PULSAR

CAL. V658
CHRONOGRAPH

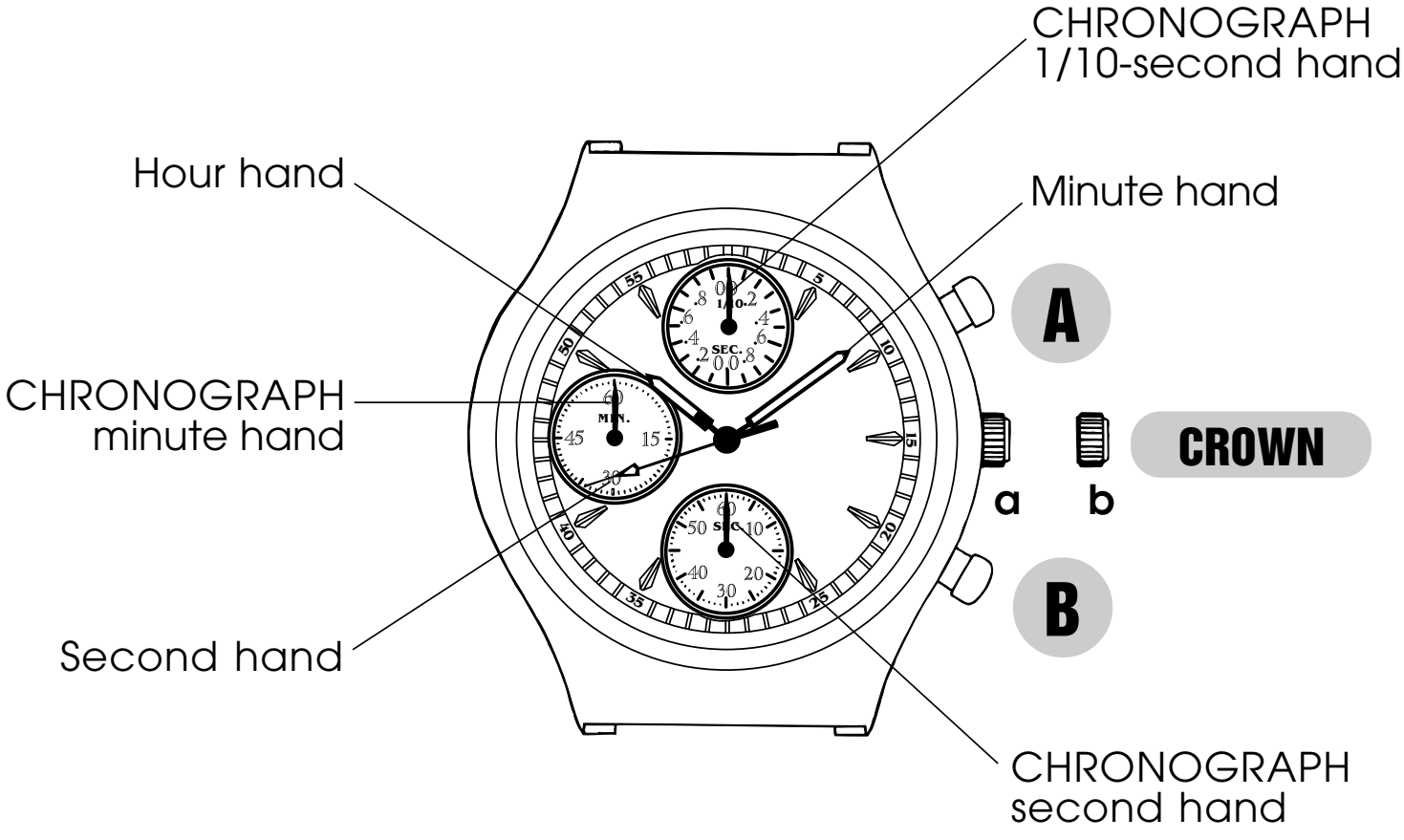
TIME

- Hour, minute and second hands

CHRONOGRAPH

- Measures up to 60 minutes in 1/10 second increments.
- Split time measurement

DISPLAY AND CROWN/BUTTONS

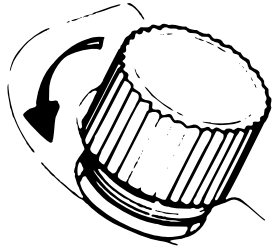


a: Normal position **b: Extended position**

SCREW DOWN CROWN

[for models with screw down crown]

Unlocking the crown



1. Turn Crown counterclockwise until you no longer feel the threads turning.
2. Crown can be pulled out.

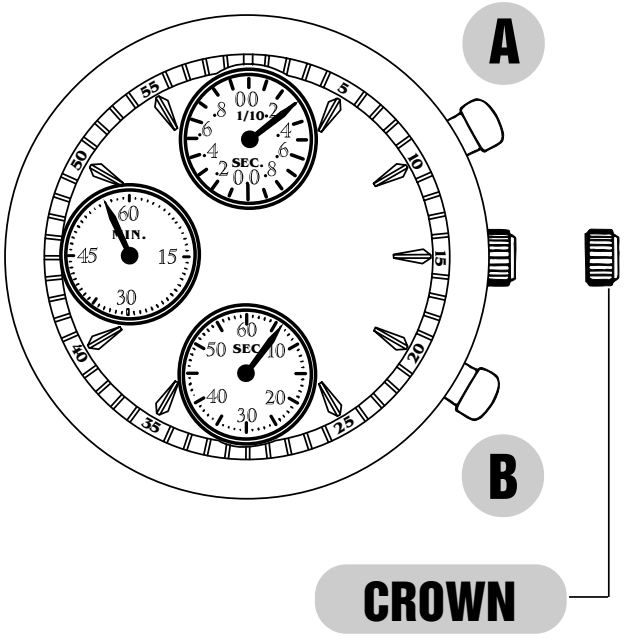
Locking the crown

1. Push Crown back in to normal position.
2. Turn Crown clockwise while pressing it lightly until tight.

ADJUSTING CHRONOGRAPH HAND POSITION

- Before setting the time, be sure to check that the CHRONOGRAPH hands are in "0" position when the chronograph is reset. (For resetting the chronograph, see "CHRONOGRAPH" on page 6)

** If any of the CHRONOGRAPH hands do not return to "0" position, follow the procedure below to reset the hands.*



CROWN — Pull out.

▼

A — Press repeatedly to reset CHRONOGRAPH 1/10-second hand to "0" position.

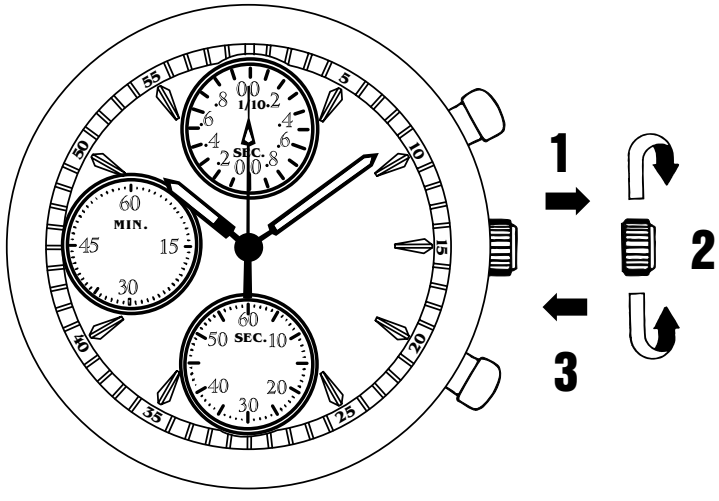
▼

B — Press repeatedly to reset CHRONOGRAPH second and minute hands to "0" position.

▼

CROWN — Push back in to normal position.

TIME SETTING



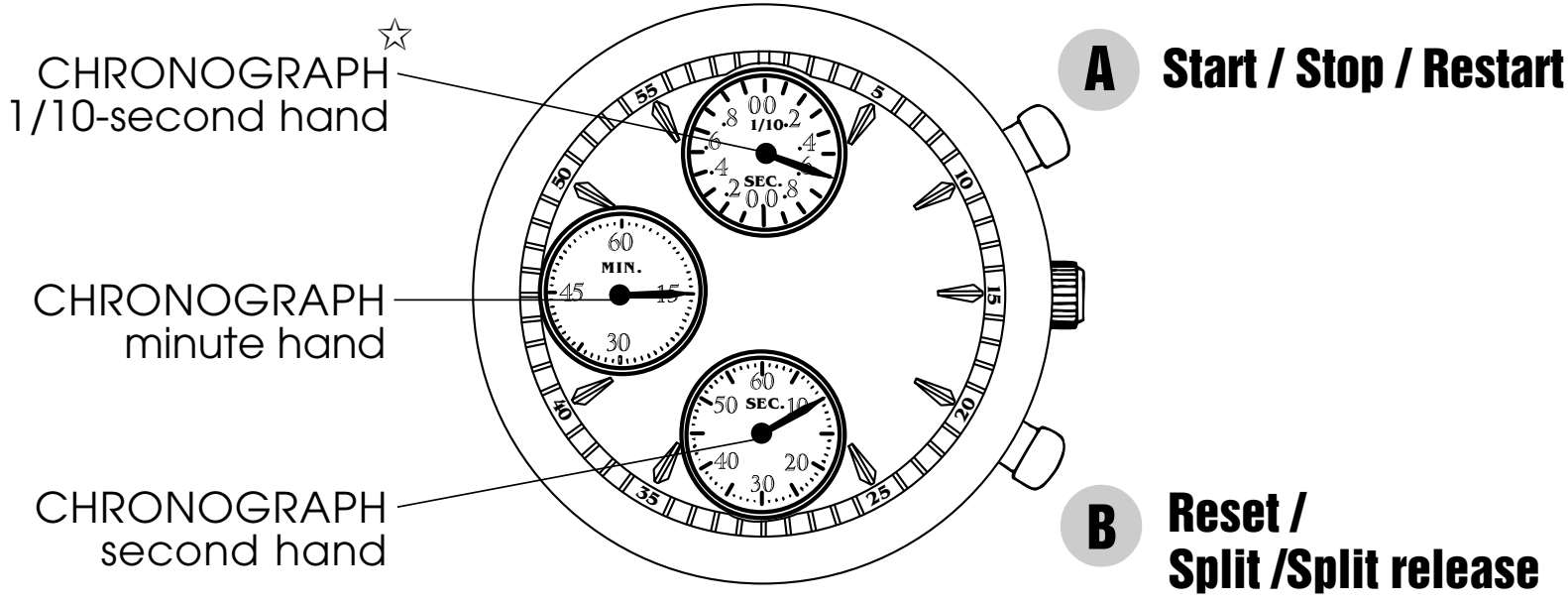
CROWN

1 Pull out when Second hand is at the 12 o’clock position.

2 Turn to set Hour and Minute hands.

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

CHRONOGRAPH



Ex.: 15 minutes and 10.6 seconds

☆ After the measurement exceeds 1 minute, the CHRONOGRAPH 1/10-second hand stays at “0” position.
When the measurement is stopped, it will move to indicate the elapsed 1/10 seconds.

TACHYMETER

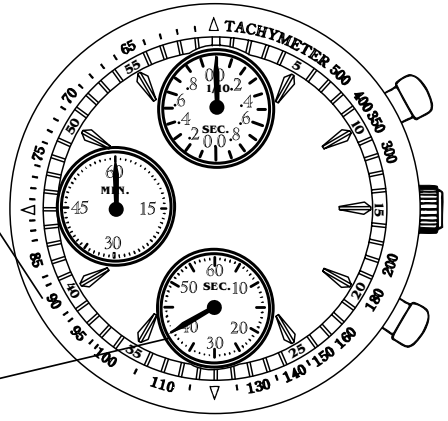
[for models with tachymeter scale on the dial]

To measure the hourly average speed of a vehicle

Ex. 1

Tachymeter scale: "90"

CHRONOGRAPH second hand: 40 seconds



"90" (tachymeter scale figure) x 1 (km or mile) = 90 km/h or mph

1 Use the chronograph to determine how many seconds it takes to go 1 km or 1 mile.

▼

2 Locate the second marker on the main dial that corresponds to the measured seconds, and the tachymeter scale it indicates gives the average speed per hour.

Tachymeter scale can be used only when the time required is less than 60 seconds.

Ex. 2: If the measuring distance is extended to 2 km or miles or shortened to 0.5 km or miles and CHRONOGRAPH second hand indicates "90" on

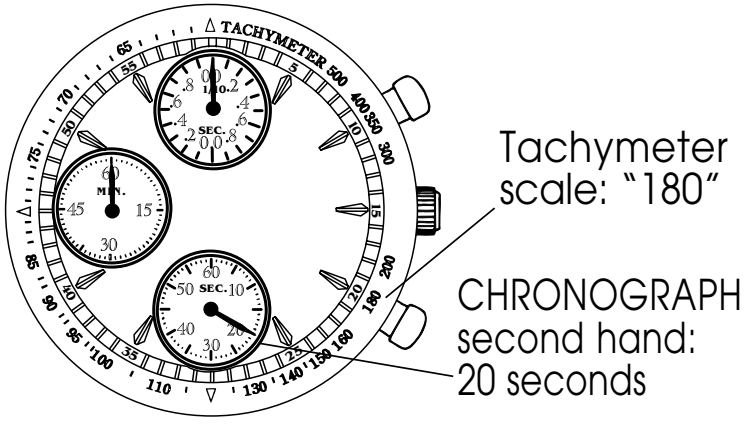
tachymeter scale:

"90" (tachymeter scale figure) x 2 (km or mile) = 180 km/h or mph

"90" (tachymeter scale figure) x 0.5 (km or mile) = 45 km/h or mph

To measure the hourly rate of operation

Ex. 1



"180" (tachymeter scale figure) x 1 job = 180 jobs/hour

1 Use the chronograph to measure the time required to complete 1 job.

▼

2 Locate the second marker on the main dial that corresponds to the measured seconds, and the tachymeter scale it indicates gives the average number of jobs accomplished per hour.

Ex. 2: If 15 jobs are completed in 20 seconds:

"180" (tachymeter scale figure) x 15 jobs = 2700 jobs/hour

NOTES ON OPERATING THE WATCH

ADJUSTING CHRONOGRAPH HAND POSITION

- The "0" position of the CHRONOGRAPH 1/10-second hand differs depending on the models.
  * *Some models have the "0" position of the CHRONOGRAPH 1/10-second hand at 3 and 9 o'clock sides of the small dial. In that case, check if the hand is level with its both ends pointing to those "0" positions.*
- The CHRONOGRAPH minute hand moves correspondingly with the CHRONOGRAPH second hand.
- The hands move quickly if the respective buttons are kept pressed.

TIME SETTING

- When setting the minute hand, first advance it 4 to 5 minute ahead of the desired time and then turn it back to the exact minute.
- While the crown is at the extended position, do not press the buttons. Otherwise, the CHRONOGRAPH hands will move. To reset them to "0" position, see "ADJUSTING CHRONOGRAPH HAND POSITION" on page 4.

CHRONOGRAPH

- While the chronograph is counting, do not pull out the crown to set the time. Otherwise, the chronograph operation cannot be made.

- The CHRONOGRAPH 1/10-second scale and hand differ in design and shape depending on the models.

  ** Some models have the CHRONOGRAPH 1/10-second scale graduated on the upper half of the small dial and the hand which is so designed that both ends can indicate the elapsed 1/10 second. In that case, read the marker on the scale where either end of the hand points to.*

BATTERY CHANGE

Battery life : Approx. 2 years

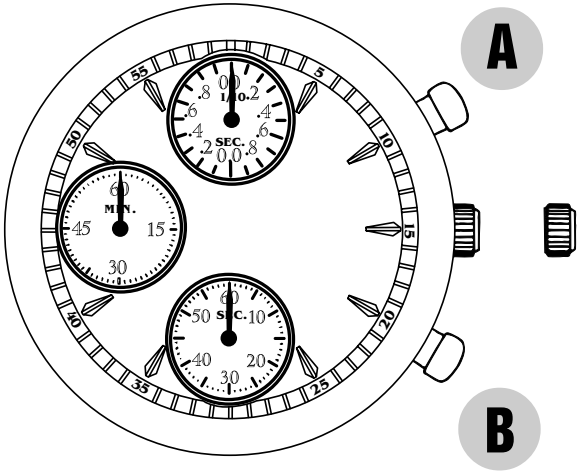
Battery : SEIKO SR920SW

- *If the chronograph is used for more than 60 minutes a day, the battery life may be less than the specified period.*
- *As 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.*

● *We recommend that you contact an AUTHORIZED PULSAR DEALER for battery replacement.*

● Necessary procedure after battery change

After the battery is replaced with a new one, or in case any of the hands should move improperly, follow the procedure below to reset the hands to “0” position.



CROWN — Pull out.

▼

A and **B** — Press and hold at the same time for 2 seconds. *

▼

A — Press repeatedly to reset CHRONOGRAPH 1/10-second hand to “0” position. **

▼

B — Press repeatedly to reset CHRONOGRAPH second and minute hands to “0” position. **

▼

CROWN — Turn to set the time.

▼

Push back in to normal position.

** The CHRONOGRAPH second hand turns half a circle counterclockwise and then returns where it was. The CHRONOGRAPH 1/10-second hand turns a full circle clockwise and stops.*

*** The hands move quickly if the respective buttons are kept pressed.*

⚠ WARNING

- 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, tamper with or heat the battery, and never expose it to fire. The battery may burst, become very hot or catch fire.

⚠ CAUTION

- The battery is not rechargeable. Never attempt to recharge it, as this may cause battery leakage or damage to the battery.

TO PRESERVE THE QUALITY OF YOUR WATCH

WATER RESISTANCE

● Non-water resistant

- If the watch becomes wet, have it checked by an AUTHORIZED PULSAR DEALER or SERVICE CENTER.

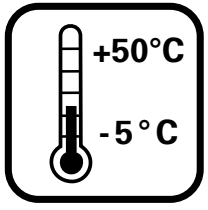
● Water resistant 5/10/15/20 bar

- Before using in water, be sure the crown is pushed in completely.
- Do not operate the crown and buttons when the watch is wet or in water. If used in sea water, rinse the watch in fresh water and dry it completely.
- When taking a shower with the water resistant 5 bar watch, or taking a bath with the water resistant 10, 15 or 20 bar watch, be sure to observe the following:
  * Do not operate the crown or push the buttons when the watch is wet with soapy water or shampoo.
  * If the watch is left in warm water, a slight time loss or gain may be caused. This condition, however, will be corrected when the watch returns to normal temperature.

** 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.*

*** We recommend that you wear a PULSAR Diver's Watch for scuba diving.*

TEMPERATURES



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

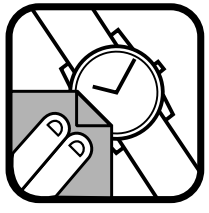
Temperatures over 50° C (122° F) may cause battery leakage or shorten the battery life. Do not leave your watch in very low temperatures below –5° C (+23° F) for a long time since the cold may cause a slight time loss or gain.

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

MAGNETISM

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

CARE OF CASE AND BRACELET

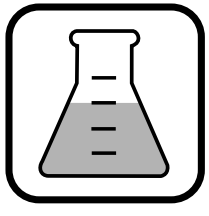


To prevent possible rusting of the case and bracelet caused by dust, moisture and perspiration, wipe them periodically with a soft dry cloth.

SHOCKS & VIBRATION

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.

CHEMICALS

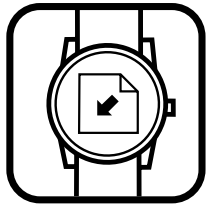


Be careful not to expose the watch to solvents, mercury, cosmetic spray, detergents, adhesives or paints. Otherwise, the case, bracelet, etc. may become discolored, deteriorated or damaged.

PERIODIC CHECK

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

PRECAUTION REGARDING CASE BACK PROTECTIVE FILM



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