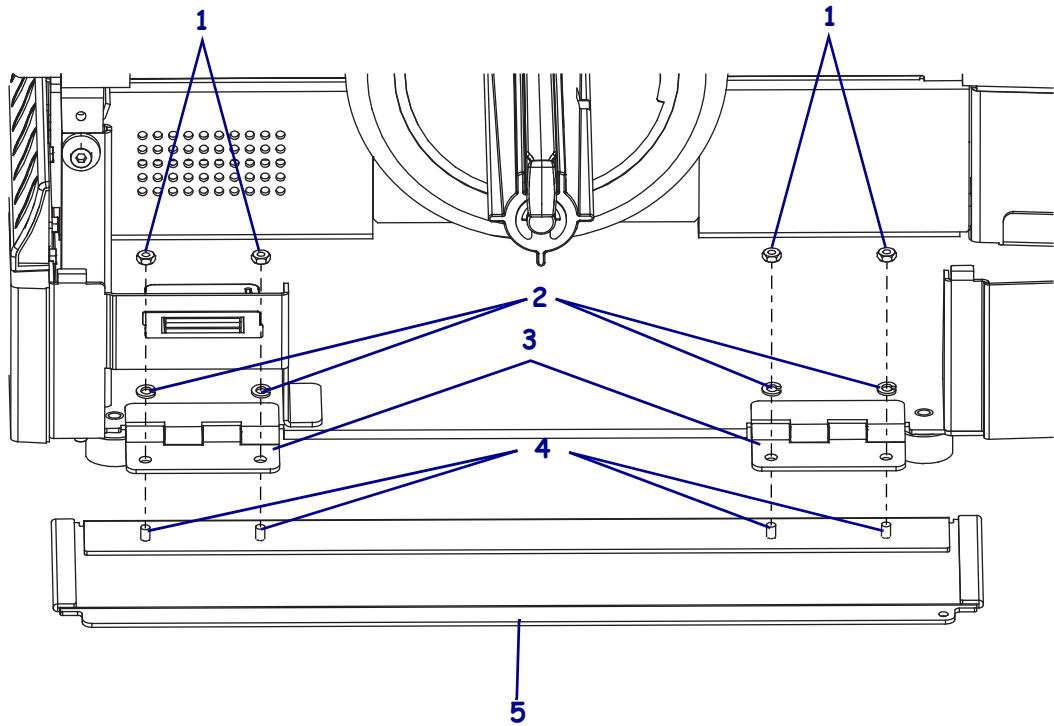
Figure 368 • Open LTU Base Door



1	Magnet
2	LTU base door

2. See [Figure 369](#). Open the LTU base door.

Figure 369 • Remove the LTU Base Door



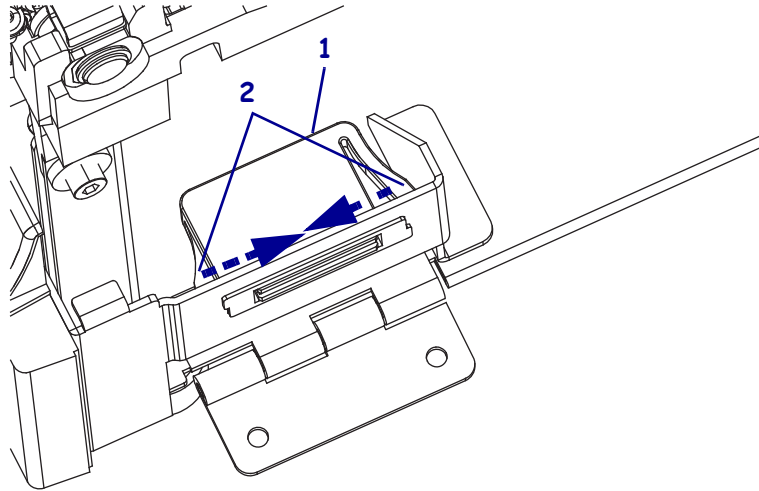
1	Mounting nuts (4)
2	Split washers (4)
3	Mounting studs (4)
4	Hinges (2)
5	LTU base door

3. Remove and discard the four mounting nuts and split washers securing the LTU base door.
4. Remove the LTU base door from the two hinges.
5. Align the new LTU base door mounting studs with the two hinges, and then insert the mounting studs into the hinges.
6. Install the new four split washers onto the studs, and then install the four new mounting nuts.
7. Close the LTU base door.

Replace the LTU Base Door Magnet

1. See [Figure 368 on page 479](#). Open the LTU base door.
2. See [Figure 370](#). Push the magnet locking tabs toward each other, and then push the magnet assembly out of the printer.

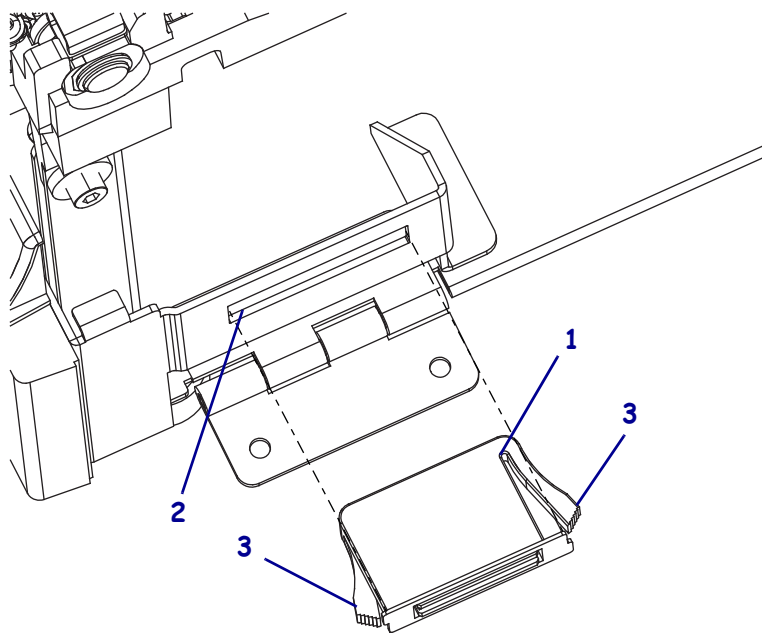
Figure 370 • Magnet Locking Tabs



1	Magnet assembly
2	Locking tabs (2)

3. See [Figure 371](#). Push the magnet assembly out of the printer.

Figure 371 • Remove the Magnet Assembly



1	Magnet assembly
2	Magnet assembly mounting hole
3	Locking tabs (2)

4. Slide the new magnet assembly into the mounting hole, and then press it in until the locking tabs pop out to secure it in place.
5. Close the LTU base door.

Replace the LTU Base Lower Trim Panel

Remove the Old Lower Trim Panel



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

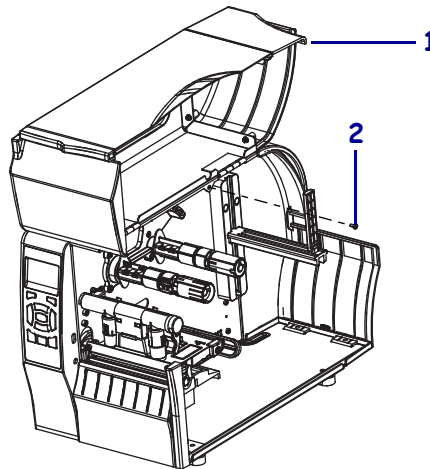
Turn off (O) the printer and disconnect the AC power cord and all data cables.

3. **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.

4. See [Figure 372](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

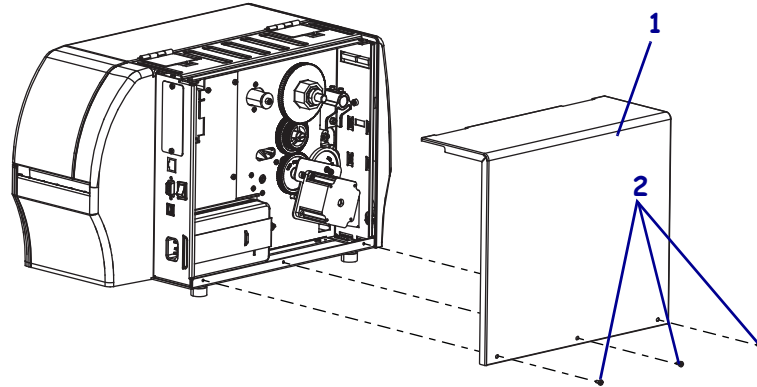
Figure 372 • Open the Media Door



1	Media door
2	Media door mounting screw

5. See [Figure 373](#). Close the media cover and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 373 • Remove the Metal Electronics Cover

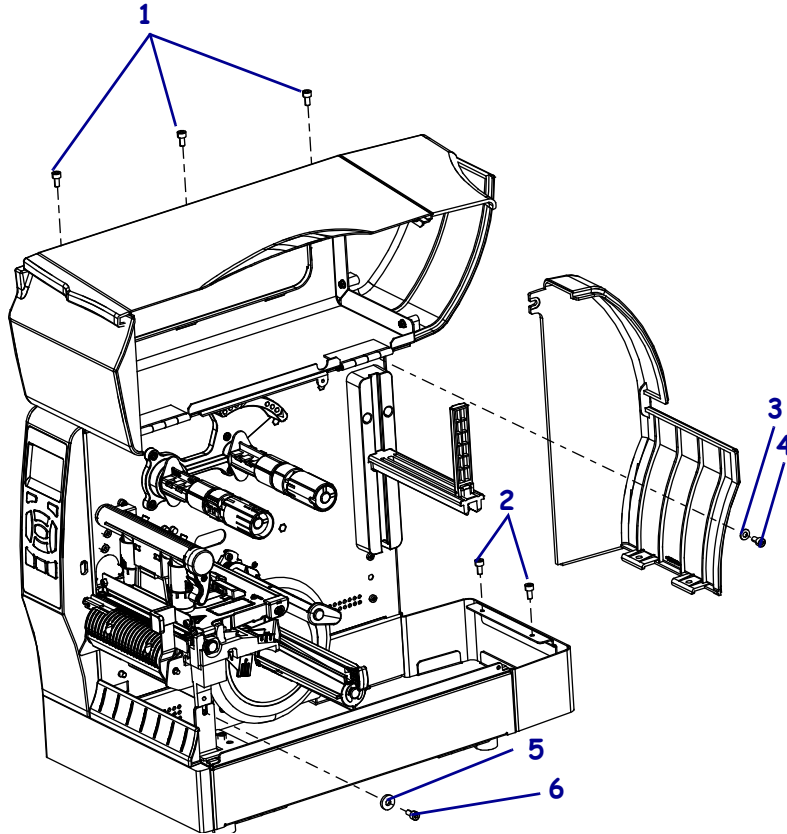


1	Electronics cover
2	Mounting screws (3)

6. Lift the electronics cover off of the printer.

7. See [Figure 374](#). Remove the three screws and mounting washer that secures the rear cover to the mainframe and base.

Figure 374 • Remove the Top Screws

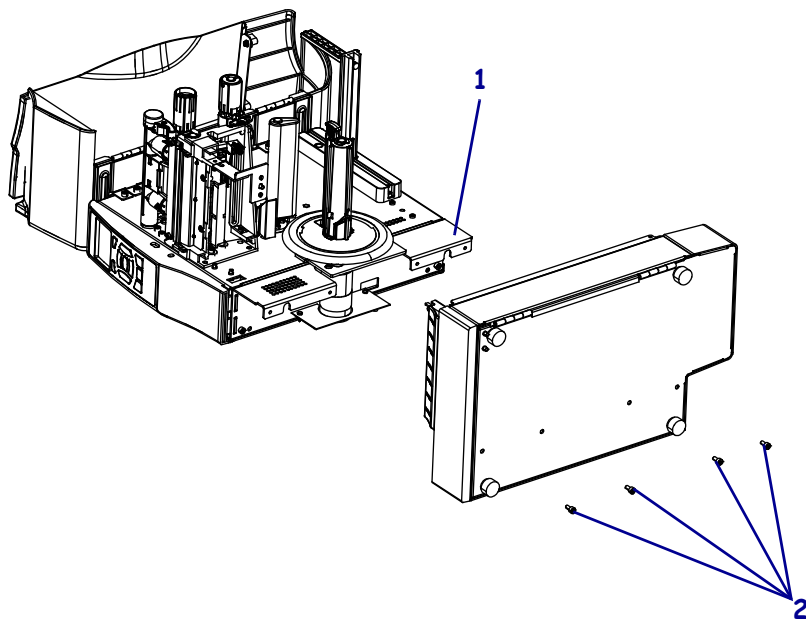


1	Mainframe mounting screws (3)
2	Rear cover base mounting screws (2)
3	Rear cover mainframe mounting washer
4	Rear cover mainframe mounting screw
5	Platen housing mounting washer
6	Platen housing mounting screw

8. Remove the screw and washer that secure the platen housing to the support bracket.

9. See [Figure 375](#). Set the printer on the electronics side, and then remove the four base mounting screws that secure the base to the mainframe support bracket.

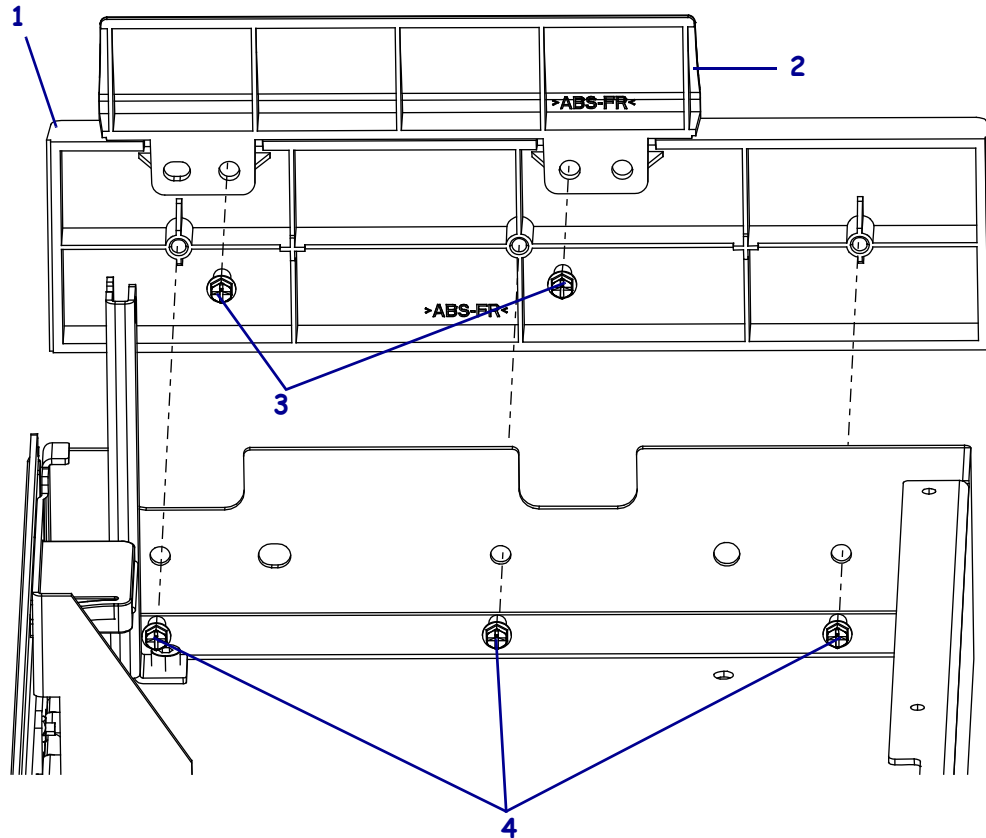
Figure 375 • Remove the Base



1	Mainframe support bracket
2	Mounting screws (4)

10. See [Figure 376](#). Set the base on its feet, and then remove the three screws that secure the lower front trim panel to the base.

Figure 376 • Remove the LTU Base Front Trim Panels



1	Lower trim panel
2	Upper trim panel
3	Upper trim panel mounting screws (2)
4	Lower trim panel mounting screws (3)

11. Lift the front trim panel out of the off the printer.
12. Remove the two screws that secure the LTU base upper trim panel to the lower trim panel, and then remove it from the lower trim panel.

Install the New Lower Trim Panel

1. See [Figure 376](#). Align the lower trim panel with the mounting holes in the lower trim panel. Install the two mounting screws that secure the upper trim panel to the lower trim panel.
2. Align the upper and lower trim panel with the LTU base, and then install the three mounting screws that secure the lower front trim panel to the base.

3. See [Figure 375 on page 486](#). Reinstall the base to the mainframe support bracket with the four screws removed earlier.
4. See [Figure 374 on page 485](#). Turn printer to the upright position, and then reinstall the three mainframe mounting screws.
5. Reinstall the platen housing mounting washer and screw.
6. Align the two rear cover mounting holes with two holes in the base, and then reinstall the two base mounting screws.
7. Align the hole in the mainframe with the slot in the rear cover, and then reinstall the mounting washer and screws
8. See [Figure 373 on page 484](#). Slide the electronics cover onto the printer.
9. Reinstall the three electronics side mounting screws.
10. See [Figure 372 on page 483](#). Open the media cover and reinstall the media side mounting screw.
11. Did you install the new upper front cover?

If...	Then...
Yes	Go to step 2 on page 490 .
No	Continue with Replace the LTU Base Upper Trim Panel .

Replace the LTU Base Upper Trim Panel



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

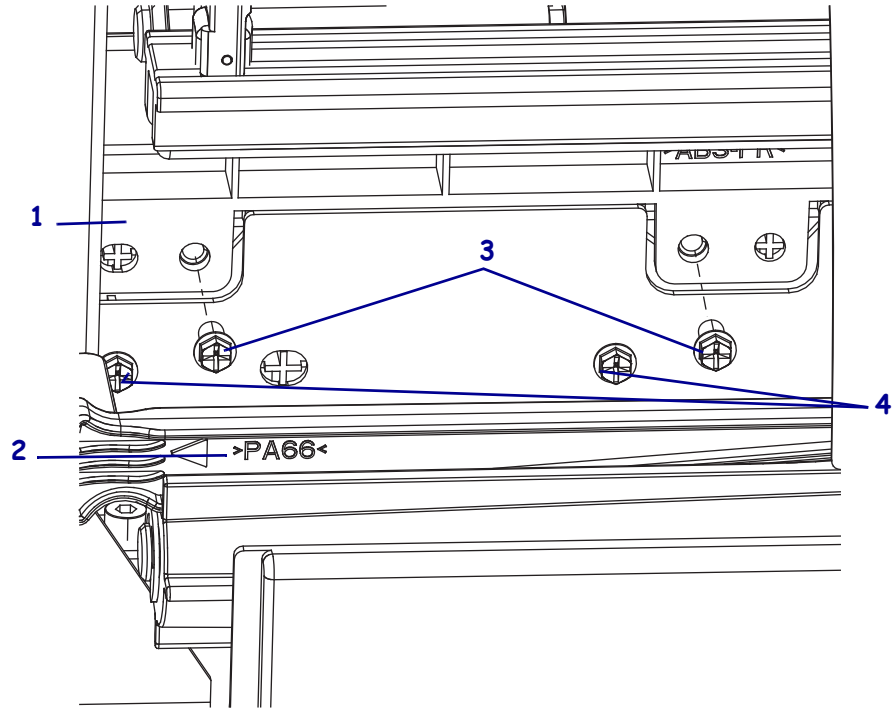
Turn off (O) the printer and disconnect the AC power cord and all data cables.

3. **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.

Open the media door and remove the media and ribbon.

4. See [Figure 377](#). Remove the two LTU base upper trim panel mounting screws.

Figure 377 • Remove the Upper Front Trim Panel



1	LTU base upper trim panel
2	LTU lower front trim panel
3	Upper front trim mounting screws (2)
4	Lower front trim mounting screws (3)

5. Lift the LTU base upper trim panel out of the printer.

Install the New Upper Trim Panel

1. **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.

2. See [Figure 376 on page 487](#). Slide the two tabs of the upper trim panel into the two slots in the lower trim panel.
3. Align the two mounting holes, and then install the two mounting screws.

Complete the Installation

1. Reconnect the AC power cord and all data cables.
2. Turn on (I) the printer.

The installation is complete.



Electronics Cover Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Electronics Cover Maintenance Kit on the following printers:

- ZT230™
- ZT210™

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 378 • Kit Contents

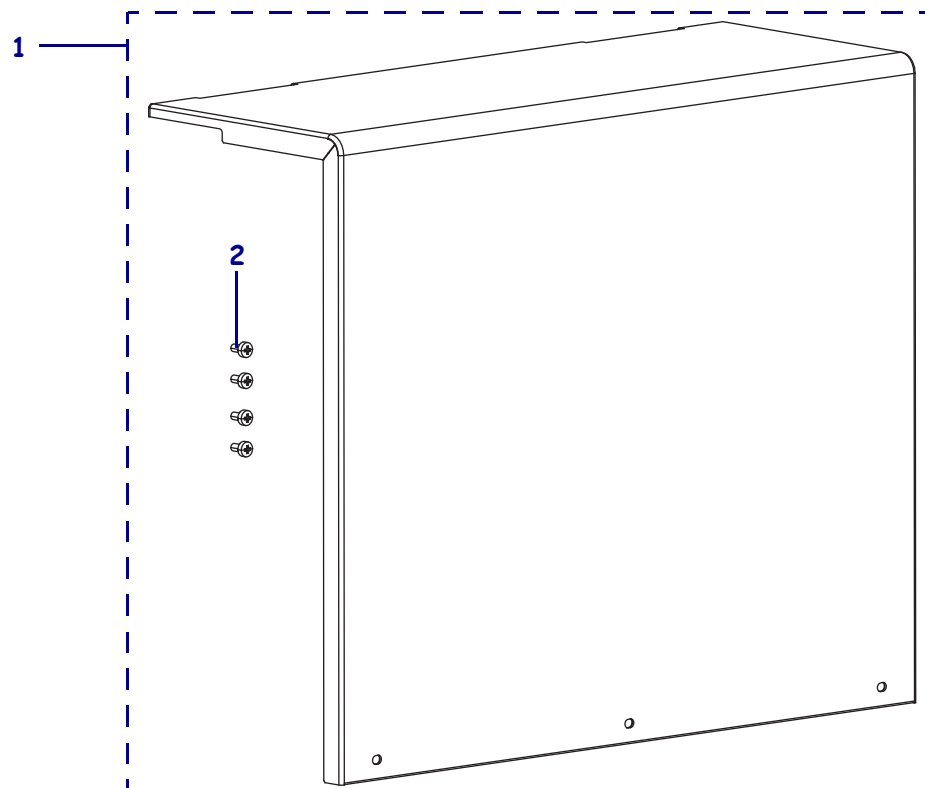


Table 56 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-034	ZT230 and ZT210 Electronics Cover
	2	4	HW43968	Screw, M3 × 0.5 × 6

Tools Required



Tools • You need these tools to complete this procedure:

- ☐ Phillips Screwdriver 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.

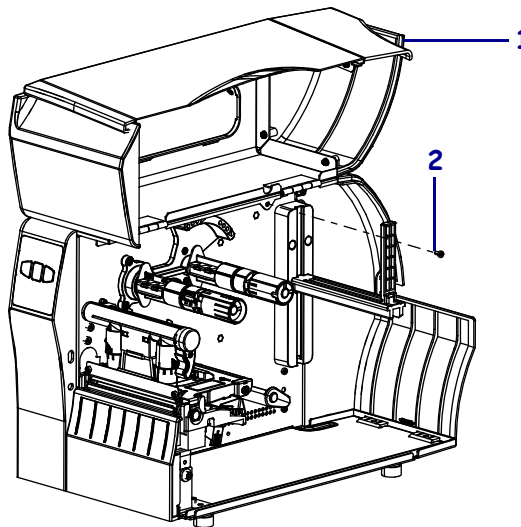


2. **Caution** • Turn off (O) the printer and disconnect it from the power source before performing the following procedure.

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

3. See [Figure 379](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

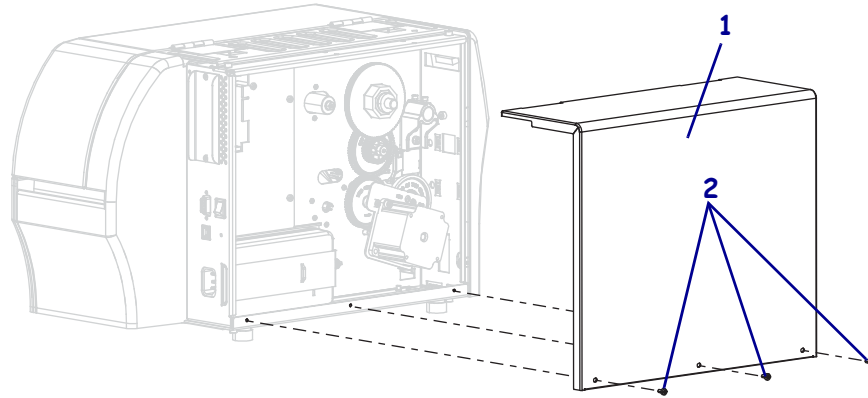
Figure 379 • Open the Media Door



1	Media door
2	Media door mounting screw

- See [Figure 380](#). Close the media cover, and then remove and discard the three screws securing the electronics cover to the electronics side of the printer.

Figure 380 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover off of the printer.

Reinstall the Electronics Cover

- See [Figure 380 on page 493](#). Slide the electronics cover onto the printer.
- Install the three electronics side mounting screws.
- See [Figure 379 on page 492](#). Open the media cover and reinstall the media side mounting screw.
- Reconnect the AC power cord and all data cables.
- Turn on (I) the printer.

The installation is complete.

Option Covers and Card Guide Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Option Covers and Option Card Guide Maintenance Kit in the following printers:

- ZT230™
- ZT220™
- ZT210™

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 381 • Kit Contents

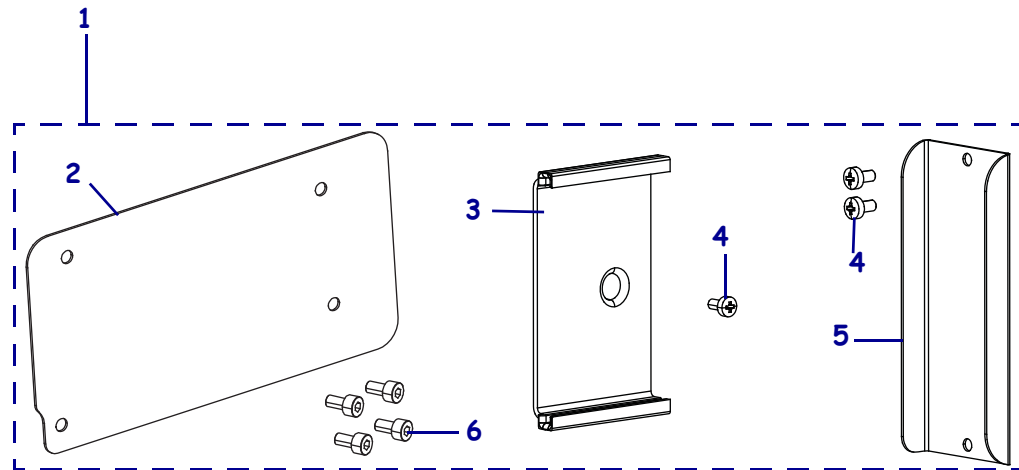


Table 57 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-041	Covers for Options
	2	1	N/A	Direct Thermal Ribbon System Cover Plate
	3	1	N/A	Option Card Guide
	4	3	HW43968	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
	5	1	N/A	Option Card Cover
	6	4	HW78805	Screw, M3 × 0.5 × 6 (sold in quantities of 25)

N/A = Not available as a separate part for purchase (listed for identification purposes only).

Remove the Option Card

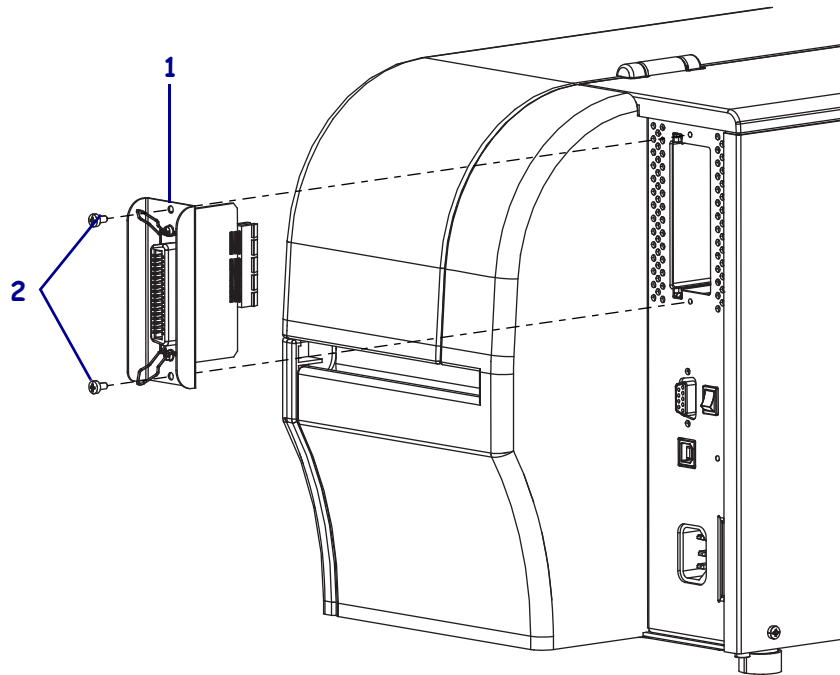


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. See [Figure 382](#). Remove the two option card mounting screws.

Figure 382 • Remove the Option Card (Parallel Port shown)



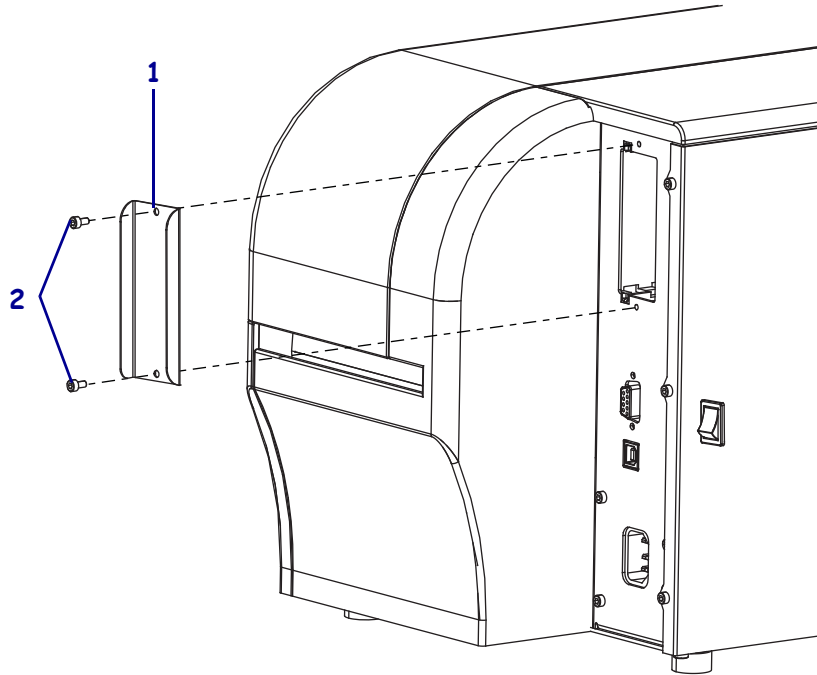
1	Option card
2	Mounting screws (2)

3. Pull the option card assembly out of the printer.
4. Continue with [Install the Option Card Cover on page 497](#).

Install the Option Card Cover

1. See [Figure 383](#). Install the blank cover by align the mounting holes, and then install the two mounting screws.

Figure 383 • Install the Blank Cover



1	Blank cover
2	Mounting screws (2)

2. Are you installing other items from this kit?

If...	Then...
Yes	What else are you going to install? <ol style="list-style-type: none"> a. Direct thermal ribbon system cover plate. Continue with <i>Replace the Direct Thermal Ribbon System Cover Plate</i> on page 507. b. Option card cover. Go to <i>Replace the Option Card Cover</i> on page 495.
No	The installation is complete.

Replace the Option Card Guide

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.

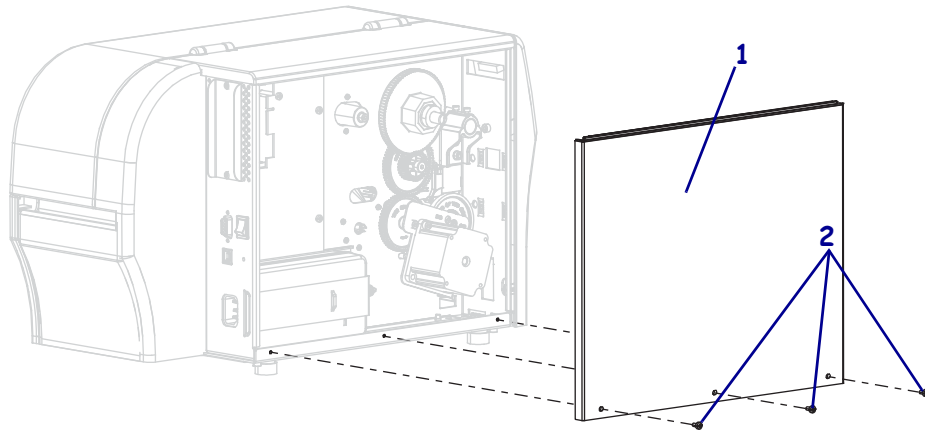
2. Which model of printer are you working on?

If you have a...	Then...
ZT220	Continue with <i>ZT220 Electronics Cover</i> .
ZT230 ZT210	Go to <i>ZT230 and ZT210 Electronics Cover</i> on page 499.

ZT220 Electronics Cover

1. See [Figure 384](#). Remove the three screws securing the electronics cover.

Figure 384 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

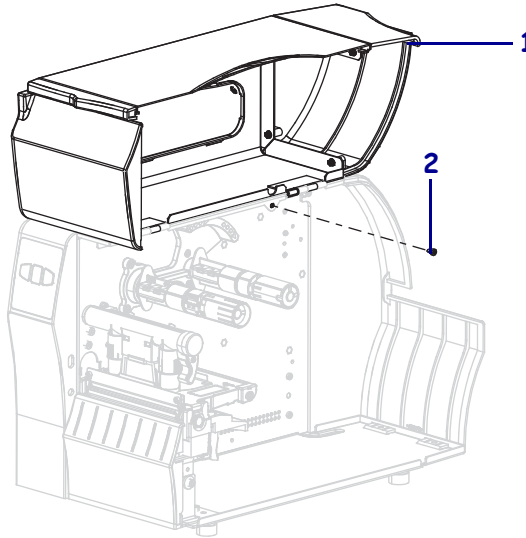
2. Lift the electronics cover out of the printer.
3. Do you have an option card installed?

If...	Then...
Yes	Go to <i>Remove the Option Card</i> on page 500.
No	Go to <i>Remove the Option Cover Plate</i> on page 501.

ZT230 and ZT210 Electronics Cover

1. See [Figure 385](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

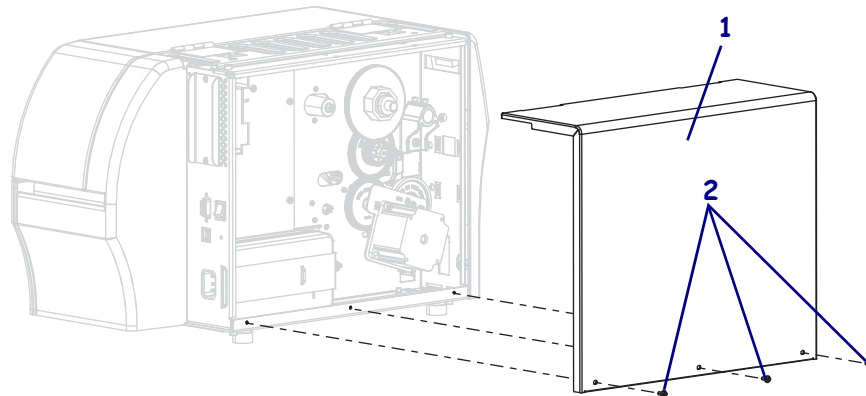
Figure 385 • Open the Media Door



1	Media door
2	Media side mounting screw

2. See [Figure 386](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 386 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

3. Lift the electronics cover off of the printer.

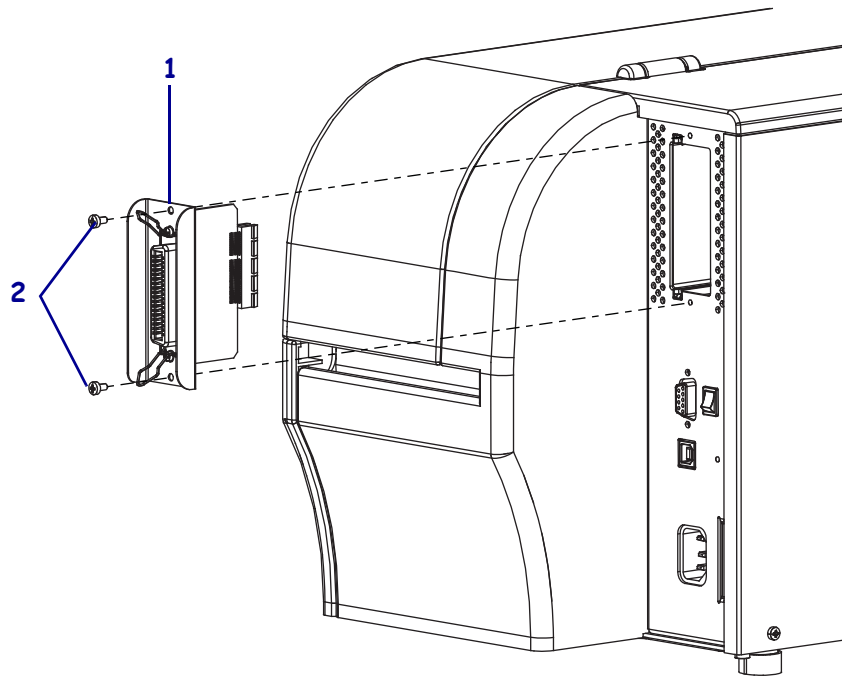
4. Do you have an option card installed?

If...	Then...
Yes	Continue with <i>Remove the Option Card</i> .
No	Go to <i>Remove the Option Cover Plate</i> on page 501.

Remove the Option Card

1. See [Figure 387](#). Remove the two option card mounting screws.

Figure 387 • Remove the Option Card



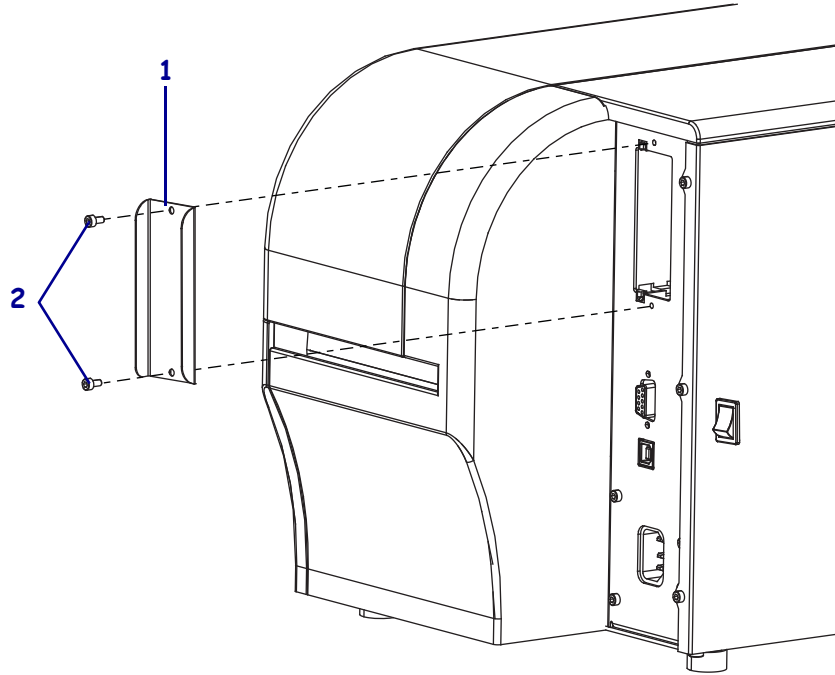
1	Option card
2	Mounting screws (2)

2. Go to [Remove the Old Option Card Guide](#) on page 502.

Remove the Option Cover Plate

1. See [Figure 388](#). Remove the blank cover by removing the two mounting screws.

Figure 388 • Remove the Blank Cover



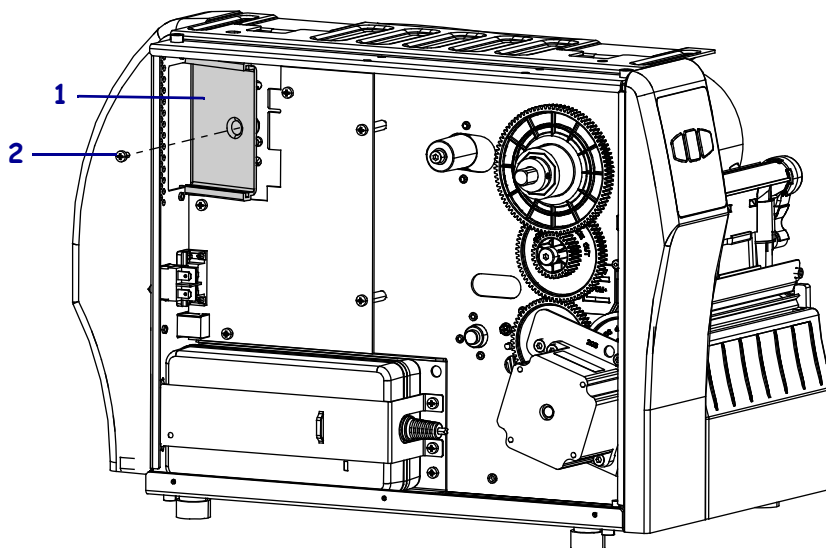
1	Blank cover
2	Mounting screws (2)

2. Continue with [Remove the Old Option Card Guide](#).

Remove the Old Option Card Guide

1. See [Figure 389](#). Remove the option card guide mounting screw.

Figure 389 • Remove Old Option Card Guide



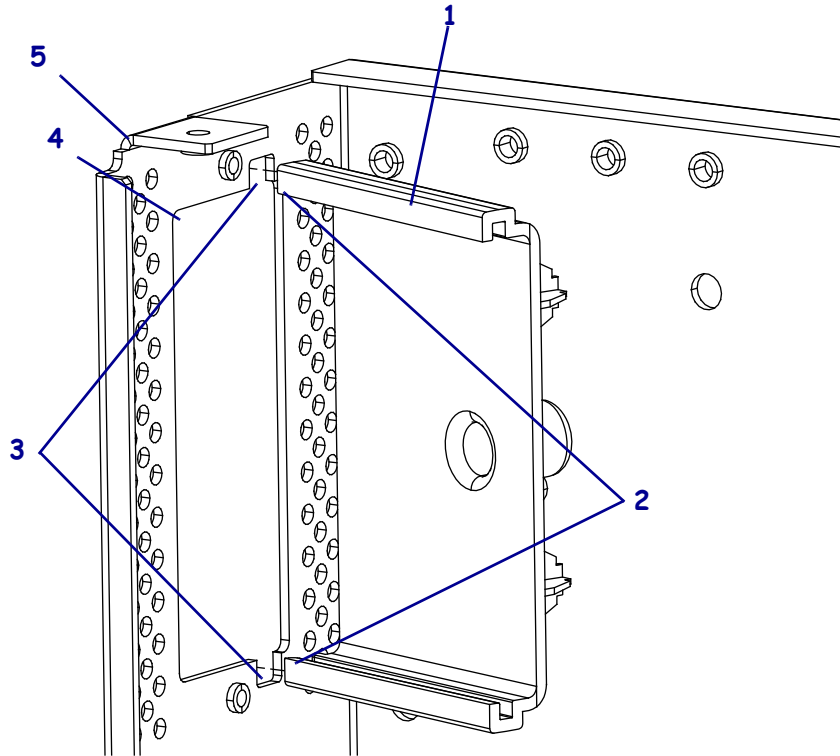
1	Option card guide
2	Mounting screw

2. Rotate the forward most side of the option card guide.

Install the New Option Card Guide

1. See [Figure 390](#). Insert the guides into the two slots in the option card hole on rear of the printer.

Figure 390 • Install the Option Card Guide



1	Option card guide
2	Guides (2)
3	Slots (2)
4	Option card hole
5	Rear of printer

2. Align the mounting hole in the option card guide with the mounting hole in the printer.
3. Install the mounting screw.

Reinstall the Electronics Cover

1. Which model of printer are you working on?

If you have a...	Then...
ZT220	<ol style="list-style-type: none">a. See Figure 393 on page 508. Insert the electronics cover into the printer.b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none">a. See Figure 395 on page 509. Slide the electronics cover onto the printer.b. Reinstall the three electronics side mounting screws.c. See Figure 394 on page 509. Open the media cover and reinstall the media side mounting screw.

Install the Option Card

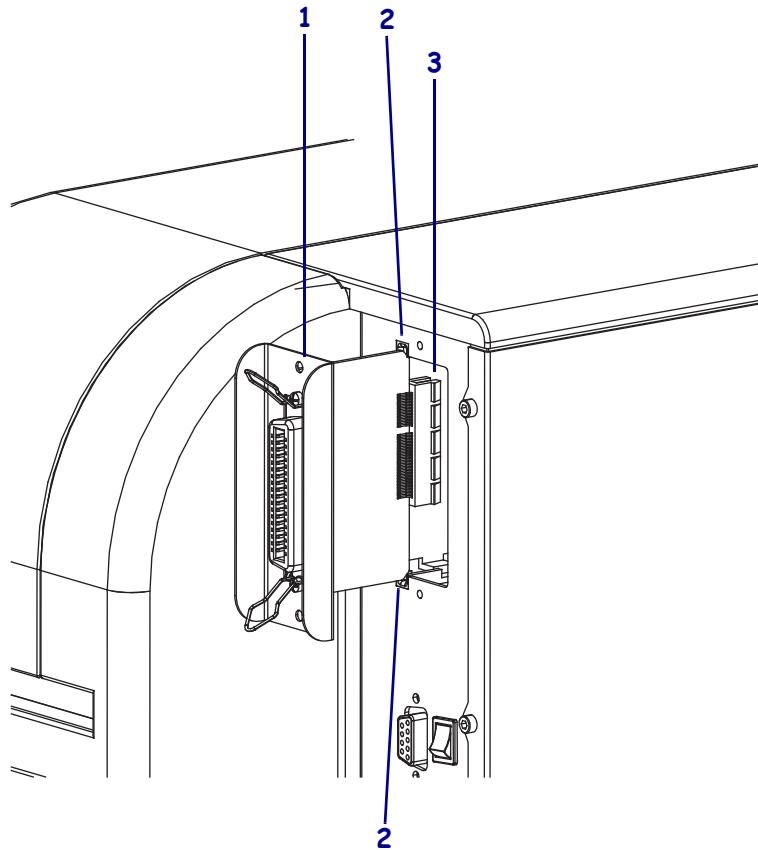


1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. See [Figure 391](#). Align the parallel port option board with the main logic board guides.

Figure 391 • Install the New Parallel Port Option Board

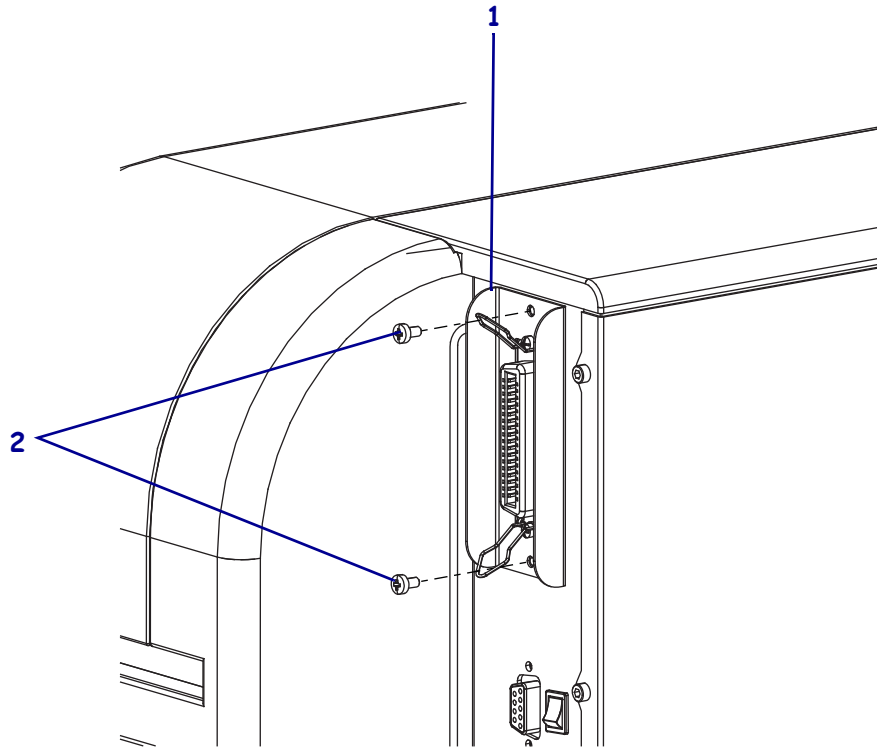


1	Parallel port option board
2	Main logic board guide slots(2)
3	Parallel option board to main logic board connector

3. Slowly slide the parallel port option board into the printer until it stops.
4. Ensure that the option board is aligned with the main logic board connector, and then push it in on the top and bottom until it is against the printer.

5. See [Figure 392](#). Install the two mounting screws.

Figure 392 • Install the Mounting Screws



1	Parallel port option board
2	Mounting screws (2)

6. Reconnect the AC power cord and all data cables.
7. Turn on (I) the printer.
8. Are you installing other items from this kit?

If...	Then...
Yes	What else are you going to install? <ol style="list-style-type: none"> a. Direct thermal ribbon system cover plate. Continue with Replace the Direct Thermal Ribbon System Cover Plate on page 507. b. Option card cover. Go to Replace the Option Card Cover on page 495.
No	The installation is complete.

Replace the Direct Thermal Ribbon System Cover Plate

Are there existing ribbon spindles installed on the printer?

If...	Then...
Yes	Continue with <i>Remove the Electronics Cover</i> .
No	Go to <i>Remove the Direct Thermal Ribbon System Cover Plate on page 512</i> .

Remove the Electronics Cover



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

Connect yourself to an antistatic device.

ZT220 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

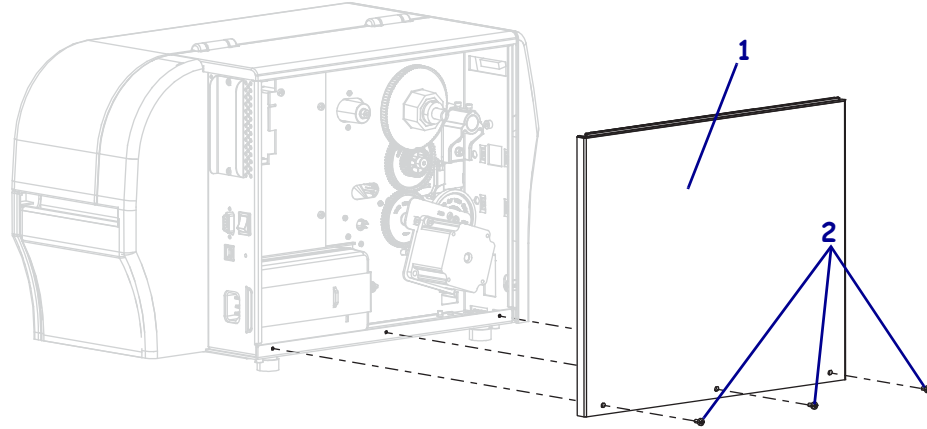
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

3. See [Figure 393](#). Remove the three screws securing the electronics cover.

Figure 393 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

4. Lift the electronics cover off of the printer.

ZT230 and ZT210 Electronics Cover



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

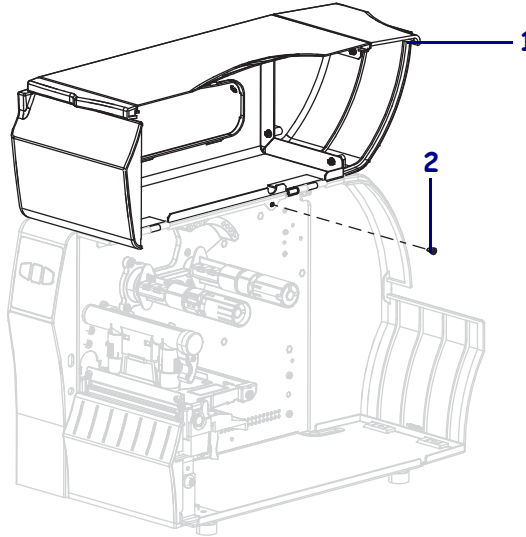
Turn off (O) the printer and disconnect the AC power cord and all data cables.

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.

Open the media door and remove the media and ribbon.

3. See [Figure 394](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

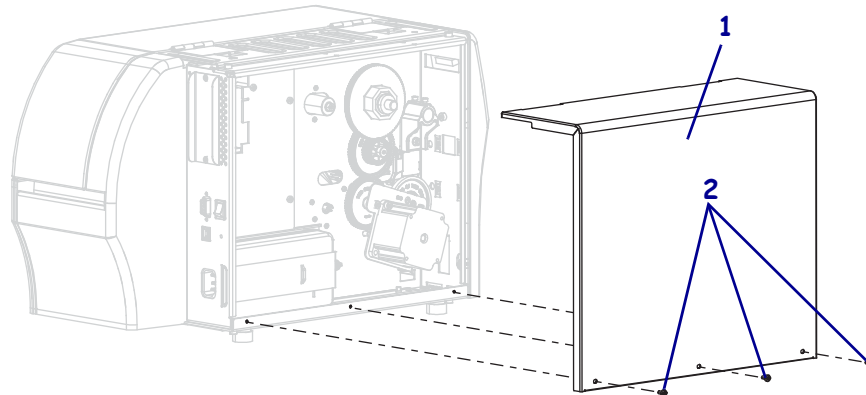
Figure 394 • Open the Media Door



1	Media door
2	Media side mounting screw

4. See [Figure 395](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 395 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

5. Lift the electronics cover off of the printer.

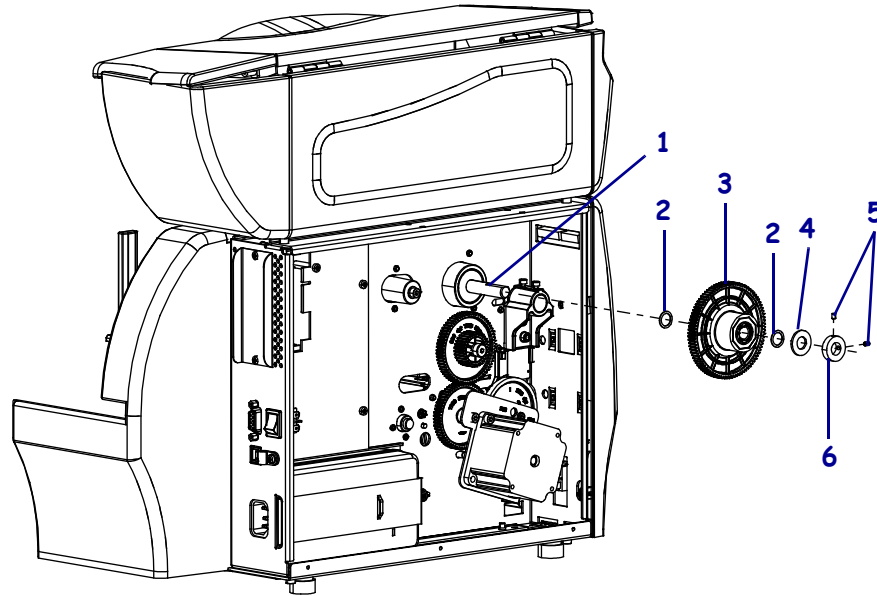
6. Is there an existing ribbon system on this printer?

If...	Then...
Yes	Continue with <i>Remove the Ribbon Spindle Assembly</i> .
No	Go to <i>Remove the Direct Thermal Ribbon System Cover Plate</i> on page 512.

Remove the Ribbon Spindle Assembly

1. See [Figure 396](#). Remove the two set screws that secure the collar to the ribbon take-up shaft.

Figure 396 • Remove the Ribbon Spindle Assembly

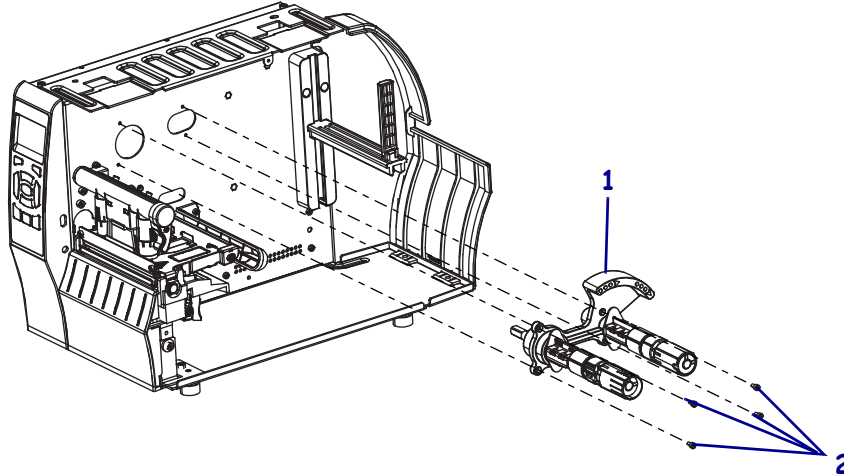


1	Ribbon take-up shaft
2	Thin washer
3	Ribbon take-up clutch
4	Nylon washer
5	Set screws
6	Collar

2. Slide the collar, nylon washer, thin washer, clutch, and thin washer off the ribbon take-up shaft.

3. See [Figure 397](#). From the media side, remove the four ribbon spindle assembly mounting screws.

Figure 397 • Remove the Ribbon



1	Ribbon spindle assembly
2	Mounting screws (4)

4. Slide the ribbon spindle assembly out of the printer.
5. Continue with [Reinstall the Electronics Cover](#).

Reinstall the Electronics Cover

1. Which model of printer are you working on?

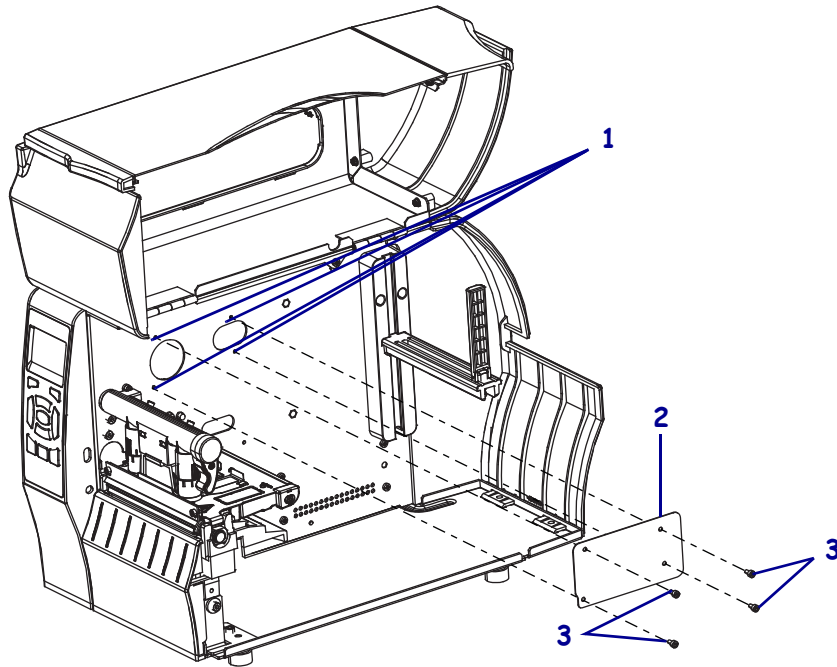
If you have a...	Then...
ZT220	<ol style="list-style-type: none"> a. See Figure 393 on page 508. Insert the electronics cover into the printer. b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none"> a. See Figure 395 on page 509. Slide the electronics cover onto the printer. b. Reinstall the three electronics side mounting screws. c. See Figure 394 on page 509. Open the media cover and reinstall the media side mounting screw.

2. Go to [Install the Direct Thermal Ribbon System Cover Plate on page 513](#).

Remove the Direct Thermal Ribbon System Cover Plate

1. Remove the four mounting screws.

Figure 398 • Remove the Mounting Screws



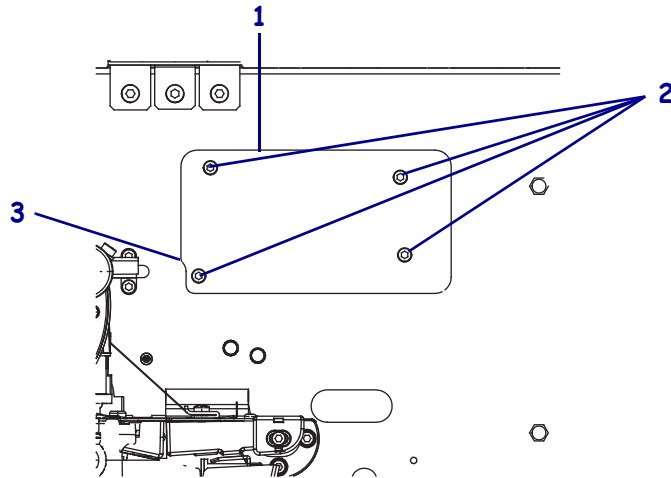
1	Mounting holes (4)
2	Direct thermal ribbon system cover plate
3	Mounting screws (4)

2. Continue with [Install the Direct Thermal Ribbon System Cover Plate](#) on page 513.

Install the Direct Thermal Ribbon System Cover Plate

1. See [Figure 399](#). Align the direct thermal ribbon system cover plate, the notch facing down and to the front of the printer, with the four mounting holes in the printer.
2. Install the four mounting screws.

Figure 399 • Install the Direct Thermal Ribbon System Cover Plate



1	Direct thermal ribbon system cover plate
2	Mounting screws (4)
3	Notch

-
3. **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.

4. Reinstall the AC power cord and all data cables.
5. Turn on (I) the printer.

The installation is complete.

Electronics Cover Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Plastic Electronics Cover Maintenance Kit for the ZT220™ 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 400 • Kit Contents

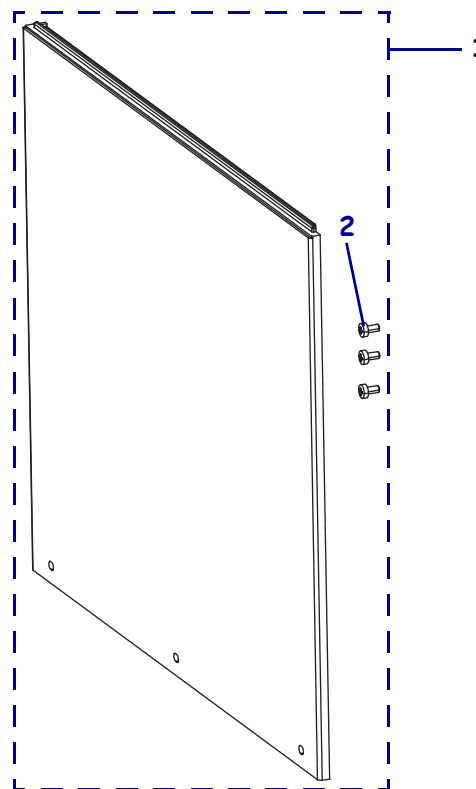


Table 58 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037990-005	ZT220 Electronics Cover
	2	3	HW43968	Screw, M3 × 0.5 × 6

Tools Required

Tools • You need these tools to complete this procedure:

- Phillips Screwdriver Set
- Antistatic Wriststrap and Pad

Remove the Electronics Cover



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

Connect yourself to an antistatic device.



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

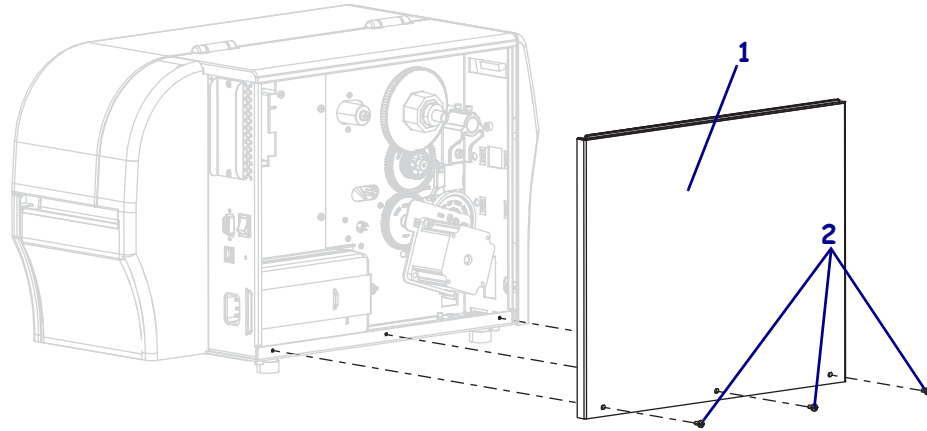
Turn off (O) the printer and disconnect the AC power cord and all data cables.

4. **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.

Open the media door and remove the media and ribbon.

5. See [Figure 401](#). Remove the three screws securing the electronics cover.

Figure 401 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

6. Lift the electronics cover off of the printer.

Install the Electronics Cover

1. See [Figure 401 on page 516](#). Insert the new electronics cover into the printer.
2. Reinstall the three mounting screws.
3. Reconnect the AC power cord and all data cables.
4. Turn on (I) the printer.

The installation is complete.

Top Plate Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Top Plate Maintenance Kit in the following printers:

- ZT230™
- ZT210™

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 402 • Kit Contents

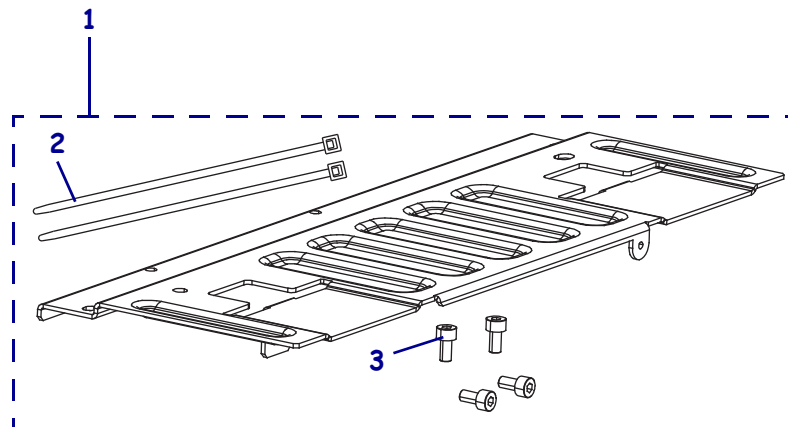


Table 59 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-042	ZT230 and ZT210 Top Plate Maintenance Kit
	2	2	HWQ06020	Cable tie, 0.09 × 3.62 (sold in quantities of 20)
	3	4	HW23827	Screw, M4 × 0.7 × 6 (sold in quantities of 25)

Tools Required

Tools • You need these tools to complete this procedure:

- | | |
|--|-----------------------------------|
| <input type="checkbox"/> Phillips Screwdriver Set | Metric hex key (Allen wrench) Set |
| <input type="checkbox"/> Antistatic Wriststrap and Mat | Safety Glasses |

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. **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.



Note • Retain all parts removed during disassembly, unless otherwise directed.



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

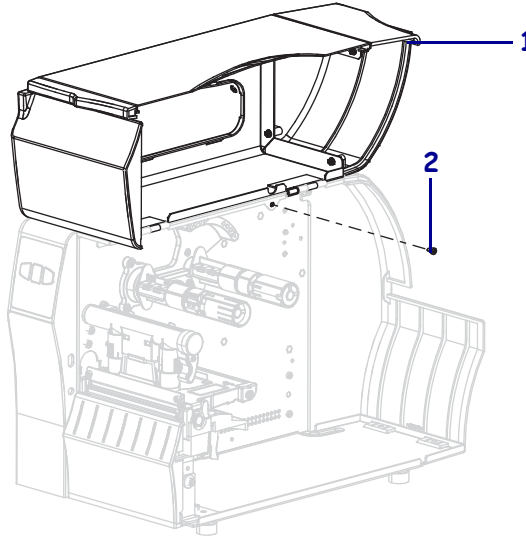
Turn off (O) the printer and disconnect the AC power cord and all data cables.

-
4. **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.
-

Open the media door and remove the media and ribbon.

5. See [Figure 403](#). Open the media cover and remove the screw securing the electronics cover to the media side of the printer.

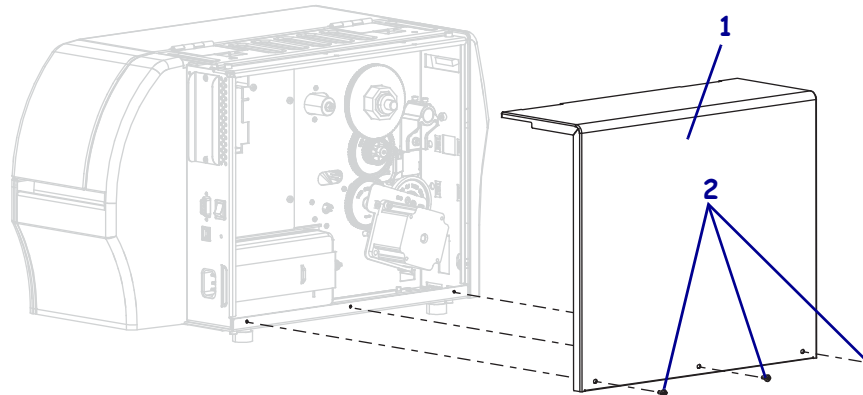
Figure 403 • Open the Media Door



1	Media door
2	Media side mounting screw

6. See [Figure 404](#). Close the media cover, and then remove the three screws securing the electronics cover to the electronics side of the printer.

Figure 404 • Remove the Electronics Cover



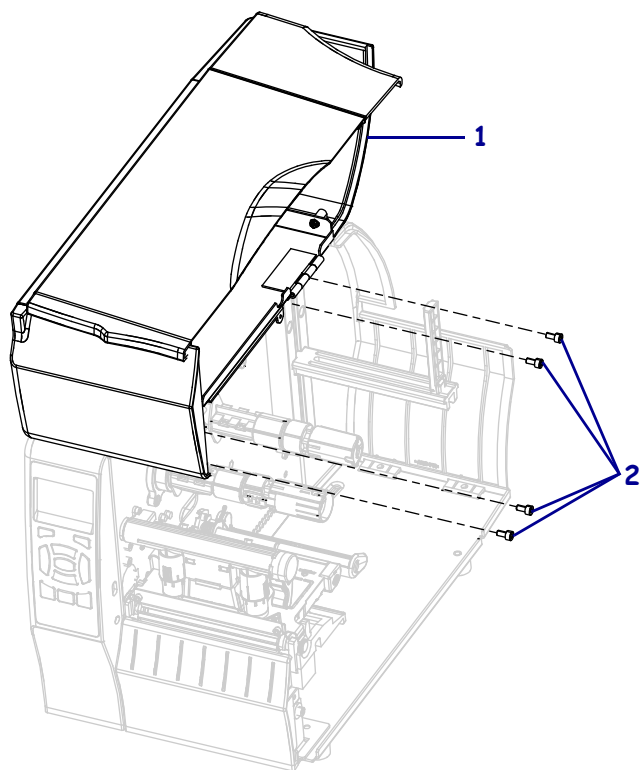
1	Electronics cover
2	Mounting screws (3)

7. Lift the electronics cover off of the printer.
8. Continue with [Remove the ZT230 and ZT210 Media Door](#).

Remove the ZT230 and ZT210 Media Door

1. See [Figure 405](#). Remove the four hinge mounting screws.

Figure 405 • Remove the Mounting Screws

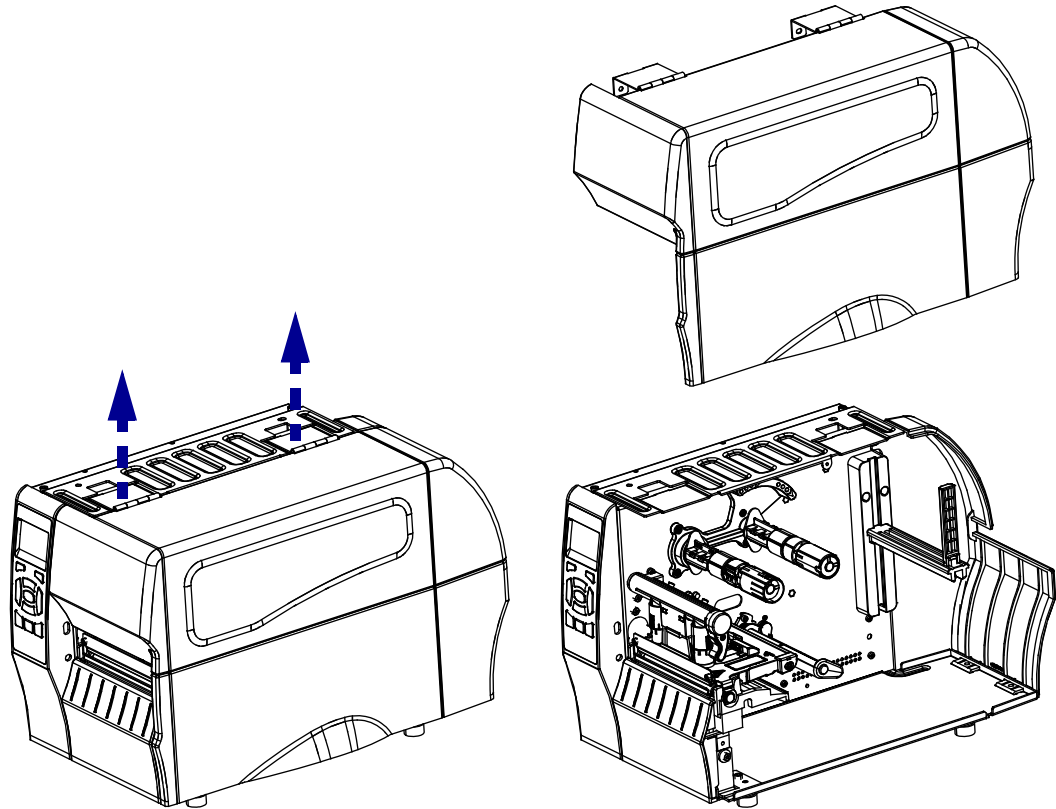


1	Metal media cover
2	Mounting screws (4)

Remove the ZT230 and ZT210 Media Door

2. See [Figure 406](#). Close the media door, and then lift the media door off the printer, ensuring to lift the hinges out of the top plate.

Figure 406 • Remove the Media Cover



Remove the Old Top Plate



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

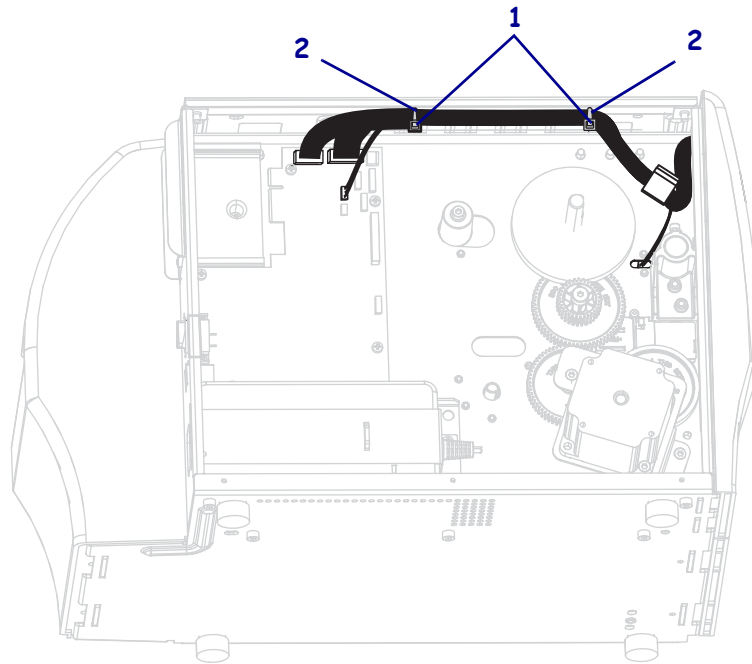
Connect yourself to an antistatic device.



2. **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.

See [Figure 407](#). Cut and discard the two cables ties securing the cable bundle to the top plate,

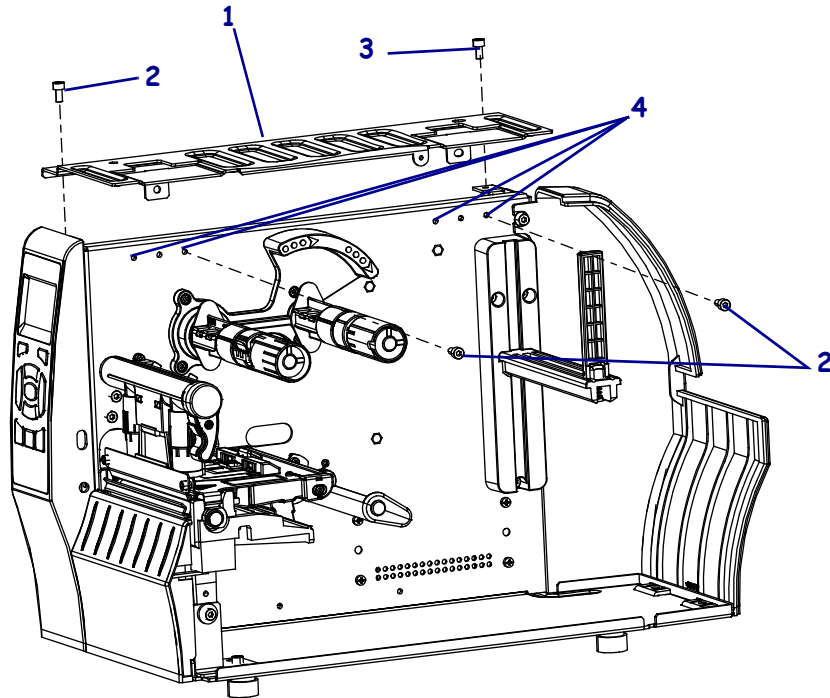
Figure 407 • Remove Cable Ties



1	Cable ties (2)
2	Top plate mounting tabs (2)

3. See [Figure 408](#). Remove and discard the four mounting screws.
4. Lift the top plate out of the printer and discard it.

Figure 408 • Remove the Top Plate



1	Top plate
2	Forward most mounting screw
3	Mounting screws (3)
4	Mounting holes (4)
5	Top plate mounting tabs

Install the New Top Plate

1. See [Figure 408](#). Align the mounting holes of the new top plate with the mounting holes in the printer.
2. Install the four new mounting screws.



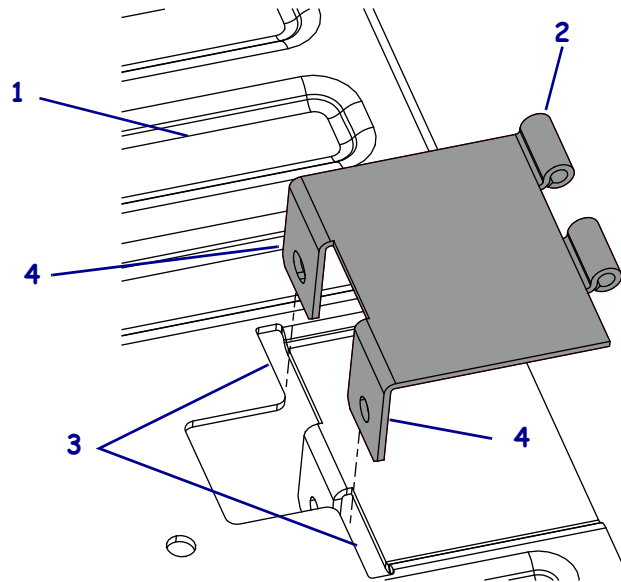
Note • Insert the forward most screw first, and then install the other three.

3. See [Figure 407 on page 522](#). Slide the two cable ties through the top plate mounting tabs.
4. Bundle all the cables, and then wrap one of cable ties around the cables and tighten the cable tie.
5. Repeat [step 4](#) for the other cable tie.

Reinstall the Media Door

1. See [Figure 409](#). Align the mounting tabs of the hinges with the mounting slots in the top plate.

Figure 409 • Align the Hinges



1	Top plate
2	Door hinge
3	Top plate mounting slots
4	Door hinge mounting tabs

2. Slide the hinge tabs into the top plate slots, and then open the media door.
3. See [Figure 405 on page 520](#). While holding the media door down, reinstall the four mounting screws.

Reinstall the Electronics Cover

1. See [Figure 404 on page 519](#). Slide the electronics cover onto the printer.
2. Reinstall the three electronics side mounting screws.
3. See [Figure 403 on page 519](#). Open the media cover and reinstall the media side mounting screw.
4. Reconnect the AC power cord and all data cables.
5. Turn on (I) the printer.

The installation is complete.

Assorted Hardware Kit

Installation Instructions

This kit includes an assortment of parts for the following printers:

- ZT230™
- ZT220™
- ZT210™

Parts List

Figure 410 • Kit Contents

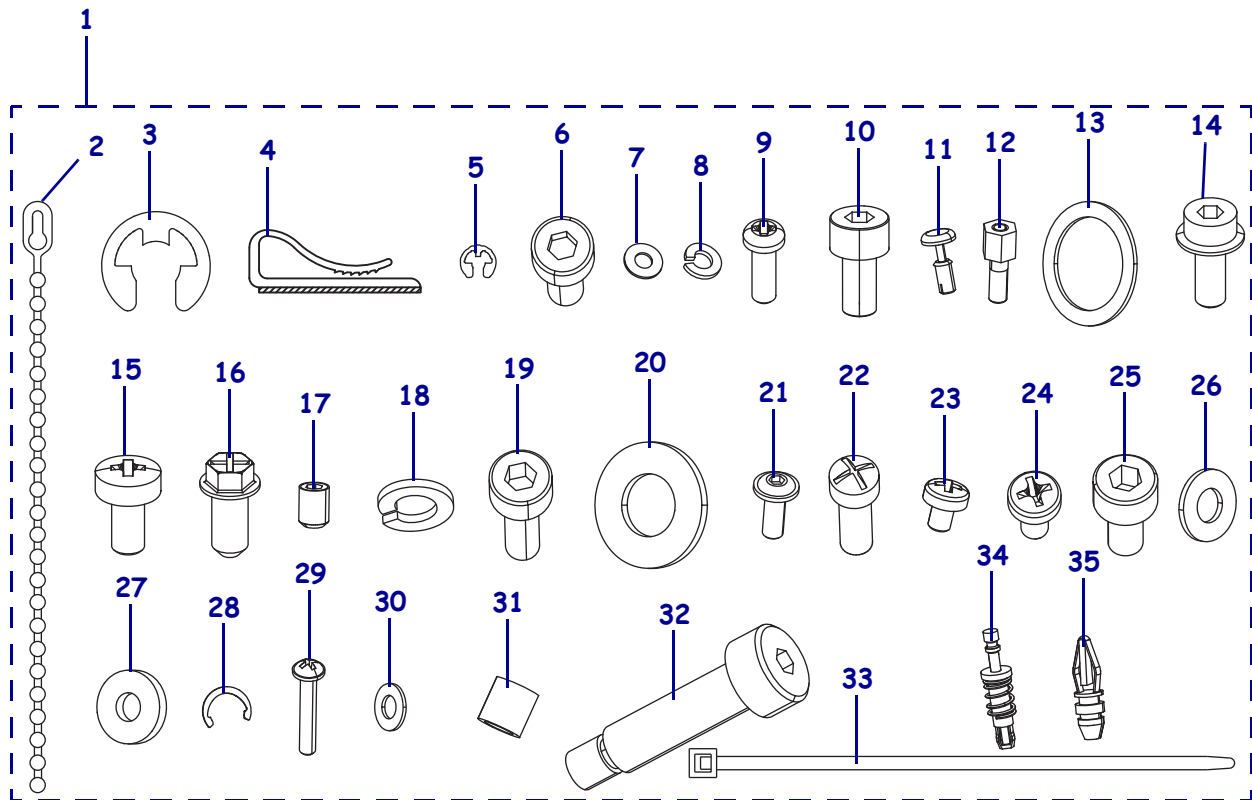


Table 60 • Parts List

✓	Item	Qty	Part Number	Description
	1	1	P1037974-044	ZT200 series Assorted Hardware Kit
	2	10	N/A	Beaded Cable Tie, 4.25
	3	10	HW06313	E-ring External, 0.375 (sold in quantities of 25)
	4	10	HW07808	Cable Clamp (sold in quantities of 25)
	5	10	HW10094	E-ring, 3 mm (sold in quantities of 25)
	6	10	HW10432	Screw, M4 × 0.7 × 12 (sold in quantities of 25)
	7	10	HW10470	Flat Washer, M3 (sold in quantities of 50)
	8	10	HW10471	Split Washer, M3 (sold in quantities of 50)
	9	10	N/A	Thread Forming Screw, M2.5 × 8
	10	20	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)
	11	10	N/A	Push Rivet
	12	10	HW32406	Standoff, 4-40 Hex (sold in quantities of 25)
	13	10	HW33808	Flat Washer, 0.50 × 0.377 × 0.02 (sold in quantities of 25)
	14	10	HW43894	Screw, M4 × 0.7 × 10 (sold in quantities of 25)
	15	10	HW43968	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
	16	20	HW44114	Screw, M4.2 × 8 (sold in quantities of 50)
	17	10	HW44147	Set screw, M3 × 0.5 × 4 (sold in quantities of 25)
	18	10	HW45945	Lock Washer, #4 (sold in quantities of 100)
	19	10	N/A	Screw, M3 × 0.5 × 10
	20	10	N/A	Flat Washer, 0.375 × 0.75 × 0.062
	21	10	HW77231	Screw, M3 × 8 (sold in quantities of 25)
	22	10	HW78802	Screw, 4-40 × 0.31 (sold in quantities of 25)
	23	10	HW78803	Screw, M3 × 0.5 × 4 (sold in quantities of 50)
	24	10	HW78804	Screw, M3 × 0.5 × 6 (sold in quantities of 50)
	25	20	HW78805	Screw, M3 × 0.5 × 6 (sold in quantities of 50)
	26	10	HW78806	Flat Washer, M4 (sold in quantities of 25)
	27	10	N/A	Flat Washer, 0.5 × 0.195 × 0.09
	28	10	HW78820	Crescent Ring, 0.375 Diameter (sold in quantities of 50)
	29	10	N/A	Thread Forming Screw, M3 × 18
	30	10	HW79041	Flat Washer, 0.25 × 0.125 × 0.023 (sold in quantities of 25)
	31	10	N/A	Antistatic Brush Standoff
	32	10	N/A	Shoulder Screw, M5 × 0.8 × 20
	33	10	HWQ06020	Cable Tie, 0.09 × 3.62 (sold in quantities of 20)
	34	10	N/A	Heat Sink Standoff with Spring
	35	10	N/A	Plastic Snap-in Standoff

N/A = Not available as a separate part (listed for identification purposes only).

ZT200™ Repacking Kit



Important • Before repacking, call 1.847.913.2259 for a Return Material Authorization (RMA) number.

The following instructions are for the ZT200 series printers. Repack the complete unit as shown.

The repacking kit includes all the material needed to repack the printer to transport it safely. Before packing the printer, remove the media and ribbon, and make sure that the printhead is closed.

Parts List

Figure 411 • Kit Contents

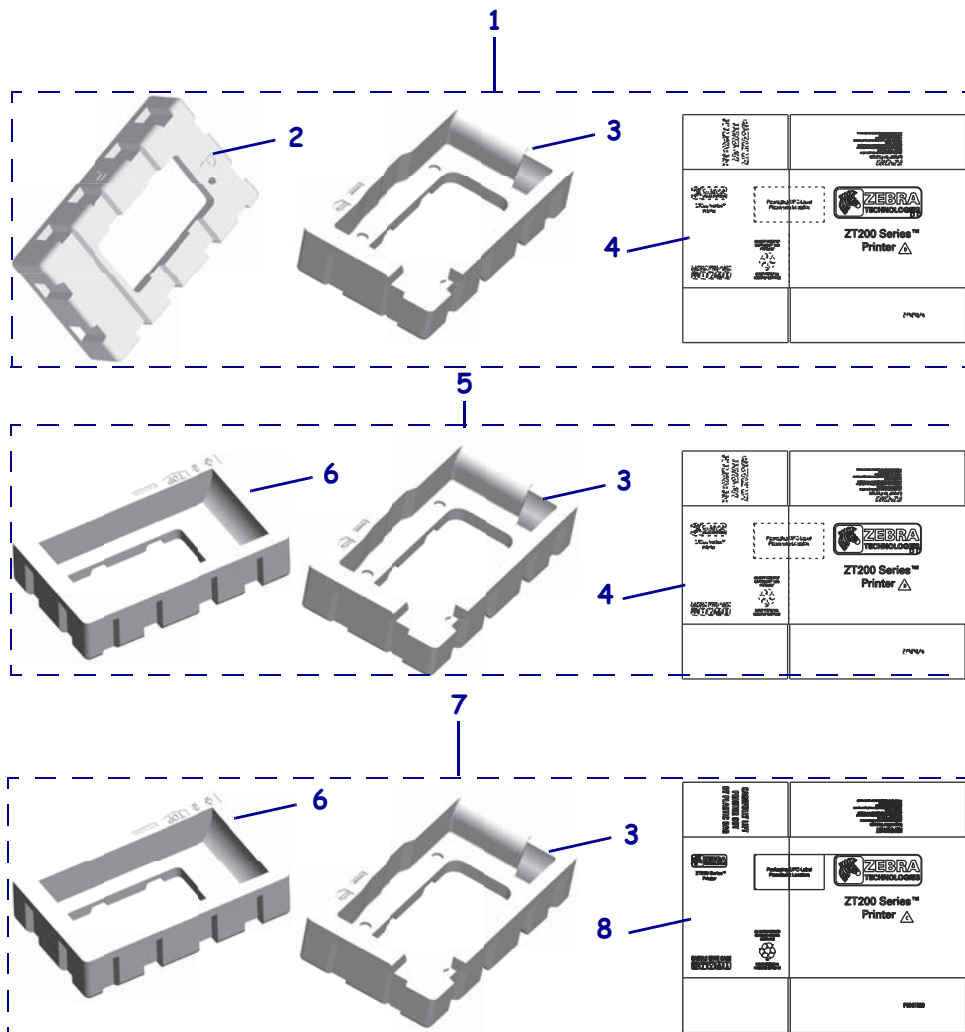


Table 61 • Available Kits

✓	Item	Qty	Part Number	Description
	1	1	P1037990-018	ZT220 Packing Kit (one packing kit)
		1	P1037990-019	ZT220 Packing Kit (eight packing kits)
	2	1	N/A	ZT220 Top Support
	3	1	N/A	ZT200 Bottom Support
	4	1	N/A	ZT200 Non-Liner Take-Up Box
	5	1	P1037974-045	ZT230 and ZT210 Packing Kit (one packing kit)
	6	1	N/A	ZT230 and ZT210 Top Support
	7	1	P1037974-046	ZT230 and ZT210 Packing Kit (eight packing kits)
		1	P1037974-058	ZT230 Liner Take-up Packing kit (one packing kit)
	8	1	N/A	ZT230 Liner Take-Up Box

Tools Required



Tools • You need these tools to complete this procedure:

- Packing Tape Dispenser

Packing Instructions

1. See [Figure 412](#). Install the proper top support for your printer.

Figure 412 • Install the Top Support



2. Turn the printer over with the top support installed.

3. See [Figure 413](#). Slide the plastic bag as far as it will go over the printer.

Figure 413 • Slide the Plastic Bag and Install the Bottom Support



4. Install the bottom support.
5. See [Figure 414](#). Turn the printer over, and then remove the top support.

Figure 414 • Remove the Top Support and Close the Bag



6. Close the bag and fold it over the top of the printer, and then reinstall the top support.

7. See [Figure 415](#). Pull the bottom flaps out, and then slide the box over the printer and supports.

Figure 415 • Slide the Box Over with the Printer



8. Fold the top flaps over, and then tape the top closed.
9. See [Figure 416](#). Turn the box over with the printer inside, and then fold the flaps in to close the bottom of the box.

Figure 416 • Turn the Box Over



10. Tape the flaps closed.
11. Turn the box upright.

The installation is complete.

Parts and Assembly Drawings

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Print System

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Figure A • Print System Overview

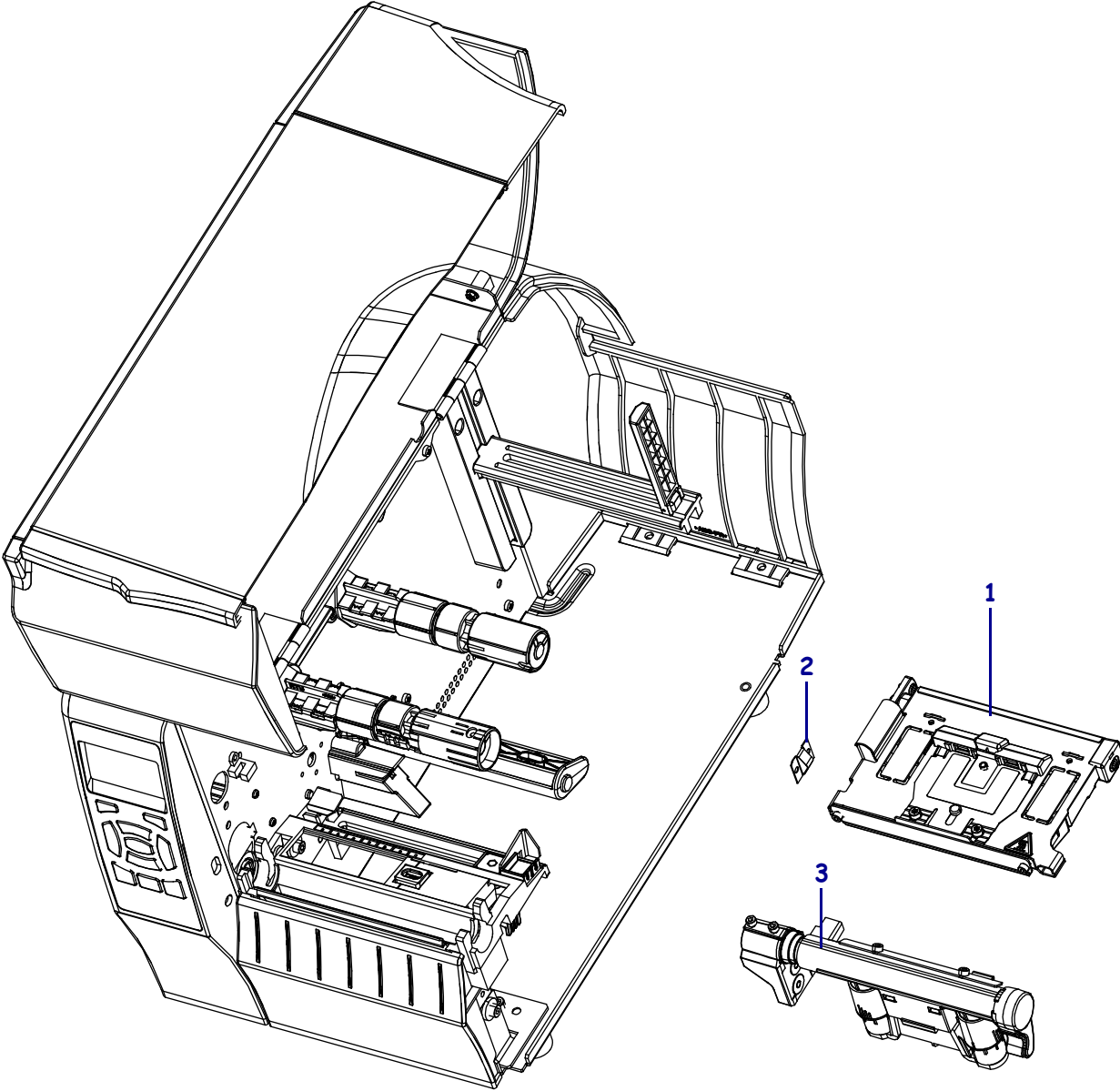


Table A • Print System Overview

Item	Part Number	Description
1	P1037974-013	ZT200 series Thermal Transfer Print Mechanism Maintenance Kit
	P1037974-056	ZT200 series Direct Thermal Print Mechanism Maintenance Kit
2	P1047974-015	ZT200 series Ground Contact Maintenance Kit
3	P1037974-014	ZT200 series Toggle Bar Maintenance Kit

Figure B • Print System

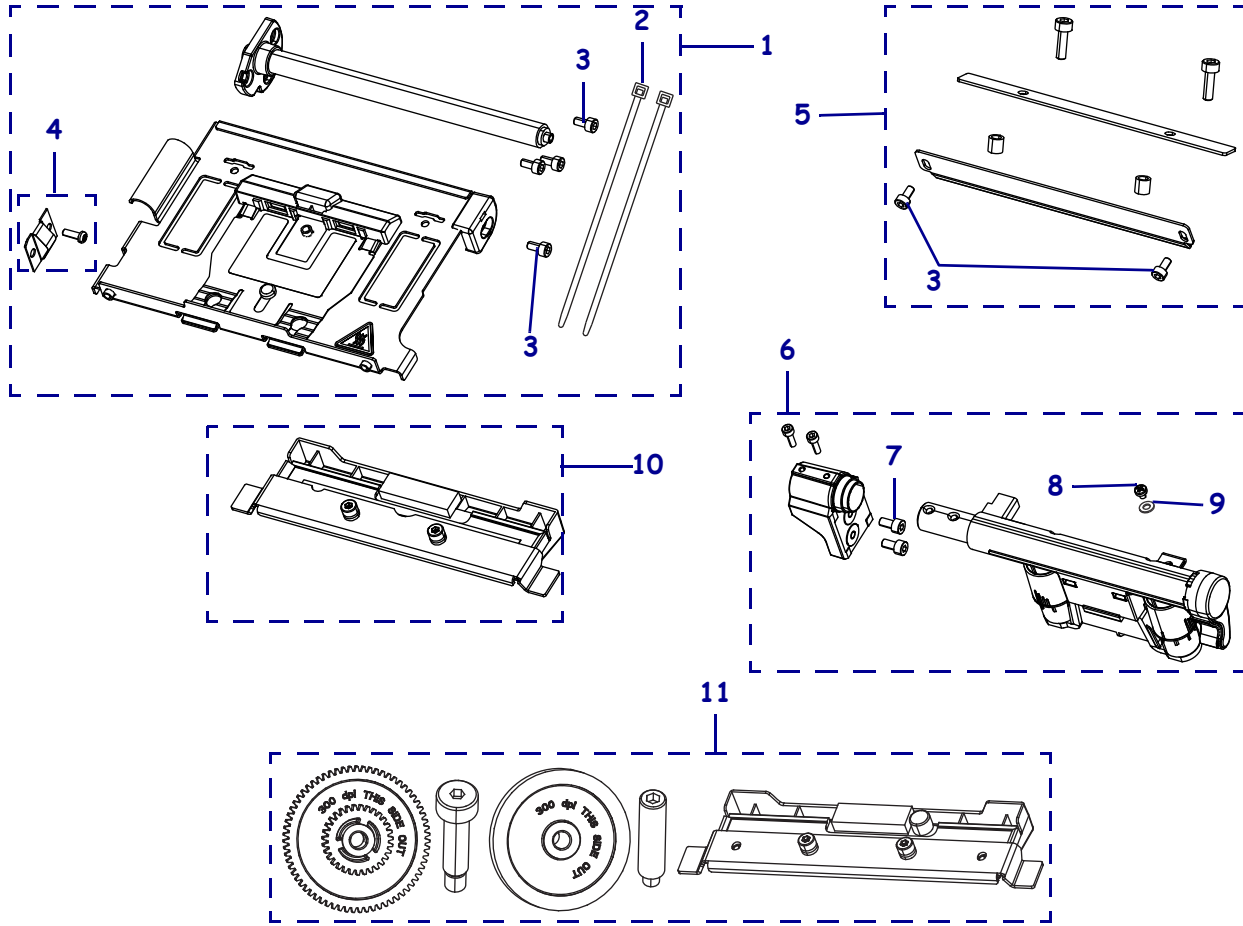


Table B • Print System

Item	Part Number	Description
1	P1037974-013	ZT200 series Thermal Transfer Print Mechanism Maintenance Kit
	P1037974-056	ZT200 series Direct Thermal Print Mechanism Maintenance Kit
2	HWQ06020	Cable Tie, 0.09 × 3.62 (sold in quantities of 20)
3	HW78805	Screw, 3 × 0.5 × 6 (sold in quantities of 25)
4	P1047974-015	ZT200 series Ground Contact Maintenance Kit
5	P1037974-047	Ribbon Strip Plate and Antistatic Brush Maintenance Kit
6	P1037974-014	ZT200 series Toggle Bar Maintenance Kit
7	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)
8	P1039959-004	Screw, M3 × 0.5 × 4 (sold in quantities of 50)
9	HW79041	Washer, 0.250 × 0.125 × 0.023 (sold in quantities of 25)
10	P1037974-010	ZT230 203 dpi Printhead Maintenance Kit
	P1037974-011	ZT230 300 dpi Printhead Maintenance Kit
11	P1037974-005	ZT230 Printhead 203 to 300 dpi Conversion Kit
	P1037974-006	ZT230 Printhead 300 to 203 dpi Conversion Kit



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Sensors

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Figure C • Sensors Overview

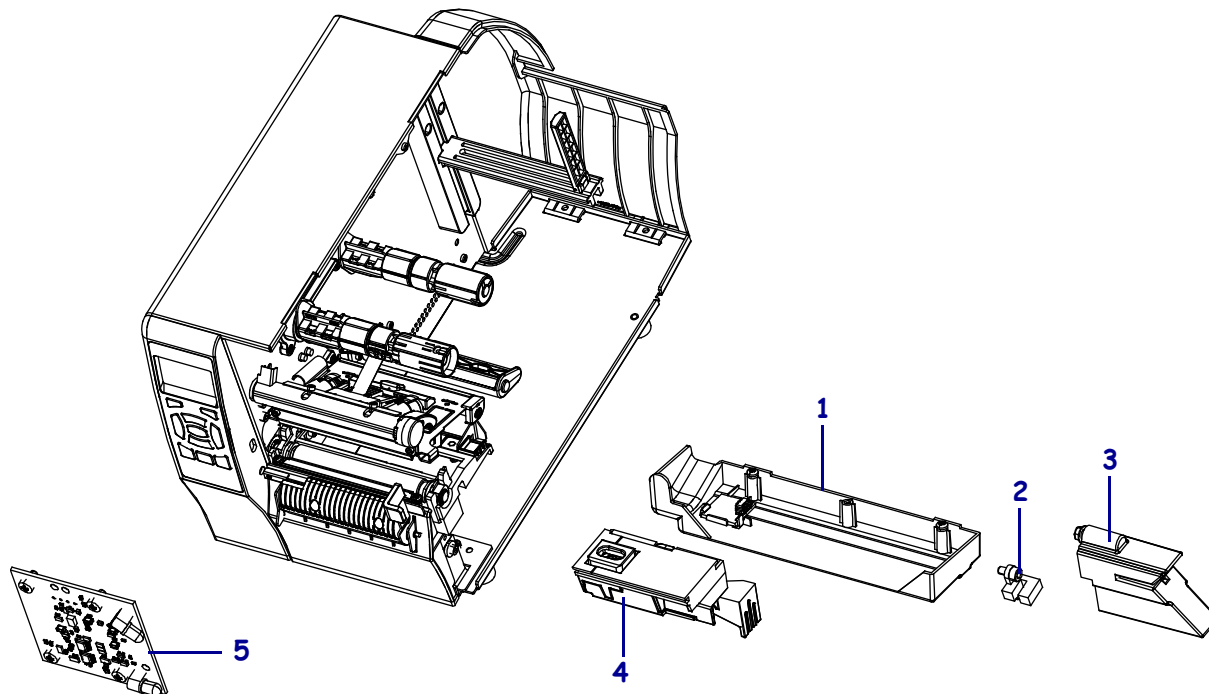


Table C • Sensors Overview

Item	Part Number	Description
1	P1037974-023	Ribbon Sensor Maintenance Kit
2	P1037974-025	Head-Open Sensor Maintenance Kit
3	P1037974-021	Media Sensor Maintenance Kit
4	P1037974-022	Black Mark Sensor Maintenance Kit
5	P1037974-024	Take-Label Sensor Maintenance Kit

Figure D • Sensors

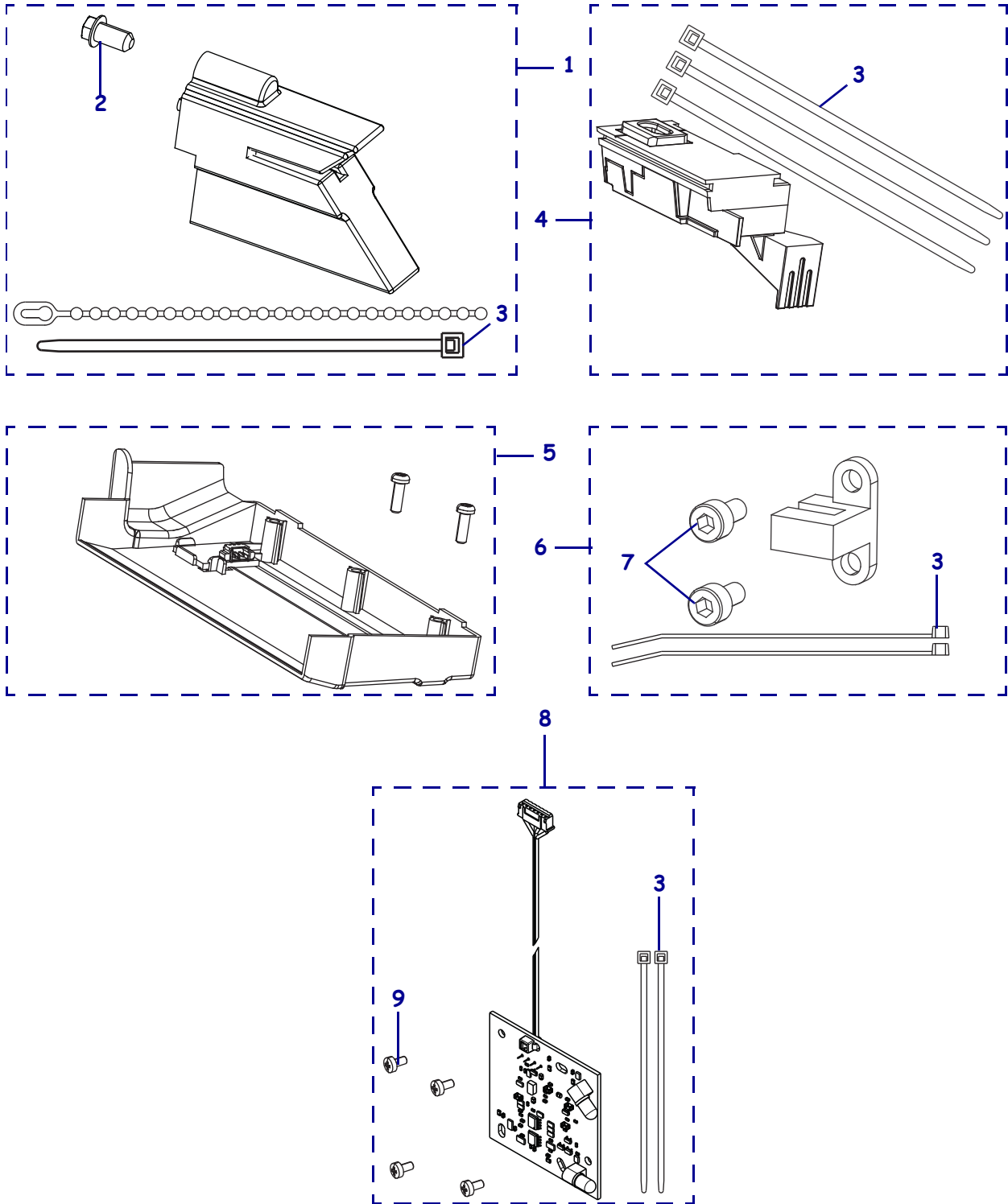


Table D • Sensors

Item	Part Number	Description
1	P1037974-021	Media Sensor Maintenance Kit
2	HW44114	Screw, M4.2 × 8, (sold in quantities of 50)
3	HWQ06020	Cable Tie, 0.09 × 3.62 (sold in quantities of 20)
4	P1037974-022	Black Mark Sensor Maintenance Kit
5	P1037974-023	Ribbon Sensor Maintenance Kit
6	P1037974-025	Head-Open Sensor Maintenance Kit
7	HW78805	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
8	P1037974-024	Take-Label Sensor Maintenance Kit
9	HW43968	Screw, M3 × 0.5 × 6 (sold in quantities of 25)



Notes • _____

Drive System

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Figure E • Drive System Overview

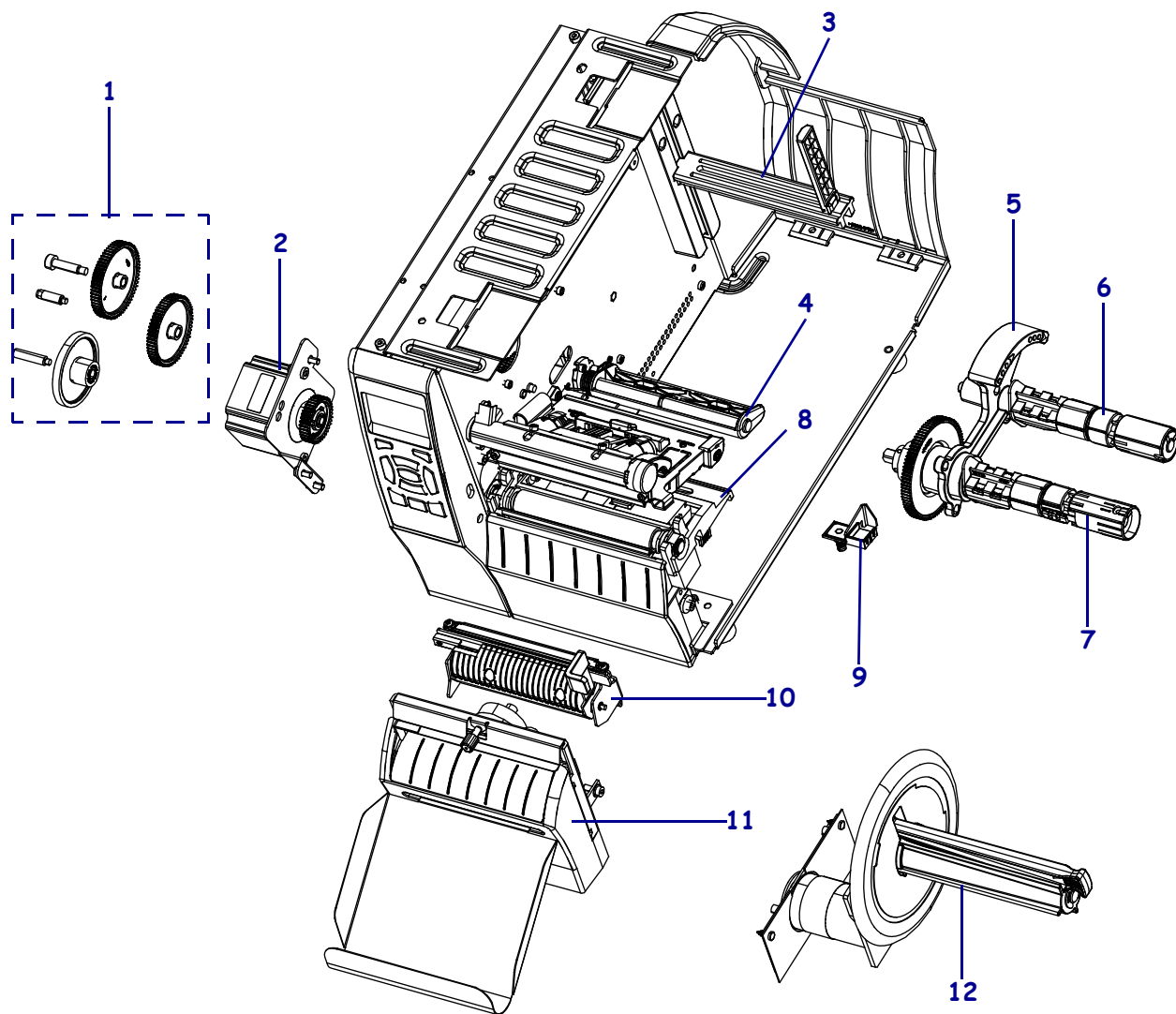


Table E • Drive System Overview

Item	Part Number	Description
1	P1037974-029	Drive Gear Maintenance Kit (includes gears for 203 dpi and 300 dpi) for serial numbers less than 52J141101521
	P1037974-061	Drive Gear Maintenance Kit (includes gears for 203 dpi and 300 dpi) for serial numbers greater than 52J141101521
2	P1037974-030	ZT200 series Drive Motor Assembly Maintenance Kit for 200dpi and 300 dpi only for serial numbers less than 52J141101521
	P1037974-062	ZT200 series Drive Motor Assembly Maintenance Kit for 200dpi and 300 dpi only for serial numbers greater than 52J141101521
3	P1037974-027	Media Hanger Maintenance Kit
4	P1037974-057	Dancer Assembly Maintenance Kit
5	P1037974-026	ZT230 Ribbon System Maintenance Kit
	P1037990-001	ZT220 and ZT210 Ribbon System Maintenance Kit
6	P1037974-050	Ribbon Supply Spindle Maintenance Kit
7	P1037974-051	Ribbon Take-Up Spindle Maintenance Kit
8	P1037974-059	Platen Housing Maintenance Kit
9	P1037974-016	Outer Media Guide Maintenance Kit
10	P1037974-008	Peel Option Kit
11	P1047974-007	Cutter Option Kit
12	P1037974-040	Liner Take-Up Spindle Maintenance Kit

Figure F • Drive System

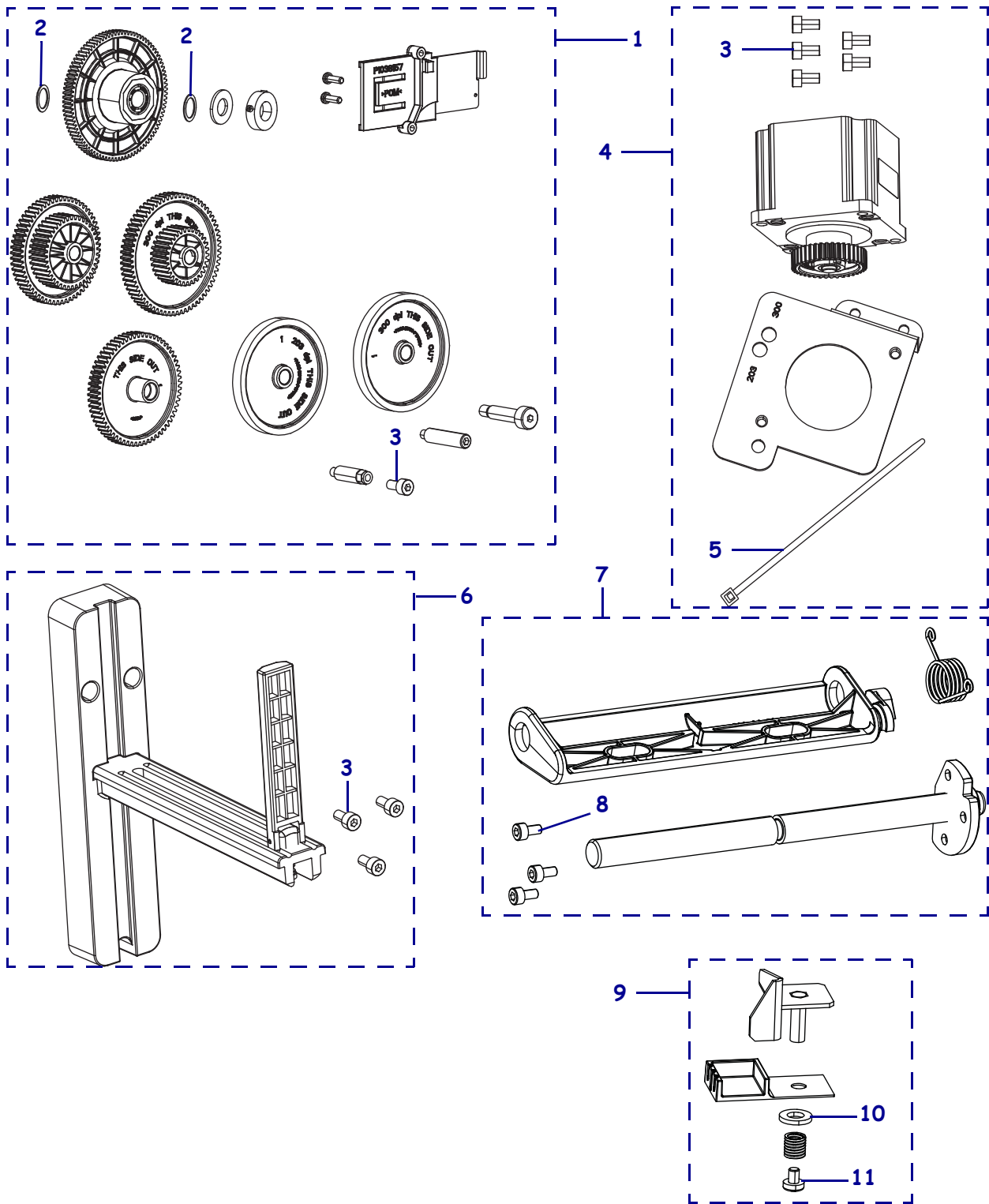


Table F • Drive System (1)

Item	Part Number	Description
1	P1037974-029	Drive Gear Maintenance Kit (includes gears for 203 dpi and 300 dpi) for serial numbers less than 52J141101521
	P1037974-061	Drive Gear Maintenance Kit (includes gears for 203 dpi and 300 dpi) for serial numbers greater than 52J141101521
2	HW33808	Washer, 0.500 × 0.377 × 0.020
3	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)
4	P1037974-030	ZT200 series Drive Motor Assembly Maintenance Kit for 200dpi and 300 dpi only for serial numbers less than 52J141101521
	P1037974-062	ZT200 series Drive Motor Assembly Maintenance Kit for 200dpi and 300 dpi only for serial numbers greater than 52J141101521
5	HWQ06020	Cable Tie, 0.09 × 3.62 (sold in quantities of 20)
6	P1037974-027	Media Hanger Maintenance Kit
7	P1037974-057	Dancer Maintenance Kit
8	HW44924	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
9	P1037974-016	Outside Media Guide Maintenance Kit
10	HW46128	Washer (sold in quantities of 25)
11	P1039959-004	Screw, M3 × 0.5 × 4 (sold in quantities of 25)

Figure G • Ribbon System

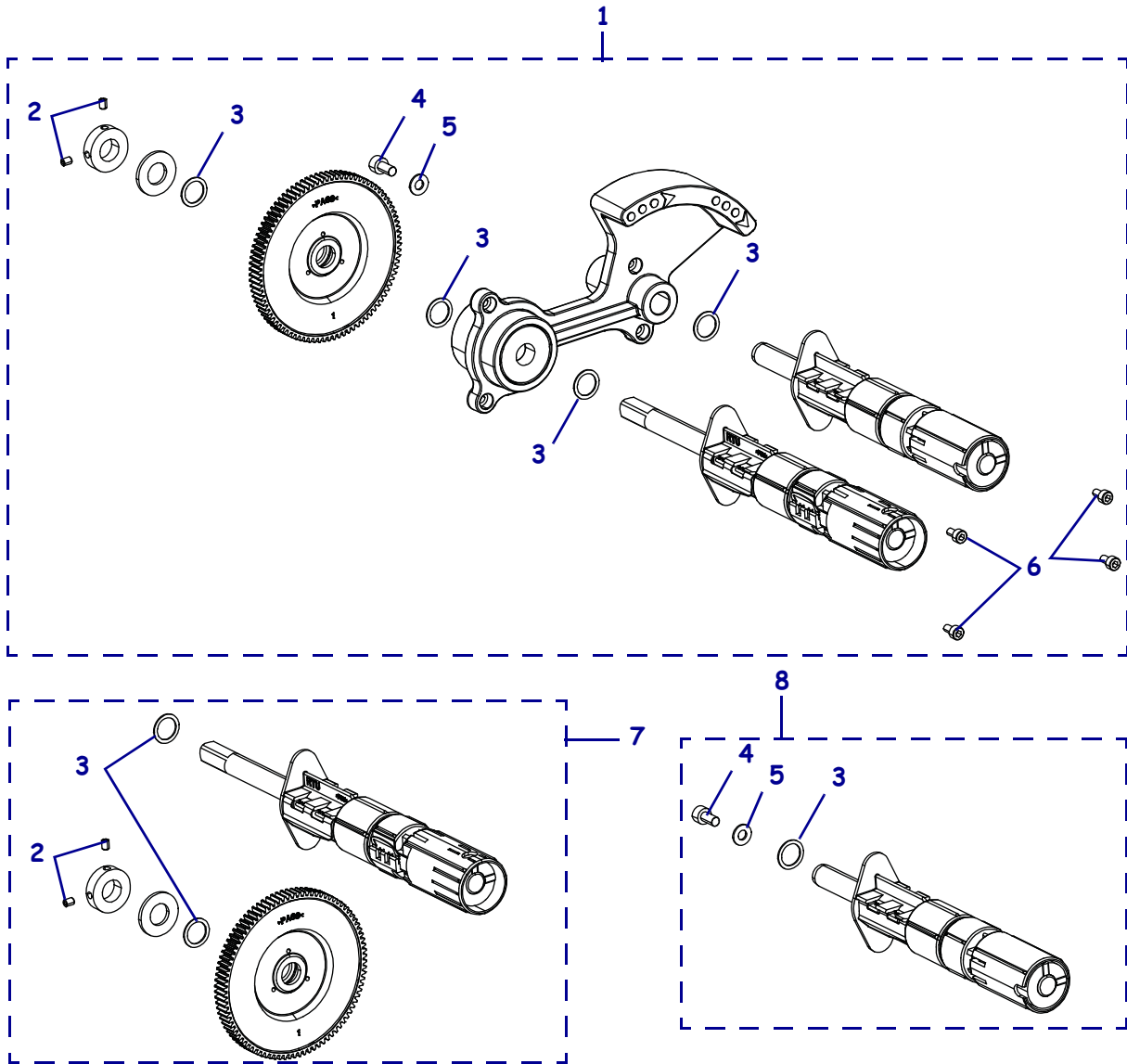


Table G • Drive System (2)

Item	Part Number	Description
1	P1037974-026	ZT230 Ribbon System Maintenance Kit
	P1037990-001	ZT220 and ZT210 Ribbon System Maintenance Kit
2	P1040609	Set screws, M3 × 0.5 × 4 (sold in quantities of 25)
3	HW33808	Washer, 0.500 × 0.377 × 0.020 (sold in quantities of 25)
4	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)
5	HW78806	Washer, M4 (sold in quantities of 25)
6	HW78805	Screw, M3 × 0.5 × 6 (sold in quantities of 50)
7	P1037974-051	Ribbon Take-Up (RTU) Spindle Maintenance Kit
8	P1037974-050	Ribbon Supply Spindle (RSS) Maintenance Kit

Figure H • Cutter Option

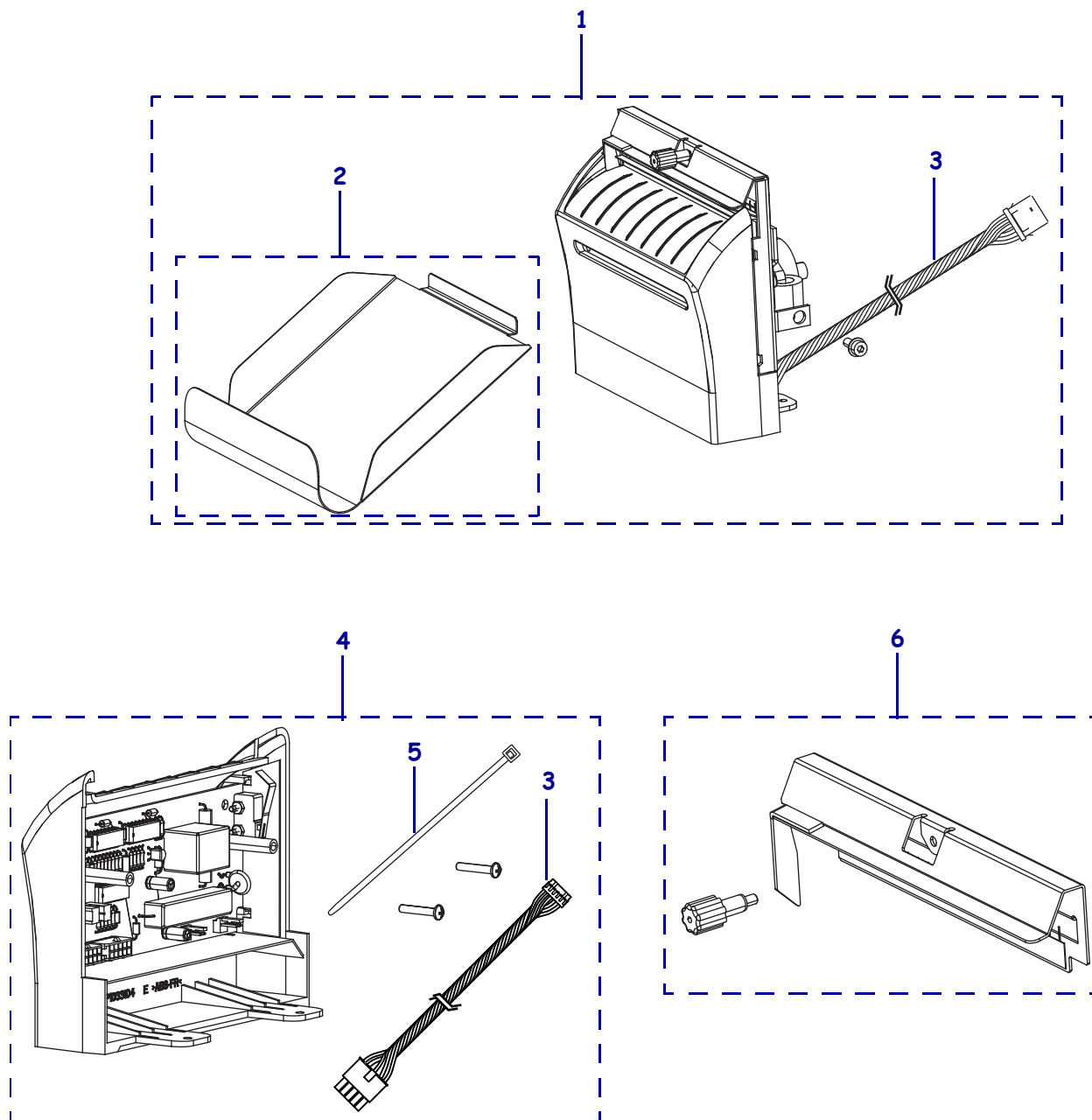


Table H • Cutter Option

Item	Part Number	Description
1	P1037974-007	ZT200 Cutter Option Kit
2	P1037974-037	Cutter Catch Tray Kit
3	P1037974-020	Electronics Cables Maintenance Kit
4	P1037974-035	Cutter Cover and PCB maintenance Kit
5	HWQ06020	Cable Tie, 0.09 × 3.62 (sold in quantities of 20)
6	P1037974-036	Cutter Static Brush Maintenance Kit

Figure I • Peel Option and LTU Motor and Spindle

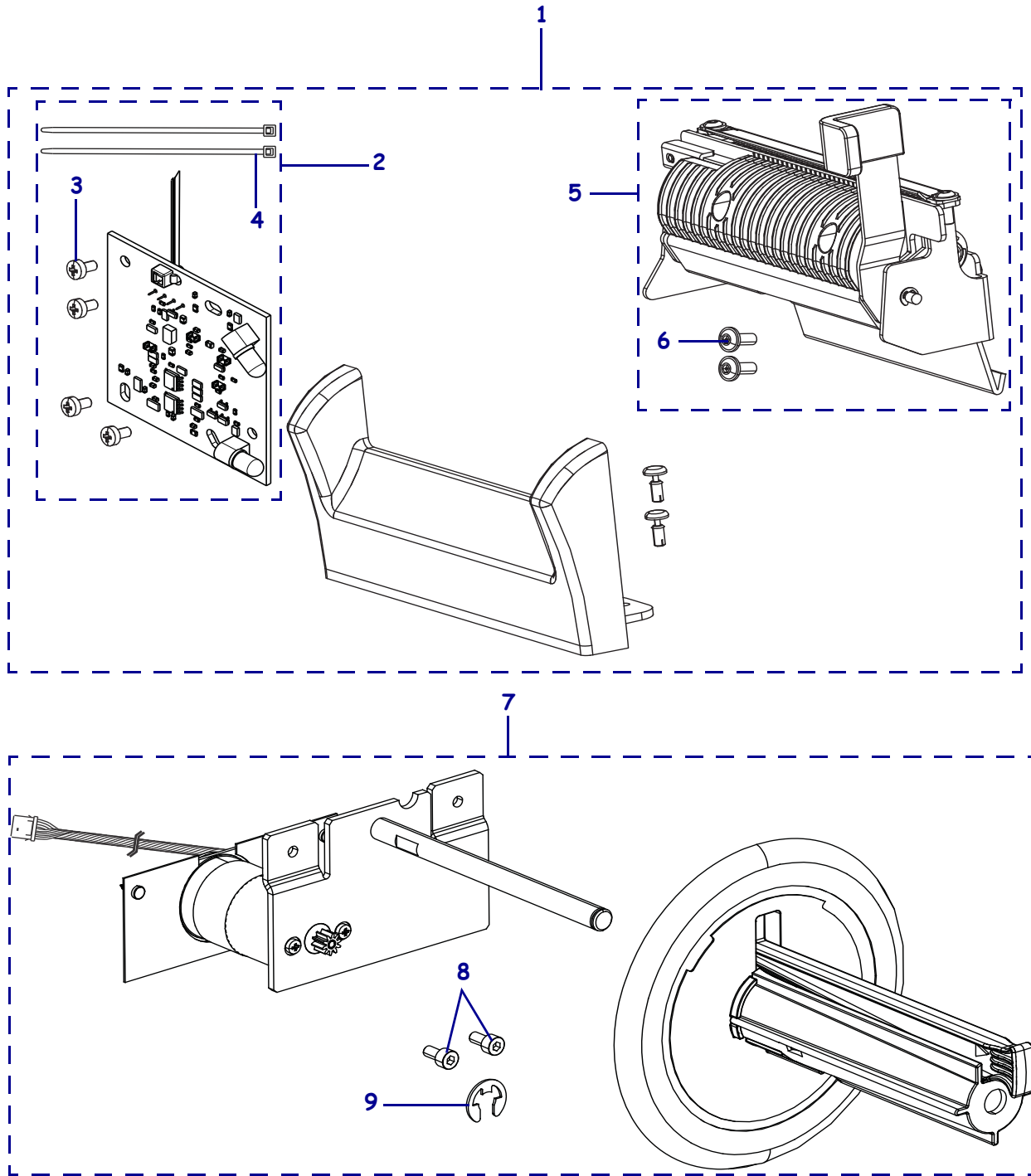


Table I • Peel Option and LTU Motor and Spindle

Item	Part Number	Description
1	P1037974-008	Peel Option Kit
2	P1037974-024	Take-Label Sensor Maintenance Kit
3	HW43968	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
4	HWQ06020	Cable Tie, 0.09 × 3.62 (sold in quantities of 20)
5	P1037974-038	Peel Assembly Maintenance Kit
6	P1040178-004	Screw, M3 × 8 (sold in quantities of 25)
7	P1037974-040	Liner Take-up Motor and Spindle Maintenance Kit
8	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)
9	HW06313	E-Ring (sold in quantities of 25)



Notes • _____

Rollers

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Figure J • Rollers Overview

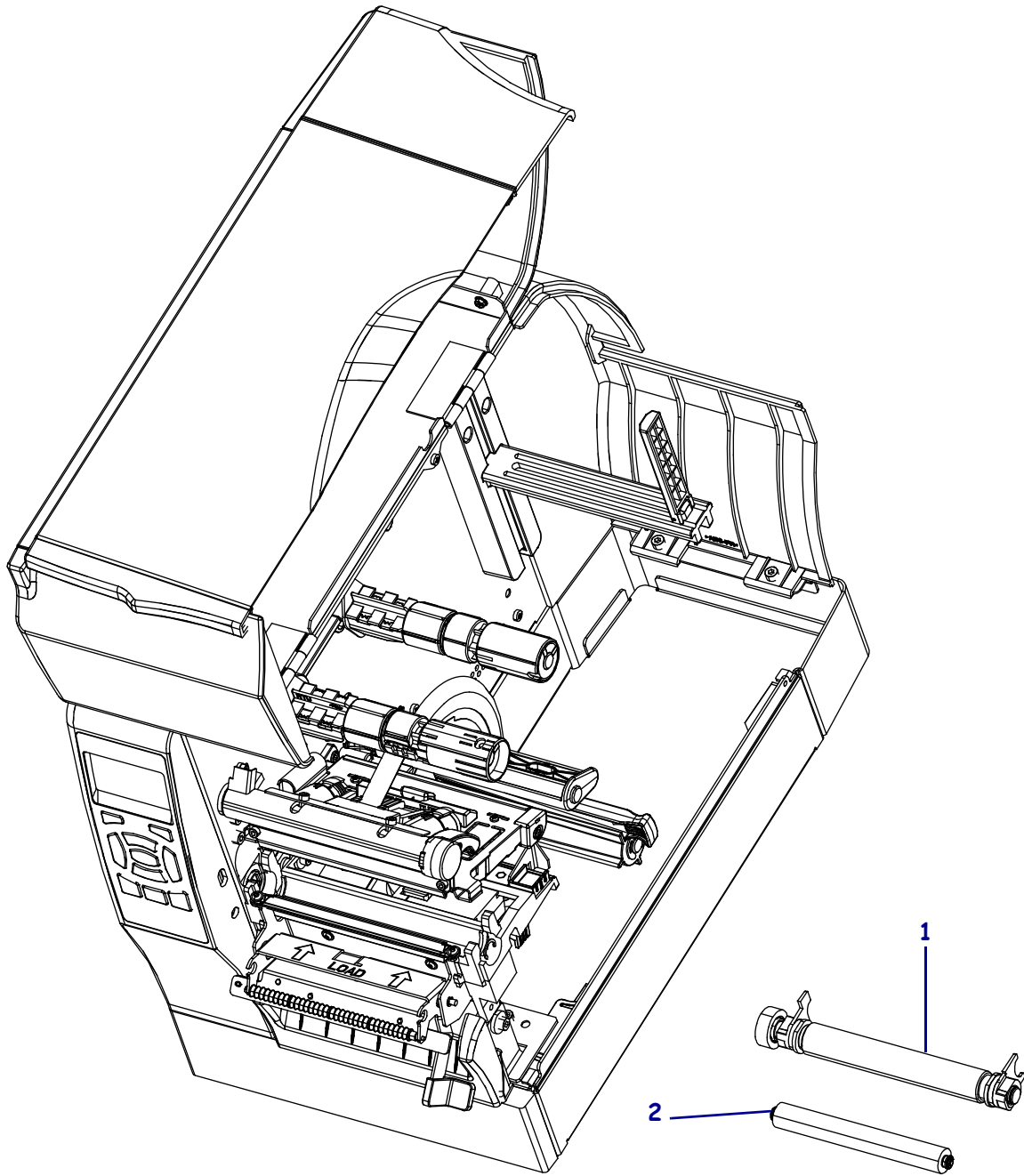


Table J • Rollers Overview

Item	Part Number	Description
1	P1037974-028	Platen Roller Assembly Maintenance Kit
2	P1037974-039	Peel Roller Maintenance Kit

Figure K • Peel Roller

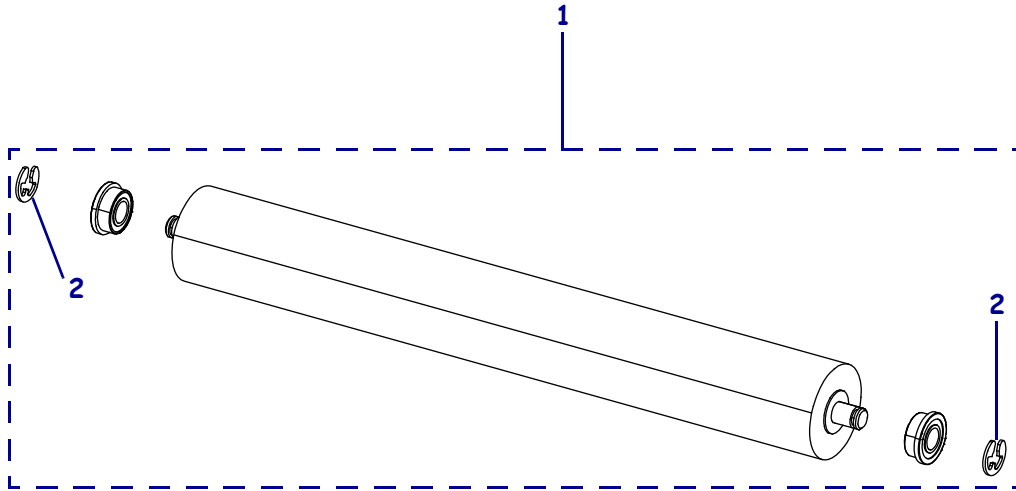


Table K • Peel Roller

Item	Part Number	Description
1	P1037974-039	Peel Roller Maintenance Kit
2	HW10094	E-ring, 3 mm (available in quantities of 25)



Notes • _____

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Figure L • Circuit Board Overview

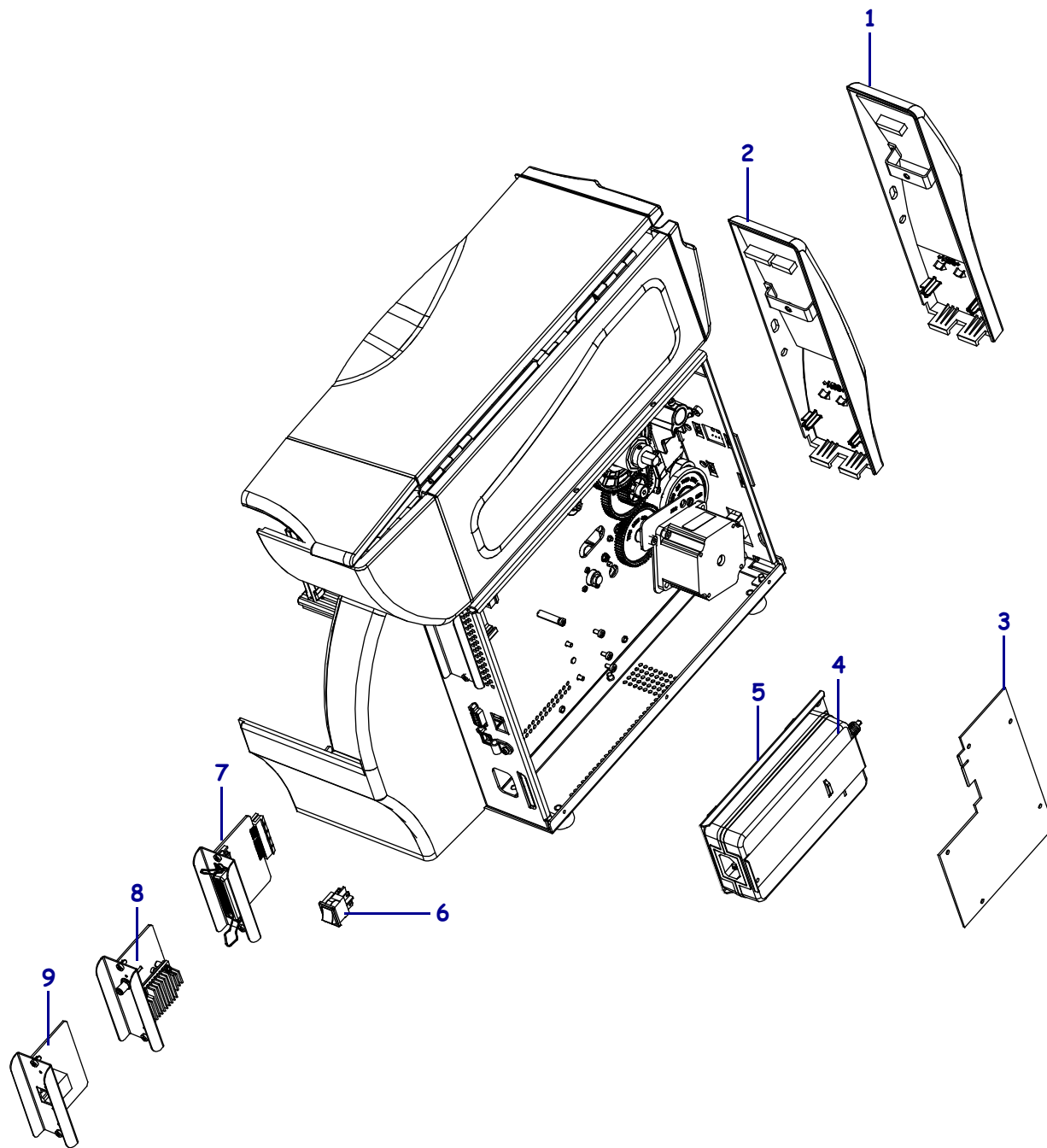


Table L • Circuit Boards Overview

Item	Part Number	Description
1	P1037990-002	ZT230 Printer Control Panel Maintenance Kit
	P1037991-001	ZT220 and ZT210 Printer Control Panel Maintenance Kit
2	P1037974-031	ZT230 Printer Control Panel Maintenance Kit
3	P1037974-017	ZT200 Main Logic Board Maintenance Kit
4	P1037974-018	ZT200 Power Supply Maintenance Kit
5	P1037974-043	ZT200 Power Supply Mounting Brackets Maintenance Kit
6	P1037974-019	ZT200 Power Switch Maintenance Kit
7	P1037974-002	ZT200 Parallel Port Option/Maintenance Kit
8	P1037974-003A	ZT200 ZebraNet n Print Server Option/Maintenance Kit, Region A (usa)
	P1037974-003B	ZT200 ZebraNet n Print Server Option/Maintenance Kit, Region B (japan)
	P1037974-003C	ZT200 ZebraNet n Print Server Option/Maintenance Kit, Region C (rest of the world)
9	P1037974-001	Wired Ethernet Option/Maintenance Kit

Figure M • Printed Circuit Boards

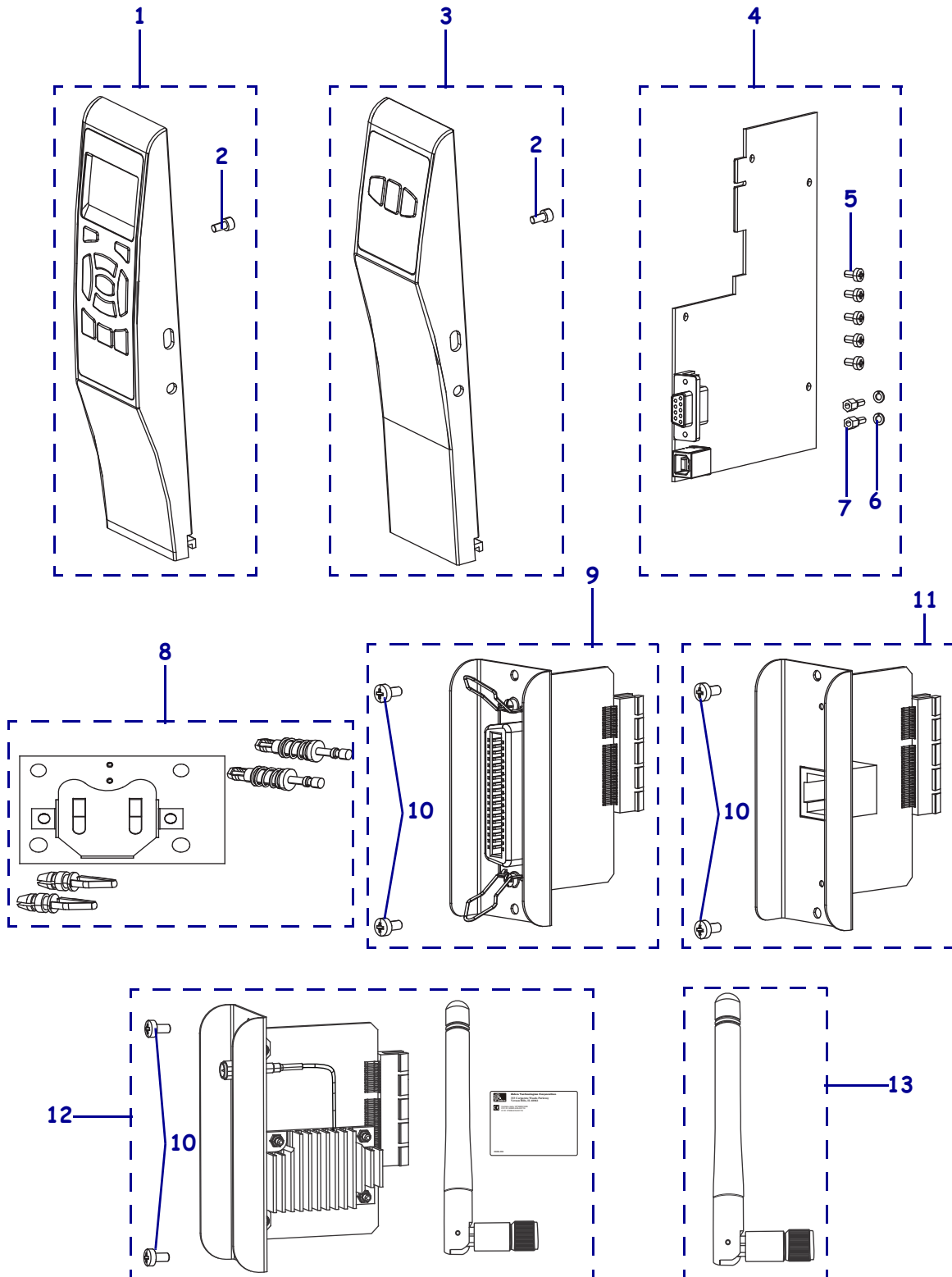


Table M • Printed Circuit Boards

Item	Part Number	Description
1	P1037974-031	ZT230 Printer Control Panel Maintenance Kit
2	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)
3	P1037990-002	ZT220 Printer Control Panel Maintenance Kit
	P1037991-001	ZT210 Printer Control Panel Maintenance Kit
4	P1037974-017	Main Logic Board Maintenance Kit
5	HW43968	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
6	HW45945	Lock Washer (sold in quantities of 100)
7	HW32406	Standoff, 4-40 (sold in quantities of 25)
8	P1037974-004	Real Time Clock Option/Maintenance Kit
9	P1037974-002	Parallel Port Option/Maintenance Kit
10	HW43968	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
11	P1037974-001	Wired Ethernet Option/Maintenance Kit
12	P1037974-003A	ZebraNet n Print Server Option/Maintenance Kit Region A (USA/Canada)
	P1037974-003B	ZebraNet n Print Server Option/Maintenance Kit Region B (Japan)
	P1037974-003C	ZebraNet n Print Server Option/Maintenance Kit Region C (Rest of World)
13	P1037974-053	ZebraNet n Print Server Antenna Maintenance Kit

Figure N • Power Supply

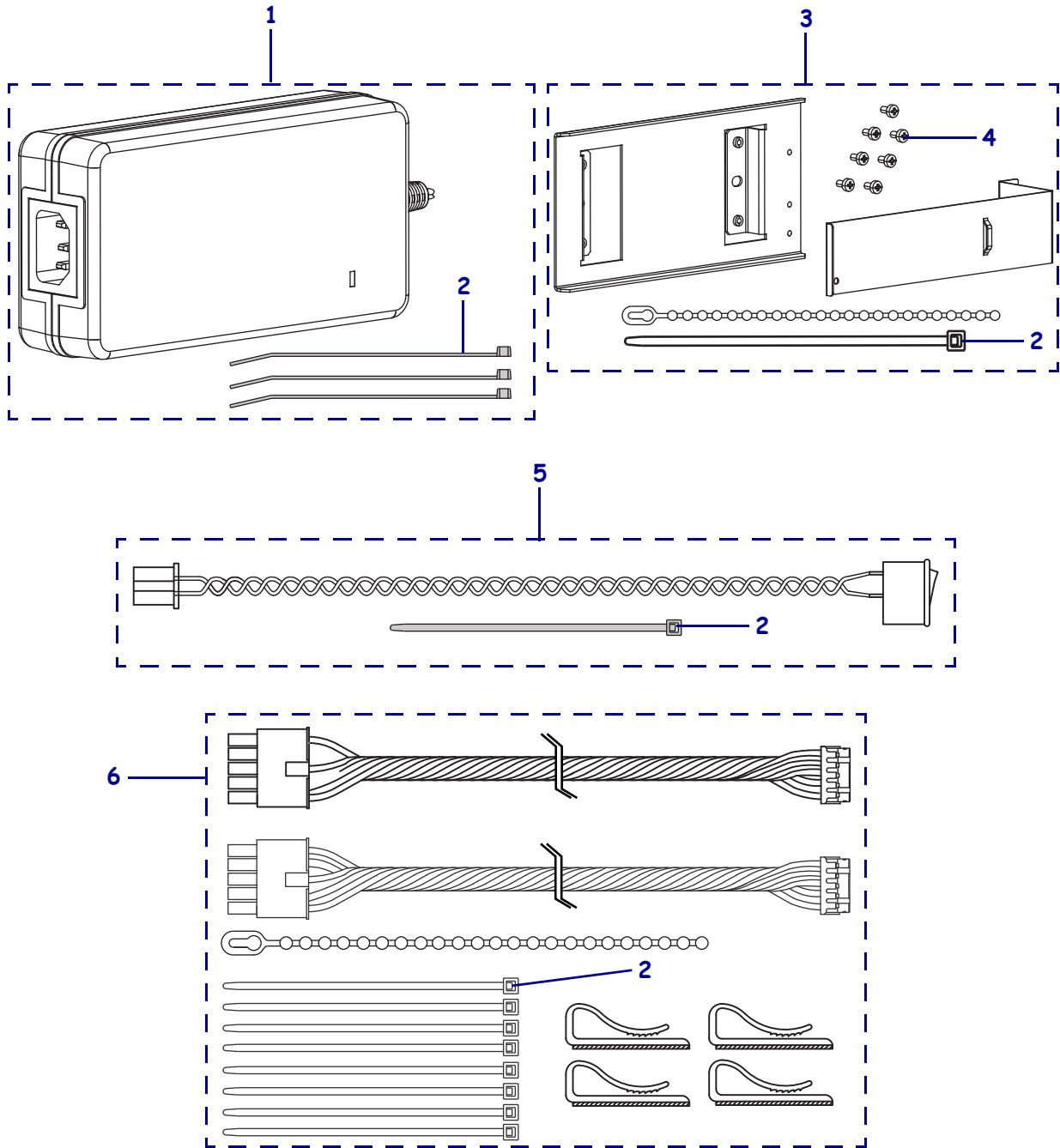


Table N • Power Supply

Item	Part Number	Description
1	P1037974-018	Power Supply Maintenance Kit
2	HWQ06020	Cable Tie, 0.9 × 3.62 (sold in quantities of 20)
3	P1037974-043	Power Supply Brackets Maintenance Kit
4	HW43968	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
5	P1037974-019	Power Switch Maintenance Kit
6	P1037974-020	Electronics Cables Maintenance Kit



Notes • _____

Exterior Parts

Contents

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Figure O • Exterior Overview ZT230

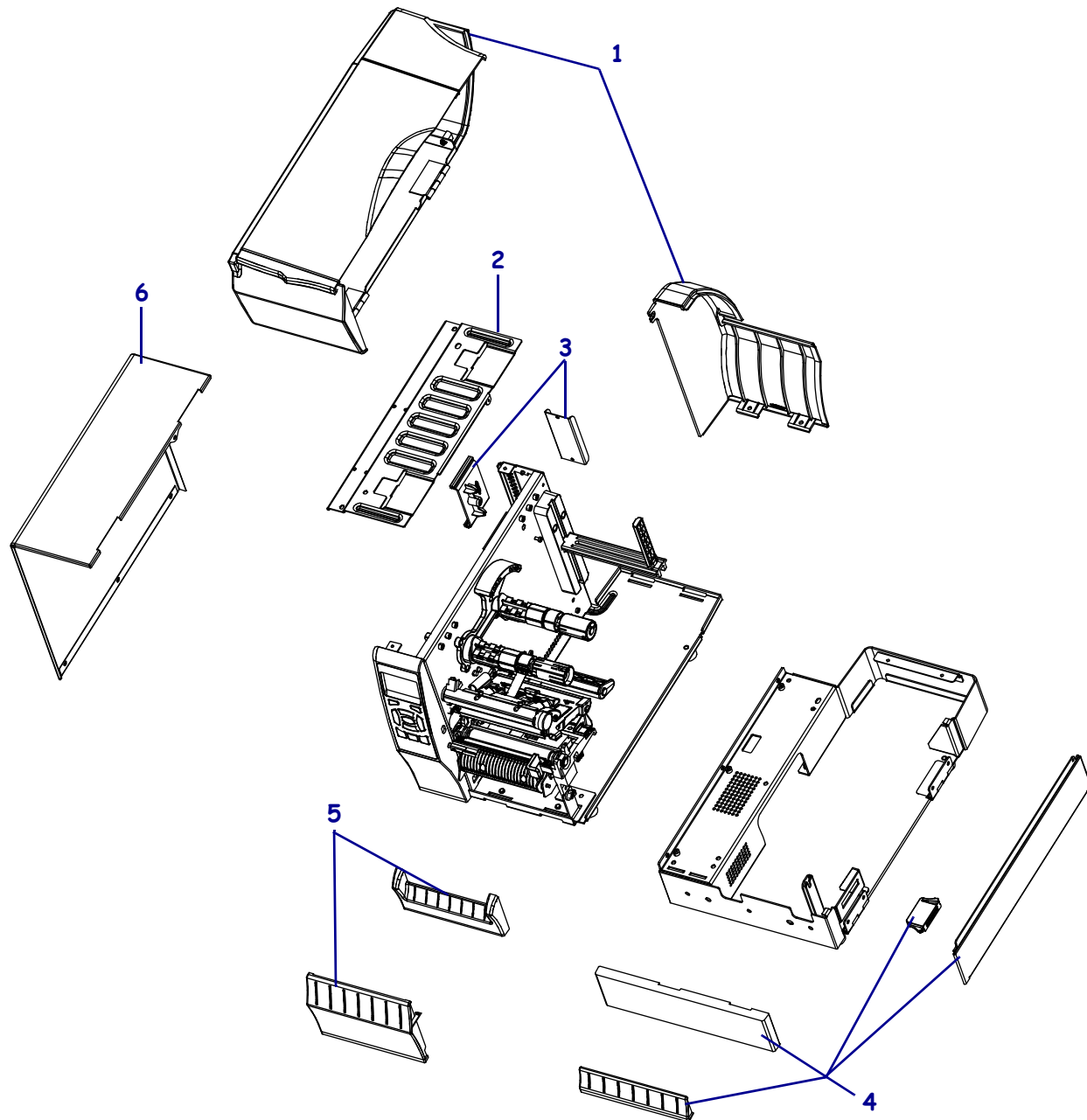


Table O • Exterior Overview ZT230

Item	Part Number	Description
1	P1037974-032	Media Door Maintenance Kit
2	P1037974-042	Top Plate Maintenance Kit
3	P1037974-041	Option Covers and Guide Maintenance Kit
4	P1037974-054	Liner Take-Up Door and Trim Maintenance Kit
5	P1037974-033	Lower Front Panel Maintenance Kit
6	P1037974-034	Electronics Cover

Figure P • Exterior ZT230

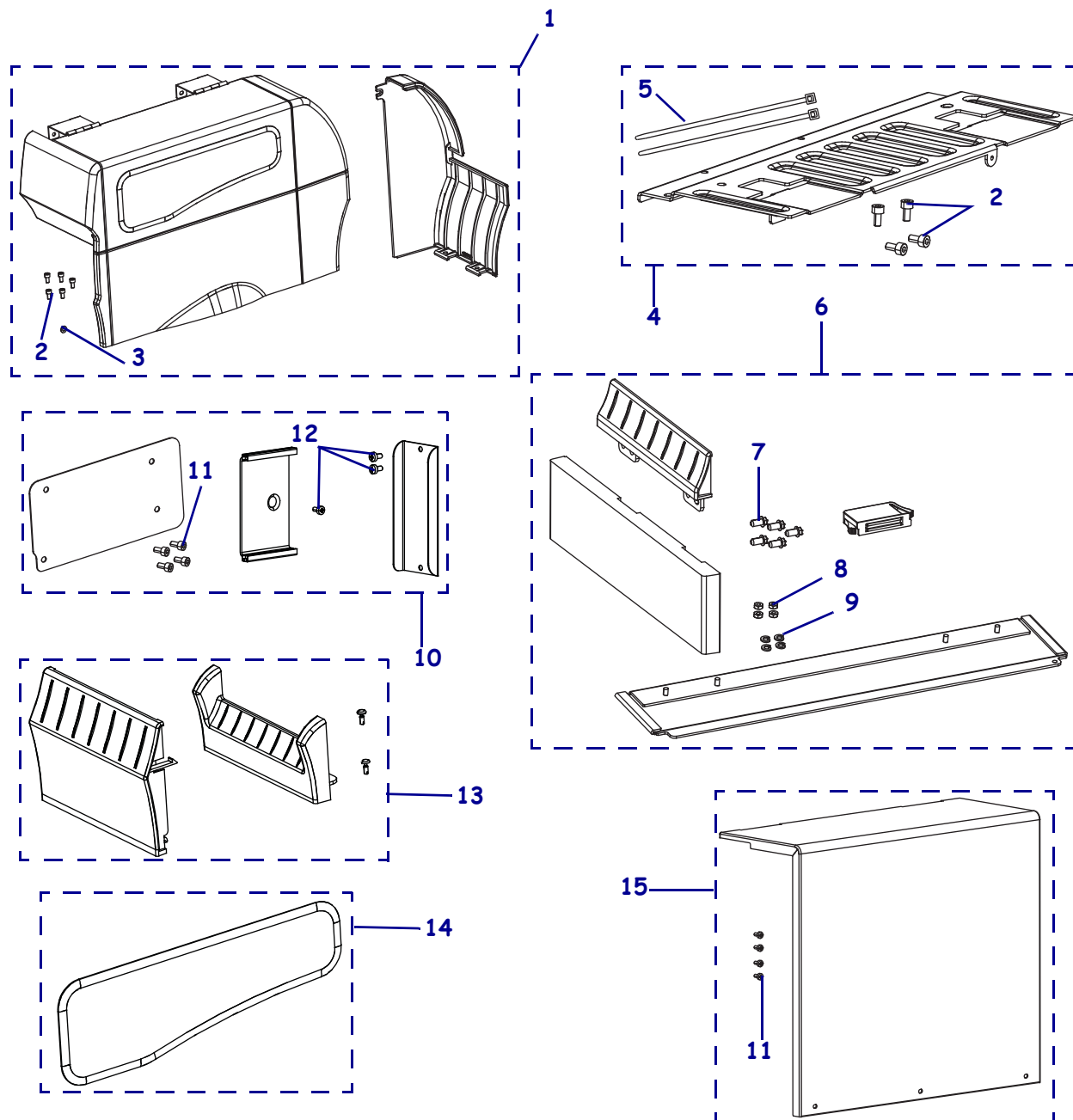


Table P • Exterior ZT230

Item	Part Number	Description
1	P1037974-032	Media Door Maintenance Kit
2	HW78806	Washer, M4 (sold in quantities of 25)
3	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)
4	P1037974-042	Top Plate Maintenance Kit
5	HWQ06020	Cable Tie, 0.09 × 3.62 (sold in quantities of 20)
6	P1037974-054	Liner Take-up (LTU) Door and Trim Maintenance Kit
7	HW44114	Screw, M4.2 × 8 (sold in quantities of 50)
8	P1040548	Nut, M3 × 2.4 × 5.5 (sold in quantities of 25)
9	HW10471	Split Washer, M3 (sold in quantities of 50)
10	P1037974-041	Option Covers and Guide Maintenance Kit
11	HW43986	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
12	HW78805	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
13	P1037974-033	Lower Front Panel Maintenance Kit
14	P1037974-049	Media Door Window Maintenance Kit
15	P1037974-034	Electronics Cover Maintenance Kit

Figure Q • Exterior Overview ZT220

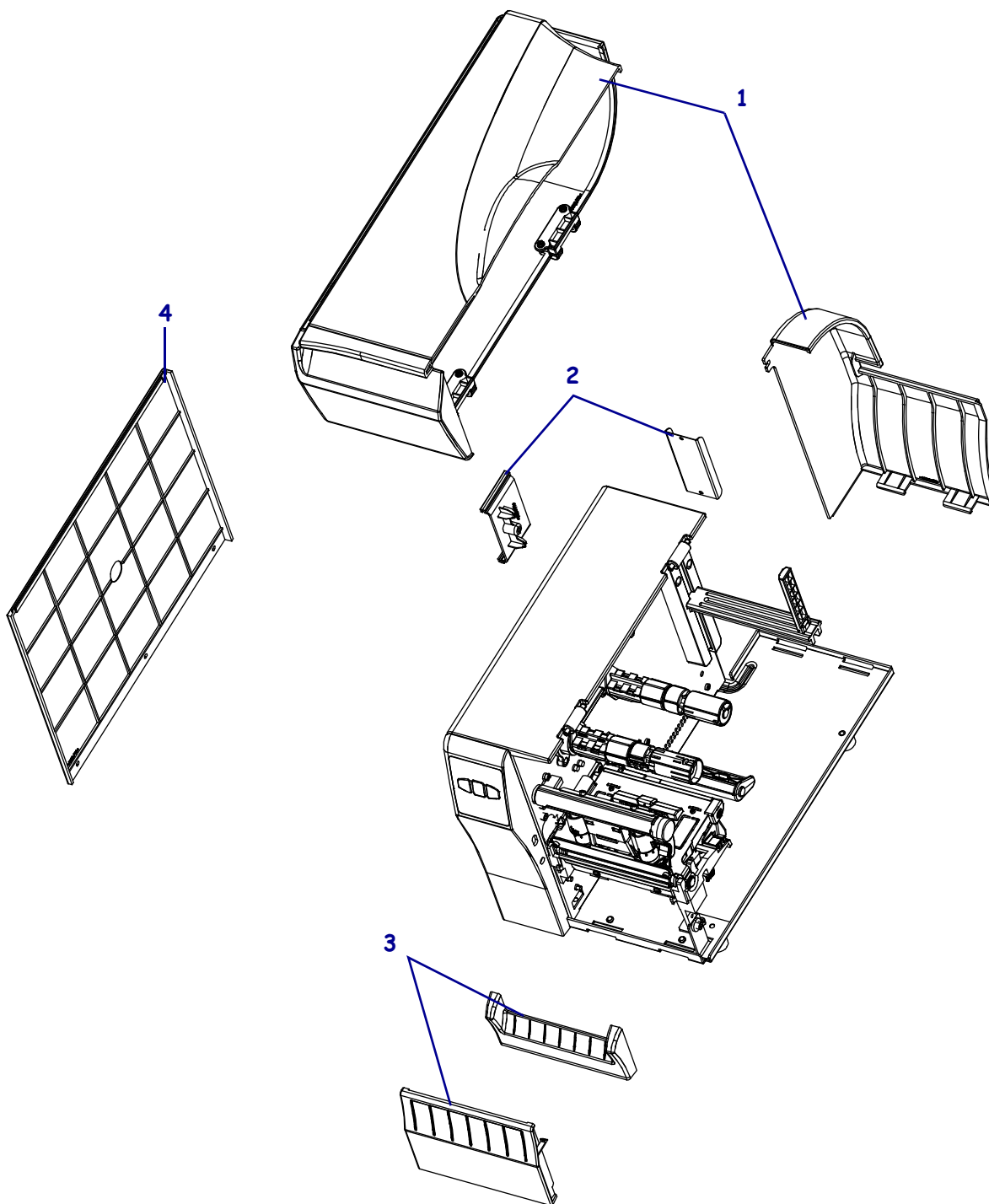


Table Q • Exterior Overview ZT220

Item	Part Number	Description
1	P1037990-003	Media Door Maintenance Kit
2	P1037974-041	Option Covers and Guide Maintenance Kit
3	P1037990-004	Lower Front Panel Maintenance Kit
4	P1037990-005	Electronics Cover

Figure R • Exterior ZT220

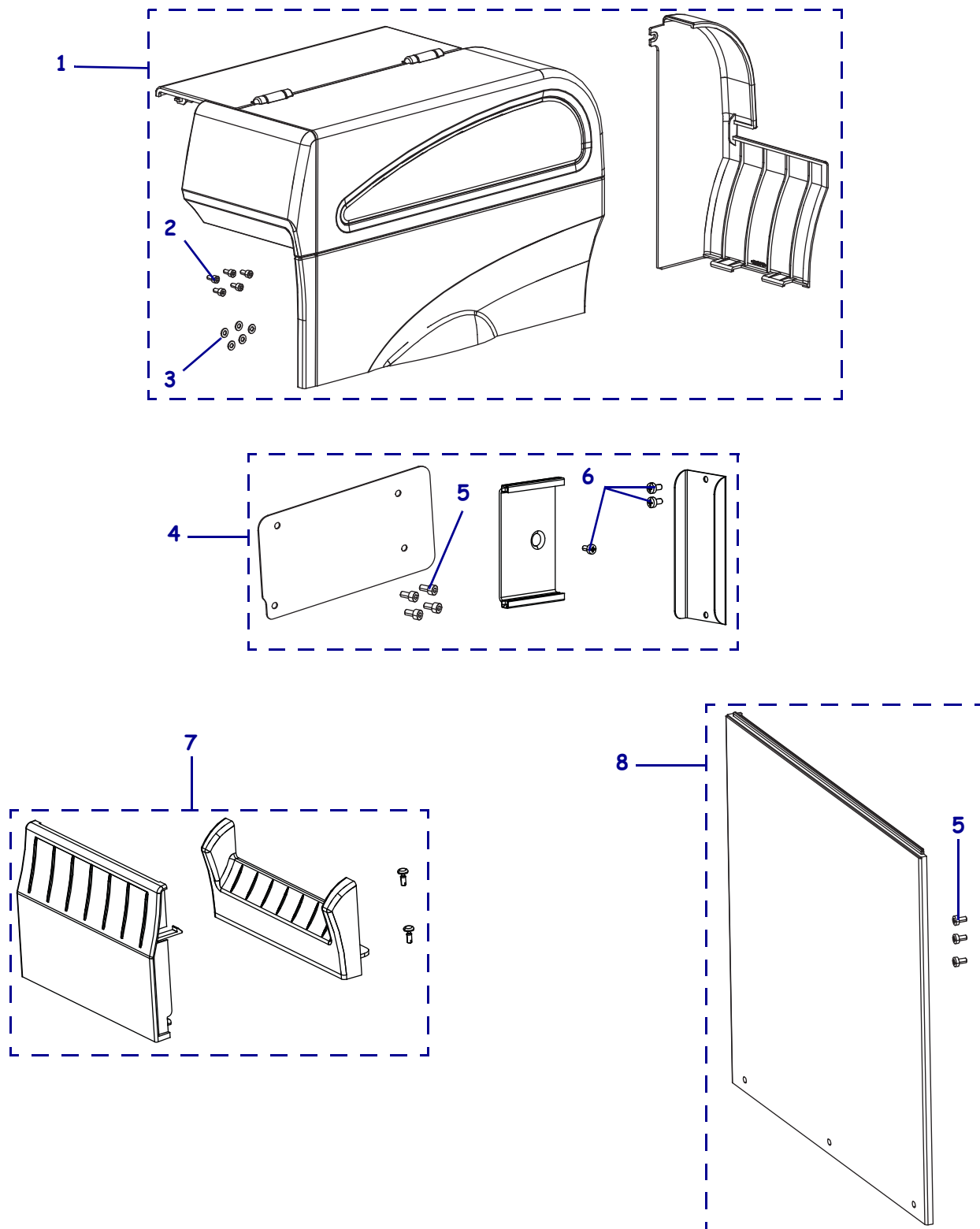


Table R • Exterior Overview ZT220

Item	Part Number	Description
1	P1037990-003	Media Door Maintenance Kit
2	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)
3	HW78806	Washer, M4 (sold in quantities of 25)
4	P1037974-041	Option Covers and Guide Maintenance Kit
5	HW43986	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
6	HW78805	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
7	P1037990-004	Lower Front Panel Maintenance Kit
8	P1037990-005	Electronics Cover

Figure S • Exterior Overview ZT210

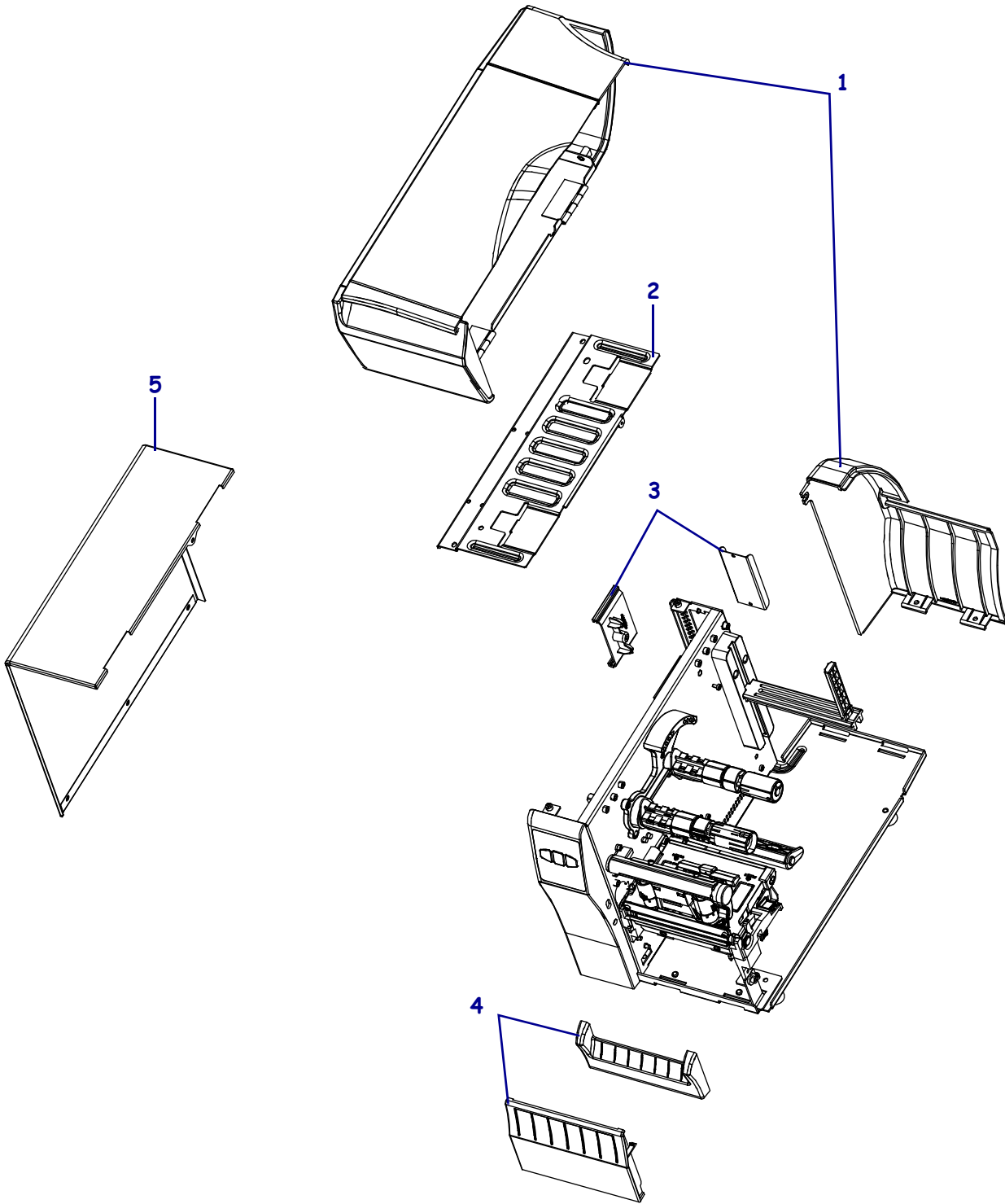


Table S • Exterior Overview ZT210

Item	Part Number	Description
1	P1037991-002	Media Door Maintenance Kit
2	P1037974-042	Top Plate Maintenance Kit
3	P1037974-041	Option Covers and Guide Maintenance Kit
4	P1037990-004	Lower Front Panel Maintenance Kit
5	P1037974-034	Electronics Cover

Figure T • Exterior ZT210

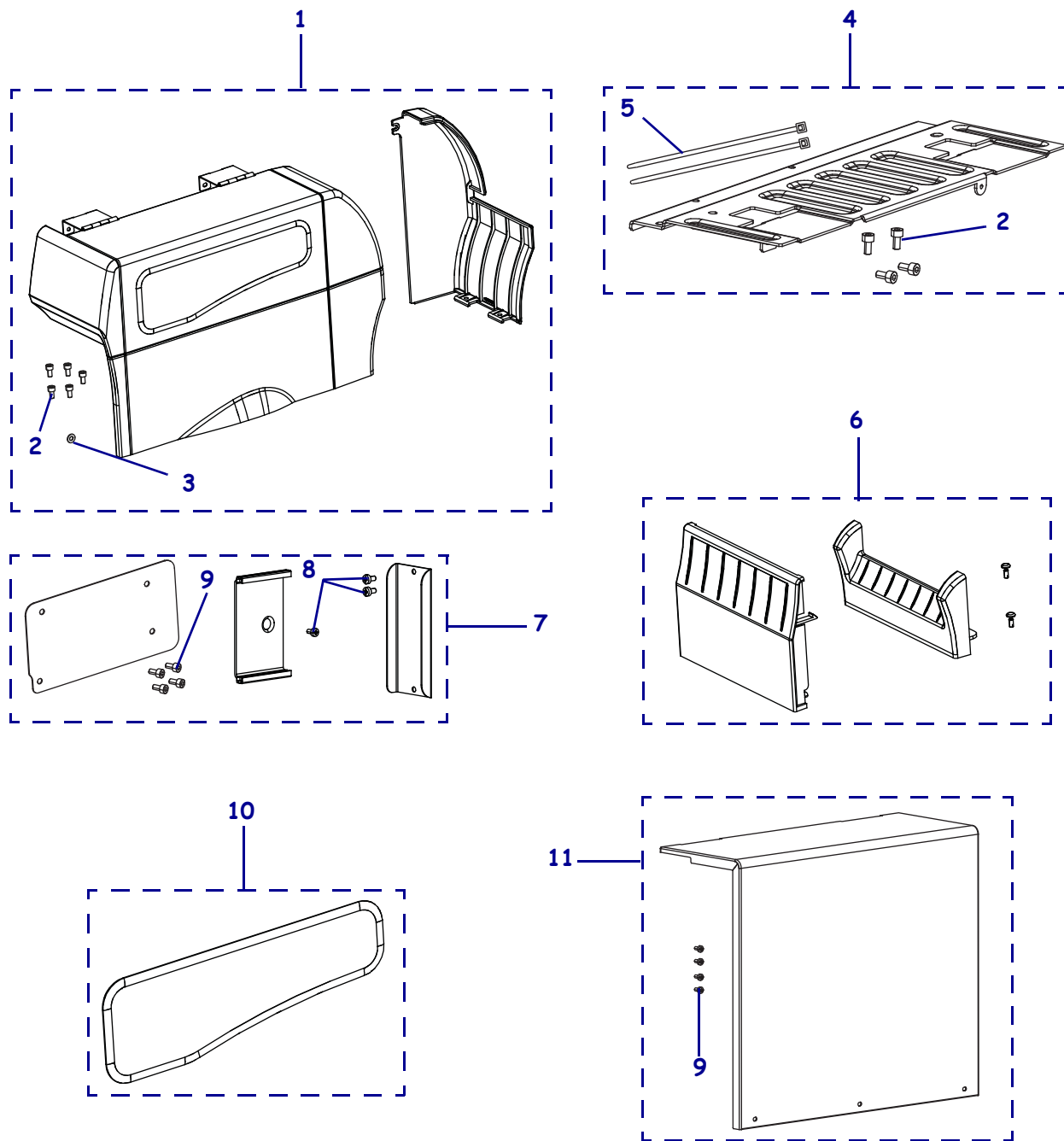


Table T • Exterior Overview ZT210

Item	Part Number	Description
1	P1037991-002	Media Door Maintenance Kit
2	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)
3	HW78806	Washer, M4 (sold in quantities of 25)
4	P1037974-042	Top Plate Maintenance Kit
5	HWQ06020	Cable Tie, 0.09 × 3.62 (sold in quantities of 20)
6	P1037990-004	Lower Front Panel Maintenance Kit
7	P1037974-041	Option Covers and Guide Maintenance Kit
8	HW43986	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
9	HW78805	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
10	P1037974-049	Media Door Window Maintenance Kit
11	P1037974-034	Electronics Cover

Figure U • Miscellaneous Overview

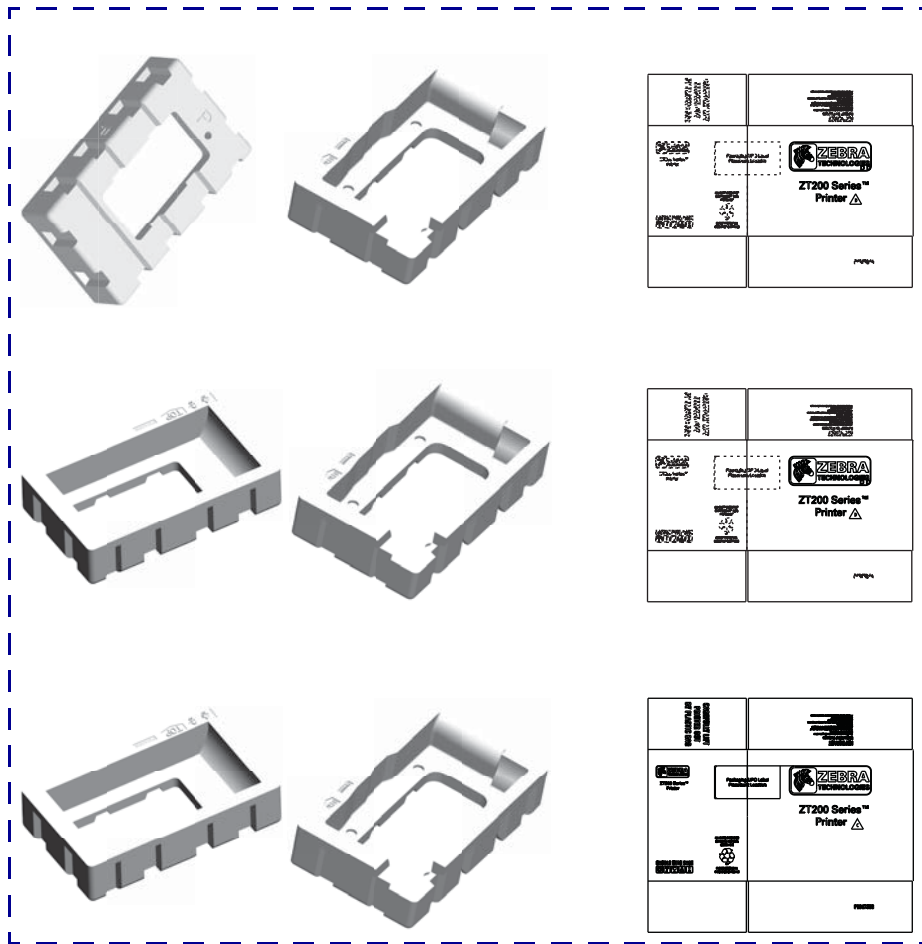
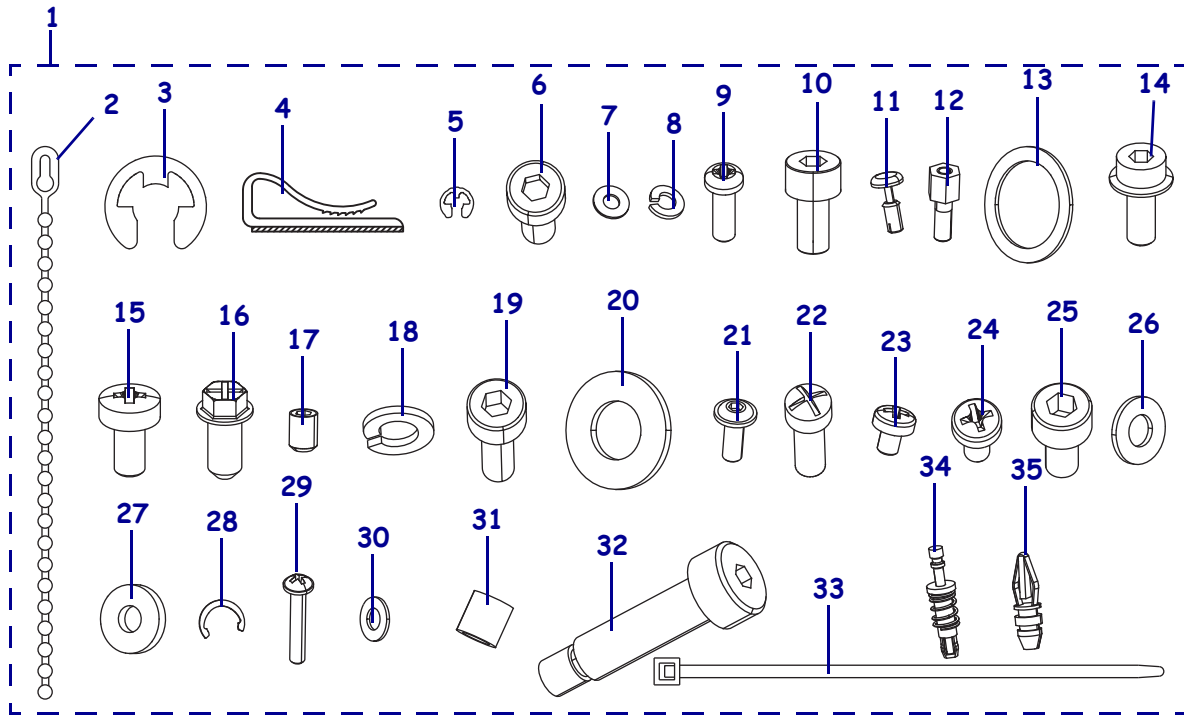


Table U • Exterior Overview ZT210

Item	Part Number	Description
1	P1037974-044	ZT200 series Assorted Hardware Kit
2	<i>N/A</i>	Beaded Cable Tie, 4.25
3	HW06313	E-ring External. 0.375 (sold in quantities of 25)
4	HW07808	Cable Clamp (sold in quantities of 25)
5	HW10094	E-ring, 3 mm (sold in quantities of 25)
6	P1040021-012	Screw, M4 × 0.7 × 12 (sold in quantities of 25)
7	P1040560	Flat Washer, M3 (sold in quantities of 50)
8	P1040561	Split Washer, M3 (sold in quantities of 50)
9	<i>N/A</i>	Thread Forming Screw, M2.5 × 8
10	HW23827	Screw, M4 × 0.7 × 8 (sold in quantities of 25)
11	<i>N/A</i>	Push Rivet
12	HW32406	Standoff, 4-40 Hex (sold in quantities of 25)
13	HW33808	Flat Washer, 0.50 × 0.377 × 0.02 (sold in quantities of 25)
14	HW43894	Screw, M4 × 0.7 × 10 (sold in quantities of 25)
15	HW43968	Screw, M3 × 0.5 × 6 (sold in quantities of 25)
16	HW44114	Screw, M4.2 × 8 (sold in quantities of 50)
17	P1040609	Setscrew, M3 × 0.5 × 4 (sold in quantities of 25)
18	HW45945	Lock Washer, #4 (sold in quantities of 100)
19	<i>N/A</i>	Screw, M3 × 0.5 × 10
20	<i>N/A</i>	Flat Washer, 0.375 × 0.75 × 0.062
21	P1040020	Screw, M3 × 8 (sold in quantities of 25)
22	HW78802	Screw, 4-40 × 0.31 (sold in quantities of 25)
23	P1039959-004	Screw, M3 × 0.5 × 4 (sold in quantities of 50)
24	P1039959-006	Screw, M3 × 0.5 × 6 (sold in quantities of 50)
25	HW78805	Screw, M3 × 0.5 × 6 (sold in quantities of 50)
26	HW78806	Flat Washer, M4 (sold in quantities of 25)
27	<i>N/A</i>	Flat Washer, 0.5 × 0.195 × 0.09
28	HW78820	Crescent Ring, 0.375 Diameter (sold in quantities of 50)
29	<i>N/A</i>	Thread Forming Screw, M3 × 18
30	HW79041	Flat Washer, 0.25 × 0.125 × 0.023 (sold in quantities of 25)
31	<i>N/A</i>	Antistatic Brush Standoff
32	<i>N/A</i>	Shoulder Screw, M5 × 0.8 × 20
33	HWQ06020	Cable Tie, 0.09 × 3.62 (sold in quantities of 20)
34	<i>N/A</i>	Heat Sink Standoff with Spring
35	<i>N/A</i>	Plastic Snap-in Standoff
36	P1037990-018	ZT220 Packing Kit (one packing kit)
37	P1037990-019	ZT220 Packing Kit (eight packing kits)
38	<i>N/A</i>	ZT220 Top Support
39	<i>N/A</i>	ZT200 Bottom Support
40	<i>N/A</i>	ZT200 Non-Liner Take-Up Box
41	P1037974-045	ZT230 and ZT210 Packing Kit (one packing kit)
42	<i>N/A</i>	ZT230 and ZT210 Top Support
43	P1037974-046	ZT230 and ZT210 Packing Kit (eight packing kits)



Notes • _____



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