

# ***TECHNICAL INFORMATION***

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**CITIZEN QUARTZ**

**Cal. No. 737 ※ ※**

 **CITIZEN**

For this watch, the retailer shop performs only the replacement of power cell. And all other repairs, troubleshooting and adjustment are carried out at Citizen through the Citizen Service Center of each region.

## § 1. OUTLINE



This is a "Mega" quartz watch for gentlemen with center second, which has been completed based on the movement of the Cal. No. 73-series watch and with application of a high-frequency quartz crystal oscillator (4.2MHz).

Thus, it features the highest-class accuracy of the wristwatch in the world today. It also features the less power consumption, smaller size in thickness and longer life of the power cell in comparison with Citizen's Cal. No. 8650A.

## § 2. FEATURES

### 1) High accuracy of 4.2MHz

The AT-plate quartz crystal oscillator can produce an extremely high accuracy of  $\pm 5$  seconds per year at the normal temperature.

\*The monthly error of accuracy, however, is not calculated exactly to just 1/12 annual accuracy due to difference of the watch using condition.

### 2) Meticulous adjustment of time

The high accuracy of this watch can be ensured by a meticulous and more rigid adjustment given through Citizen's superb technique and long experience in manufacture of the electronic watches.

### 3) High reliability attained by use of 1-chip C/MOS LSI

The reliability of function is enhanced greatly with use of only one unit of the integrated circuit in terms of the low power consumption, increased anti-moisture and anti-temperature performance, etc.

### 4) Multiple function

The conventional multiple function is fully maintained for each of day and date displays plus quick setting of the calendar, along with high accuracy and reliability.

### 5) Second-hand stopping device

The second-hand can be stopped at an optional position by setting the crown at the time-set position. Thus, a correct time can be obtained at all times.

### 6) About two years of power cell life.

Owing to realization of the low power consumption, the life time of power cell can be extended about double in comparison with the preceding Cal.No.8650A along with reduce thickness of the power cell.

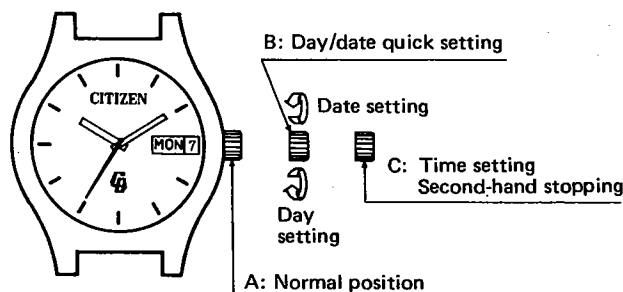
### §3. SPECIFICATIONS

Caliber No.	7370-07D
Type	Analog-type high-frequency quartz crystal watch (center second)
Movement	Size: 26.0mm $\phi$ x 23.15mm
	Thickness: 4.96mm (Power cell part 5.66mm)
Oscillation	4,194,304Hz
Accuracy	Gains and losses within 5 sec. per year. (at normal temperatures) *
Converter	Bipolar step motor
Effective temperature range	-10°C ~ +60°C (+14°F ~ +140°F)
Integrated circuit	C/MOS-LSI (1 unit)
Additional mechanisms	<ul style="list-style-type: none"> <li>•Day/date display</li> <li>•Quick calendar setting device</li> <li>•Bilingual day display switch (English <math>\Rightarrow</math> Germany)</li> <li>•Second-hand stopping device</li> </ul>
Power cell	Miniature silver oxide cell (1 unit) Parts No. : 280-47 Nominal voltage : 1.55V Capacity : 175mAH Size : 11.6mm $\phi$ x 4.2mm Life : About 2 years

\*The monthly accuracy is not always just 1/12 annual accuracy due to the difference of using condition.

#### §4. HANDLING INSTRUCTIONS

The correct setting of the time and calendar is carried out in that order of time → date → day.



##### 1) Setting of time

The second-hand stops instantaneously when the crown is set at position C. The second-hand is set to 0 previously, and then the crown is pushed in synchronization with the standard time signal. Thus, the correct time can be set. (With the crown set at position C, the time is set with attention paid to AM or PM. And if the calendar changes at 12 o'clock, it indicates 12:00 AM.)

##### 2) Setting of day and date

The day and date are changed by turning the crown clockwise and counterclockwise respectively at position B. In the bilingual display for the day of the week, the English and Germany appear alternately. And either one of the two languages, after once selected, is displayed automatically thereafter.

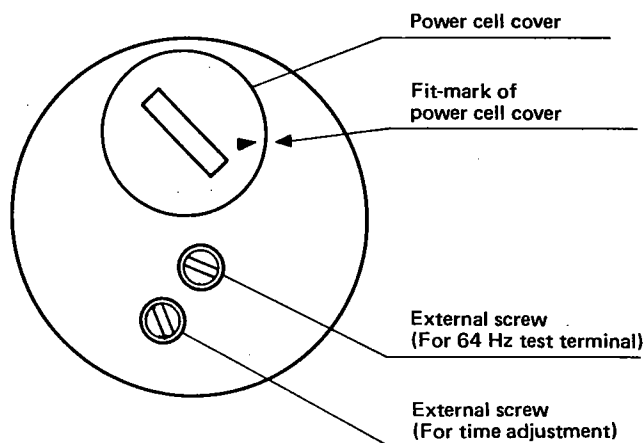
(Note) The calendar may not sometimes change even on the following day during the time between 9:00 PM and 1:00 AM because the watch starts changing the calendar in that time band.

3) The crown is pushed in completely up to position A to end the setting procedure for time and calendar. After this, both the day and date change automatically.

#### §5. REPLACEMENT OF POWER CELL

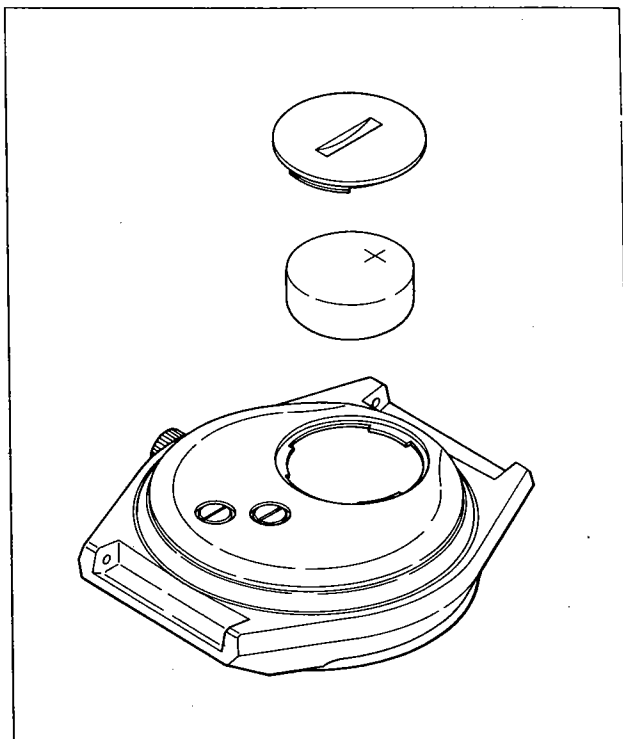
- This watch contains the power cell cover and two units of the external screw attached to the caseback. And never touch the external screws.

- The dust or other foreign matters must be kept away from the inside of the watch when replacing the power cell.

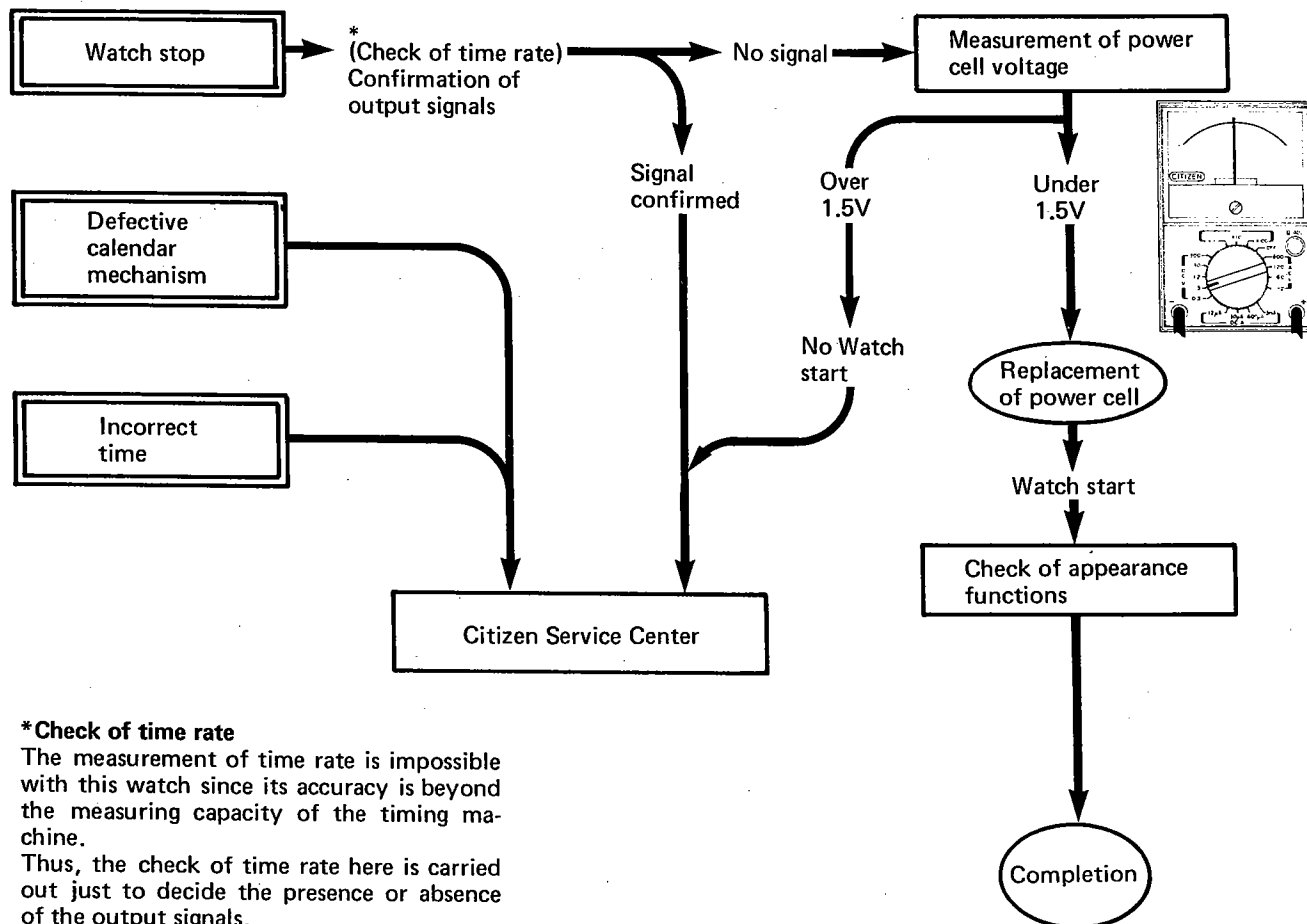


## How to replace power cell

- 1) The Power cell is taken out:  
The power cell cover is opened with the coin or the like, and then the watch is tilted to take out the power cell.
- 2) The power cell voltage is measured:  
The power cell voltage is measured through the tester. And in case the readings shows under 1.5V, the power cell must be replaced with new one. Even in case the voltage reads more than 1.5V, the power cell must be changed if the watch has been used over two years.
- 3) The new power cell is put in and the power cell cover is closed:  
The voltage of the new power cell is checked through the tester, and the surface of the cell is wiped up clean. Then the power cell is attached, and then the power cell cover is closed tight.



## §6. TROUBLESHOOTING AND ADJUSTMENT



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