

SEIKO WATCH CORPORATION

Operating Instructions

Parts No.

| Thank you very much for choosing a | а | a CREDOR watch |
|------------------------------------|---|----------------|
|------------------------------------|---|----------------|

Only the unique melding of traditional Japanese sensitivity and state-of-the-art technology can bring you a watch of this quality and character.

Doing so is our passion. The CREDOR name is your guarantee.

From the French "crête d'or" or "crest of gold" it signifies our commitment to always being the very best.

We hope this CREDOR watch will be your favorite personal timepiece for many years to come.

This is a complication watch equipped with a minute repeater mechanism that audibly chimes the hour.

Please read carefully the instructions in this booklet for proper and safe use of your CREDOR watch before start using it.

Keep this manual handy for easy reference.

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.

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### HANDLING CAUTIONS

## **MWARNING**

To indicate the risks of serious consequences such as severe injuries unless the following safety regulations are strictly observed.

#### Immediately stop wearing the watch in the 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.

# **ACAUTION**

To indicate the risks of light injuries or material damages unless the following safety regulations are strictly observed.

#### Avoid wearing or storing the watch in the following places.

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

#### Do not shock or magnetize

- O The watch is a precision device. Avoid shocks by dropping, spins or tumbles. Do not wear the watch when you play active sports.
- O The watch may temporarily stop operating when affected by strong magnetism. "Magnetic resistance (Magnetic influence)"→ P. 19

#### If you observe any allergic symptoms or skin irritation

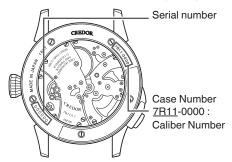
Stop wearing the watch immediately and consult a specialist such as a dermatologist or an allergist.

#### Other cautions

- O Do not disassemble or tamper with the watch.
- O Please follow local government directions when disposing of the watch body.
- 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 they touch the watch.
- 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.
- O Please keep in mind that if a watch is taken off and placed down as it is, the case back, the band and the clasp will rub against each other possibly causing scratches on the case back. We recommend placing a soft cloth between the case back, the band and the clasp after taking off your watch.

## ■ PERFORMANCE AND TYPE

The case back shows the performance and type of your watch.



- O Case number
- The number to identify the type of your watch
- O Serial number
- The number to identify your watch
- \* The above illustrations are examples and may differ from the case back of the watch you purchased.

## **■ WATER RESISTANCE**

#### This watch is not water-resistant.

Do not allow water or water vapor to enter the watch.

- O In order to achieve the complete purity of the chime sound, the watch has a non-water resistant design so that absolute silence of the whole movement is realized.
- O Refrain from using the watch in a condition that the watch is exposed to high humidity, for example, at times of heavy sweating or when wearing gloves.
- O Store the watch in a dry place.
- O If the inner surface of the glass is clouded with condensation for a long time, consult the retailer from whom the watch was purchased or SEIKO CUSTOMER SERVICE CENTER.

### **MWARNING**



# 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. For diving, use watches specifically designed for diving.

## **A** CAUTION



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

Water may get inside of the watch.



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

Keep your watch clean. Wipe off moisture and sweat with a soft cloth.

# ■ CHARACTERISTICS

#### **Characteristics of the minute repeater**

- O This watch features a mechanically-actuated minute repeater function that is powered by mainsprings. It audibly chimes the current time with two different sounds, a high tone and a low tone.
- O The number of times the low-tone gong is struck represents the hour, and the number of times the sequence sound of the low-tone and the high-tone gongs are struck represents the 10-minute intervals after the last hour, and the number of times the high-tone gong is struck represents the minute.
- Unlike most minute repeaters that represent a quarter hour by a sequence sound of the low and high tones, the minute repeater of this watch has a decimal system so that the indicated time is easily understood.
- (For more details on the time announcement method, refer to P. 11.)
- O The source of the sounds which produce crisp, clear sounds are the rod-shaped gongs made from specially hammered steel, using a technique passed down through generations of the Myochin family, master blacksmiths from Himeji.
- O The volume of the striking gongs is tuned slightly louder so that you can comfortably enjoy the passage of time and relaxed atmosphere in a quiet place without need for raising the watch close to your ear.
- \* 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.

#### **Characteristics of spring drive**

- O This watch features" Spring drive", the unique mechanism made available only by SEIKO technology.
- O The Spring Drive watch ensures quartz accuracy while using the mainspring as its sole power source.
- O The glide-motion seconds hand moves in a perfectly smooth movement.

#### **⚠** CAUTION

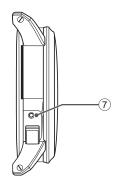
- O Spring Drive works by the power provided by the mainspring. Remember to check the power reserve indicator and keep the mainspring of the watch sufficiently wound while using the watch.
- "Power reserve indicator"→ P. 9
- O Under a low-temperature condition (below 0°C), the watch may stop when the power reserve indicator shows less than one-sixth of the power reserve. In such a case, turn the crown to wind the mainspring.

## ■ NAMES OF THE PARTS

#### 7R11



- Power reserve indicator
   → P. 9
- (2) Hour hand
- (3) Seconds hand
- (4) Button
- (5) Minute hand
- (6) Crown



How to wind the mainspring→ P. 8 How to use→ P. 10

# **■ HOW TO USE**

# How to wind the mainspring

This watch has a manually wound spring drive.

You can wind the crown to wind the mainspring to drive the watch.

The watch has two mainsprings, a first mainspring and a second mainspring. These two mainsprings can be simultaneously wound with one operation.

#### Guide for winding state of the mainspring

Manual winding : Five full rotations of the crown will provide the power to run the watch for approximately ten hours.

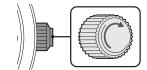
Observe the power reserve indicator to check the level of the remaining power.

"Power reserve indicator"→ P. 9

\* Under a low-temperature condition (below 0 °C), always keep at least one-sixth of the watch power shown by the power reserve indicator. The watch may stop.

### How to manually wind the mainspring

Turn the crown at the normal position clockwise (12 o'clock direction) slowly.



- ② Wind the mainspring until the power reserve indicator shows a fully wound state. "Power reserve indicator"  $\rightarrow$  P. 9
- 3 Make sure that the seconds hand is moving.

#### **ACAUTION**

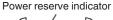
The crown cannot be turned further when the mainspring is fully wound to prevent overwinding of the mainspring. Do not try to forcefully turn the crown as this may damage the watch.

## Power reserve indicator

#### The power reserve indicator lets you know the winding state of the mainspring.

Before removing the watch from your wrist, observe the power reserve indicator to check if the watch has stored enough power to keep running until the next time you wear it. If necessary, wind the mainspring.

(To prevent the watch from stopping, wind the mainspring to store the excess power that will allow the watch to run for extra time.)





#### How to read the power reserve indicator

| Power reserve indicator           |                                    |                                      |  |  |
|-----------------------------------|------------------------------------|--------------------------------------|--|--|
| Winding state of the mainspring   | Fully wound                        | Half wound                           | Unwound                                    |  |
| Number of hours the watch can run | Approximately<br>72 hours (3 days) | Approximately<br>36 hours (1.5 days) | The watch either stops or is running down. |  |

<sup>\*</sup> The position or design of the power reserve indicator may differ depending on the model. Each time the minute repeater mechanism is used, a power reserve of approximately 3 to 5 hours is consumed.

#### How to use

#### How to set the time

- Make sure that the watch is operating.
   To carry out the procedure, please make sure that the watch is in working state.
   Please wind the mainspring when the watch is not working.
   "How to wind the mainspring"→ P. 8
- ② Pull out the crown when the seconds hand is at the 12 o'clock position. (The seconds hand stops.)



③ Turn the crown counterclockwise (6 o'clock direction) <u>slowly</u> to set the time

Set the minute hand about ten minutes behind and then slowly advance the minute hand to the desired time.



4) Push the crown back into the normal position in accordance with a time signal.

#### Tips for more accurate time setting

To ensure effective operation of the Spring Drive mechanism, observe the following instructions when you set the time.

- Before setting the time, make sure to wind the mainspring sufficiently.
   (Ensure that the power reserve indicator is showing a fully wound state.)
- ② When starting to use a watch after it stops, wind the mainspring sufficiently. To set the time after that, wait for <u>approximately 30 seconds after the seconds hand starts moving</u>, then pull the crown out to the first click.
- ③ The seconds hand will stop moving when the crown is pulled out to the first click. Do not stop the movement of the seconds hand for longer than 30 minutes. If the stoppage of the seconds hand movement exceeds 30 minutes, push the crown back in, and wait for approximately 30 seconds after the seconds hand restarts moving, and then set the time.

#### Minute repeater function

The minute repeater function audibly chimes the time with two different sounds, a low-tone gong and a high-tone gong.

The number of times the low-tone gong is struck represents the hour, and the sequence of low-tone and high-tone gongs represents the 10-minute intervals after the last hour, and the number of times the high-tone gong is struck represents the minute.

While most minute repeaters use a sequence of low-tone and high-tone gongs for quarter hours, the minute repeater of this watch has a decimal system, which makes its time announcement easily understood.



#### At four thirty-five



\* Please note that the musical notes above are only an image of the gong sounds, and do not represent the actual pitch or intervals of the sound you will hear.

10 How to use 11

#### How to use the minute repeater

 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



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

position.

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

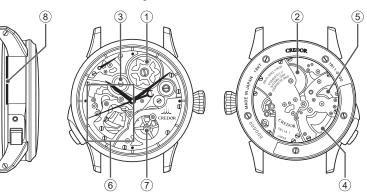
To prevent the minute repeater from being stopped in the middle of operation, it is recommended that the mainsprings be sufficiently wound before the minute repeater is activated.

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.

How to use How to use

#### Safety device of minute repeater mechanism

Failure of the minute repeater most frequently occurs due to operation of the crown when the repeater mechanism operates.

In most watches which are mounted with a repeater function, when the crown is pulled out to adjust the hand position while the minute repeater is chiming, an abnormal load is applied to the gears or lever to cause a failure.

In order to prevent a failure from occurring because of the time setting while the minute repeater is chiming, this watch is provided with a safety device that prevents both operations from being performed at the same time.

#### The minute repeater cannot be activated while the time is being adjusted.

The button located at the 8 o'clock position cannot be pressed in the state where the crown is pulled out to the first click position.

\* Please keep in mind that if the button is forcibly pressed when the crown is pulled out to the first click position, this may result in a failure. When the crown is pulled out to the first click position



# • The following operations cannot be performed while the minute repeater is chiming.

- O Setting the time (The crown cannot be pulled out.)
- O Winding the mainsprings (The mainsprings slip even if the crown is turned.)
- \* The minute repeater mechanism operates for a few seconds even after chiming is finished. Please make sure that operation of the minute repeater mechanism is finished by checking that the slow governor is stopped.
- \* Please keep in mind that if the crown is forcibly pulled out while the minute repeater is chiming, this may result in a failure.



# When operation is not allowed (How to release the safety device)

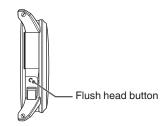
If the minute repeater is activated when the power reserve is in an "unwound" state (P. 9), the following phenomena may occur.

- O The mainsprings cannot be wound
- O The crown cannot be pulled out
- O The minute repeater cannot be operated

As these phenomena are not due to a failure, please carry out the following operations to release the safety device.

#### O How to release the safety device

1) Press the flush head button.



## **ACAUTION**

Use an object such as a wooden edge which is less likely to damage the case.

- ② Wind the mainsprings to a" fully wound" state.
  - "How to wind the mainspring"→ P. 8
  - \* Although the watch may chime while the mainsprings are being wound, continue to wind it as is
- ③ Press the button located at the 8 o'clock position to activate the minute repeater. "How to use the minute repeater" > P. 12
- ④ Check the number of times the gongs are struck. It is normal if the time indicated by the number of times the gongs are struck is the same as the time indicated by the hands of the watch. "Minute repeater function"→ P. 11
- (5) Reset the time.

"How to set the time"→ P. 10

How to use

# ■ TO PRESERVE THE QUALITY OF YOUR WATCH

#### After-sale service

#### Notes on guarantee and repair

- O Contact the retailer from whom the watch was purchased or SEIKO CUSTOMER SERVICE CENTER for repair or overhaul.
- O Within the guarantee period, present the certificate of guarantee to receive repair services.
- O Guarantee coverage is provided in the certificate of guarantee. Read carefully and retain it.
- O 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 parts

O 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.

# <u>Inspection and adjustment by disassembly and</u> cleaning (overhaul)

- O Periodic inspection and adjustment by disassembly and cleaning (overhaul) is recommended approximately once every <a href="2">2 years</a> in order to maintain optimal performance of the watch for a long time.
- O The power transmission gear of the movement of this watch constantly receives force. The movement of this watch has no less than 660 components. To ensure that this mechanism works properly all the time, washing parts, changing oil, adjusting accuracy, checking functions and replacing consumable parts on a regular basis are important. The first overhaul after the purchase of your watch is particularly important for preserving long-time use of your watch. 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.
  - 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.

#### Daily care

#### The watch requires good daily care

- O The watch body and band touch the skin directly just as underwear.
- Keep the watch body and band clean in order to avoid stain on the sleeve edge or rash or itch.
- After removing the watch from your wrist, wipe perspiration or moisture with a soft cloth as soon as possible.
- O Do not use any chemical agent such as cleaner to clean the watch.

# Turn the crown from time to time. (Only several turns in slow movement will be enough.)

- O This prevents corrosion of the crown and helps to extend the life of the gasket in use.
- O Stainless steel is a highly rust-resistant metal. However, rust will form if contaminants are left on it for a long time.

#### Remarks on 18-karat gold

O 18-karat gold (18KT) is an alloy comprised of 75% of gold and 25% of other metals. Depending on the proportion of the other metals mixed with the gold, the 18-karat gold is classified into three colors such as yellow gold (YG), white gold (WG) and pink gold (PG).

#### **Decoloration of 18-karat gold**

- O While gold can maintain its glittering quality, other metal components in the alloy may discolor to look like reddish or blackish due to various reasons.
- O Daily care helps to prevent discoloration of the alloy, however, if the discoloration or stain of the alloy persists even after wiping the watch off, take your watch to the retailer from whom the watch was purchased for refinishing. (Refinishing will be done at a cost.)

## Watch body / metal bracelet

#### Length adjustment service

- O For the length adjustment service of the 18-karat gold or platinum bracelet, ask the retailer from whom the watch was purchased.
- The watch will be submitted to CREDOR SERVICE STUDIO for the length adjustment. It may take two to three weeks depending on the model to adjust the length of the bracelet.
- O The length adjustment service of the 18-karat gold, platinum or stainless steel mesh bracelet will not be charged only for the first time. However, the cost for materials or parts necessary for the length adjustment and repair cost other than the length adjustment will be charged.
- O The length adjustment service of stainless-steel band is available from the retailer from whom the watch was purchased or SEIKO CUSTOMER SERVICE CENTER. Some other retailers may charge you for the length adjustment or may not undertake such treatments.

#### Periodic cleaning

- O Periodic cleaning is highly recommended to enjoy the best quality of the watch for a long time.
- Ask the retailer from whom the watch was purchased or the CREDOR SERVICE STUDIO through your nearby CREDOR retailers. (Cleaning may be done at a cost.)

#### Band

The band touches the skin directly and becomes dirty from 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**

- O Moisture, sweat or soil will cause rust even on a stainless steel band if they are left for a long time.
- O Lack of care may cause a yellowish or gold stain on the lower sleeve edge of shirts.
- O Wipe off moisture, sweat or soil with a soft cloth as soon as possible.
- O 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.)
  - Wipe off the remaining moisture with a soft cloth.
- O Because some titanium bracelets use pins made of stainless steel, which has outstanding strength, rust may form in the stainless steel parts.
- Olf rust advances, pins may poke out or drop out, and the watch case may fall off the bracelet, or the clasp may not open.
- O If a pin is poking out, personal injury may result. In such a case, refrain from using the watch and request repair.

#### Leather band

- A leather band is susceptible to discoloration and deterioration from moisture, sweat and direct sunlight.
- O Wipe off moisture and sweat as soon as possible by gently blotting them up with a dry cloth.
- O Do not expose the watch to direct sunlight for a long time.
- O 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 swimming, and when working with water even if the watch itself is water-resistant enforced for daily use.

#### Notes on skin irritation and allergy

Skin irritation caused by a band has various reasons 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.



# Magnetic resistance (Magnetic influence)

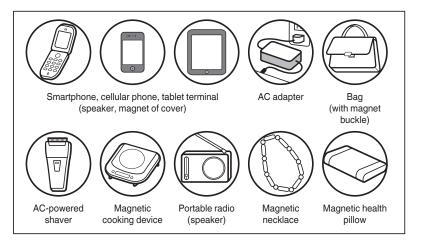
Affected by nearby magnetism, a watch may temporarily gain or lose time or stop operating. This watch is not magnetism resistant.

#### Conditions of use

Keep the watch more than 10cm away from magnetic products.

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

#### Examples of common magnetic products that may affect watches



#### The reason why this watch is affected by magnetism

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

#### Shock

# **⚠** CAUTION

This watch incorporates a complicated mechanism, comprising individual parts that exceed the number that ordinary timepieces have.

Exercise caution so as not to subject the watch to excessive shock or vibration.

# **Troubleshooting**

| Troubles  | Possible causes  | Solutions  |
|---|--|--|
| The watch stops operating.  | The mainspring has not been wound.   | Turn the crown to wind the mainspring and reset the time. While you are wearing the watch or when you take it off, check the remaining power shown by the power reserve indicator and wind the mainspring if necessary.                              |
| The watch stops even though the power reserve indicator is not showing "0".   | The watch has been left at a low temperature (below 0°C).  | Turn the crown to wind the mainspring. Under a low-temperature condition (below 0°C), the watch may stop when the power reserve indicator shows less than one-sixth of the power reserve.  |
|   | The watch has been left in extremely high or low temperatures for a long time.   | Return the watch to a normal temperature so that it works accurately as usual, and then reset the time. The watch has been adjusted so that it works accurately when it is worn on your wrist under a normal temperature range between 5°C and 35°C. |
| The watch temporarily loses/gains time.   | The watch was brought into close contact with a magnetic object.   | 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.                                     |
|   | The watch was dropped, worn while playing active sports, hit against hard surfaces, or exposed to strong vibrations.                 | Reset the time. If the watch does not return to its normal accuracy after resetting the time, contact the retailer from whom the watch was purchased.  |
| The watch hands move quicker than usual.  | This is not a malfunction.   | <ol> <li>Conduct the following crown operation.<br/>Normal position → first click → normal position</li> <li>Reset the time.</li> </ol>  |
| Right after starting the watch, it seems that the seconds hand moves more quickly than usual when setting the time. | When the watch starts moving, it takes a little time before the speed-regulating unit starts operating. (This is not a malfunction.) | It takes several seconds before the speed-<br>regulating unit starts operating. To set the time correctly, wait for<br>approximately 30 seconds after the<br>seconds hand starts to move, and set the<br>time.                                       |
| Blur in the display persists.   | This condensation temporarily occurs due to a temperature difference between the inside of the watch and the outside environment.    | Condensation will clear when the temperature difference is reduced. No repair is needed.   |
|   | Moisture has entered the watch.  | Consult the retailer from whom the watch was purchased.  |

| Troubles   | Possible causes   | Solutions   |
|--|---|---|
| The time indicated by the number of times the gongs are struck is not the same as the time indicated 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. | If an error of a few minutes is observed, consult the retailer from whom the watch was purchased.   |
| The mainsprings cannot be  | The minute repeater is chiming. (The safety device is activated. P. 14)   | Wait until the minute repeater finishes its operation, and then start operating the crown.  |
| wound. The crown cannot be pulled out.   | While the minute repeater is chiming, the mainsprings are completely unwound, preventing the safety device from being released.   | Release the safety device following the instructions in this booklet. (P. 15)   |
| The minute repeater does not   | The mainsprings are in an<br>"unwound" or a nearly<br>"unwound" state.  | Wind the mainsprings. It is recommended that you use the minute repeater when the mainsprings are in a "fully wound" state.                 |
| The minute repeater does not chime.  | The crown is pulled out to the first click position. (The safety device is activated. P. 14)  | Push the crown back in to the normal position, and then press the button located at the 8 o'clock position to activate the minute repeater. |
| The intervals of the gong struck by the minute repeater are long.  | The mainsprings are in an<br>"unwound" or a nearly<br>"unwound" state.  | Wind the mainsprings. It is recommended that you use the minute repeater when the mainsprings are in a "fully wound" state.                 |

<sup>\*</sup> For the solution of troubles other than above, contact the retailer from whom the watch was purchased.

# **■ SPECIFICATIONS (Movement)**

| Cal. NO                            | 7R11  |
|------------------------------------|---|
| Features                           | Hour, minute and seconds hands, power reserve indicator (for both the watch and the minute repeater)  |
| Frequency of<br>crystal oscillator | 32,768 Hz (Hz = Cycles per second)  |
| Loss/Gain                          | Within 15 seconds per month (equivalent to 1 second per day) (If the watch is worn on your wrist within normal temperature range between 5 °C and 35 °C.) |
| Operational temperature range      | -10°C ~ +60°C Under a low-temperature condition (below 0 °C), always keep at least one-sixth of the watch power shown by the power reserve indicator.     |
| Driving system                     | Manual winding type   |
| Duration                           | Approx. 72 hours (If the the minute repeater is not used.)  |
| Additional functions               | Minute repeater mechanism (decimal system)  |
| IC (Integrated<br>Circuit)         | Oscillator, frequency divider, and spring drive control circuit (C-MOS-IC): 1 piece   |
| Hand movement                      | Glide motion  |
| Jewels                             | 112 jewels  |

<sup>\*</sup> The specifications are subject to change without prior notice due to product improvement.