

## **“Low Battery” Warning Message**

**September 2010**

The Taber Abraser models 5135 / 5155 along with instrument models 5750, 5900, 6100 and 6160 were designed with a battery on the microcontroller board. This battery is responsible for maintaining accurate date and time. It is also responsible for volatile memory which maintains calibration information and user setup information such as speed, total cycles, mode, etc. If the battery voltage becomes low or exhausted, some instruments may display a “Low Battery” warning message. In addition, the instrument may also display the message “Last Calibration ‘x’ Years Ago” (where ‘x’ is greater than 10 years). Should either of these warnings appear or if an instrument no longer maintains the setup information, there are four options:

### **(1) Leave instrument ON at all times**

The simple solution is leave the instrument powered on at all times. The battery is used only when power is not supplied. If the instrument is left on, the volatile memory will always have power and setup information will not be lost. In the event the instrument is powered OFF and battery voltage is too low, the volatile memory may be lost and all settings will return to the factory default. For instruments with a serial number prior to 2010, the speed calibration settings will also be lost. When the instrument is turned back on, it will automatically cycle through a “start-up” calibration process to ensure proper table speeds.

### **(2) Replace the Battery**

The battery is soldered onto the microcontroller board and may be replaced by a skilled technician. Taber Industries offers a replacement battery kit (p/n 134766) for sale which includes detailed instructions how to remove and install the new battery.

**WARNING:** This repair should be conducted by a technician capable of soldering electrical components onto a board and who is familiar with ESD procedures. Taber Industries cannot guarantee repairs performed outside our facility.

### **(3) Replace the Microcontroller Board**

To avoid potential risks associated with soldering a new battery in place, the entire microcontroller board (p/n 132250) may be replaced by a skilled technician.

**WARNING:** This repair should be conducted by a technician familiar with wiring schematics and ESD procedures. Taber Industries cannot guarantee repairs performed outside our facility.

### **(4) Return Instrument to Taber Industries or Authorized Distributor**

If the instrument is returned to Taber Industries or an authorized distributor, a skilled technician will install a replacement battery per the manufacturer’s recommended procedures and verify the instrument is in proper working order. This repair could take place during annual calibration.

Please note battery life can be impacted by factors such as temperature and humidity. While the original battery selected had a theoretical life of 10 years, its actual life is typically between 4 and 6 years. The replacement battery is considered to be “long-life” and expected to last 3x longer than the original.

While a dead or low battery will not damage or destroy the instrument or software program, its failure can become a nuisance. Please contact Taber with any questions regarding these options.

