Cal. 8L35, 8L55

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You are now the proud owner of a SEIKO Automatic Diver's Watch Cal. 8L35/8L55. For best results, please read the instructions in this booklet carefully before using your SEIKO Automatic Diver's Watch. Please keep this manual handy for ready reference.

Sie sind jetzt stolzer Besitzer einer automatischen Taucheruhr SEIKO Kal. 8L35/8L55. Bitte lesen Sie diese Bedienungsanleitung vor der Verwendung der Uhr aufmerksam durch, um optimale Ergebnisse davon zu erhalten. Heben Sie die Bedienungsanleitung gut auf, um jederzeit nachlesen zu können.

Vous voici l'heureux propriétaire d'une montre automatique de plongée SEIKO Cal. 8L35/8L55. Pour en obtenir de bonnes performances, veuillez, avant d'utiliser la montre, lire attentivement les explications de ce mode d'emploi que vous conserverez pour toute référence ultérieure.

Grazie per aver acquistato questo orologio automatico SEIKO Cal. 8L35/8L55 per subacqueo. Per ottenerne i migliori risultati leggere attentamente le istruzioni di questo libretto prima di passare all'uso dell'orologio stesso. Tenere poi il manuale a portata di mano, per ogni eventuale futura, ulteriore consultazione.

Usted es ahora un honrado poseedor del reloi de buceador automatico SEIKO Cal. 8L35/8L55. Para obtener de él los mejores resultados, lea las instrucciones del presente folleto con cuidado antes del uso de su reloi de buceador automatico SEIKO. Guarde este manual para fácil referencia.

Você pode sentir-se orgulhoso de possuir um Relógio do mergulhador SEIKO Automático Cal. 8L35/8L55. Para obter dele os melhores resultados, leia atentamente as instruções contidas neste opúsculo antes de usar o seu Relógio do mergulhador SEIKO Automático. Conserve este manual para referências futuras.

Теперь Вы являетесь обладателем часов Аналоговые Кварцевые часы Калибра 8L35/8L55. Перед использованием их. для достижения лучших результатов, пожалуйста, внимательно ознакомьтесь с данной инструкцией и обязательно сохраните ее.

您現在是精工自動潛水錶機件編號 81.35/81.55 自豪的擁有者。為正確使用起見,請在使用精工自動潛水錶之前, 詳細閱讀本説明書。並將之妥善保管,以備今後參考。



- 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.
- 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 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.
- Check that:
 - the crown is 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 tight) and the "\overline{\Phi}" 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 an AUTHORIZED SEIKO SERVICE CENTER.

WHILE DIVING

- Do not operate the crown 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.

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☆ For the care of your watch, see "TO PRESERVE THE QUALITY OF YOUR WATCH" in the attached Worldwide Guarantee and Instruction Booklet.

FEATURES

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.

English

SCREW LOCK TYPE CROWN

- Some models have the screw lock type crown, which can be locked by the screw when it is not necessary to be operated.
- Locking the crown will prevent operating errors.
- Unscrew the crown before any crown operation. When the operation is over, screw the crown in to lock.
- HOW TO OPERATE THE SCREW LOCK TYPE CROWN

If your watch has a screw lock type crown, unscrew it before any crown operation.

❖ Always keep the crown locked unless it is necessary for operating the crown.

[To unscrew the crown]

Turn the crown counterclockwise (downward) to unscrew it. The crown is unlocked and can be operated.



[To screw the crown in]

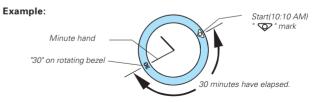
Upon completion of the crown operation, screw the crown in completely until it stops by turning it clockwise (upward) while gently pressing it back into the original position.



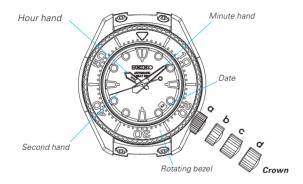
ROTATING BEZEL

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.
- 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.
- To know the elapsed time, read the number on the rotating bezel that the minute hand points to.



NAMES OF THE PARTS

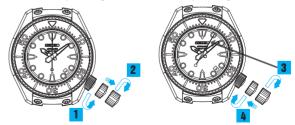


a: Screwed-in position b: Normal position c: First click d: Second click

HOW TO START THE WATCH

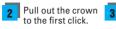
This watch is an automatic watch equipped with a manual winding mechanism.

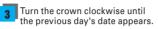
- To initially start your watch:
- If your watch is completely stopped, it is recommended that you manually wind the mainspring by turning the crown.
- How to manually wind the mainspring by turning the crown
 - 1. Unlock the crown by turning it counterclockwise.
 - 2. Slowly turn the crown clockwise to wind the mainspring.
 - 3. Continue to turn the crown until the mainspring is sufficiently wound. The second hand will start moving.
 - 4. Lock the crown by turning it clockwise while pressing it.



TIME/CALENDAR SETTING

Unlock the crown by turning it counterclockwise.











Turn the crown to advance the hands until the date changes to the next. When it has changed, the time is set for the A.M. period. Keep advancing the hands to set the correct time.

- Push back the crown in accordance with a time signal.
- 7 Lock the crown by turning it clockwise while pressing it.

- Turn the hands past the 12 o'clock marker to determine whether the watch is set for the A.M. or P.M. period. If the calendar changes when the hour hand passes the 12 o'clock marker, the time is set for A.M. If the calendar does not change, the time is set for P.M.
- When setting the hands, first set them to a time a few minutes earlier than the correct time, and then advance them to the exact time.
- It is necessary to adjust the date on the first day after a month that has less than 31 days.

^{*}Do not change the day or the date between 9:00 p.m. and 1:00 a.m.

TO PRESERVE THE QUALITY OF YOUR WATCH

 Repair of diver's watches requires special expertise and equipment. If you find that your diver's watch is malfunctioning, therefore, never attempt to repair it but immediately send it to a nearby SEIKO 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. Otherwise, the case, bracelet, etc. may become discolored. deteriorated or damaged.

■ PERIODIC CHECK



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 against hard surfaces. dry cloth.

■ SHOCKS & **VIBRATION**



Be careful not to drop your watch or hit it

■ 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™

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 $500\,\mathrm{lux}$ 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 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.

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

[Cloudy weather]: 10,000 lux

(B) Indoor (Window side during daytime) [Fine weather]: more than 3,000 lux [Rainy weather]: less than 1,000 lux

[Cloudy weather]: 1,000 to 3,000 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.

ACCURACY OF MECHANICAL WATCHES

- 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 external strong 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 | Features | 3 hands, time display (Hour, minute and second hands) and date display |
|---|---|---|
| 2 | Vibrations per hour | |
| | 8L35 | 28,800 |
| | 8L55 | 36,000 |
| 3 | Loss/gain (daily rate) | Between +15 and – 10 seconds at normal temperature range (between 5 $^{\circ}$ C and 35 $^{\circ}$ C) |
| 4 | Continuous operating time | |
| | 8L35 | Approximately 50 hours |
| | 8L55 | Approximately 55 hours |
| 5 | Driving system | Automatic winding type with manual winding mechanism |
| 6 | Jewels | |
| | 8L35 | 26 jewels |
| | 8L55 | 37 jewels |
| | The accuracy above is factory adjusted. | |

- 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.