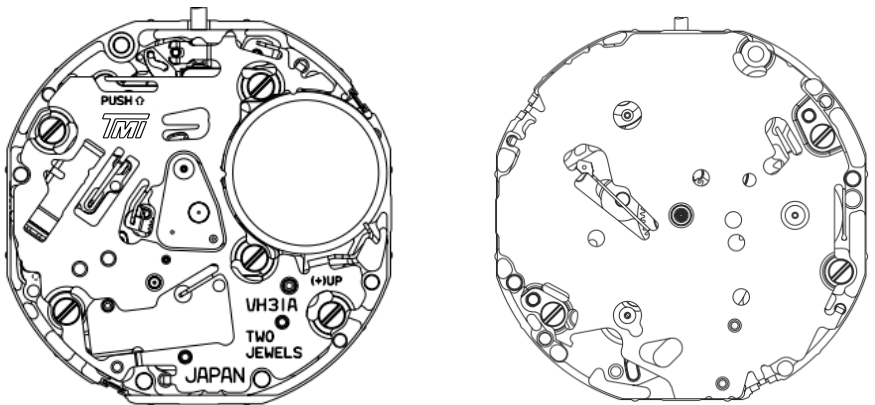






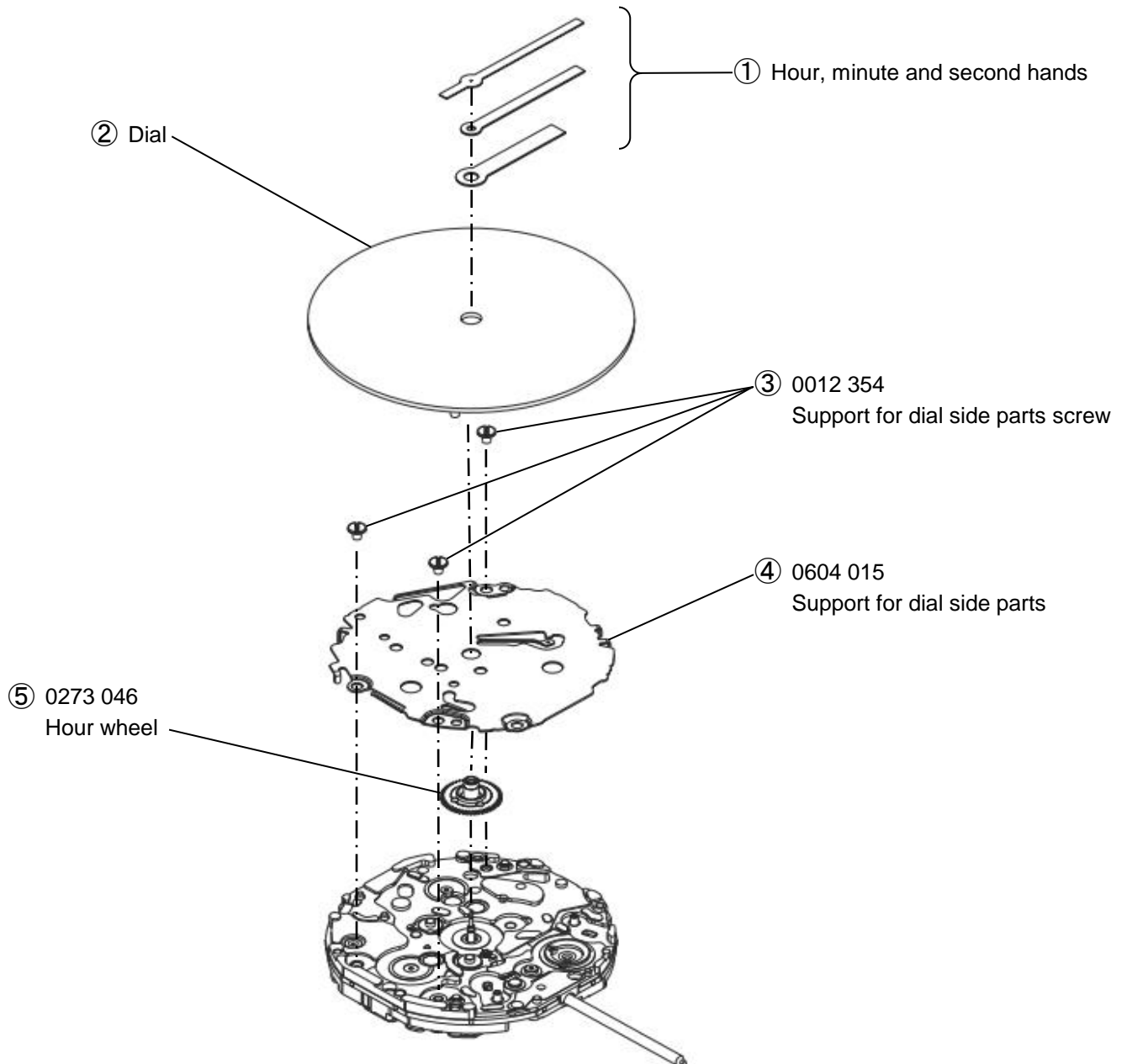
**TECHNICAL GUIDE
&
PARTS CATALOGUE**




Cal.VH31A

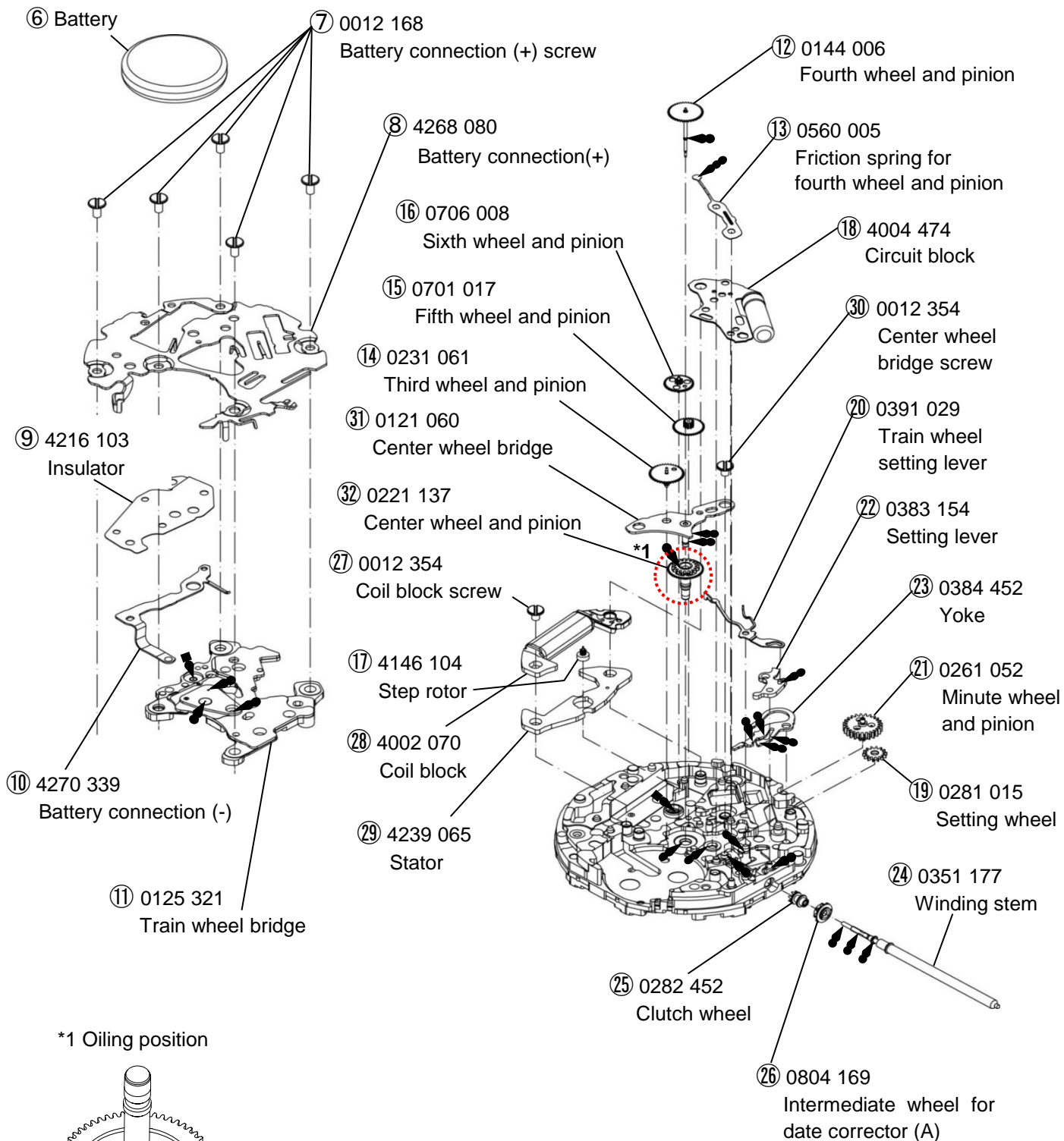
ANALOGUE QUARTZ

	Cal. No.	VH31A
Movement		
Movement size	Outside diameter	$\phi 23.70$ mm 22.60 mm : between 12 o'clock and 6 o'clock sides 22.60 mm : between 3 o'clock and 9 o'clock sides
	Casing diameter	$\phi 23.30$ mm 22.10 mm : between 12 o'clock and 6 o'clock sides 21.40 mm : between 3 o'clock and 9 o'clock sides
	Total height	3.45 mm
Time indication		3 Hands (Hour, Minute, Second)
Driving system		Step motor
Additional mechanism		Electronic circuit reset switch Second setting device
Antimagnetic		≥ 1600 A/m
Accuracy		Less than ± 15 seconds : Monthly rate at normal temperature range
Battery		SR920SW (Silver oxide battery) Battery life is approximately 2 years
Measuring gate by quartz tester		Use 10 second gate * Set the winding stem with crown at the normal position
Jewels		2 Jewels

Disassembling procedures Figs. ① → ③②	Lubricating : Types of oil	
		A3a / Moebius 9010
Reassembling procedures Figs. ③② → ①		A2a / Moebius 9030
	Oil quantity	
		Sufficient quantity



Disassembling procedures Figs. ① → ③②	Lubricating : Types of oil		A3a / Moebius 9010
Reassembling procedures Figs. ③② → ①	Oil quantity		Normal quantity
			Sufficient quantity



•The explanation here is only for the particular point of Cal.VH31A

REMARKS ON DISASSEMBLING AND REASSEMBLING

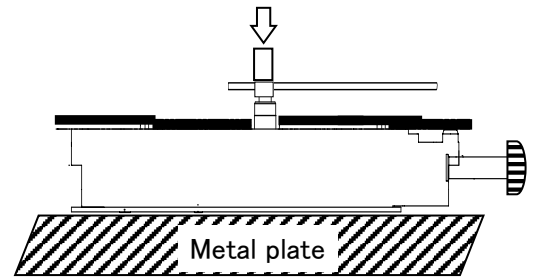
(1)Hand

•How to install hands:

Place the movement directly on a flat metal plate or such a hard plate when you install the hands.

Necessary procedure to setting hands:

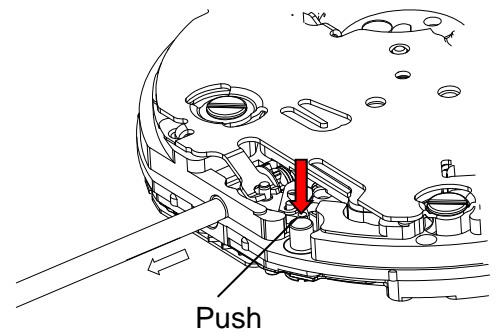
- ①Set the dial.
- ②Install the hour and minute and second hands at the 12 o'clock position.



(2)Winding stem

•How to remove:

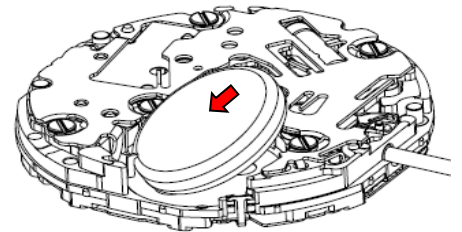
Pull out the winding stem while pushing the indented portion of the arrow.



(3)Battery

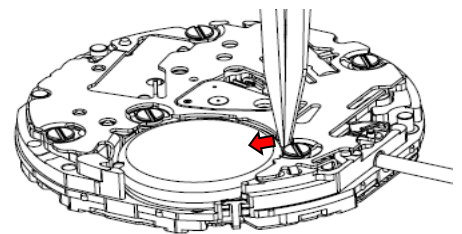
•How to install:

Insert the battery in the aslant direction as shown by the arrow. Check the battery connection (+) securely touches the side face of the battery.



•How to remove:

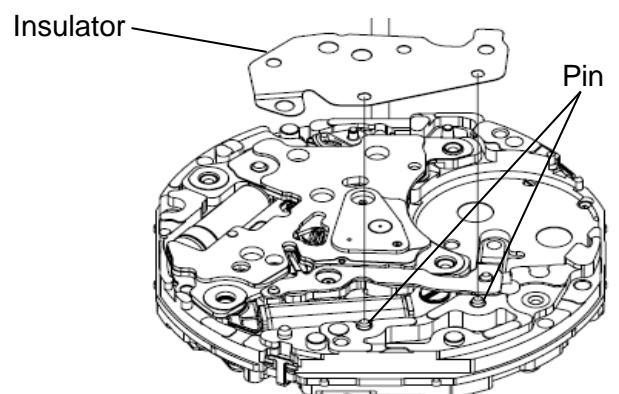
Firstly slide the battery in the direction of the arrow with tweezers, and then lift the battery.



(4)Insulator

•How to set:

To insulate between the battery connection (+) and the battery connection (-), the insulator should be put at the two pins securely as bellow.



•How to set the support of dial side parts:

There are two hooks on the support for dial side parts. (Fig.1)

First, assemble the two hooks on the support for dial side parts to the position of the built-in height A of the base plate. (Fig.2)

Second, assemble the two hooks on the position of the built-in height B of the base plate. (Fig.3)

example VH31A

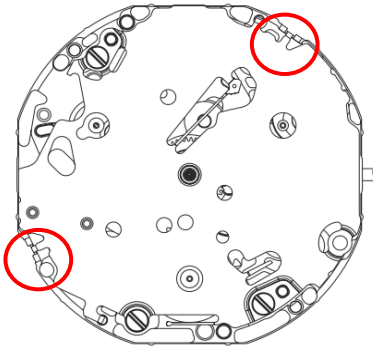


Fig.1

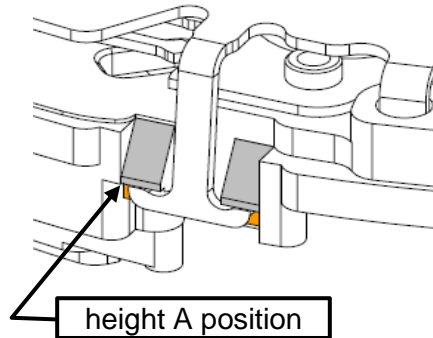


Fig.2 (built-in height A)

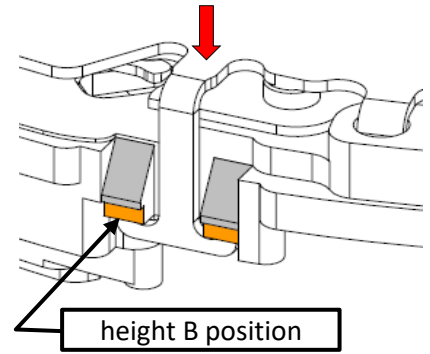
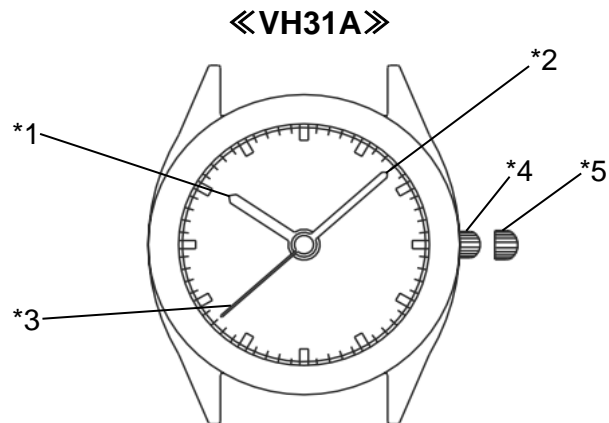


Fig.3 (built-in height B)

DISPLAY AND CROWN OPERATION



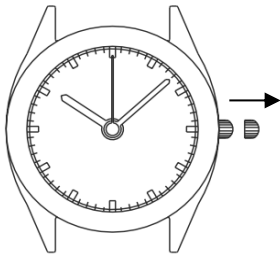
Note:

*1: Hour hand
*2: Minute hand

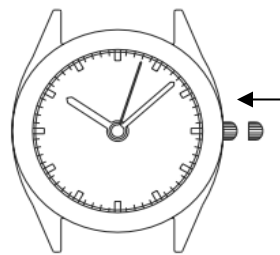
*3: Second hand
*4: Crown at normal position

*5: First click
• Time setting

TIME SETTING



1. Pull out the crown to the first click when the second hand is at the 12 O'clock position.



2. Push the crown back into the normal position in signal.

Turn the crown to set the hour and minute hands to the time.