TMI
TIME MODULE

TECHNICAL GUIDE
&
PARTS CATALOGUE

Cal.VD57B

ANALOGUE QUARTZ

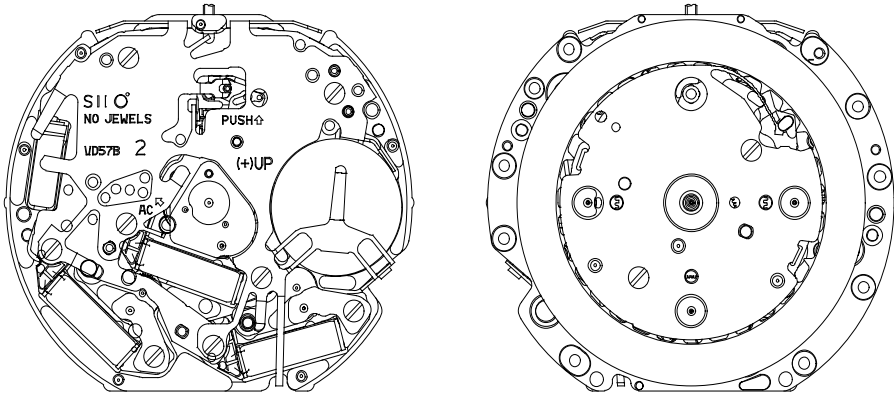# SII Products

PARTS CATALOGUE / TECHNICAL GUIDE

Cal.VD57B

[SPECIFICATION]

Cal. No. / Item		VD57B
Movement		
Movement size	Outside diameter	φ 29.50 mm (12H - 6H) × 26.00 mm
	Casing diameter	φ 28.80 mm (12H - 6H)
	Total height	4.57 mm
Time indication		3 Hands (Hour , Minute , Second) Chronograph (Minute , Second , 1/10 second) Calendar
Driving System		Two pole stepping motor Step motor 3 pieces

Additional mechanism		Electronic circuit reset switch
		Second setting device
		[Time]
		  Indicated by the Hour , Minute , Second and Calendar
		[Stop watch]
		  Up to 1 minutes in 1/10 second (2 seconds per round)
		  Up to 60 minutes in 1 second split time

Antimagnetic		$\geqq$ 1600 A/m
Accuracy		Less than ± 20seconds : Monthly rate at normal temperature range
Battery		SR920SW (SEIZAIKEN) Silver oxide battery φ 9.5 × t 2.0 mm Battery life is approximately 2 years
Measuring gate by quartz tester		Use 10-second gate *Set the winding stem with crown at the normal position
Jewels		0 Jewel

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PARTS CATALOGUE

Disassembling procedures Figs.	① ⇒ �	Lubricating : Types of oil	Oil quantity
Reassembling procedures Figs.	� ⇒ ①	🖊 Moebius A	⊂⊃ Normal quantity
		🖊 Moebius F	

① Hour, minute second hands

② Chronograph minute, second and 1/10 second hands

③ Dial

④ 0012 079
Auxiliary train wheel bridge screw

⑤ 0808 368
Date dial guard

⑥ Date dial

⑦ 0126 368
Auxiliary train wheel bridge

⑧ 0806 368
Date corrector wheel

⑪ 0817 368
Intermediate date driving wheel

⑨ 0810 368
Date jumper

⑩ 0802 368
Date driving wheel

⑮ 0888 009
Chronograph second wheel

⑯ 0885 002
Intermediate chronograph second wheel

⑰ 0886 003
Intermediate chronograph minute wheel and pinion (B)

⑫ 0836 369
Intermediate wheel for date corrector holder

⑬ 0737 891
Intermediate wheel for date corrector (C)

⑱ 0902 008
Chronograph minute wheel

⑭ 0962 891
Intermediate wheel for date corrector (B)

⑲ 0886 001
Intermediate chronograph minute wheel and pinion (A)

⑳ 0885 002
Intermediate chronograph second wheel

㉑ 0888 009
Chronograph second wheel

㉒ 0271 407
Hour wheel

*All parts code are subject to change without notice.

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23 Battery

24 0351 177
Winding stem

25 0012 079
Switch spring screw

25 0012 079
Switch spring screw

26 4245 402
Switch spring

29 0012 079
Train wheel bridge (B) screw

27 4004 259
Circuit block

30 0125 331
Train wheel bridge (B)

28 4270 358
Battery connection(-)

31 0701 014
Fifth wheel and pinion (B)

32 4146 177
Step rptor (B)

35 0012 079
Train wheel bridge (B) screw

33 4002 923
Coil block (B)

36 0125 331
Train wheel bridge (B)

34 4239 357
Rotor stator (B)

37 4146 177
Step rotor (B)

38 4002 923
Coil block (B)

39 4239 357
Rotor stator (B)

40 0701 014
Fifth wheel and pinion (B)

*All parts code are subject to change without notice.

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41 0125 248
Train wheel bridge (A)

42 0241 178
Fourth wheel and pinion

44 0701 904
Fifth wheel and pinion (A)

43 0231 904
Third wheel and pinion

45 4146 890
Step rotor (A)

46 0261 034
Minute wheel and pinion

47 0221 157
Center wheel and pinion

48 0281 904
Setting wheel

49 4002 904
Coil block (A)

50 4239 357
Rotor stator (A)

51 0391 368
Train wheel setting lever

52 0383 368
Setting lever

53 0384 470
Yoke

54 0282 890
Clutch wheel

55 0962 890
Intermediate wheel
for date corrector (A)

*All parts code are subject to change without notice.

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Remark :

⑥ Date dial

Part code	Position of crown	Position of date frame	Color of figure	Color of background
0878 220	3H	3H	Black	white
0878 221	3H	3H	white	Black

* All parts code are subject to change without notice.

・The explanation here is only for the particular point of Cal.VD57B   Tweezers

1.REMARKS ON INSTALLING THE BATTERY

1) After the battery is replaced with a new one or after the
   battery is reinstalled following the repairing procedures,
   Be sure to touch the short-circuit the AC terminal of circuit
   block and the switch spring with conductive tweezers
   to reset the circuit as illustrated at right.
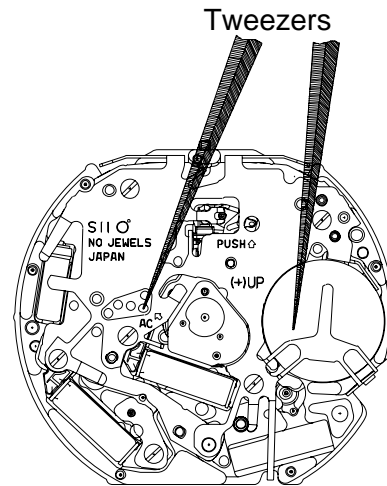
2) When the battery replaced with a new one, the time information stored in the built-in IC and
   the time indicated by the stopwatch hands do not correspond with each other.
   Reset the stopwatch hands to "0" position following the procedure below.
   If the stopwatch hands should move improperly, also follow the same procedure.

ORDER
(1) Pull out the crown.

(2) Keep the buttons "A" and "B" pressed at the same time
    for 2 seconds, and then, release the buttons.
    The stopwatch second hand move back and returned
    to where it was.

(3) Press button "A" or "B" to reset the stopwatch second
    and minute hands to"0" position.
    * By pressing button "A" , set the stopwatch 1/10 second hand.
    * By pressing button "B", set the stopwatch second and minute hands.

(4) Turn the crown to set the hour, and minute and 24-hour hands to
    the desired time, and push the crown back
    to the normal position.

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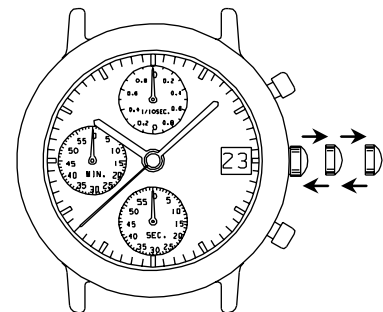
1.REMARKS ON INSTALLING THE BATTERY

(1) HAND
・How to install the hands
Place the movement directly on a flat metal plate or
the like and press in the hands.
* Install the hour , minute and second hands at the
"12"o'clock position.
* Install the chrono minute and second hands at the
"0"o'clock position.

Metal plate
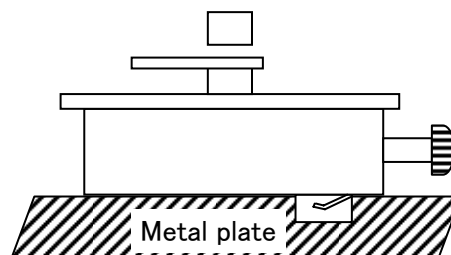
[Reference] The power of press hands
Minute & Hour Hands	< 5kg
Second Hand	< 5kg
Chrono Minute & Second	< 3kg

(2) Battery
・How to install the battery
① Remove the hook of the switch springs battery
clamp portion.
② Insert the battery sideways, and have the hook of
the switch springs battery clamp portion catch
the main plate.

Hook
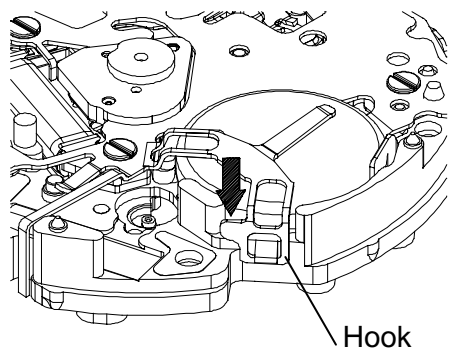
Battery clamp position

Hook　　　　　　　　　　　　　　Main plate
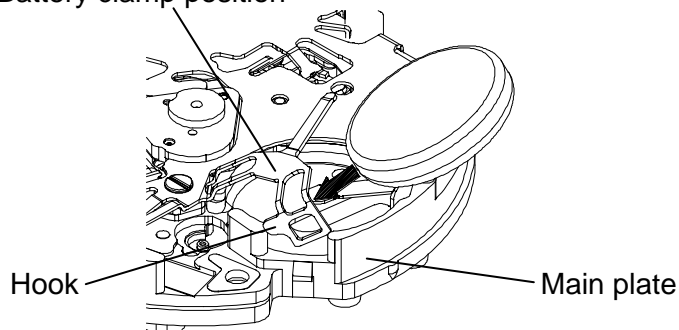
(3) Winding stem
・How to remove

While pushing the indented portion of the arrow pull out
the winding stem.

Push

SII ♂
NO JEWELS
JAPAN
VD57B
PUSH⇧
(+)UP
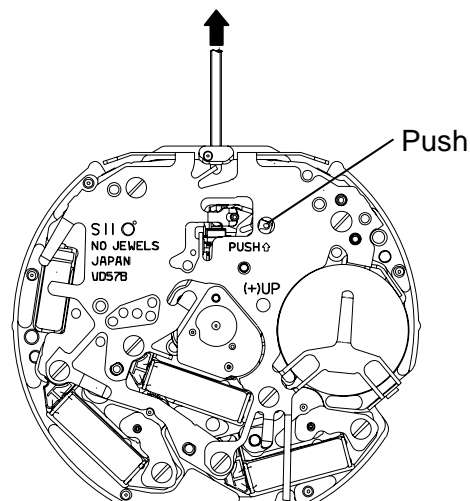
DISPLAY AND CROWN / BUTTON OPERATION

Stopwatch 1/10 second hand
(Move in 1/10 second increments)

Minute hand

Hour hand

Button "A"
In stopwatch function
Start / Stop

First click
Date setting

Stopwatch minute hand
(Move in minute increments)

Second click
Time setting

Crown at normal position

Second hand

Button "B"
In stopwatch function
Split / Slit release / Reset

Stopwatch second hand
(Move in second increments)
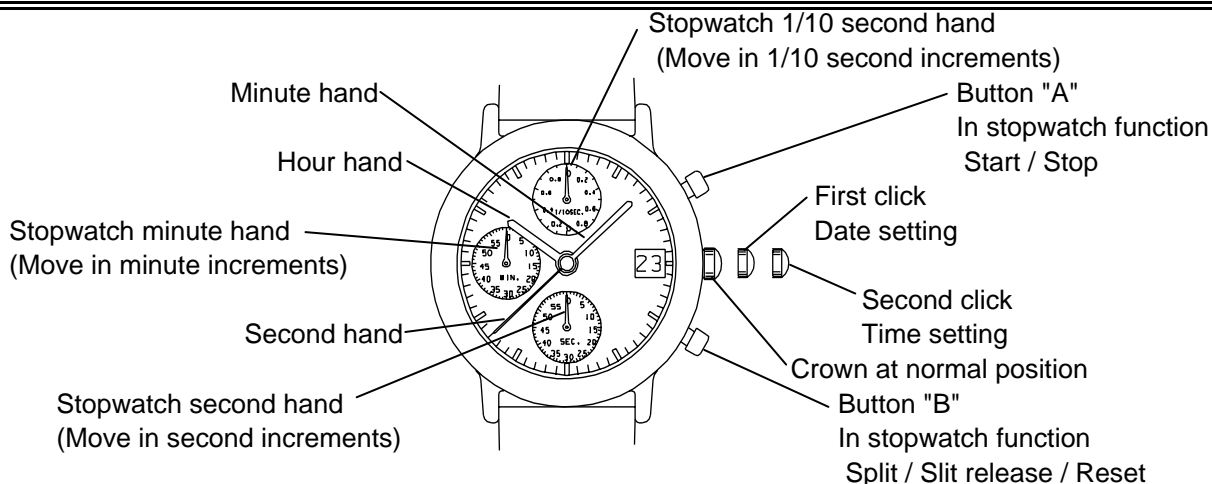
*The measurement time indicated by the stopwatch hands that move independently of center hands.
*Stopwatch 1/10 second hand moves for a first minute.
After one minute , it indicates the measurement time when it is stopped.

ADJUSTING THE STOPWATCH HAND POSITION

Before setting the time , check if the stopwatch 1/10 second , second and minute hands are in the "0"(12 o'clock) position.
*If the stopwatch is in use , press the button in the following order to reset it , and then , check if the hands
return to "0" position. (For details , see "HOW TO USE THE STOPWATCH")

* If the stopwatch is counting : A → B
* If the stopwatch is stopped : B
* If the split time is displayed : B → A → B

If either of the stopwatch hands are not in the "0" position , reset them following the procedure below.

Stopwatch minute hand

Stopwatch 1/10 second hand

A

B

Stopwatch second hand
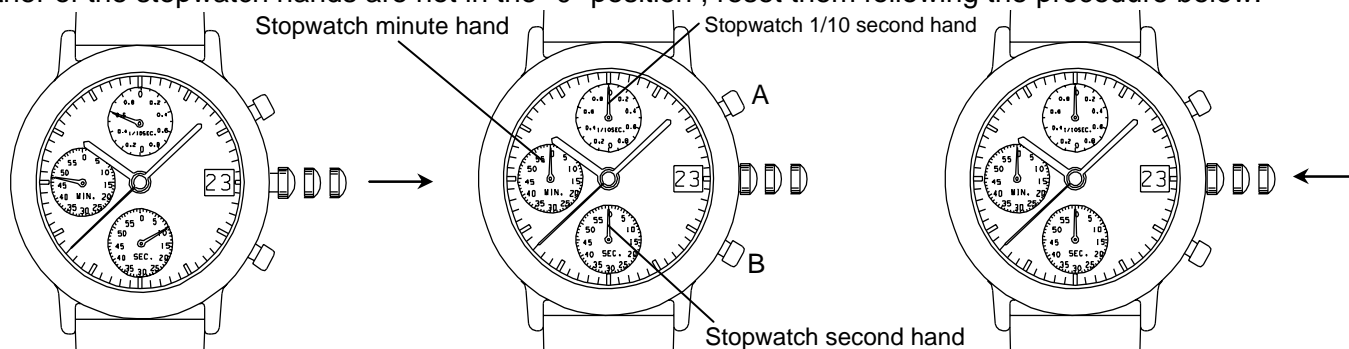
1.Pull out the crown

2.Press button A or B to reset the
stopwatch 1/10 second , second
and minute hands to "0"position.
*By pressing button A set the
Stopwatch 1/10 second hand.
*By pressing button B set the
Stopwatch second and minute
hands.

3.Push the crown back to
the normal position.

*The stopwatch minute hand moves correspondingly with the stopwatch second hand.
*The hands move quickly if the respective buttons are kept pressed.

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OPERATION

TIME SETTING
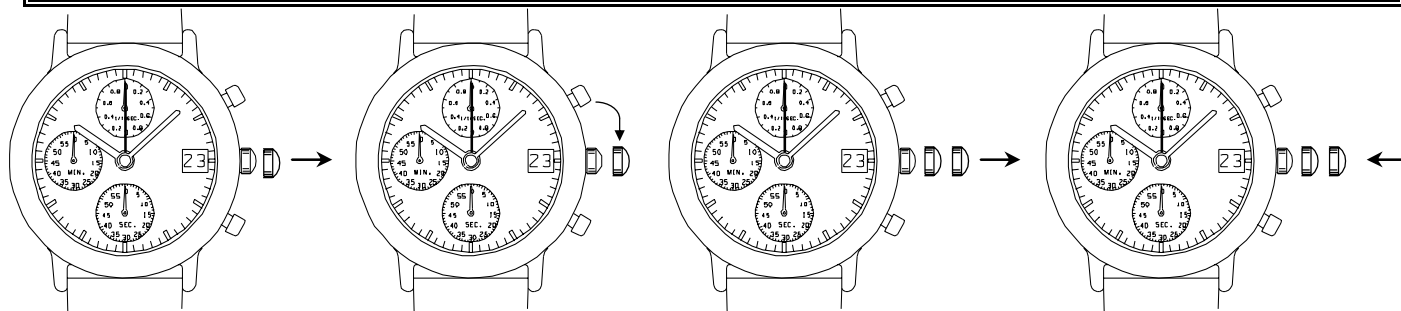
1.Pull out the crown to the first click.

2.Turn the crown clockwise until the previous day's date appears.

3.Pull out the crown to the second click when the second hand is at the 12 o'clock position. It will stop on the spot and advance the hour and minute hands by turning the crown. (Check that AM/PM is set correctly.)

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

*When the crown is at the second click position. Do not press any button. Otherwise, the chronograph hands will move.

*Do not set the date between 9:00 P.M. and 1:00 A.M.
Otherwise, the day 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.

HOW TO USE THE STOPWATCH

・The measurement time is indicated by the stopwatch hands that move independently of the center hands.
・The stopwatch can measure up to 60 minutes in second.
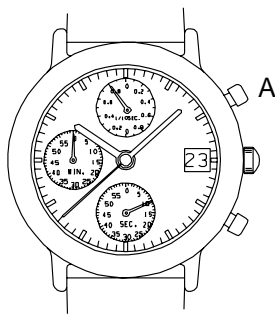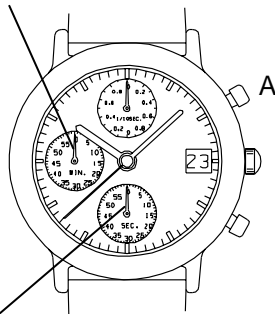 (The watch indicates the measurement time in second increments by ignoring off the 1/10 seconds obtained.)

(Standard measurement)
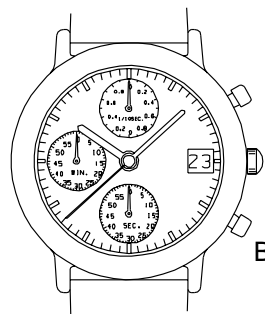Ex) 100m race (Press the buttons in the following order A → A → B)

START ⟶ STOP (Finish) ⟶ RESET (Reset to "0'00")
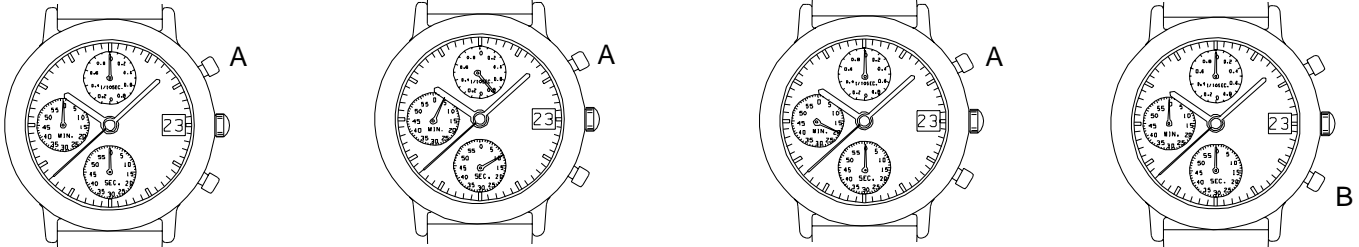
Stopwatch minute hand

Stopwatch second hand   9.8/10 second

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(Accumulated elapsed time measurement)
Ex) Basketball game (Press the buttons in the following order   A → A / A ··· → A → B)

START ⟶ STOP   RESTART ··· ⟶   STOP ⟶   RESET
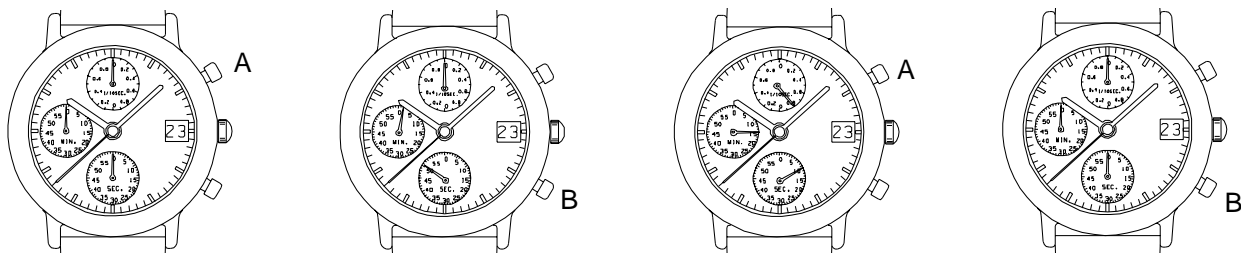(Start of game) (Time out) (Restart of game)   (Game over)

          5 minutes 10,8/10 seconds   20 minutes 00 seconds

*Restart and stop of the stopwatch can be repeated as many times as necessary by pressing button A

(Split time measurement)
Ex) 5,000m race (Press the buttons in the following order   A → B / B ··· → A → B)

START ⟶   SPLIT / ···⟶   STOP ⟶   RESET
          SPLIT RELEASE

          2 minutes 50 seconds   15 minutes 10 seconds

* Measurement and release of the split time can be repeated as many times as necessary
  by pressing button B.