

Manufacturer's description.

A non-literal translation of the manufacturer's old Danish description of the Telavox movement by CB:

*TELAVOX clock with anchor escapement and electric rewinding and striking:*

*The clock's construction is based on the principle that an electric motor, powered by 4.5 Volt torch battery, winds a spring. The spring then provides the power to the escapement for the clock to run. The striking gears (wheels) also provide the transmission of power between the motor and the going spring housing. It requires only 168 strokes per day to keep the clock fully wound but the clock strikes 180 times in this period. So the extra 12 strokes, in every 24 hours, provide nearly two extra turns to the going spring. To avoid over-winding the going spring, a friction clutch is provided. This ensures the spring is wound only to a pre-arranged tension before the clutch starts to slip. The spring could be wound up to 12 times which provides 12 hours of going power but the slipping clutch limits the tension to about 8 hours of going power, which greatly extends the life of the spring by avoiding over-winding.*

*The motor is not self-starting. When the current is connected the motor is started by a sprung arm. Whose movement is controlled by two cams on the minute arbor. These cams also control the half and full hour strike.*

*The clock is provided with an anchor escapement, a rate regulator and a ballistically (sic) suspended, temperature compensated, torsion balance. This system, which is patented in many countries, allows the clock to go regardless of the physical orientation of the movement or its case. In fact it is very insensitive to shocks and shaking. e.g: during transport.*

*Because the normal balance arbor and spiral spring are replaced by a tensioned suspension spring there is nowhere for the oil to thicken which would eventually reduce the swing of the balance. In turn this would affect the going rate (timekeeping) of the clock. So the Telavox keeps very good time, over long periods, compared with normal balance wheel clocks.*

*The movement plates, where the movement pivots are housed, is made of a man-made fibre material best known as "Turbonit". This material has been shown to have far superior bearing qualities compared to brass, such that the oil remains in good condition for far longer than it does in brass plates where undesirable chemical reactions can take place. Because "Turbonit" has such excellent insulation qualities the electrically conducting parts can be fixed directly to the movement plates.*

Removal of the Telavox movement from its case:

*Before the movement can be removed the dial glass and the outer brass bezel must first be removed. The bezel consists of two parts. A thin outer ring (which holds the glass in place) and a fixed inner (sight) ring. The inner ring is screwed firmly to the case and should not be removed. The thin outer ring is pressed down over the inner ring during manufacture and is only held on by friction. The best tool to lever off the outer ring is a clean, plain wood chisel with a reasonably good cutting edge without damage. The sharpened edge should be gently pressed under the edge of the outer ring to lift it. You should work gently around the ring with the chisel to lift the outer ring off the inner ring. However, great care is required to avoid catching the sharp edge of the chisel under the inner ring. To do so could cause serious and permanent damage to the case and might easily break the glass. A wood chisel is broad and flat enough not to damage the case or the edge of the thin shell of the outer ring. Other smaller tools (like screwdrivers) should really be avoided because they could easily and*

*permanently damage the wooden case and bend the edge of the thin outer ring due to localised pressure. Where a wood chisel is not readily available the case should be well protected and even greater care taken not to permanently damage the outer ring. Take great care not to drop or break the dial glass once it is released by the outer ring's removal. No great effort is required to lift the outer ring if you work slowly and carefully around the ring.*

The translation has been altered to emphasise the care required to avoid permanent damage to the clock. The glass is no longer held safely once the outer ring is lifted free. No responsibility is taken for this advice.

*Once the bezel is free the dial glass can be placed safely aside. The hands must be removed before the dial and chapter ring can be lifted free. They lie on the case front centred by the inner sight ring. Only after their removal will the movement be exposed. The movement itself is held by three screws which pass through rubber bushes with permanently attached nuts. Do not remove any other screws.*

Detail on movement disassembly has not been translated

*Oiling:*

*All the arbor pivots and the escapement should be oiled with clock oil. Avoid getting any oil near the contacts or their springs. The clock will not run with oil on the contacts! A tiny drop of oil is all that is required in the pivot holes surrounding the pivots.*