

TECHNICAL GUIDE & PARTS CATALOGUE Cal.VD53C

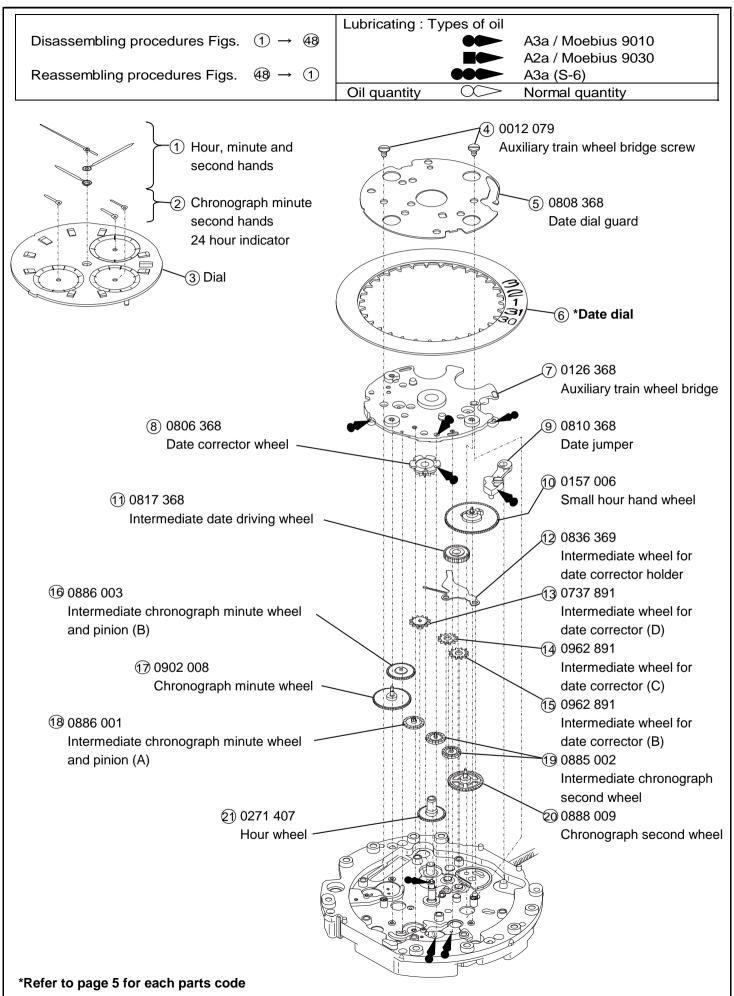
ANALOGUE QUARTZ



SPECIFICATION

| Item | Cal. No. | VD53C | | |
|---------------------------------|------------------|---|--|--|
| Movement | | NO JEWELS JAPAN VUOSAC (+)UIP | | |
| Movement size | Outside diameter | (φD) (3H - 9H) (12H - 6H) φ29.50 mm × 26.00 mm × — | | |
| | Casing diameter | (φD) (3H - 9H) (12H - 6H) φ28.80 mm × — × — | | |
| | Total height | 4.57 mm | | |
| Time indication | | 3 Hands (Hour, Minute, Second) Chronograph (Minute, Second) 24 hour indicator Calendar | | |
| Driving system | | Two pole stepping motor Step motor 2 pieces | | |
| Additional mechanism | | Electronic circuit reset switch Second setting device [Time] Indicated by the Hour, Minute, Second 24 hour hands [Stop watch] Up to 60 minutes in 1 second split time | | |
| Antimagnetic | | ≥ 1600 A/m | | |
| Accuracy | | Less than ± 20 seconds : Monthly rate at normal temperature range | | |
| Battery | | SR920SW (SEIZAIKEN) Silver oxide battery φ9.5 × t 2.0 mm Battery life is approximately 3 years | | |
| Measuring gate by quartz tester | | Use 10 second gate *Set the winding stem with crown at the normal position | | |
| Jewels | | 0 Jewel | | |





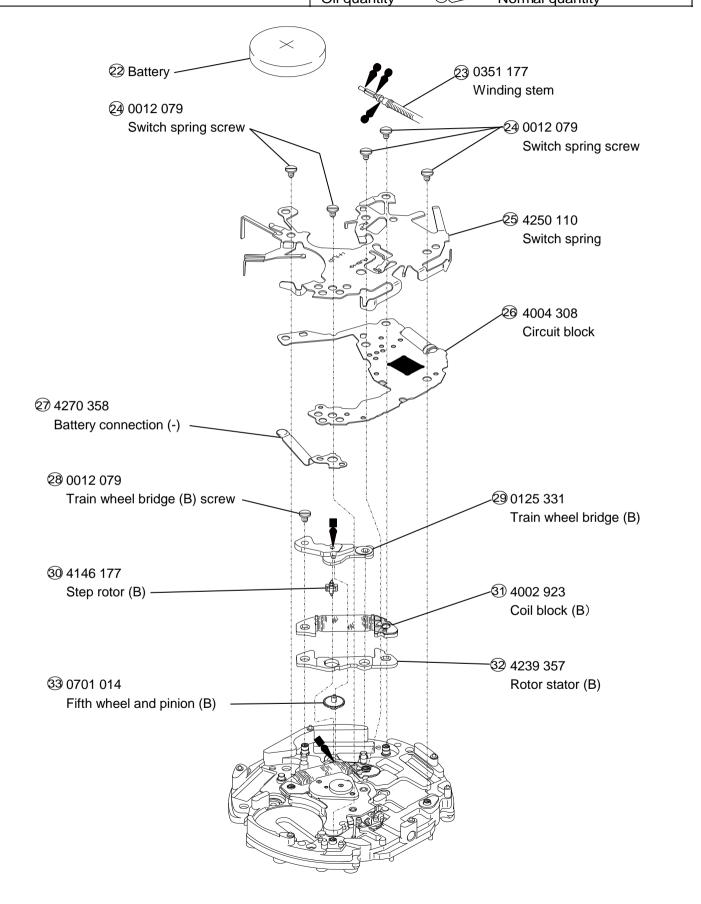


Disassembling procedures Figs. ① → 48

Reassembling procedures Figs.

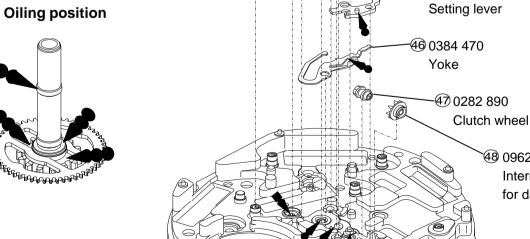
Lubricating: Types of oil A3a / Moebius 9010 A2a / Moebius 9030 A3a (S-6)







Lubricating: Types of oil Disassembling procedures Figs. A3a / Moebius 9010 A2a / Moebius 9030 $48 \rightarrow 1$ Reassembling procedures Figs. A3a (S-6) Oil quantity Normal quantity 34 0125 248 Train wheel bridge (A) 35 0241 178 Fourth wheel and pinion 37 0701 904 36 0231 904 Fifth wheel and pinion (A) Third wheel and pinion 38 4146 890 £9 0261 150 Step rotor (A) -Minute wheel and pinion **40** 0221 203 Center wheel and pinion **41** 0281 904 Setting wheel 42 4002 904 Coil block (A) 43 4239 357 Rotor stator (A) 44 0391 368 Train wheel setting lever 45 0383 368 Setting lever *1 Oiling position



48 0962 890

Intermediate wheel for date corrector (A)



Remark:

6 Date dial

| Part code | Position of crown | Position of date frame | Color of figure | Color of background |
|-----------|-------------------|------------------------|-----------------|---------------------|
| 0878 220 | 3H | 4.5H | Black | White |
| 0878 165 | 3H | 6H | Black | White |

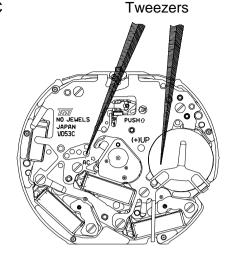
*All parts code are subject to change without notice.

TECHNICAL GUIDE

•The explanation here is only for the particular point of Cal.VD53C

1.REMARKS ON INSTALLING THE BATTERY

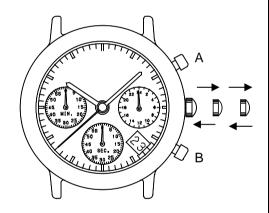
1) After the battery is replaced with a new one or after the battery is reinstalled following the repairing procedures, Be sure to touch the short-circuit the AC terminal of circuit block and the switch spring with conductive tweezers to reset the circuit as illustrated at right.



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 the crown out to the second click.
- ② Keep 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", the hands move counter clockwise.
 - * By pressing button "B", the hands move clockwise.
- 4 Turn the crown to set the hour, and minute and 24 hour hands to the desired time, and push the crown back in to the normal position.





TECHNICAL GUIDE

2.REMARKS ON DISASSEMBLING AND REASSEMBLING

(1) Hand

·How to install the hands

Please put on the metal plate so as to avoid 6 protrusions.(Right figure: place of red circle)

*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.

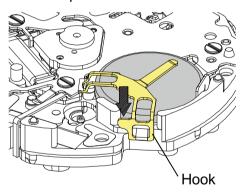
*Install the 24 hour indicator at the "24" position.

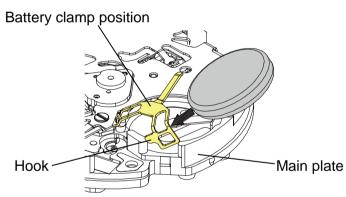
[Reference] The power of press hands

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



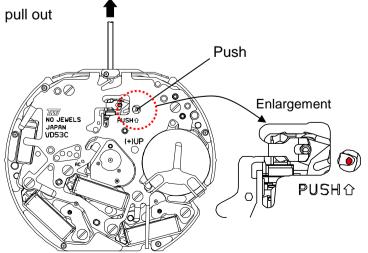
- How to install the battery
- ① Remove the hook of the switch springs battery clamp portion.
- ② Insert the battery sideways, and have the hook of the switch springs battery clamp portion catch the main plate.

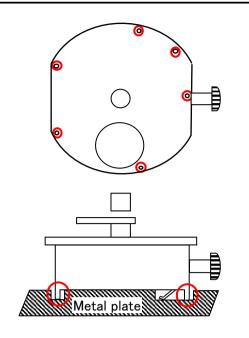




(3) Winding stem

• How to remove While pushing the indented portion of the arrow, pull out the winding stem.

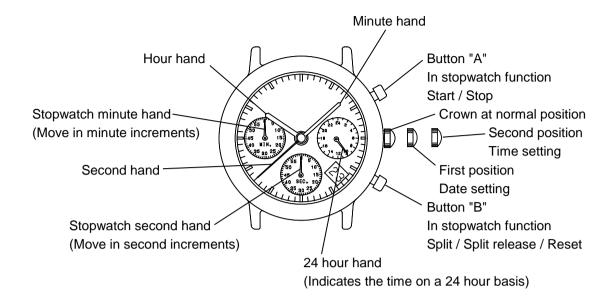




OPERATION



DISPLAY AND CROWN / BUTTON OPERATION



ADJUSTING THE STOPWATCH HAND POSITION

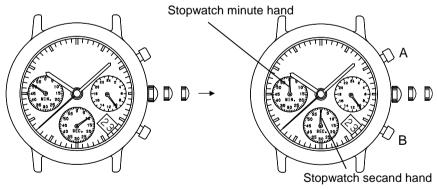
Before setting the time, check if the stopwatch second and minute hands are in the "0"(12 o'clock) position. *If the stopwatch is in use, press the button in the following order to reset it, and then, check if the hands return to "0" position. (For details, see "HOW TO USE THE STOPWATCH")

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

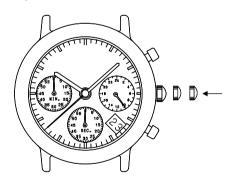
* If the stopwatch is stopped: B

* 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 the crown out to the second click.
- 2.Press button A or B to reset the stopwatch second and minute hands to "0" position.
- *By pressing button A the hands move counter clockwise.
- *By pressing button B the hands move clockwise.

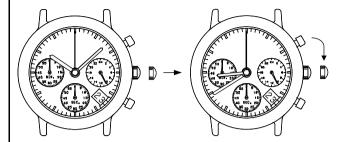


3. Push the crown back to the normal position.

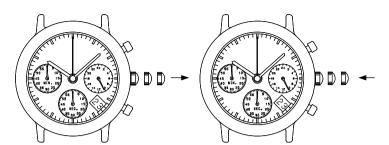
OPERATION



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 24 hour hand 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.

OPERATION



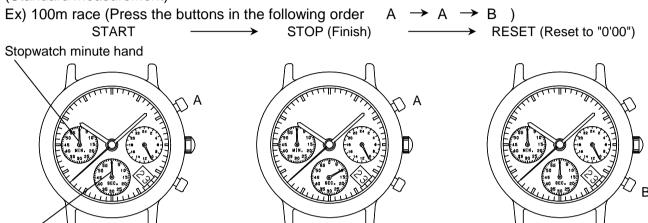
HOW TO USE THE STOPWATCH

- •The measurement time is indicated by the stopwatch hands that move independently of the center and 24 hour hands.
- •The stopwatch can measure up to 60 minutes in second.

(The watch indicates the measured time in second increments by ignoring off the 1/10 seconds obtained.)

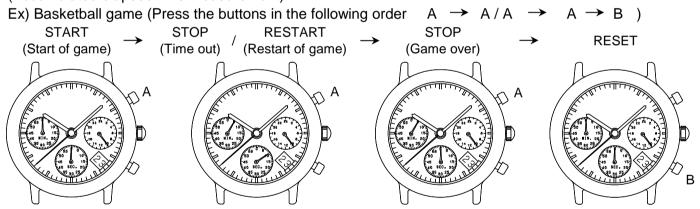
(Standard measurement)

Stopwatch second hand



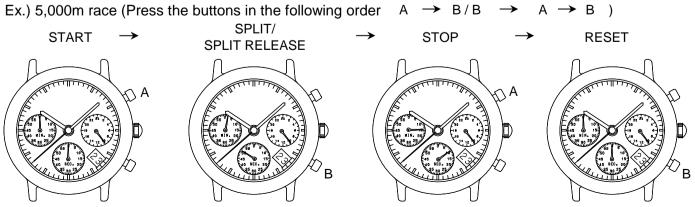
10 second

(Accumulated elapsed time measurement)



5 minutes 10 seconds 20 minutes 00 seconds

(Split time measurement)



2 minutes 50 seconds

15 minutes 10 seconds

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

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