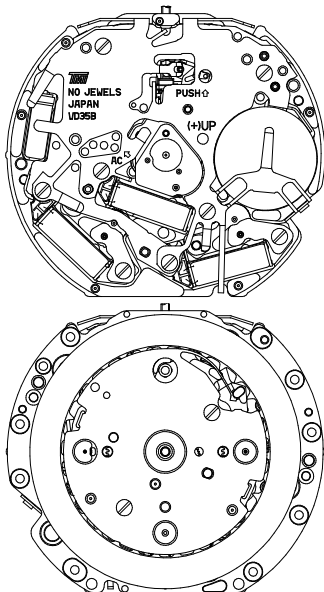
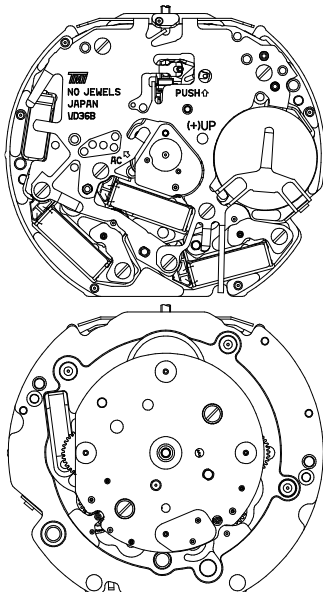


**TECHNICAL GUIDE
&
PARTS CATALOGUE**

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

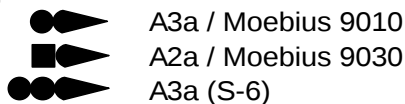
ANALOGUE QUARTZ

Cal. No.			VD35B	VD36B
Item				
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	Free	Time setting with stop-second device
		Right rotation	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	

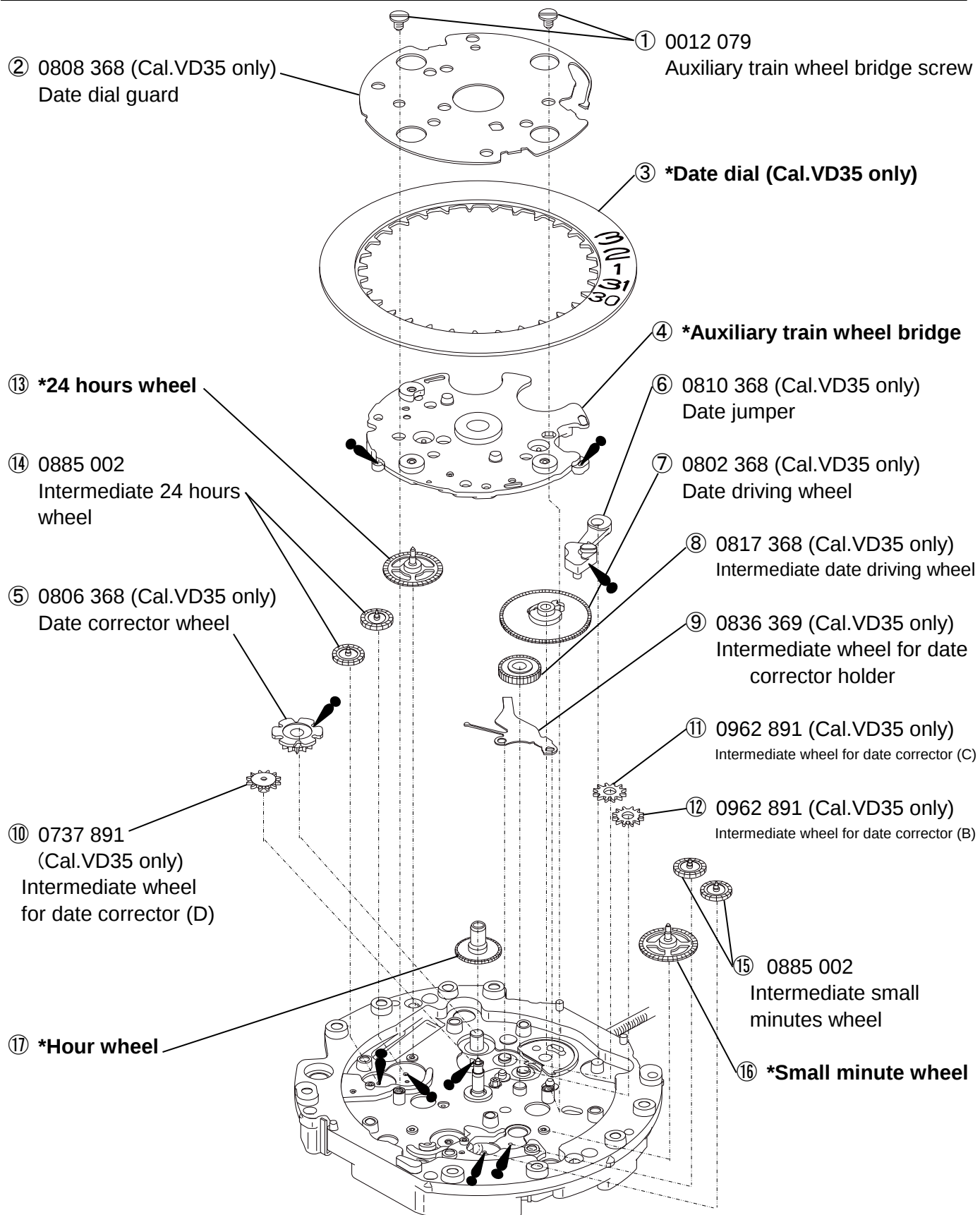
Disassembling procedures Figs. ① → ⑤①

Reassembling procedures Figs. ⑤① → ①

Lubricating : Types of oil



Oil quantity ○ ○ ○ Normal quantity

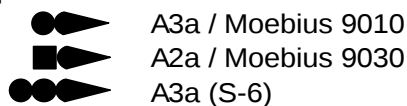


*Refer to page 5 for each parts code

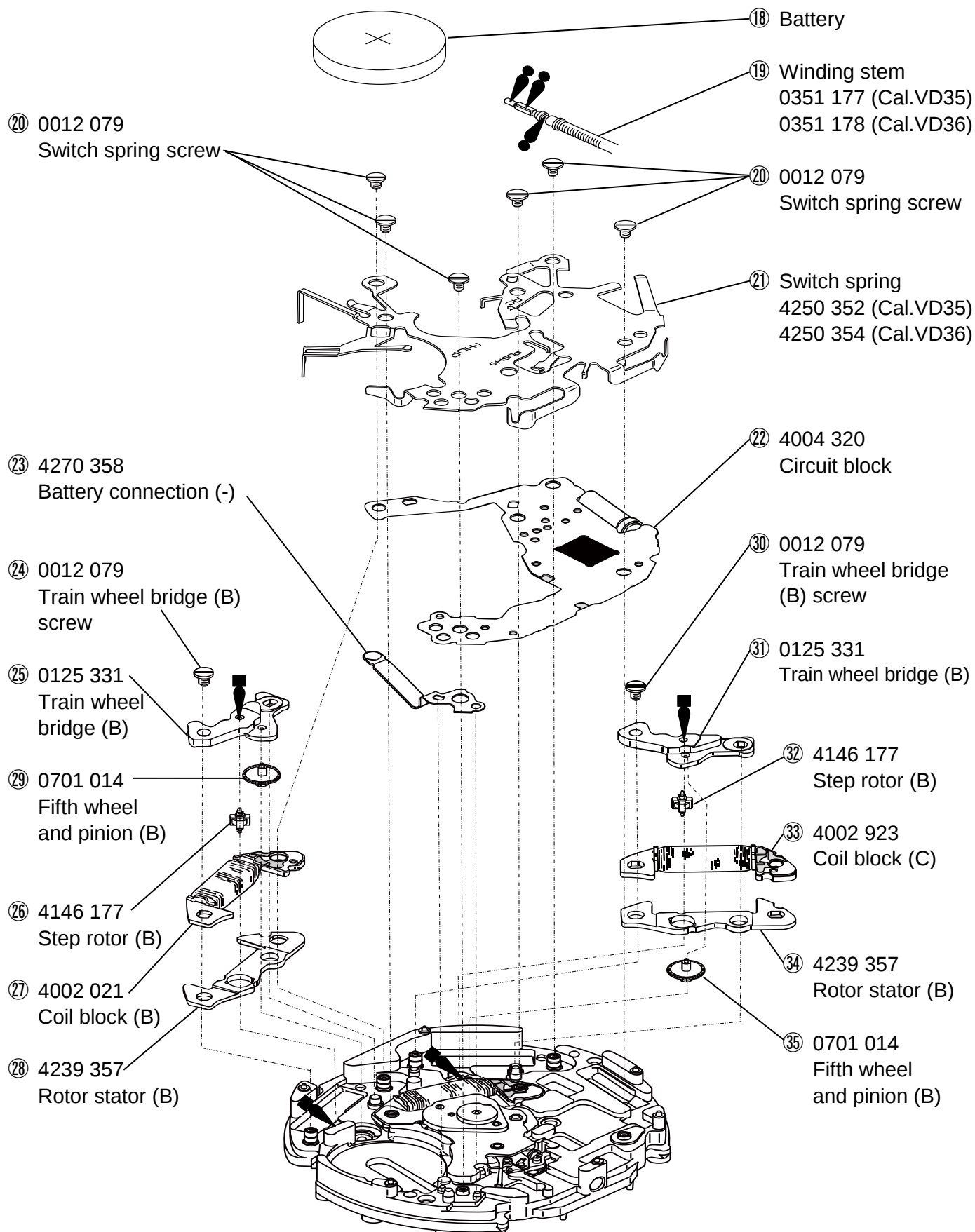
Disassembling procedures Figs. ① → ⑤①

Reassembling procedures Figs. ⑤① → ①

Lubricating : Types of oil



Oil quantity ○ ○ ○ Normal quantity



Disassembling procedures Figs. ① → ⑤①

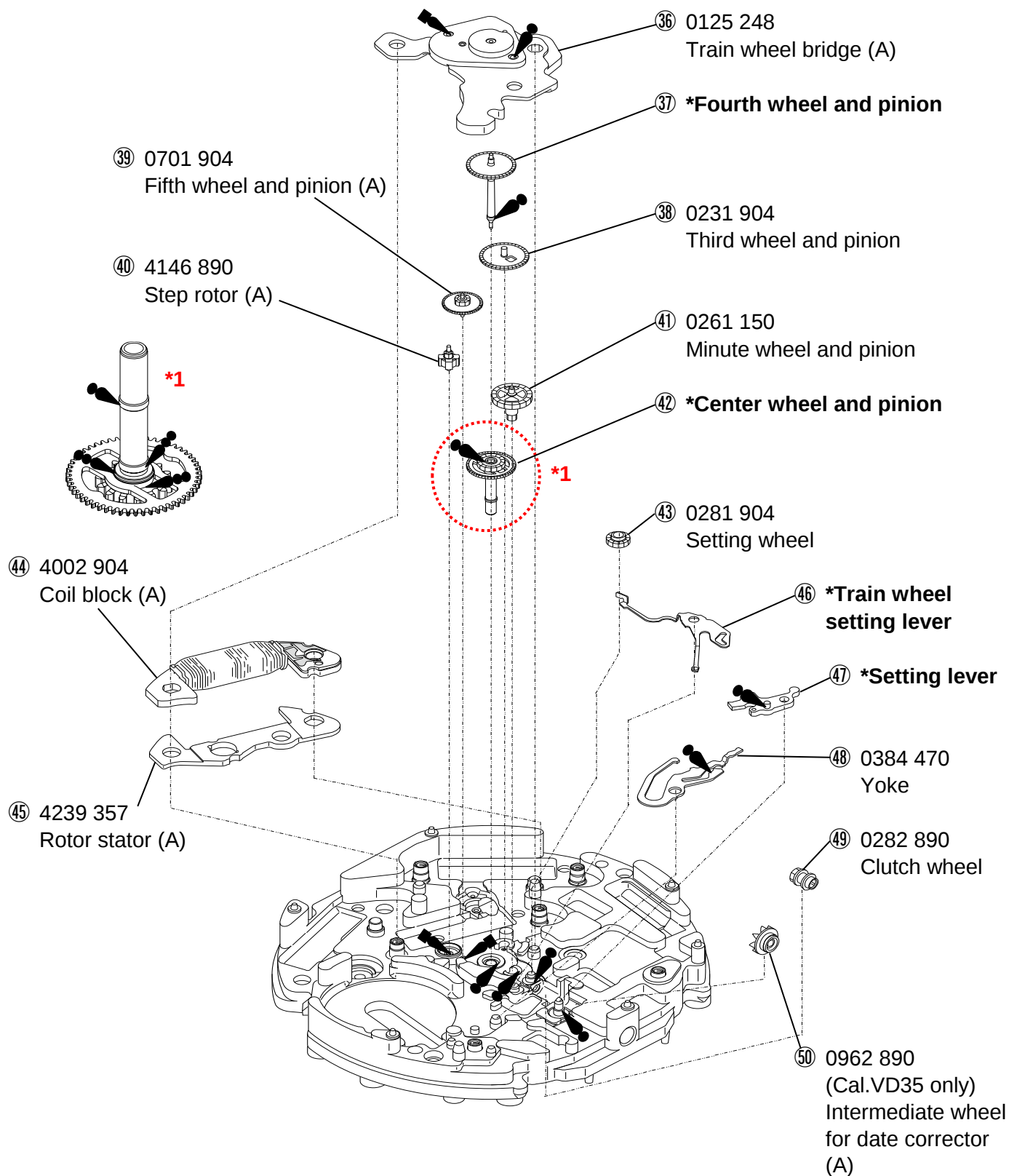
Reassembling procedures Figs. ⑤① → ①

Lubricating : Types of oil

-  A3a / Moebius 9010
-  A2a / Moebius 9030
-  A3a (S-6)

Oil quantity

 Normal quantity

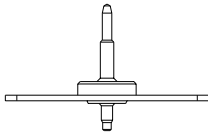
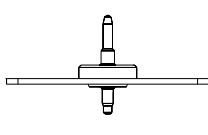
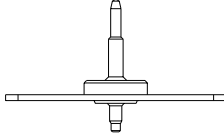
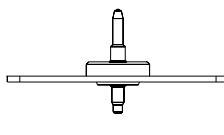
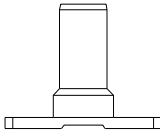
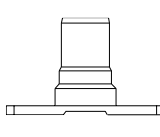
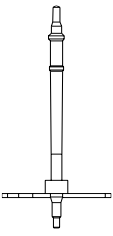
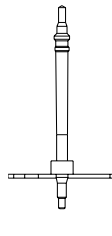
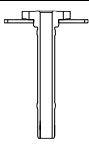
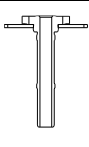
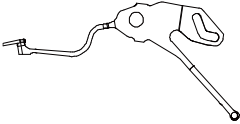
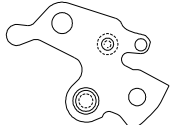


***Refer to page 5 for each parts code**

Remarks:

③ Date dial (Cal.VD35 only)

Parts 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.**

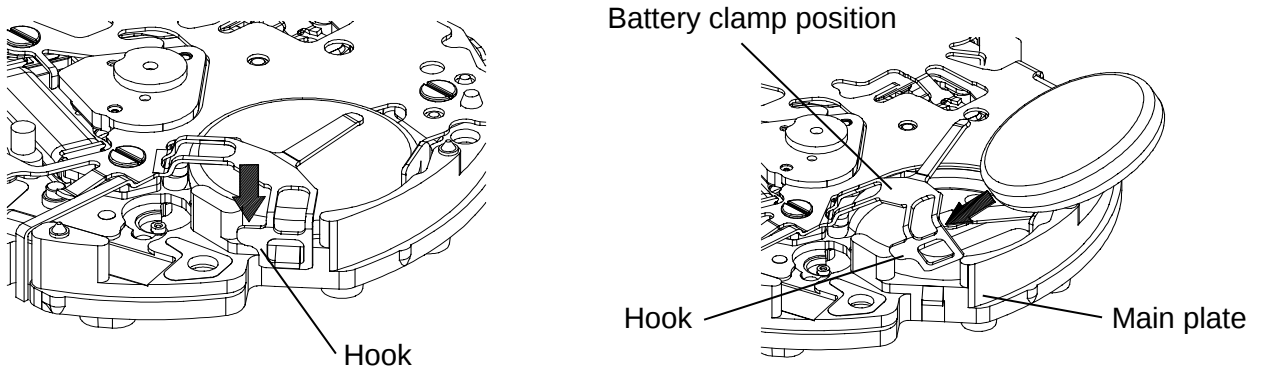
•The explanation here is only for the particular point of Cal.VD35&VD36

1.REMARKS ON INSTALLING THE BATTERY

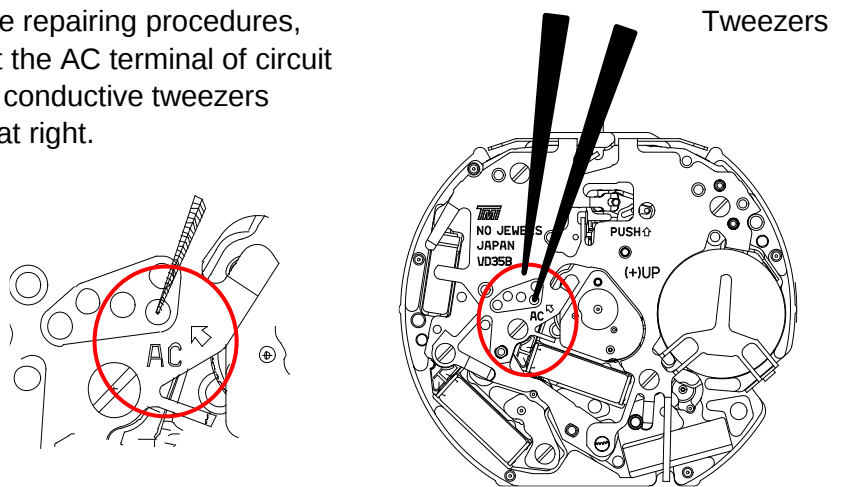
(1) Battery

•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.



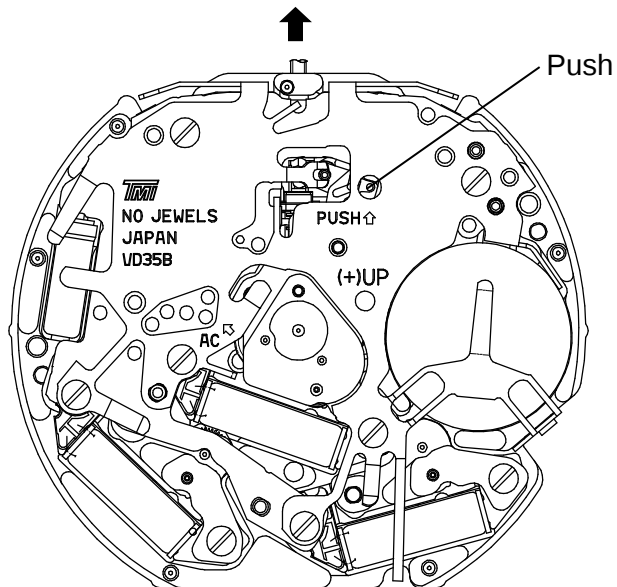
- (3) When the battery replaced with a new one, the time information stored in the built-in IC and the time indicated by the dual time of 24 hour regulator and dual time of 60 minute regulator hands do not correspond with each other.
 Reset the dual time of 24 hour regulator and dual time of 60 minute 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.



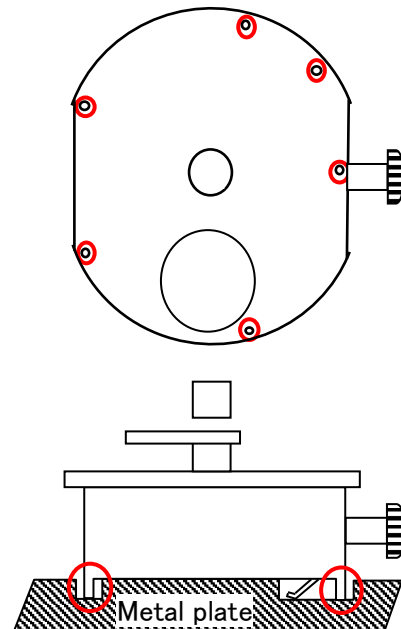
3.How to attach hands

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

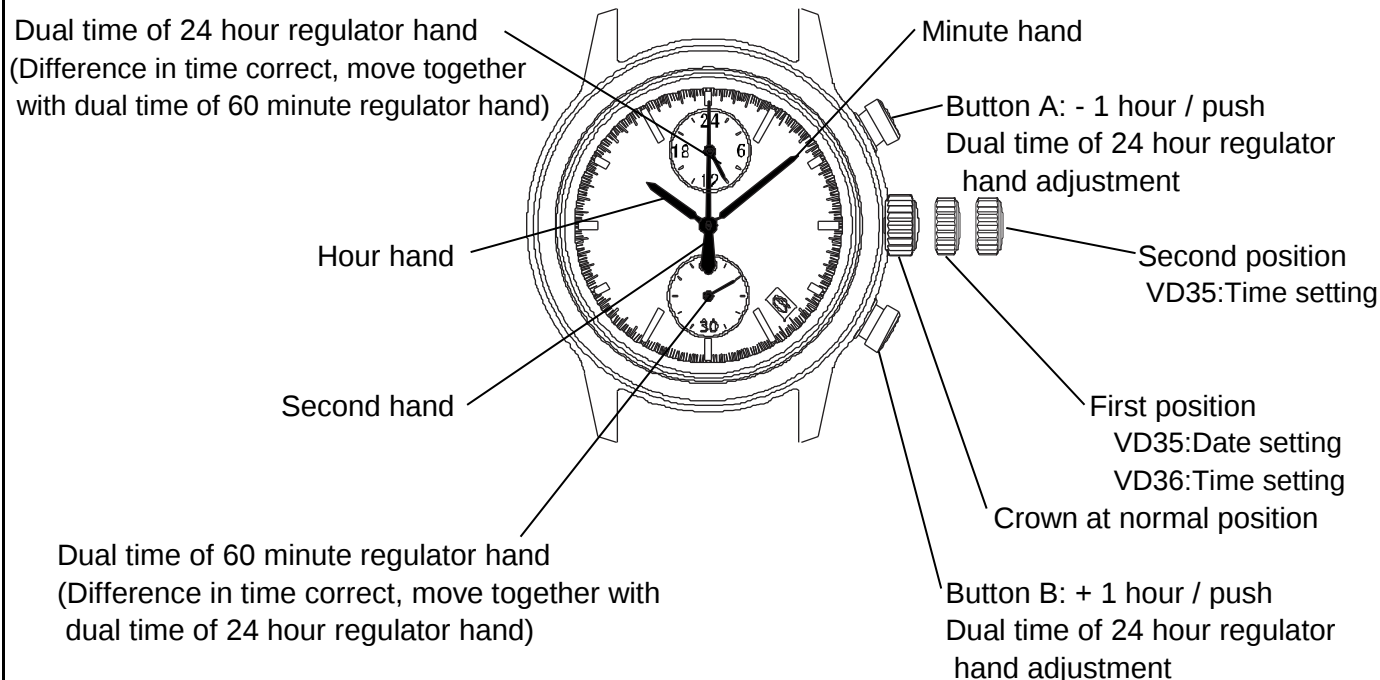
- *Install the hour, minute, and second hands at the "12" o'clock position.
- *Install the dual time of 24 hour regulator hand at the "24" position.
- *Install the dual time of 60 minute regulator hand at the "60" position respectively.

[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

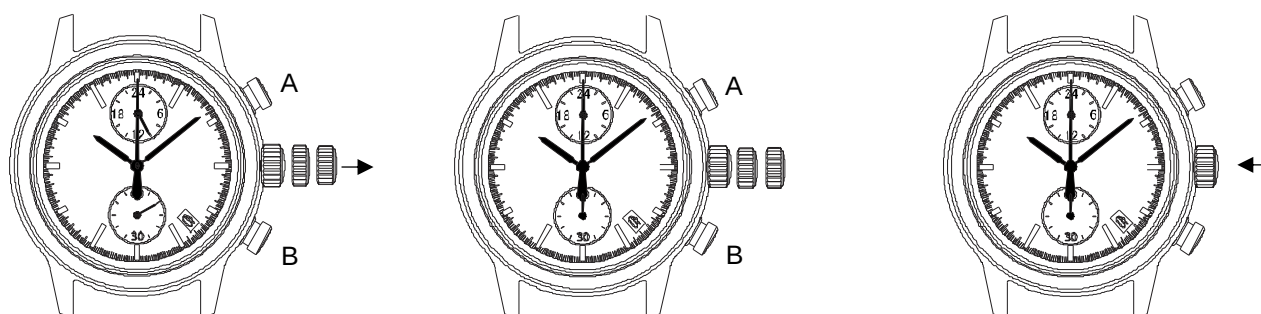


ADJUSTING THE DUAL TIME OF 24 HOUR REGULATOR AND DUAL TIME OF 60 MINUTE REGULATOR HANDS POSITION

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.

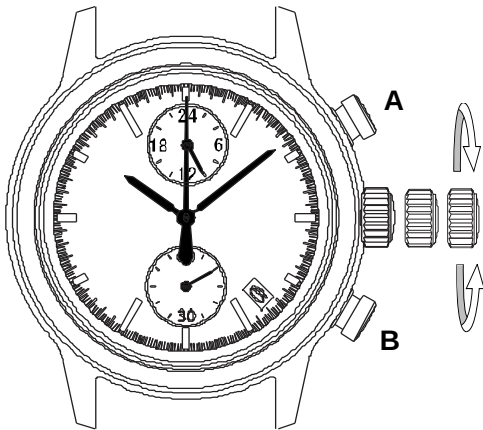
*By pressing button A the dual time of 24 hour regulator hand move clockwise. (+ 1 step / push)

*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

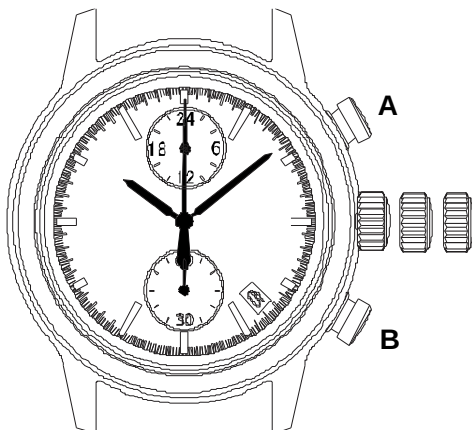
*The moment of the date changes is midnight.

■ Using the time difference 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

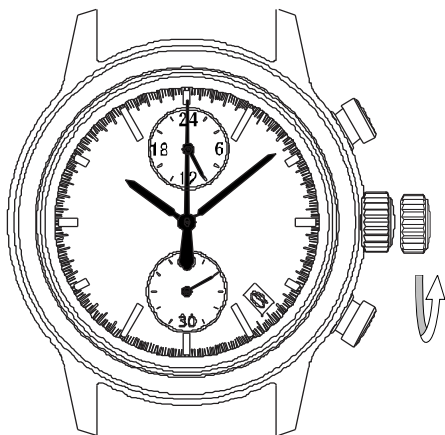
TIME SETTING (DUAL TIME OF 24 HOUR REGULATOR AND DUAL TIME OF 60 MINUTE REGULATOR HANDS)



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.