ZEBRA® ZQ500™ Series
Mobile Battery Eliminator Kit
Installation Guide

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Special Notices

The following notices emphasize certain information in the guide. Each serves a special purpose and is displayed in the format shown:

- **Note:** Note is used to emphasize any significant information.
- **Caution:** Indicates information that, if not followed, can result in damage to software, hardware, or data.
- **Warning:** This warning symbol indicates an imminently hazardous situation which, if not avoided will result in death or serious injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents.

### General Warnings and Cautions

#### Caution

- **Read the following installation instructions before you connect the system to its power source.**
- **Zebra Technologies Corporation is not liable for personal injury or damage to any equipment caused by the improper installation of this equipment to any power source.**

### Vehicle Installation Safety

#### Caution

- **Only trained and qualified personnel should be allowed to install, replace, or service this equipment.**
- **DO NOT USE THE PRINTER WHILE DRIVING, as this may result in property damage or personal injury. Zebra Technologies Corporation does not promote the use of these products except when parked or stationary, and is not responsible for any loss resulting from the use or misuse of our products.**
- **Do not install the battery eliminator kit where it will be exposed to precipitation, extreme temperatures or excessive condensation.**
- **Do not install the battery eliminator kit in a location that will affect vehicle safety or drivability.**
- **Never install or remove the equipment from the vehicle’s electrical system while the vehicle is running. This may result in permanent damage to the equipment.**

**Warning:** It is very important to ensure that you make the correct cable to power source connections, because electrical energy from a vehicle’s power system can harm equipment and people.
Electrical Information
Power Supply Input: 12VDC to 48VDC

Electrical Information
Caution: Ensure that the Power Supply has proper cooling. Do not place any padding or cushioning material under the unit or next to the back of the unit.

Caution: Since the Mobile Battery Eliminator consumes vehicle power even when the printer is turned off, it MUST be connected to a power source that is switched off when the vehicle is turned off.

Zebra Technologies Corporation is not liable for damage to any equipment caused by improper installation of this equipment to any power source.

Regulatory Information

Regulatory Markings
Type-approval labels indicate compliance with country regulations. This product carries country-specific labels to indicate compliance.

Radio Frequency Interference Regulations
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference and (2) this device must accept any interference received including interference that may cause undesired operation.

Notification of Canadian Requirements
This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de classe B est conforme à la norme NMB-003 du Canada.

Agency Approvals and Regulatory Information

- FCC part 15 Class B
- Canadian STD ICES-003 Class B
- EN55022 Class B European Electromagnetic Radiation Standard
- EN55024 European Immunity Standard
- EN60950 Safety Standard
- RCM (Australia/New Zealand)
- VCCI (Japan)
- SII (Israel)
- CB
- C-TUV-US
- CE (EU/EFTA)
Mobile Battery Eliminator Kits

Introduction

Note: Zebra Technologies Corporation is not liable for personal injury or damage to any equipment caused by the improper installation of this equipment to any power source.

Caution: All of these systems must be connected in strict accordance with the instructions in this document. Failure to install this equipment per these instructions will void the warranty.

The following instructions for the Mobile Battery Eliminator Kit include the equipment listed below:

- P1063406-032: KIT, Acc Mobile Battery Eliminator, Dummy Battery Pack
- P1063406-033: Battery Eliminator Power Supply, 12-48V, Cig Adapter
- P1063406-042: KIT, ACC RAM Arm Mounting Plate, ZQ500 Series
- P1063406-063: Kit, Acc, RAM Mount Base Plate ZQ500 Series
- P1050667-042: Battery Eliminator Power Supply, 12-48V Open Ended
- AK17463-002: RAM Mount Kit (for flexible mounting of RW series vehicle cradles)

Note: The Mobile Battery Eliminator cannot be used with the ZQ500 Vehicle Cradle (p/n P1063406-029). However, there is a ZQ500 Battery Eliminator Cradle (p/n P1063406-028) if cradle mounting is needed.
Installing the DC Transfer Pack

The following instructions detail the installation for the components listed above, which will allow a ZQ510, ZQ520, QLn220, and QLn320 printer to run from a DC power source.

- Turn off the printer and remove the battery pack.
- Plug the DC Transfer Pack assembly into the printer. The battery pack assembly resembles and installs like a normal battery.

![Figure 1: DC Transfer Pack Installation (ZQ520 Shown)](image)

- Plug the DC cable from the Power Supply into the mating connector from the DC Transfer Pack. The plugs are polarized to ensure correct installation. They can only be connected one way. Do not attempt to force a connection. Secure the connection by turning the locking ring on the DC cable connector until it clicks into place.

**Caution:** Since the Mobile Battery Eliminator consumes vehicle power even when the printer is turned off, it MUST be connected to a power source that is switched off when the vehicle is turned off. Zebra Technologies Corporation is not liable for damage to any equipment caused by improper installation of this equipment to any power source.

**Note:** When the vehicle’s power is turned on, the icon will appear on the printer’s LCD to indicate the presence of a battery eliminator.
To ensure the most reliable printer performance possible, Zebra recommends the following installation techniques:

- It is very important that if a USB cable is connected to the printer while the battery eliminator is installed, the USB cable must be no more than four (4) feet long. If a longer USB cable is used, intermittent printer performance could be experienced. Please contact your Zebra sales representative to obtain the proper cable.

- If installing the permanent bare-wire installation version, follow good wiring practices and connect to a fused connection point on the vehicle electrical fuse block. (NOTE: The positive lead (red wire) contains the fuse holder.)

**Figure 2: Power Supply Vehicle Connectors**

- A green LED will light on the power supply (see Fig. 2) to indicate the power is on. A red LED will light to indicate an error condition is present. If the error condition occurs, unplug the printer’s DC transfer pack from the power supply and turn off the vehicle power. Reconnect the DC transfer pack to the power supply, and if the red LED remains on, contact technical support.
• Turn on the printer. Load the printer with media and press the feed button to ensure that the printer is properly connected and the media has been properly installed. The printer will be able to print as long as the vehicle power stays on.

The power supply can be located on any convenient surface within 1.42 ft. (0.43m) of the printer. Locate the power supply where it will receive adequate ventilation. Do not locate it near the operator’s feet or where it could hinder operation of the system or vehicle controls. Ensure that the cable routing does not invite damage to either the charger or the printer.

**RAM Mount Installation for a ZQ500 Series Printer**

When attaching the ZQ500 Series printer to the RAM mount and the RAM mounting plate using the RAM Mount kit (AK17463-002) and Base Plate (P1063406-063), be sure to properly route the DC Transfer Pack connector and secure the printer to the mounting plate.

• Insert the two raised clips on the mounting plate (P1063406-042) into the corresponding openings on the front bumper of the printer (as shown).
• Secure the printer to the mounting plate with two #6 captive panel screws (circled).

• Screw the Power Adapter to the Base Plate. Be sure to secure the DC cable to the plate with the wire clip (circled).
• Mount the printer onto the RAM.

• Connect the mating cable from the DC transfer pack to the DC cable from the Power Adapter (circled).
Desktop Installation

- Install the DC transfer pack in the printer.

- Connect the DC Cable of the Power Adapter to the mating connector of the DC Transfer Pack (circled).
Technical Support

U.S. Only

Zebra maintains a help line for questions involving installation and use of the Mobile Battery Eliminator Kit. Please have as much information as possible regarding your particular application ready when you call to enable the technical support personnel to help you. The number in the U.S. is (800)-423-0442 and is open Monday through Friday from 8:00 am to 4:30 P.M. E.S.T.

All Others

For technical support, please contact your local Zebra sales representative listed below:

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