

Maintenance

This section provides routine cleaning and maintenance procedures.

Clean the Printer

Your printer requires periodic maintenance to keep it good working order and printing quality labels, receipts, tags, etc.

Recommended Cleaning Supplies

The following printer cleaning supplies are recommended for use with your printer:

- Printhead cleaning pens—for simple operator printhead cleaning
- 99% pure isopropyl alcohol—use a labeled dispenser
- Fiber-free cleaning swabs—for media path, guides, and sensors
- Cleaning Wipes—for media path and interior (ex., Kimberly-Clark Kimwipes)
- Can of compressed air—to clean inside parts that are too sharp or sensitive to be cleaned using other methods



IMPORTANT: Never re-moisten cleaning materials used to clean the printer.



IMPORTANT: The cutter mechanism does not require maintenance cleaning. DO NOT clean the blade or mechanism. The blade has a special coating to resist adhesives and wear.



IMPORTANT: Using too much alcohol can result in contamination of the electronic components requiring a much longer drying time before the printer will function properly.



IMPORTANT: Do NOT Use an air compressor in place of the can of compressed air. Air compressors have micro-contaminants and particles that get into the air system and damage your printer.



CAUTION—EYE INJURY: Use eye protection to protect your eyes from flying particles and objects when using compressed air to clean the inside of your printer.




Get Zebra Supplies and Accessories for Cleaning Your Printer

We recommend that you purchase Zebra supplies and accessories. These are specifically designed to work with your Zebra printer.

For a list of available cleaning supplies, go to zebra.com/supplies.

Recommended Cleaning Schedule

Component / Area	Recommendations
Printhead	Clean the printhead after printing every five rolls of media. See Cleaning the Printhead on page 121.
Standard platen (drive) roller	As needed to improve print quality. Platen rollers can slip causing print image distortion and in worst case scenarios not move the media (labels, receipts, tags, etc.) See Cleaning and Replacing the Platen (Drive Roller) on page 126. Standard platen rollers come in two colors, black (203 dpi) and gray (300 dpi).
Media path	Clean thoroughly as needed with fiber-free cleaning swabs and cloths moistened with 99% isopropyl alcohol. Let alcohol evaporate completely. See Cleaning the Media Path on page 122.
Interior	Clean as needed using a soft cloth, brush or compressed air to wipe or blow dust and particles out of the printer. Use 99% isopropyl alcohol and a fiber-free cleaning cloth to dissolve contaminants like oils and grime.
Exterior	Clean as needed using a soft cloth, brush, or compressed air to wipe or blow dust and particles out of the printer. The exterior of the printer can be cleaned using plain soap and water solutions to moisten the cloth. Only use the minimum amount of cleaning solution to avoid getting solution in the printer or other areas. Do NOT clean connectors or interior of the printer with this method. The latest healthcare printer models now include ultraviolet (UV) and disinfectant-ready plastics for hospital and other similar environments. The printer user interface controls are sealed so they can be cleaned with the rest of the printer's exterior. See the 'Guide To Disinfecting and Cleaning Zebra Healthcare Printers on the Zebra website at zebra.com/support for the latest information on tested and approved cleaning materials and cleaning methods.
Label dispenser option	Clean as needed to improve label dispenser operations. For details on operating the dispenser, see Using the Label Dispenser Option on page 100.

Component / Area	Recommendations
Cutter option	<p>The cutter is not a user-serviceable component. Do NOT clean inside the cutter opening or blade mechanism. However, you may use the exterior cleaning procedure to clean the cutter bezel (housing). For cleaning and maintenance of this option, call a service technician.</p> <p> CUT WARNING: There are no operator serviceable parts in the cutter unit. Never remove the cutter cover (bezel). Never attempt to insert objects or fingers in to the cutter mechanism.</p> <p> IMPORTANT: The blade has a special coating to resist adhesives and wear. Cleaning it may ruin the blade.</p> <p> IMPORTANT: Use the recommended cleaning supplies listed in Recommended Cleaning Supplies on page 119. Using unapproved tools, cotton swabs, solvents (including alcohol), etc. may damage or shorten the cutter's usable life or cause the cutter to bind.</p>

Cleaning the Printhead

For optimal print operations, clean the printhead each time you load a new roll of media.

Always use a new cleaning pen on the printhead. Old, used cleaning pens carry contaminants from previous use that may damage the printhead.



CAUTION: The printhead becomes hot while printing. To protect from damaging the printhead and risk of personal injury, avoid touching the printhead. Only use the cleaning pen to perform printhead maintenance.

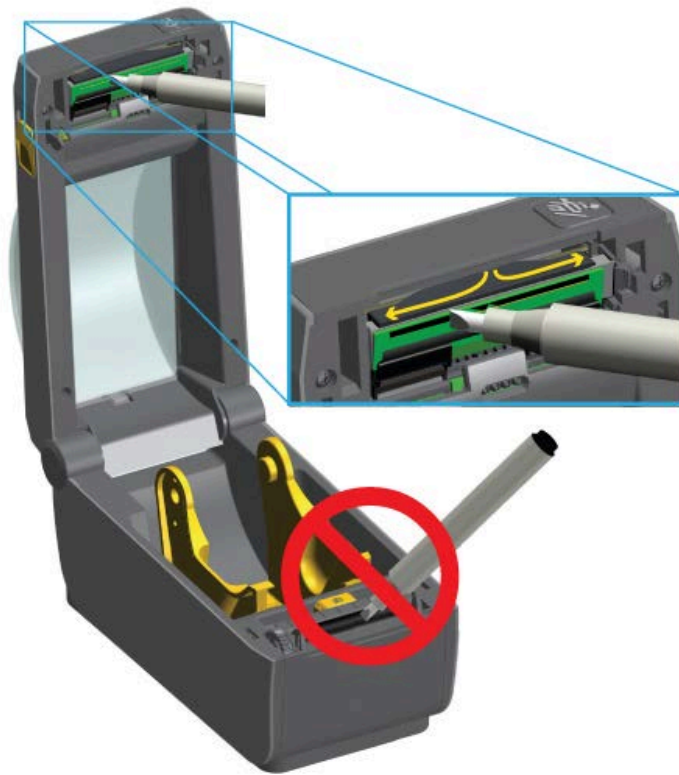


CAUTION—ESD: Observe static-safe procedures when working with the printhead or the electronic components under the top cover. The discharge of electrostatic energy that accumulates on the surface of the human body or other surfaces can damage or destroy the printhead and other electronic components used in this device.

1. Rub the cleaning pen across the dark area of the printhead. Clean from the middle to the outside.

This will move adhesive transferred from the edges of media to the outside of media path.

2. Wait one minute before you close the printer to allow the wet areas to dry fully.



Cleaning the Media Path

Use a cleaning swab and or a lint-free cloth to remove debris, dust or crust that has built-up on the holders, guides, and the media path surfaces.

Lightly moisten the swab or cloth with 99% solution medical-grade alcohol. For hard to clean areas, use extra alcohol on a cleaning swab to soak the debris to break up any adhesive that may have accumulated on surfaces in the media compartment.



IMPORTANT: Do NOT clean the printhead, movable sensor, or platen as part of this process.

1. Wipe the inside areas of the media compartment.
2. Wipe the inside surfaces of the roll holders and the underside of the media guides with a swab.
3. Wipe the movable sensor slide channel (but not the sensor). Move the sensor gently as needed to get to all areas.

4. Wait one minute before closing the printer to allow time for all cleaned areas to dry thoroughly.



1	Media roll holders and guides
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NOTE: Use a clean swab for each cleaning. Discard all used cleaning swabs.

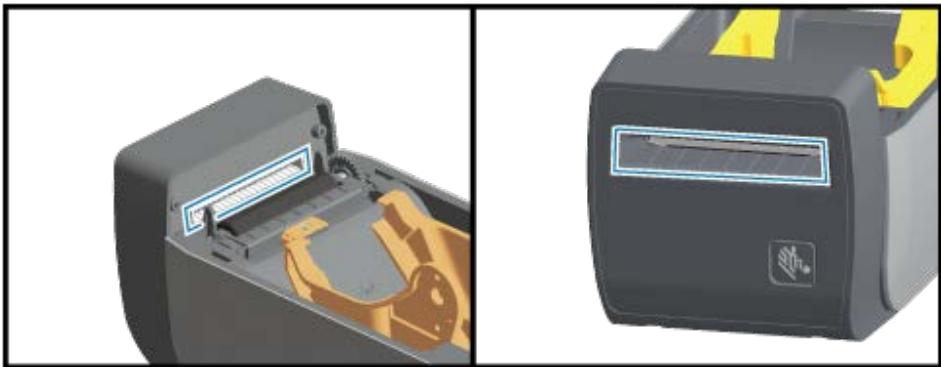
Options for Cleaning the Cutter and Label Dispenser

If either the Cutter option or the Label Dispenser option is installed on your printer, be sure to clean them as well following the procedures in [Cleaning the Cutter](#) on page 124 and [Cleaning the Label Dispenser](#) on page 124.

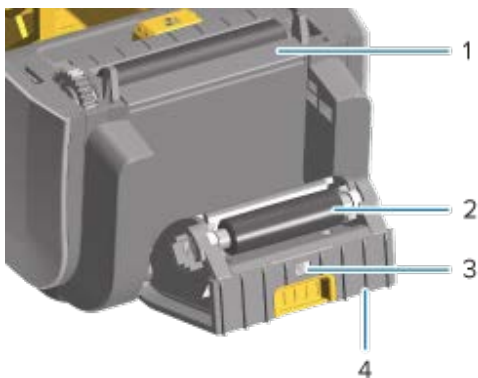
Cleaning the Cutter

While the media path surfaces can be cleaned, the internal cutter blades and mechanism are NOT a user-cleanable component. You will only need to wipe the areas around the cutter,

- 1. Wipe the ridges and the plastic surfaces of the media entry (inside) and exit slot (outside) of the cutter, the areas outlined in blue in these images.
- 2. Repeat as necessary to remove any adhesive or contaminate residue after the cleaned areas have dried.



Cleaning the Label Dispenser



1	Peel bar
2	Pinch roller
3	Label-taken sensor
4	Ridges

- 1. Open the door and clean the peel bar (1), the inner surfaces, and the ridges on the door (4).
- 2. Wipe the roller (2) while rotating it. Discard the swab or cloth and clean again to remove any residue.
- 3. Clean any streaks and residue on the label-taken sensor (3) window.

Cleaning the Sensors

The sensors must be cleaned periodically to remove any accumulated dust.



IMPORTANT: Do NOT use an air compressor to remove dust. Compressors add moisture, fine grit, and lubricant which can contaminate your printer.



1	Upper array sensor (web/gap)
2	Movable sensor (black mark and lower web/gap)

1. If necessary, use a dry cleaning swab to gently brush away dust from the sensor or use a can of compressed air.
2. If adhesives or other contaminants remain, use an alcohol moistened swab to break any of this build-up.
3. Use a dry swab to gently remove any residue that may be left from the first cleaning.

4. Repeat steps 1 and 2 as required until all residue and streaks are removed from the sensor.

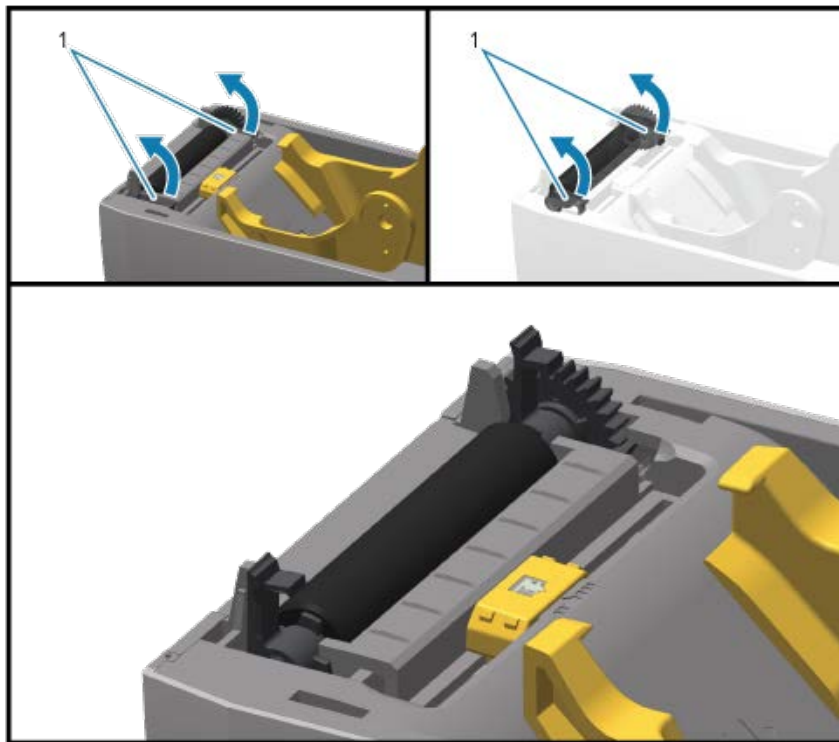
Cleaning and Replacing the Platen (Drive Roller)

The platen is the print surface and drive roller for your media. Contaminants on the platen roller can damage the printhead or cause the media to slip or stick when printing. Adhesive, dirt, general dust, oils and other contaminants should be cleaned immediately off the platen.

Clean the platen (and media path) whenever the printer has significantly poorer performance, print quality or media handling when compared to normal printing performance. If sticking or jamming of media continues even after cleaning the platen, you will need to replace the platen.

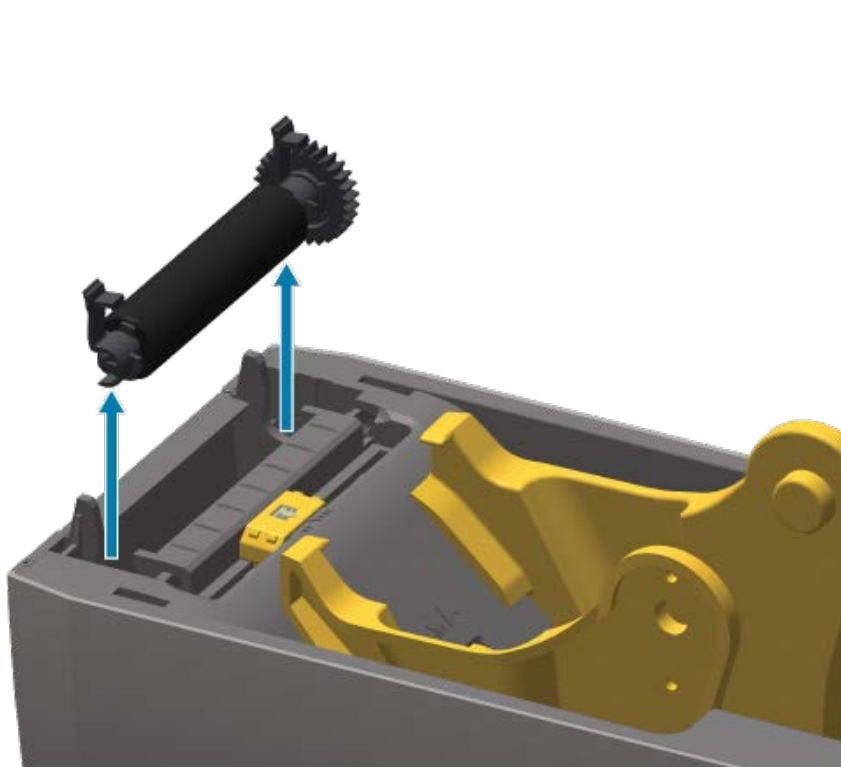
The platen can be cleaned with a fiber-free swab (such as a Texpad swab) or a lint-free, clean, damp cloth very lightly moistened with medical grade alcohol (99% pure or better).

1. Open the cover (and dispenser door if the dispenser is installed).
2. Remove media from the platen area.
3. Pull the platen-bearing latch release tabs on the right and left sides towards the front of the printer and rotate them up.

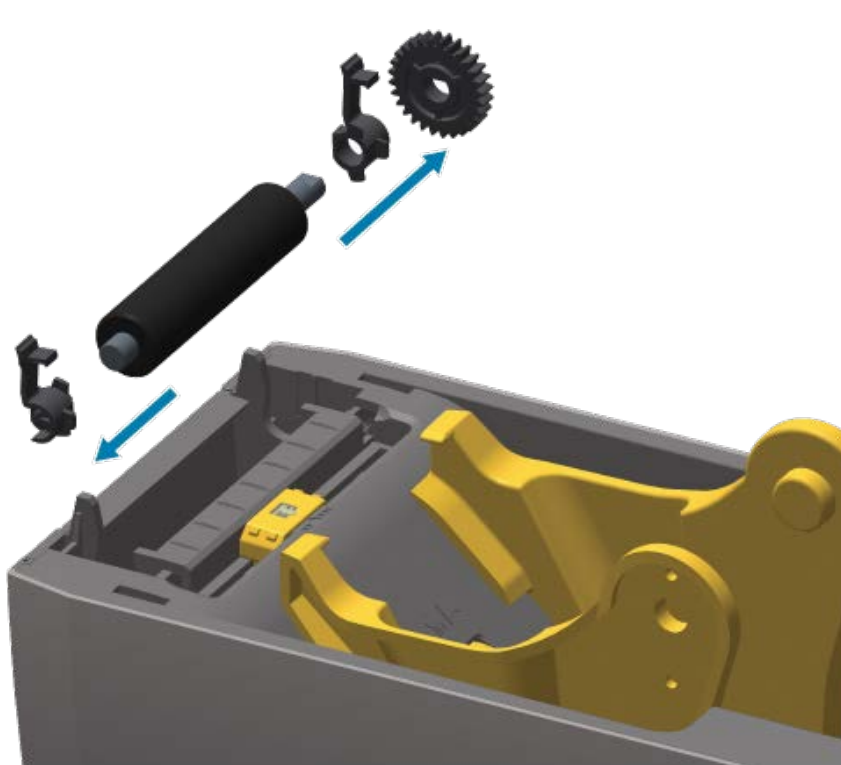


1	Platen bearings
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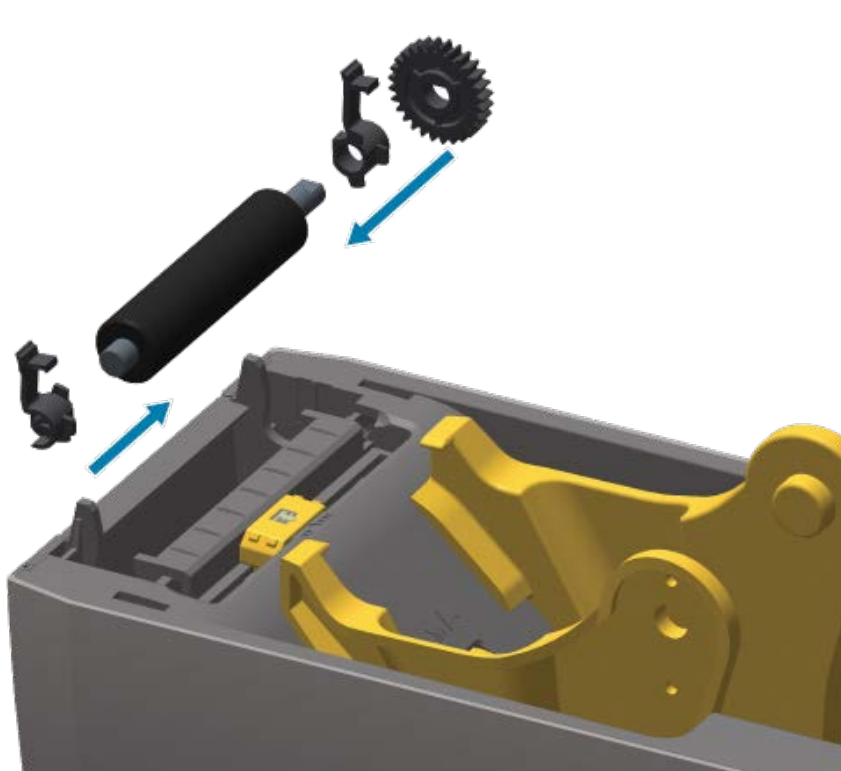
4. Lift the platen out of the printer's bottom frame.



5. Slide the gear and the two bearings off the shaft of the platen roller.



6. Clean the platen with the alcohol-moistened swab. Clean from the center out. Repeat this process until all of the roller surface has been cleaned. If there has been heavy adhesive build-up or a label jam, repeat with a new swab to remove residual contaminants. Adhesives and oils, for example, may be thinned by the initial cleaning but not completely removed.
7. Discard the cleaning swabs after use. Reusing used cleaning swabs for cleaning may contaminate the platen surface.
8. Make sure the bearings and drive gear are on the shaft of the platen roller.



9. Align the platen with the gear to the left and lower it into the printer's bottom frame.
10. Rotate the platen-bearing latch release tabs down on the right and left sides towards the rear of the printer and snap them into place.

Allow the printer to dry for one minute before closing the dispenser door and the media cover and loading new media.

Other Printer Maintenance

There are no user level maintenance procedures beyond those detailed in this section. See [Troubleshooting](#) on page 133 for more information on diagnosing printer and print problems.

Real-Time Clock (RTC) Battery

Real Time Clock (RTC) is available with printers on which networking options are factory-installed and which are paired using the Zebra Print Touch feature. See [Zebra Print Touch](#) on page 27.

The RTC battery is rated to provide approximately 10 years of service. It is not user-replaceable. See a Zebra authorized service technician to replace the RTC battery. For details on your printer and printer component warranties, go to the Zebra website at zebra.com/warranty.



CAUTION: The printer's RTC battery is a three-volt battery. If the printer consistently provides a delayed time stamp which usually indicates a flat or low RTC battery condition. Battery replacement must be performed by a qualified service technician. Only a Zebra-approved replacement battery must be used as a replacement.



CAUTION: Do NOT short-circuit the battery. Doing so may generate heat, cause a fire, or burst the battery. By that same token, do NOT heat the battery, disassemble it, or dispose of it in a fire.



IMPORTANT: Recycle batteries according to local your guidelines and regulations. Wrap the battery during disposal or storage to avoid a short circuit.

No Replaceable Fuses

There are no replaceable fuses in this Zebra printer or in its power supplies.

Replace the Printhead

Before you start, review the procedures to remove the existing printhead and install a new one.



CAUTION—ESD: Prepare your work area to protect against static discharge. The area must be static-safe. Use a properly-grounded, conductive-cushioned mat to hold the printer. Be sure to wear a conductive wrist strap.



CAUTION: Unplug the printer from the power supply and allow the printer to cool to prevent injuries or damage to printer circuitry.

Before you begin, open the printer by pulling the release latches forward, lift the top cover, and follow the steps in [Removing the Printhead](#) on page 129 and [Replacing the Printhead](#) on page 131.

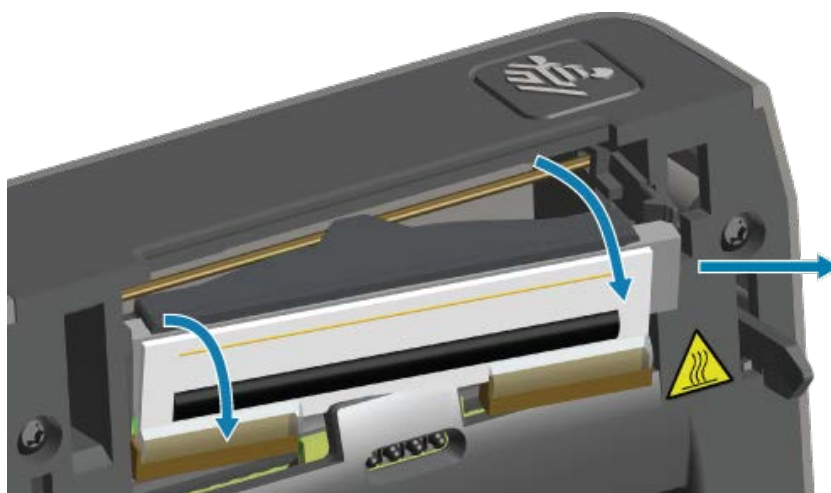
Removing the Printhead

1. Turn printer power OFF.
2. If you have not done so already, open the printer.

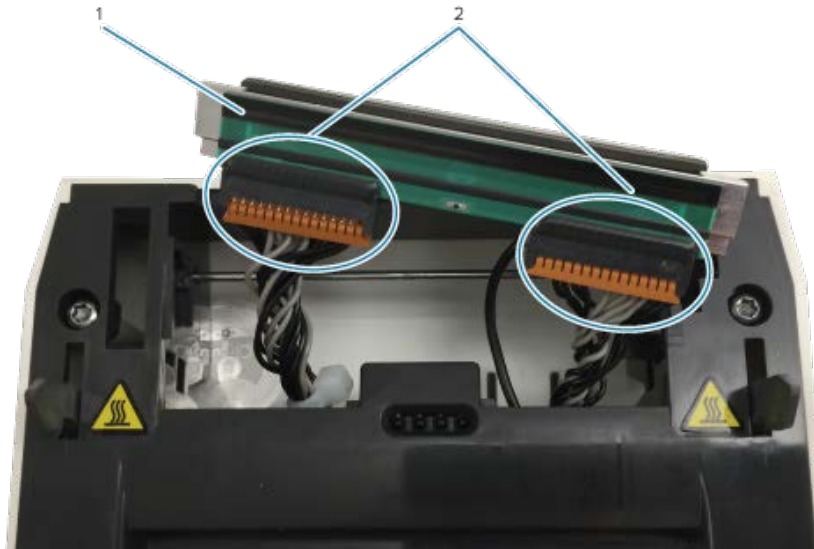
3. Pull the printhead release latch on the right side of the printhead towards the outside of the printer to release the printhead.



4. Swing the loose right side of the printhead out of the printer. Pull it to the right a little to get the left side of the printhead clear. Pull the printhead free to gain access to its attached cables.

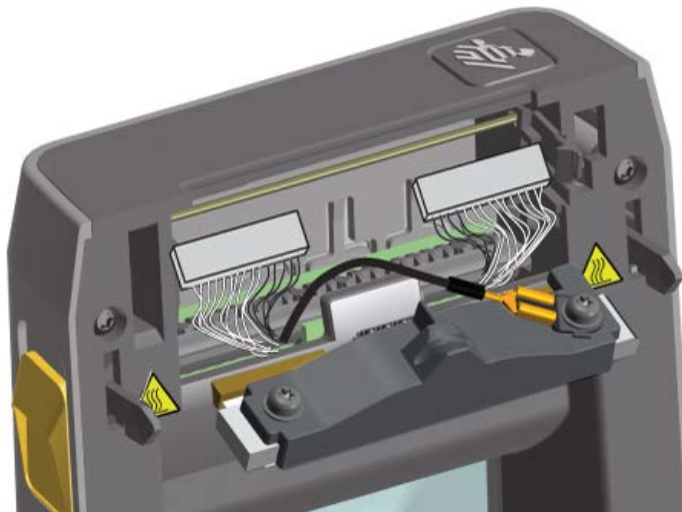


5. Gently but firmly pull the two printhead cable bundle connectors off the printhead.



1	Printhead
2	Connectors

6. Gently but firmly pull the single black ground wire off the back of the printhead to complete this procedure.



Replacing the Printhead

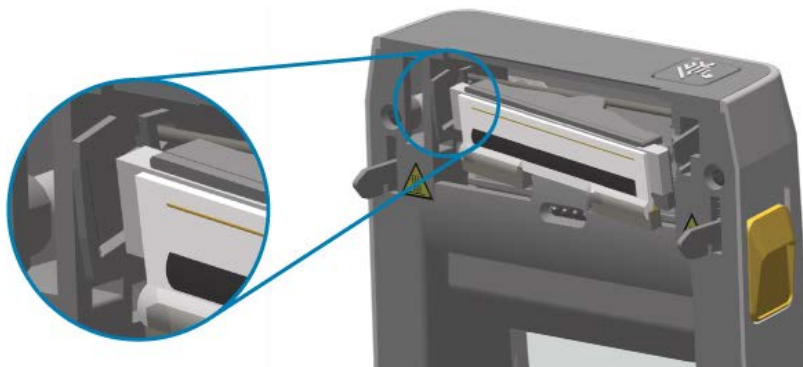
1. Push the right side printhead cable connector into the printhead.



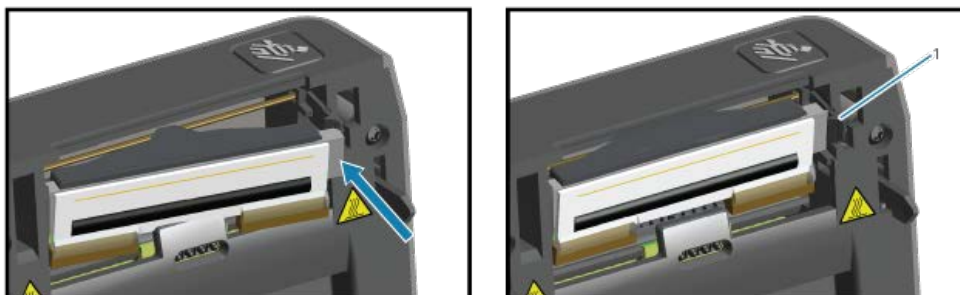
NOTE: The connector is keyed to only insert one way.

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2. Connect the single black ground wire spade lug connector onto the spade lug attached to the back of the printhead.
3. Push the left side printhead cable connector onto the printhead.
4. Check that the ground wire and wire bundles are still connected to the printhead.
5. Insert the left side of the printhead assembly into the recessed area.



6. Push the right side of the printhead into the printer until the latch locks the right side of the printhead into the printer.



1	Locked
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7. Verify that the printhead moves freely into the printer when pressure is applied and remains locked when pressure is released.
8. Clean the printhead using a new cleaning pen to wipe body oils (fingerprints) and debris off the printhead. Clean from the center of the printhead to the outside. See [Cleaning the Printhead](#) on page 121.
9. Reload media.
10. Turn printer power ON and print a status report to ensure proper function. See [Testing Printing with the Configuration Report](#) on page 59.