

TECHNICAL GUIDE & PARTS CATALOGUE Cal.VD56B

ANALOGUE QUARTZ



PARTS CATALOGUE / TECHNICAL GUIDE

Cal.VD56B

| [SPECIFICATION] Version | | |
|-------------------------|------------------|--|
| Cal. No. | | VD56B |
| Movement | | SII O' NO JEMELS PUSHO (+)UP |
| Movement size | Outside diameter | φ29.50 mm (12H - 6H) × 26.00 mm |
| | Casing diameter | φ28.80 mm (12H - 6H) |
| | Total height | 3.97 mm |
| Time indication | | 3 Hands (Hour , Minute , Second) Chronograph (Minute , Second , 1/10 second) 24H indicator |
| 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 24-Hour hands [Stop watch] Up to 1 minutes in 1/10 second (2 seconds per round) Up to 60 minutes in 1 second Split time |
| Antimagnetic | | ≧ 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 | | Use 10-second gate |
| quartz tester Jewels | | *Set the winding stem with crown at the normal position 0 Jewel |
| 20.00 | | |



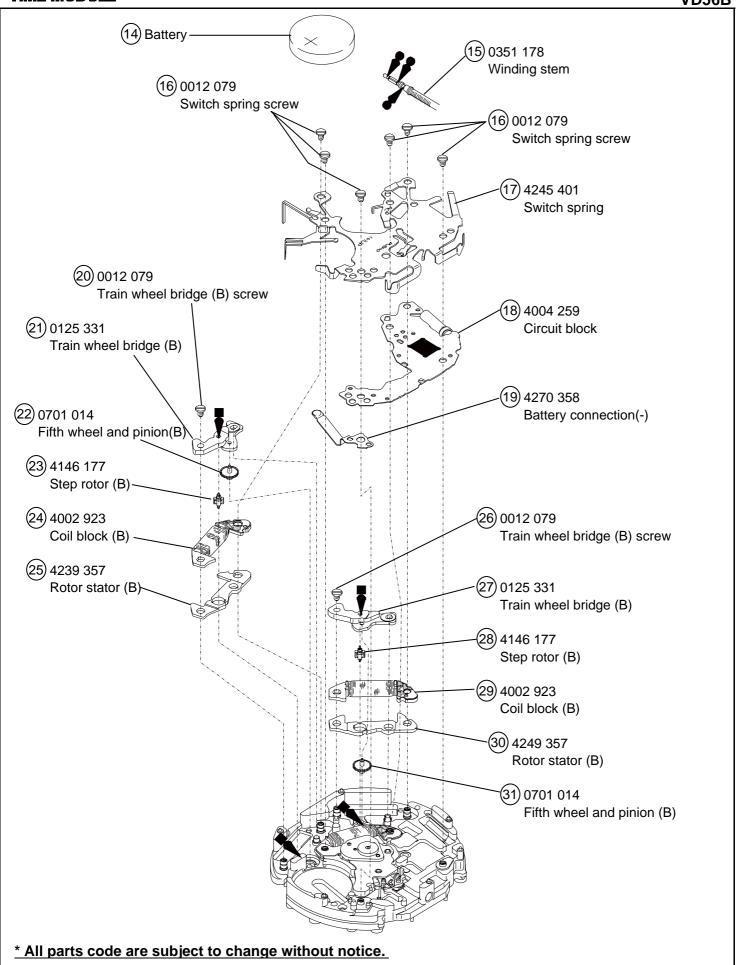
PARTS CATALOGUE

Version-03 VD56B

Disassembling procedures Figs. Lubricating: Types of oil Oil quantity Moebius A ∞ Normal quantity Reassembling procedures Figs. Moebius F (1) Hour, minute second hands Chronograph minute, second and 1/10 second hands 4) 0012 079 24-hour indicator Auxiliary train wheel bridge screw 3) Dial (5) 0126 357 Auxiliary train wheel bridge (11) 0157 011 (10) 0888 008 Small hour hand wheel Chronograph second wheel 0817 357 (9) 0885 002 Intermediate small hour wheel Intermediate chronograph second wheel 6) 0886 003 (7) 0902 007 Intermediate chronograph Chronograph minute wheel minute wheel and pinion (B) 9) 0885 002 Intermediate chronograph second wheel (8) 0886 001-Intermediate chronograph 10) 0888 008 minute wheel and pinion (A) Chronograph second wheel 13) 0271 406 Hour wheel

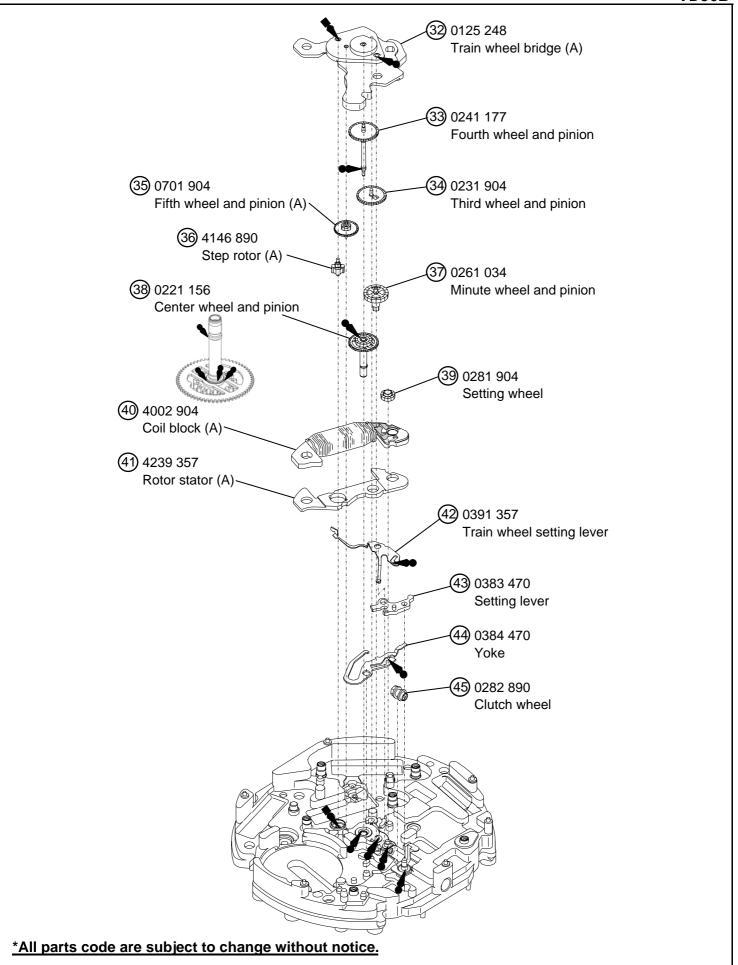


PARTS CATALOGUE





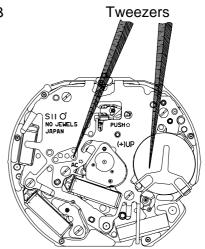
PARTS CATALOGUE





TECHNICAL GUIDE

- •The explanation here is only for the particular point of Cal.VD56B
- 1.REMARKS ON INSTALLING THE BATTERY
 - 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.

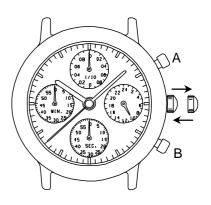


2) When the battery replaced with a new one, the time information stored in the built-in IC and the time indicated by the stopwatch hands do not correspond with each other. Reset the stopwatch hands to "0" position following the procedure below. If the stopwatch hands should move improperly, also follow 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.







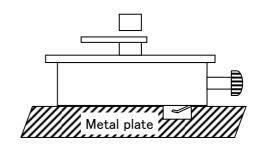
1.REMARKS ON INSTALLING THE BATTERY

(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.
- *Install the 24-hour indicator at the "24"position.

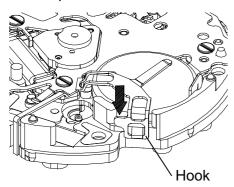


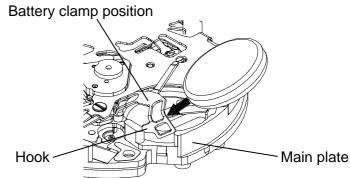
[Reference] The power of press hands

Minute & Hour Hands < 5kg
Second Hand < 5kg
Chrono Minute & Second < 3kg
24-Hour indicator < 3kg

(2) 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.

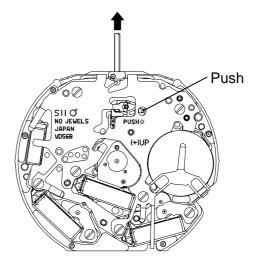




(3) Winding stem

·How to remove

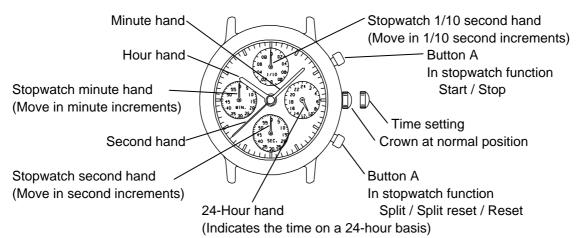
While pushing the indented portion of the arrow pull out the winding stem.







DISPLAY AND CROWN / BUTTON OPERATION



^{*}The measurement time indicated by the stopwatch hands that move independently of center hands.

After one minute, it indicates the measurement time when it is stopped.

ADJUSTING THE STOPWATCH HAND POSITION

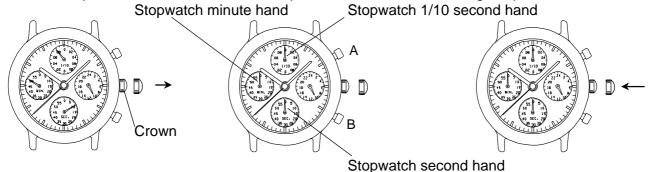
Before setting the time, check if the stopwatch 1/10 second, second and minute hands are in the "0"(12 o'clock) position. *If the stopwatch is in use, press the button in the following order to reset it, and then, check if the hands return to "0" position. (For details, see "HOW TO USE THE STOPWATCH")

* If the stopwatch is counting : $A \rightarrow B$

* If the stopwatch is stopped: B

* If the split time is displayed : $B \rightarrow A \rightarrow B$

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



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.

^{*}Stopwatch 1/10 second hand moves for a first minute.

^{*}The stopwatch minute hand moves correspondingly with the stopwatch second hand.

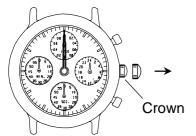
^{*}The hands move quickly if the respective buttons are kept pressed.





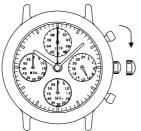
TIME SETTING

*Before setting the time, check that the chronograph measurement is stopped.



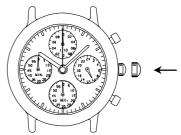
- 1.Pull out the crown when the second hand is at the 12 o'clock position. The second hand will stop on the spot.
- * Do not press any button.

 Otherwise, the chronograph hands will move.



2.Turn the crown to set the hour, minute and 24-hour hands to the desired time.
As the hour hand moves, the 24-hour hand also moves correspondingly.

When setting the hour hand, check that the 24-hour hand is set property.



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

HOW TO USE THE STOPWATCH

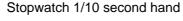
- •The measured time is indicated by the stopwatch hands that move independently of the center hands.
- •The stopwatch can measure up to 60 minutes in 1/10 seconds.

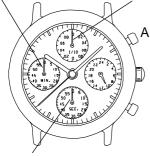
(Standard measurement)

Ex) 100m race (Press the buttons in the following order A \rightarrow A \rightarrow B)

START STOP (Finish) RESET (Reset to "0'00")

Stopwatch minute hand

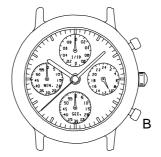




Stopwatch second hand



9.8/10 second

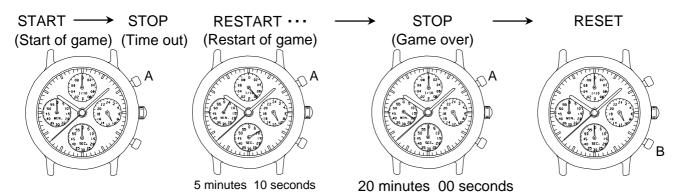






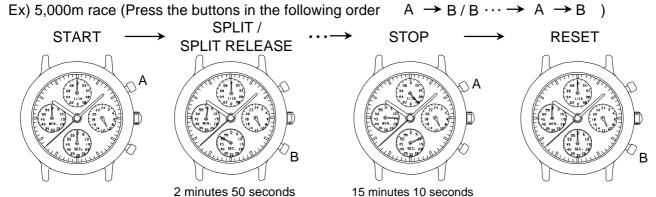
(Accumulated elapsed time measurement)

Ex) Basketball game (Press the buttons in the following order $A \rightarrow A/A \cdots \rightarrow A \rightarrow B$)



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

(Split time measurement)



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