

## Replacing the Batteries in Fortress LI1.3KBWM, LI 1.7K and LI 2K

This FTS describes how to replace the batteries in Fortress LI1.3KBWM, LI 1.7K and LI 2K units. **The batteries should be replaced by a qualified technician. If you have any questions or problems, please call Powerware's Technical Support Center at 800-356-5737**

When you replace the batteries, you will need the following tools:

- (2) 7/16" Wrenches
- 3/8" Nutdriver
- Phillips Screwdriver
- 3/8" Wrench
- Torque Wrench Calibrated in Inch-pounds or Newton-meters

**Before you begin the replacement procedure, read the important safety warnings on the next page.**

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### ***IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS***

This publication contains important instructions that you should follow during battery replacement.

#### **WARNING!**

**Read the following warnings before you go on to Section 1:**

**The batteries used in this system are capable of producing dangerous voltages and high currents. They may cause severe injury if terminals are shorted together or to ground (earth). Extreme care must be taken to avoid electrical shock and burns from contacting battery terminals or shorting terminals during battery replacement.**

**BEST/Powerware's batteries come with a one-year warranty. Using batteries not supplied by Powerware invalidates any BEST/Powerware service agreement.**

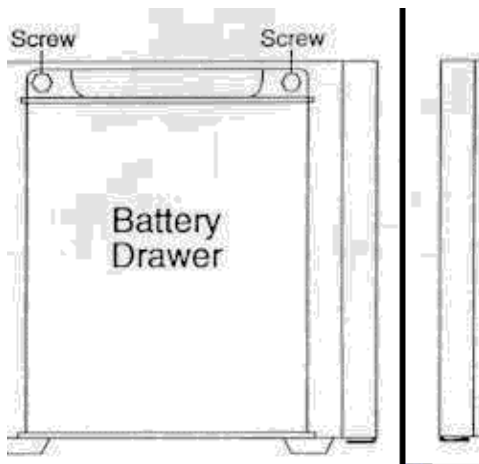
A qualified technician who is familiar with the Fortress should replace the batteries. The technician must take these precautions:

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## Section 1: Removing the Fortress' Battery Drawer

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1. Shut off the equipment plugged into the Fortress and unplug the equipment.
2. Next, follow these three steps:
  - a. Turn the On/Off (1/0) switch on the back of the Fortress off (to 0).
  - b. Unplug the Fortress.
  - c. If the power cord is removable, remove it from the back of the Fortress.



3. Remove the two screws on the back of the Fortress that hold the battery drawer in place. (See Figure 1.)

**Caution:** The battery drawer is heavy! Make sure it does not fall when you pull it completely out of the UPS.

4. Remove the battery drawer by sliding it carefully back until it is completely away from the unit. **Make sure the drawer does not fall.**

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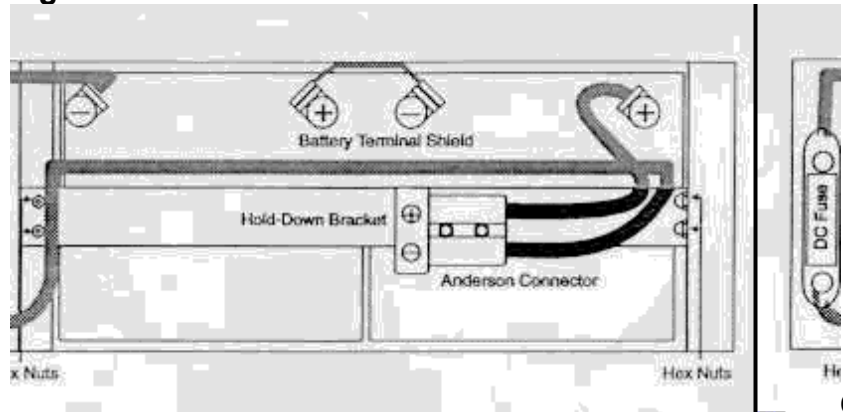
## Section 2: Replacing the Batteries

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1. Refer to Figure 2. Remove the four hex nuts securing the battery hold-down bracket to the tray.
2. Lift the hold-down bracket off the batteries. Disconnect the battery cables from the

battery terminals.

**Figure 2**



3. Remove the old batteries from the tray and place the new batteries in as shown in Figure 2.
4. Connect the battery cables as shown in Figure 2. Torque the connection to 30-45 inch-pounds (3.4-5.1 Newton-meters).
5. Replace the battery hold-down bracket and terminal shield.

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### Section 3: Replacing the Battery Drawer

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1. Place the battery drawer in the opening in the back of the Fortress, and slide the battery drawer all the way inside the unit.
2. Install and tighten the two screws that hold the battery drawer in place. (See Figure 1 on page 3.)
3. Turn the On/Off switch on (to 1). The yellow Battery light on the front panel should be on, showing that the unit is running on inverter. Measure the output voltage at the Fortress' output receptacles to make sure the Fortress provides the proper output voltage on inverter.
4. Turn the On/Off switch off (to 0). If the power cord is removable, plug it back into the Fortress.
5. Plug in the Fortress and turn the On/Off switch to on (1). Make sure the unit switches to AC Line power. (The green Line light should light and the yellow Battery light should go out.)
6. Plug your load equipment back into the Fortress.