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SEIKO WATCH CORPORATION

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SOLAR WATCH INSTRUCTIONS

そのほかの言語の取扱説明書は、パソコンやスマートフォンから当社ホームページ内の「カスタマーサービス」>「取扱説明書」にアクセスいただき、ご覧ください。

Please refer to the Instruction Manuals of other languages by accessing "Customer Service"→ "Instruction" on our Website from PC or Smartphone.

Deutsch / Français / Italiano / Español / Русский язык / العربية / Português / 简体中文 / 繁體中文 / 한국어 / ไทย



https://www.seikowatches.com/

Thank you very much for choosing a SEIKO watch. For proper and safe use of your SEIKO watch, please read carefully the instructions in this booklet before using it.

Keep this manual handy for easy reference.

- * Length adjustment service for metallic bands is available at the retailer from whom the watch was purchased. If you cannot have your watch repaired by the retailer from whom the watch was purchased because you received the watch as a gift, or you moved to a distant place, please contact SEIKO CUSTOMER SERVICE CENTER. The service may also be available on a chargeable basis at other retailers, however, some retailers may not undertake the service.
- * If your watch has a protective film for preventing scratches, make sure to peel it off before using the watch. If the watch is used with the film on it, dirt, sweat, dust, or moisture may be attached to the film and may cause rust.

EN 1

EN 2

Handling cautions

∕ WARNING

Please note that there is a risk of serious consequences such as severe injury if the following safety regulations are not strictly observed.

Immediately stop wearing the watch in following cases:

- O If the watch body or band becomes edged by corrosion etc.
- O If the pins protrude from the band.
- * Immediately consult the retailer from whom the watch was purchased or SEIKO CUSTOMER SERVICE CENTER.

Keep the watch and accessories out of the reach of babies and children.

Care should be taken to prevent a baby or a child accidentally swallowing the accessories. If a baby or child swallows the battery or accessories, immediately consult a doctor, as it will be harmful to the health of the baby or child.

Do not remove the secondary battery from the watch.

* About the secondary battery → Power Source → P.21 Replacement of the secondary battery requires professional knowledge and skill. Please ask the retailer from whom the watch was purchased for replacement of the secondary battery. Installation of an ordinary silver oxide battery can generate heat that can cause bursting and ignition.

CONTENTS

HOW TO USE	3 TO PRESERVE THE QUALITY OF YOUR
	WATCH
Handling cautions 3	
Before use 7	Power Source21
Make sure to keep the watch sufficiently	Daily care 23
charged 7	Performance and type24
Names of the parts and their functions 8	Lumibrite
Crown 9	Water resistant performance 26
How to set the time (for models with two or three	Magnetic resistant performance
hands) 10	Band
How to set the time and date (for models with	How to use tri-fold type clasp for leather band
date or date and day of the week) 12	(Special clasps)
Manual date adjustment at the end of the month	After sales service
	4 TROUBLESHOOTING
SOLAR CHARGING FUNCTION	Troubleshooting
Charging the battery 17	Troubleshooting
How to charge the battery 17	5 SPECIFICATIONS
Guide to charging times 18	Specifications41

⚠ CAUTION

Please note that there is a risk of minor injury or material damage if the following safety regulations are not strictly observed.

Avoid the following places for wearing or keeping the watch:

- O Places where volatile agents (cosmetics such as polish remover, bug repellent, thinners etc.) are
- O Places where the temperature drops below 5°C or rises above 35°C for a long time
- O Places affected by strong magnetism or static
- O Places affected by strong vibrations
- O Places of high humidity
- O Dusty places

If you observe any allergic symptoms or skin irritation

Stop wearing the watch immediately and consult a specialist such as a dermatologist or an allergist.

- O For adjusting the length of the metallic band, specialized knowledge and expertise are necessary. Therefore, in such a case, contact the retailer from whom the watch was purchased. If you attempt to adjust the metallic band, injury may occur to your hand or fingers, or parts of the band may be
- O Do not disassemble or tamper with the watch.
- O Keep the watch out of the reach of babies and children. Extra care should be taken to avoid risks of any injury or allergic rash or itching that may be caused when you touch the watch.
- O When disposing of used batteries, follow the instructions of your local authorities.
- O If your watch is of the fob or pendant type, the strap or chain attached to the watch may damage your clothes, or injure the hand, neck, or other parts of your body.

⚠ WARNING



Do not use the watch in scuba diving or saturation diving.

The various tightened inspections under simulated harsh environment, which are usually required for watches designed for scuba diving or saturation diving, have not been conducted on the water resistant watch with the BAR (barometric pressure) display. For diving, use watches specifically designed for diving.

⚠ CAUTION



Do not pour running water directly from faucet.

The water pressure of tap water from a faucet is high enough to degrade the water resistant performance of a water resistant watch for everyday life.

EN 5

Before use

■ Make sure to keep the watch sufficiently charged

The watch operates while charging electricity by converting light received on the dial to electrical energy. It cannot properly operate unless the remaining energy is sufficient. Place or store in a location receiving light, etc., to sufficiently charge electricity.

- The amount of energy stored in the watch can be checked by the movement of the seconds hand.
- * Two-second interval movement by the seconds hand is a signal that the energy of the watch is nearly depleted. (For models with a seconds hand)
- Charging the solar battery
- "How to charge the battery" → P.17 "Guide to charging times" → P.18

↑ CAUTION

Please note that there is a risk of minor injury or material damage if the following safety regulations are not strictly observed.



Do not turn or pull out the crown when the watch is wet.

Water may get inside of the watch.

* If the inner surface of the glass is clouded with condensation or water droplets appear inside of the watch for a long time, the water resistant performance of the watch is deteriorated. Immediately consult the retailer from whom the watch was purchased or SEIKO CUSTOMER SERVICE CENTER.



Do not leave moisture, sweat and dirt on the watch for a long time.

Be aware of a risk that a water resistant watch may lessen its water resistant performance because of deterioration of the adhesive on the glass or gasket, or the development of rust on stainless steel.



Do not wear the watch while taking a bath or a sauna.

Steam, soap or some components of a hot spring may accelerate the deterioration of water resistant performance of the watch.

EN 6

Names of the parts and their functions

HOW TO USE

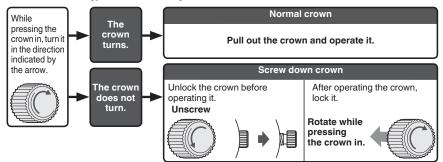
- 1 Minute hand
 - ② Hour hand
 - (3) Seconds hand
 - (4) Date and day of the week
 - (5) Crown



- * The position and design of the display may vary depending on the model.
- * Some models may not have a seconds hand or display the date or day of the week.

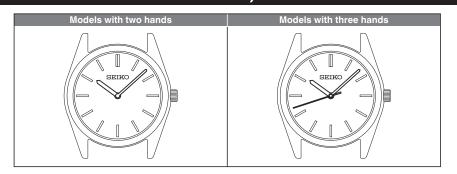
Crown

There are two types of crowns, a normal crown and a screw down crown. Please check the type of the crown of your watch.



- * By locking the crown by screw, a screw down crown can prevent malfunction and increase water resistance.
- * Be careful not to screw the crown in by force as it may damage the slots of the crown.

How to set the time (for models with two or three hands)



EN 9

Pull out the crown.

If your watch has three hands, pull out the crown when the seconds hand is at the 12 o'clock position. (The seconds hand will stop.)

* For models with screw down crown, please unlock the crown before operating it.



In order to set the time accurately, turn the minute hand 4 to 5 minutes ahead and then return it to the correct time.

3 Push the crown back in to the normal

If your watch has three hands, push the crown back in simultaneously with a time signal.

- * The telephone time signal service is helpful for setting the seconds hand exactly.
- * For models with screw down crown, please be sure to lock the crown after operating it.

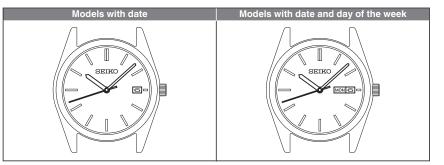






How to set the time and date (for models with date or date and day of the week)

HOW TO USE



EN 11 EN 12

EN 10

HOW TO USE

Time setting

Pull out the crown to the second click.

Pull out the crown to the second click when the seconds hand is at the 12 o'clock position; the seconds hand stops on the spot.

* For models with screw down crown, please unlock the crown before operating it.

7 Turn the crown to set the time.

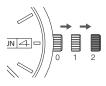
In order to set the time accurately, turn the minute hand 4 to 5 minutes ahead and then return it to the correct time.

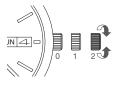
* When setting the time, make sure that AM/PM is set correctly.

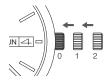
The date changes once every 24 hours.

3 Push the crown back in to the normal position in accordance with a time signal.

- * The telephone time signal service is helpful for setting the seconds hand exactly.
- * For models with screw down crown, please be sure to lock the crown after operating it.







EN 13

1

NOW TO US

Pull out the crown to the first click.

* For models with screw down crown, please unlock the crown before operating it.



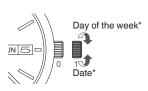
2 Turn the crown to set the date (day of the week).

Day of the week can be displayed either in Japanese or English by your choice.

* Some models display the date and day of the week in the reverse order.

3 Push the crown back in to the normal position.

* For models with screw down crown, please be sure to lock the crown after operating it.





Date (Day of the week) setting

The watch is provided with a date (day of the week) function and is so designed that the date changes once every 24 hours.

The date (day of the week) changes around 12 o'clock midnight. If AM/PM is not properly set, the date will change at 12 o'clock noon.

A CAUTION

Do not set the date (day of week) within the following time frames. Amending the date during this time period may cause problems such as the date failing to change the next day or may cause damage.

Date-displaying models: 9:00 pm to 1:00 am

Date/day of week-displaying models: 9:00 pm to 4:00 am

EN 14

■ Manual date adjustment at the end of the month

It is necessary to adjust the date at the end of February and 30-day months.

Ex.) To adjust the date in the A.M. period on the first day of a month following a 30-day month The watch displays "31" instead of "1." Pull out the crown to the first click.

Turn the crown to set the date to "1" and then push the crown back in to the normal position.

* For models with screw down crown, please be sure to lock the crown after operating it.



⚠ CAUTION

Avoid amending the date within the following time frames. Doing so may cause damage. Date-displaying models: 9:00 pm to 1:00 am

Date-displaying models. 9.00 pm to 1.00 am

Date/day of week-displaying models: 9:00 pm to 4:00 am

HOW TO US

EN 18

SOLAR CHARGING FUNCTION

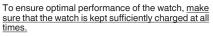
SOLAR CHARGING FUNCTION

Charging the battery

■ How to charge the battery

Expose the dial to light to charge the watch.









Under the following situations, the energy of the watch is likely to be depleted, resulting in stoppage of the watch:
• The watch is concealed under a sleeve.

- The watch is used or stored under conditions where
- it cannot be exposed to light for a long time.

 * Be careful to make sure that the watch does not get hot when it is charging. (The operating temperature range is
- * When you first start using the watch or starting it after it stopped due to a lack of charge, charge the watch sufficiently using the table on P.18 as a guide.
- * Two-second interval movement by the seconds hand is a signal that the energy of the watch is nearly depleted. (For models with a seconds hand)

EN 17

V131 / V137 / V138

Illuminance Ix (LUX)	Light source	Condition (Example)	Time required for fully charging the watch	Time required for charging the watch to stable hand movement	Time required for charging the watch to last for 1 day
700	Fluorescent light	General offices	-	16 hours	110 minutes
3,000	Fluorescent light	30 W 20 cm	90 hours	4 hours	30 minutes
10,000	Sunlight	Cloudy day	30 hours	72 minutes	8 minutes
100,000	Sunlight	Sunny day (Under direct sunlight on a summer day)	10 hours	6 minutes	1 minute

V147 / V157 / V158

Illuminance Ix (LUX)	Light source	Condition (Example)	Time required for fully charging the watch		Time required for charging the watch to last for 1 day
700	Fluorescent light	General offices	-	25 hours	110 minutes
3,000	Fluorescent light	30 W 20 cm	120 hours	6 hours	30 minutes
10,000	Sunlight	Cloudy day	35 hours	2 hours	10 minutes
100,000		Sunny day (Under direct sunlight on a summer day)	9 hours	24 minutes	2 minutes

■ Guide to charging times

Charge the watch using the times below as a guide.

The "Time required for charging the watch to stable hand movement" figure is an estimate of the amount of time required to expose the stopped watch to light and charge the watch until it reaches stable hand movement (for models with a seconds hand: until it reaches one-second interval movement). Charge the watch using these times as a guide.

* The required charging time slightly varies depending on the model of the watch.

V111 / V114 / V115 / V116 / V117

Illuminance Ix (LUX)	Light source	Condition (Example)	Time required for fully charging the watch	Time required for charging the watch to stable hand movement	Time required for charging the watch to last for 1 day
700	Fluorescent light	General offices	-	60 hours	3 hours
3,000	Fluorescent light	30 W 20 cm	180 hours	10 hours	35 minutes
10,000	Sunlight	Cloudy day	60 hours	4 hours	12 minutes
100,000	Sunlight	Sunny day (Under direct sunlight on a summer day)	10 hours	30 minutes	2 minutes

V181

Illuminance Ix (LUX)	Light source	Condition (Example)	Time required for fully charging the watch		Time required for charging the watch to last for 1 day
700	Fluorescent light	General offices	82 hours	6 hours	75 minutes
3,000	Fluorescent light	30 W 20 cm	20 hours	78 minutes	18 minutes
10,000	Sunlight	Cloudy day	5 hours	18 minutes	5 minutes
100,000		Sunny day (Under direct sunlight on a summer day)	126 minutes	6 minutes	2 minutes

V187

Illuminance Ix (LUX)	Light source	Condition (Example)	Time required for fully charging the watch	Time required for charging the watch to stable hand movement	Time required for charging the watch to last for 1 day
700	Fluorescent light	General offices	100 hours	8 hours	95 minutes
3,000	Fluorescent light	30 W 20 cm	25 hours	96 minutes	23 minutes
10,000	Sunlight	Cloudy day	7 hours	24 minutes	6 minutes
100,000	Sunlight	Sunny day (Under direct sunlight on a summer day)	3 hours	6 minutes	3 minutes

Power Source

The battery used in this watch is a special secondary battery, which is different from ordinary batteries.

Unlike an ordinary silver oxide battery, the secondary battery does not require periodic replacement.

The capacity or charging efficiency may gradually lower due to long-term use or operating environment.

In addition, long-term use may shorten the charge duration due to wear, contamination, lubricant deterioration of mechanical parts, etc. Request repair when the performance lowers.

⚠ WARNING

Notes on replacing the secondary battery

- Do not remove the secondary battery from the watch.
 Replacement of the secondary battery requires professional knowledge and skill.
 Please ask the retailer from whom the watch was purchased for replacement of the secondary battery.
- Installation of an ordinary silver oxide battery can generate heat that can cause bursting and ignition.

EN 21

Daily care

The watch requires good daily care

- Do not wash the watch when its crown is in the extended position.
- · Wipe away moisture, sweat or dirt with a soft cloth.
- After soaking the watch in seawater, be sure to wash the watch in clean pure water and wipe it dry carefully.

Do not pour running water directly from a faucet onto the watch. Put some water into a bowl first, and then soak the watch in the water to wash it.

- * If your watch is rated as "Non-water resistant" or "water resistant for daily use," please do not wash the watch. "Performance and type" → P.24
- "Water resistant performance" → P.26

Turn the crown from time to time

- In order to prevent corrosion of the crown, turn the crown from time to time.
- The same practice should be applied to a screw down crown.

"Crown" → P.9

* Overcharge prevention function

When the secondary battery is fully charged, the overcharge prevention function is automatically activated to avoid further charging.

There is no need to worry about damage caused by overcharging no matter how much the secondary battery is charged in excess of the "time required for fully charging the watch."

* For the required time to fully charge the battery, see "Guide to charging times" -> P.18.

⚠ WARNING

Notes on charging the watch

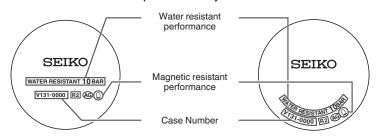
- When charging the watch, do not place the watch in close proximity to an intense light source such as lighting equipment for photography, spotlights or incandescent lights, as the watch may be excessively heated resulting in damage to its internal parts.
- When charging the watch by exposure to direct sunlight, avoid places that easily reach high temperatures, such as a car dashboard.
- Always keep the watch temperature under 50°C.

EN 22

TO PRESERVE THE QUALITY OF YOUR WATCH

Performance and type

The case back shows the caliber and performance of your watch



- Water resistant performance Please refer to P.26.
- Case Number
- Case Number

The number to identify the type of your watch.

- Magnetic resistant performance Please refer to P.27 and P.28.
- * The above illustration is provided as an example, therefore it may not be exactly the same as your watch.

EN 23

PRESERVE THE QUALITY OF YOUR WATCH

Lumibrite is a luminous paint that absorbs the light energy of sunlight and lighting apparatuses in a short time and stores it to emit light in the dark. For example, if exposed to a light of more than 500 lux for approximately 10 minutes, Lumibrite can emit light for 3 to 5 hours. Please note, however, that, as Lumibrite emits the light it stores, the luminance level of the light decreases gradually over time. The duration of the emitted light may also differ slightly depending on such factors as the brightness of the place where the watch is exposed to light and the distance from the light source to the watch.

Lumibrite

- * In general, when coming from a place that is bright to a place that is dark, it takes human eyes some time to adapt to the darkness making it difficult to see objects initially. (Dark adaptation)
- * Lumibrite is luminous paint that stores and emits light, which is harmless to human beings and the environment, containing no toxic materials such as radioactive substances.

<Brightness levels>

Condition		Illumination
Sunlight	Fine weather	100,000 lux
Suringrit	Cloudy weather	10,000 lux
Indoor (Window-side during daytime)	Fine weather	More than 3,000 lux
	Cloudy weather	1,000 to 3,000 lux
daytiirie)	Rainy weather	Less than 1,000 lux
Lighting apparetus (40 west devilight	Distance to the watch: 1 m	1,000 lux
Lighting apparatus (40-watt daylight fluorescent light)	Distance to the watch: 3 m	500 lux (Average room luminance)
indorescent light)	Distance to the watch: 4 m	250 lux

EN 25

Magnetic resistant performance

Affected by nearby magnetism, a watch may temporarily gain or lose time or stop operating.

	<u></u> DANGER		
Indication on the case back	Condition of use		
No indication	Keep the watch more than 10 cm away from magnetic products.		
Ū	Keep the watch more than 5 cm away from magnetic products. (JIS level-1 standard)		
	Keep the watch more than 1 cm away from magnetic products. (JIS level-2 standard)		

If the watch becomes magnetized and its accuracy deteriorates to an extent exceeding the specified rate under normal use, the watch needs to be demagnetized. In this case, you will be charged for demagnetization and accuracy readjustment even if it happens within the guarantee period.

The reason why a watch is affected by magnetism

The built-in motor is provided with a magnet, which may be influenced by a strong external magnetic field.

Water resistant performance

Refer the table below for the description of water resistant performance of your watch before using. (Please look at P.24.)

Indication on the case back	Water resistant performance	Conditio	ns of Use
No indication	Non-water resistance	Avoid drops of water or swe	at
WATER RESISTANT	Water resistance for everyday life	The watch withstands accidental contact with water in everyday life.	↑ WARNING Please do not use it for swimming.
WATER RESISTANT 5 BAR	Water resistance for everyday life at 5-BAR water resistant	The watch is suitable for spo	orts such as swimming.
WATER RESISTANT 10 (20) BAR	Water resistance for everyday life at 10 (20)-BAR water resistant	The watch is suitable for div	ing not using an air cylinder.

PRESERVE THE QUALITY OF YOUR WATCH





Smartphone, cellular phone, tablet terminal

(Speaker, magnet of cover)



Examples of common magnetic products that may affect watches





AC adapter

Bag (With magnet buckle)



AC-powered

shaver



Magnetic

cooking device



(Speaker)

Magnetic necklace

pillow

Magnetic health

TO PRESERVE THE QUALITY OF YOUR WATCH

Band

The band touches the skin directly and becomes dirty with sweat or dust. Therefore, lack of care may accelerate deterioration of the band or cause skin irritation or stain on the sleeve edge. The watch requires a lot of attention for long usage.

Metallic band

- · Moisture, sweat or soil will cause rust even on a stainless steel band if they are left for a long time.
- · Lack of care may result in a rash or cause a yellowish or gold stain on the lower sleeve edge of shirts.
- Wipe off moisture, sweat or soil with a soft cloth as soon as possible.
- To clean the soil around the joint gaps of the band, wipe it out in water and then brush it off with a soft toothbrush.
- (Protect the watch body from water splashes by wrapping it up in plastic wrap etc.) Clean it off with a soft cloth.
- Because some titan bands use pins made of stainless steel, which has outstanding strength, rust may
 form in the stainless steel parts.
- If rust advances, pins may poke out or drop out, and the watch case may fall off the band, or the clasp may not open.
- If a pin is poking out, personal injury may result. In such a case, refrain from using the watch and request repair.

EN 29

PRESERVE THE QUALITY OF YOUR WATCH

TO PRESERVE THE QUALITY OF YOUR WATCH

Leather band

- A leather band is susceptible to discoloration and deterioration from moisture, sweat and direct sunlight.
- Wipe off moisture and sweat as soon as possible by gently blotting them up with a dry cloth.
- Do not expose the watch to direct sunlight for a long time.
- Please take care when wearing a watch with light-colored band, as dirt is likely to show up.
- Refrain from wearing a leather band watch other than Aqua Free bands while bathing, swimming, and
 when working with water even if the watch itself is water resistant enforced for daily use (10-BAR/20-BAR
 water resistant).

Polyurethane band

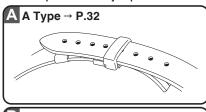
- A polyurethane band is susceptible to discoloration from light, and may be deteriorated by solvent or atmospheric humidity.
- Especially a translucent, white, or pale colored band easily adsorbs other colors, resulting in color smears or discoloration.
- Wash out dirt in water and clean it off with a dry cloth.
- (Protect the watch body from water splashes by wrapping it up in plastic wrap etc.)
- When the band becomes less flexible, have the band replaced with a new one. If you continue to use
 the band as it is, the band may develop cracks or become brittle over time.

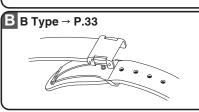
Notes on skin irritation and allergy	Skin irritation caused by a band may result from various factors such as allergy to metals or leathers, or skin reactions against friction on dust or the band itself.	
Notes on the length of the band	Adjust the band to allow a little clearance with your wrist to ensure proper airflow. When wearing the watch, leave enough room to insert a finger between the band and your wrist.	

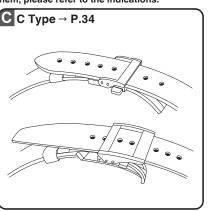
S) 30

How to use tri-fold type clasp for leather band (Special clasps)

There are 3 types of special clasps as described below; If the clasp of the watch you purchased is one of them, please refer to the indications.

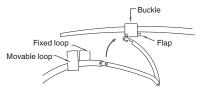






A Type

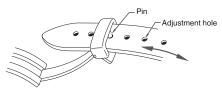
Lift up the clasp to release the buckle.







Remove the pin from the adjustment hole. Slide the band left and right, and reinsert the pin into the adjustment hole at an appropriate length.



Fasten the flap.

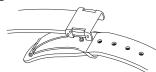
* Do not push the flap in too hard.



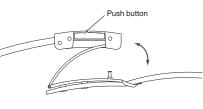
* When fastening the clasp, insert the tip of the band into the movable loop and fixed loop, and then, securely tighten the clasp.

3

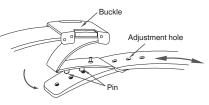
В в Туре



While pressing the push buttons on both sides of the flap, lift to open the clasp.

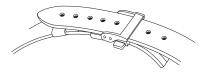


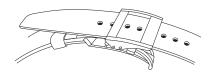
Remove the pin from the adjustment hole.
Slide the band left and right, and insert the pin into the adjustment hole at an appropriate length. Push the buckle and fasten the clasp.



EN 33

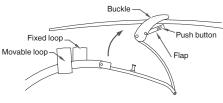
С С Туре



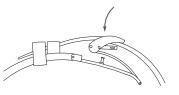


How to wear or take off the watch

While pressing the push buttons on both sides of the flap, pull the band out of the movable loop and fixed loop. Then open the clasp.



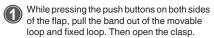
Place the tip of the band into the movable loop and fixed loop, and fasten the clasp by pressing the frame of the buckle.



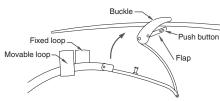
EN 34

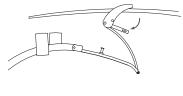
TO PRESERVE THE QUALITY OF YOUR WATCH

How to adjust the length of the band

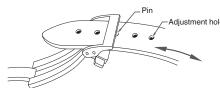


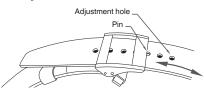




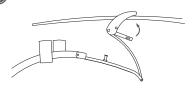


Pull the pin out of an adjustment hole of the band. Slide the band to adjust its length and find an appropriate hole. Place the pin into the hole.





Fasten the flap.



3

TO PRESERVE THE QUALITY OF YOUR WATCH

PRESERVE THE QUALITY OF YOUR WATCH

After sales service

Notes on quarantee and repair

- Contact the retailer from whom the watch was purchased or SEIKO CUSTOMER SERVICE CENTER for repair or overhaul.
- Within the guarantee period, present the certificate of guarantee to receive repair services.
- Guarantee coverage is provided in the certificate of guarantee. Read carefully and retain it.
- · For repair services after the guarantee period has expired, if the functions of the watch can be restored by repair work, we will undertake repair services upon request and payment.

Replacement with functional parts

 Please keep in mind that if original parts are not available, they may be replaced with substitutes whose outward appearance may differ from the originals.

EN 37 EN 38

Troubleshooting

Troubles	Possible causes	Solutions	Reference
The watch stops operating. The seconds hand is moving at two-second intervals. (For models with a seconds hand)	The power is completely depleted or low. If you wear the watch every day and this occurs, the most likely cause is the watch is hidden by your sleeves or other clothing when you wear it and it is not sufficiently exposed to light.	Sufficiently charge the battery until it reaches stable hand movement. When you wear the watch, try to make sure that the watch is not hidden by your sleeves or other clothing. Additionally, when you take the watch off, try to place it in a bright place.	P.17
	The watch has been left in extremely high or low temperatures for a long time.	If the watch returns to room temperature, the accuracy will return to its original state. If it does not return to its original state, contact the retailer from whom the watch was purchased.	-
The watch temporarily gains/ loses time.	The watch has been left close to an object with a strong magnetic field.	Correct this condition by moving and keeping the watch away from the magnetic source, and reset the time. If this action does not correct the condition, contact the retailer from whom the watch was purchased.	-
	You drop the watch, hit it against a hard surface, or wear it while playing active sports. The watch is exposed to strong vibrations.	If accuracy does not return after setting the time, consult the retailer from whom the watch was purchased.	-

approximately once every 3 to 4 years in order to maintain optimal performance of the watch for a long time. According to use conditions, the oil retaining condition of your watch mechanical parts may deteriorate, abrasion of the parts may occur due to contamination of oil, which may ultimately lead the watch itself to stop. As the parts such as gasket may deteriorate, water-resistant performance may be impaired due to

intrusion of perspiration and moisture.

Inspection and adjustment by disassembly and cleaning (Overhaul)

• Periodic inspection and adjustment by disassembly and cleaning (overhaul) is recommended

Please contact the retailer from whom the watch was purchased for inspection and adjustment by disassembly and cleaning (overhaul). For replacement of parts, please specify "SEIKO GENUINE PARTS." When asking for inspection and adjustment by disassembly and cleaning (overhaul), make sure that the gasket and push pin are also replaced with new ones.

· When your watch is inspected and adjusted by disassembly and cleaning (overhauled), the movement of your watch may be replaced.

Troubles	Possible causes	Solutions	Reference
The date changes at 12 o'clock noon. (For models with a date display)		Advance the hands by 12 hours.	P.12
Blur in the display persists.	A small amount of water has got inside the watch due to deterioration of the gasket, etc.	Consult the retailer from whom the watch was purchased.	-

^{*} Contact the retailer from whom the watch was purchased for any other troubles.

EN 39 EN 40

Specifications

Caliber number	V114/V115/ V116	V111/V117/ V131	V137/V138	V147/V157/ V158	V187
1. Features	Basic watch with two hands (Hour and minute hands)	Basic watch with three hands (Hour, minute and seconds hands)	Basic watch with three hands (Hour, minute and seconds hands), date display		
2. Frequency of crystal oscillator	32,768 Hz (Hz= Hertz, cycles per second)				
3. Loss/gain (Monthly rate)	Monthly average loss/gain ±15 seconds (If worn on the wrist in a temperature range of 5°C to 35°C)				
4. Operational temperature range	-10 °C ~ +60 °C				
5. Driving system	Step motor (Hour and minute hands)	Step motor (Hour, minute and seconds hands)	Step motor (Hour	ep motor (Hour, minute and seconds hands), date display	
6. Power source	Secondary battery, 1 piece				
7. Duration	Approx. 12 months	Approx. 6 months		Approx. 10 months	Approx. 2 months
8. IC (Integrated Circuit)	Oscillator, frequency divider and driving circuit C-MOSIC, 1 piece				

^{*} The specifications are subject to change without prior notice due to product improvements.

Caliber number	V181			
1. Features	Basic watch with three hands (Hour, minute and seconds hands)			
2. Frequency of crystal oscillator	32,768 Hz (Hz= Hertz, cycles per second)			
3. Loss/gain (Monthly rate)	Monthly average loss/gain ± 20 seconds (If worn on the wrist in a temperature range of 5°C to 35°C)			
4. Operational temperature range	-5°C ~ +50°C			
5. Driving system	Step motor (Hour, minute and seconds hands)			
6. Power source	Secondary battery, 1 piece			
7. Duration	Approx. 2 months			
8. IC (Integrated Circuit)	Oscillator, frequency divider and driving circuit C-MOSIC, 1 piece			

^{*} The specifications are subject to change without prior notice due to product improvements.