# **Replacing the Linear Imager Scanner Battery**

The battery is installed in the cordless linear imager scanner by the factory and resides in a chamber in the linear imager scanner handle. To replace the battery:

- 1. Insert a Phillips screwdriver in the screw at the base of the linear imager scanner, then turn the screw counterclockwise to release the latch.
- 2. Remove the latch.
- 3. If a battery is already installed, turn the linear imager scanner upright to slide the battery out. Disconnect the battery connector clip.

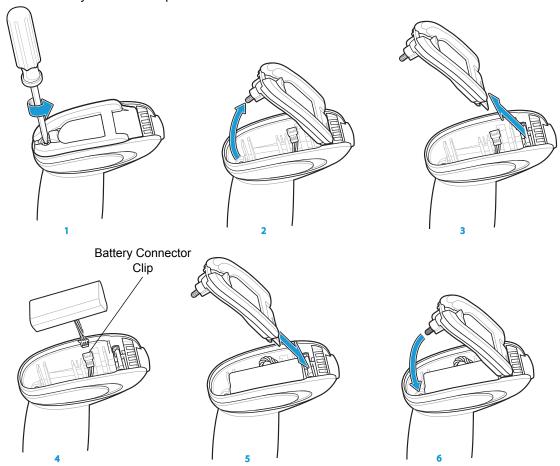


Figure 1-9 Inserting the Battery

- **4.** With the contacts on the connector clips facing in the same direction, attach the new battery's connector clip to the connector clip in the base of the linear imager scanner.
- 5. Slide the new battery into the battery well and ensure the battery leads are visible. The battery should sit securely in the well.
- 6. Attach and close the latch.
- 7. Insert a Phillips screwdriver in the screw at the base of the linear imager scanner, press down gently, and turn the screw clockwise to lock the latch in place.

### **Charging the Linear Imager Scanner Battery**

Fully charge the linear imager scanner battery before using the linear imager scanner for the first time. To charge the linear imager scanner battery, place the linear imager scanner in the cradle, ensuring that the metal contacts on the bottom of the linear imager scanner touch the contacts on the cradle. A complete charge of a fully discharged battery can take typically three hours using external power and typically five hours when powered from a host.

For battery charging LED indicators see Table 1-3 and Table 2-2 on page 2-5. See Table 1-4 on page 1-13 for battery reconditioning LED indicators.



CAUTION To avoid a battery temperature fault, always charge the battery in the linear imager scanner within the recommended temperature of 32° to 104° F (0° to 40° C) nominal, 41° to 95° F (5° to 35° C) ideal.

Table 1-3 Charging LED Definitions

LED Indication	Indication	
Green - Slow Continuous Flash	Non-critical battery temperature fault. Battery is above or below normal operating temperature.  If this occurs, do not use the linear imager scanner and move the linear imager scanner to a location within normal operating temperature. The linear imager scanner can remain in the cradle while the battery warms or cools to normal operating temperature.  Note: For appropriate charging temperatures, see <i>Table 3-3 on page 3-10</i> .	
Red & Green - Continuous Flash	Critical battery temperature fault. Battery is above or below normal operating temperature. If this occurs, do not use the linear imager scanner and move the linear imager scanner to a location within normal operating temperature. The linear imager scanner can remain in the cradle while the battery warms or cools to normal operating temperature.  Note: For appropriate charging temperatures, see <i>Table 3-3 on page 3-10</i> .	
Green - Fast Continuous Flash	Linear imager scanner is charging.	
Green - Solid	Linear imager scanner is fully charged.	
Red	Battery may require pre-charge.	

# **Turning Off the Linear Imager Scanner Battery**

To turn off the NiMH battery for long term storage or shipping:

1. Scan Battery Off bar code below.



**Battery Off** 

2. To turn the battery back on, place the linear imager scanner in the cradle.

# **Reconditioning the Linear Imager Scanner Battery**

To maintain optimal performance of the linear imager scanner NiMH battery, perform a battery recondition approximately once a year.

To begin the battery recondition cycle:

1. Scan Battery Recondition below.



**Battery Recondition** 

2. Place the linear imager scanner into the cradle.



**NOTE** If the scanner is removed from the cradle during the battery reconditioning cycle, the scanner exits the battery reconditioning mode of operation and returns to the normal mode of battery charging (see <a href="Charging the Linear Imager Scanner Battery">Charging the Linear Imager Scanner Battery on page 1-12</a>). To restart the battery reconditioning cycle, re-scan the Battery Recondition parameter and place the scanner in the cradle.

3. The linear imager scanner must perform two charge cycles to complete the battery reconditioning process (discharge/charge/discharge/charge). See *Table 1-4*.

#### **Battery Reconditioning LED Definitions**

Table 1-4 Battery Reconditioning LED Definitions

Battery Reconditioning Mode	LED	Comments
Discharging	Red Flash	Time to discharge is approximately 2.5 hours.
Charging	Green Flash	Time to charge is typically 3 hours with an external power supply.
Reconditioning Complete	Green - Solid (always on)	The linear imager scanner enters a trickle charge until the linear imager scanner is removed from the cradle.

Note: When the scanner is inserted into the CR0078-S (standard) cradle, the scanner's LED is used as the charging indicator.

When the scanner is inserted into the CR0078-P (presentation) cradle, the cradle's LED is used as the charging indicator.