

## 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.

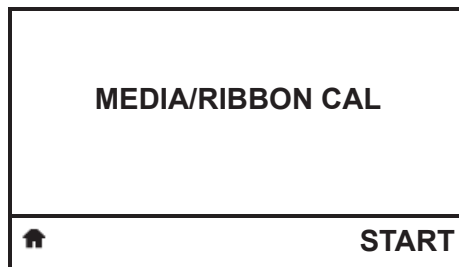
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- For a summary of the options for initiating calibration, see *Media and Ribbon Sensor Calibration* on page 87.



**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:

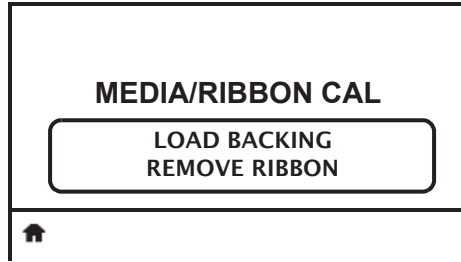
1. With the printer in the Ready state, initiate media and ribbon calibration in one of these ways:
  - Press and hold **PAUSE + CANCEL** for 2 seconds. Updated wck 11/2012
  - Send the `ezpl.manual_calibration` SGD command to the printer. See the *Zebra Programming Guide* for more information about this command.
  - ZT230 printer only: ZT220 - follow process interacting with the Pause button sequence
    - 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 *ZT230 Printer Control Panel Display* for information about using the control panel and accessing the menus.



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

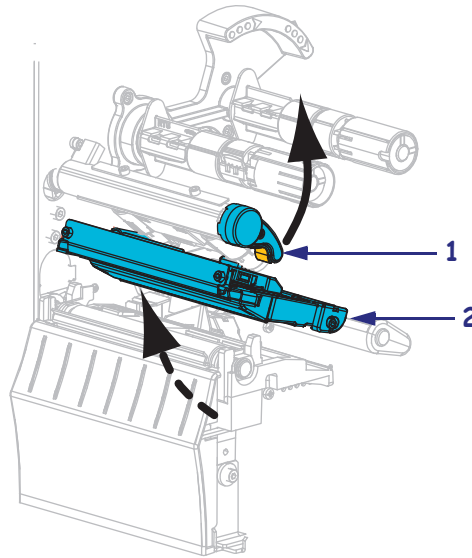
The printer does the following:

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

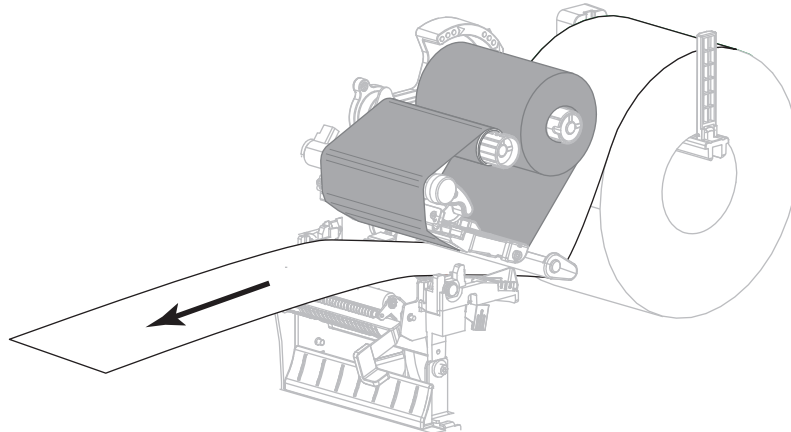


2. **Caution** • The printhead may be hot and could cause severe burns. Allow the printhead to cool.

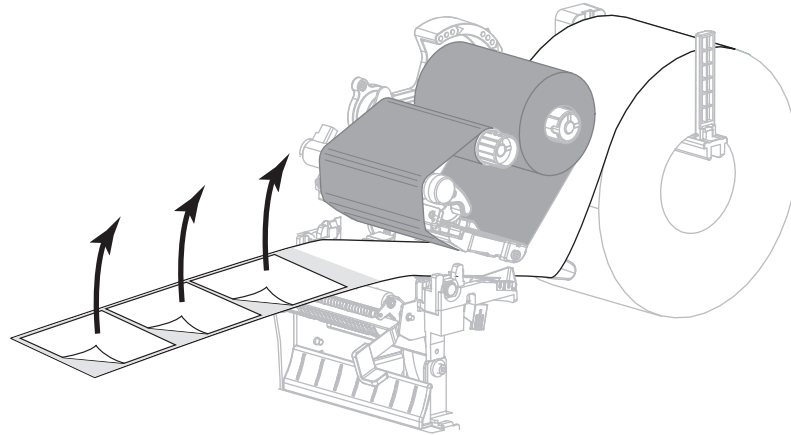
Rotate the printhead-open lever (1) counterclockwise to release the print mechanism (2).



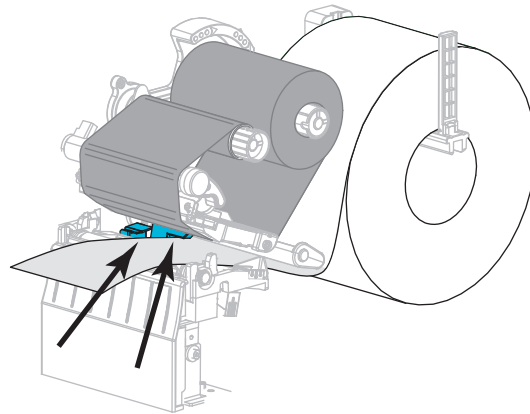
3. Extend the media approximately 8 in. (203 mm) out of the printer.



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

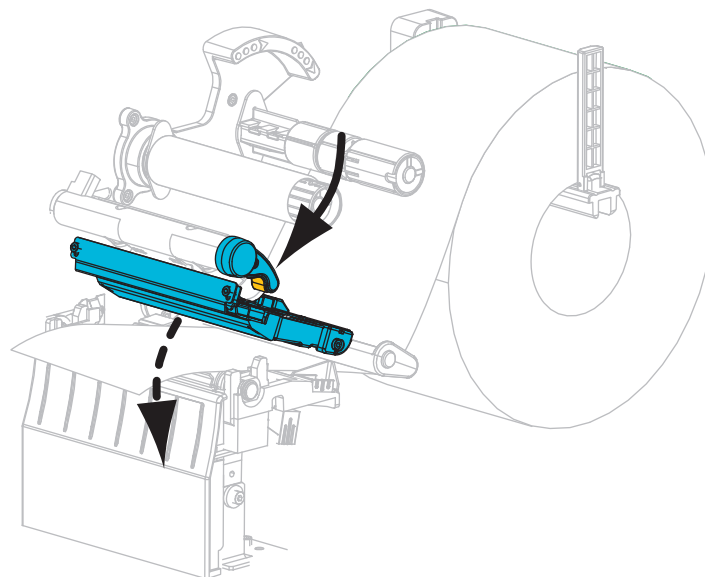


5. Pull the media into the printer so that only the backing is between the media sensors.

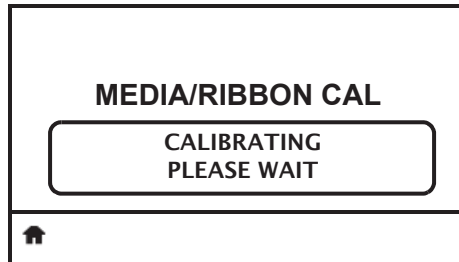


6. Remove the ribbon (if used).

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

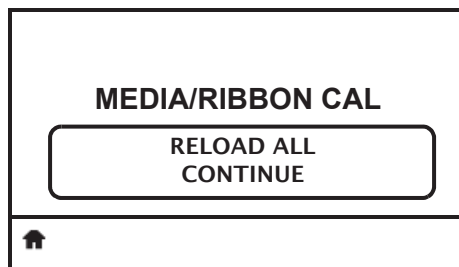


8. Press **PAUSE** to begin the media calibration process.
  - The PAUSE light turns off.
  - The SUPPLIES light flashes.
  - The control panel (ZT230 printer only) displays:

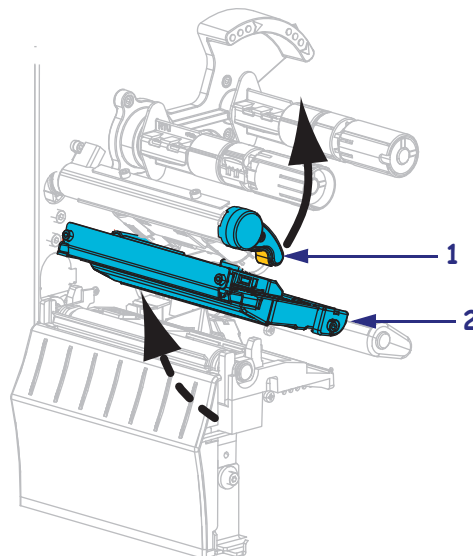


When the process is complete:

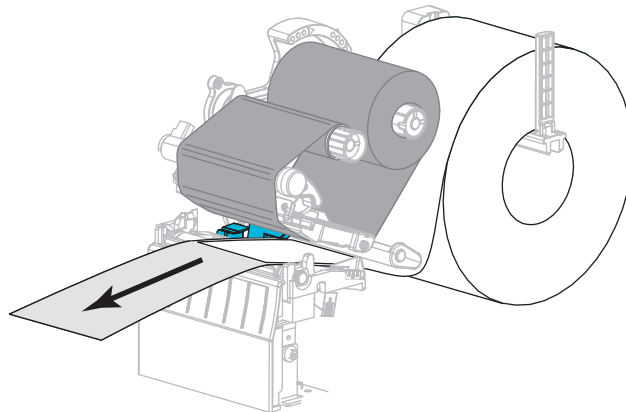
- The SUPPLIES light stops flashing.
- The PAUSE light flashes yellow.
- The control panel (ZT230 printer only) displays:



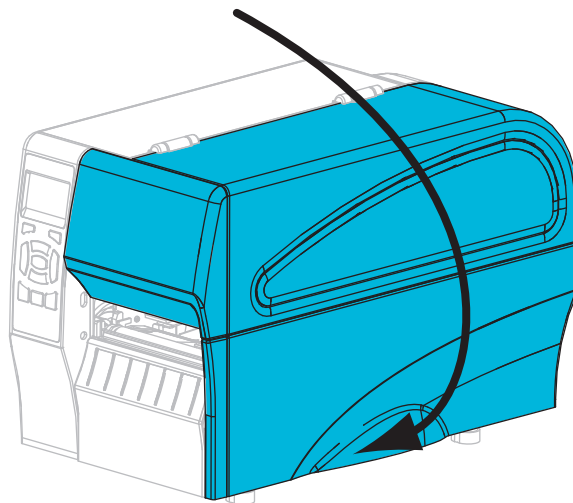
9. Rotate the printhead-open lever (1) counterclockwise to release the print mechanism (2).



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.

**Table 8 • Calibration and Diagnostic Tools (Continued)**

<b>Media and Ribbon Sensor Calibration</b>	<p>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.</p>	
	<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 <b>PAUSE + CANCEL (corrected wck)</b> for 2 seconds to initiate calibration.
	<i>Printer web page:</i>	<p>The calibration procedure cannot be initiated through the web pages. See the following web page for settings that are set during sensor calibration:</p> <p style="padding-left: 40px;">View and Modify Printer Settings &gt; Calibration</p> <p> <b>Important</b> • Do not change these settings unless you are told to do so by Zebra Technical Support or by an authorized service technician.</p>
<b>Communication Diagnostics Mode</b>	<p>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.</p>	
	<i>Accepted values:</i>	<ul style="list-style-type: none"> <li>• DISABLED</li> <li>• ENABLED</li> </ul>
	<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 <b>PAUSE + FEED</b> for 2 seconds when the printer is in the Ready state.
	<i>Printer web page:</i>	N/A