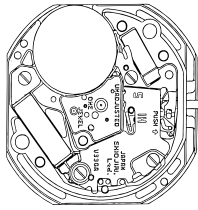
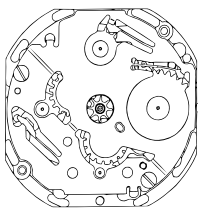


PARTS CATALOGUE/TECHNICAL GUIDE

Cal. 5Y85A/5Y89A

[SPECIFICATIONS]

Item		Cal. No.	5Y85A	5Y89A
Movement				
			The illustrations refer to Cal. 5Y89A. (x 1.0)	
Movement size	Outside diameter		\varnothing 24.0 mm 21.5 mm between 3 o'clock and 9 o'clock sides 21.5 mm between 6 o'clock and 12 o'clock sides	
	Casing diameter		\varnothing 23.3 mm 21.3 mm between 3 o'clock and 9 o'clock sides 21.5 mm between 6 o'clock and 12 o'clock sides	
	Height		3.05 mm (Including battery portion)	
Time indication			3 hands (hour, minute and second hands)	
Driving system			Step motor (Load compensated driving pulse type)	
Additional mechanism			<ul style="list-style-type: none"> • Day calendar • Instant setting device for day calendar • Date calendar • Electronic circuit reset switch • Train wheel setting device • 24 hour dial disk 	
Loss/gain			Monthly rate within normal temperature range: less than 20 seconds	
Regulation system			Nil	
Measuring gate by quartz tester			Use 10-second gate	
Battery	Battery No.		SEIKO SR916SW	
	Voltage		1.55 V	
	Battery life		Approximately 3 years	
Jewels			1 jewel	






PARTS CATALOGUE

Cal. 5Y85A/5Y89A

Disassembling procedures Figs. : ① → ④⑥

Reassembling procedures Figs. : ④⑥ → ①

Lubricating : Types of oil Oil quantity

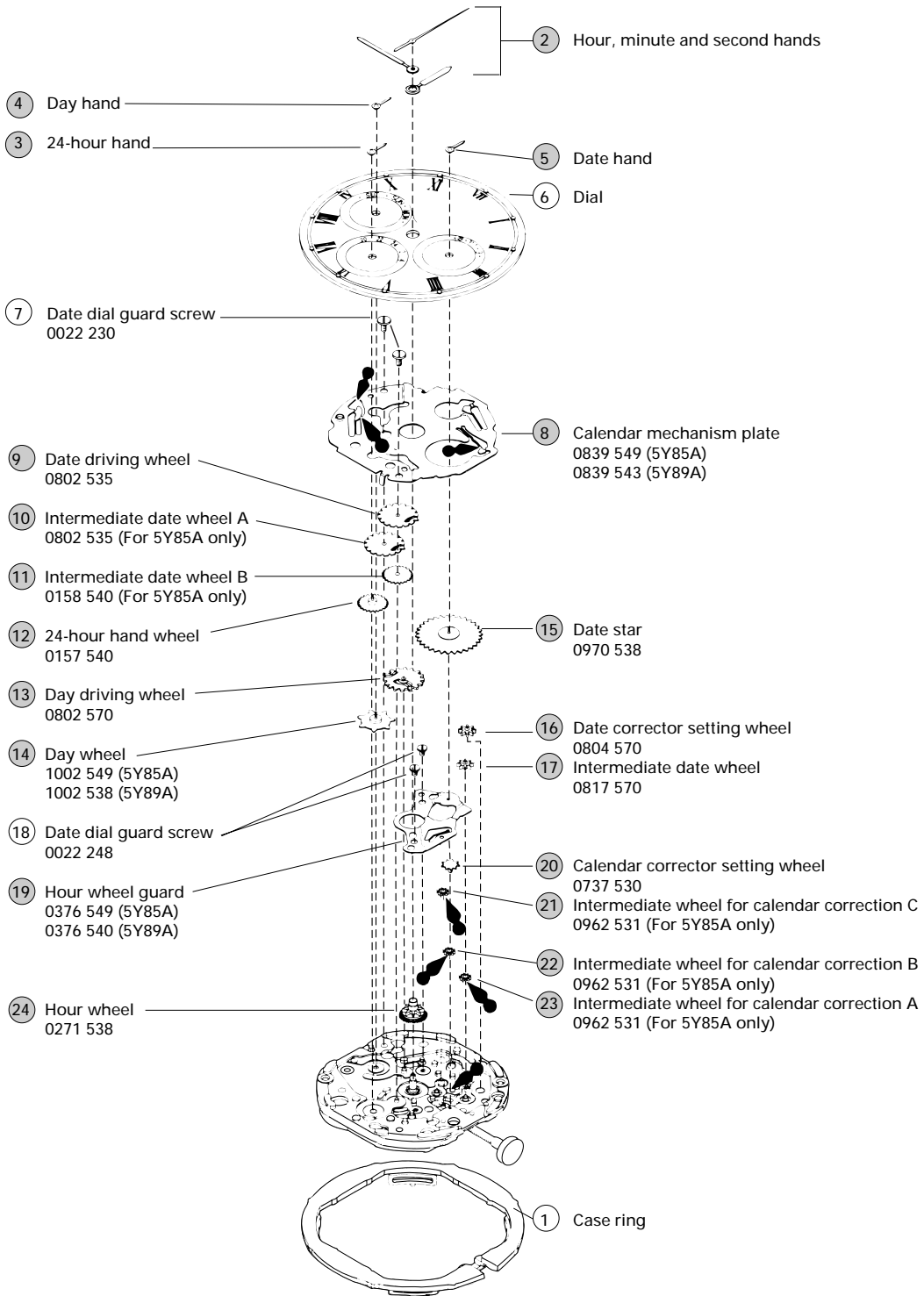
- | | | | |
|---|---------------------|---|-----------------|
|  | Moebius A |  | Normal quantity |
|  | Moebius F |  | Large quantity |
|  | SEIKO Watch Oil S-6 | | |

5Y85A/5Y89A

The illustration below is based on the Cal. 5Y89A. The exclusive parts for the Cal. 5Y85A are additionally indicated.

Remarks

Some parts have different parts codes between the Cal. 5Y85A and Cal. 5Y89A. Some parts are used only for the Cal.5Y85A.



⇒ Please see the remarks on the following pages.

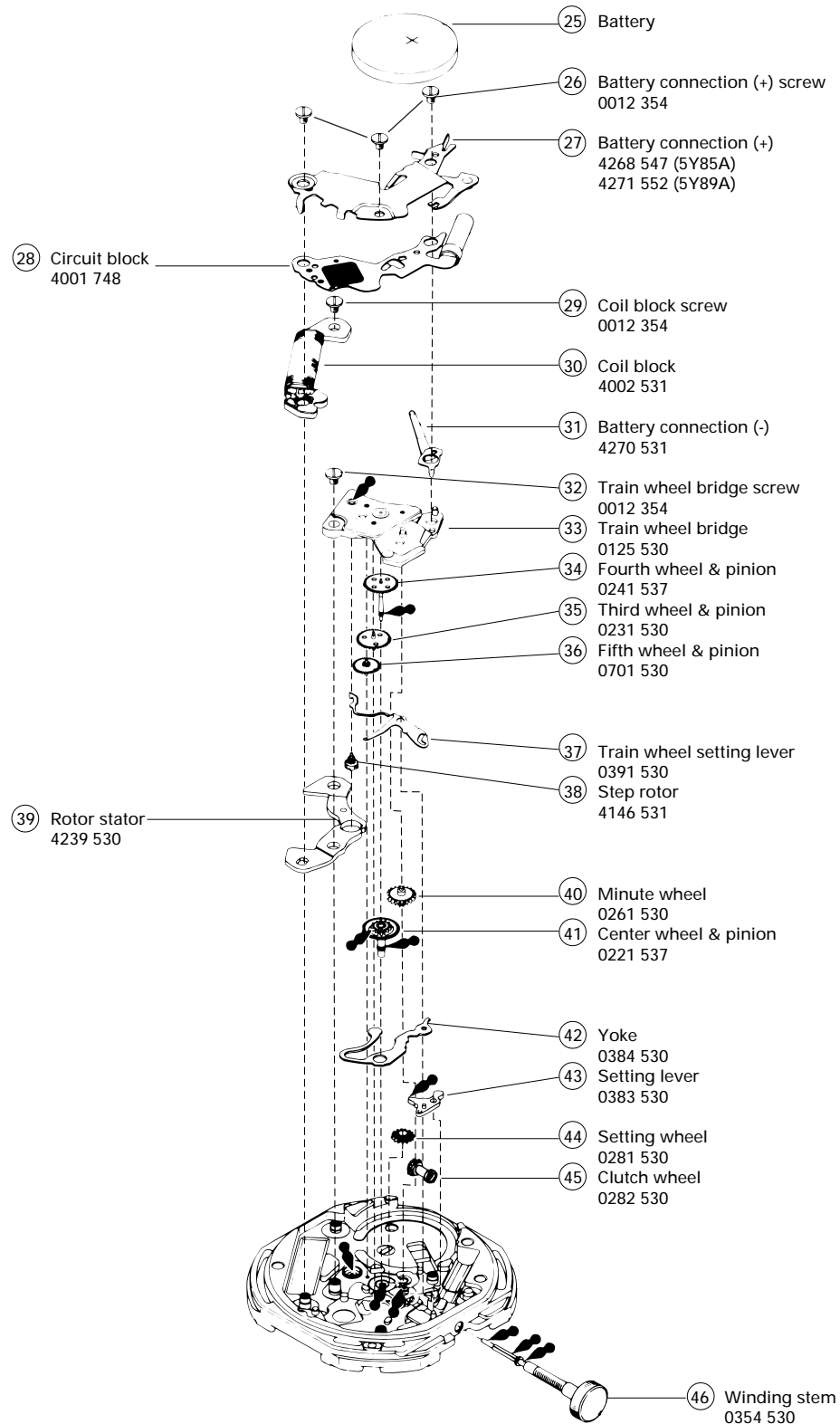
Lubricating of some parts is shown in "II. REMARKS ON DISASSEMBLING AND REASSEMBLING".

PARTS CATALOGUE

Cal. 5Y85A/5Y89A

5Y85A/5Y89A

The parts shown below are the common parts except for (27) Battery connection (+).



⇒ Please see the remarks on the following pages.
Lubricating of some parts is shown in "II. REMARKS ON DISASSEMBLING AND REASSEMBLING".

- The explanation here is only for the particular points of the Cal. 5Y85A and 5Y89A.
- For preparing, checking and measuring procedures, refer to the "TECHNICAL GUIDE, GENERAL INSTRUCTIONS".

I. REMARKS ON DISASSEMBLING AND REASSEMBLING

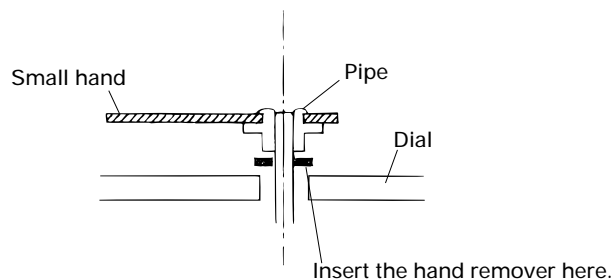
② Hour, minute, second hands ~ ⑤ Date hand

■ How to install the hands

1. Pull out the crown to the second click. Rotate the crown until the date, and subsequently, the day of the week change. After confirming the completion of the date and the day of the week change, set the dial.
2. Install the date hand and the day hand in order.
3. Rotate the crown further until just after the date changes.
4. Install the 24-hour hand at the 24 o'clock (zero) position.
5. Install the hour, minute and second hands to the 12 o'clock position.

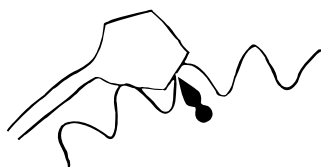
■ Remarks on removing the small hands (Date, day and 24-hour hands)

- When pulling out the small hands, be sure to hold the dial while pulling them out.
- When pulling out a small hand, put the hand remover under the pipe of the hand and then remove the hand.

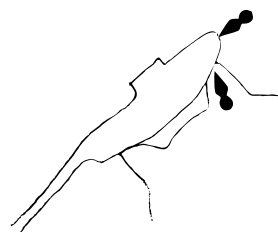


⑧ Calendar mechanism plate

Lubricating



Date jumper section



Day jumper section

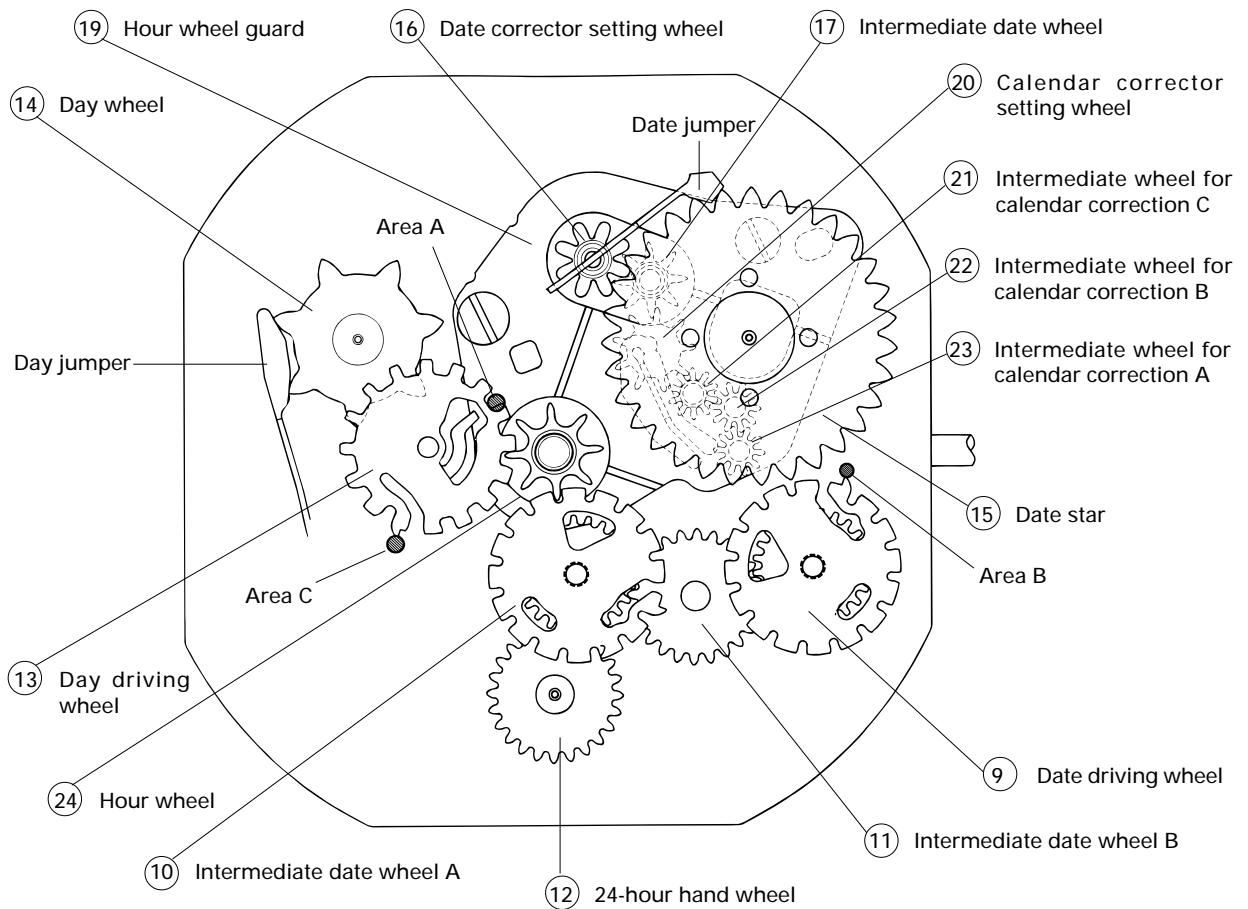
5Y85A

- ⑩ Intermediate date wheel A ~ ⑰ Intermediate date wheel,
 ⑲ Hour wheel guard ~ ⑳ Hour wheel

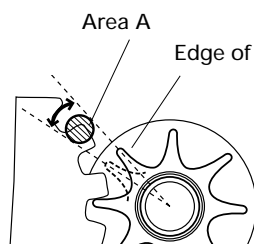
■ How to install the calendar wheels for the Cal. 5Y85A

Refer to the illustration below to install the calendar wheels for the Cal. 5Y85A.

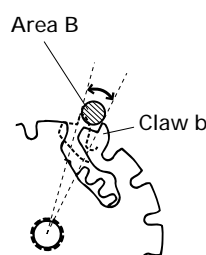
Set the jumpers to mesh with the gear teeth.



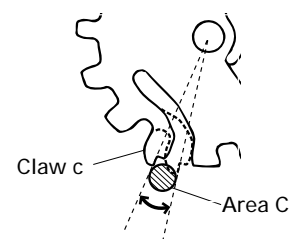
- Set the hour wheel so that any of its eight teeth is in the Area A on the hour wheel guard.
- Set the date driving wheel so that its claw b is in the Area B on the main plate.
- Set the day driving wheel so that its claw c is in the Area C on the main plate.



Hour wheel



Date driving wheel



Day driving wheel

TECHNICAL GUIDE

5Y89A

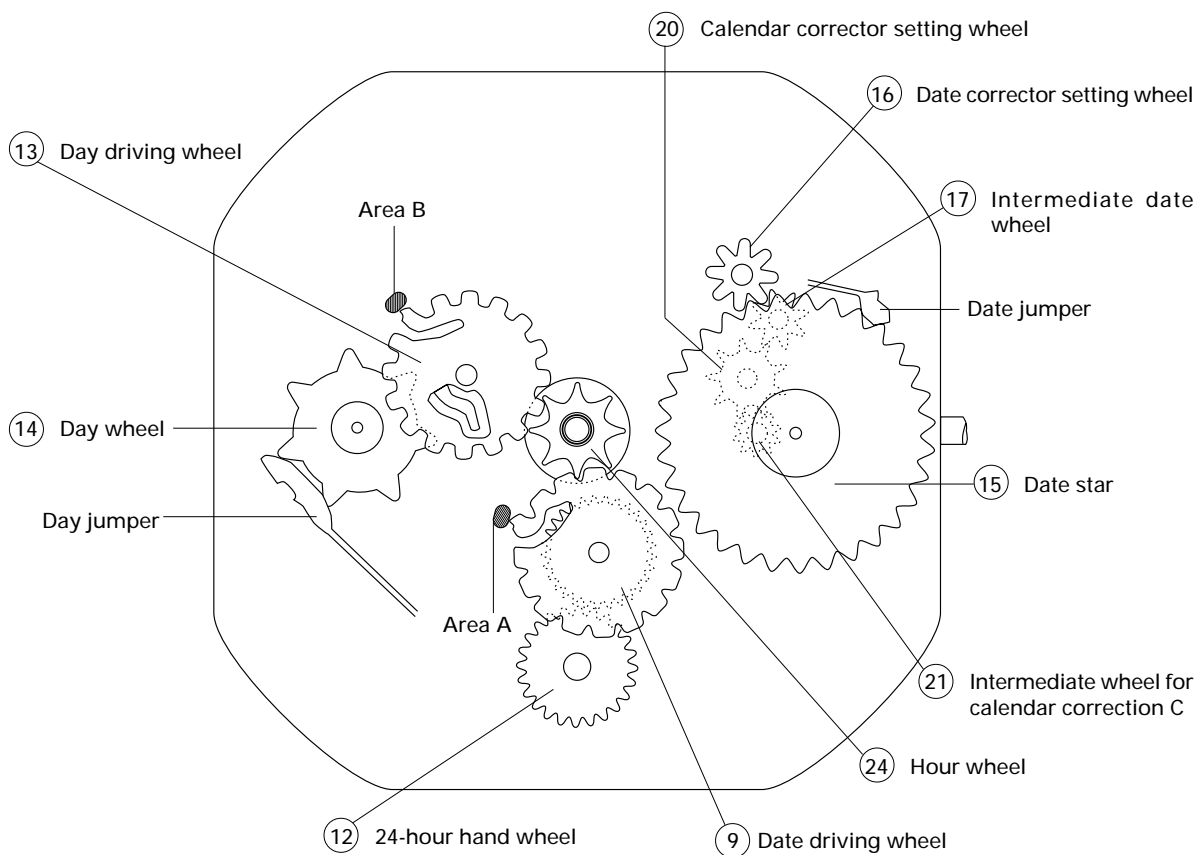
- (9) Date driving wheel, (12) 24-hour hand wheel ~ (17) Intermediate date wheel,
 (20) Calendar corrector setting wheel, (21) Intermediate wheel for calendar correction C, (24) Hour wheel

■ How to install the calendar wheels for the Cal. 5Y89A

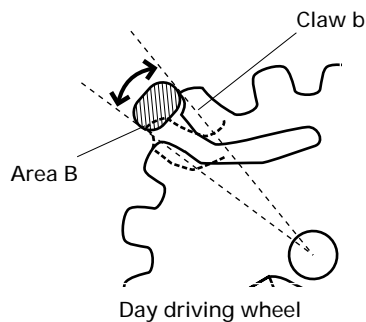
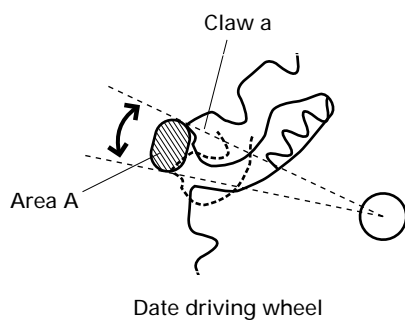
Refer to the illustration below to install the calendar wheels for the Cal. 5Y89A.

(19) Hour wheel guard is omitted from the illustration.

Set the jumpers to mesh with the gear teeth.



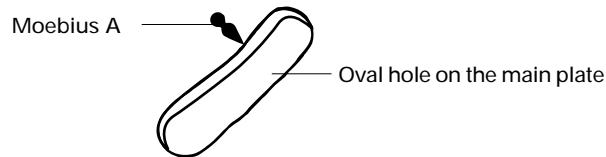
- Set the Date driving wheel so that its claw a is in the Area A on the main plate.
- Set the Day driving wheel so that its claw b is in the Area B on the main plate.



20 Calendar corrector setting wheel D

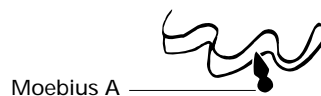
Lubricating

Lubricate the inner edge of the oval hole on the main plate where the calendar corrector setting wheel oscillates.



21 Intermediate wheel for calendar correction C ~ 23 Intermediate wheel for calendar correction A

Lubricating



II. Value checking

■ Coil block resistance

3.0 kW ~ 3.4 kW

■ Current consumption

For the whole movement : Less than 1.2 mA

For the circuit block only : Less than 0.4 mA

III. Troubleshooting

Symptoms	Problems	Solutions
The watch stops.	The battery is weak or dead.	Measure the battery voltage. Change the battery.
	The hands are worn out.	Change the hands.
	The coil is burned out.	Measure the coil block resistance. Change the coil block.
	The wheels are soiled with dirt and dust. The amount of oil is excessive(wringing) .	Remove all dust or dirt. Clean up the relevant parts. Be careful not to damage the teeth of the plastic parts while cleaning.
The current consumption for the whole movement is excessive.	Dirt, dust or chips are adhere to the movement.	Remove all dust or dirt.
	The driving pulse is generated due to the excessive load to the wheels. (The oil is deteriorated, leaked or ran out.)	Measure the current consumption for the circuit block alone. If the result is within the standard range, overhaul and clean the movement parts, and then measure the current consumption for the whole movement again.
The date or day hand dose not move.	The relevant wheels are disengaged. The relevant jumpers are disengaged.	Check the setting position of the relevant wheels and jumpers.
The date or day of the week changes at a wrong timing.	The date driving wheel and/or day driving wheel are wrongly installed.	Reinstall the relevant wheels correctly. (Refer to the instructions on the page 5 and 6.)
	The hour, minute hands are wrongly installed.	Reinstall the hour and minute hands. (Refer to the instructions on the page 4.)