

ZT220 Calibrate the Ribbon and Media Sensors

Use the procedure in this section to calibrate the ZT220, which adjusts the sensitivity of the media and ribbon sensors and helps to resolve "Paper Out" and "Ribbon Out" errors (see below for LED indicators of errors).

     STATUS PAUSE DATA SUPPLIES NETWORK	<i>STATUS light steady red</i> <i>SUPPLIES light steady red</i> The media supply is out. The printer needs attention and cannot continue without user intervention.
     STATUS PAUSE DATA SUPPLIES NETWORK	<i>STATUS light steady red</i> <i>SUPPLIES light flashing red</i> The ribbon supply is out. The printer needs attention and cannot continue without user intervention.



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** + **CANCEL** for 2 seconds. (recommended)
 - Send the `ezpl.manual_calibration` SGD command to the printer. See the *Zebra Programming Guide* for more information about this command.

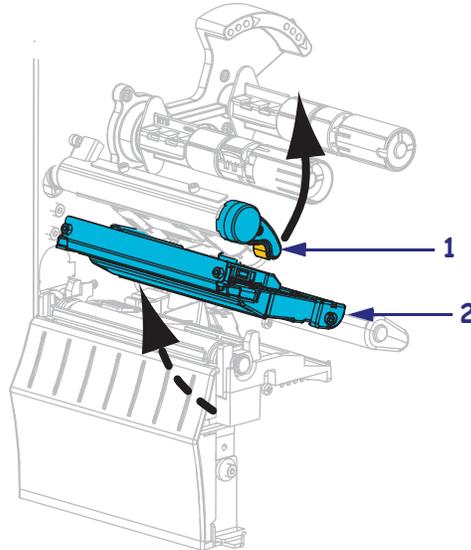
The printer does the following:

- The **STATUS light** and **SUPPLIES light** flash yellow once.
- The **PAUSE light** blinks yellow.

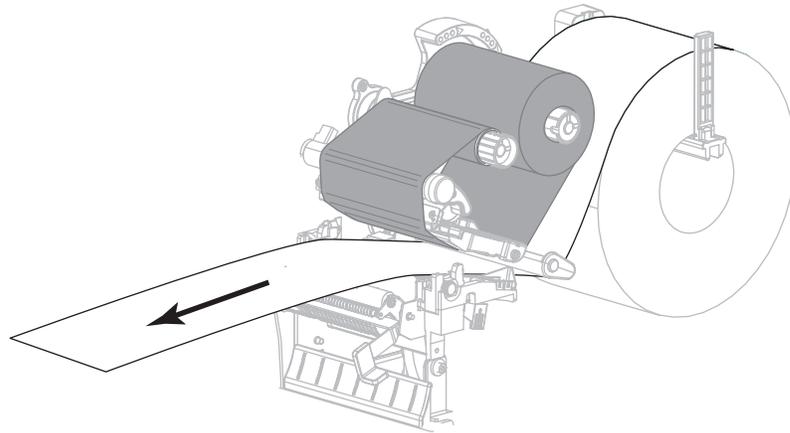


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2. **Caution** • The printhead may be hot and could cause severe burns. Allow the printhead to cool.
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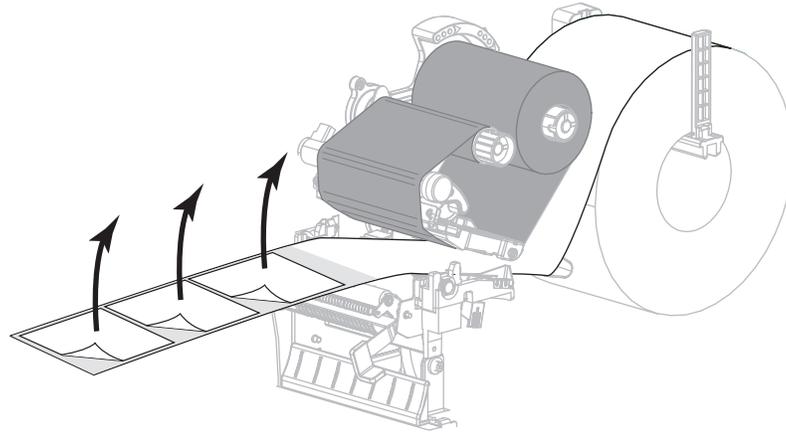
Rotate the printhead-open lever (1) counterclockwise to release the print mechanism (2).



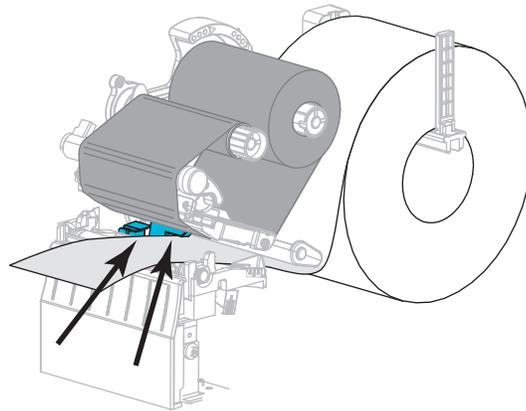
3. Extend the media approximately 8 in. (203 mm) out of the printer.



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

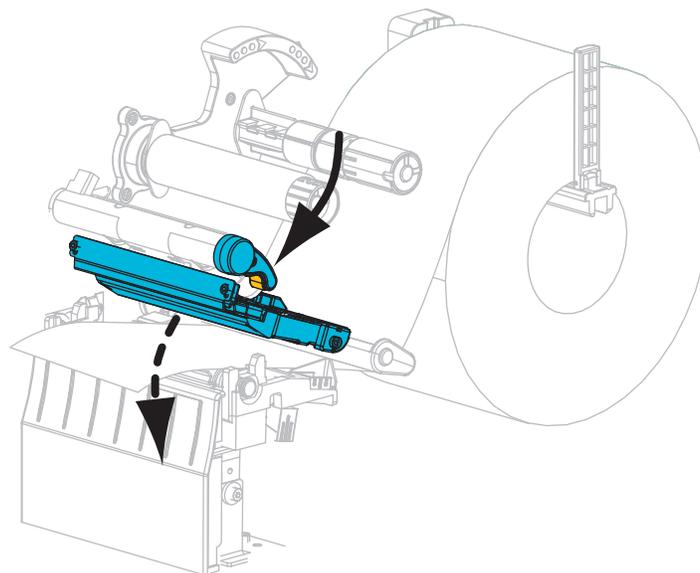


5. Pull the media into the printer so that only the backing is between the media sensors.



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.

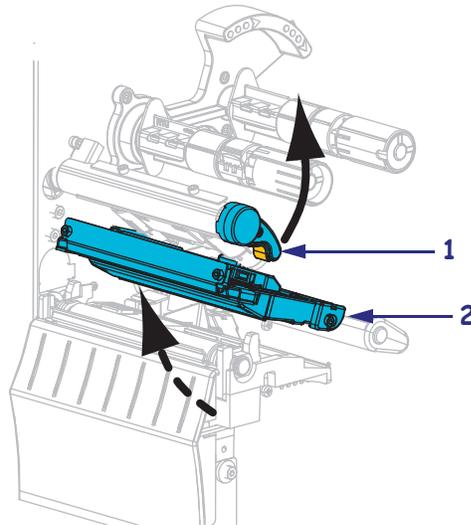


When the process is complete:

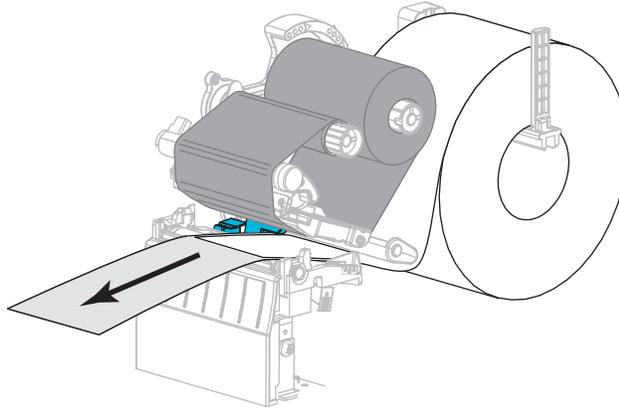
- The **SUPPLIES** light stops flashing.
- The **PAUSE** light flashes yellow.



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



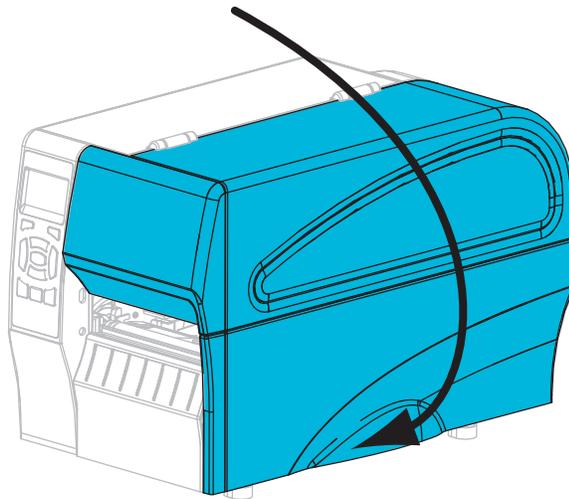
10. Pull the media forward until a label is positioned under the media sensors.



11. Reload the ribbon (if used).

12. Close the printhead.

13. Close the media door.



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

15. The printer will feed several labels while attempting to calibrate. After feeding is complete, press the feed button to ensure one label feeds correctly and without error.

Table 8 • Calibration and Diagnostic Tools (Continued)

Media and Ribbon Sensor Calibration	Calibrate the printer to adjust the sensitivity of the media and ribbon sensors. For complete instructions on how to perform a calibration procedure, see <i>Calibrate the Ribbon and Media Sensors</i> on page 98.	
	<i>Accepted values:</i>	N/A
	<i>Related ZPL command(s):</i>	~JC
	<i>SGD command used:</i>	ezpl.manual_calibration
	<i>Control panel menu item:</i>	MEDIA/RIBBON CAL (ZT230)
	<i>Control panel key(s):</i>	Hold PAUSE + CANCEL (corrected wck) for 2 seconds to initiate calibration.
	<i>Printer web page:</i>	The calibration procedure cannot be initiated through the web pages. See the following web page for settings that are set during sensor calibration: View and Modify Printer Settings > Calibration  Important • Do not change these settings unless you are told to do so by Zebra Technical Support or by an authorized service technician.
Communication Diagnostics Mode	Use this diagnostics tool to cause the printer to output the hexadecimal values for all data received by the printer. For more information, see <i>Communication Diagnostics Test</i> on page 148.	
	<i>Accepted values:</i>	<ul style="list-style-type: none"> • DISABLED • ENABLED
	<i>Related ZPL command(s):</i>	~JD to enable, ~JE to disable
	<i>SGD command used:</i>	device.diagnostic_print
	<i>Control panel menu item:</i>	DIAGNOSTIC MODE on page 25
	<i>Control panel key(s):</i>	Hold PAUSE + FEED for 2 seconds when the printer is in the Ready state.
	<i>Printer web page:</i>	N/A