



Elderhorst Bells, Inc.

CLOCK MOVEMENT OPERATION ADJUSTING ROLLER SWITCH

Minute Impulse Type Clock Movement Operation

Once each minute, a 6 second, 115vac "impulse" is sent out from the clock controller on terminal S1, or, S2. 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.



The "cam" is located between the minute dial and the "hurst" motor in the center of this photo (note: the cam profile was modified in 2007-see attached drawings). The roller on the arm of the switch follows the "cam" and switches off the motor .

This photo 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"

At minute one: 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 the position shown in the photo below.

The next minute, an impulse will be sent out from the clock controller to the movement – the clock should advance until the roller is in the top photo position once again.

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.

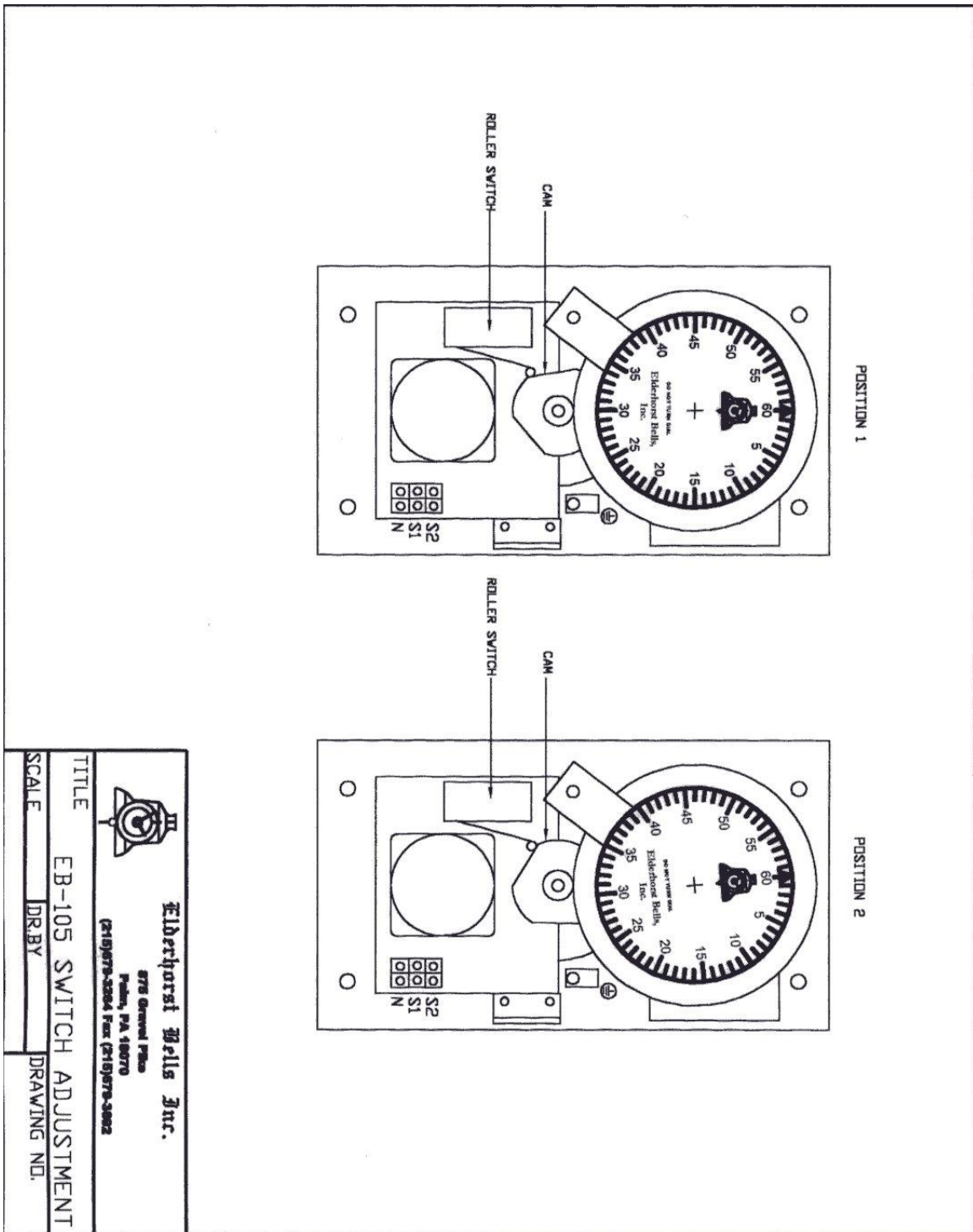
The roller switch is held in place with 2 small screws. It is possible to adjust the switch in or out so that the switch will work properly each minute. Small adjustments can make a big difference.


If 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"

**The replacement switch is available from:
GRAINGER – PART # 6X290**

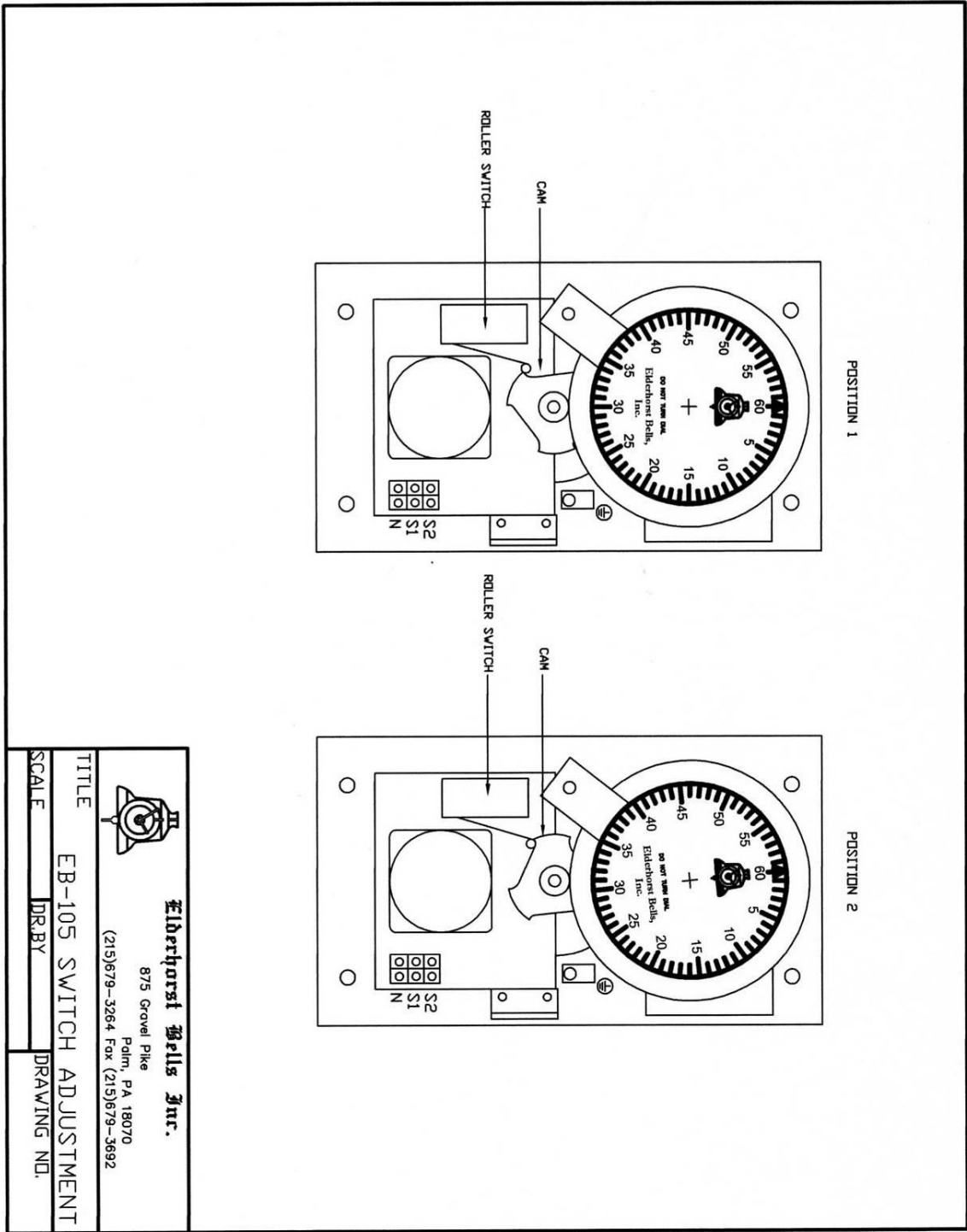




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TITLE EB-105 SWITCH ADJUSTMENT	
SCALE DR BY	DRAWING NO.

CAM SHOWN ABOVE USED THROUGH EARLY 2007

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NEW CAM PROFILE SHOWN ABOVE -2007 TO PRESENT