



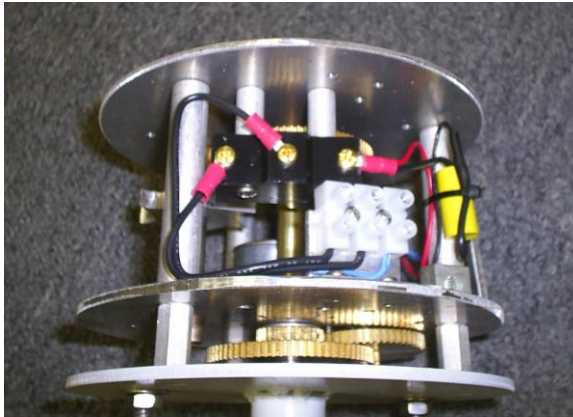
Elderhorst Bells, Inc.

CLOCK MOVEMENT OPERATION

ADJUSTING ROLLER SWITCH -Note: adjustment and replacement of the roller switch is more difficult on this movement – consider sending the movement to Elderhorst Bells, Inc. for service

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”. The roller switch runs on the “cam” and at the proper spot, is switched off and the motor stops. When the movement runs slow or fast – the switch can either be out of adjustment, or may be failing/defective.



This photo – looking at the EB-106 clock movement from front to back – shows the roller switch (black, with three wires attached). This switch is mounted to the back plate of the EB-106 Clock movement with 2 bolts running through two aluminum spacers and nuts on the back side of the clock plate. Your movement may have a different switch mounting

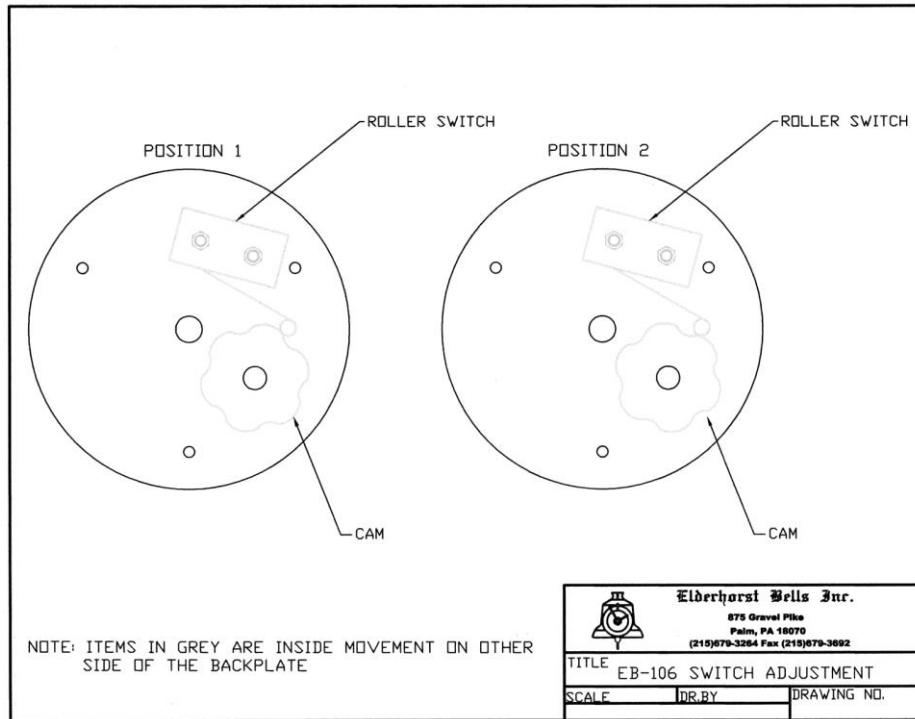
For this type of mounting, you will need a 5/16” wrench and right angle Phillips head screwdriver to remove and replace the roller switch

Some movements have the switch mounted on a moveable bar – you will have to look at your movement to determine how the switch is mounted



This photo shows the roller of the switch riding on the “cam”. The cam in this photo is aluminum – your application may have a brass , aluminum or plastic cam with a different cam configuration

The roller switch is available from Elderhorst Bells, Inc. or is a stock item from GRAINGER. GRAINGER PART NUMBER: 6X290



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 drawing above.

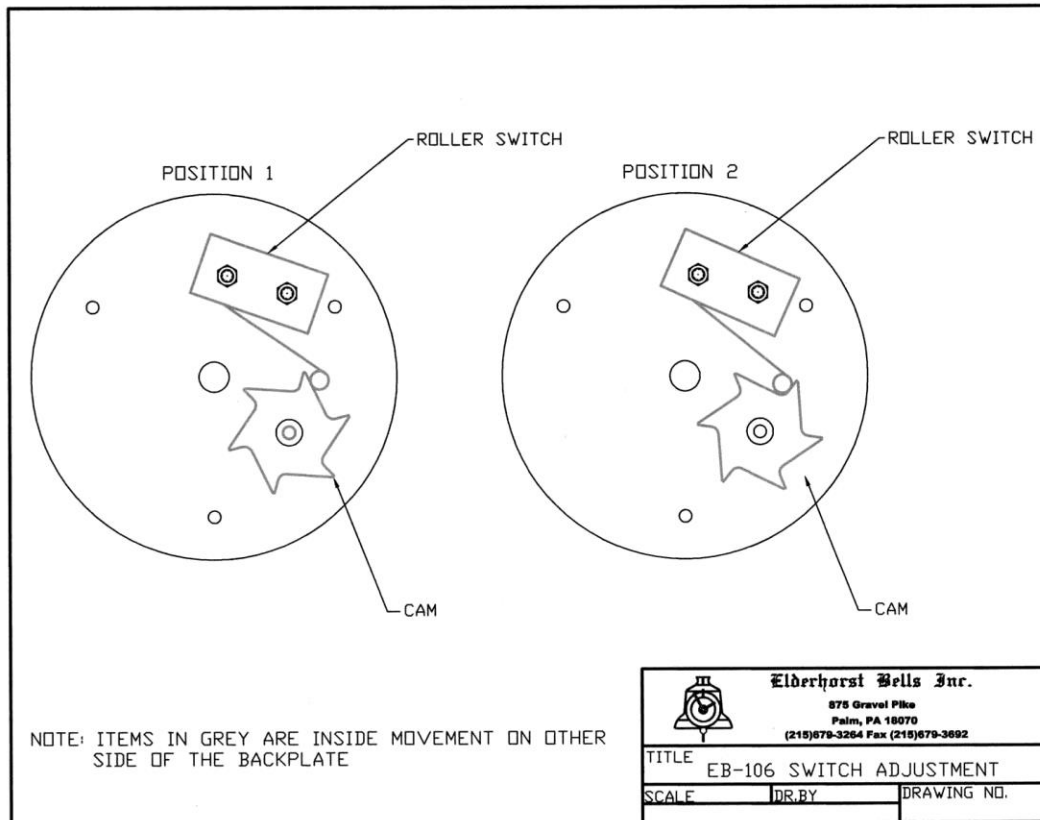
The next minute, an impulse will be sent out from the clock controller to the movement – the clock should advance until the roller is in the top photo position once again.

The 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”.

If adjustments to the switch are not successful – you may need to replace the roller switch.



Above drawing shows the switch positioning with the “sawtooth” type cam.

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