



Omega 1637 Movement Parts (1)

Compiled by EmmyWatch - <https://www.emmywatch.com>

CALIBRE**1637****17 Q LCD CALD S ECL STS CORH CORM CORR CORJ CORMO AL TM****Description and performances**

This ladies' watch with LCD numerical display, developed and assembled by SSIH, is equipped with a high quality 32 KHz quartz. Its accuracy is better than 5 seconds per month Adjusted to this degree if necessary). A choice of hour, minute, second or date is permanently displayed, the word "date" becoming apparent at foot in the middle of the display when the date is selected. A lighting system by microlamp allows the display to be illuminated whenever required, and irrespective of the particular functioning system in operation. Expiry of the battery is indicated by flashing of the display.

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In addition, this caliber possesses 2 alarm functions, namely:

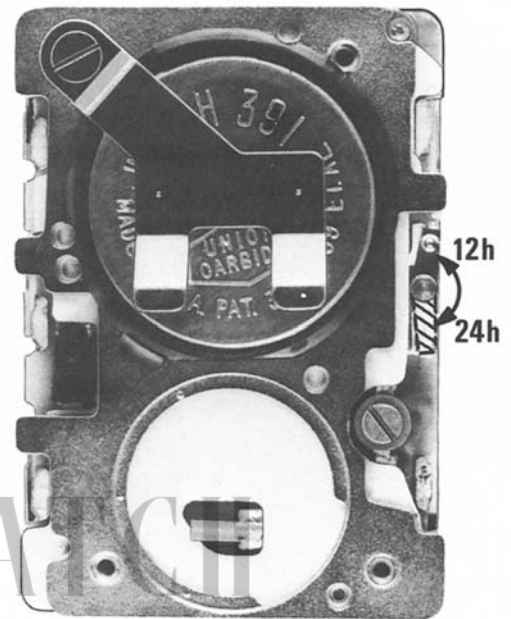
1. "TIMER" (count-down timer) with a maximum capacity of 11 hours 55 minutes; the corresponding symbol (arrow) appears on the display when the TIMER is functioning (fig. 1).

2. "ALARM" (watch alarm) over a period of 24 hours; the corresponding symbol (loud-speaker) appears on the display when the alarm is set.

READING OF THE HOUR AND THE DATE (Fig. 1)

A choice of hour, minute, second or date is permanently displayed. The dot located between the hour and minute flashes at the rhythm of the second. By pressing pusher B briefly progression of the second is replaced by the date, programmed for 4 years, and located at right of the indication "DATE" A further push on B causes the "DATE" indication to disappear and progression of the seconds is resumed. The pusher E controls lighting of the display.

A commutator allows the watchmaker to select easily the 12 h. am/pm or 24 h. version; (commutator beside the trimmer, fig. 2) in the first case, a "P" will appear in the afternoon at top right of the hour figure.



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MODIFICATION OF THE DISPLAY

The LCD/SSIH calibers are equipped with a sequential correcting system.

Selection of the indication to be corrected is made by means of the corrector C. The selected indication then begins to flash every second.

The actual correction is effected by pressing pusher B. Each push causes the data to advance one stop. A continued push of more than two seconds makes the selected data advance at 4 Hz.

The indicator PM ("P") operates in the 12 h. version, between mid-day and midnight.

The "DATE" indicator operates during the correcting phase of the month and date.

The correcting operations do not influence the different alarm programmes.

SYNCHRONIZATION OF THE SECOND

Rapid synchronization for variations of less than 30 seconds

With pusher C select the correcting sequence of the minutes and await the instant when the exterior reference is at 0 second.

- if the watch is gaining less than 30 seconds (seconds between 0 and 29), one push on B and the seconds will restart from zero.

- if the watch is losing less than 30 seconds (seconds between 30 and 59), one push on B, the minutes advance one unit and the seconds restart from zero.

Synchronization for variations of more than 30 seconds

When effecting a correction of the minutes, the seconds are reset to zero by two or several pushes on B. Stop the display on the minute to follow. Return to permanent display : display shows the hour, the new minute and the seconds at zero, whilst the dot located between the hours and minutes no longer flashes. One push on B at the instant of synchronization (zero of exterior reference) and the seconds restart.

For further details concerning modification of the display, please refer to the instructions for use of Caliber 1637.

THE ALARM SYSTEMS

1. Timer (count-down system)

This count-down timer releases an audible signal (4 KHz 2 KHz) during 30 seconds when it reaches 0 position. Its maximum capacity is 11 hours 55 minutes. A symbol (arrow) appears on the display when the timer is counting-down, and this symbol flashes when the corresponding audible signal is functioning. The state of the timer (hours, minutes, seconds) will become visible by pressing pusher D once.

Utilization

One push on D selects the TIMER system with flashing of the corresponding symbol at bottom left of the display. There are then 10 to 12 seconds available for putting the count-down into operation by means of pusher B. Otherwise, the normal display will reappear. Introduction of the count-down with pusher B is effected by steps of 1 minute from 1 to 20 minutes and then, after 20 minutes, by steps of 5 minutes. As for correction of the display, by pressing pusher B for more than 2 seconds, the selected data will progress at 4 Hz, and this for the 2 systems. As soon as the time has been inserted., the TIMER immediately starts counting-down, without any further manipulation. It is also possible to modify at any time the contents of the TIMER or to reset it to zero by pressing pusher A. To stop the ringing, press any of the 4 pushers.

2. Watch alarm

When the time programmed in the alarm system is identical to that of the watch, a ringing tone (4 KHz - 2 KHz - 4 KHz) sets in for 30 seconds. Press any one of the 4 pushers to stop it. A symbol (loudspeaker) located at bottom in middle of the display indicates that the alarm is set, and this symbol-flashes when the corresponding alarm is functioning.

Utilization

Two pushes on D select the watch alarm system with indication "AL" at bottom right of display if the alarm is set or "OF" if the alarm is released; the corresponding symbol flashes at the rate of the seconds.

Press pusher B to choose either set alarm (AL) or released alarm (OF), press pusher A once to select the hour to be chosen with pusher B and press pusher A a second time to select the minute to be chosen with pusher B.

If no other operation is effected, the normal display will reappear after 10-12 seconds.

3. TECHNICAL DATA AND PERFORMANCE OF CALIBRE 1637

Dimensions :	24.00 x 17.00 mm H = 5.80 mm on battery clamp
Resonator type :	Tuning fork, quartz frequency 32768 Hz
Typical quality factor :	100'000
Thermic coefficient :	0.1 s/d. for a variation of $\pm 5^{\circ}$ C
Consumption :	3.5 A maxi
Typical running time with 1 45 mAh :	18 months with each day : 4 illuminations of display during 1 sec. and 60 seconds' use of audible signal
Variation during wear :	5 sec/month (adjusted to this degree if necessary)
Shock resistance :	in conformity with NIHS norms residual affect recoverable by the trimmer
Resistance to magnetic fields :	NIHS magnetism test : no affect
Temperature functioning limits :	- 10° to + 55° C
Feed :	1 battery 1.55 V SSIH No. 9921 or Vartachron 553.

NOTE

Uncase on side opposite to loudspeaker grill so as not to damage it.

DISASSEMBLING

Refer to figures indicated on the drawing
16-15-14-13-1-2-3-4-
5-6-7-8-9-10-11-12.

CLEANING

Take the usual precautions relating to the cleaning of electronic watches.

ASSEMBLING

12-11-10-9-8-7-b-5-4*-
3-2-1-13-14-15-16*.

NOTE

* 4 mat side on top

*16 adhere to position indicated on the drawing

CLOSING OF THE CASE

Press the back between 3 h and 9 h.

