## ■ Solar Watch

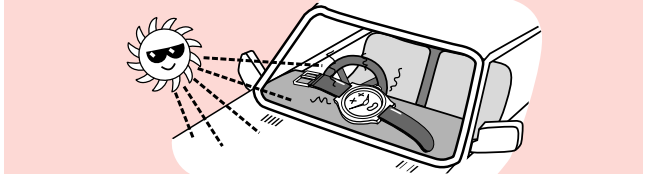
### ● Charging Time (Slightly different depending on model)

| Illumination Intensities (lx) | Light Source | Environment (Criteria) | Time Required for Full Charge | Time Required to Move Second Hand at One Second Intervals | Time Required to Maintain One-Day Usage |
|---|---|---|---|---|---|
| 500 | Incandescent Lamp | 60W 60cm | Approx. 250 hours | Approx. 15 hours | Approx. 1 hr |
| 700 | Fluorescent Lamp | Inside General Office | Approx. 175 hours | Approx. 11 hours | Approx. 50 min |
| 1000 | Fluorescent Lamp | 30W 70cm | Approx. 120 hours | Approx. 6 hours | Approx. 30 min |
| 3000 | Fluorescent Lamp | 30W 20cm | Approx. 45 hours | Approx. 2 hours | Approx. 10 min |
| 10000 | Sunlight | Cloudy Day | Approx. 10 hours | Approx. 30 min | Approx. 3 min |
| 100000 | Sunlight | Sunny Day | Approx. 3 hours | Approx. 8 min | Approx. 1 min |

*Charging time required until the second hand moves constantly at one-second intervals after the watch is exposed to light and starts operating.

### ● Precautions in Charging

Do not expose the watch to direct sunlight to charge nor leave it on the dashboard of a car, etc, as the watch temperature becomes extremely high, which may cause a malfunction.



## ■ Kinetic

### ● To charge the watch

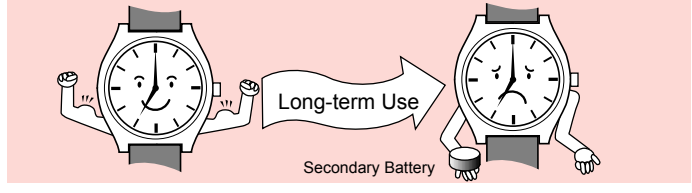
Please swing your watch to rotate the oscillating weight as shown in the illustration.

When the hands stop operating, swing the watch from side to side 300 – 500 times rhythmically at a rate of twice a second. After the second hand starts to move at one-second intervals, wear the watch on your wrist. It is recommended to continuously wear the watch as it is charged by the movement of your arm.

(Note) As a kinetic watch is different from a mechanical watch in mechanism, an auto-winder of a mechanical watch is unsuitable for charging a kinetic watch.

## ■ Performance of Secondary Battery

Capacity and charging efficiency may decrease because of long-term use and usage environment. When the performance starts to decrease, this is an indication that the watch requires inspection/repair.

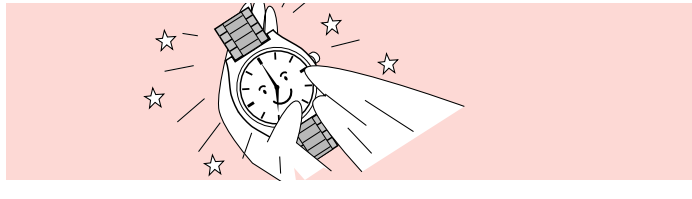



## ■ In the Event of Short Duration

As with a general quartz watch, maintenance and repair (overhaul) of the inner mechanism are necessary. If a watch is used for a long period of time, not only deterioration of the secondary battery but also wear and dirt of mechanical parts and deterioration of the lubricant shorten the duration time. In this case, contact us for overhaul. Dirt and moisture of hidden parts that may cause a malfunction are removed and packing is replaced so that the watch can be normally used.


## ■ Care of Your Watch

As a solar watch requires no regular battery replacement, it may be worn for long time with perspiration and dirt left on the watch or band. Perspiration and dirt may lead to rust, etc. Please take care of your watch by wiping the watch and band with a soft cloth.



Other leaflets available: “Battery,” “Magnetism,” “Waterproof / Non-waterproof,” “Bracelet,” “Mechanical Watch” and “Radio-controlled Watch.”

SEIKO WATCH CORPORATION

# watch care

## Charging Your Watch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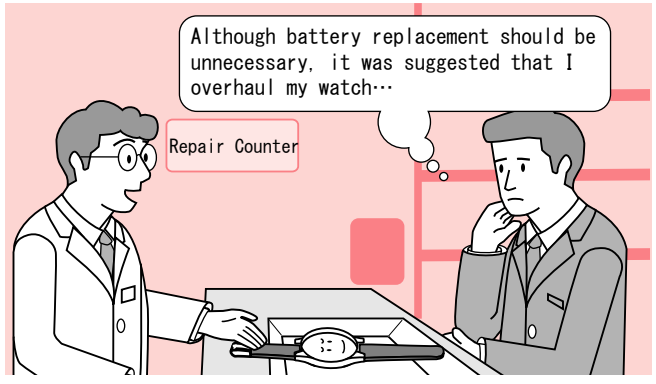
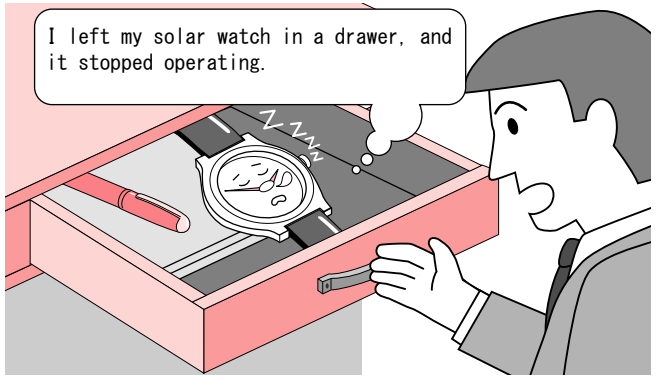
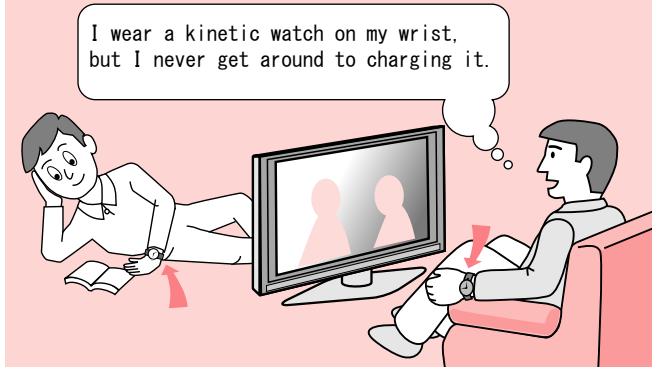


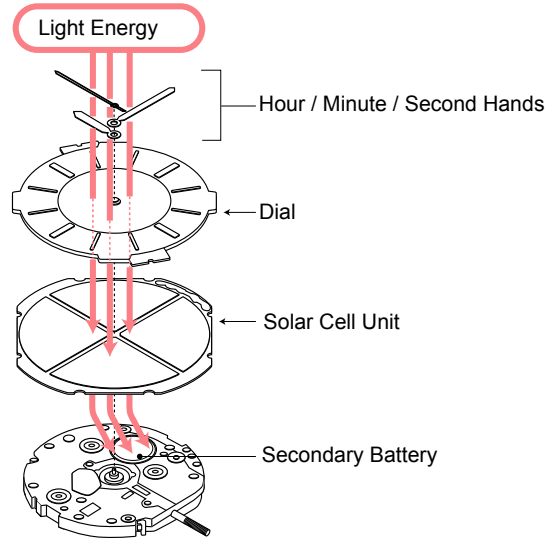

## ■ Charging Your Watch

Instead of a normal battery, a secondary battery* is used for charging the watch. Light or movement of your arm is converted into electrical energy and the energy is stored in the secondary battery to move the watch.

*Unlike the disposable primary battery such as a dry battery and button battery, a secondary battery can be used for a long period of time by repeating charging and discharging, and is an environmentally conscious battery.

## ■ Mechanism of Solar Watch (Ecotech solar watch and others)

Light-Powered Watch: Light energy is received by a solar cell (solar cell unit) and converted into electrical energy to charge.

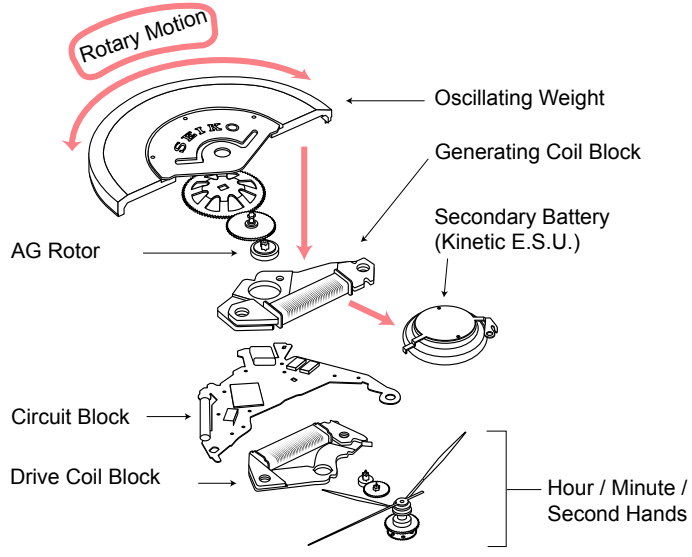



【 Characteristic Function --- Some Models 】

- Power save function (automatic): After a watch is not exposed to light for a certain period of time, the hands automatically stop operating to prevent wasteful consumption of energy. If a watch is exposed to light, the current time is displayed.

## ■ Mechanism of Kinetic Watch

Auto Generating System: Kinetic energy of the oscillating weight that is rotated by the movement of your arm is converted into electrical energy to charge.




## Kinetic / Auto Relay

Kinetic Auto Relay is an enhanced version of Kinetic and further energy saving is achieved.

【Characteristic Functions】

- Power Save Function (auto / forced): After the watch is left uncharged for a certain period of time, the hands automatically stop operating to prevent wasteful consumption of energy. Additionally, the watch can be forcibly switched to the power save mode in a certain period of time.

- Time Auto Relay Function: Even in the power save mode, time advances in the circuit. When you start to use your watch, the hour, minute and second hands catch up to the current time to indicate the current time.