



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 1 • Kit Contents

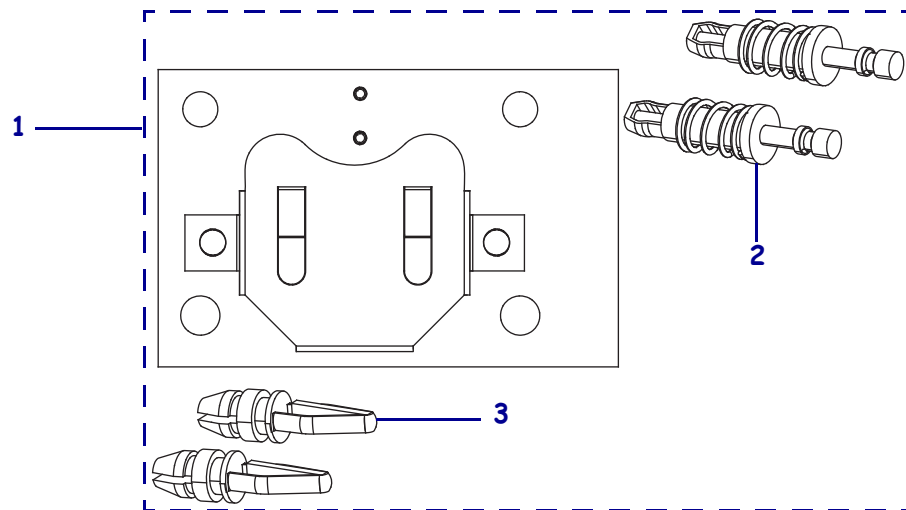


Table 1 • Parts List

✓	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

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.

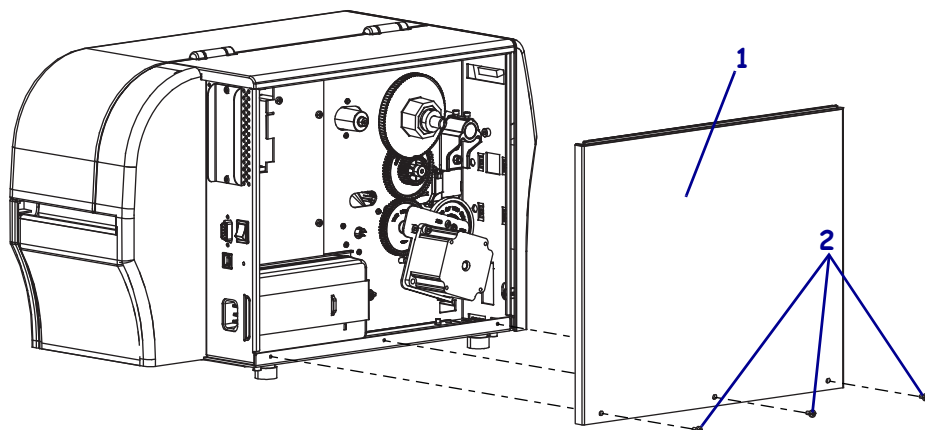
- Which model of printer are you working on?

If have a...	Then...
ZT220	Continue with <i>ZT220 Door</i> .
ZT210 ZT230	Go to <i>ZT230 and ZT210 Door</i> on page 3.

ZT220 Door

- See [Figure 2](#). Remove the three screws securing the electronics cover.

Figure 2 • Remove the Electronics Cover



1	Electronics cover
2	Mounting screws (3)

- Lift the electronics cover out of the printer.

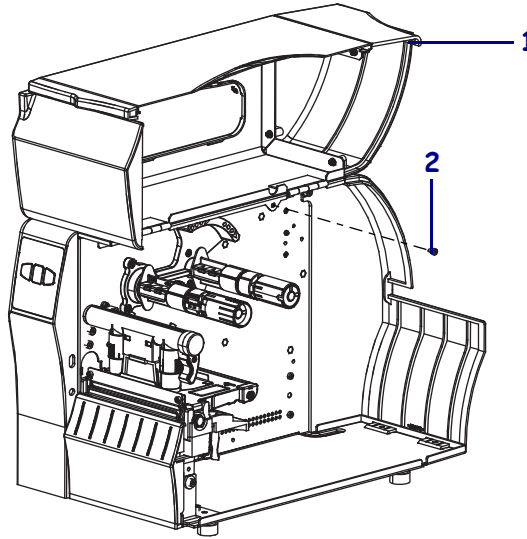
3. Are you replacing an existing RTC option board?

If...	Then...
Yes	Continue with <i>Remove the Old Real Time Clock (RTC) Board</i> on page 4.
No	Go to <i>Install the Real Time Clock (RTC) Board</i> on page 6.

ZT230 and ZT210 Door

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

Figure 3 • Open the Media Door

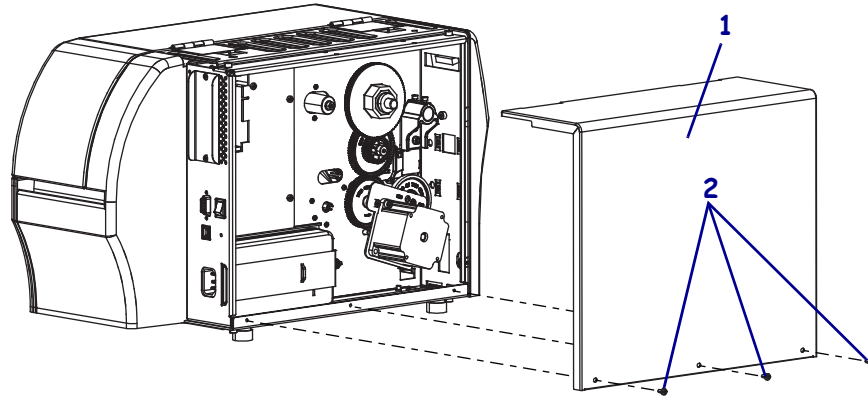


1	Media door
2	Media side mounting screw

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Remove the Old Real Time Clock (RTC) Board

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

Figure 4 • 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 <i>Remove the Old Real Time Clock (RTC) Board</i> .
No	Go to <i>Install the Real Time Clock (RTC) Board</i> on page 6.

Remove the Old Real Time Clock (RTC) 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.

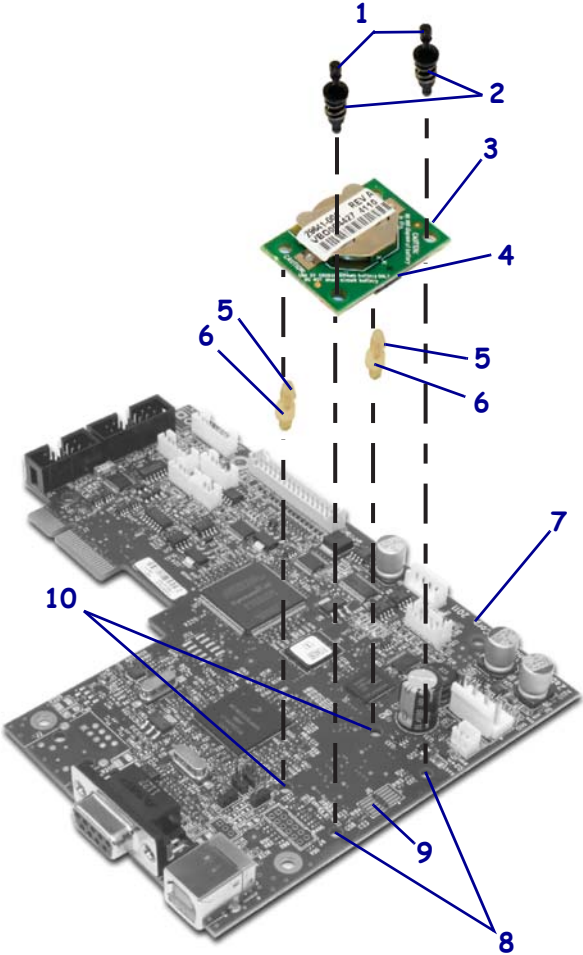
Connect yourself to an antistatic device.



3. **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 5](#). 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 5 • 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.

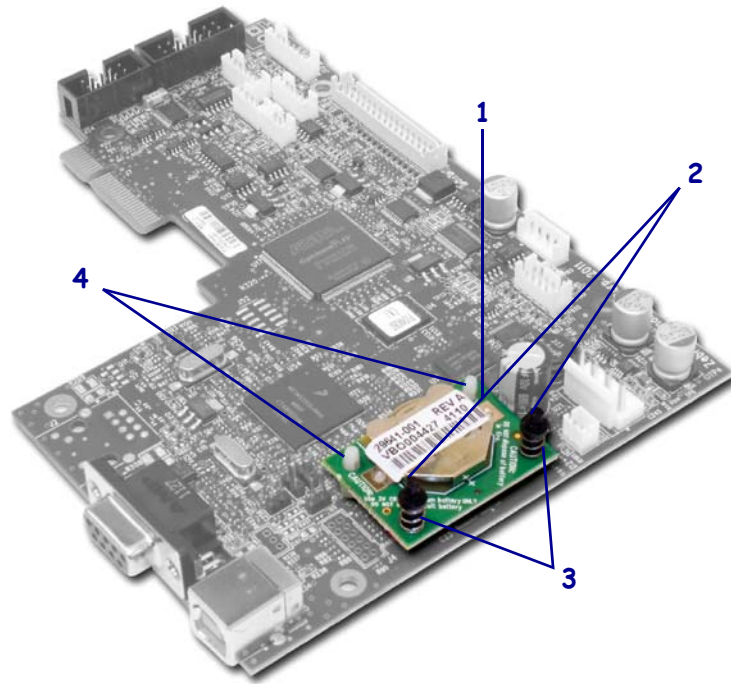
2. Are you installing the RTC option board for the first time?

If...	Then...
Yes	Continue to step 3 .
No	Go to step 4 .

3. See [Figure 5 on page 5](#). **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 6](#). Verify that the RTC board is seated properly and that J1 on the RTC board is in contact with J6 on the MLB.

Figure 6 • 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 2 on page 2. Insert the electronics cover into the printer.b. Reinstall the three mounting screws.
ZT230 ZT210	<ol style="list-style-type: none">a. See Figure 4 on page 4. Slide the electronics cover onto the printer.b. Reinstall the three electronics side mounting screws.c. See Figure 3 on page 3. 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 chapter in the *Zebra Programing Guide for ZPLII, ZBI2, Set-Get-Do, Mirror, and WML*.

The installation is complete.

