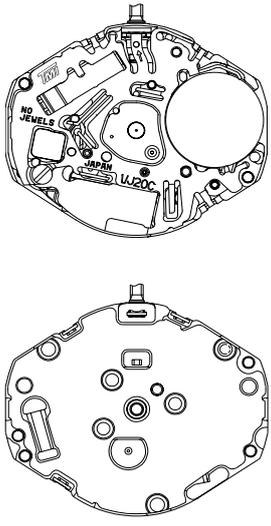
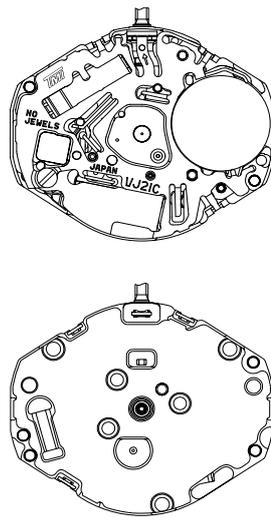


**TECHNICAL GUIDE
&
PARTS CATALOGUE**

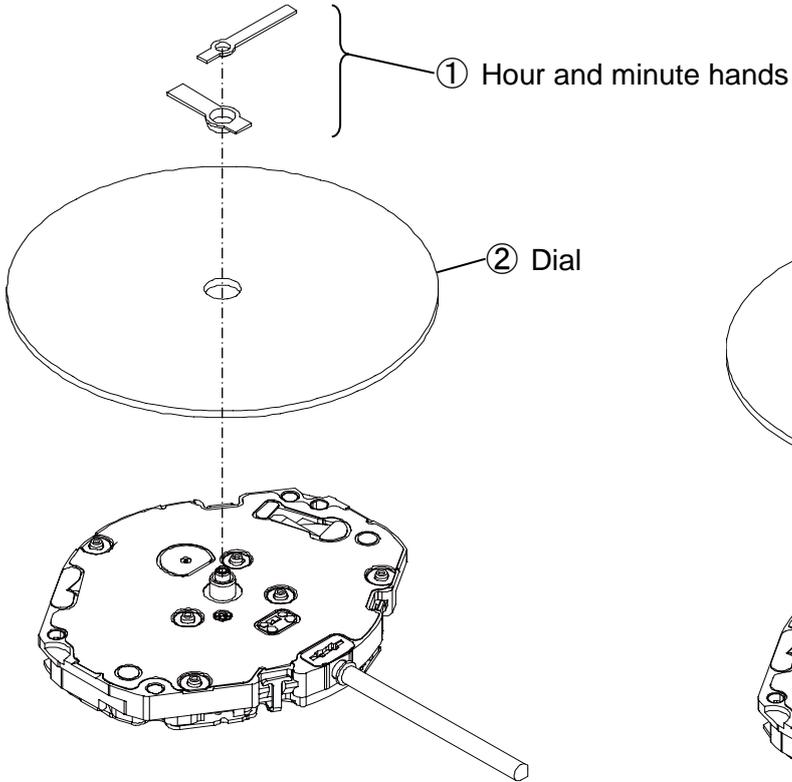
**Cal.VJ2 Series
(VJ20C/21C)**

ANALOGUE QUARTZ

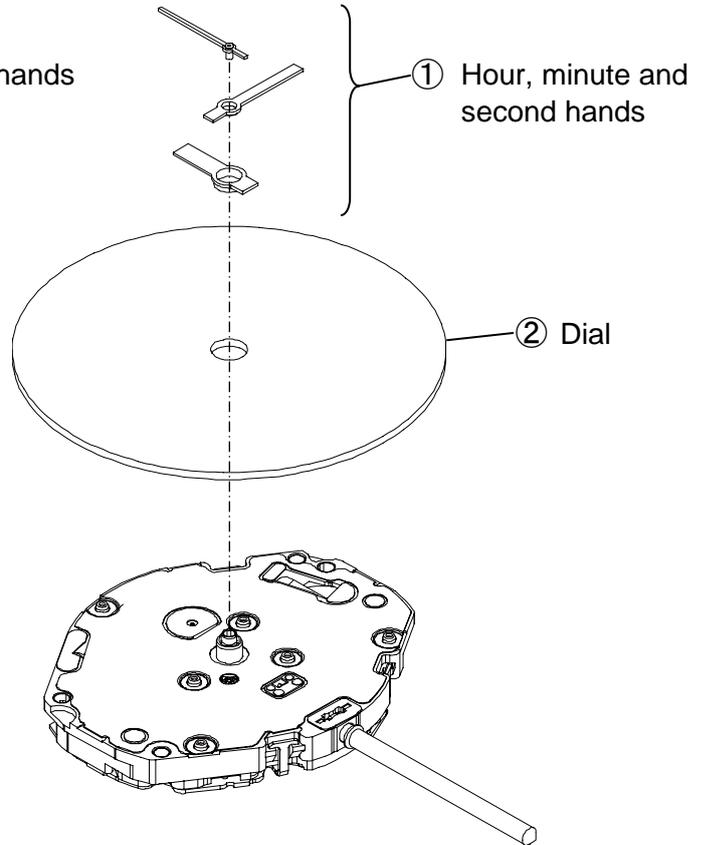
Item		Cal. No.	VJ20C	VJ21C
Movement				
Movement size	Outside diameter	ϕ 18.50 mm 18.20 mm : between 12 o'clock and 6 o'clock sides 15.30 mm : between 3 o'clock and 9 o'clock sides		
	Casing diameter	ϕ 18.10 mm 17.80 mm : between 12 o'clock and 6 o'clock sides		
	Total height	2.28 mm (including the battery)		
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
Antimagnetic		\geq 1600 A/m		
Loss/Gain (Monthly rate) Frequency of crystal oscillator		Less than \pm 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	Lubricating : Types of oil	
		A3a / Moebius 9010
Reassembling procedures Figs. ②② → ①		A2a / Moebius 9030
Oil quantity		Normal quantity

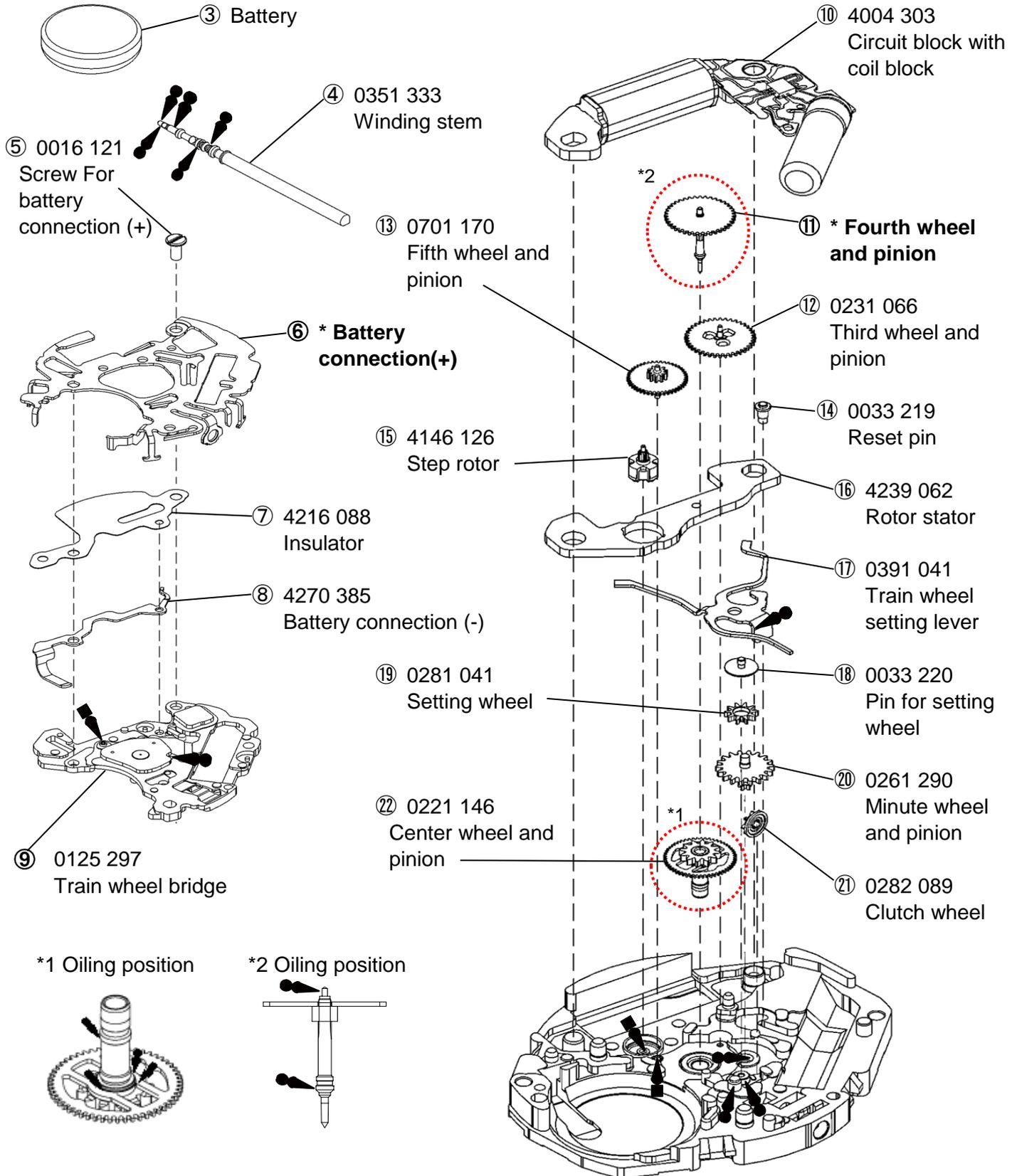
<< VJ20C >>



<< VJ21C >>



Disassembling procedures Figs. ① → ②②	Lubricating : Types of oil
Reassembling procedures Figs. ②② → ①	 A3a / Moebius 9010  A2a / Moebius 9030
	Oil quantity  Normal quantity



*1 Oiling position

*2 Oiling position

*Refer to page 4 for each parts code

○ The part which is not common in Cal.VJ20C/VJ21C

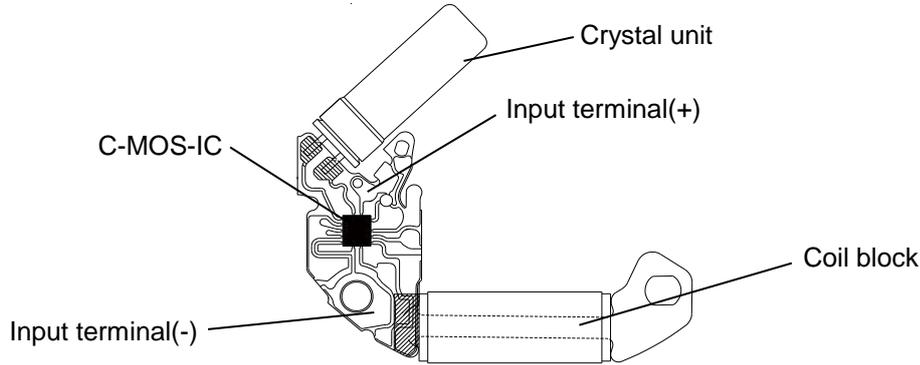
Parts name	VJ20C	VJ21C
⑥ Battery connection(+)	4268 032	4268 029
⑪ Fourth wheel and pinion	0241 469	0241 467

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

The explanation here is only for the particular points of Cal.VJ20C/21C

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.

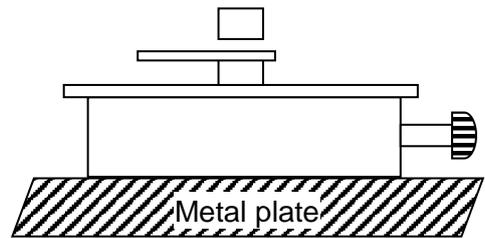


II . REMARKS ON DISASSEMBLING AND REASSEMBLING

① Hands

•How to install

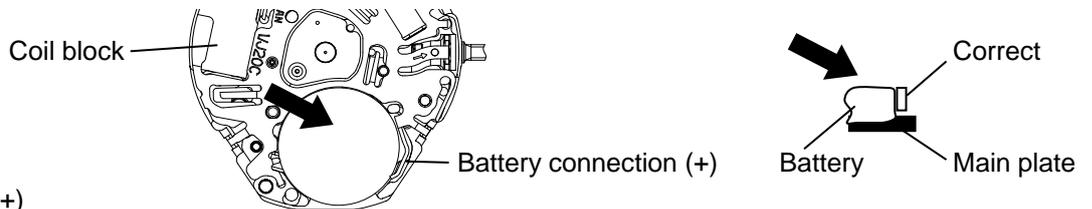
Place the movement directly on a flat metal plate or the like to install the hands.



② Battery

•How to install Battery

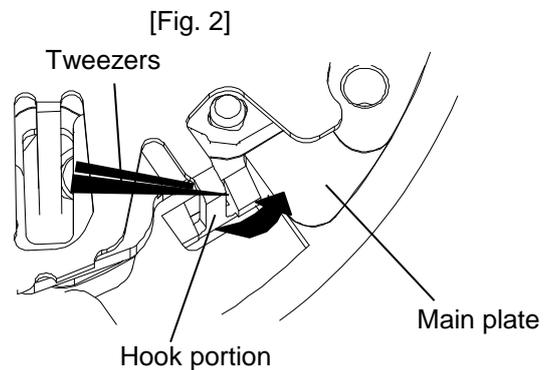
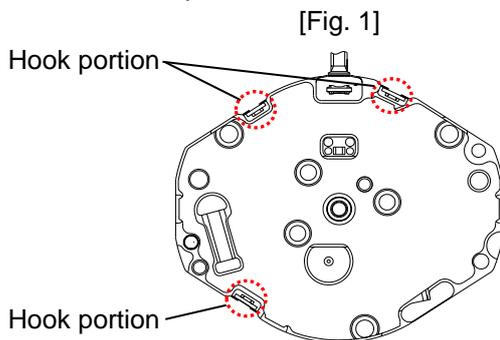
Insert the battery aslant in the direction shown by the arrow.
Check the battery connection (+) securely touches the side face of the battery.



③ Battery connection (+)

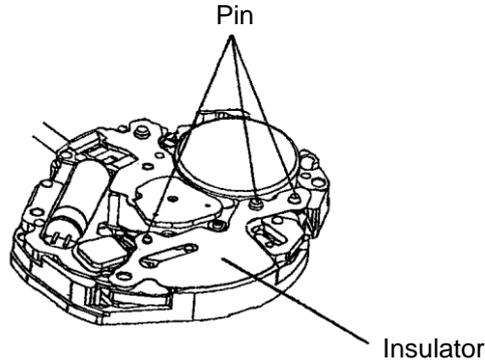
•How to install

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.



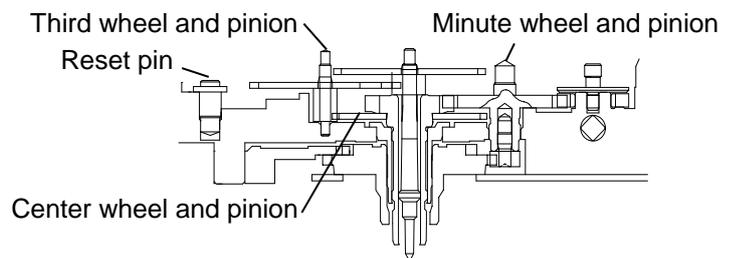
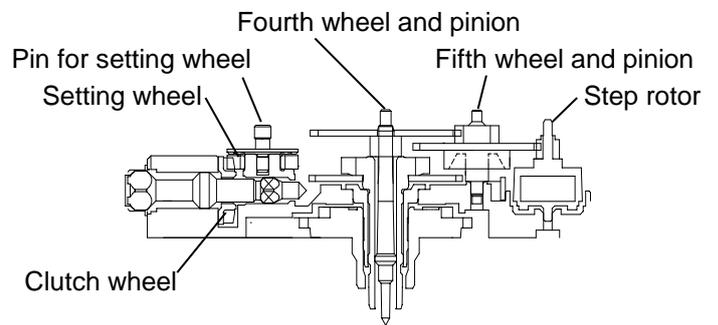
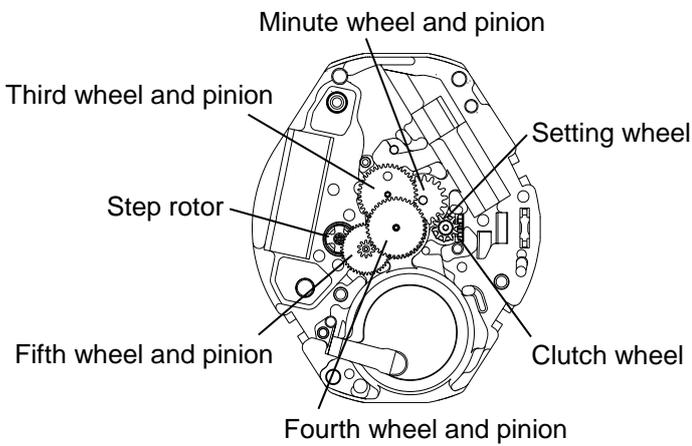
- ④ Insulator
• Setting position

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



- ⑤ Train wheel bridge
• Setting position

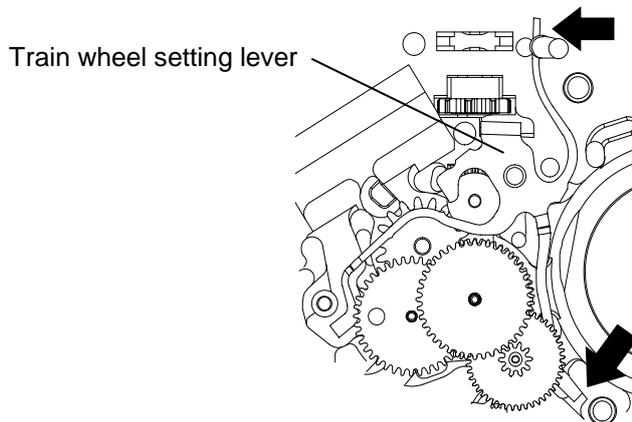
Notes: Since the fifth wheel and pinion and step rotor are made of plastics, take care not to damage them in disassembling and reassembling.



- ⑥ Train wheel setting lever
• Setting position

Notes:

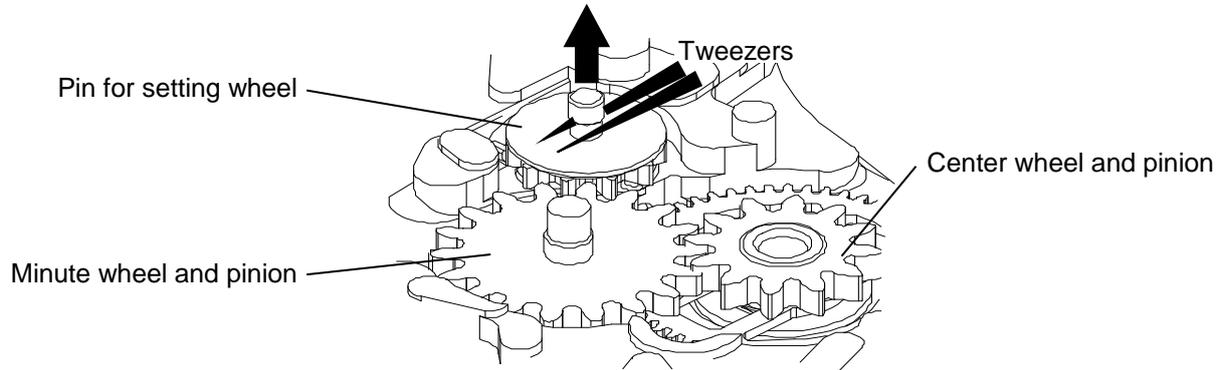
- Catch the part of spring of the train wheel setting lever to the pin like as below.
- Take care not to deform the spring portion of the train wheel setting lever.



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.

