



SEIKO WATCH CORPORATION

Operating Instructions

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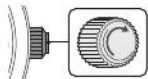
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## How to use the minute repeater

- ① Make sure that the crown is at the normal position.  
If the crown is at the first click position, push it back to the normal position.



- ② Check the power reserve indicator.  
"Power reserve indicator"→ P. 9  
If the mainsprings are in a nearly "unwound" state, rewind it.  
"How to wind the mainspring"→ P. 8

### CAUTION

Each time the minute repeater mechanism is used, a power reserve of approximately 3 to 5 hours is consumed.

To prevent the minute repeater from being stopped in the middle of operation, it is recommended that the mainsprings be sufficiently wound before the minute repeater is activated.

- ③ Press the button.  
The minute repeater audibly chimes the currently indicated time by the hour and minute hands.  
\* As the minute repeater is a mechanically-actuated time announcing device, an error of approximately one minute may occur between the time indicated by the number of times the gongs are struck and the time indicated by the hands of the watch.



## Structure of minute repeater



- ① First mainspring  
② Second mainspring  
The first mainspring is mounted on the front side and the second mainspring is mounted on the rear side of the watch.  
These mainsprings are the power source for the watch and minute repeater.
- ③ One-way clutch  
The one-way clutch transmits and interrupts the power generated by the mainsprings to the minute repeater.  
The one-way clutch slips when the mainsprings are wound and is locked when the minute repeater mechanism is activated. When winding the mainsprings, you can view the movement of two small springs and the slipping one-way clutch.
- ④ Large hammer  
The large hammer strikes the gong for a low-tone sound (sound source).
- ⑤ Small hammer  
The small hammer strikes the gong for a high-tone sound (sound source).
- ⑥ Repeating rack  
This is a mechanism for reading the number of times the gongs are struck.  
Three repeating racks for the hour, 10-minute intervals after the last hour, and minute operate in conjunction with each other.  
When the button is pressed to activate the minute repeater, the repeating racks instantaneously rotate and slowly return to the original position.  
The number of times the gongs are struck is determined by the returning amount.
- ⑦ Slow governor  
The slow governor controls the speed at which the mainsprings are unwound and regulates the chime intervals.  
When the button located at the 8 o'clock position is pressed, the slow governor rotates at a high speed, and stops after chiming is finished.  
It uses the viscosity of air to minimize the operating sound.
- ⑧ Sound output hole  
This is a slit for releasing the sound, in which the gongs (sound source) are mounted.

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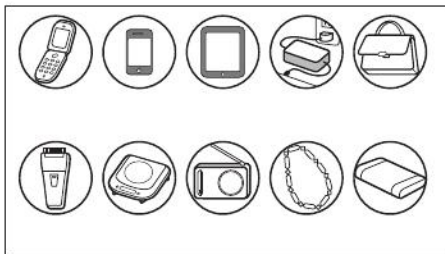
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