

PULSAR

CAL. Y182, 7T32 ALARM CHRONOGRAPH

TIME/CALENDAR

Hour & minute hands with small second hand
Date displayed in numerals

ALARM

Can be set on a 12-hour basis with small alarm hands.

STOPWATCH

Measures up to 30 minutes in 1/5 second increments.

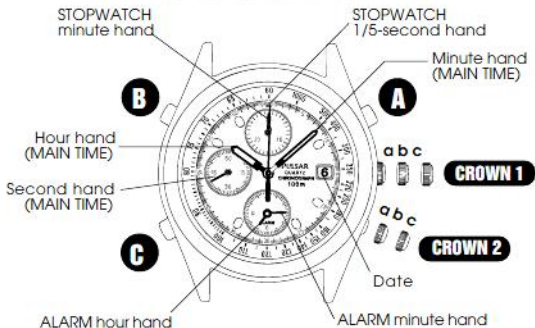
TACHYMETER

For models with tachymeter scale

ENGLISH

DISPLAY AND CROWNS/BUTTONS

There are three buttons and two crowns.



a: Normal position

b: First click

c: Second click

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.

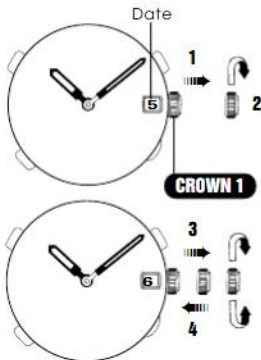


Locking the crown

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



DATE SETTING

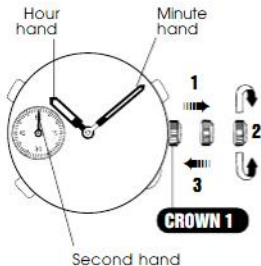


CROWN 1

- 1 Pull out to first click.
- ▼
2 Turn clockwise until the date for the previous day appears.
- ▼
3 Pull out to second click and turn until the desired date appears.
- ▼
4 Push back in to normal position.

TIME SETTING

CROWN 1



1 Pull out to second click 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.

English

ALARM

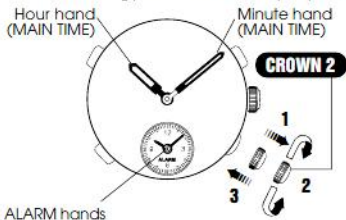
Alarm time is set on a 12-hour basis and indicated by ALARM hour and minute hands that move independently of MAIN TIME hands.

ALARM SETTING

1 Adjustment of ALARM hands

After the main time is adjusted, follow the procedure below, and then set the alarm.

** The following procedure is necessary only after the main time is adjusted.*



CROWN 2

- 1 Pull out to second click.



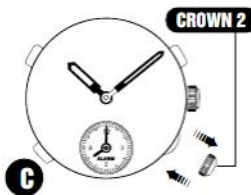
- 2 Turn to set ALARM hands to the current time (MAIN TIME).



- 3 Push back in to normal position.

2 Alarm time setting

* Once ALARM hands are adjusted to the main time, alarm time setting can be made only by following the procedure below.



CROWN 2

Pull out to first click.



Press repeatedly to set ALARM hands to the desired alarm time.



CROWN 2

Push back in to normal position.

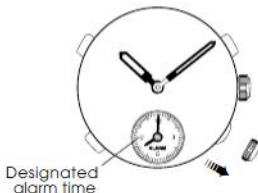
English

ALARM ENGAGEMENT/DISENGAGEMENT

1 Alarm engagement

CROWN 2

Pull out to first click.



2 Alarm disengagement

CROWN 2

Push back in to normal position.



● Alarm rings at the designated time for 20 seconds.

* To stop it manually, press **Button A, B or C**, or push **CROWN 2** back in to normal position.

STOPWATCH

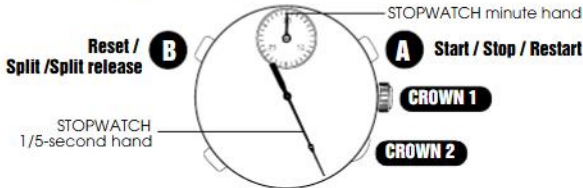
Stopwatch measures up to 30 minutes in 1/5 second increments.
After 30 minutes, it will start counting again from "0" repeatedly up to 6 hours.

STOPWATCH OPERATION

● Before using the stopwatch:

- 1 Check that **CROWNS 1 and 2** are set at normal position.
- 2 Press **Button B** to reset STOPWATCH hands to "0" position.

** If the hands do not return to "0" position, follow the procedure in "ADJUSTING THE HAND POSITION" (page 12).*



TACHYMETER

[for models with tachymeter scale on the dial]

To measure the hourly average speed of a vehicle

Ex. 1

STOPWATCH
second
hand:
40 seconds

Tachymeter
scale: "90"



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

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



2 Tachymeter scale indicated by STOPWATCH second hand 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 STOPWATCH 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 stopwatch to measure the time required to complete 1 job.



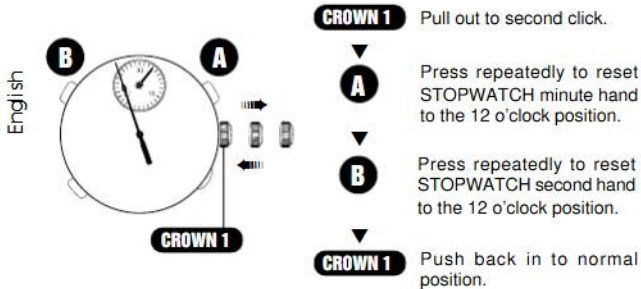
2 Tachymeter scale indicated by STOPWATCH second hand gives the average number of jobs accomplished per hour.

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

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

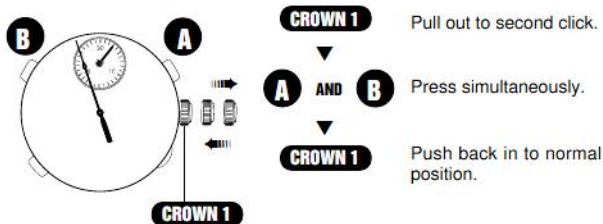
ADJUSTING THE HAND POSITION

If **STOPWATCH** 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.



RESETTING THE BUILT-IN IC

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



English

NOTES ON OPERATING THE WATCH

DATE SETTING

- Do not set the date between 9:00 p.m. and 3:00 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 this period, set the date and then reset the correct time.*
- It is necessary to adjust the date at the end of February and 30-day months.

TIME SETTING

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

ALARM

- When setting ALARM minute hand, advance it 4 to 5 minutes ahead of the desired time and then turn it back to the exact minute.
- Alarm hands move quickly if Button C is kept pressed.

- If CROWN 2 is pulled out to first click within 1 minute after being pushed back in to normal position, the alarm sounds.
- If CROWN 2 is pulled out to second click, the designated alarm time is canceled with a warning beep.
 - * In that case, set ALARM hands to MAIN TIME again, push CROWN 2 back in to normal position, and then, pull it out to first click and set the desired alarm time again. However, if CROWN 2 is pushed back in to normal position before the warning beep stops, the designated alarm time will not be canceled.

STOPWATCH

- If CROWN 1 is pulled out to second click, STOPWATCH hands are reset to "0" position.
- If CROWN 2 is pulled out to first or second click, STOPWATCH hands are reset to "0" position.
- When stopwatch has been reset and Button A is pressed before the hands reach "0" position, stopwatch still starts counting when Button A is pressed.

ADJUSTING THE HAND POSITION

- Hands move quickly if the respective buttons are kept pressed.
- After adjusting the hand position, set the main time.

RESETTING THE BUILT-IN IC

- Before using the watch again, be sure to set the main time, adjust the position of STOPWATCH hands and set the alarm.

BATTERY CHANGE

**2
Years**

Battery life : Approx. 2 years

Battery : SEIKO SR927W

- *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.*

● **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.

** If the alarm is used while Second hand is moving at two-second intervals, the watch may stop operating. Replace the battery as soon as possible.*

**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 crowns are pushed in completely.
- Do not operate the crowns 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 crowns 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 60° C (140° F) may cause battery leakage or shorten the battery life. Do not leave your watch in very low temperatures 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.

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, crowns, 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.