

[about batteries]

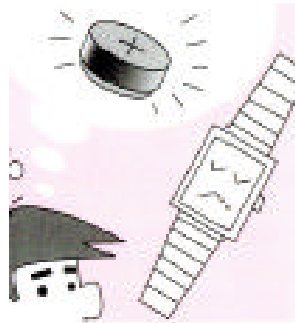


Have you ever had this experience?



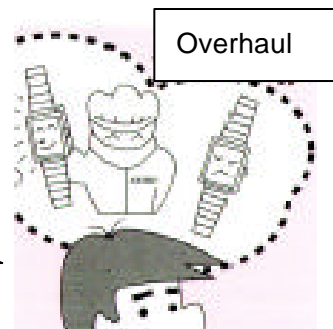
Oh!? The second hand is moving at two-second intervals. This means the battery life will be soon over?

I did not recognize that my quartz watch had stopped operating. Do I need a battery change?



I thought I replaced the battery recently. I feel the battery life of my watch is shorter than it should be.

My watch does not start operation even after the battery exchange. Does my watch need an overhaul?



Did you know?

Batteries and quartz watches

Quartz watches have quartz oscillators that are activated and vibrate at a high frequency, when certain voltage is applied. Accordingly quartz watches stop when the battery life ends.

Feature of small sized compact batteries for quartz watches

Batteries required for quartz watches have to maintain a stable small energy supply for a long time. We recommend you use SEIKO batteries for SEIKO quartz watches. The features of SEIKO batteries are as follows:

- *Keep stable voltage for a long time.
- *Stable performance even under a severe environment (-10C to +60C).
- *Leak proof.
- *Suitable for long-term storage.

Variation in small sized compact batteries for quartz watches and battery life

There are various types of batteries for quartz watches according to the size (thickness/diameter) and the battery life (voltage/ capacity).

The proper battery must be always used.

Still, after many years of use, mechanical parts (such as wheels) of the movements of quartz watches will be worn out and the amount of oil for the mechanical parts will be running short. This sometimes leads to excessive consumption of current and may result in a relatively short battery life.

In order to avoid this, we recommend you have a overhaul of your watch when you need a battery replacement.

The relationship between quartz watches and batteries

Battery life indication function

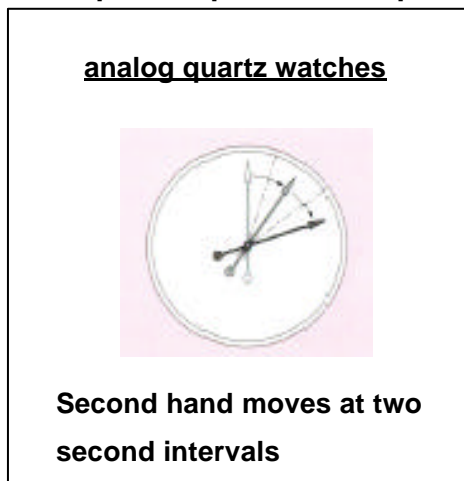
Quartz watches need periodic battery exchange.

Battery life ranges are from 1 to 10 years, depending on the combination of the quartz movement and the batteries installed.

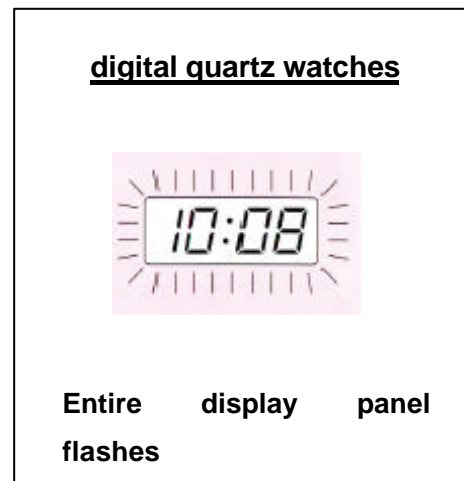
There are some types of quartz watches, which have a battery life indication function so as to avoid sudden watch operation stop without prior notice, which may annoy you.

Once the 'battery life indication function' starts, quartz watches will stop within about 1-10 days.

Although quartz watches keep the correct time even after the 'battery life indication function' starts, we strongly recommend you have battery exchange at a watch repair shop as soon as possible.



Analog quartz watches give a warning 'two second intervals' that the battery will soon be over.



In digital quartz watches the 'display panel' flashes to warn that the battery will soon be over.

Monitor battery

Please note that the battery life of your watch may not always initially fulfill the prescribed numbers of years since a monitor battery has been installed into your watch at the factory. The purpose of a monitor battery is to insure the performance of the watch, and the watch price does not include 'monitor battery'. This means that a battery change will be on a charge basis even within the guarantee period.

MEMO

Q I want to do the battery change by myself.

A Consult your watch repair shop since a battery change requires some special knowledge and skill.

Q Why does a battery change for Divers'/Water Resistant watches take time?

A We need to carry out water-resistant testing after the battery exchange, which takes around 2 weeks of time.

Q I heard that there are some different types of quartz watches without batteries.

A We have KINETIC(Auto Generating quartz), SPRING Drive, etc. These types do not need battery change.

For long use

Prompt battery change is strongly recommended

If you leave a battery whose life is over in your watch for a long time, the contents of the battery may leak and damage your watch.

Gasket exchange at the same time

Gaskets are really important to maintain your watch's water-resistant function. When you have an opportunity to have a battery exchange, ask for gasket change as well!

Water-resistant function check

It is recommended that divers' or water resistant (10 bar-) watches will have water-resistance check at the time of battery change. Consult your watch repair shop for detailed information.

Overhaul

If you keep using your watch for a long time, the gaskets, the band/bracelet, the push pins will deteriorate due to stains/perspiration/water.

The crown or the push may also not function properly because of accumulated dust/corrosion(sometimes rust develops).

We strongly recommend an overhaul of your watch when you need a battery change in order to avoid the above.

We will carry out necessary parts exchange/ lubrication/cleaning of your watch at the time of overhaul, which keeps your watch healthy.

Thus, you will be able to wear your watch for a long time without problems.

