

EA-1

Replacing Counter Assembly (Vernier Assembly)

FOR BALANCES WITH SERIAL NUMBER 21639 & UP  
(NEW VERNIER ASSEMBLIES)

Before making a vernier assembly replacement, please make sure that the binding is not at the bearing in the sidewall of the base. To check this, remove the crank and loosen the two screws in the bearing and see if when the crank is replaced, the shaft rotates freely. If it does, it would indicate that the crank might have been struck and the bearing moved slightly.

If a replacement is necessary, the procedure is as follows:

- (1). Remove the dash pot from the balance.
- (2). Tape doors closed.
- (3). Tip the balance gently so it rests on its back.
- (4). Remove the leveling screws.
- (5). Take out the screws and remove the bottom cover.
- (6). Remove the crank from the shaft.
- (7). Remove the two screws and take out the bearing in the sidewall of the base.
- (8). Remove the green wire ties around the wires.
- (9). Remove the wires from the potentiometer, remembering in what order they were attached.
- (10). Remove the two screws holding the vernier assembly to the base. (One of these screws is slotted and the other has a hex head).
- (11). Remove the vernier assembly.

TO INSTALL NEW COUNTER:

- (1). Fasten the vernier assembly to the base. Snug up the screws at this point, but do not tighten too tightly.
- (2). Insert the bearing in the sidewall. As you tighten screws holding this bearing, move the big gear on the operating shaft with your finger as you tighten the bearing. This insures proper alignment.
- (3). Tighten bearing screws tightly. (You may find the shaft binds when you do this). If so, loosen the two screws holding the vernier assembly to the base and shift the assembly slightly until the shaft becomes free.
- (4). Tighten the two screws holding the assembly.
- (5). Resolder the pot connections.
- (6). Retie the wires with the green wire ties. (CAUTION: Make sure that the wire from the pilot light is not tight against the counter or the gears).
- (7). Replace the cover.
- (8). Replace leveling screws.
- (9). Put balance in the upright position and install the dash pot.

FOR BALANCES WITH SERIAL NUMBER BELOW 21639  
OLD VERNIER ASSEMBLIES)

The procedure for making the replacement of the old vernier assembly is similar to that for the new assembly, except that there is no bearing in the side wall. To install the new counter, follow the following sequence:

- (1). Install the counter to the base and line up the shaft so it is approximately in the center of the opening in the base sidewall.
- (2). Check and make sure that the counter numbers line up in the bezel.
- (3). Tighten firmly the two screws holding the assembly.

- (4). Resolder the pot connections.
- (5). Retie the wires with the green wire ties, making sure that these wires are not against the counter or the gears.
- (6). Replace the cover.
- (7). Replace leveling screws.
- (8). Put balance in upright position and install dash pot.

