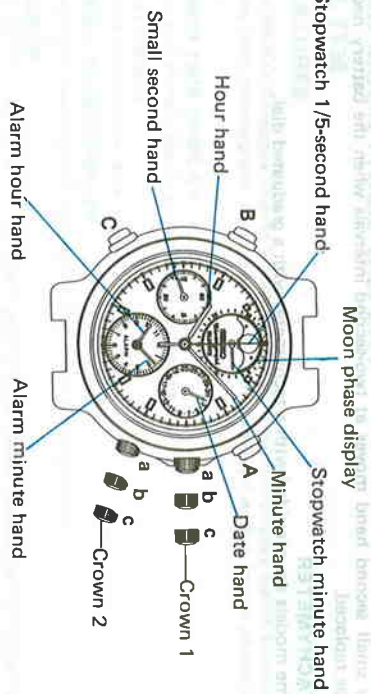




### DISPLAY AND CROWN OPERATION

There are three buttons and two crowns as shown in the illustration below.



#### Crown 1

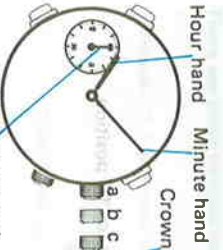
- (a) Normal position : Free
- (b) First click : Date setting  
Clockwise : Moon phase setting  
Counterclockwise : Main time setting
- (c) Second click : Adjusting the stopwatch hands to "0" position

#### Crown 2

- (a) Normal position : Stopwatch mode  
Alarm disengagement
- (b) First click : Stopwatch mode  
Alarm engagement/alarm setting
- (c) Second click : Stopwatch mode  
Alarm hour and minute hands setting



**TIME SETTING**



1. Pull out crown "1" all the way to the second click when the small second hand is at the 12 o'clock position.
2. Turn crown "1" counterclockwise to set the hour and minute hands to the desired time.
3. Push crown "1" back in to the normal position in accordance with a time signal.

- (a) Normal position
- (b) First click
- (c) Second click

**Notes:**

1. 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.
2. When setting the minute hand, advance it 4 to 5 minutes ahead of the desired time and then turn it back to the exact minute.

**DATE SETTING**

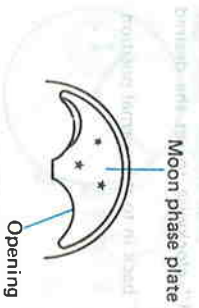


1. Pull out crown "1" to the first click.
2. Turn crown "1" clockwise to set the desired date.
3. Push crown "1" back in to the normal position.

- (a) Normal position
- (b) First click

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### MOON PHASE DISPLAY

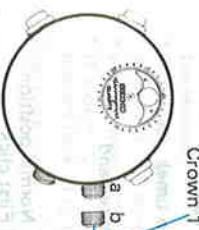


The illustration below will be helpful to you in reading the moon phase. It is intended to show the age of the moon only and not the exact shapes of the moon.

Age of the moon	0 (New Moon)	7	15 (Full Moon)	22
Moon phase				

- The phases (waxing and waning) of the moon are displayed by the shapes which a circle (the moon) and the double-mountain-shaped opening on the dial combine to form.
- The moon phase (age of the moon) is expressed by the number of days which elapse from the time of a new moon to the noon of a certain day. It moves in a cycle of approximately 29.5 days from one new moon to the next.

### MOON PHASE SETTING



- Normal position
- First click

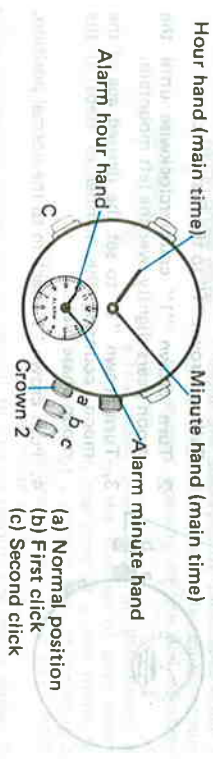
- Pull out crown "1" to the first click.
- Turn crown "1" counterclockwise until the moon peers slightly over the left mountain.
- Turn crown "1" to set the desired age of the moon, counting the number of steps of the moon phase plate.
- Push crown "1" back in to the normal position.

**Note:** Refer to the newspaper for the day's age of the moon. Round off any fractions. (For example: 24.4 → 24; 7.3 → 7)

1. Pull out crown "1" to the first click.

## ALARM

The alarm time is set on a 12-hour basis and indicated by the alarm hour and minute hands that move independently of the main time hands.



### Alarm setting

1. Pull out crown "2" all the way to the second click. There is a warning beep for one second and the alarm hands stop on the spot.
2. Turn crown "2" clockwise and counterclockwise to set the alarm hands to the time that the main time hands indicate.  
\* When setting the alarm minute hand, advance it 4 to 5 minutes ahead of the desired time and then turn it back to the exact minute.
3. Push back crown "2" all the way in to the normal position. Then, pull it out again to the first click, and press "C" repeatedly to set the desired alarm

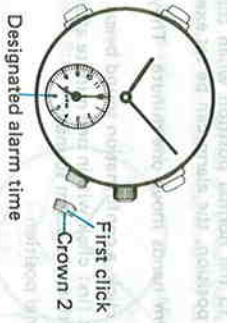
time.

- \* By pushing back crown "2" in to the normal position when the small second hand is at the 12 o'clock position, the alarm can be set exactly to the second.
- \* With each press of "C", the alarm hands move one minute. They move quickly if "C" is kept pressed.
- \* When crown "2" is set to the first click, a confirmation sound beeps.
- \* If crown "2" is pulled out to the first click within one minute after being pushed back in to the normal position, the alarm sounds.
- 4. Push back crown "2" in to the normal position.

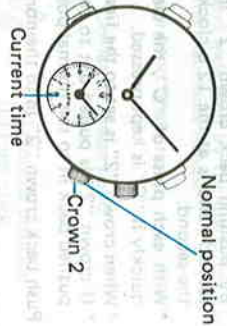
### Alarm engagement/disengagement

- To engage the alarm, pull out crown "2" to the first click. The alarm hands indicate the designated alarm time:
  - \* The alarm rings at the designated time for 20 seconds. To stop it manually, press "A", "B" or "C", or push back crown "2" in to the normal position.
  - \* The alarm sounds differently when the alarm and stopwatch are used simultaneously.
- When crown "2" is at the normal position, the alarm is disengaged, and the alarm hands indicate the current time.

[Alarm engaged]



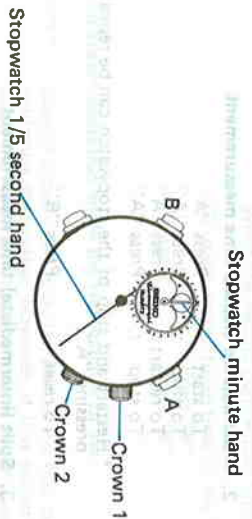
[Alarm disengaged]



**Note:** Please note, if crown "2" is pulled out to the second click, the designated alarm time is canceled with a warning beep. In that case, set the alarm hour and minute hands to the main time again, push crown "2" back in to the normal position, and then, pull it out to the first click and set the desired alarm time again. However, if crown "2" is pushed back in to the normal position before the warning Deep stops, the designated alarm time will not be canceled.

### STOPWATCH

The stopwatch can measure up to 30 minutes in 1/5 seconds. After 30 minutes, it will start counting again from "0" repeatedly up to 6 hours.



- Before using the stopwatch**
- Be sure to check that crown "1" is set at the normal position.
  - Press "B" to reset the stopwatch hands to "0" position.
  - \* If the hands do not return to "0" position, pull out crown "1" all the way to the second click and press "A" and "B" to reset the hands. (For details, refer to "ADJUSTING THE HAND POSITION".)



### 1. Standard measurement

To start : Press "A"  
 To stop : Press "A"  
 To reset : Press "B"

### 2. Accumulated elapsed time measurement

To start : Press "A"  
 To stop : Press "A"  
 To restart : Press "A"  
 To stop : Press "A"

\* Restart and stop of the stopwatch can be repeated by pressing "A".

To reset : Press "B"

### 3. Split (intermediate) time measurement

To start : Press "A"  
 To measure split time : Press "B"  
 To release split time : Press "B"

\* Measurement and release of the split time can be repeated by pressing "B".

To stop : Press "A"  
 To reset : Press "B"

### 4. Measurement of two competitors

To start : Press "A"  
 To measure the finish time of the first competitor:  
 Press "B"

When the second competitor finishes:

Press "A"  
 To measure the finish time of the second competitor:  
 Press "B"  
 To reset : Press "B"

### Notes on crown operation while the stopwatch is in use.

**Crown "1" :** Even if crown "1" is pulled out to the first click, the stopwatch continues measuring. However, if it is pulled out to the second click, the stopwatch hands are reset to "0" position.

**Crown "2" :** The stopwatch continues measuring regardless of the position of crown "2".

\* When the stopwatch has been reset and "A" is pressed before the hand reaches "0" position, the stopwatch still starts counting time when "A" is pressed.

**HOW TO USE THE TACHYMETER****(For the models with a tachymeter scale on the dial.)**

- Use the tachymeter with the stopwatch.

Stopwatch operation (Standard measurement)

To start : Press "A"  
 To stop : Press "A"  
 To reset : Press "B"

The tachymeter can be used for the following purposes.

**(1) To measure the hourly average speed of a vehicle**

- Use the stopwatch to determine how many seconds it takes to go one kilometer (or one mile). The tachymeter scale indicated by the stopwatch second hand gives the average speed per hour.

\* Please note that the tachymeter scale can be used only when the time required is less than 60 seconds. If it exceeds 60 seconds, shorten the measuring distance. (Refer to "Ex. 2" below.)

**Ex. 1)**

If it takes 40 seconds to go one kilometer (or one mile), the stopwatch second hand indicates "90" on the tachymeter scale. This means that the average speed of the vehicle is 90 kilometers (or miles) per hour.

90 (Tachymeter scale figure) x 1 (Kilometer or mile)  
 at 40 seconds position  
 = 90 Km/h (mph)

**Ex. 2)**

If the measuring distance is extended to 2 kilometers (or miles) or shortened to 0.5 kilometers (miles), multiply the figure on the tachymeter scale by 2 or 0.5, respectively. We recommend that you utilize the tachymeter in a rally, speedway or circuit race.

90 (Tachymeter scale figure) x 2 (Kilometers or miles)  
 at 40 seconds position  
 = 180 Km/h (mph)

90 (Tachymeter scale figure) x 0.5 (Kilometers or miles)  
 at 40 seconds position  
 = 45 Km/h (mph)



(2) To measure the hourly rate of operation

The tachymeter is extremely useful in calculating factory operation efficiency or machine production amount.

Ex. 1)

Use the stopwatch to measure the time required to complete one job. If it takes 20 seconds, the stopwatch second hand indicates "180" on the tachymeter scale. This means that 180 jobs will be accomplished in our hour.

180 (Tachymeter scale figure) x 1 job = 180 jobs at 20 seconds position

Ex. 2)

Use the stopwatch to determine how many jobs are accomplished in a specific period of time.

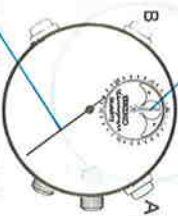
If 15 jobs are completed in 20 seconds, multiply "180", the figure on the tachymeter scale indicated by the stopwatch second hand, by 15. Thus, it is estimated that 2,700 jobs will be accomplished in one hour.

180 (Tachymeter scale figure) x 15 jobs = 2,700 jobs at 20 seconds position per hour

ADJUSTING THE HAND POSITION

If the stopwatch 1/5 second and minute hands will not return to the 12 o'clock position when the stopwatch is reset or when the battery is replaced with a new one, follow the procedure below to reset the hands to the 12 o'clock position.

Stopwatch minute hand



Second click

Crown 1

Stopwatch 1/5-second hand

1. Pull out crown "1" to the second click.
2. Press "A" and "B" repeatedly but separately to reset the stopwatch minute hand and the stopwatch 1/5 second hand to the 12 o'clock position, respectively.
3. Push crown "1" back in to the normal position.

**Note:** When you adjust the stopwatch hands and set the main time at a time, set the main time first. If you adjust the hand position before main time setting, or if crown "1" is pushed back all the way into the normal position from the second click, the stopwatch 1/5-second hand may move from "0" position. However, it will properly point to "0" position when the stopwatch is used.



**RESETTING THE BUILT-IN IC**

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



1. Pull out crown "1" to the second click.
2. Press "A" and "B" simultaneously.
3. Push back crown "1" in to the normal position. The built-in IC will be reset, and normal movement of the hands will return. Before using the watch again, be sure to set the main time and alarm hands to the desired time and adjust the position of the stopwatch hands following the procedure in "ADJUSTING THE HAND POSITION".

**BATTERY LIFE INDICATOR**

When the battery nears its end, the small second hand moves at two-second intervals instead of normal one-second intervals to indicate that the battery needs to be replaced with a new one.

**Note:** Once the small second hand has come to move at two-second intervals the alarm and confirmation sound will not ring. Therefore, if you see the small second hand moving at two-second intervals, replace the battery with a new one as soon as possible.

**TO PRESERVE THE QUALITY OF YOUR WATCH**

**■ WATER RESISTANCE**

**● Non-water resistance**

If "WATER RESISTANT" is not inscribed on the case back, your watch is not water resistant, and care should be taken not to get it wet as water may damage the movement. If the watch becomes wet, we suggest that you have it checked by an AUTHORIZED SEIKO DEALER or SERVICE CENTER to make sure that no water damage has occurred.



**● Water resistance (3 bar)**

If "WATER RESISTANT" is inscribed on the case back, your watch is designed and manufactured to withstand up to 3 bar such as accidental contact with water, for example, splashes or rain, but it is not designed for swimming or diving.



**● Water resistance (10 bar)**

If "WATER RESISTANT 10 BAR" is inscribed on the case back, your watch is designed and manufactured to withstand up to 10 bar and is suitable for swimming and shallow diving, but not for scuba diving. We recommend that you wear a SEIKO Diver's watch for scuba diving. If used in sea water, rinse the watch in fresh water and dry it completely. Do not press any buttons or turn the crowns in water.



**● Water resistance (15 bar)**

If "WATER RESISTANT 15 BAR" is inscribed on the case back, your watch is designed and manufactured to withstand up to 15 bar and is suitable for swimming and shallow diving, but not for scuba diving. We recommend that you wear a SEIKO Diver's watch for scuba diving. If used in sea water, rinse the watch in fresh water and dry it completely. Do not press any buttons or turn the crowns in water.



**NOTE:**

Pressure in bar is a test pressure and should not be considered as corresponding to actual diving depth since swimming movement tends to increase the pressure at a given depth. Care should also be taken on diving into water.

**■ SHOCKS**

Light activities will not affect your watch. But, be careful not to drop your watch or hit it against hard surfaces as this may cause damage.

**■ MAGNETISM**

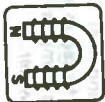
Your watch will be adversely affected by strong magnetism. Keep it away from close contact with magnetic objects.

**■ TEMPERATURES**

Your watch works with stable accuracy between a temperature range of 5°C and 35°C (41°F and 95°F).

**● High temperature**

Temperature over 60°C (140°F) may cause battery leakage or shorten the battery life.

**● Low temperature**

Do not leave your watch in very low temperature below -10°C (+14°F) for a long time, since the cold may cause a slight time loss or gain.

However, the above conditions will be corrected when the watch returns to normal temperature.

**■ CHEMICALS**

Be careful not to expose the watch to solvents (such as alcohol and gasoline), mercury (i.e. from a broken thermometer), 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. Have your watch checked by an AUTHORIZED SEIKO DEALER or SERVICE CENTER to ensure that the case, buttons, crowns, gasket, and crystal seal remain intact.

**■ CARE OF CASE AND BRACELET**

To prevent possible corrosion on the case and bracelet caused by dust and moisture, wipe them with a soft dry cloth.



**BATTERY CHANGE**



The miniature battery which powers your watch should last approximately 2 years. However, because the battery is inserted at the factory, 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 possible malfunction. For battery replacement, we recommend that you contact an AUTHORIZED SEIKO DEALER and request SEIKO SR927W battery. However, if this battery is not available, then use a recognized battery, Maxell SR927W, SONY SR927W or EVEREADY 399.

**Note:** The battery life may be less than two years if the stop-watch is used more than 2 hours a day and/or the alarm more than 20 seconds a day.

**SPECIFICATIONS**

- 1. Frequency of crystal oscillator . . . . . 32,768 Hz (Hz = Hertz . . . Cycles per second)

- 2. Loss/gain (monthly rate) . . . . . Less than 15 seconds at normal temperature range (5°C ~ 35°C) (41°F ~ 95°F)
- 3. Operational temperature range . . . . . -10°C ~ +60°C (14°F ~ 140°F)
- 4. Driving system . . . . . Step motor, 4 pieces
- 5. Display system
  - Time . . . . . Three hands (Hour, minute and small second hands)
  - Date . . . . . Indicated by date hand
  - Moon phase . . . . . Date change: 22:30 ~ 0:00  
Displayed by moon phase dial
  - Alarm . . . . . Moon phase change: 2:30 ~ 4:00  
Small hour and minute hands
  - Stopwatch . . . . . The alarm is set on a 12-hour basis.  
Minute and 1/5-second hands  
The stopwatch can measure up to 30 minutes in 1/5 seconds.
- 6. Battery . . . . . SEIKO SR927W, 1 piece
- 7. IC (Integrated Circuit) . . . . . C-MOS-LSI

\*The specifications are subject to change without prior notice, for product improvement.