Introduction
Thank you for choosing one of our Zebra MZ™ Series Mobile Printers. These rugged printers will become productive and efficient additions to your workplace thanks to their innovative design. Because they are made by Zebra Technologies you can be assured of world-class support for all of your bar code printers, software, and supplies.

This document provides an easy reference for operating and maintaining the MZ Series of Mobile Printers. Complete and current documentation for each model printer is provided by the MZ Series User Guide available on the Internet at: www.zebra.com/manuals.

Always refer to the Important Safety Information data sheet shipped with each printer and the Technical Bulletin shipped with each battery pack. These documents detail procedures to ensure maximum reliability and safety while using this printer.

MZ Series Overview
(MZ 220 Illustrated)

<table>
<thead>
<tr>
<th>MZ 220</th>
<th>MZ 320</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media width:</td>
<td>Media width:</td>
</tr>
<tr>
<td>2.0 in. (50.8 mm)</td>
<td>3.0 in. (76.2 mm)</td>
</tr>
<tr>
<td>L: 5.34 in. (135.6 mm)</td>
<td>L: 5.34 in. (135.6 mm)</td>
</tr>
<tr>
<td>W: 3.18 in. (80.7 mm)</td>
<td>W: 4.11 in. (104.4 mm)</td>
</tr>
<tr>
<td>H: 2.47 in. (62.7 mm)*</td>
<td>H: 2.47 in. (62.7 mm)*</td>
</tr>
<tr>
<td>*w/ belt clip</td>
<td>*w/ belt clip</td>
</tr>
</tbody>
</table>

1. Feed Switch
2. Media Status Light
3. USB Port
4. Battery Charging Receptacle
5. Media/Black Bar Sensor
6. Media Cover
7. Platen
8. Printhead
9. Latch Release Button
10. Communications Status Indicator
11. IR window
12. Charge Status Indicator
13. Power Switch
14. Power Indicator
15. Belt Clip
16. Battery Door Latch
17. Battery Compartment Cover
18. Battery Pack
19. External Charge Contacts
Installing the Battery

Batteries are shipped uncharged. Remove any protective packaging from a new battery pack, install it in the printer and charge completely prior to initial use.

1. Use a coin to rotate the Battery Compartment lock 1/4 turn as shown.

2. Remove the Battery Compartment Cover

3. Plug the Battery Pack connector into the Printer.

4. Re-install the Battery Compartment Cover and rotate the lock back 1/4 turn to lock it in place.

Ensure battery leads are not pinched prior to replacing battery cover.

Removing the Battery

1. Use a coin to rotate the Battery Compartment lock 1/4 turn as shown.

2. Remove the Battery Compartment Cover

3. Squeeze lock to release.

Allow old battery pack to drop out of the printer.

Always release the locking barb before unplugging the battery connector. Do not attempt to remove the connector by force, or by using pliers, etc. as this could cause damage to the printer’s CPU assembly.
Charging the Battery

The printer may be used while charging the battery. However, prolonged use of the printer while charging will greatly increase charge times.

Preparing the Charger Power Supply

Remove the power supply from its box. Remove and discard the shipping ring from the mains receptacle cavity. Verify that the mains adapter shipped with your Printer is the correct one for your region. Install the mains adapter into the Power Supply byhooking the top edge into the mains receptacle cavity, and rotating it until it snaps into place.

Using the Charger Power Supply

MZ Series Charger Power Supply p/n AT17947-2
110-240 VAC 50-60 Hz 0.6A input;
12 VDC 1.25 A output
Plug into appropriate AC receptacle.
Loading Media

1. Press Latch Button

2. Media Cover Opens

Open the Media Cover

Load the Media Roll

Media Roll
Note direction media pulls off the roll.

Pull a short length of Media out of the Printer

Close the Cover

2 Close Media Cover
Connecting the Printer

Connect With a Cable
Refer to the Label Vista™ application on the Internet at www.zebra.com/software for help on setting up the Printer. If you are connecting to a PC you may need to install the Zebra Universal Driver available on the Internet at: www.zebra.com/drivers.

Connect by Radio
Refer to the Wireless Quick Start Guide on the Internet at www.zebra.com/manuals for help on setting up your wireless printer.
Printer Controls

Power Button
Press until Power Light turns on, then release. Press again to turn unit off.

Power Light (Green)
Indicates power status and battery condition. A steadily lit indicator means the battery has more than a 30% charge remaining. A blinking indicator means the battery has less than a 30% charge remaining.

Feed Button
Press to advance the media. Release to stop.

Charge Light (Green/Amber)
Green indicates the battery fully charged. Amber indicates the battery is less than 90% charged.

Communication Light (Blue)
When lit steadily indicates a wireless communications link is established, when blinking indicates data transmission.

IrDA® Window
This area must be within the line of sight of any other IrDA enabled device for IR communications to occur.

Media Status Light (Amber)
When off indicates normal operation, blinking indicates either no media or that the media compartment is open.
## Cleaning the Printer

![Diagram of Printer](image.png)

<table>
<thead>
<tr>
<th>Area</th>
<th>Method</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Printhead</strong></td>
<td>Use a Zebra cleaning pen or a 70% isopropyl alcohol solution on a cotton swab to clean the print elements from end to end (the print elements are located in the thin gray line on the printhead).</td>
<td>After every five rolls of media (or more often, if needed)</td>
</tr>
<tr>
<td><strong>Platen</strong></td>
<td>Rotate the platen roller and clean it thoroughly with a Zebra cleaning pen or a 70% isopropyl alcohol solution and a cotton swab.</td>
<td></td>
</tr>
<tr>
<td><strong>Tear bar</strong></td>
<td>Clean thoroughly with a Zebra cleaning pen or a 70% isopropyl alcohol solution and a cotton swab.</td>
<td></td>
</tr>
<tr>
<td><strong>Exterior</strong></td>
<td>Water dampened cloth</td>
<td>As needed</td>
</tr>
<tr>
<td><strong>Media Compartment Interior &amp; Media Sensors</strong></td>
<td>Brush/air blow.</td>
<td>After every five rolls of media (or more often, if needed)</td>
</tr>
</tbody>
</table>

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**Caution** • To avoid possible personal injury or damage to the Printer, never insert any pointed or sharp objects into the Printer.

**Note** • Twelve packs of approved cleaning pens are available from Zebra as p/n 105950-035.
## Troubleshooting

### Interpreting Indicators

The printer’s indicators display various printer functions and their status. Check the indicator status, then refer to the Troubleshooting topic referenced in the chart.

<table>
<thead>
<tr>
<th>Function</th>
<th>Indicator Color</th>
<th>Indicator Status: Steady</th>
<th>Indicator Status: Blinking</th>
<th>Troubleshooting Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>Green</td>
<td>Indicates printer is on and battery condition is OK to use.</td>
<td>Blinking signifies Low Battery</td>
<td>3</td>
</tr>
<tr>
<td>Charger</td>
<td>Amber/Green</td>
<td>Off indicates battery is not charging. Amber indicates battery is charging. Green indicates battery is charged.</td>
<td>N/A</td>
<td>1,6,10</td>
</tr>
<tr>
<td>Error</td>
<td>Amber</td>
<td>Off indicates no error condition</td>
<td>No media or media door is open. Application may be missing or corrupted</td>
<td>2,4,7,9</td>
</tr>
<tr>
<td>Communications</td>
<td>Blue</td>
<td>Cable/IrDA: n/a</td>
<td>Data is being received</td>
<td>5,8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bluetooth: Printer has paired with another Bluetooth device.</td>
<td>Data is being received</td>
<td>5,8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>802.11g: Radio is associated with a WLAN.</td>
<td>Radio is trying to associate with a WLAN</td>
<td>5,8</td>
</tr>
</tbody>
</table>

### Troubleshooting Topics

1. **No power:**
   - Ensure you press and hold the Power switch until the Power light comes on.
   - Check that battery is installed properly.
   - Recharge or replace battery as necessary.

2. **Media does not feed:**
   - Be sure Media Cover is closed and latched.
   - Check media compartment. Ensure media is not binding on the sides of the compartment.

3. **Poor or faded print**
   - Clean printhead.
   - Check battery for possible damage. Recharge or replace as necessary.

   Always dispose of batteries properly. Refer to Appendix D of the MZ Series User Guide for more information.

   - Check quality of media.

4. **Partial or missing print:**
   - Check media alignment.
   - Clean printhead.
   - Ensure Media Cover is properly closed and latched.
Troubleshooting Topics

5. No print:
   • Replace battery.
   • Check cable to terminal.
   • (Wireless units only) Restore wireless connection.

6. Reduced battery life:
   • Check battery date code — if battery is one to two years old, short life may be due to normal aging.
   • Recharge or replace battery.

7. Flashing Amber indicator:
   • Check that media is loaded and that printhead is closed and securely latched.
   • If media is present and latch is closed, indicates that no application is present or application is corrupted. Program must be re-loaded.

8. Communication Error:
   • (Wireless units only) Check that media is loaded, head is closed and blue communication link light is on.
   • Replace cable to terminal.

9. Label Jam:
   • Open media cover.
   • Generously apply alcohol to Printer in area of jammed label.

   Caution- Never use sharp or pointed objects when attempting to remove a label jam.

10. Battery Pack Is Hard to Install
    • Do not force the battery into place. Verify you have not pinched any wires between the battery and the printer.
    • Verify you are plugging the battery connector into the printer correctly.
**Resetting an MZ Series Printer**

If the printer has locked up and is not responding to any operator inputs or external commands, either from a connected terminal or from a linked LAN, you can perform a forced reset as follows:

**Units built before June 18, 2008 (see sidebar-Using The Serial Number Label To Determine Your Printer Version)**

Units with an S/N with a Year and Week Built code earlier than "08-25" are reset using the following procedure:

1. Open the media compartment and remove any media.
2. Press the Feed button and hold it approximately ten seconds until the Power, Communications and Error indicators turn off and stay off.
3. After the three indicators turn off, reload the media and close the media compartment cover.
4. Wait at least ten more seconds and press the Power button. The Printer will restart and normal operation can resume.

**Units built after June 18, 2008 (see sidebar-Using The Serial Number Label To Determine Your Printer Version)**

Units with an S/N with a Year and Week Built code of "08-25" or later are reset using the following procedure:

1. Press and hold the power button for 5 seconds and then release. The printer will power down.
2. Re-start the Printer as usual. Any pending data in the printer will have been deleted and must be re-sent.

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**Using The Serial Number Label To Determine Your Printer Version**

The printer serial number label is located on the bottom of the printer. (MZ 320 serial number label illustrated)

- **Year Built code:** "08" = 2008
- **Week Built code:** "25" = week beginning June 16
Accessories

Belt Clip
(Standard on all printers)
To use: hook the clip over your belt and ensure that the clip is securely attached to the belt. The belt clip will pivot to allow you to move freely while wearing the Printer.

Adjustable Shoulder Strap
(Available as an Accessory Kit)
Refer to figure below. Secure each end of the shoulder strap by looping through the slots on the belt clip and securing with the buckle.

Thread the free end of the shoulder strap through one of the slots on the belt clip

Thread the free end of the shoulder strap through the buckle and pull tight to adjust. Do the same procedure on the other end of the strap in the remaining slot on the belt clip.

Once the shoulder strap is secured, hold the buckle and adjust the strap as shown until you achieve the desired length.
For product support, and the latest versions of all customer documentation, contact Zebra Technologies at: www.zebra.com
Refer to Appendix E in the MZ series User Guide for more detailed contact information

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