

Installation Instructions

This kit includes the parts and documentation necessary to install the Option Covers Maintenance Kit into the following printers:

- ZT410/ZT420
- ZT411/ZT421



NOTE: Some configurations of this printer do not include the features that are marked with this symbol (‡) in this chapter. The part number sticker inside the media compartment, usually located below the media hanger, indicates if the printer includes these features. The information will be in the following format:

Part Number: ZTxxxxx – ~~Xxxxxxxx~~.

If the last part (~~Xxxxxxxx~~) begins with the letter **P**, the printer DOES NOT include these features.



CAUTION: Turn off (O) the printer and disconnect it from the power source before performing the following procedure.

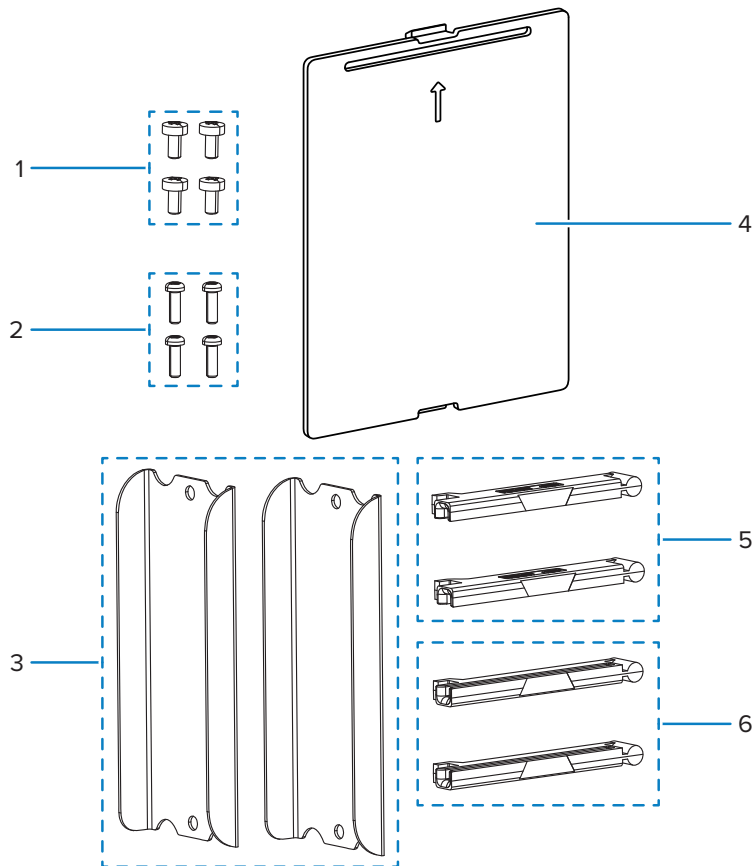


IMPORTANT: A qualified service technician must perform this installation.

Read these instructions thoroughly before attempting to install this kit.

Parts List

Before proceeding, verify that your kit contains the following items. To reorder specific parts, navigate to [Zebra.com/parts](https://zebra.com/parts), and select your printer model.



Item	Description	Qty
1	Screw, M3 × 0.65 × 6	4
2	Screw, M2.5 × 8	4
3	Option cover	2
4	Liner take-up opening cover	1
5	Upper option card guide	2
6	Lower option card guide	2

Tools Required

TOOLS NEEDED:

- Metric nutdriver set
- Antistatic wrist strap and mat
- Phillips screwdriver set
- Safety glasses

Prepare for Installation



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.

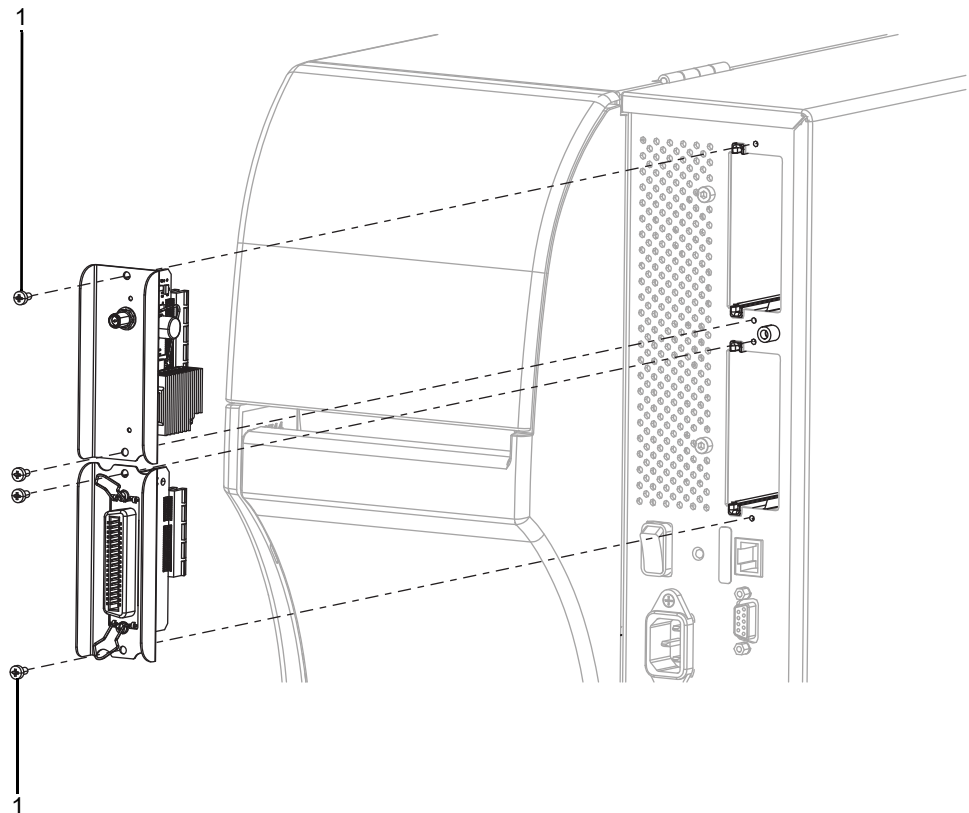
- 1. Disconnect the AC power cord and all data cables.
- 2. Which item are you replacing?

If the...	Then...
Option Card Cover	Go to “Replace the Option Card Covers” on page 3.
Liner Take-up Cover	Go to “Replace the Liner Take-up Cover” on page 5.
Option Card Guides	Go to “Replace the Option Card Guides” on page 7.

Replace the Option Card Covers

Remove the Option Cards

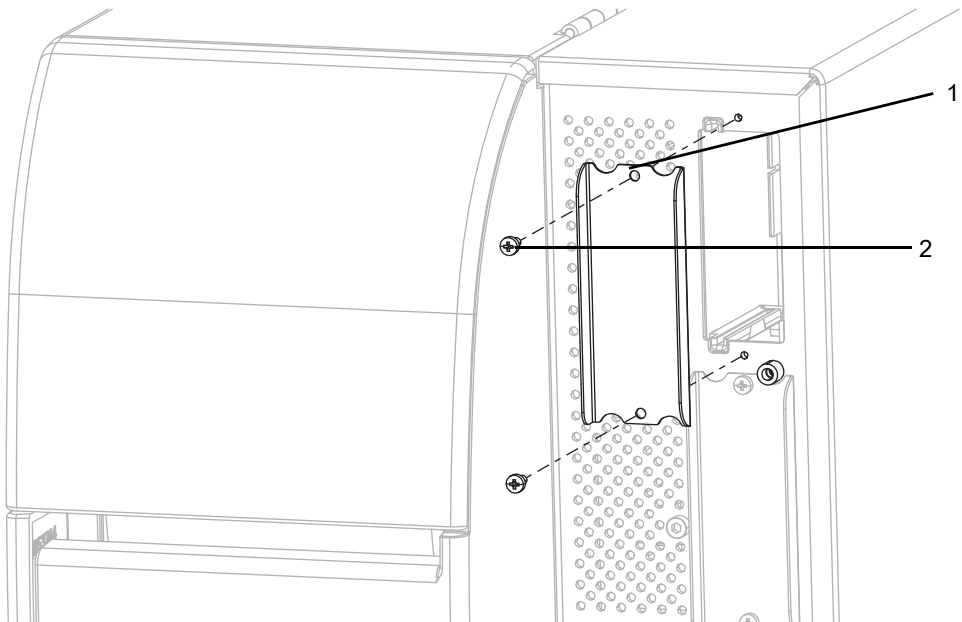
- 1. Remove the two screws (3) securing each option board to the printer.



- 2. Remove the option cards.

Install the Options Covers

- 1. Install the new covers (1) by lining up the mounting holes in the printer with the mounting holes in the new cover.
- 2. Install the new mounting screws.



- 3. Do you need to replace other parts included with this kit?

If...	Then...
Yes	• Go to “Replace the Liner Take-up Cover” on page 5. • Go to “Replace the Option Card Guides” on page 7.
No	Go to “Resume Printer Operation” on page 23.

Replace the Liner Take-up Cover

Remove the Liner Take-up Assembly

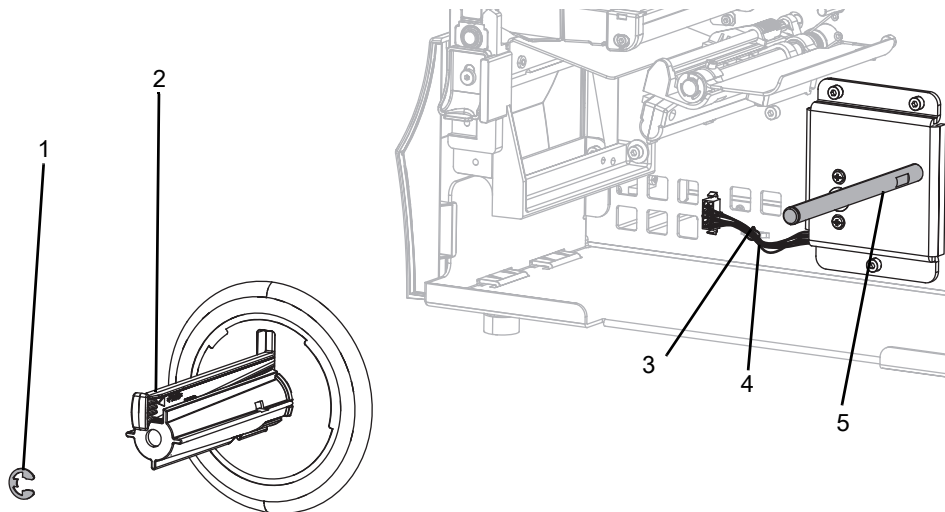


CAUTION—ESD: Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

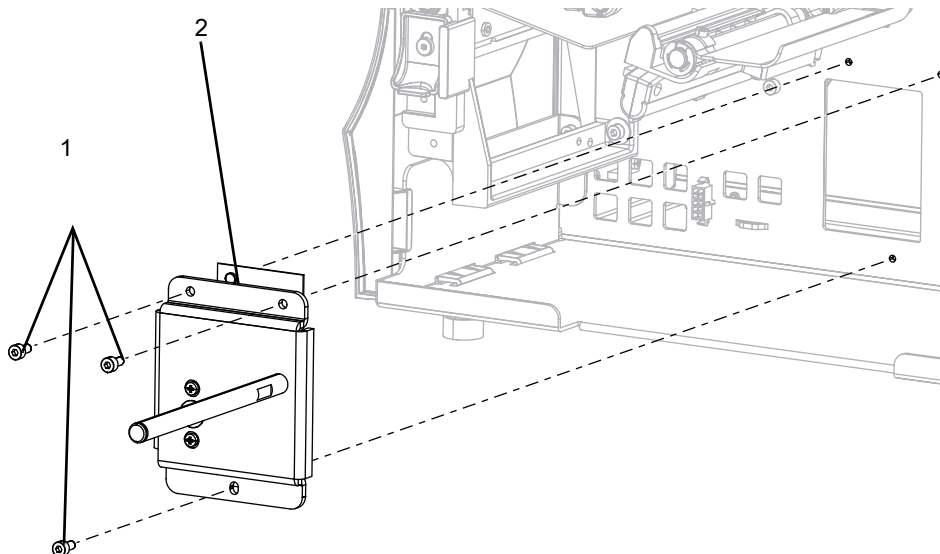


CAUTION—EYE INJURY: Wear protective eyewear when installing or removing E-rings, C-clips, snap rings, springs, and mounting buttons. These are under tension and could fly off.

1. Remove the E-ring (1) securing the liner take-up (LTU) (2) spindle to the shaft (5).
2. Disconnect the liner take-up cable from the ten-pin option connector and cut the cable tie (3).
3. Slide the spindle assembly (2) off of the shaft (3).



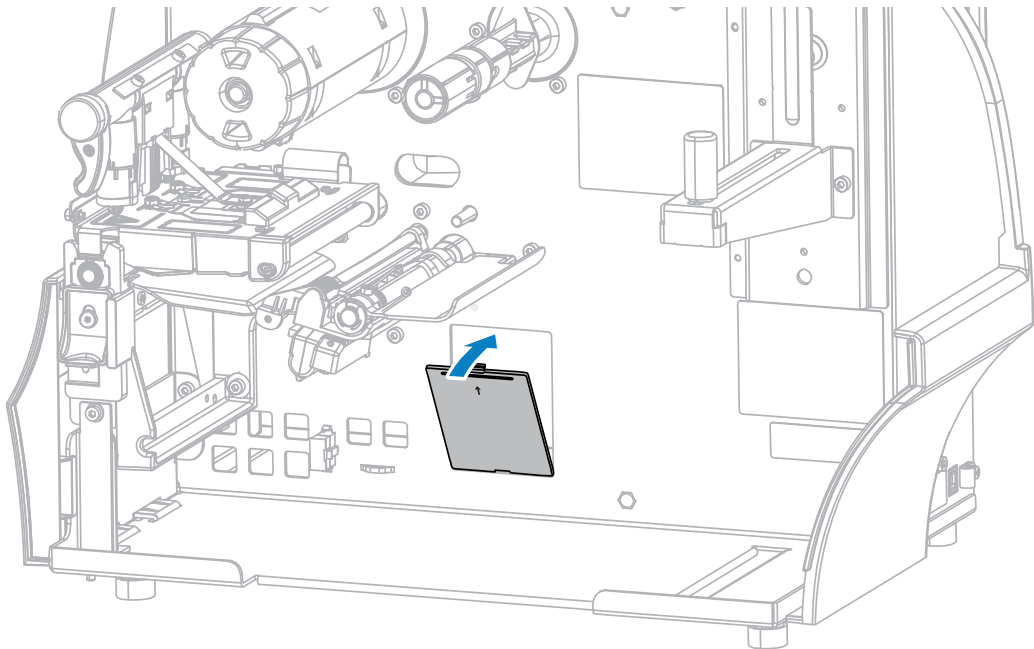
4. Remove the three mounting screws (1) securing the liner take-up motor assembly (2).



5. Remove the liner take-up motor assembly from the printer.

Install the Liner Take-up Cover

- 1. With the arrow on the liner take-up cover facing upward, insert the bottom of the cover into the opening in the printer mainframe. Then rotate the cover up, and snap it into place.



- 2. Do you need to replace other parts included with this kit?

If...	Then...
Yes	Go to "Replace the Option Card Covers" on page 3. Go to "Replace the Option Card Guides" on page 7.
No	Go the "Resume Printer Operation" on page 23.

Replace the Option Card Guides

Remove the Electronics Cover

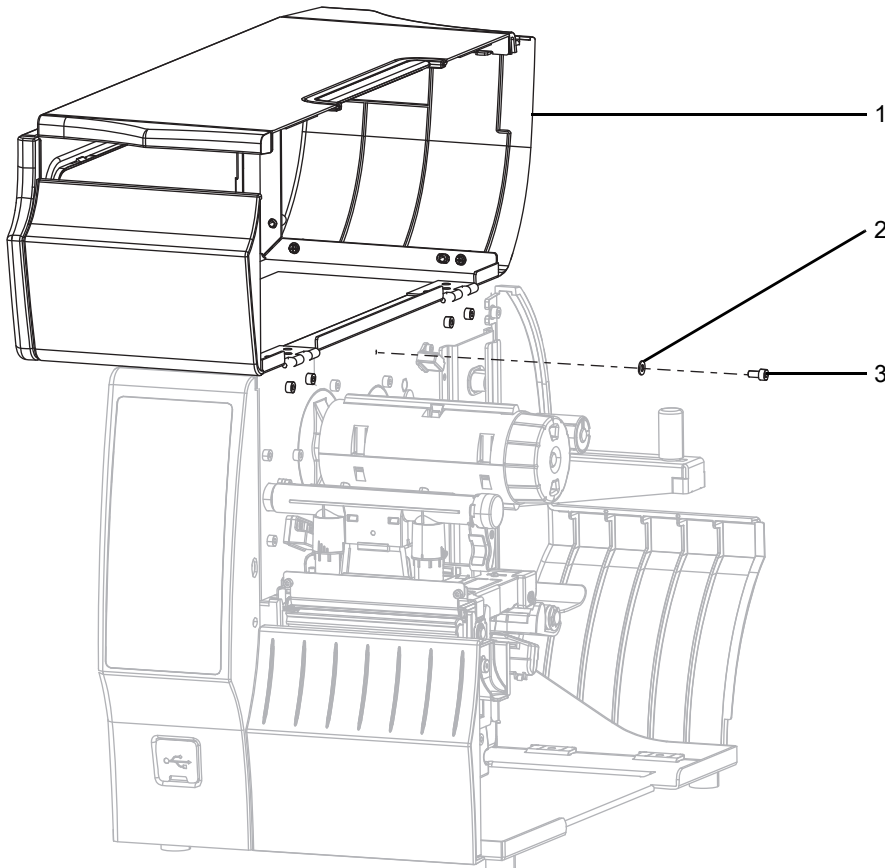


NOTE: Retain all parts removed during disassembly, unless otherwise directed.



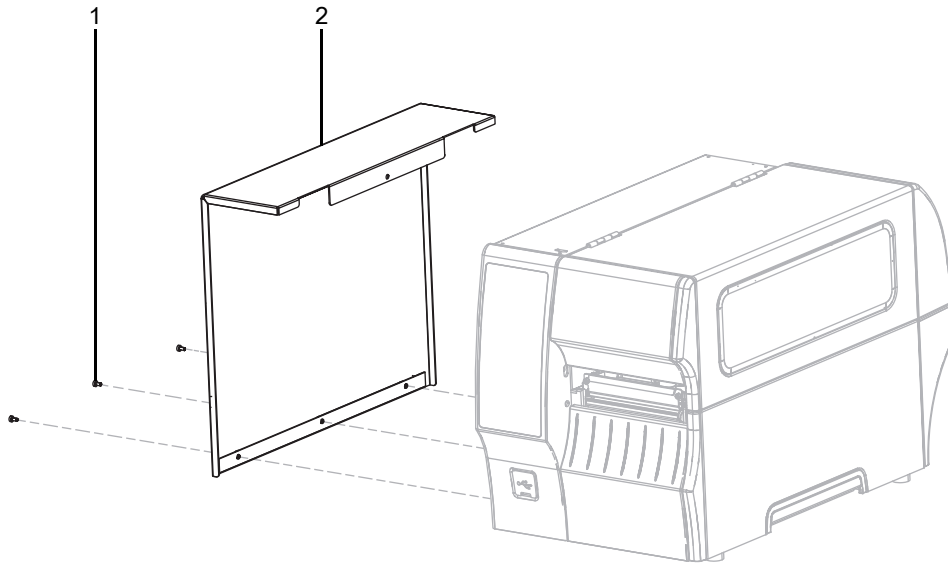
CAUTION: Turn off (O) the printer and disconnect it from the power source before performing the following procedure.

1. Open the media door (1).
2. Remove the media and ribbon.
3. Remove the washer (2) (ZT410/ZT420 only) and the screw (3) securing the electronics cover.



4. Close the media door.

5. Remove the three screws (1) securing the electronics cover (2) to the printer.



6. Remove the electronics cover by lifting up on the electronics cover.

Disconnect and Remove the Main Logic Board

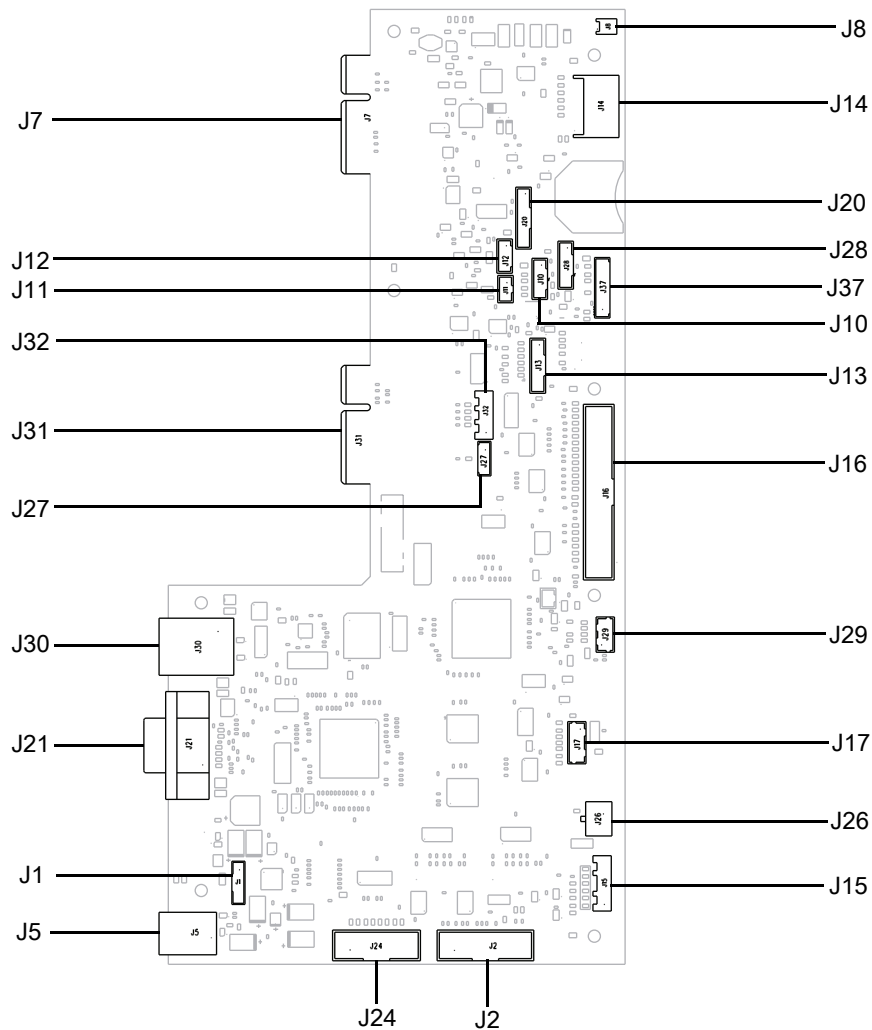


NOTE: It is not necessary to remove the option board covers to remove the MLB.

Are you working on a...	Then...
ZT410/ZT420 Printer	Go to "ZT410/ZT420 Printer" on page 9.
ZT411/ZT421 Printer	Go to "ZT411/ZT421 Printers" on page 11.

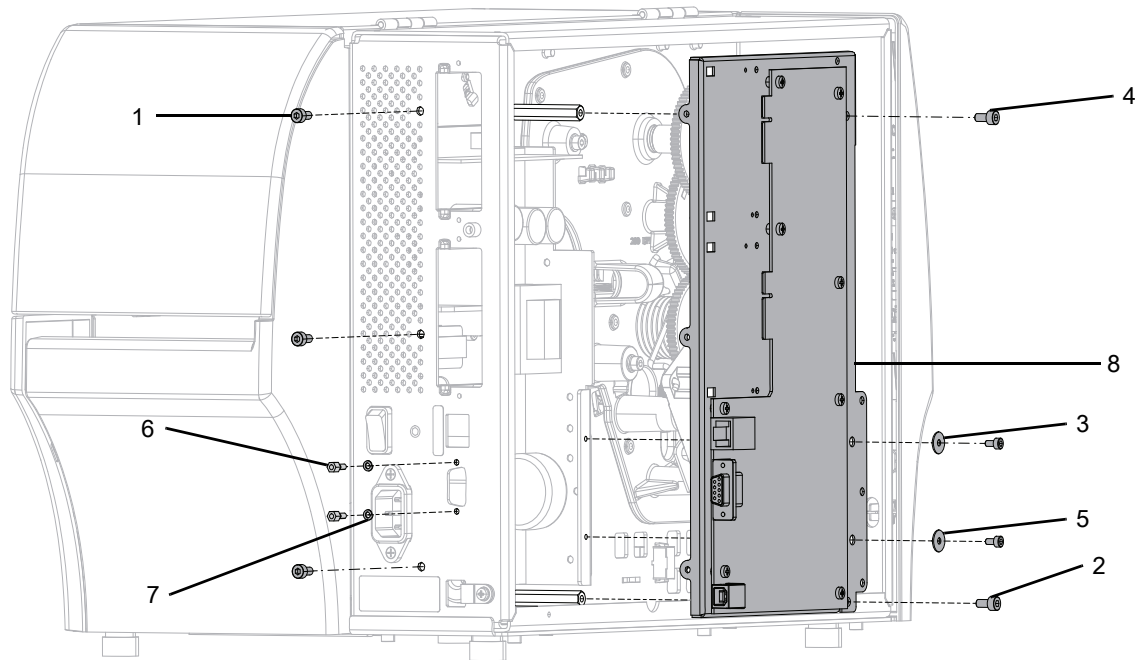
ZT410/ZT420 Printer

1. Disconnect all cables from the main logic board (MLB).



J1	USB cable connector	J17	Rewind/LTU/Cutter connector
J2	Control panel	J20	Lower media sensor
J5	USB 2 connector	J21	Serial port
J7	Option card connector	J24	Control panel
J8	Shutdown pack	J26	Power output
J10	Transmissive sensor	J27	Print mechanism path light
J11	Ribbon sensor	J28	Upper media sensor
J12	Head open sensor	J29	RFID connector
J13	Take-label sensor	J30	Ethernet
J14	Power supply	J31	Option card connector
J15	Data interface	J32	Media path light
J16	Printhead data cable	J37	Ribbon low quadrature sensor

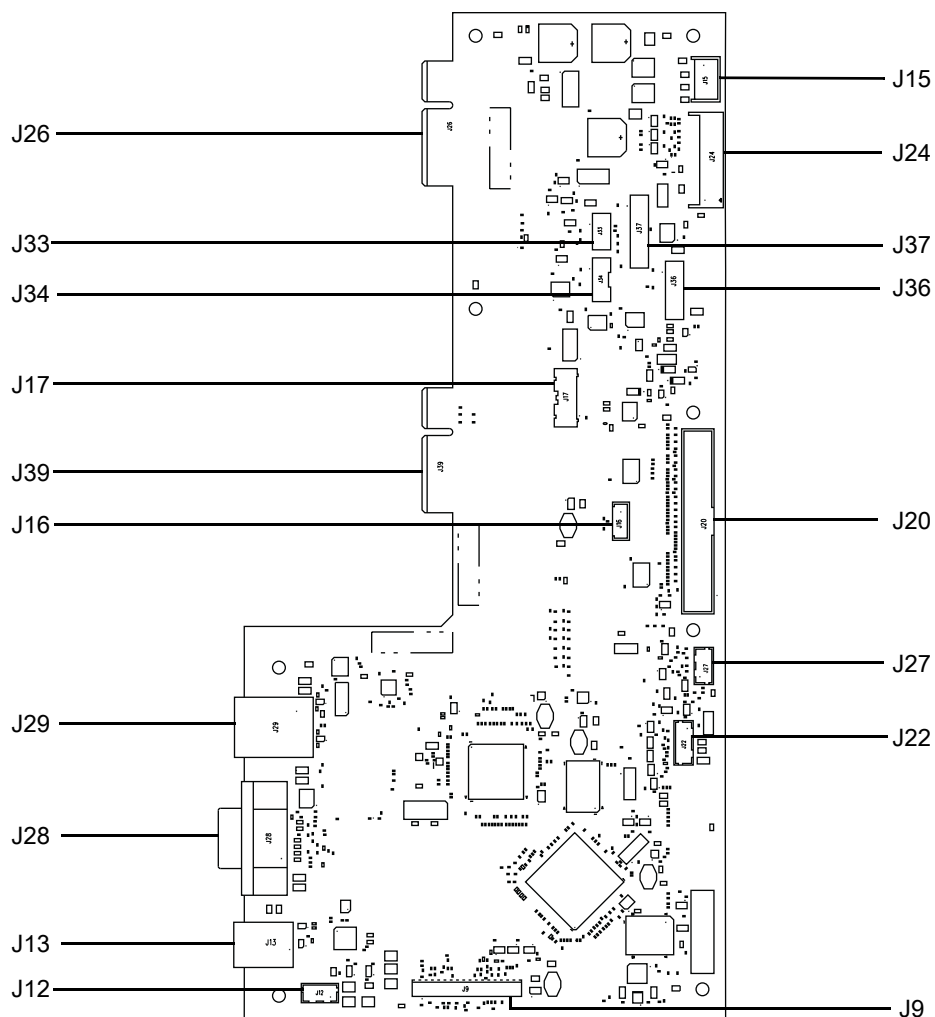
2. Remove the three rear mounting screws (1) from the back panel of the printer.
3. Remove the lower mounting screw (2).
4. Remove the two middle mounting screws and washers (3 & 4) holding the mounting bracket near the front of the printer.
5. Remove the upper mounting screw from the mounting bracket (5).
6. Remove the two standoffs (6) and lock washers (7) securing the serial port to the rear of the printer.
7. Remove the main logic board bracket assembly (8).



8. Disconnect the printhead power cable from JP1 on the power supply.
9. Remove the printhead power cable from the cable tie.
10. Cut the two cable ties securing the printhead cable.
11. Go to "Remove the Option Card Guides" on page 13.

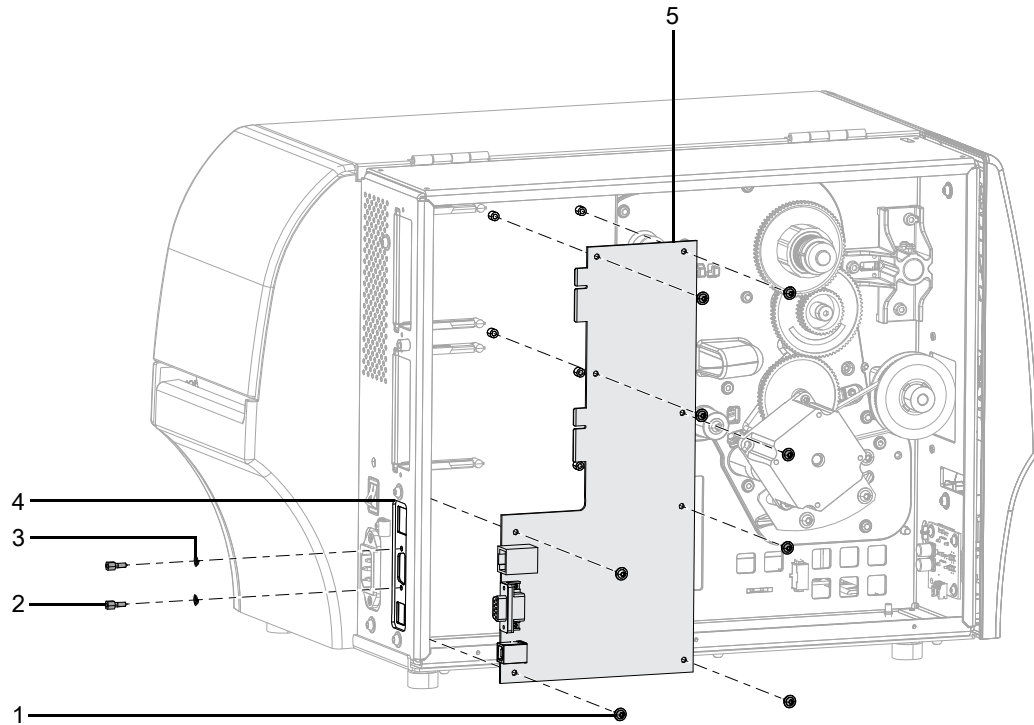
ZT411/ZT421 Printers

1. Disconnect all cables from the MLB.

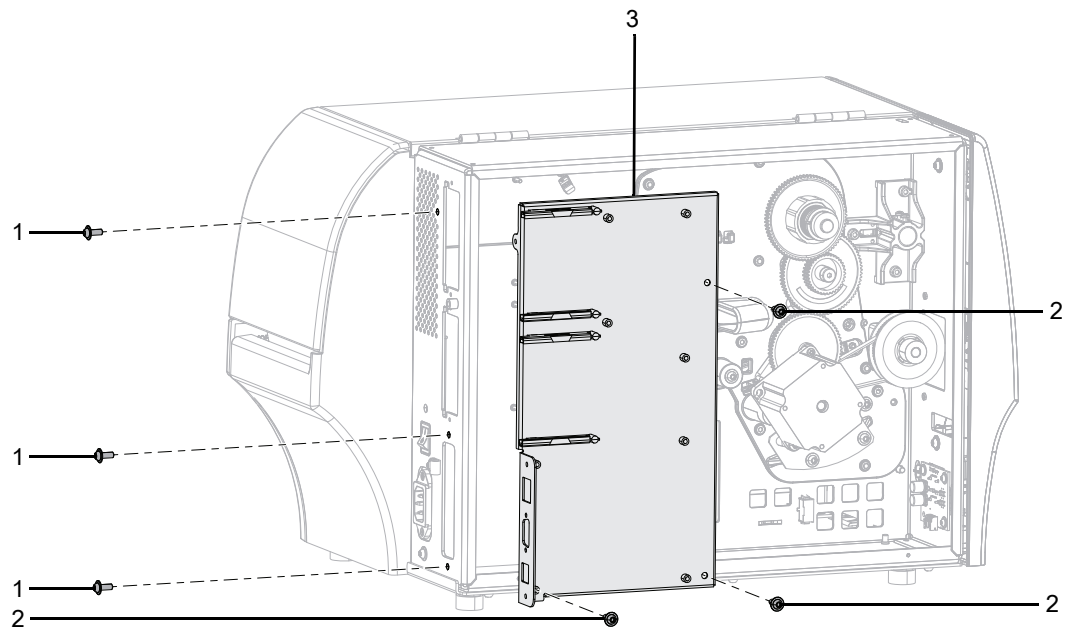


J9	Control panel	J26	Option card connector
J12	USB cable connector ‡	J27	RFID connector ‡
J13	USB connector	J28	Serial port
J15	Stepper motor	J29	Ethernet
J16	Print mechanism path light ‡	J33	Ribbon sensor
J17	Media path light ‡	J34	Head open sensor
J24	Power supply	J36	Media sensor input
J20	Printhead data cable	J37	Media sensor output
J22	Rewind/LTU/Cutter connector ‡	J39	Option card connector

2. Remove the standoffs (2) and lock washers (3) from the serial port connector.
3. Remove the eight screws (1) securing the MLB to the MLB bracket.
4. Remove the MLB (5).



5. Remove the three rear mounting screws (1).
6. Remove the screws (2) securing the MLB bracket (3).

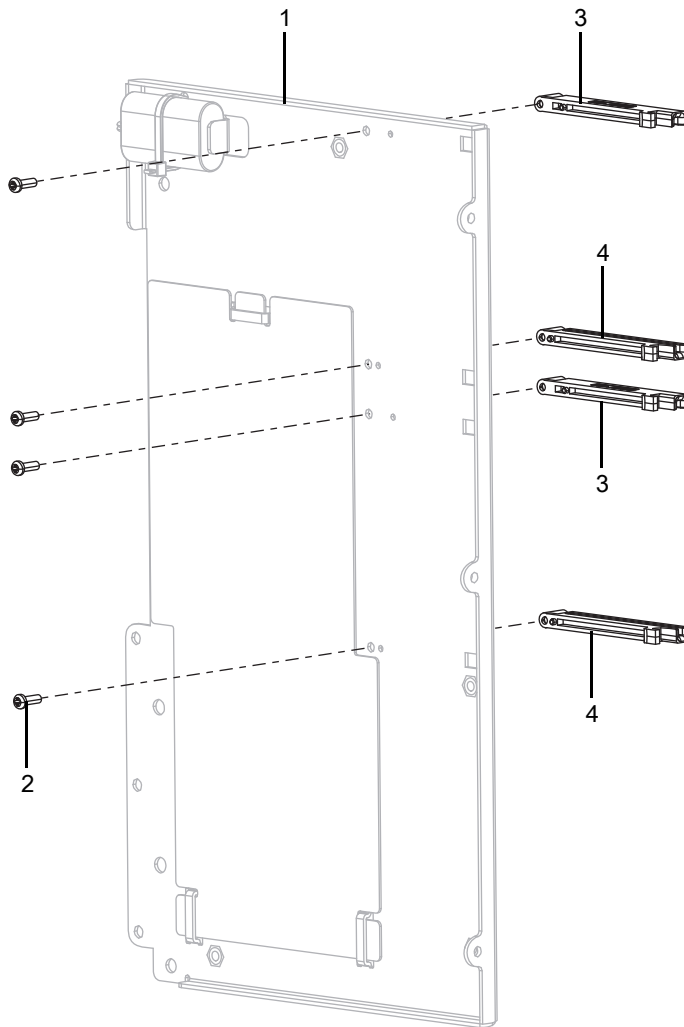


7. Remove the MLB bracket.
8. Go to "Remove the Option Card Guides" on page 13.

Remove the Option Card Guides

1. Turn the main logic board bracket (1) over and remove the four mounting screws (2) securing the option card guides (3 & 4).

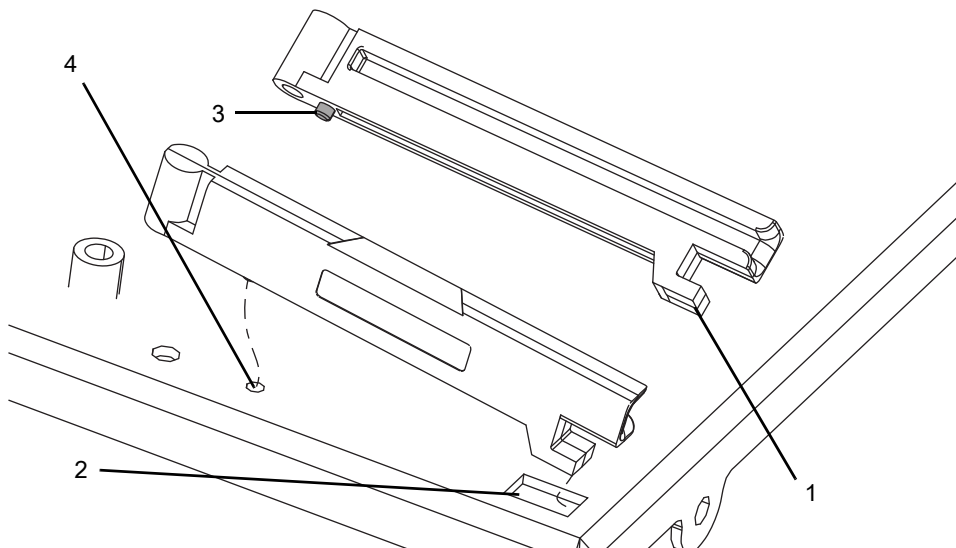
(ZT410 MLB Bracket Shown)



2. Remove the four options card guides.

Install the New Option Card Guides

1. From the front of the main logic board bracket hook (1) the guide into the outer hole (2) in the main logic board bracket.
2. From the rear of the main logic board bracket ensure that you have the option card guides (3) aligned with the mounting hole (4), and then install the new mounting screw.

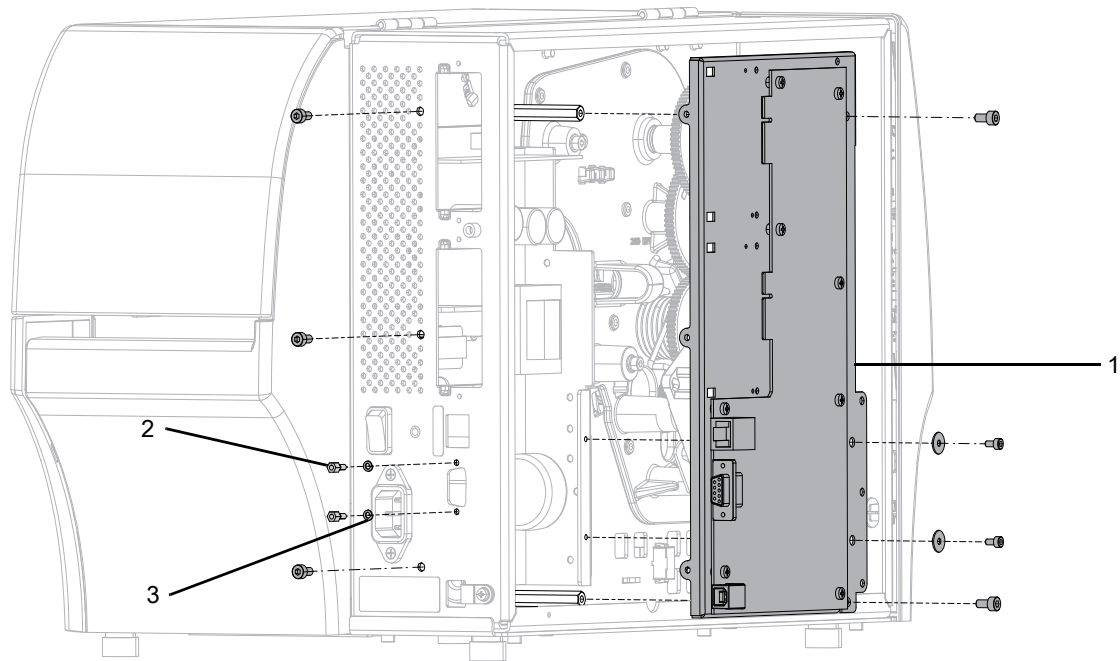


3. Go to step 3 for the remaining option card guides.

Are you working on a...	Then...
ZT410/ZT420 Printer	Go to "Reconnect the Main Logic Board in a ZT410/ZT420 Printer" on page 16.
ZT411/ZT421 Printer	Go to "Reinstall the Main Logic Board in a ZT411/ZT421 Printer" on page 19.

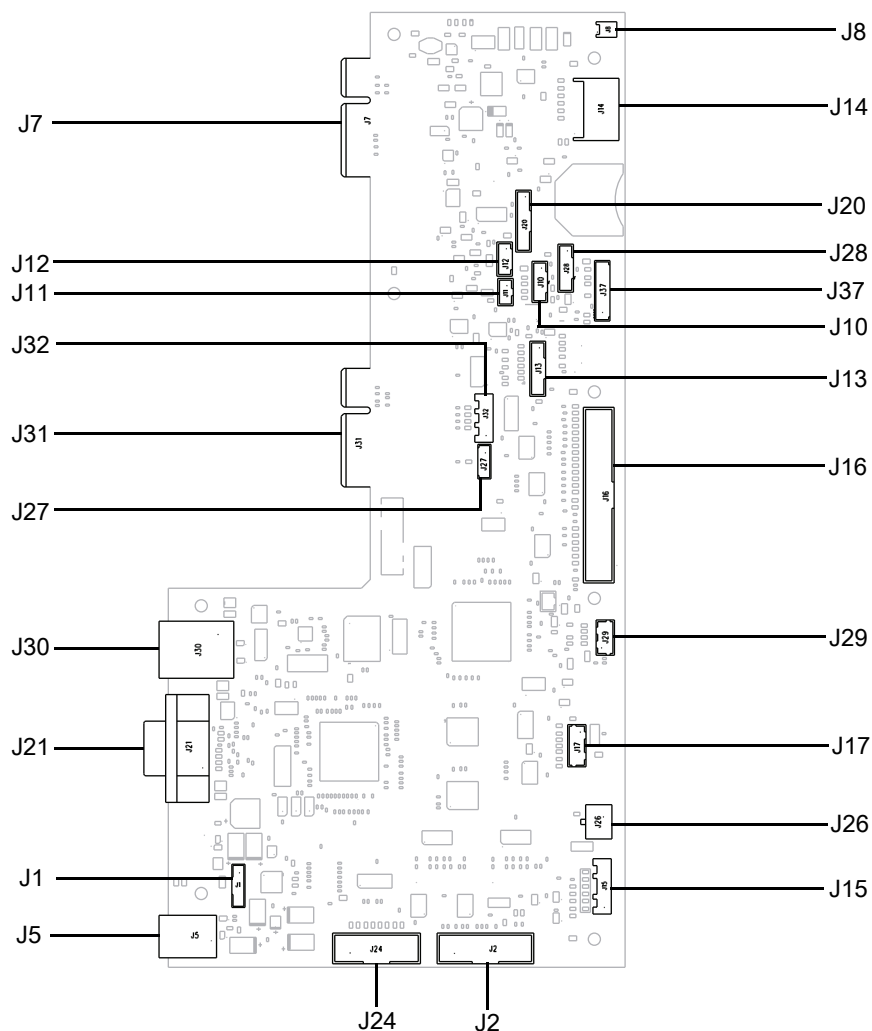
Reinstall the Main Logic Board Bracket Assembly in a ZT410/ZT420 Printer

1. Align the serial port with the serial port mounting hole.
2. Install the main logic board bracket (1) with the screws and washers previously removed.
3. Install the two standoffs (2) and lock washers (3) to secure the serial port.



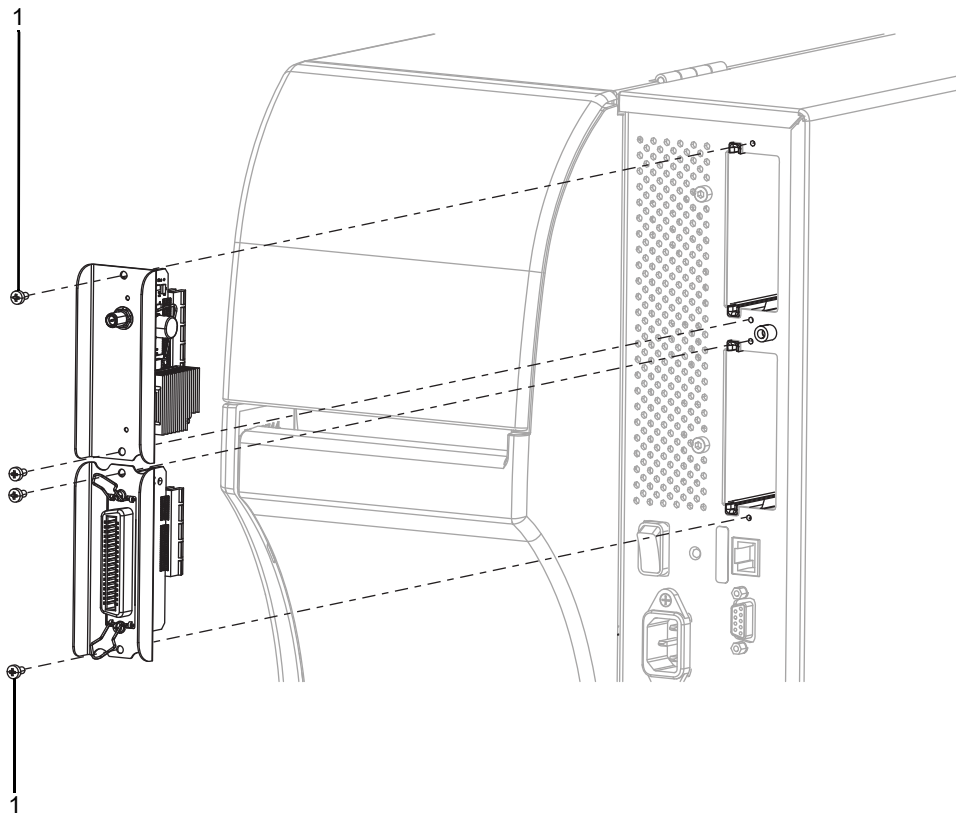
Reconnect the Main Logic Board in a ZT410/ZT420 Printer

1. Connect all cables removed previously to the main logic board.



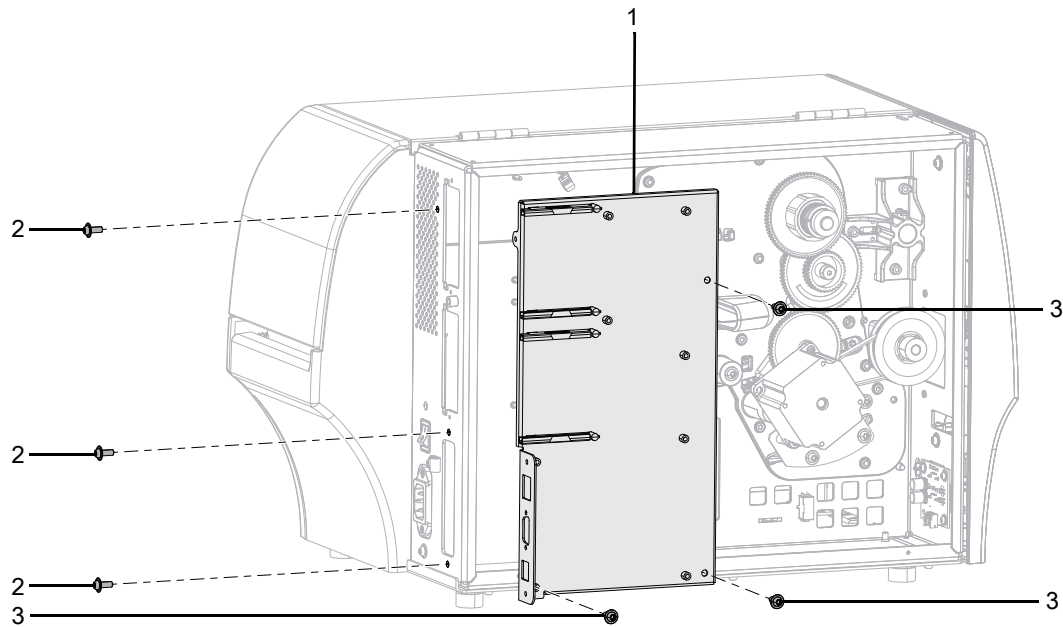
J1	USB cable connector	J17	Rewind/LTU/Cutter connector
J2	Control panel	J20	Lower media sensor
J5	USB 2 connector	J21	Serial port
J7	Option card connector	J24	Control panel
J8	Shutdown pack	J26	Power output
J10	Transmissive sensor	J27	Print mechanism path light
J11	Ribbon sensor	J28	Upper media sensor
J12	Head open sensor	J29	RFID connector
J13	Take-label sensor	J30	Ethernet
J14	Power supply	J31	Option card connector
J15	Data interface	J32	Media path light
J16	Printhead data cable	J37	Ribbon low quadrature sensor

2. Reinstall the two cables ties removed previously.
3. Reinstall any option boards that were removed. and secure with the two screws (1).



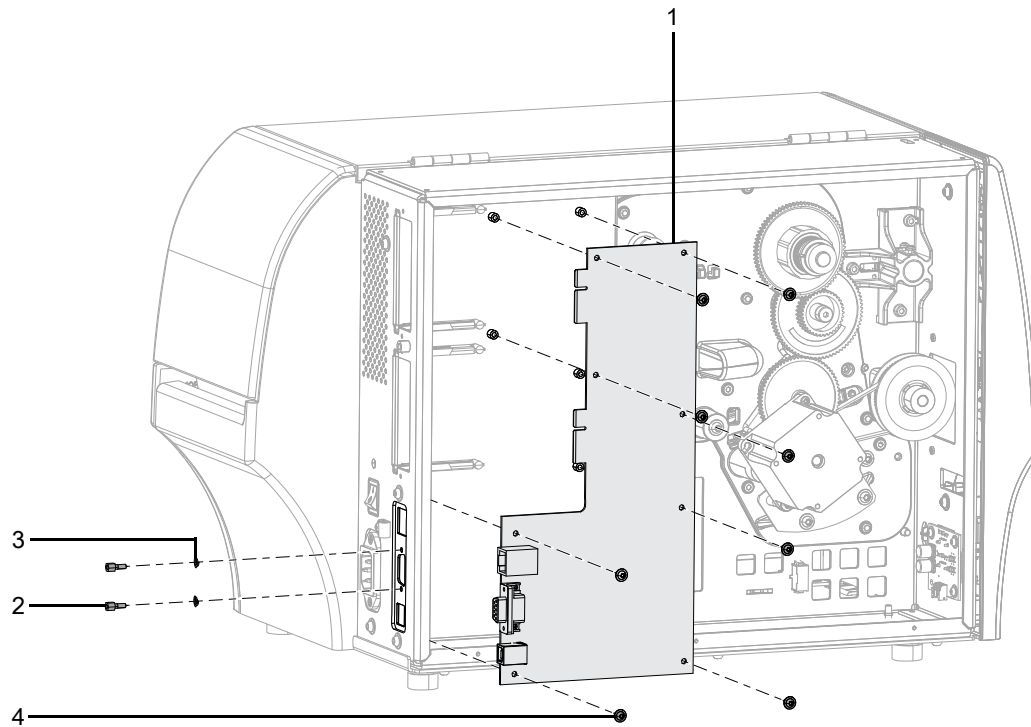
Reinstall the Main Logic Board Bracket Assembly in a ZT411/ZT421 Printer

1. Install the MLB bracket (1) into the printer.
2. Install the three rear mounting screws (2).
3. Installs the screws (3) securing the MLB bracket (1).

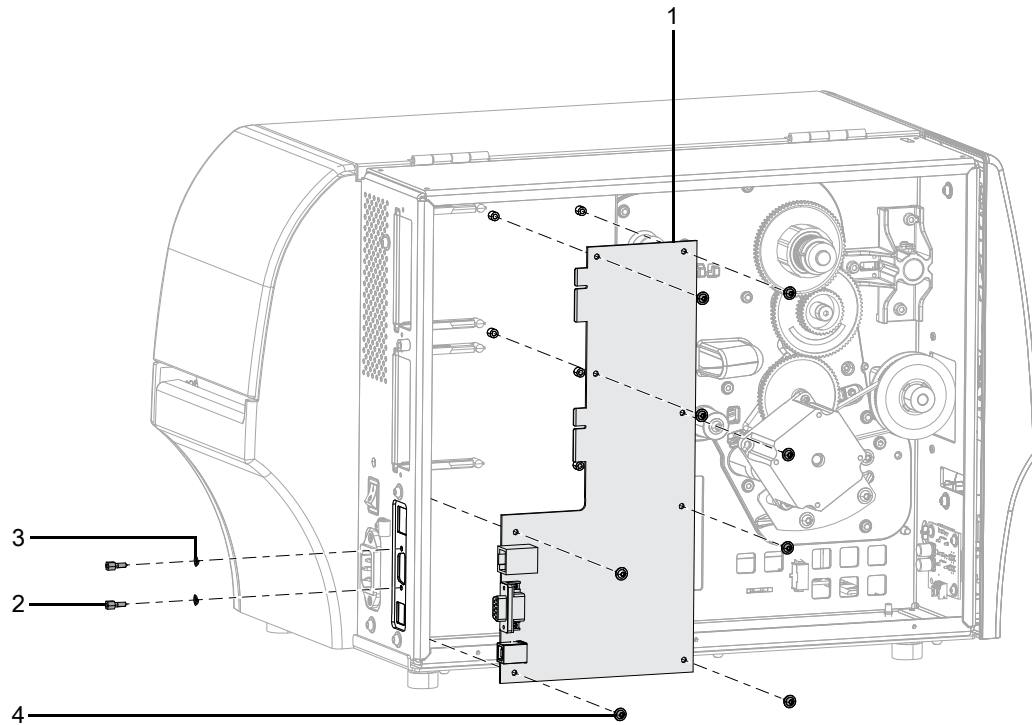


Reinstall the Main Logic Board in a ZT411/ZT421 Printer

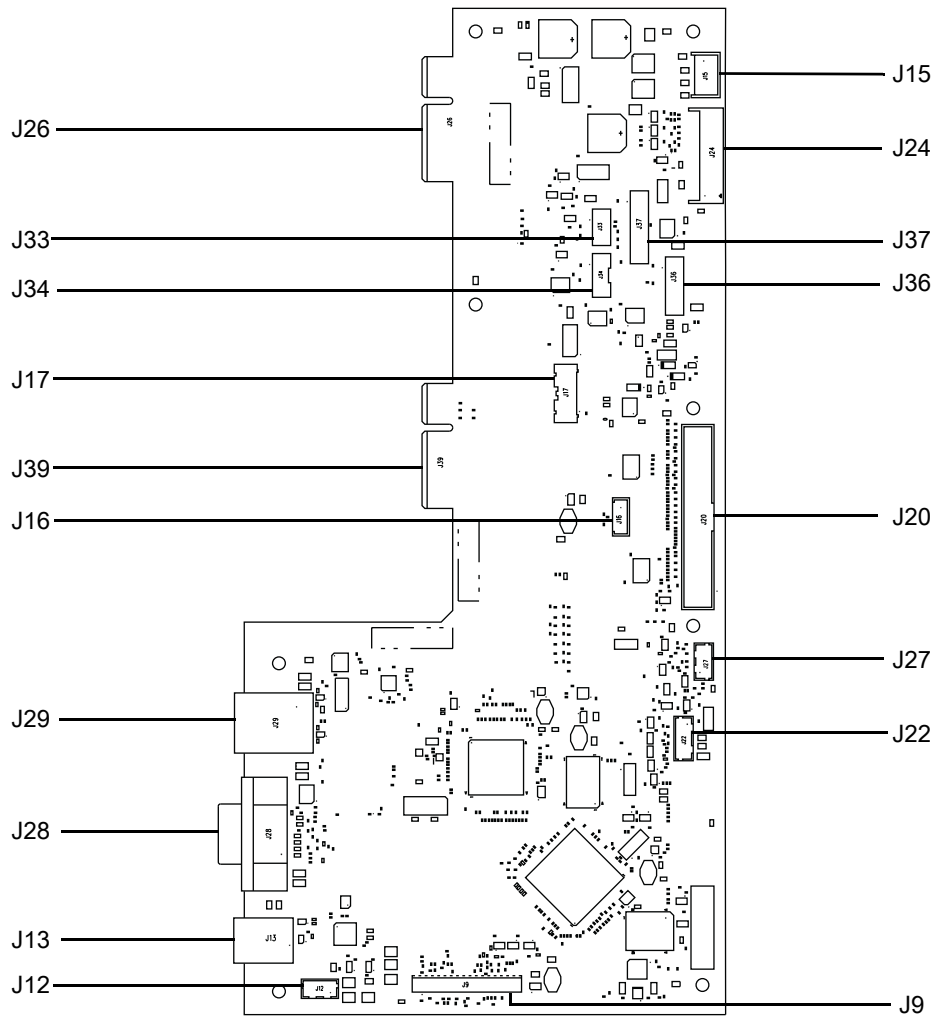
1. Reinstall the main logic board bracket assembly (1).
2. Install the standoffs (2) and lock washers (3) from the serial port connector.
3. Install the eight screws (4) securing the MLB to the MLB bracket.



4. Reinstall the MLB (1).
5. Install the standoffs (2) and lock washers (3) from the serial port connector.
6. Install the eight screws (4) securing the MLB to the MLB bracket.



7. Reconnect all cables from the MLB.

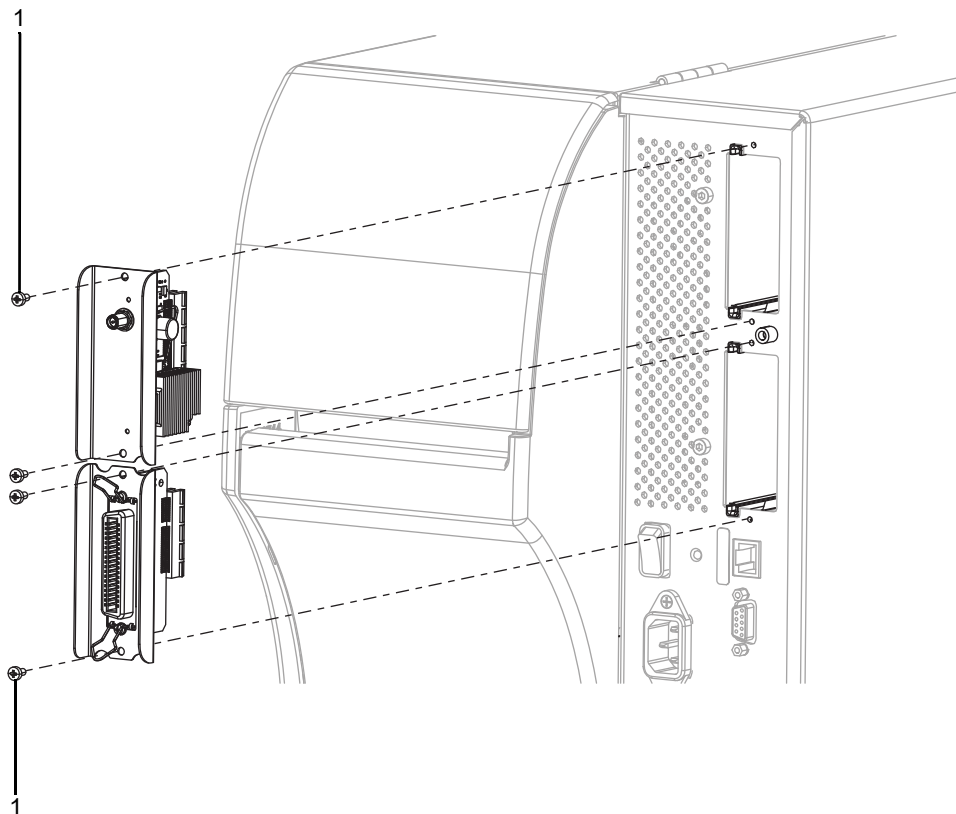


J9	Control panel	J26	Option card connector
J12	USB cable connector ‡	J27	RFID connector ‡
J13	USB connector	J28	Serial port
J15	Stepper motor	J29	Ethernet
J16	Print mechanism path light ‡	J33	Ribbon sensor
J17	Media path light ‡	J34	Head open sensor
J24	Power supply	J36	Media sensor input
J20	Printhead data cable	J37	Media sensor output
J22	Rewind/LTU/Cutter connector ‡	J39	Option card connector

8. Go to “Reinstall the Option Boards”.

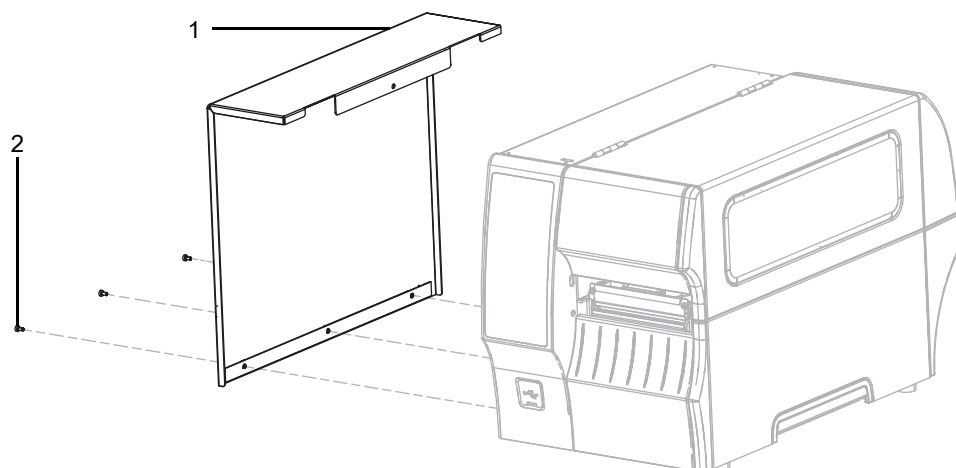
Reinstall the Option Boards

1. Reinstall any option boards that were removed, and secure with the two screws (1).

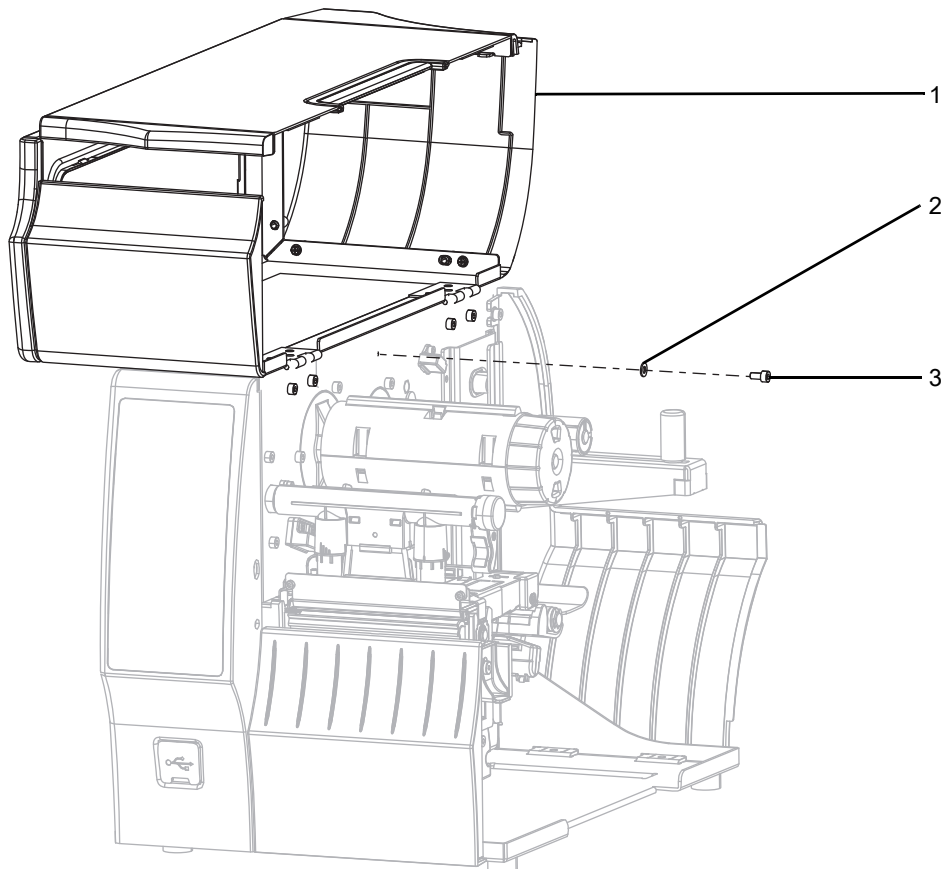


Reinstall the Electronics Cover

1. Slide the electronics cover (1) onto the printer.
2. Reinstall the three screws (2).



3. Open the media door (1) and install the washer (2) (ZT410/ZT420 only) and screw (2).



4. Do you need to replace other parts included with this kit?

If...	Then...
Yes	Go to "Replace the Option Card Covers" on page 3. Go to "Replace the Liner Take-up Cover" on page 5.
No	Go to "Resume Printer Operation".

Resume Printer Operation

1. Reinstall media and ribbon (if used).
2. Close the media door.
3. If you disconnected the AC power cord and interface cables, reconnect them, and then turn on the printer power.
4. If necessary, press Pause to resume printer operation.

The installation is complete.