TECHNICAL GUIDE
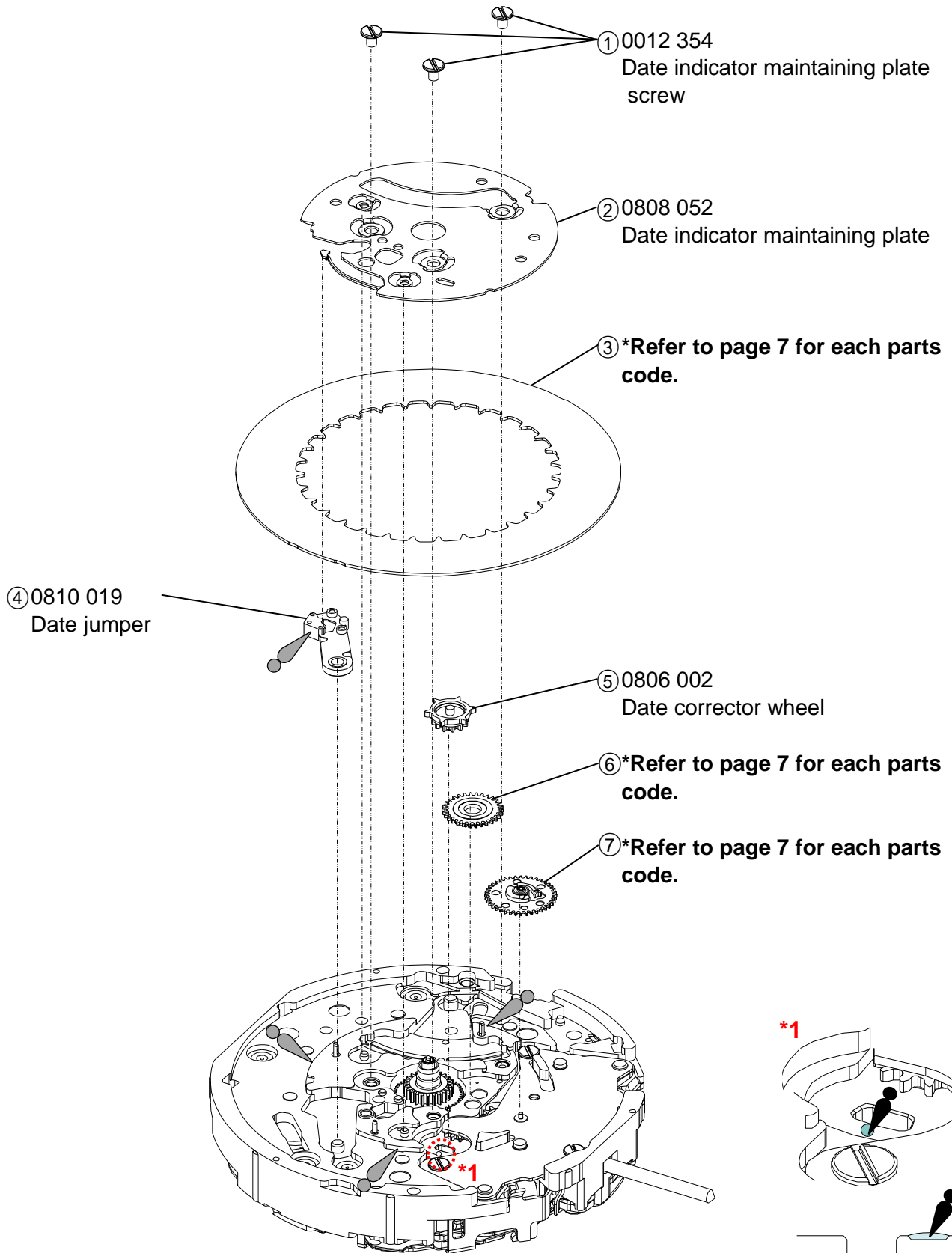# &
PARTS CATALOGUE

Cal.VK6 Series
(VK61A/64A)

ANALOGUE QUARTZ

SPECIFICATION

Cal. No. Item		VK61A	VK64A
Movement			
Movement size	Outside diameter	φ30.80 mm × 29.10 mm (3H - 9H)	
	Casing diameter	φ29.00 mm	
	Total height	5.10 mm	
Time indication	2 Hands (hour, minute)	O	O
	Date Calendar	O	O
	Small second hand (6H)	O	-
	Center chronograph (1 / 5 second)	O 60 second per round	O 60 second per round
	60 minutes counter (12H)	O	-
	60 minutes counter (9H)	-	O
	24 hour indicator (3H)	-	O
Driving system		Two pole stepping motor Step motor 2 pieces	
Additional mechanism		Date display with quick correction Electronic circuit reset switch Time setting with stop-second	
Accuracy		Less than ± 20 seconds : Monthly rate at normal temperature range	
Battery		SR936SW (Silver oxide battery) Battery life is approximately 3 years (60 minutes chronograph operation per day)	
Measuring gate by quartz tester		Use 10 second gate *Set the winding stem with crown at the normal position	
Antimagnetic		≧ 1600 A/m	
Jewels		0 Jewel	

Disassembling procedures Figs. ① → 61	Lubricating : Types of oil	Oil quantity
Reassembling procedures Figs. 61 → ①	⬤◗ Moebius 9010 ◼◗ Moebius 9030	◗ NORMAL QUANTITY ● SUFFICIENT QUANTITY

① 0012 354
Date indicator maintaining plate screw

② 0808 052
Date indicator maintaining plate

③ ***Refer to page 7 for each parts code.**

④ 0810 019
Date jumper

⑤ 0806 002
Date corrector wheel

⑥ ***Refer to page 7 for each parts code.**

⑦ ***Refer to page 7 for each parts code.**

*1

*Refer to page 7 for each parts code.

*1

[Cross section]

Disassembling procedures Figs. ① → �
Reassembling procedures Figs. ㉑ → ①

Disassembling procedures Figs. ① → 61
Reassembling procedures Figs. 61 → ①

Lubricating : Types of oil
◖◗— Moebius 9010
◖▬— Moebius 9030

Oil quantity
◗ NORMAL QUANTITY
◗ SUFFICIENT QUANTITY

⑧ 0273 041
Hour wheel

⑨ 0012 354
Switch lever holder screw

⑩ 0837 005
Switch lever holder

⑪ **4450 017** ***
Switch lever (A)

⑫ **4450 018** ***
Switch lever (B)

⑭ 0962 891
Date corrector setting
transmission wheel (C)

⑬ 0962 013
Date corrector setting
transmission wheel
(B)

*1

*1

*** Refer to page 10 for spring setting position.

PARTS CATALOGUE

	Lubricating : Types of oil	Oil quantity
Disassembling procedures Figs. ① → 61	Moebius 9010	NORMAL QUANTITY
Reassembling procedures Figs. 61 → ①	Moebius 9030	SUFFICIENT QUANTITY

⑮ 0016 121
Switch spring screw

⑮ 0016 121
Switch spring screw

*1

*2

⑯ **Switch spring** ** & ***

⑰ 0353 018
Seconds counting
wheel friction spring

⑱ 0190 007
Chronograph bridge

*VK64 only

*VK61 only

⑲ **0581 007** ***
**Chronograph coupling
lever**

⑳ **0587 006** ***
Hammer
operating
lever (B)

㉑ **0585 013**
** & ***
Hammer

㉒ 0888 027
Seconds counting
wheel

*1

*2

㉕ **0894 002**
***
Train
wheel
stop lever

㉓ *Refer to page 7
for each parts

㉔ *Refer to page 7
for each parts

㉖ **0587 004** ***
Hammer
operating lever
(A)

* Refer to page 7 for each parts code.
** **Refer to page 9 for oiling spot.**
*** Refer to page 10 for spring setting position.

TMI TIME MODULE

Disassembling procedures Figs. ① → �	Lubricating : Types of oil	Oil quantity

Disassembling procedures Figs. ① → ㉖₁
Reassembling procedures Figs. ㉖₁ → ①

Lubricating : Types of oil
Moebius 9010
Moebius 9030

Oil quantity
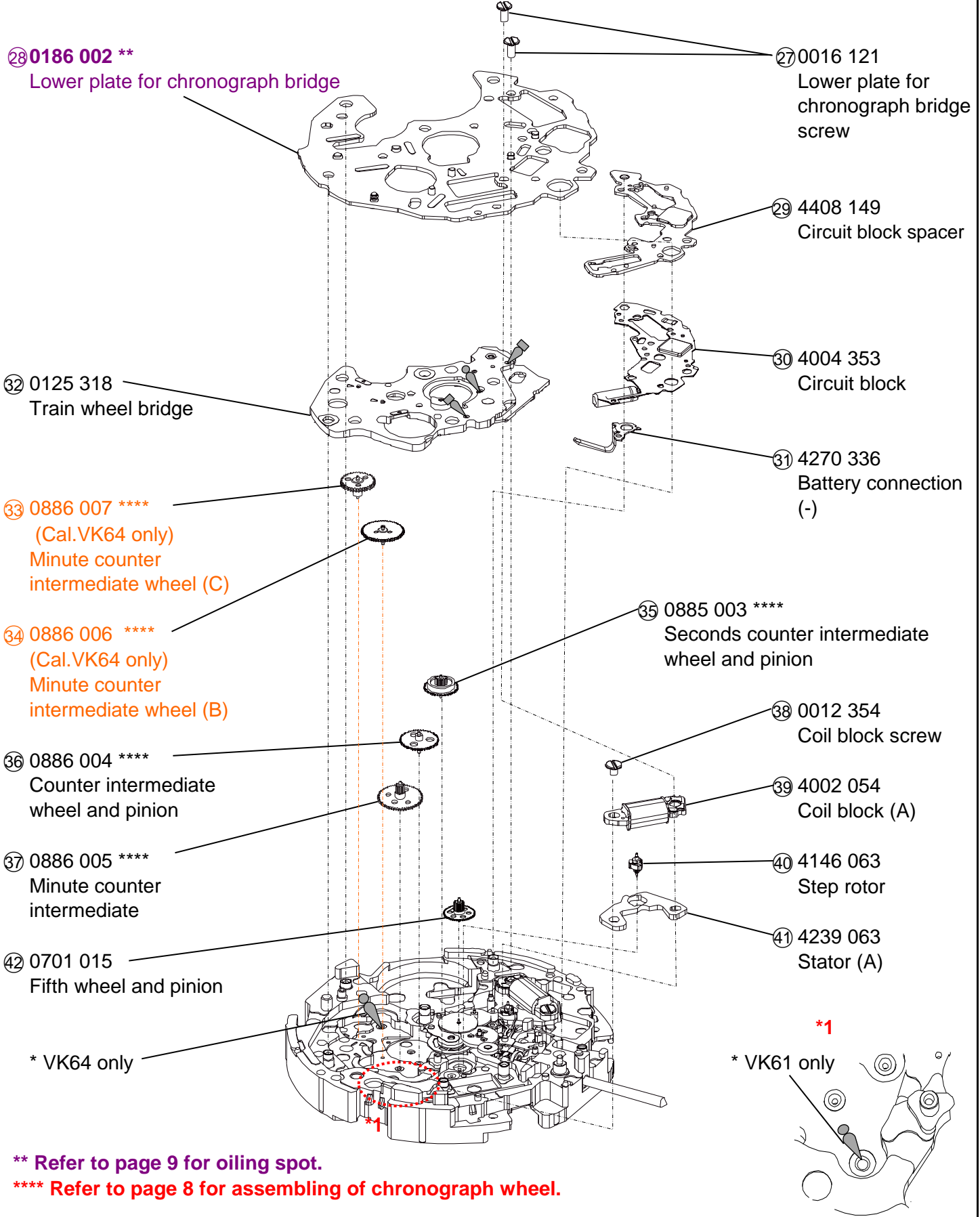NORMAL QUANTITY
SUFFICIENT QUANTITY

㉘ **0186 002 ** **
Lower plate for chronograph bridge

㉗ 0016 121
Lower plate for chronograph bridge screw

㉙ 4408 149
Circuit block spacer

㉜ 0125 318
Train wheel bridge

㉚ 4004 353
Circuit block

㉛ 4270 336
Battery connection (-)

㉝ 0886 007 ****
(Cal.VK64 only)
Minute counter intermediate wheel (C)

㉞ 0886 006 ****
(Cal.VK64 only)
Minute counter intermediate wheel (B)

㉟ 0885 003 ****
Seconds counter intermediate wheel and pinion

㊳ 0012 354
Coil block screw

㊱ 0886 004 ****
Counter intermediate wheel and pinion

㊴ 4002 054
Coil block (A)

㊲ 0886 005 ****
Minute counter intermediate

㊵ 4146 063
Step rotor

㊷ 0701 015
Fifth wheel and pinion

㊶ 4239 063
Stator (A)

* VK64 only

*1
* VK61 only

*1

** **Refer to page 9 for oiling spot.**
**** **Refer to page 8 for assembling of chronograph wheel.**

Disassembling procedures Figs. ① → �61 Reassembling procedures Figs. �61 → ①	Lubricating : Types of oil ⬤◖▬ Moebius 9010 ◼▬ Moebius 9030	Oil quantity ▬ NORMAL QUANTITY ◼ SUFFICIENT QUANTITY

㊹ 0231 059
Third wheel and pinion

㊺ 0144 002
Fourth wheel
and pinion

㊻ 0261 126
Minute wheel
and pinion

㊼ 0281 452
Setting wheel

㊽ 4283 042
Center wheel and
pinion bridge

㊾ 0221 091
Center wheel
and pinion
*1

�55 0701 015
Fifth wheel
and pinion

㊹43 4455 006
Reset lever

㊿50 0391 028
Train wheel setting lever

�51 0012 354
Coil block screw

�52 4002 055
Coil block (B)

�53 4146 063
Step rotor

�54 4239 064
Stator (B)

�57 0383 891
Setting lever

�58 0384 024
Yoke

�60 0282 452
Clutch wheel

�61 0962 032
Date corrector
setting
transmission
wheel (A)

�59 0351 177
Winding stem

*1

�56 0240 018
(Cal.VK61 only)
Seconds wheel

6

PARTS CATALOGUE

Remarks: **Different parts for each CAL.**

No	Cal. VK61	Cal. VK64	Parts code	Parts name	Parts form
⑥	-	O	0817 048	Intermediate small hour hand wheel and pinion	
	O	-		Intermediate date wheel and pinion	
⑦	-	O	0157 012	Small hour hand wheel	
	O	-	0802 039	Date indicator driving wheel	
⑯	O	-	4250 074	Switch spring (Differs by Cal. marking)	
	-	O	4250 080		
㉓	-	O	0685 003	Positioning arbor	
	O	-	**0902 017**	Minute counting wheel	
㉔	-	O	**0902 017**	Minute counting wheel	
	O	-	0685 003	Positioning arbor	

[NOTE]

About the parts code "**0902 017**"

Old parts		New parts
No.㉔	No.㉓	No. ㉔ & ㉓
—	—	**0902 017**

When you purchase this part,
please order new one " **0902 017** "

③ Date indicator (Cal.VK61 / 64 common parts)

Cal.	Parts code	Crown position	Date position	Color of figure	Color of background
VK61	0878 328	3H	3H (4.5H)	Black	White
	0878 329	3H	3H (4.5H)	White	Black
VK64	0148 070	3H	6H	Black	White
	0148 071	3H	6H	White	Black

* All parts code are subject to change without notice.

1.Detailed assembling of chronograph wheel

[NOTE]

There is a mark on parts. Parts are set in order of the mark as shown in the table below.
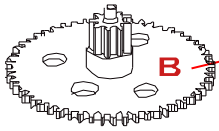
Image example of the mark

[Cal.VK61]	
Mark	Parts name
B	㊲ Minute counter intermediate wheel and pinion (A)
C	㊱ Counter intermediate wheel and pinion
Nil	㉟ Seconds counter intermediate wheel and pinion

| [Cal.VK64]	
Mark	Parts name
B	㊲ Minute counter intermediate wheel and pinion (A)
C	㊱ Counter intermediate wheel and pinion
Nil	㉟ Seconds counter intermediate wheel and pinion
F	㉞ Minute counter intermediate wheel (B)
G	㉝ Minute counter intermediate wheel (C)

[Cal.VK64]

㉝ Minute counter intermediate wheel (C)

㉞ Minute counter intermediate wheel (B)

㉟ Seconds counter intermediate wheel and pinion

㊱ Counter intermediate wheel and pinion

㊲ Minute counter intermediate wheel and pinion (A)

[Cal.VK61]

㉟ Seconds counter intermediate wheel and pinion

㊱ Counter intermediate wheel and pinion

㊲ Minute counter intermediate wheel and pinion (A)
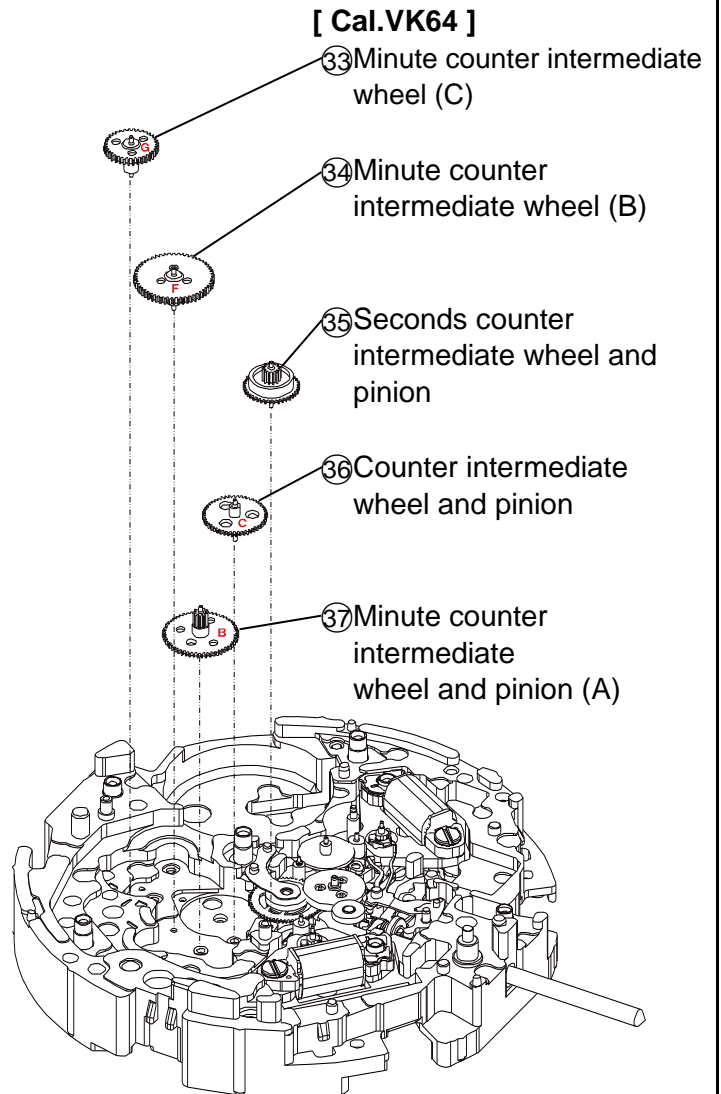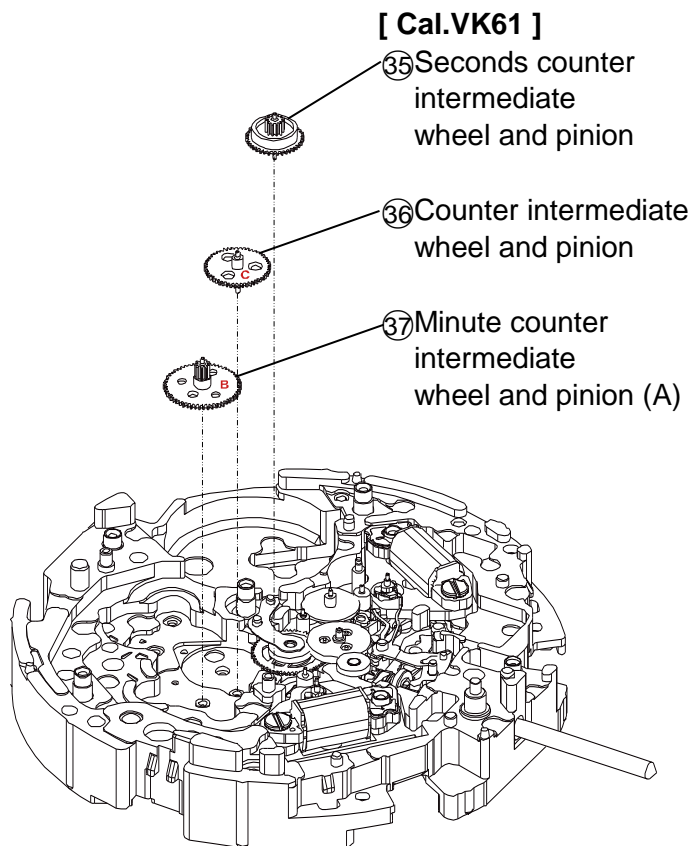
*Mark positions, and sizes, etc. are different.

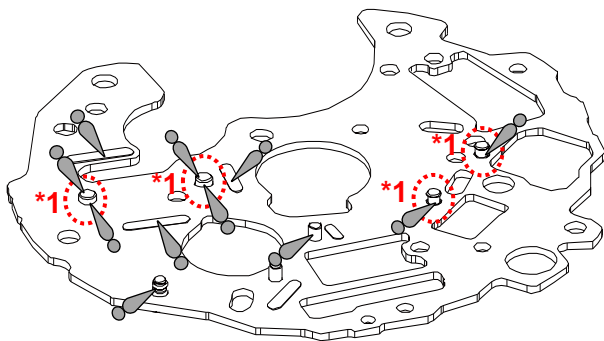| Lubricating : Types of oil	Oil quantity
Moebius 9010	NORMAL QUANTITY
S-6	SUFFICIENT QUANTITY

2.Oiling spot

㉑ Hammer
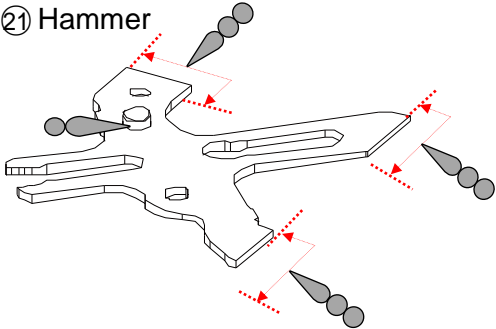
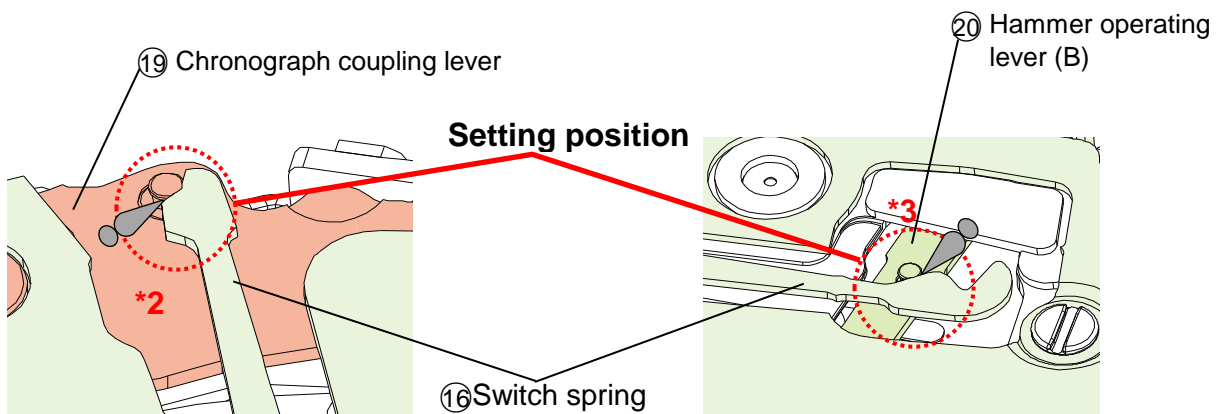**There must be oil within the range of the arrow.**
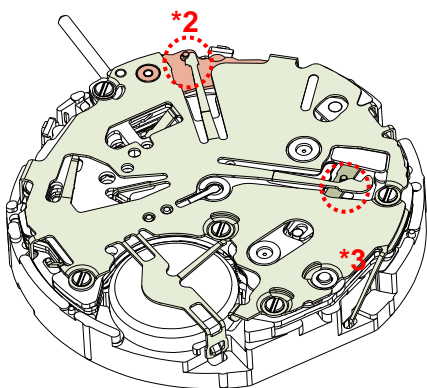
㉘ Lower plate for chronograph bridge

Note
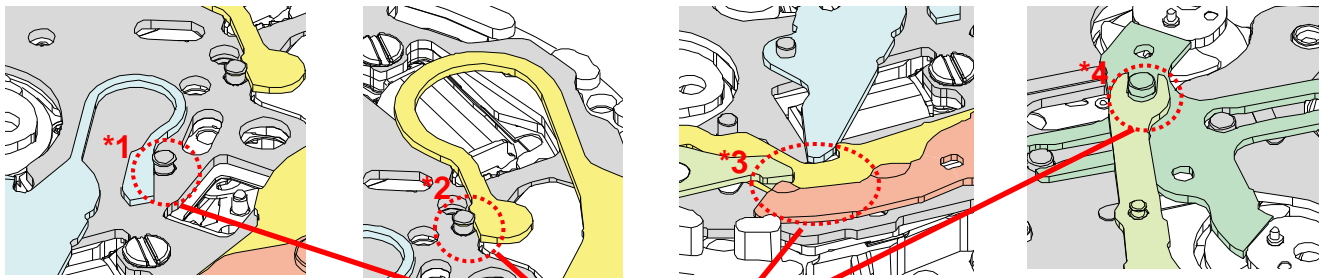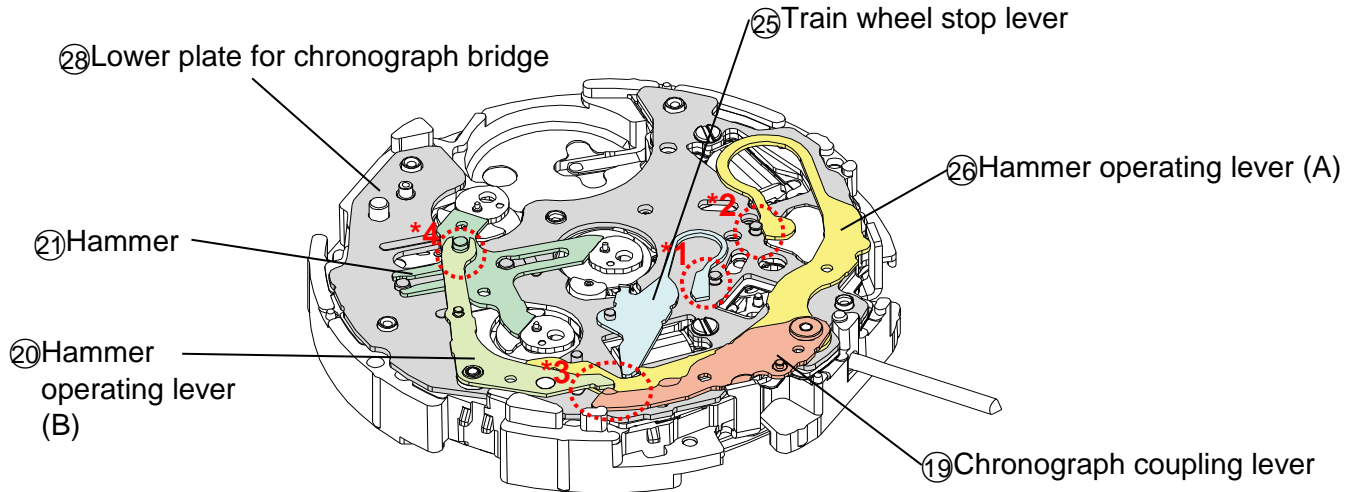***1: Oiling should be done on the
pointed spot of marked place.**

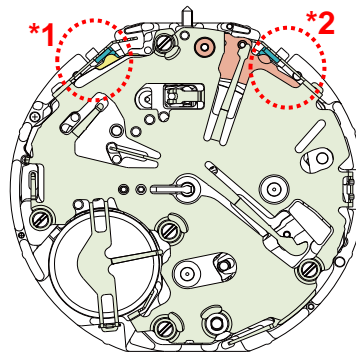⑯ Switch spring
*Oiling spot and spring setting position.

⑳ Hammer operating lever (B)

⑲ Chronograph coupling lever

Setting position

⑯Switch spring

*Oiling should be done on the contact spot of the spring and the pin.

3.Spring setting position

㉕Train wheel stop lever

㉘Lower plate for chronograph bridge

㉖Hammer operating lever (A)

㉑Hammer

⑳Hammer operating lever (B)

⑲Chronograph coupling lever

Setting position

4.Switch lever (A) and (B) setting position

⑯Switch spring

⑯Switch spring

⑯Switch spring

⑫Switch lever (B)

⑪Switch lever (A)

㉖Hammer operating lever (A)

⑲Chronograph coupling lever
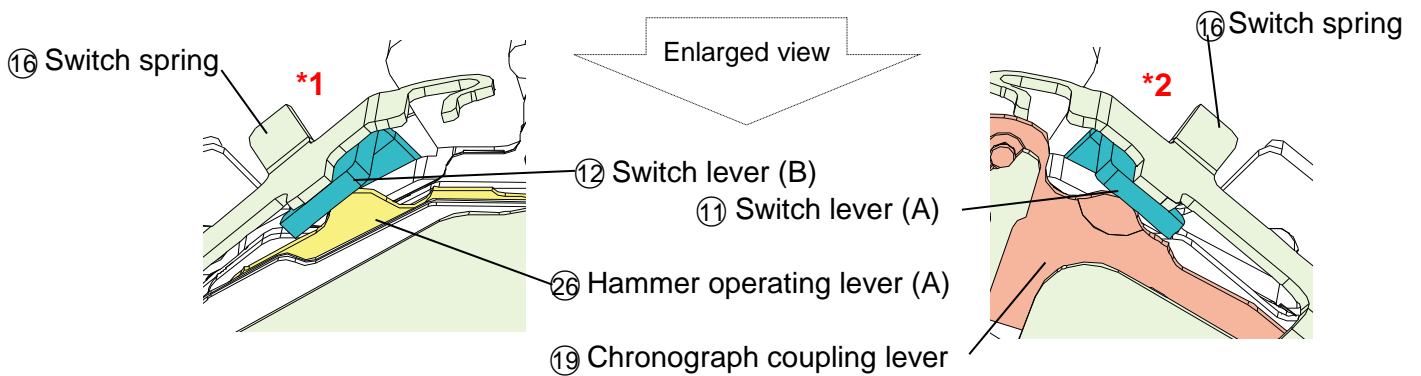
Switch lever (B) is set between the switch spring and hammer operating lever (A) .

**Switch lever (A) is set between the switch spring and chronograph coupling lever.**

5.To remove the winding stem
1) Set the winding stem to normal position.
2) Pull out the winding stem while pushing "A".

Push "A"
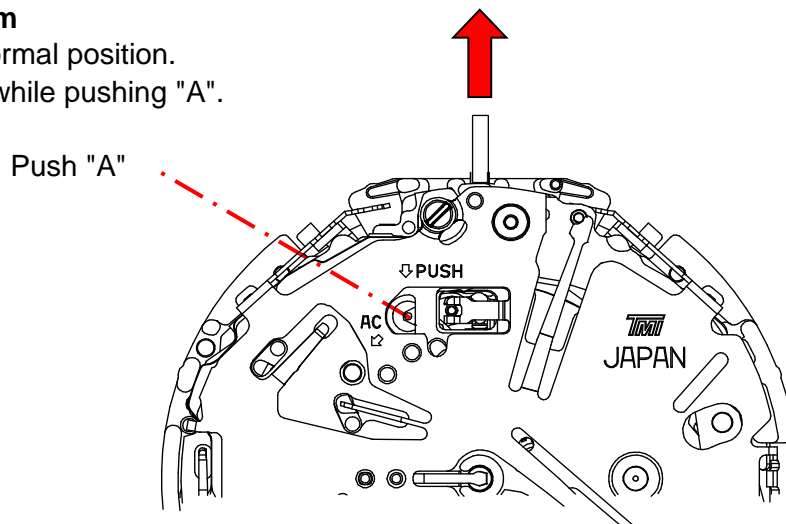
6.To remove or install the battery
1) Remove the hook of the switch spring's battery clamp.
2) Insert the battery sideways, and have the hook of the switch spring's battery clamp catch the main plate.

⑯Switch spring

Battery clamp

1) When Removing　　　　Main plate　　　　**2) When Installing**
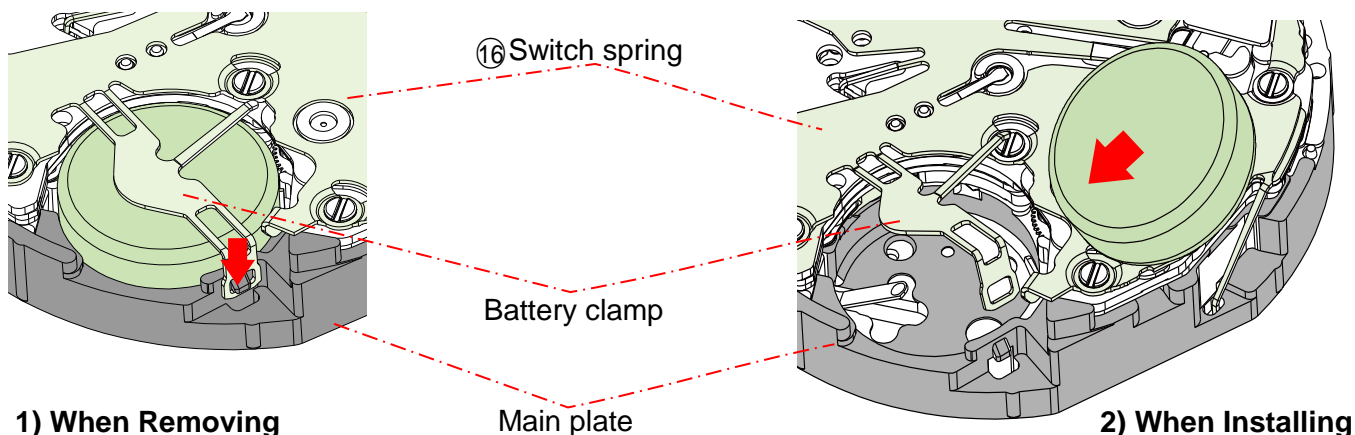
7.Remarks on installing the battery
1) After the battery is replaced with a new one, or after the battery is reinstalled following the repairing procedures, be sure to touch the AC terminal of circuit block and the switch spring with conductive tweezers to reset the circuit as illustrated.

Tweezers
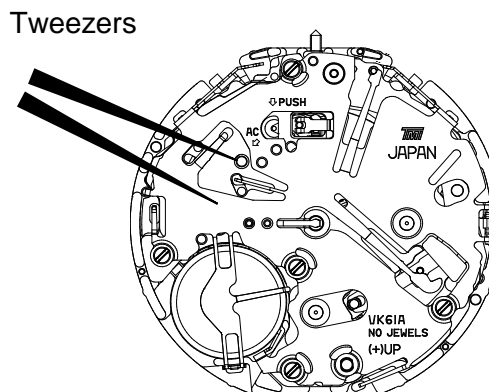
8.How to install the hands

Place the movement directly on a flat metal plate, or something alike to install the hands.

Metal plate
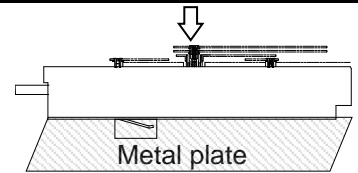
[Note: Second / Minute chronograph hands setting]

(1) Push button (A) (Chronograph start)
(2) Push button (A) (Chronograph stop)
(3) Push button (B) (Chronograph reset)
(4) After (1)-(3), Install the chronograph hands as shown in the table below.

Button (A)
(Chronograph start / stop)

Button (B)
(Chronograph reset)
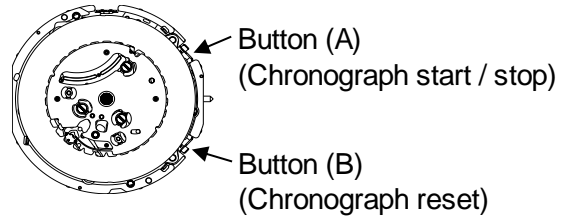
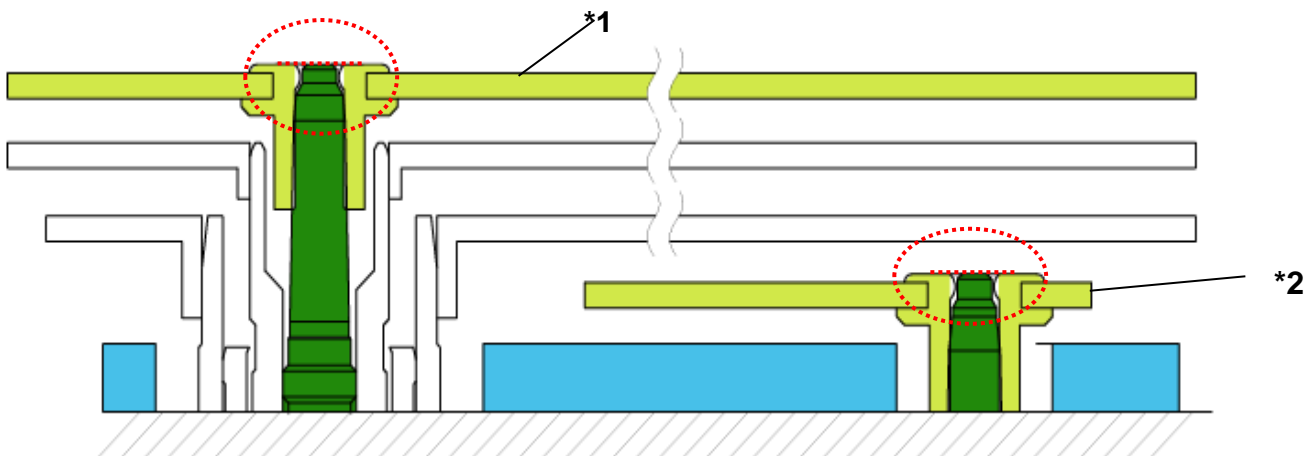| Cal.	VK61	VK64
Second chronograph	"12" o'clock (center)	"12" o'clock (center)
Minute chronograph	"60" minute (12H)	"60" minute (9H)

*Do not reuse the chronograph hands once detached. Please change and use new hands.

[Note: To install 24 hour hand for VK64]

Before installing 24 hour hand, pull out the crown to the second click position and rotate it clockwise, until changed to the next date then install the 24 hour hand.

9.How to check correct hands attachment

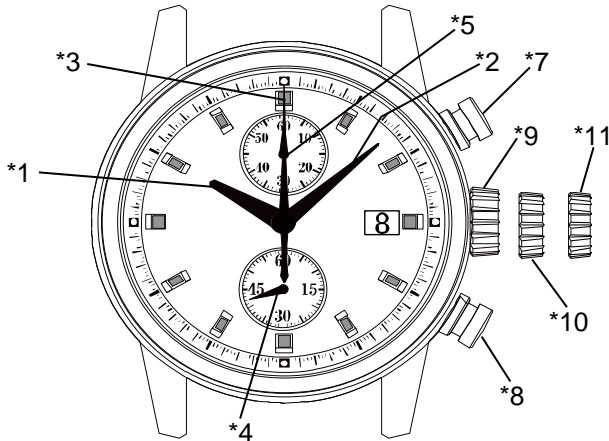**The hand's top surface should be set parallel with the axis tip, as shown below.**

*1

*2
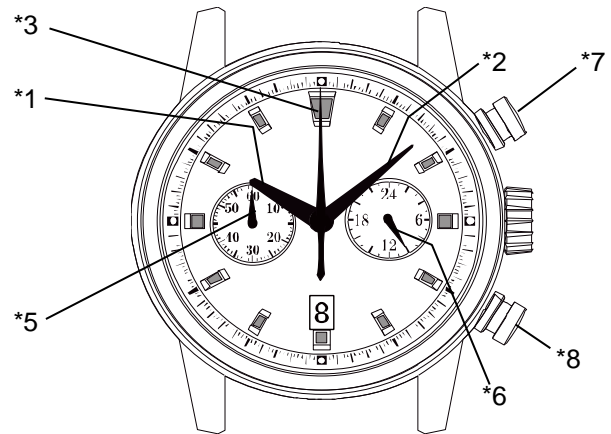
Application hands

*1: Second chronograph hand
*2: Minute chronograph hand and Small second hand and 24 hour hand

OPERATION

DISPLAY AND CROWN / BUTTON OPERATION

<< VK61 >>

<< VK64 >>

Note

*1:	Hour hand	*6:	24 hour hand	*10:	Crown at first position (Date setting)
*2:	Minute hand	*7:	Button (A) (START / STOP)		
*3:	Chronograph second hand	*8:	Button (B) (RESET)	*11:	Crown at second position (Time setting)
*4:	Small second hand	*9:	Crown at normal position		
*5:	Chronograph minute hand (60 minute)				

1.How to set the time
1) Pull out the crown to the second click position.
2) Turn the crown to set hour and minute hands.
   (Check that AM / PM is set correctly.)
3) Push the crown back into the normal position.

[Note]
If the crown is pulled to the second position while the chronograph is started, the chronograph hands will continue to move. This is not a malfunction.

2.How to set the date
1) Pull out the crown to the first click position.
2) Turn the crown clockwise for date setting.
   *Do not set the date between 9:00 P.M. and 3:00 A.M. as this will cause a malfunction.
3) Push the crown back into the normal position.

3.How to reset (after battery change)
It is possible to reset by the following two methods.

Method 1
1) Set the crown to the normal position.
2) Touch the AC terminal of circuit block and the switch spring with conductive tweezers to reset the circuit.
3) The small second hand will move at two-second interval for 10 seconds.(VK61 only)

Method 2
1) Pull out the crown to the second click position.
2) Press the button (B) for two seconds and release the button.
3) Push the crown back to the normal position.
4) The small second hand will move at two-second interval for 10 seconds.(VK61 only)

* If the crown is operated within this 10 seconds, the two-second interval movement will not activate. (VK61 only)

[Note]

It is not necessary to set the chronograph hands after the battery is exchanged.
If the chronograph hands position are incorrect, following below procedure all the chronograph hands
will be reset to "0" position.

Button (A) (START) ⇨ Button (A) (STOP) ⇨ Button (B) (RESET)
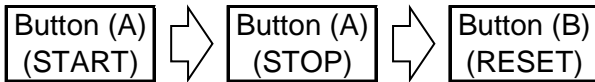
HOW TO USE THE CHRONOGRAPH

[Standard measurement]

Press the buttons in the following order :   A → A → B

START ⟶ STOP (Finish) ⟶ RESET
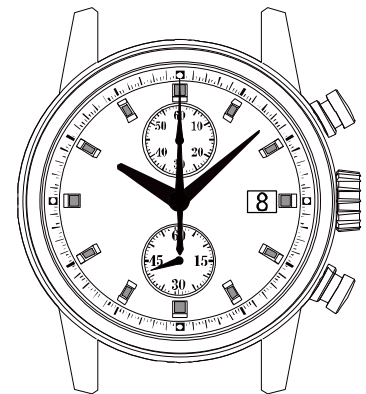
(20 minutes 10 seconds)

·Press button (A) to start the
chronograph.
The chronograph second
hand will start moving.

·Press button (A) again to stop the
chronograph.
The chronograph hands stop to
indicate the elapsed time.

·Press button (B) to reset the
chronograph.
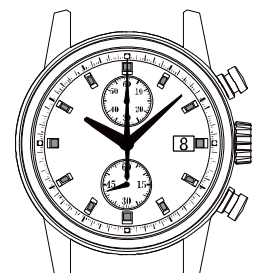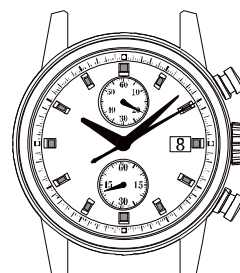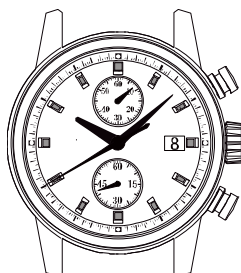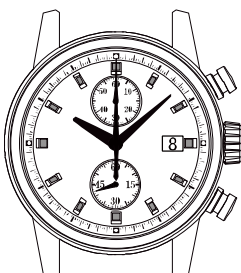All the chronograph hands
will be reset to "0" position.

Note

The chronograph can measure up to 60 minutes.
The chronograph stops after a measurement for 60 minutes.
 *Restart by pushing button (A).

During the chronograph operation, button (B) (reset) can be pushed. There is no problem with the
function.

[Accumulated elapsed time measurement]

Press the buttons in the following order :   A → A / A ··· → A → B

START ⟶ STOP / RESTART ⟶ STOP ⟶ RESET

(8 minutes 40 seconds)   (20 minutes 10 seconds)

*Restart and stop of the chronograph can be repeated as many times as necessary by pressing button (A)