Cal. V657

INSTRUCTIONS	(P.	3)
BEDIENUNGSANLEITUNG	(S.	16)
INSTRUCTIONS	(P.	29)
ISTRUZIONI	(P.	42)
INSTRUCCIONES	(P.	55)
INSTRUÇÕES	(P.	68)
用法説明	(81	頁)

You are now the proud owner of a SEIKO Analogue Quartz Watch Cal. V657. For best results, please read the instructions in this booklet carefully before using your SEIKO Analogue Quartz Watch. Please keep this manual handy for ready reference.

Sie sind jetzt Besitzer einer SEIKO Analog-Quarzuhr Kal. V657. Bitte lesen Sie diese Bedienungsanleitung vor Verwendung der Uhr sorgfältig durch und heben Sie sie gut auf.

Vous voici l'heureux propriétaire d'une montre quartz analogique SEIKO Cal. V657. Pour obtenir d'excellentes performances de cet article SEIKO, veuillez lire attentivement cette brochure que vous conserverez pour foute référence ultérieure.

Siete ora in possesso di un orologio SEIKO Analogico al Quarzo Cal. V657. Per ottenere i migliori possibili risultati dal Vostro orologio, leggere attentamente le istruzioni di questo manuale prima di utilizzare il Vostro orologio SEIKO analogico al quarzo. Conservare poi il manuale stesso per ogni qualsiasi eventuale futuro riferimento.

Enhorabuena por su adquisición de un reloj SEIKO analógico de cuarzo Cal. V657. Para óptimo resultado, lea detenidamente las instrucciones de este folleto antes de usar el reloj. Guarde este manual para consulta posterior.

Você pode sentir-se orgulhoso de possuir um Relógio SEIKO Quartz Análogo Cal. V657. Para obter os melhores resultados, leia atentamente as instruções contidas neste opúsculo antes de usar o seu Relógio SEIKO Quartz Análogo. Queira conservar este manual para referências futuras.

CONTENTS

	Page
ADJUSTING THE HAND POSITION TIME/CALENDAR SETTING STOPWATCH TACHYMETER NOTES ON USING THE WATCH BATTERY CHANGE SPECIFICATIONS	6 7 9 11 13

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

SEIKO CAL. V657



STOPWATCH

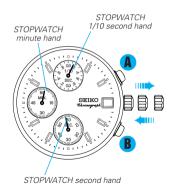
- Three small STOPWATCH hands
- Measures up to 60 minutes in 1/10 second increments.
- Split time measurement
- Tachymeter function (for models with tachymeter scale on the dial)

TIME/CALENDAR

Hour, minute and second hands and date

ADJUSTING THE HAND POSITION

- Before setting the time, be sure to check that the STOPWATCH hands are in "0" position when the stopwatch is reset. (For resetting the stopwatch, see "STOPWATCH")
- If any of the STOPWATCH hands does not return to "0" position, follow the procedure below.



CROWN Pull out to second click.

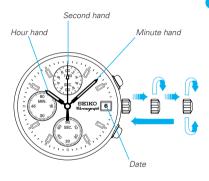
Press repeatedly to reset STOP-WATCH 1/10 second hand to "0" position.

Press repeatedly to reset STOP-WATCH second and minute hands to "0" position.

CROWN Push back in to normal position.

^{*} Hands move quickly if the respective buttons are kept pressed.

TIME/CALENDAR SETTING



CROWN

Pull out to first click and turn clockwise until the previous day's date appears.

Pull out to second click when Second hand is at the 12 o'clock position.

Turn clockwise until the desired date appears.

Set Hour and Minute hands.

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

STOPWATCH

 The measured time is indicated by small STOPWATCH hands that move independently of the center hands.

HOW TO READ THE HANDS

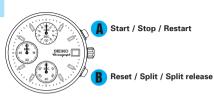
Ex.: 15 minutes and 10.6 seconds



Movement of STOPWATCH 1/10 second hand

- After the measurement exceeds 1 minute, the STOPWATCH 1/10 second hand stays at the "0" position while the stopwatch is counting.
- When the measurement is stopped or split time is being measured, it indicates the 1/10 seconds measured.

STOPWATCH OPERATION



Standard measurement



START STOP RESET

Accumulated elapsed time measurement

START STOP RESTART STOP RESET

Split time measurement



Restart and stop of the stopwatch can be repeated bv pressina button A

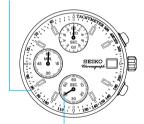
Measurement and release of split time can be repeated by pressing button B.

TACHYMETER

[for models with tachymeter scale on the dial]

To measure the hourly average speed of a vehicle:





STOPWATCH second hand: 40 seconds

Ex.: "90" (tachymeter scale figure)
 x 1 (km or mile) = 90 km/h or mile/h

- 1 Use the stopwatch to determine how many seconds it takes to go 1 km or 1 mile.
- 2 Locate the second marker on the main dial which corresponds to the number of seconds measured. The number on the tachymeter scale indicates the average speed per hour.
 - * For the models with the tachymeter scale around the small dial at the 6 o'clock position, read the tachymeter scale which the STOPWATCH second hand points to.
- Tachymeter scale can only be used to measure average speed when time required is up to 60 seconds.

If the measuring distance is extended to 2 km or miles or shortened to 0.5 km or miles and STOPWATCH second hand indicates "90" on the tachymeter scale:

"90" (tachymeter scale figure) x 2 (km or miles)

= 180 km/h or mph

"90" (tachymeter scale figure) x 0.5 (km or miles)

= 45 km/h or mph

To measure the hourly rate of operation:





STOPWATCH second hand: 20 seconds

● Ex.: "180" (tachymeter scale figure) x 1 job = 180 jobs/hour

- Use the stopwatch to measure the time required to complete 1 job.
- Locate the second marker on the main dial which corresponds to the number of seconds measured. The number on the tachymeter scale indicates the average number of jobs accomplished in one hour.
 - * For the models with the tachymeter scale around the small dial at the 6 o'clock position, read the tachymeter scale which the STOPWATCH second hand points to.
- If 15 jobs are completed in 20 seconds:
 - "180" (tachymeter scale figure) x 15 jobs
 - = 2700 jobs/hour

NOTES ON USING THE WATCH

ADJUSTING THE HAND POSITION

The STOPWATCH minute hand moves in correspondence with the STOPWATCH second hand.

TIME/CALENDAR SETTING

- Before setting the time, be sure to stop and reset the stopwatch.
- Do not set the date between 9:00 p.m. and 1:00 a.m. Otherwise, the date may not change properly. If
 it is necessary to set the date during that time period, first change the time to any time outside it, set the
 date and then reset the correct time.
- When setting the hour hand, check that AM/PM is correctly set. The watch is so designed that the
 date changes once in 24 hours.

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 date changes, the time is set for the A.M. period. If the date does not change, the time is set for the P.M. period.

- When setting the minute hand, advance it 4 to 5 minutes ahead of the desired time and then turn it back to the exact time.
- Do not press any button with the crown at the second click. Otherwise, the STOPWATCH hands move and resetting them is made necessary.

STOPWATCH

- The STOPWATCH 1/10 second scale and hand differ in design and shape depending on the model.
- Do not pull out the crown while the stopwatch is counting. If it is pulled out, the stopwatch operation cannot be made.
- When the stopwatch is reset, it takes up to 40 seconds for the STOPWATCH second and minute hands to return to "0" position.

HOW TO OPERATE THE SCREW LOCK TYPE CROWN (for models with screw lock type crown)

- To unscrew the crown:
 - Turn the crown counterclockwise. Then, pull it out for time/calendar setting or for adjusting the STOPWATCH hand position.
- To screw in the crown:

With the crown at the normal position, turn it clockwise while pressing it.

BATTERY CHANGE



The miniature battery which powers your watch should last approximately **2 years**. However, because the battery is inserted at the factory to check the function and performance of the watch, its actual life once in your possession may be less than the specified period. When the battery expires, be sure to replace it as soon as possible to prevent any malfunction. For battery replacement, we recommend that you contact an AUTHORIZED SEIKO DEALER and request **SEIKO SR920SW** battery.

* If the stopwatch is used for more than 60 minutes a day, the battery life may be less than 2 years.



- Do not remove the battery from the watch.
- If it is necessary to take out the battery, keep it out of the reach of children. If a child swallows it, consult a doctor immediately.

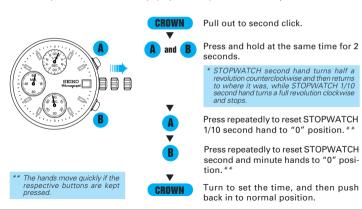


- Never short-circuit, heat or otherwise tamper with the battery, and never expose it to fire. The battery may burst, become very hot or catch fire.
- The battery is not rechargeable. Never attempt to recharge it, as this may cause battery leakage or damage to the battery.

Necessary procedure after battery change

When the battery is replaced with a new one, the information stored in the built-in IC does not
correspond with the time actually displayed. Before using the watch, therefore, be sure to reset the
circuit following the procedure below.

* In case any of the hands should move improperly, follow the procedure below to adjust the hand movement.



SPECIFICATIONS

1	Frequency of crystal oscillator	32,768 Hz (Hz = Hertz Cycles per second)		
2	Loss/gain (monthly rate)	Less than 20 seconds at normal temperature range (5° C $^{\prime}$ \sim 35° C) (41° F \sim 95° F)		
3	Operational temperature range	–5° C ~ +50° C (23° F ~ 122° F)		
4	Driving system	Step motor, 3 pieces		
5	Display system Time	Hour, minute and second hands Displayed in numerals. Minute, second and 1/10 second hands The stopwatch measures up to 60 minutes in 1/10 second increments.		
6	Battery	Miniature silver oxide battery SEIKO SR920SW, 1 piece		
7	IC (Integrated Circuit)	C-MOS-LSI, 1 piece		

^{*} The specifications are subject to change without prior notice for product improvement.