

**TECHNICAL GUIDE
&
PARTS CATALOGUE**

**Cal.VJ20B/C
Cal.VJ21B/C**

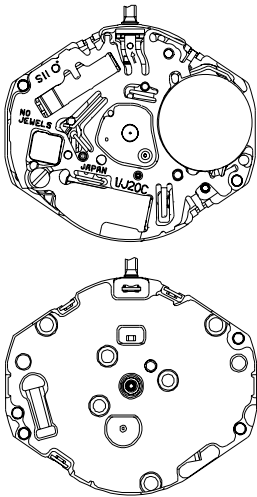
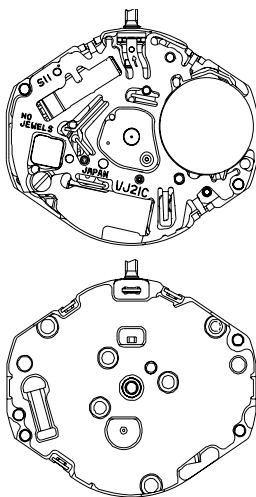
ANALOGUE QUARTZ

SII Products

VJ20B/C VJ21B/C

[SPECIFICATION]

Version-01

Item		Cal. No.	VJ20B/C	VJ21B/C
Movement				
Movement size	Outside diameter		$\phi 18.50$ mm 18.20 mm : between 12 o'clock and 6 o'clock sides 15.30 mm : between 3 o'clock and 9 o'clock sides	
	Casing diameter		$\phi 18.10$ mm 17.80 mm : between 12 o'clock and 6 o'clock sides	
	Total height		2.28 mm (including the battery)	
Time indication			2 Hands	3 Hands
Driving System			Step motor (Load compensated driving pulse system type)	
Additional mechanism			Electronic circuit reset switch	Electronic circuit reset switch Second setting device
Loss/Gain (Monthly rate) Frequency of crystal oscillator			Less than ± 20 seconds at normal temperature range 32,768 Hz	
Operational temperature range			- 5°C ~ + 50°C	
Regulation system			Nil	
Measuring gate by quartz tester			Use 10-second gate * Set the winding stem with crown at the normal position	
Battery			SR621SW (Silver oxide battery) Battery life is approximately 3 years	
Jewels			0 Jewel	

Disassembling procedures Figs. ① → ②②

Reassembling procedures Figs. ②② → ①

Lubricating : Types of oil

● Moebius A

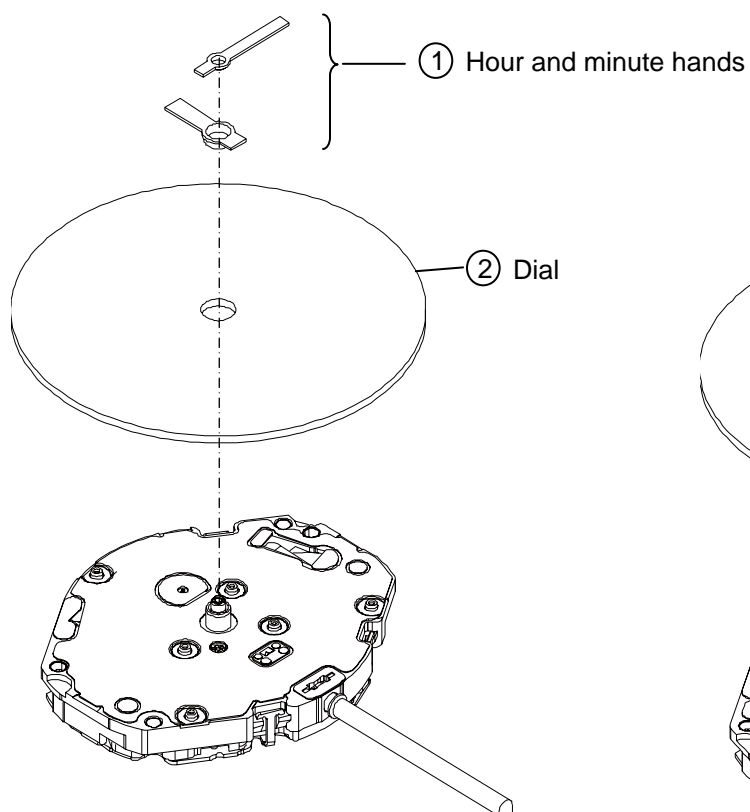
■ Moebius F

Oil quantity

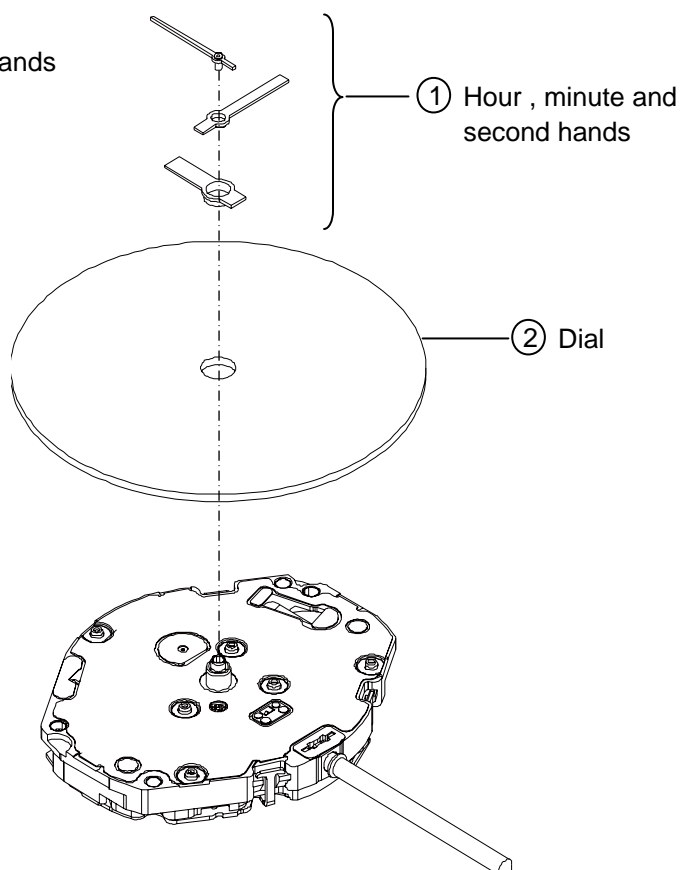
∞ NORMAL QUANTITY

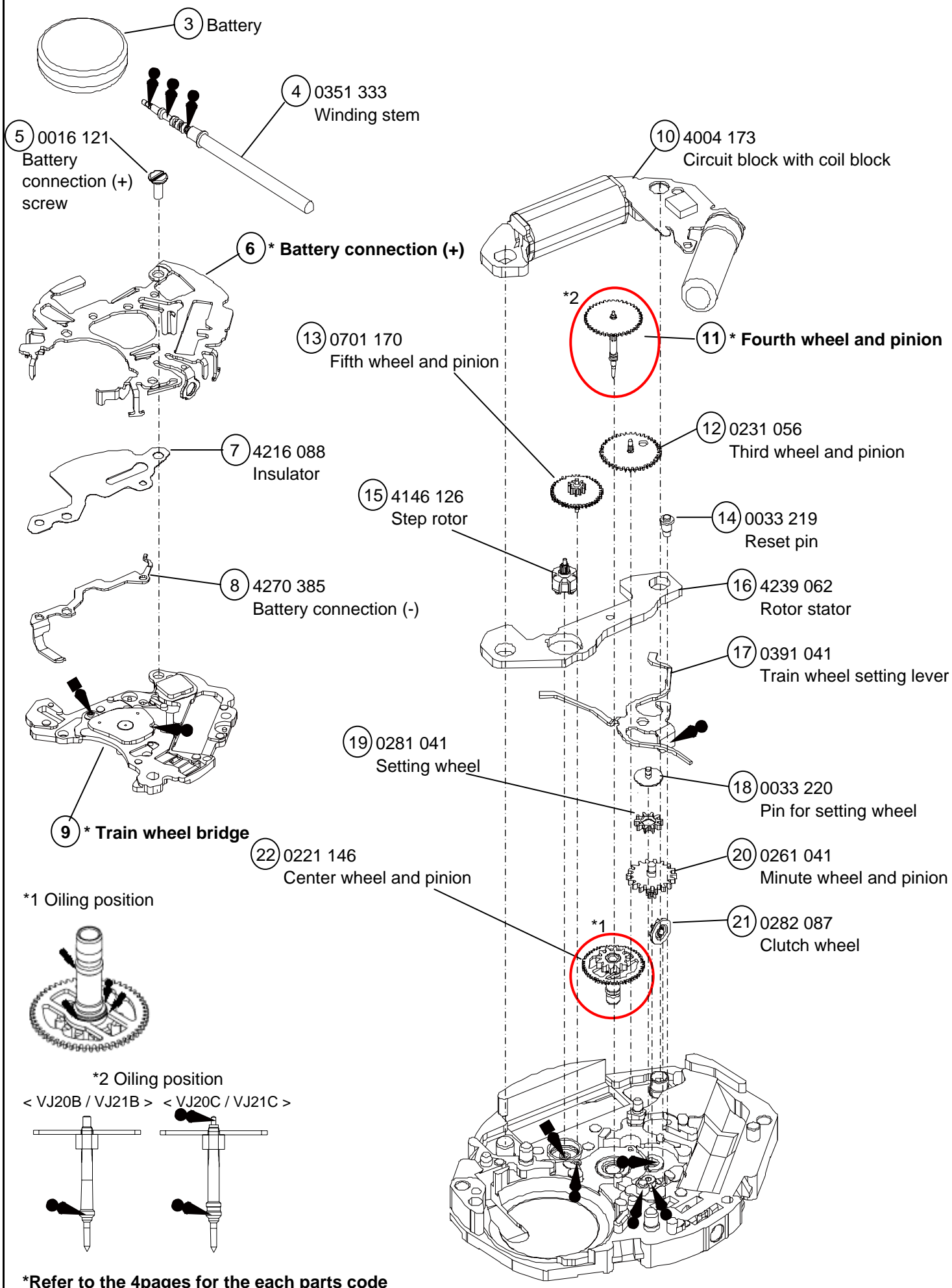
*Refer to the 4pages for the each parts code

<< VJ20B/C >>



<< VJ21B/C >>





O The part which is not common in Cal.VJ2*B and Cal.VJ2*C

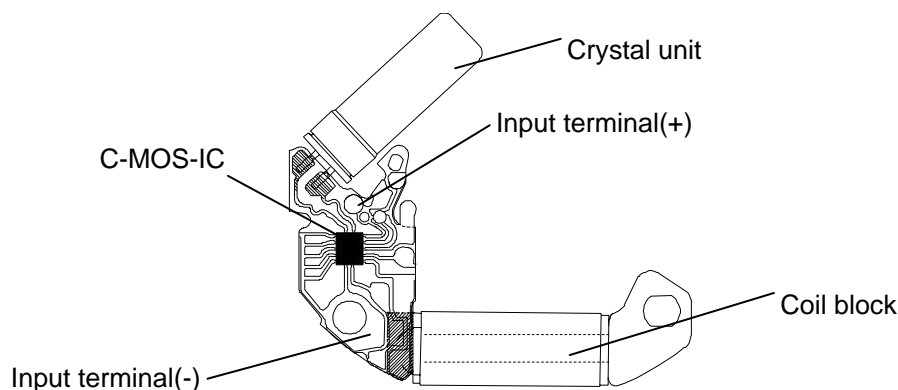
Parts name	VJ20B	VJ21B	VJ20C	VJ21C
⑥ Battery connection(+)	4271 363	4271 351	4268 032	4268 029
⑨ Train wheel bridge	0125 262	0125 262	0125 297	0125 297
⑪ Fourth wheel and pinion	0241 194	0241 104	0241 469	0241 467

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

The explanation here is only for the particular points of Cal.VJ20/21

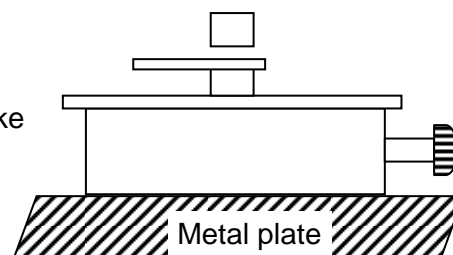
I . STRUCTURE OF THE CIRCUIT BLOCK

Notes: Since the circuit block and coil block are made by one piece, in disassembling and reassembling take care not to cut the coil line.

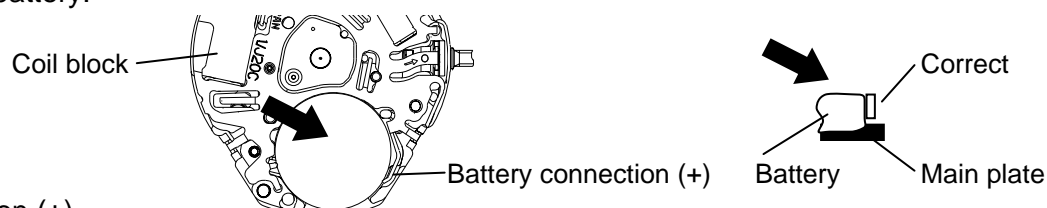


II . REMARKS ON DISASSEMBLING AND REASSEMBLING

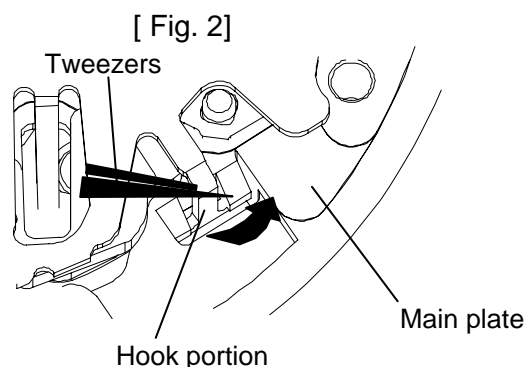
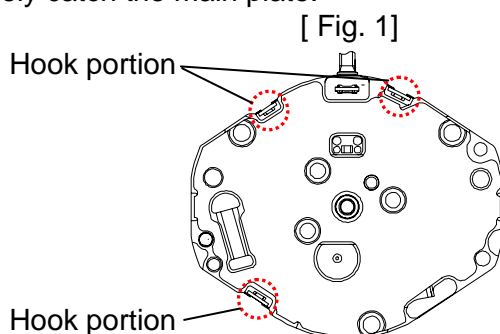
- ① Hands
 How to install
 Place the movement directly on a flat metal plate or the like to install the hands.



- ② Battery
 How to install battery
 Insert the battery aslant in the direction shown by the arrow.
 Check the battery connection (+) securely touches the side face of the battery.



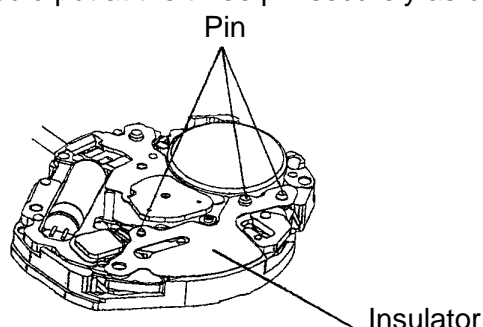
- ③ Battery connection (+)
 How to install
 Have the hook portions (3 places) catch the main plate (Fig.1&2).
 In disassembling and reassembling , take care not to deform the hook portions.
 After installing the battery connection (+), check that the three hook portions securely catch the main plate.



④ Insulator

Setting position

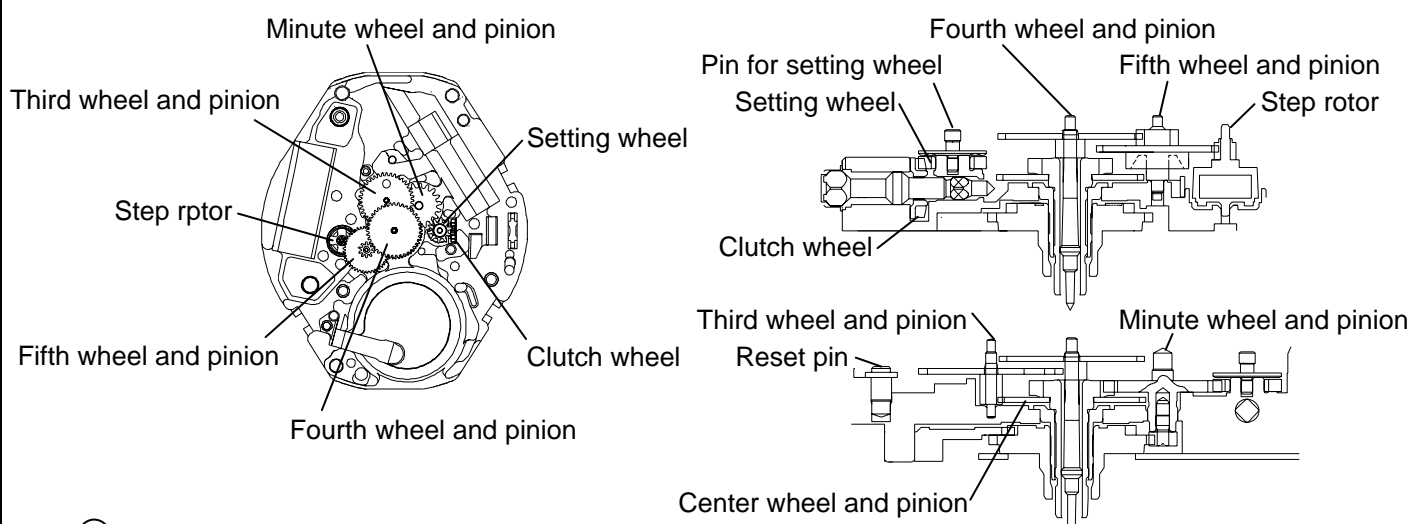
Notes: In order to insulate the battery connection (+) and the battery connection (-), the insulator should put at the three pin securely as below.



⑤ 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.

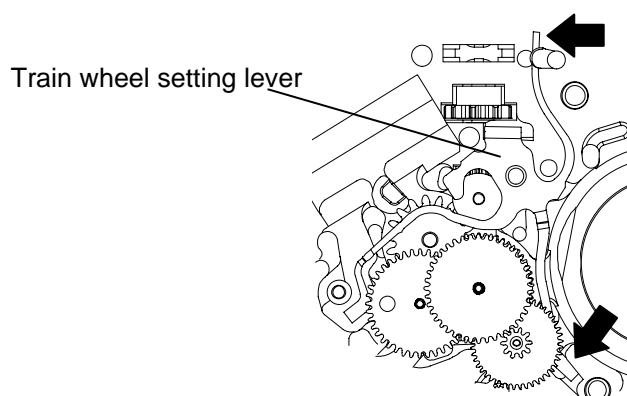


⑥ Train wheel setting lever

Setting position

Notes:

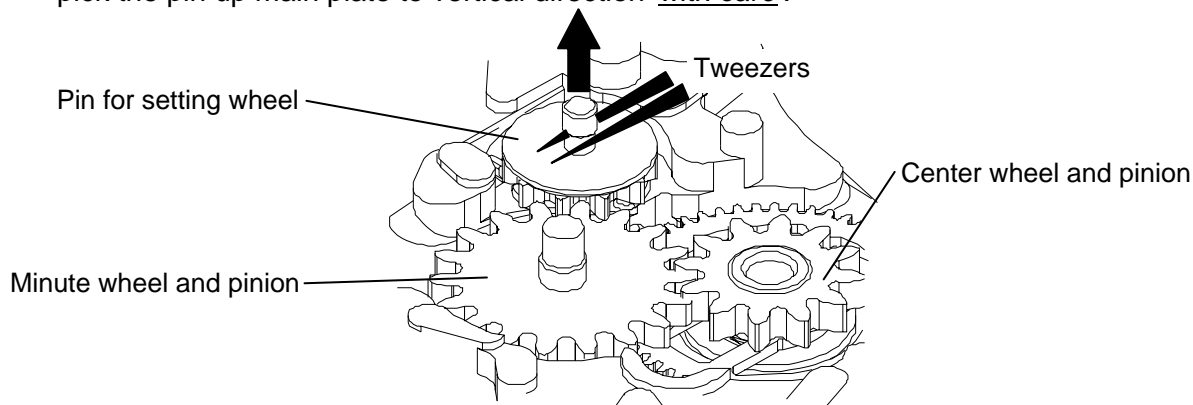
- Catch the part of spring of the train wheel setting lever to the pin like as below.
- Take care not to deform the spring portion of the train wheel setting lever.



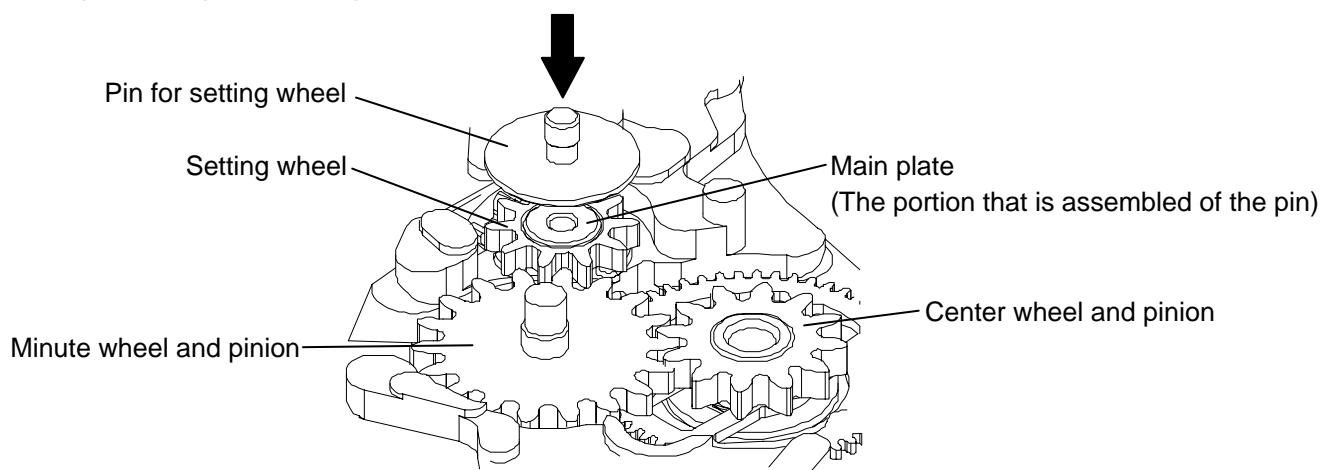
⑦ Pin for setting wheel

Notes:

- In disassembling and reassembling , take care not to damage the portion that is assembled of the pin.
- (Since the portion that is assembled of the pin is made of plastics and easily damaged.)
- In disassembling , pick the pin up main plate to vertical direction with care .



- In reassembling , push the pin in main plate to vertical direction with care .



III. VALUE CHECKING

Coil block resistance	2.10K Ω ~2.30K Ω
Current consumption	
For the wheel of the movement	less than 0.96 μ A