



Elderhorst Bells, Inc.

CLOCK MOVEMENT OPERATION ADJUSTING ROLLER SWITCH (EB-101)

Minute Impulse Type Clock Movement Operation

Once each minute, a 6-9 second*, 115vac "impulse" is sent out from the clock controller on terminal S1, or, S2. (*Older controllers using a "latch" relay are "hot" for the entire minute). The following minute, the other terminal receives the "impulse". This impulse powers the motor which is controlled by a roller type switch that is riding on a "cam". The motor is activated by the "impulse" and moves the clock ahead one "minute". At the proper spot, the roller switch is switched off and the motor stops.

It is possible that adjustment or replacement of the roller switch is required. **The replacement roller switch is available from Elderhorst Bells, Inc. or from GRAINGER – GRAINGER PART NUMBER:6X290.**

The attached drawings (use the one that matches your clock movement) shows the roller switch at rest at the first position. Note: the motor is stopped with the roller just at the edge of one of the "lobes" on the "cam"

At minute one/ POSITION 1, an impulse will be sent out from the clock controller to the movement. The clock should advance until the roller on the switch moves to POSITION 2 shown in the drawings below.

The next minute, an impulse will be sent out from the clock controller to the movement – the clock should advance from POSITION 2 to POSITION 1.

The white minute dial is placed on the movement to provide a reference for where the minute hand should be in the hour. The minute dial also helps when adjusting the roller switch.

Dependent on application, the roller switch on the EB-101 is mounted:

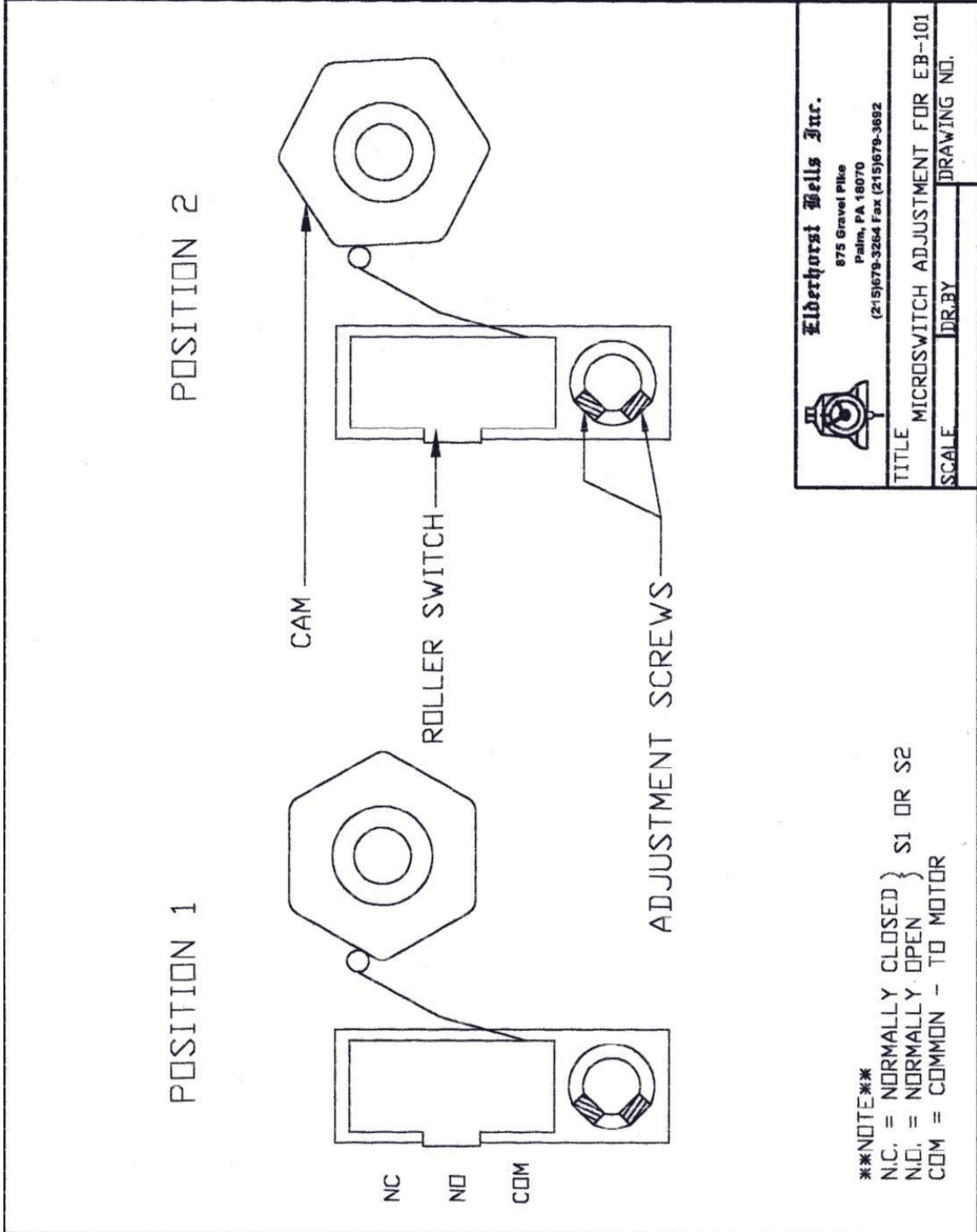
- on an adjustable plate held in place with small set screws, or with a hex head bolt.
- with two mounting screws through the switch to a fixed mounting plate

-If the clock is running "fast" the switch may need to be adjusted closer to the "cam" so that the switch will operate properly.

-If the clock is running "slow" the switch may need to be adjusted away from the "cam"

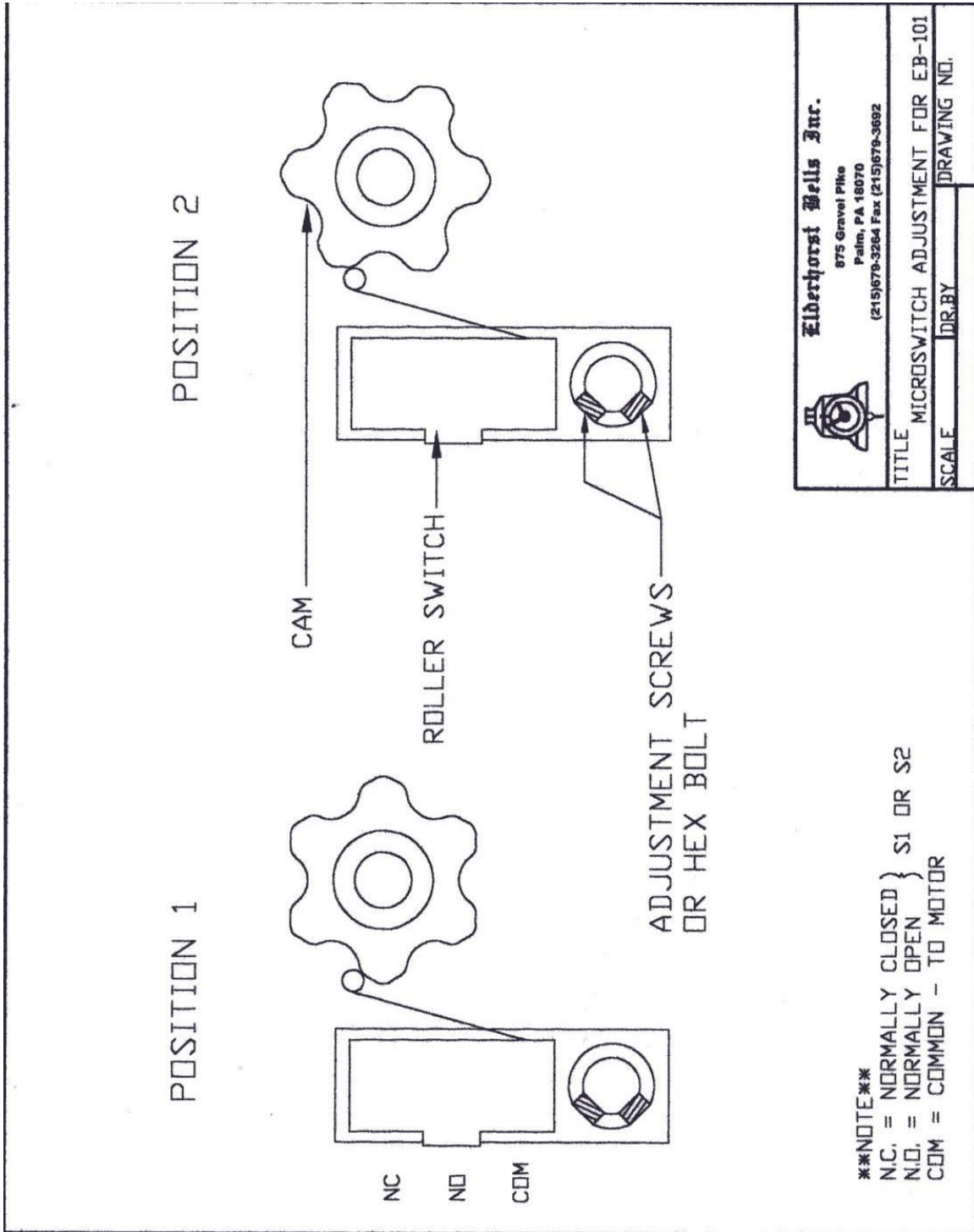
It is possible to adjust the switch in or out so that the switch will work properly each minute. Small adjustments can make a big difference.

If replacing the roller switch - verify that the wires from the old switch are mounted on the same terminals on the new switch - common to common, norm open to norm open, norm closed to norm closed. The terminals are marked.



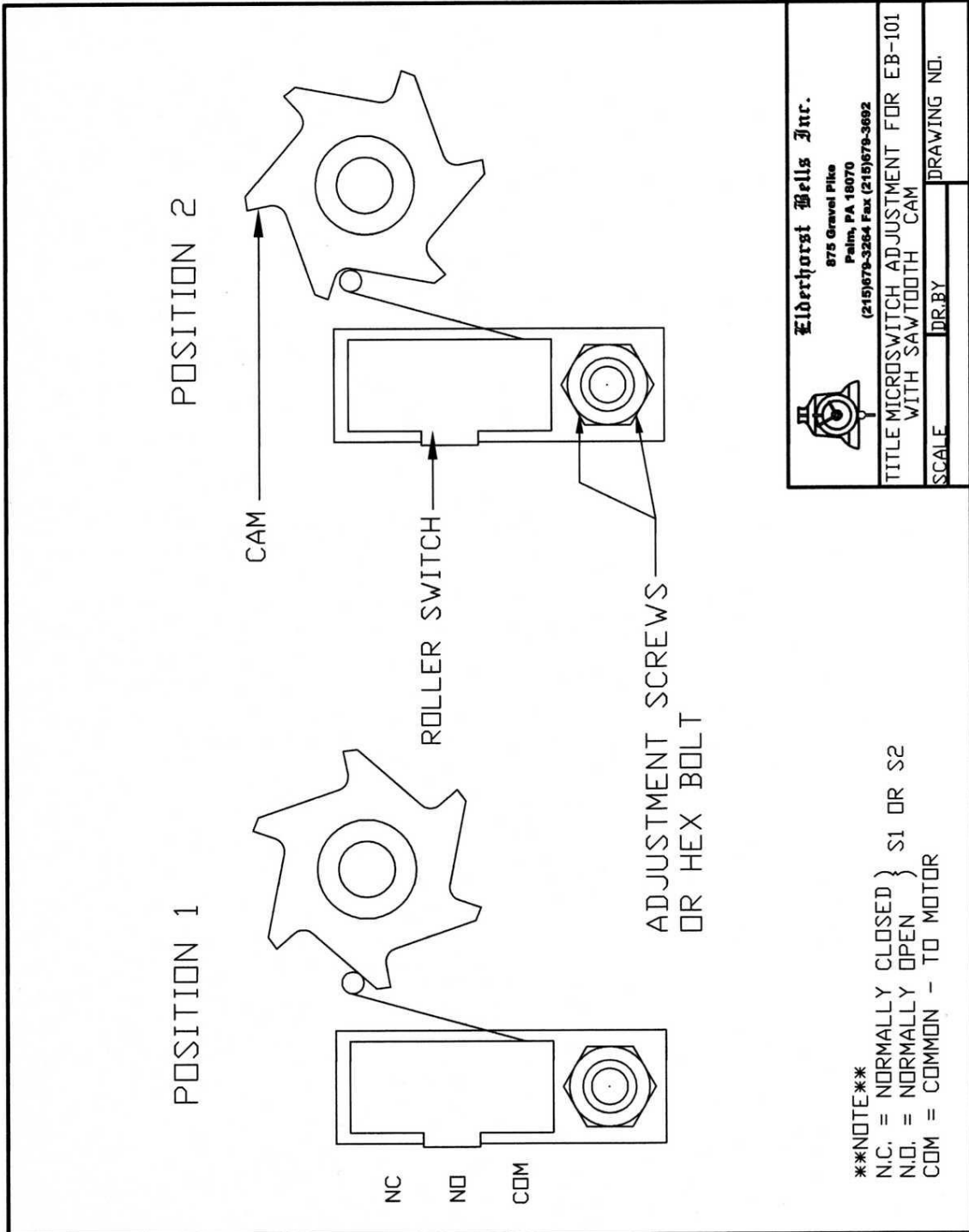
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PAGE 3 EB-101 SWITCH ADJUSTMENT "LOBE" STYLE DRAWING



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TITLE MICROSWITCH ADJUSTMENT FOR EB-101 WITH SAWTOOTH CAM

SCALE DR.BY DRAWING NO.

NOTE

N.C. = NORMALLY CLOSED } S1 OR S2
N.O. = NORMALLY OPEN }
COM = COMMON - TO MOTOR

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