




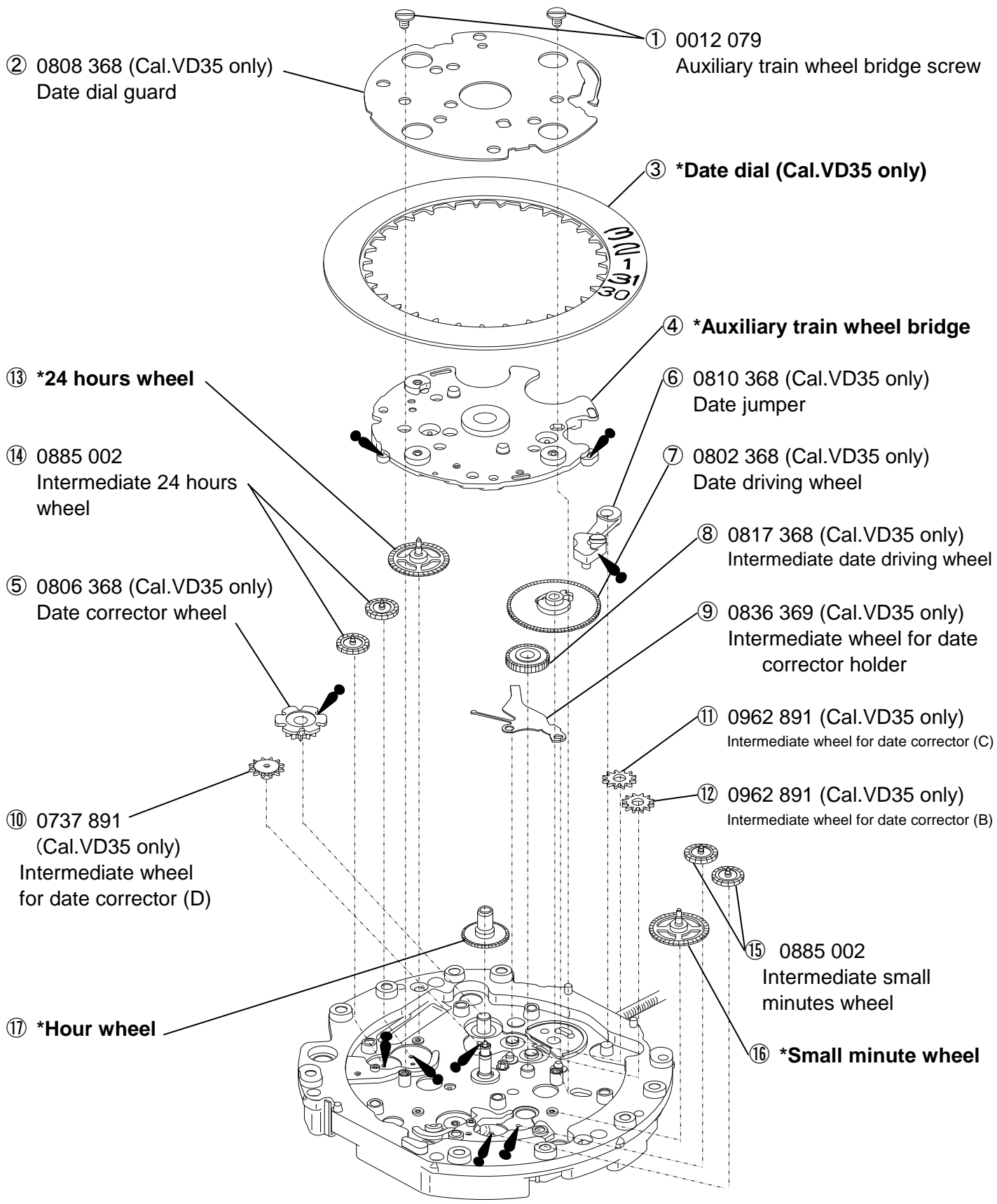
**TECHNICAL GUIDE
&
PARTS CATALOGUE**

**Cal.VD3 Series
(VD35B/36B)**




ANALOGUE QUARTZ

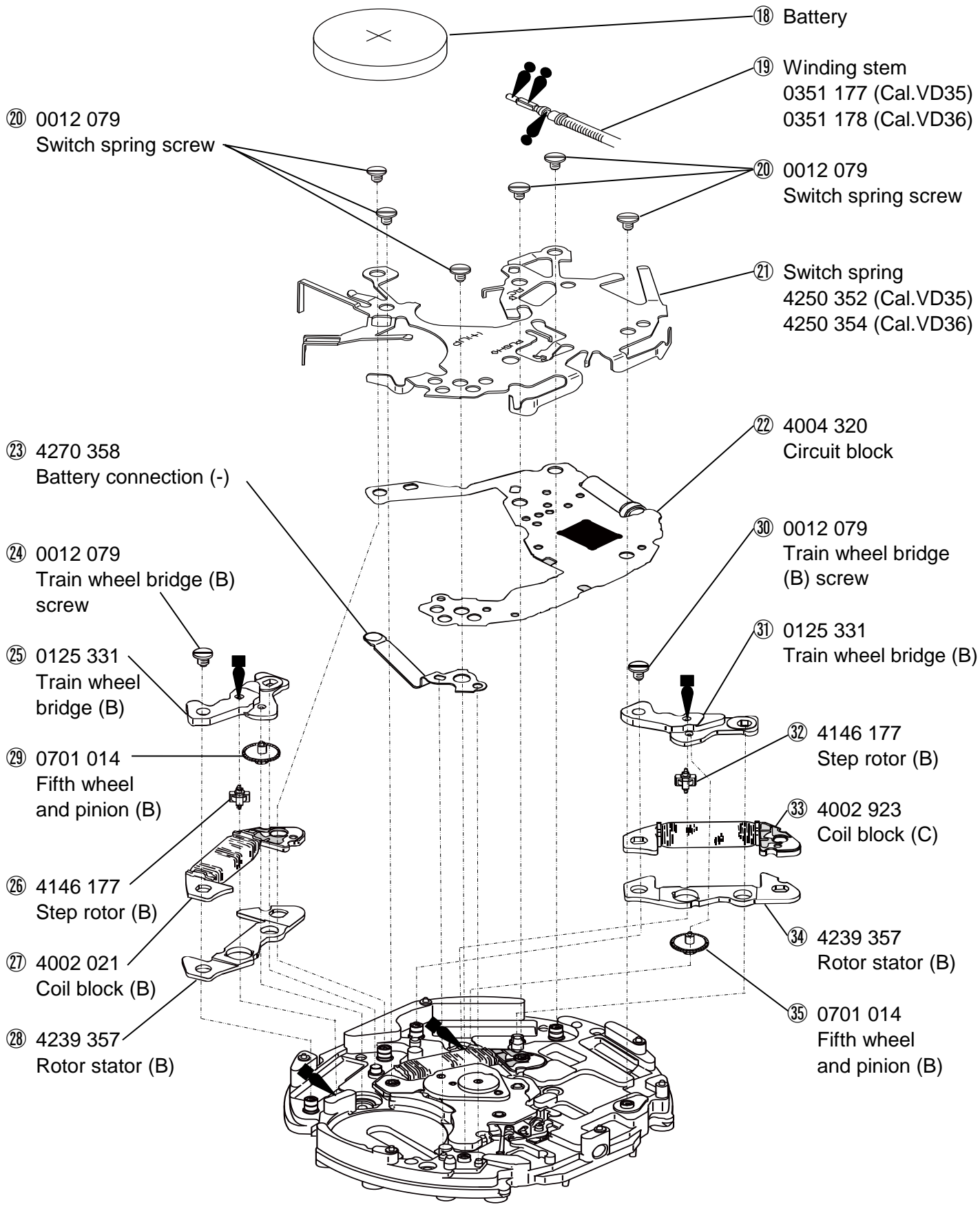
| | Cal. No. | VD35B | VD36B |
|---------------------------------|------------------|--|--|
| Movement | | | |
| Movement size | Outside diameter | φ29.50 mm × 26.00 mm (3H-9H) | |
| | Casing diameter | φ28.80 mm | |
| | Total height | 4.57 mm | 3.97 mm |
| Time indication | | 3 Hands (Hour, Minute, Second) Dual time of 24 hour regulator hand Dual time of 60 minute regulator hand Calendar | 3 Hands (Hour, Minute, Second) Dual time of 24 hour regulator hand Dual time of 60 minute regulator hand |
| Driving system | | Two pole stepping motor Step motor 3 pieces | |
| Additional mechanism | | Electronic circuit reset switch Second setting device Date setting | Electronic circuit reset switch Second setting device |
| | | Time difference correction [Time] Indicated by Hour, Minute, Second Dual time of 24 hour regulator and dual time of 60 minute regulator hands [Dual time of 24 hour regulator and dual time of 60 minute regulator] ± 1 hour / push | |
| Antimagnetic | | ≥ 1600 A/m | |
| Accuracy | | Less than ± 20 seconds : Monthly rate at normal temperature range | |
| Battery | | SR920SW (Silver oxide battery) 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 | |
| Crown position | Normal position | Free | Free |
| | First click | Left rotation Right rotation | Free Date setting |
| | Second click | | Time setting with stop-second device |
| Buttons | Button A | - 1 hour / push Time difference correction | |
| | Button B | + 1 hour / push Time difference correction | |

| | | | |
|---------------------------------------|----------------------------|--|--------------------|
| Disassembling procedures Figs. ① → ⑤⑩ | Lubricating : Types of oil |  | A3a / Moebius 9010 |
| Reassembling procedures Figs. ⑤⑩ → ① | |  | A2a / Moebius 9030 |
| | Oil quantity |  | Normal quantity |

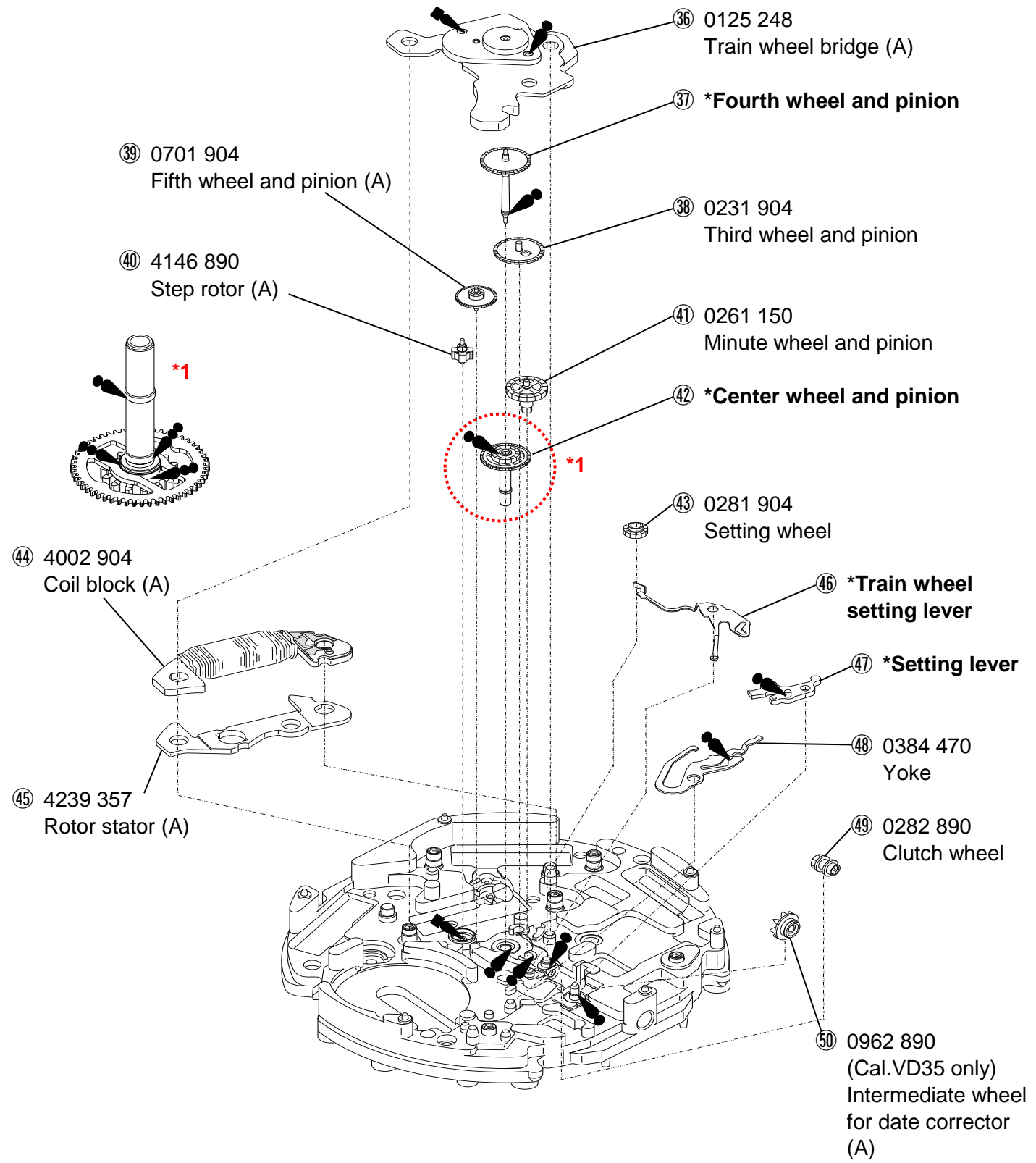


*Refer to page 5 for each parts code

| | | | |
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| | | | A3a (S-6) |
| | Oil quantity | | Normal quantity |

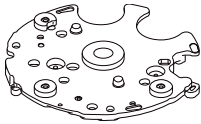
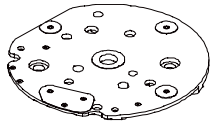
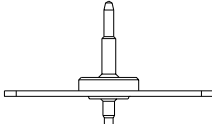
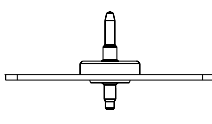
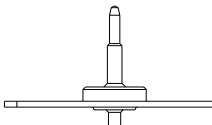
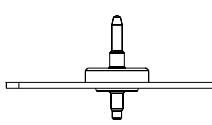
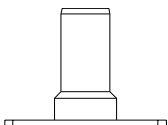
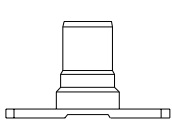
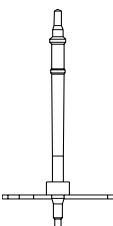
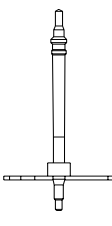
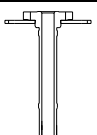
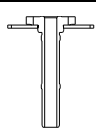
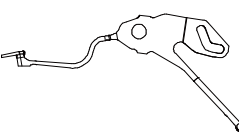
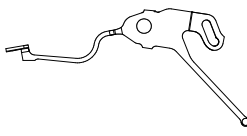




*Refer to page 5 for each parts code

Remarks:

③ Date dial (Cal.VD35 only)

| 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 |

| Page | No | Parts name | Parts code VD35 | Parts form | Parts code VD36 | Parts form |
|------|----|------------------------------|-----------------|--|-----------------|---|
| 2 | ④ | Auxiliary train wheel bridge | 0126 368 |  | 0126 357 |  |
| | ⑬ | 24 hours wheel | 0888 014 |  | 0888 013 |  |
| | ⑯ | Small minute wheel | 0888 014 |  | 0888 013 |  |
| | ⑰ | Hour wheel | 0271 407 |  | 0271 406 |  |
| 4 | ⑳ | Fourth wheel and pinion | 0241 178 |  | 0241 177 |  |
| | ㉔ | Center wheel and pinion | 0221 203 |  | 0221 205 |  |
| | ㉖ | Train wheel setting lever | 0391 368 |  | 0391 357 |  |
| | ㉗ | Setting lever | 0383 368 |  | 0383 470 |  |

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

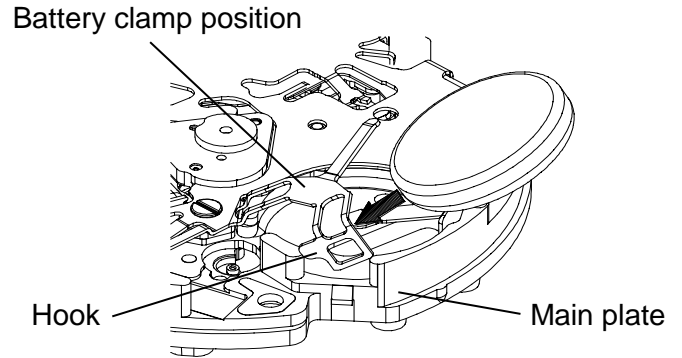
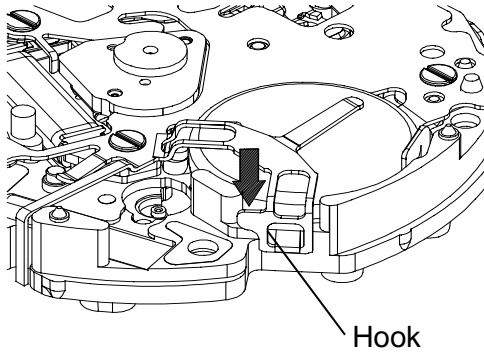
•The explanation here is only for the particular point of Cal.VD35&VD36

1.REMARKS ON INSTALLING THE BATTERY

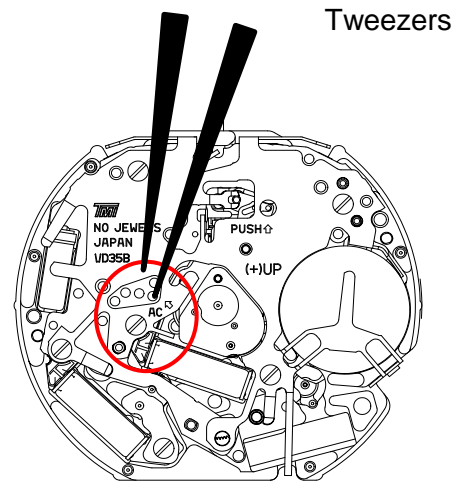
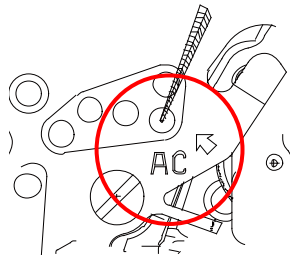
(1) Battery

•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.



- (2) 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.



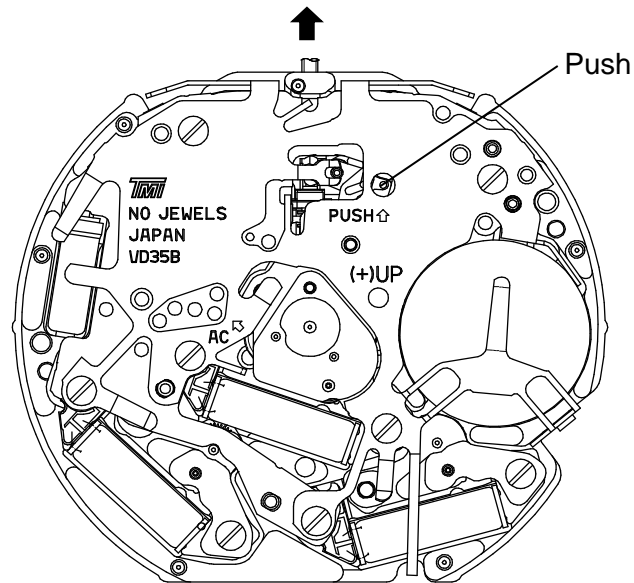
- (3) When the battery replaced with a new one, the time information stored in the built-in IC and the time indicated by the dual time of 24 hour regulator and dual time of 60 minute regulator hands do not correspond with each other.
Reset the dual time of 24 hour regulator and dual time of 60 minute regulator hands to "0" position following the procedure below.
If the dual time of 24 hour regulator and dual time of 60 minute regulator hands should move improperly, also follow the same procedure.

Note

Refer to page 8 for each adjustment method.

2.To remove the winding stem

- (1) set the winding stem to normal position.
- (2) While pushing the indented portion of the arrow, pull out the winding stem.



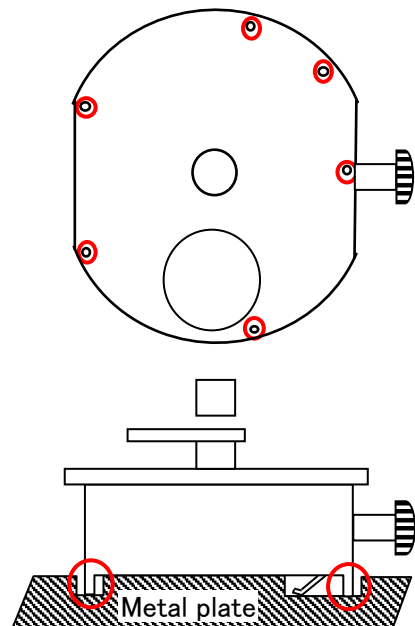
3.How to attach hands

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

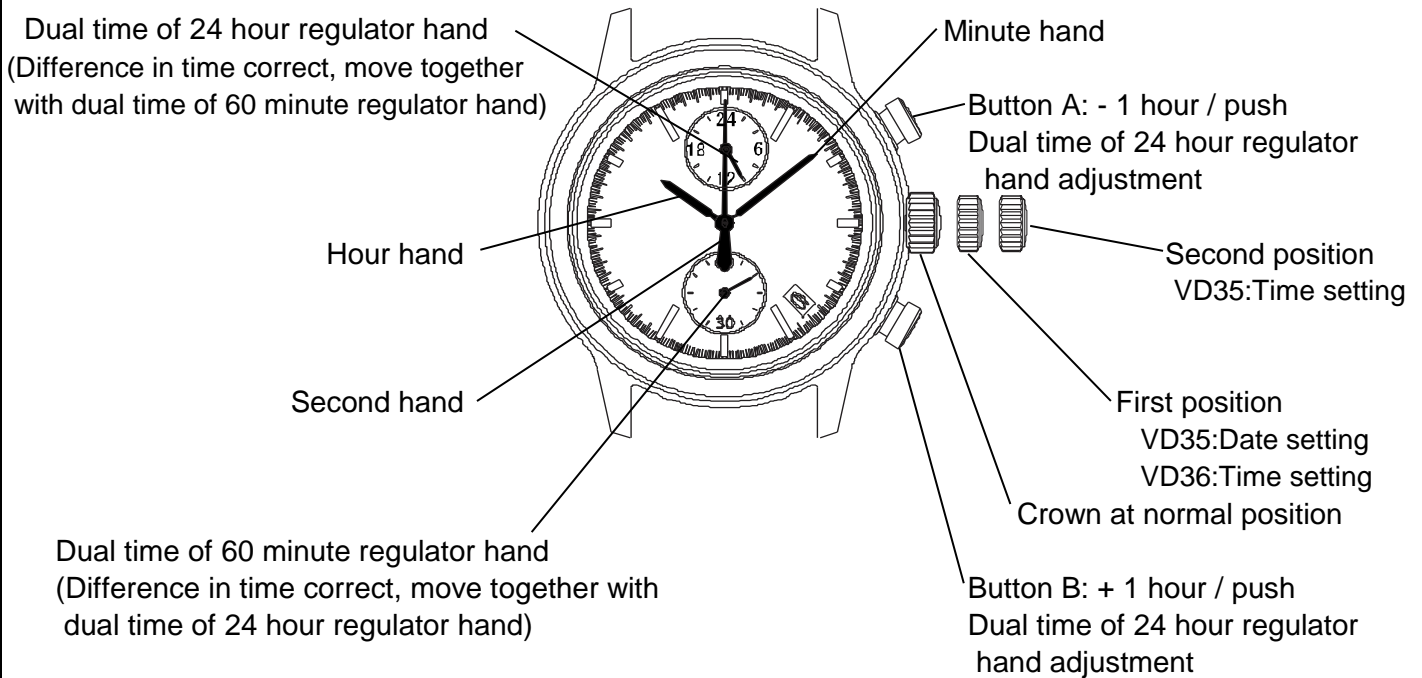
- *Install the hour, minute, and second hands at the "12" o'clock position.
- *Install the dual time of 24 hour regulator hand at the "24" position.
- *Install the dual time of 60 minute regulator hand at the "60" position respectively.

[Reference] The power of press hands

| | |
|---------------------------------------|-------|
| Minute & Hour Hands | < 5kg |
| Second Hand | < 5kg |
| Dual time of 24 hour regulator hand | < 3kg |
| Dual time of 60 minute regulator hand | < 3kg |



DISPLAY AND CROWN / BUTTON OPERATION

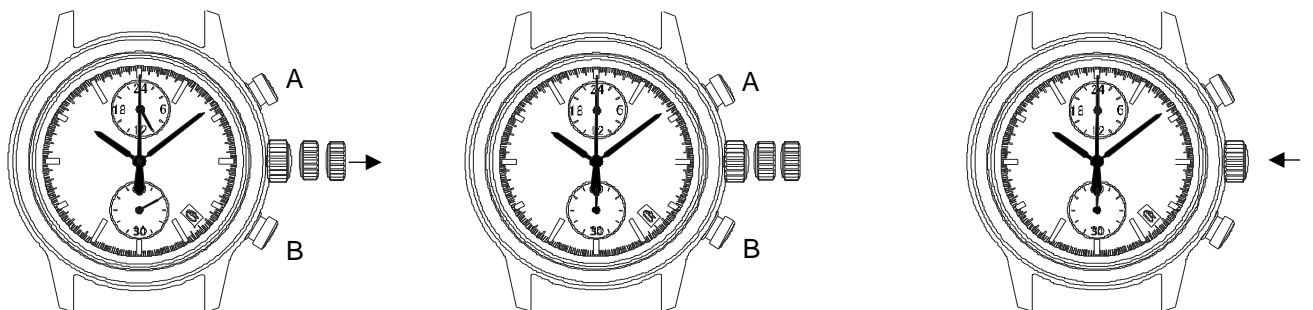


ADJUSTING THE DUAL TIME OF 24 HOUR REGULATOR AND DUAL TIME OF 60 MINUTE REGULATOR HANDS POSITION

Before setting the time, check if the dual time of 24 hour regulator and dual time of 60 minute regulator hands are in the "0"(12 o'clock) position.

If either of the dual time of 24 hour regulator and dual time of 60 minute regulator hands are not in the "0" position, reset them following the procedure below.

The battery setting and after battery change, please execute the "0" position adjustment.



1. Pull out the crown
VD35:second click
VD36:first click

2. Keep the buttons A & B pressed at the same time more than 2 seconds, and then release the buttons.
*Dual time of 24 hour regulator and dual time of 60 minute regulator hands moves. Returned to where it was.

3. Press button A or B to reset the dual time of 24 hour regulator and dual time of 60 minute regulator hands to "0" position.

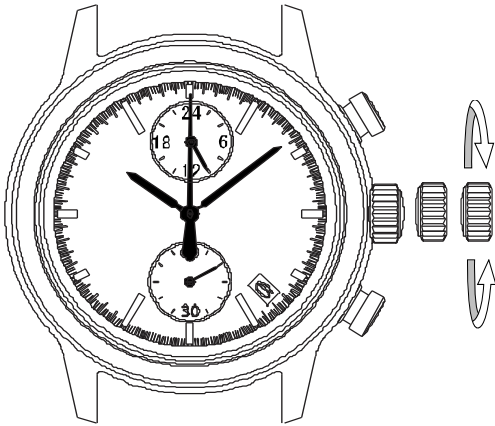
*By pressing button A the dual time of 24 hour regulator hand move clockwise. (+ 1 step / push)

*By pressing button B the dual time of 60 minute regulator hand move clockwise. (+ 1 step / push)

*Press and hold the button, possible to fast-forward modification.

4. Push the crown back to the normal position.

TIME SETTING



1. Pull out the crown when the second hand is at the 12 o'clock position.
[Crown position]
VD35: second click
VD36: first click
2. Turn the crown to set the hour and minute hands.
(Check that AM/PM is set correctly)
3. Push the crown back normal position in accordance with a time signal.

Note

*The moment the date changes is midnight.

■ Using the time different correction

When moving to a country or area which is in a different timezone, the current time in the local time can be corrected.

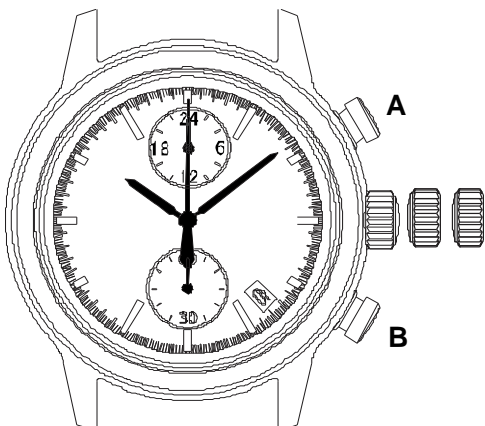
1. Crown the normal position

2. To adjust the time by pressing the button A or B.

*By pressing button A the hands move counter clockwise. - 1 hour / push

*By pressing button B the hands move clockwise. + 1 hour / push

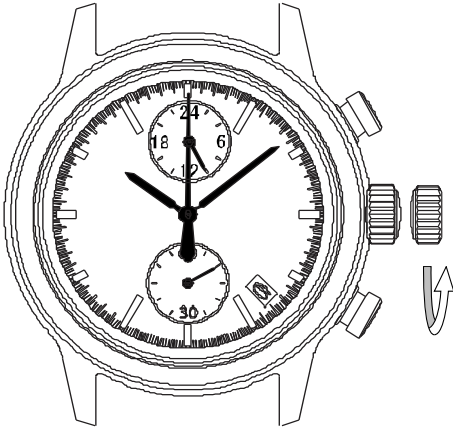
TIME SETTING (DUAL TIME OF 24 HOUR REGULATOR AND DUAL TIME OF 60 MINUTE REGULATOR HANDS)



1. Pull out the crown when the second hand is at the 12 o'clock position.
[Crown position]
VD35: second click
VD36: first click
2. To adjust the time by pressing the buttons A or B.
*By pressing button A the dual time of 24 hour regulator and dual time of 60 minute regulator hands move counter clockwise.
*By pressing button B the dual time of 24 hour regulator and dual time of 60 minute regulator hands move clockwise.
*Press and hold the button, possible to fast-forward modification.
3. Push the crown back in to the normal position.

DATE SETTING (Cal.VD35 only)

*Before setting the date, be sure to set the time.



- 1.Pull out the crown to the first click.
- 2.Turn the crown to clockwise until the next date appears.
- 3.Push the crown back in to the normal position.

Note

*Do not set the date during any time between 9:00 P.M. and 1:00 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 it, set the date and then reset the correct time.