Jaeger Le Coultre Atmos 540 Clock.

The Atmos 540 clock incorporates the improvements in manufacturing technology that had become available when this clock was introduced in 1984. It is a truly impressive piece of machinery.



Fig. 1

This clock is less substantial, however, than the Atmos 528. It is certainly more fragile and more easily damaged during repairs because of several new design features that do not amount to improvements. First of all, the bellows must be removed, the chain disconnected from the rear spring, and the smaller chain return spring disconnected from the back plate, all done before removing the mechanism. Otherwise, the tiny click springs will be broken.



Fig. 2

To let the power down, you hold the ratchet wheel with your fingers while moving the two large click springs out of the way with a pair of tweezers, gradually allowing the ratchet wheel to move slowly between your fingers until the mainspring is fully unwound.



Fig. 3

Make sure the pallet fork protrudes through the opening in the back plate as you assemble the mechanism. Otherwise you will have a broken pallet pivot. The fact that the pallet assembly cannot be added after assembling the mechanism makes this clock far more difficult to assemble than the Atmos 528, with a much greater risk of a broken pallet pivot or escape wheel pivot. It would be an improvement in design to add a bridge for the pallet assembly, as seen in the 528.



Fig. 4

In the AWI Atmos repair course that I took in 1992, the instructor, Mr. Jerry Jaeger, told us that the mainspring in the Atmos 528 should be removed from its barrel, cleaned, lubricated, and reinstalled. He told us that the mainspring in the Atmos 540, however, should not be removed from the barrel nor serviced unless it were broken and needed to be replaced.



Fig. 5

WARNING: If you have not taken a professional repair course for Atmos clocks, you should not attempt to service one, particularly not the 540. The suspension wire inside the pendulum of the 540 is even thinner, (about a thin as a human hair), more fragile and more easily broken than the suspension wire in the 528, which is certainly not the only, nor the least, of its fragile characteristics.

This Atmos clock was brought from Marble Falls, TX.

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