## Cal．8R39

INSTRUCTIONS ..... （P．3）
BEDIENUNGSANLEITUNG ..... （S．28）
INSTRUCTIONS ..... （P．54）
ISTRUZIONI ..... （P．80）
INSTRUCCIONES ..... （P．106）
INSTRUÇÕES ..... （P．132）
инСТРУКЦИИ ..... （P．158）
用法説明 ..... （183頁）

You are now the proud owner of a SEIKO Automatic Chronograph Diver＇s Watch Cal．8R39．To ensure its optimum performance，please read the instructions in this booklet carefully before using it．Please keep this manual handy for ready reference．

Sie sind jetzt stolzer Besitzer eines automatischen SEIKO Taucher－Chronografen Kal．8R39．Lesen Sie diese Bedienungsanleitung vor der Verwendung aufmerksam durch，um ihre optimale Nutzung zu gewährleisten．Heben Sie diese Bedienungsanleitung gut auf，um jederzeit wieder nachlesen zu können．
Vous voici l＇heureux propriétaire d＇une montre de plongée à chronomètre automatique SEIKO CaI．8R39． Pour en obtenir des performances optimales，veuillez lire attentivement cette brochure avant d＇utiliser la montre．Conservez ce manuel pour vous y référer en cas de besoin．
Grazie di aver acquistato questo nuovo Cronografo Automatico SEIKO Cal．8R39．Per poter utilizzare ＇orologio al massimo delle sue prestazioni leggere attentamente questo manuale di istruzioni prima di passare all＇uso dell＇orologio stesso，e conservarlo poi per qualsiasi eventuale futura consultazione．
Usted es ahora el orgulloso propietario de un Reloj de Buceo Cronógrafo Automático de SEIKO Cal． 8R39．Para asegurar el óptimo rendimiento de su reloj，sírvase leer cuidadosamente las instrucciones contenidas en este manual antes de su uso．Guarde este manual en un lugar muy accesible para la rápida referencia．

Você poderá sentir－se orgulhoso de possuir um SEIKO Cronógrafo Automático Relógio do Mergulhador Cal．8R39．Para garantir o seu excelente movimento，leia atentamente as instruções contidas neste opúsculo antes de usá－lo．Conserve este manual para consultas futuras

Вы стали гордым обладателем автоматических часов SEIKO калибра 8R39．Чтобы использовать часы оптимальным образом，внимательно прочитайте эту инструкцию，прежде чем приступать к пользованию．Сохраните эту брошюру，чтобы обратиться к ней в случае необходимости．

歡迎購買精工 8R39 機型自動計時器。為保證在最佳狀態下操作手錶，請在使用手錶之前仔細閱讀本手冊內的各項使用說明。並妥善保管本使用手冊以備今後參考。

## WARNING

－Do not attempt to dive using this watch unless you have been properly trained in diving．For your safety，please abide by the rules of diving．
－Do not use the watch for saturation diving using helium gas．
－Before diving，make sure that the watch operates normally．

## CAUTION

－Please read and observe the instructions described in this booklet to ensure the proper functioning of your diver＇s watch
－Do not operate the crown when the watch is wet or in water．
－Do not operate the buttons when the watch is wet or in water．
－Avoid hitting the watch against hard objects such as rocks．

WARNING notes indicate any condition or practice which, if not strictly observed, could result in severe personal injury or possible death.

## CAUTION

CAUTION notes indicate any condition or practice which, if not strictly observed, may result in personal injury or property damage.

## PRECAUTIONS ON USING THE WATCH FOR DIVING

Before diving, make sure that the watch operates normally and be sure to observe the precautions described below.

## BEFORE DIVING

- Do not use the watch for saturation diving using helium gas.
- To measure the elasped time while you are underwater, always use the rotating bezel.
- Check that:
- the crown is locked tightly in place.
- the buttons are locked tightly in place.
- there are no visible cracks in the crystal or the watch band.
- the strap or bracelet is securely fastened to the watch case
- the buckle keeps the strap or bracelet firmly secured to the wrist
- the rotating bezel turns counterclockwise smoothly (the rotation must not be too loose or too the rotating bezel turns counterclockwise smooth
tight) and the or mark aligns with the minute hand.
- the time and calendar are appropriately set.
- the second hand is operating normally (if not, swing the watch for more than 30 seconds to wind the mainspring sufficiently.)
If there are any malfunctions, we recommend that you contact SEIKO CUSTOMER SERVICE CENTER.


## WHILE DIVING

- Do not operate the crown and the buttons when the watch is wet or in water.
- Take care not to hit the watch against hard objects such as rocks.
- Bezel rotation may become slightly stiffer underwater. This is not a malfunction.

AFTER DIVING

- Rinse the watch in fresh water after diving and wash out all seawater, soil, sand, etc.
- Wipe the watch thoroughly dry to prevent possible rust on the case after cleaning the watch in fresh water.


## CONTENTS

PageCHARACTERISTICS OF A MECHANICAL WATCH
NAMES OF THE PARTS ..... 8
HOW TO USE .....  9
HOW TO SET THE TIME AND DATE ..... 11
HOW TO USE THE STOPWATCH ..... 14
ROTATING BEZEL ..... 17
SCREW DOWN CROWN ..... 18
TO PRESERVE THE QUALITY OF YOUR WATCH ..... 20
PLACES TO KEEP YOUR WATCH ..... 23
NOTES ON OVERHAUL ..... 23
NOTES ON GUARANTEE AND REPAIR ..... 24
TROUBLESHOOTING ..... 24
ACCURACY OF MECHANICAL WATCHES . ..... 26
SPECIFICATIONS ..... 27

## SEIKO cal. 8 R39

## CHARACTERISTICS OF A MECHANICAL WATCH

## (self-winding type, automatic winding type)

- This mechanical watch operates using power obtained from a mainspring.
- If the watch is completely stopped, manually turn the crown approximately 20 times to wind up the mainspring to start the watch.
- While loss/gain of a quartz watch is indicated by a monthly or annual rate, accuracy of a mechanical watch is normally indicated by a daily rate (loss/gain per day).
- Normal usage accuracy of a mechanical watch varies according to conditions of use (time period that the watch is worn on the wrist, temperature environment, hand movement, and winding state of the mainspring).
- When the watch is affected by strong magnetism, it temporarily gains or loses time. If the watch encounters a strong magnetic field, the parts of the watch may be magnetized. In this case, repairs such as removal of magnetism are required. Contact the retailer from whom the watch was purchased.


## NAMES OF THE PARTS



## HOW TO USE

This watch is an automatic watch equipped with a manual winding mechanism.

- When the watch is worn on the wrist, the motion of the wearer's arm winds the mainspring of the watch.
- If your watch is completely stopped, it is recommended that you manually wind the mainspring by turning the crown.
- How to manually wind the mainspring by turning the crown

1. Slowly turn the crown clockwise (in the 12 o'clock direction) to wind the mainspring.

* Turning the crown counterclockwise (the 6 o'clock direction) does not wind the mainspring.

2. Continue to turn the crown until the mainspring is sufficiently wound. The small second hand will start moving.
3. Set the time and date before putting the watch on your wrist.

[^0]* There is no need to turn the crown further when the mainspring is fully wound. But the crown can be turned without damaging the watch mechanism.
* Once the watch is wound up fully, it operates for about 45 hours. However, when the stopwatch is used continuously for a certain period, the watch may not operate for as long as 45 hours.
* If the watch is used without being wound up fully, gain or loss of the watch may result. To avoid this, wear the watch for more than 10 hours a day. If the watch is used without being worn on the wrist lif it is used on the desk like a clock, for example), make sure to wind it up fully every day at a fixed time.
* If the watch has stopped with the mainspring unwound, winding the mainspring with the crown will not start the watch immediately. This is because the mainspring torque (force) is low at the beginning of its winding due to the characteristics of mechanical watches. The small second hand starts to move when a certain degree of strong torque is reached after the mainspring has been wound up. However, swinging the watch from side to side to forcibly turn the balance can start the watch sooner.


## HOW TO SET THE TIME AND DATE

- Check that the watch is operating, and then set the time and date.
- The watch is provided with a date function and is designed so that the date changes once every 24 hours. The date changes around 12 o'clock midnight. If AM/PM is not properly set, the date will change around 12 o'clock noon.

1. Pull out the crown to the first click. (The small second hand continues moving and the accuracy of the watch is unimpaired.)
2. The date can be set by turning the crown counterclockwise. Turn it until the previous day's date appears
Ex.)If today is the 6th of the month, first set the date to "5" by turning the crown counterclockwise.

## CAUTION

- Do not set the date between 8:00 p.m. and 2:00 a.m. If you do so, the date may not change properly on the following day or malfunction of the watch may occur.


3. Pull out the crown to the second click when the small second hand is at the 12 o'clock position. (The small second hand stops on the spot.)
Turn the crown to advance the hands until the date changes to the next. The time is now set for the a.m. period. Advance the hands to set the correct time.
4. Push the crown back in to the normal position in accordance with a time signal.


## CAUTION

- The mechanism of mechanical watches is different from that of quartz watches.
When setting the time, make sure to turn back the minute hand a little behind the desired time and then advance it to the exact time.
- Date adjustment at the beginning of the month

It is necessary to adjust the date on the first day after a month that has less than 31 days.

Ex.) To adust the date in the a.m. period on the first day of a month following a 30-day month.

1. The watch displays " 31 " instead of "1". Pull out the crown to the first click
2. Turn the crown to set the date to " 1 " and then push the crown back in to the normal position.


## . CAUTION

- Do not set the date between 8:00 p.m. and 2:00 a.m. If you do so, the date may not change properly on the following day or malfunction of the watch may occur.

HOW TO USE THE STOPWATCH
E. This watch features a stopwatch function which can measure up to 12 hours.

0 - A chronograph refers to a watch that has a stopwatch function in addition to a time display function.

- Before using the stopwatch, make sure that the center stopwatch hand is pointing at the 0 position. If it is not pointing at the 0 position, press the Button B to correct the position of the center stopwatch hand.
- Before using the stopwatch, make sure that the mainspring is sufficiently wound.


Current time indication: 10 o'clock 8 minutes and 42 seconds Stopwatch time indication: 6 hours 20 minutes and 10 seconds

STOPWATCH OPERATION
<STANDARD MEASUREMENT>

# <ACCUMULATED ELAPSED TIME MEASUREMENT> 

## start


$2^{\circ} 8^{\prime} 40^{\prime \prime}$


* Restart and stop can be repeated as many times as required by pressing Button A.

How to read the stopwatch minute hand
The stopwatch minute hand completes a full rotation in 30 minutes. The correct indication of the stopwatch minute hand is determined in connection with the position of the stopwatch hour hand.

## <Between 0 and 29 minutes>


0.5 hour index

When the stopwatch hour hand is pointing at a position before a short indication (0.5 hour index), read the minutes the stopwatch minute hand is indicating. In the case illustrated above the measured time should be read as "6 hours 20 minutes and 10 seconds.
<Between 30 and 59 minutes>


When the stopwatch hour hand is pointing at a position after a short index ( 0.5 hour index), 30 minutes should be added to the minutes that the stopwatch minute hand is indicating. In the case illustrated above, the measured time should be read as " 6 hours 50 minutes and 10 seconds."

## ROTATING BEZEL

The rotating bezel can show the elapsed time up to 60 minutes. By setting it before diving, you can know how many minutes you are underwater.

- To prevent accidental rotation, the rotating bezel is so designed that rotation becomes harder in water. Also for safty's sake, it roatates only counterclockwise, so that the time measured is never shorter than the actual elapsed time.

1. Turn the rotating bezel to align its " ©" mark with the minute hand * The rotating bezel rotates with clicks. With each click, it turns half a minute.
2. To know the elapsed time, read the number on the rotating bezel that the minute hand points to.


SGREW DOWN CROWIN

-     - Your watch has a screw down crown to prevent accidental operation and help maintain water-resistant quality.
- To use the crown, it is necessary to unlock the crown first before pulling it out, and it is important to securely screw the crown in after each use.
HOW TO OPERATE THE SCREW DOWN CROWN
The crown must be securely locked in the case except when you use it to set the watch.


## <How to unlock the crown>

Turn the crown counterclockwise to unscrew it.
The crown is released and projected outward from its original position.

## <How to lock the crown>

Turn the crown clockwise while pressing it to the case until it is screwed all the way in and locked.

Before diving, make sure that the crown is locked tightly in place.
2. Do not operate the crown when the watch is wet or in water.
3. When screwing the crown in, ensure that the crown is correctly aligned and turn it gently. If it is hard to turn, unscrew it first, and then rewind it. Do not screw it in by force as it may damage the thread of the screw or the case.

## SECURITY LOCK BUTTON OPERATION

SECURITY LOCK OF PUSH-BUTTONS A \& B

Unlocking the push-buttons
Turn Security Lock Buttons counterclockwise until you no longer feel the threads turning. The buttons can be pushed in.
Locking the push-buttons
Turn Security Lock Buttons clockwise until you no longer feel the threads turning. The buttons cannot be pushed in.

1. Before diving, make sure that both buttons are locked tightly in place 2. Do not operate the buttons when the watch is wet or in water.

## TO PRESERVE THE OUALITY OF YOUR WATCH

- Repair of divers watches requires special expertise and equipment. If you find that your diver's watch is malfunctioning, do not attempt to repair it but immediately send it to SEIKO CUSTOMER SERVICE CENTER.


## - TEMPERATURES

The key components in mechanical watches are made of metals, which expand or contract depending on temperatures due to metal properties. This exerts an effect on the accuracy of the watches. Mechanical watches tend to loss time at high temperatures while they tend to gain time at low temperatures.

## - MAGNETISM



Your watch will be adversely affected by strong magnetism. Keep it away from close contact with magnetic objects.

## - CHEMICALS



Be careful not to expose the watch to solvents, mercury, cosmetic spray, detergents adhesives or paints. Other wise, the case, bracelet, etc may become discolored, dete riorated or damaged.
$\square$ PERIODIC CHECK

## (2-3

It is recommended that the watch be checked once every 2 to 3 years by an AUTHORIZED SEIKO DEALER or SERVICE CENTER to ensure that the case, crown, gasket and crystal seal remain intact.

- CARE OF CASE AND BRACELET


To prevent possible rusting of the case and bracelet, wipe them periodically with a soft dry cloth

SHOCKS \& VIBRATION


Be careful not to drop your watch or hit it against hard surfaces

- PRECAUTION REGARDING CASE BACK PROTECTIVE FILM


If your watch has a protective film and/or a sticker on the case back, peel them off before using your watch.

LumiBrite is a luminous paint that is completely harmless to human beings and the natural environment, containing no noxious materials such as radioactive substances.
LumiBrite is a newly-developed luminous paint that absorbs the light energy of sunlight or artificial light 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 5 to 8 hours.
Please note, however, that, as LumiBrite emits the light it stores, the luminance level of the depending deases gradually over time. The duration of the emitted light may also differ slightly and the distance from the light source to the watch
When you make a dive in dark water, LumiBrite may not emit light unless it has absorbed and stored light sufficiently.
Before diving, therefore, be sure to expose the watch to light under the conditions specified above, so that it fully absorbs and stores light energy. Otherwise, use the watch together with an underwater flashlight.
< Reference data on luminance >
(A) Sunlight
[Fine weather]: 100,000 lux
(B) Indoor (Window side during daytime)
[Fine weather]: more than 3,000 lux
[Rainy weather]: less than 1,000 lux
(C) Lighting apparatus (40-watt daylight fluorescent light
[Distance to the watch: 1 m ]: 1,000 lux
[Distance to the watch: 3 m ]: 500 lux (average room luminance)
[Distance to the watch: 4 m ]: 250 lux

* "LUMIBRITE" is a trademark of SEIKO HOLDINGS CORPORATION.


## PLACES TO KEEP YOUR WATCH

- Do not leave the watch in a place where the temperature drops below $5^{\circ} \mathrm{C}\left(41^{\circ} \mathrm{F}\right)$ or rises above $35^{\circ} \mathrm{C}\left(95^{\circ} \mathrm{F}\right)$ for a long time.
- Do not leave the watch in a place where it will be subjected to strong magnetism (for example, near television sets, loudspeakers or magnetic necklaces) or static electricity.
- Do not leave the watch where there are strong vibrations.
- Do not leave the watch in dusty places.
- Do not expose the watch to chemical substances or gases.
(Ex.: Organic solvents such as benzine and thinner, gasoline, nail polish, cosmetic sprays, detergents, adhesives, mercury, and iodine antiseptic solution.)
- Do not leave the watch in close contact with hot spring water.


## NOTES ON OVERHAUL

- The watch is a precision device with many moving parts lubricated with special oils. If the parts run short of oil or get worn out, the watch may lose time or stop operation. In such a case, have the watch overhauled.


## NOTES ON GUARANTEE AND REPAIR

$\stackrel{\frac{\varrho}{\curvearrowleft}}{-}$ Please contact the retailer the watch was purchased from or SEIKO CUSTOMER SERVICE CENTER for repair or overhaul.

- Within the guarantee period, please present the certificate of guarantee to receive repair services.
- Guarantee coverage is provided in the certificate of guarantee. Please read carefully and retain it.


## TROUBLESHOOTING

| Problem | Possible causes | Solutions |
| :--- | :--- | :--- |
| The watch stops <br> operating. | The power supplied by <br> the mainspring has been <br> consumed. | Turn the crown or swing the watch <br> to wind it up. The watch will start <br> operating. If the watch does not start, <br> consult the retailer from whom the <br> watch was purchased. |
| Even though you wear <br> the watch every day, it <br> soon stops operating. | The watch is worn on <br> your wrist only for a short <br> period of time, or the <br> amount of arm movement <br> is small. | Wear the watch for an extended <br> period of time, or when taking off the <br> watch, turn the crown to wind the <br> mainspring. |
| The date changes at 12 <br> o'clock noon. | AM/PM is not properly set. | Advance the hands by 12 hours. |

## The watch gains/lose

 time temporarily.The watch has been left extremely high or low temperatures for a long time. The watch was brought magnetic object

You dropped the watch, hit wore it while playing active wore it while playing act
sports. The watch was exposed to strong vibrations.
The watch has not been overhauled for more than 3 years
The glass is blurred and the blur persists for a
The stopwatch minute
hand and stopwatch hour hand move while you are setting the watch to the current
time.
For the solution of troubles other than listed above, contact the retailer from whom the watch was purchased.

Normal accuracy will resume

Normal accuracy will resume when the watch is kept away from close contact with the magnetic source. If this condition persists, consult the retaile from whom the watch was purchased.
Normal accuracy will not resume. Consult the retailer from whom the watch was purchased.

Consult the retailer from whom the watch was purchased.

Consult the retailer from whom the watch was purchased.

Push the crown back in to the normal position. And then, stop and reset the stopwatch. After that, if you wish to set the time, follow the procedures in HOW SET THE TIME AND DATE section of this booklet.
purcirasea.

ACCURACY OF IMECHANICAL WNATCHES

- The accuracy of mechanical watches is indicated by the daily rates of one week or so.
- The accuracy of mechanical watches may not fall within the specified range of time accuracy because of loss/gain changes due to the conditions of use, such as the length of time during which the watch is worn on the wrist, arm movement, whether the mainspring is wound up fully or not, etc.
- The key components in mechanical watches are made of metals which expand or contract depending on temperatures due to metal properties. This exerts an effect on the accuracy of the watches. Mechanical watches tend to lose time at high temperatures while they tend to gain time at low temperatures.
- In order to improve accuracy, it is important to regularly supply energy to the balance that controls the speed of the gears. The driving force of the mainspring that powers mechanical watches varies between when it is fully wound and immediately before it is unwound. As the mainspring unwinds, the force weakens.
Relatively steady accuracy can be obtained by wearing the watch on the wrist frequently for the self-winding type and winding up the mainspring fully everyday at a fixed time to move it regularly for the wind-up mechanical type.
- When affected by strong external magnetism, a mechanical watch may loss/gain time temporarily. The parts of the watch may become magnetized depending on the extent of the effect. In such a case, consult the retailer from whom the watch was purchased since the watch requires repair, including demagnetizing.


## SPECIFICATIONS

## 1 Display system

Time/Calendar..

Stopwatch
our, minute and small second hands
Date is displayed in numerals
Measures up to 12 hours
Stopwatch hour, Stopwatch minute and Stopwatch second hands
2 Vibrations per hour.
28,800
Between +25 and -15 seconds at normal temperature range (between $5{ }^{\circ} \mathrm{C}$ and $35^{\circ} \mathrm{C}$ or between $41^{\circ} \mathrm{F}$ and $95^{\circ} \mathrm{F}$ )

4 Continuous operating time
More than approx. 45 hours
5 Driving system. Automatic winding type with manual winding mechanism
6 Number of jewels 34 jewels

- The accuracy above is factory adjusted
- Due to the characteristics of mechanical watches, any actual daily rate may not fall within the range of time accuracy specified above dependent on the conditions of use, such as the length of time during which the watch is worn on the wrist, temperature, arm movement, and whether the mainspring is wound up fully or not, etc.


[^0]:    * The position or design of the displays may differ depending on the model.

