

TECHNICAL GUIDE &

**PARTS CATALOGUE** 

**Cal.VC10/11E** 

**ANALOGUE QUARTZ** 



# PARTS CATALOGUE / TECHNICAL GUIDE

# Cal.VC10 / 11E

Version-01 Cal. No. VC10E VC11E Item Movement 13.00 mm: between 3 o'clock and 9 o'clock sides Outside diameter 15.55 mm: between 6 o'clock and 12 o'clock sides Movement Casing diameter 15.15 mm: between 6 o'clock and 12 o'clock sides size Total height 2.38 mm (including the battery) Time indication 2 Hands 3 Hands Driving system Step motor (Load compensated driving pulse system type) Electronic circuit reset switch Additional function Electronic circuit reset switch Second setting device Loss/Gain (Monthly rate) Less than 20 seconds at normal temperature range Frequency of crystal oscillator 32,768 Hz -5°C ~ +50°C Operational temperature range Nil Regulation system Measuring gate Use 10-second gate by QUARTZ TESTER SR521SW (Silver oxide battery) Battery life is approximately 2 years **Battery** Voltage: 1.55 V **Jewels** 0 jewel

# **PARTS CATALOGUE**

Version-03 Cal.VC10/11E

Disassembling procedures Figs.

(1)

⇒ 25

Lubricating: Types of oil

Oil quantity

Reassembling procedures Figs.

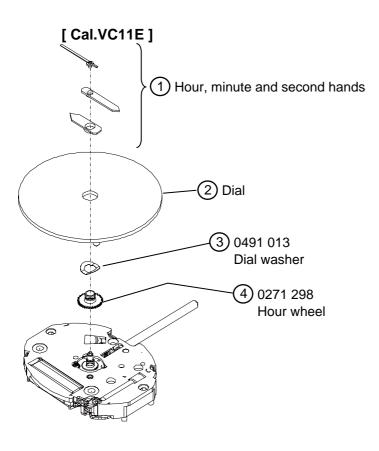
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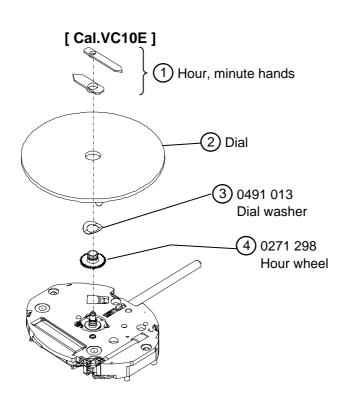
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Moebius AMoebius F

 $\infty$ 

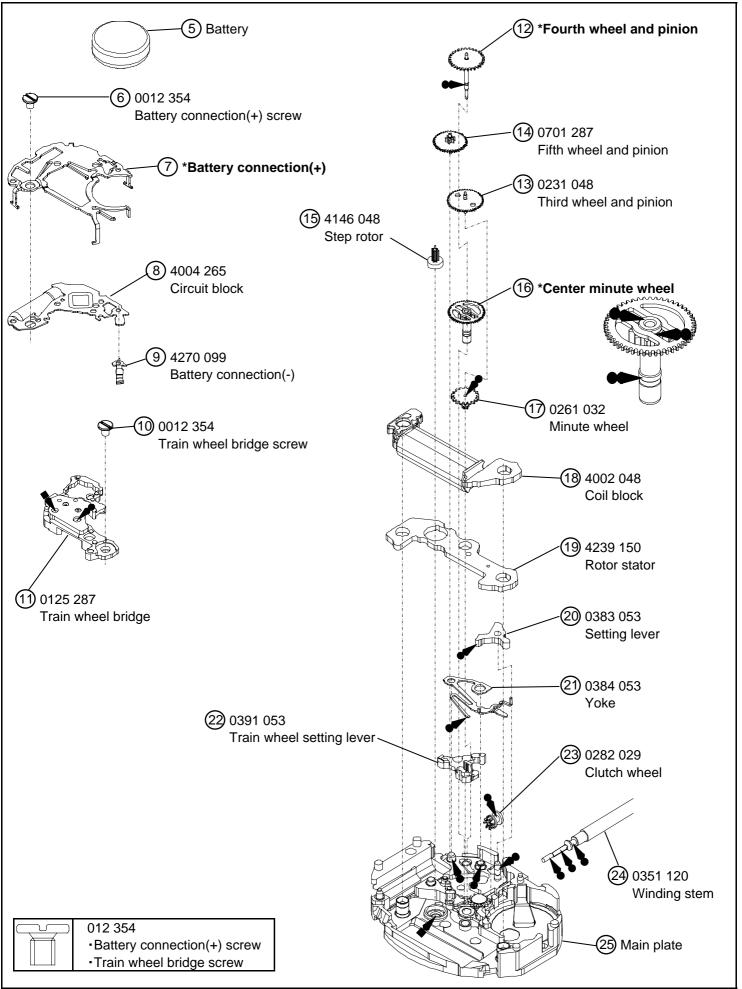
Normal quantity











# **PARTS CATALOGUE**

Version-02 Cal.VC10/11E

## Remarks:

Fourth wheel and pinion Center minute wheel Battery connection(+)

## [ Cal.VC10E ]

Center minute wheel : 0270 082 Fourth wheel and pinion : 0241 329 Battery connection(+) : 4271 216

## [ Cal.VC11E ]

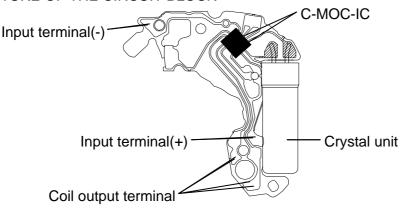
Center minute wheel : 0270 298 Fourth wheel and pinion : 0241 133 Battery connection(+) : 4271 217

\* All parts code are subject to change without notice.



# **TECHNICAL GUIDE**

- •The explanation here is only for the particular points of Cal.VC10/11E
- 1. STRUCTURE OF THE CIRCUIT BLOCK

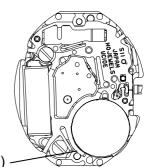


## 2. REMARKS ON DISASSEMBLING ANA REASSEMBLING

- (1) Hands
  - ·How to install

### Notes:

•When installing the hands, place the movement directly on a flat metal plate or the like, escaping the spring portion of the battery connection(+).

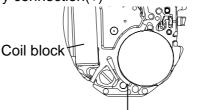


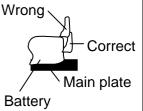
Spring portion of battery connection(+)

- (2) Battery
  - ·How to install

## Notes:

•When installing the battery, check that the battery connection(+) securely touches the side face of the battery.



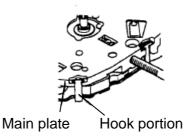


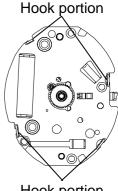
Battery connection(+)

- (3) Battery connection(+)
  - · How to install

#### Notes:

- ·Have the hook portions (4places) catch the main plate
- In disassembling and reassembling, take care not to deform the hook portions.
- After installing the battery connection(+), check that the four hook portions securely catch the main plate.





Hook portion

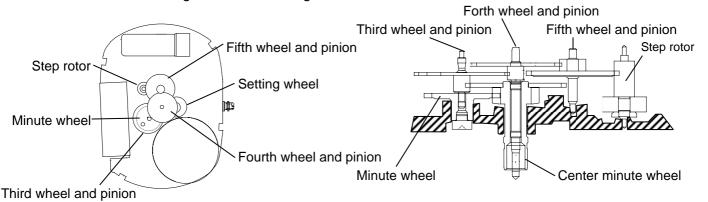




- (4) Train wheel bridge
  - Setting position

### Notes:

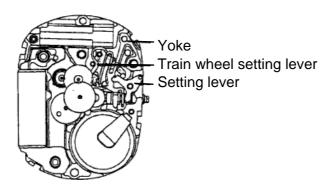
•Since the fifth wheel and pinion and step rotor are made of plastics, take care not to damage them in disassembling and reassembling.



- (5) Setting lever
- (6) Yoke
- (7) Train wheel setting lever
  - Setting position

## Notes:

- •Take care not to deform the spring portion of the Yoke.
- Since the train wheel setting lever is made of plastics and easily damaged, Lightly catch it with tweezers taking care not to touch the portion engaging with the fifth wheel and pinion.

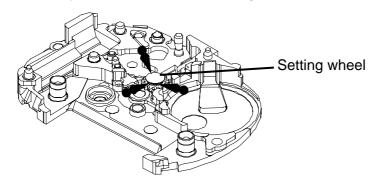


## (8) Main plate

Lubricating

### Notes:

- •Since the setting wheel is fixed securely to the main plate with a pin, never disassemble them apart.
- Apply a liberal quantity of Moebius A to the setting wheel.









3. VALUE CHECKING

Coil block resistance :  $2.70 \text{ K}\Omega \sim 2.90 \text{ K}\Omega$ 

Current consumption

For the wheel of the movement : less than  $1.1\mu A$  For the circuit block alone : less than  $0.3\mu A$