Liberating Technologies, Inc. introduced the new Lithium-polymer Battery (BE360) for the Boston Digital Arm in 2010. Prostheses delivered in 2010 and beyond were provided with this upgraded battery along with molded urethane forearm and battery covers (rather than the laminated forearms and battery covers previously supplied).

A replacement Lithium-polymer Battery can be installed by the local clinician to avoid sending the prosthesis back for installation by LTI staff. To do this, the battery latch height will need to be adjusted in the field.

The top surface of the latch has been molded intentionally high to provide for some adjustment. This latch will need to be filed down to the correct height and shaped to properly engage the forearm. Generally the latch needs to be filed down less than \( \frac{1}{8} \)” (3 mm) and the shape must conform to that of the forearm – curved. Removing too little material will make it difficult to latch the battery and can apply excessive force on the main circuit board below. Removing too much material will result in a loose fitting battery. This latch modification should be done incrementally to assure that the battery locks into place properly.

The goal is to remove material on the top surface of the battery latch until it “snaps” into place under the edge of the forearm when modest downward force is applied to the battery. In most cases, a properly installed battery will result in a relatively smooth transition from the top of the battery cover to the top of the forearm. However, regardless of the battery alignment with the forearm, remove enough of the top surface of the latch to allow the battery to snap in without excessive downward pressure.

Ordering a replacement battery: Boston Arm batteries are labeled on the bottom surface of the battery.

- **BE360** Lithium-polymer Battery, 2000 mAh, 11 volts
- **BE361** Regulator Board, 7.4 volts

7/01/2013