

Zebra®
QLn420 Mobile Battery
Eliminator Kits

**Installation
Instructions**



QLn420 Mobile Battery Eliminator Kits

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.



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.

Vehicle Installation Safety



Caution: Only trained and qualified personnel should be allowed to install, replace, or service this equipment.



Caution: 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.



Caution: Do not install the battery eliminator kit where it will be exposed to precipitation, extreme temperatures or excessive condensation.



Caution: Do not install the battery eliminator kit in a location that will affect vehicle safety or drivability.



Caution: 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.



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.

Electrical Information

Power Supply Input: 12VDC to 48VDC



Caution: Since the QLn420 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.

QLn420 Mobile Battery Eliminator Kits

Notification of Canadian Requirements

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

Product Safety Regulatory Marking

Regulatory labels indicate compliance with safety standards. This product carries one or more of the following labels: UL, CE, TUV and/or CS.

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 QLn420 Mobile Battery Eliminator Kits include the equipment listed below:

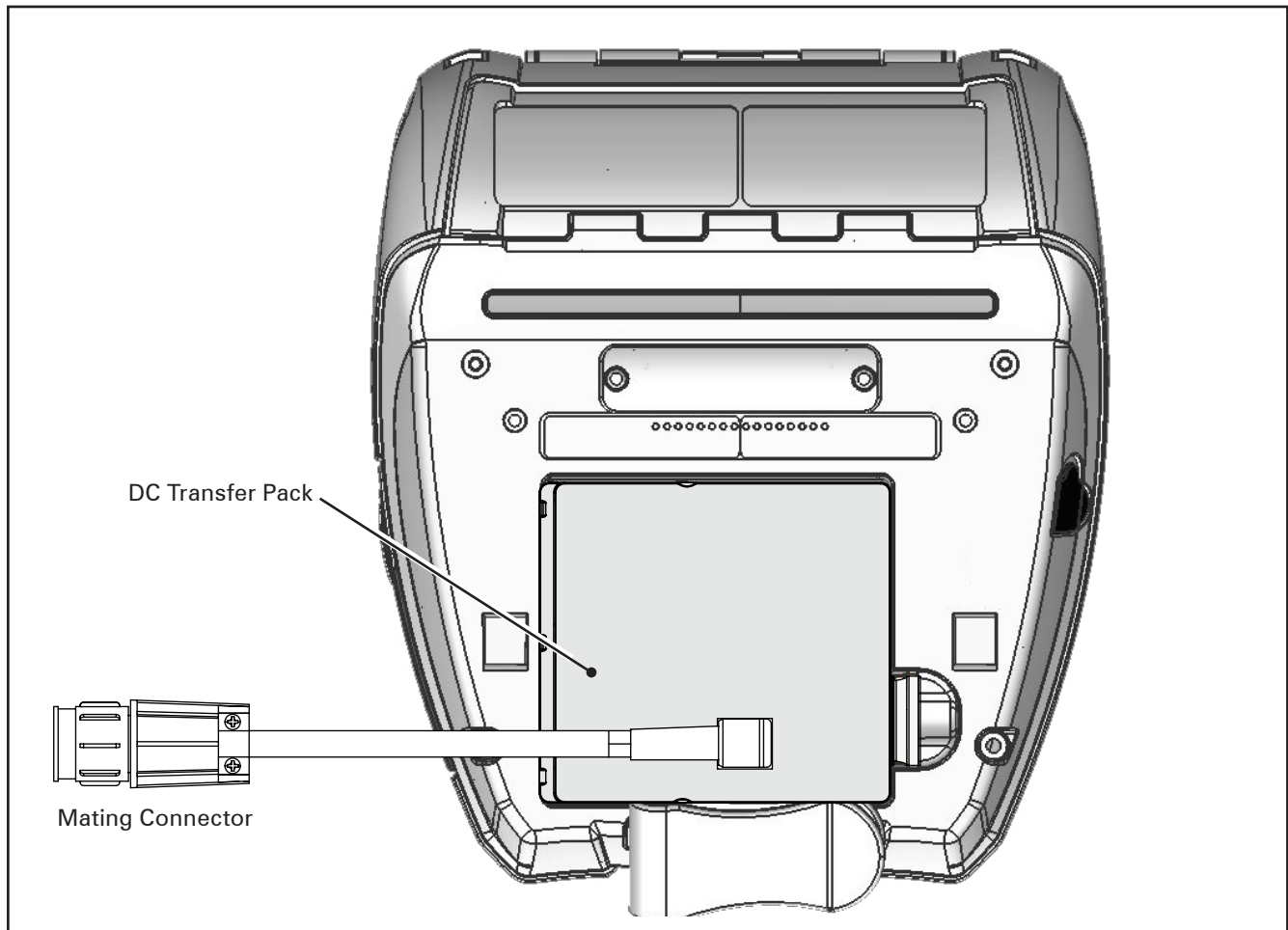
- P1058933: ASSY Battery Eliminator QLn420
- P1058934: DC to DC Power Adapter, 7.8V, 5A Output
- P1058935: ASSY DC Transfer Pack
- P1050667-032: KIT ACC_Handi-Mount (compact, flexible RAM arm) with Base Plate QLn420
- P1050667-033: KIT ACC_QL420 Handi-Mount (compact, flexible RAM arm) without Base Plate
- P1050667-035: KIT ACC QLn4 Mobile Mount for Forklifts (with U-arm bracket and fanfold bin)
- AT17147-1: RAM MOUNT RAM-101

Installing the DC Transfer Pack

The following instructions detail the installation for the components listed above, which will allow a QLn420 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



- 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.



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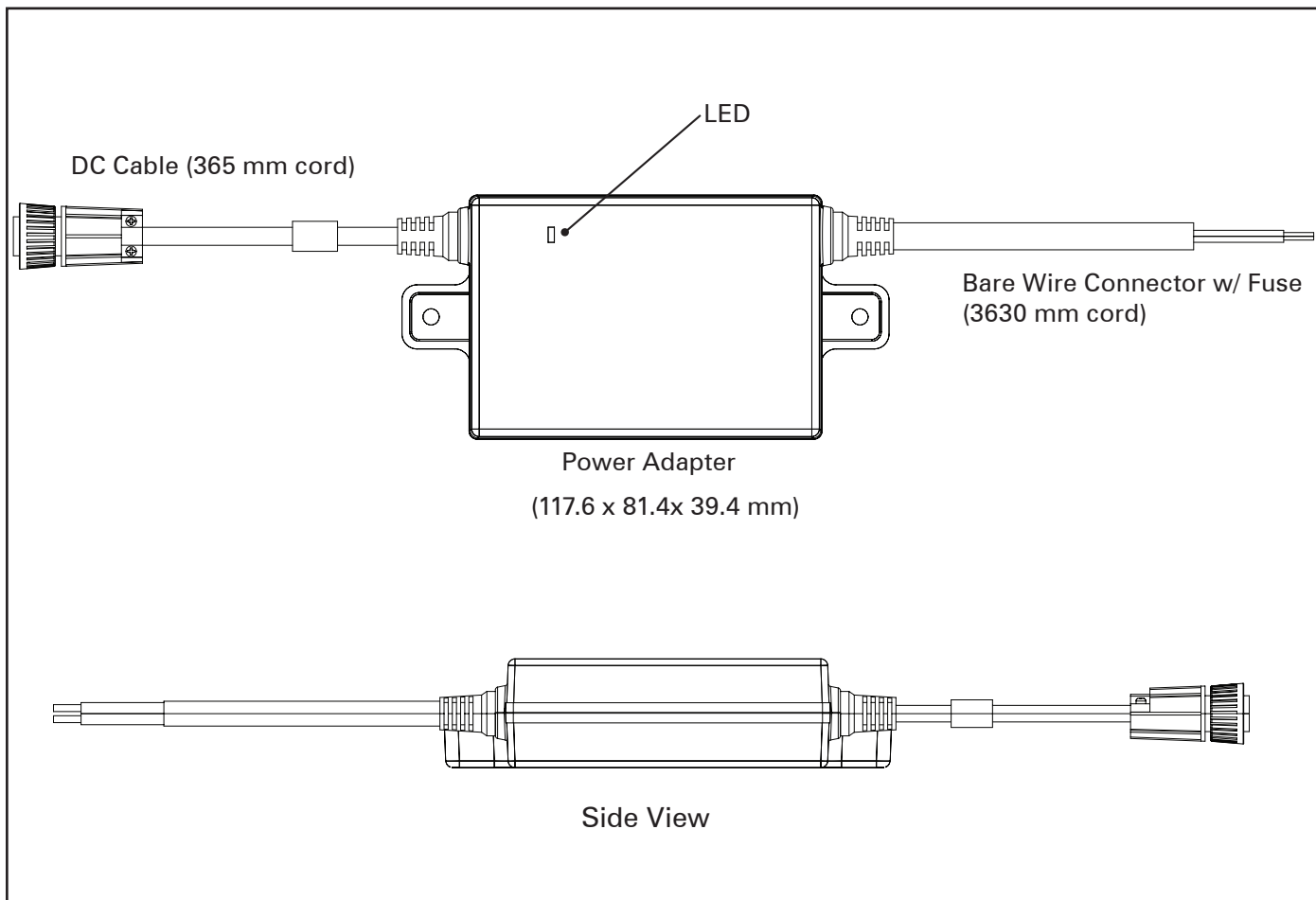


Note: When the vehicle's power is turned on, the printer's LCD will indicate the battery is full at all times.

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 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 from the power supply and turn off the vehicle power. Reconnect the printer 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

When attaching the QLn420 to the RAM mount and the RAM mounting plate using the RAM Mount Kit (Zebra p/n P1050667-032), be sure to properly route the DC Transfer Pack connector and secure the printer to the mounting plate.

- Remove and retain the docking connector cover from the base of the printer.
- Insert the two raised clips on the mounting plate into the corresponding openings on the bottom of the printer.
- 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).

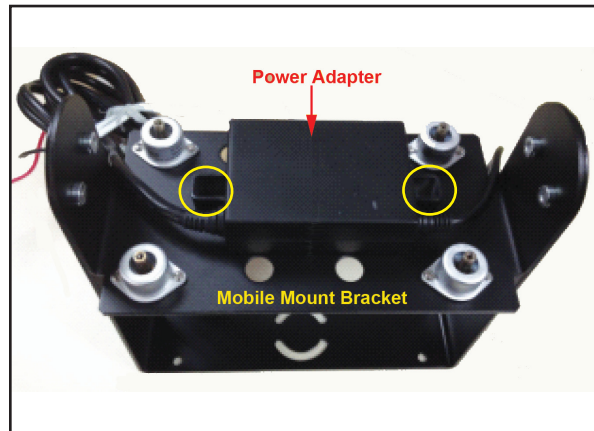


Forklift Mount Installation



Note: Refer to the MM4 Mobile Mount Installation Guide (p/n P1005089 Rev. C) for detailed forklift mounting instructions for the QLn420 printer.

- Attach the Mobile Mount Bracket to the U-shaped bracket.
- Place the Power Adapter on the Mobile Mount Bracket and secure with two (2) screws (where shown).



- Secure the printer (with the DC transfer pack) to the Mobile Mount. Be sure to route the DC mating connector through the slot on the Mobile Mount (circled).



- Attach the printer and Mobile Mount to the Mobile Mount Bracket.
- Connect the mating cable from the DC transfer pack to the DC cable from the Power Adapter (where shown).



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 of the QLn420 Mobile Battery Eliminator Kit. Please have as much information as possible regarding your particular application ready when you call to enable the technical support person to properly 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 pm EST. Ask for Mobile Printer Technical Support.

All Others

For technical support please contact your local Zebra sales representative.



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