Row Counter by NKK Battery Changing Procedure

Battery Type
The original battery is a type AG10 or equivalent. To the right are other battery types which are equivalent to the AG10.
1.5 volt alkaline

Equiv. Battery Types
LR54, V10GA, G10A, GP89A, KA54, 189, 389-1, 389a, 390A, RW89,L1131, D189

Battery Removal & Replacement
The Row Counter case must be disassembled in order for the battery to be removed. You will need:
1. A new battery (check chart at left)
2. A #0 Phillips Head screwdriver
3. A small slotted screwdriver or needle nose pliers
4. A flat work surface and these instructions

Step 1
Lay the counter flat on the table.

Remove the 4 screws from the counter with the #0 Phillips screw driver.
Note - the LONGER screws are installed near the lanyard.

Step 2
Gently separate the top and the bottom cases and lay the bottom to the side of the top half. A wire runs to the speaker in the bottom half. This is to remain connected during the battery replace-ment process. If the speaker disk pops out of its holder in the bottom case, simply push it back in place

Step 3
This picture shows the battery in its holder. The holder is soldered to the printed circuit card (green plastic) on 2 sides. It also has metal tabs on the other 2 sides.

Step 4
This picture shows how the battery is held in place inside the counter. There is a small tab that must be pulled upward in order to remove the battery. This is the tab that faces the red wires or top of the counter.

Step 5
To bend the tab upward, you simply take your flat head or Phillips screwdriver (or pliers), and get it behind the small tab and bend it upward. For added leverage, place a finger on top of the battery holder. You can also hold the counter as shown.

Step 6
Once the tab has been bent upward, you can now push the old battery out by putting your screwdriver on the other side of the battery holder and pushing the battery out. Use the side of the screwdriver (as shown) Do not poke the screwdriver into the printed circuit or puncture the battery.

Step 6
After removing the old battery, then put the new battery in the holder and bend the tab down slightly. Make sure the + sign on the battery is facing upward. Because the battery is generally a tight fit anyway, do not worry about trying to make the fit as tight as when you started.

Step 7
After putting the battery in, you need to reassemble the counter. If the Blue button has fallen out, simply re-insert it as shown.

Step 8 - Place 2 ends of lanyard in the case. Make sure that the knots are positioned <u>inside</u> the edge of the case. Be sure to have the ends of the lanyard untwisted <u>before</u> you position the ends in the case or the lanyard may not fit nicely around your neck.

Step 9 - Leave top case flat on the table and snap the bottom half onto it. While pressing the two halves together, tug on the lanyard to make sure it is snug. Then test the blue on-off button to hear the beep which means it is working. Fasten 4 screws (longer screws near lanyard).