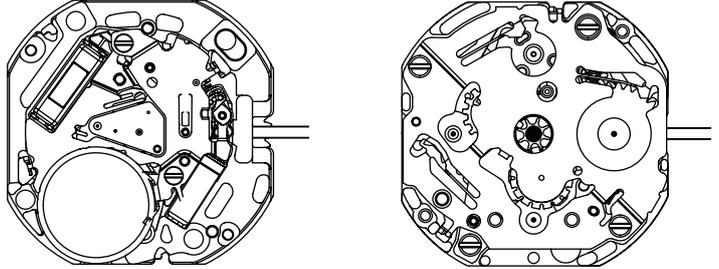


# PARTS LIST/TECHNICAL GUIDE

## ANALOGUE QUARTZ Cal. 5Y19A

### [SPECIFICATIONS]

Item	Cal. No.	5Y19A
 <ul style="list-style-type: none"> <li>• 3 hands (hour, minute and second hands)</li> </ul>	Movement	 <ul style="list-style-type: none"> <li>• Diameter <ul style="list-style-type: none"> <li>Outside : <math>\varnothing</math> 24.0 mm</li> <li>21.5 mm between 3 o'clock and 9 o'clock sides</li> <li>21.5 mm between 6 o'clock and 12 o'clock sides</li> </ul> </li> <li>Casing : <math>\varnothing</math> 23.3 mm <ul style="list-style-type: none"> <li>21.3 mm between 3 o'clock and 9 o'clock sides</li> <li>21.5 mm between 6 o'clock and 12 o'clock sides</li> </ul> </li> <li>• Height: 3.07 mm (Including battery portion)</li> </ul>
Driving system		Step motor (Load compensated driving pulse type)
Additional mechanism		<ul style="list-style-type: none"> <li>• Day calendar</li> <li>• Instant date setting device</li> <li>• Date calendar</li> <li>• Electronic circuit reset switch</li> <li>• Train wheel setting device</li> <li>• 24 hour indicator</li> </ul>
Loss/gain		Monthly rate within normal temperature range: less than 15 seconds
Regulation system		Nil
Measuring gate by quartz tester		Use 10-second gate
Battery	Battery No.	SEIKO SR920SW
	Voltage	1.55 V
	Battery life	Approximately 3 years
Jewels		0 jewels

# PARTS LIST

Cal. 5Y19A

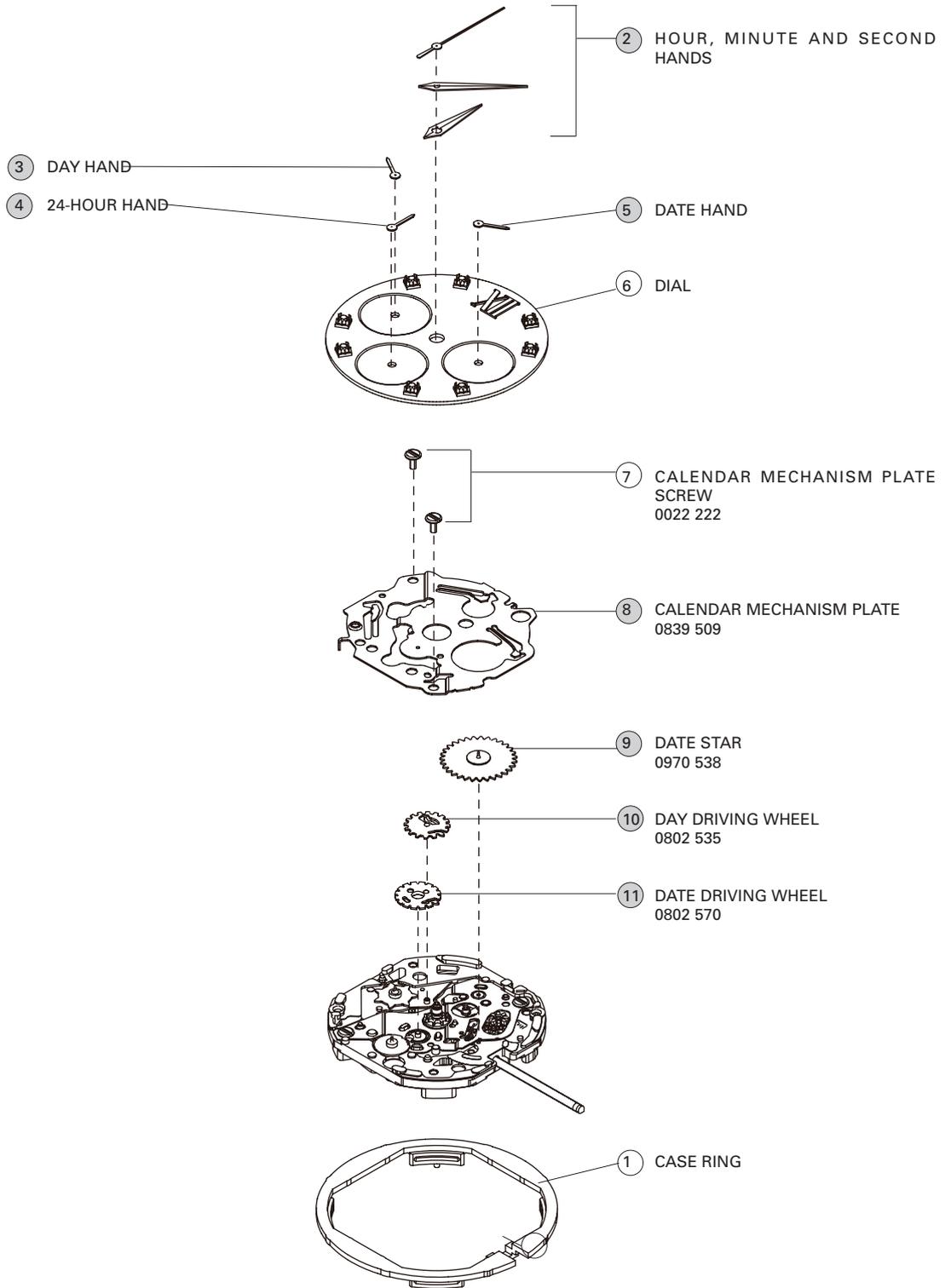
Disassembling procedures Figs. : ① → ④④  
 Reassembling procedures Figs. : ④④ → ①

### Lubricating : Types of oil

-  AO-3
-  AO-2
-  SEIKO Watch Oil S-6

### Oil quantity

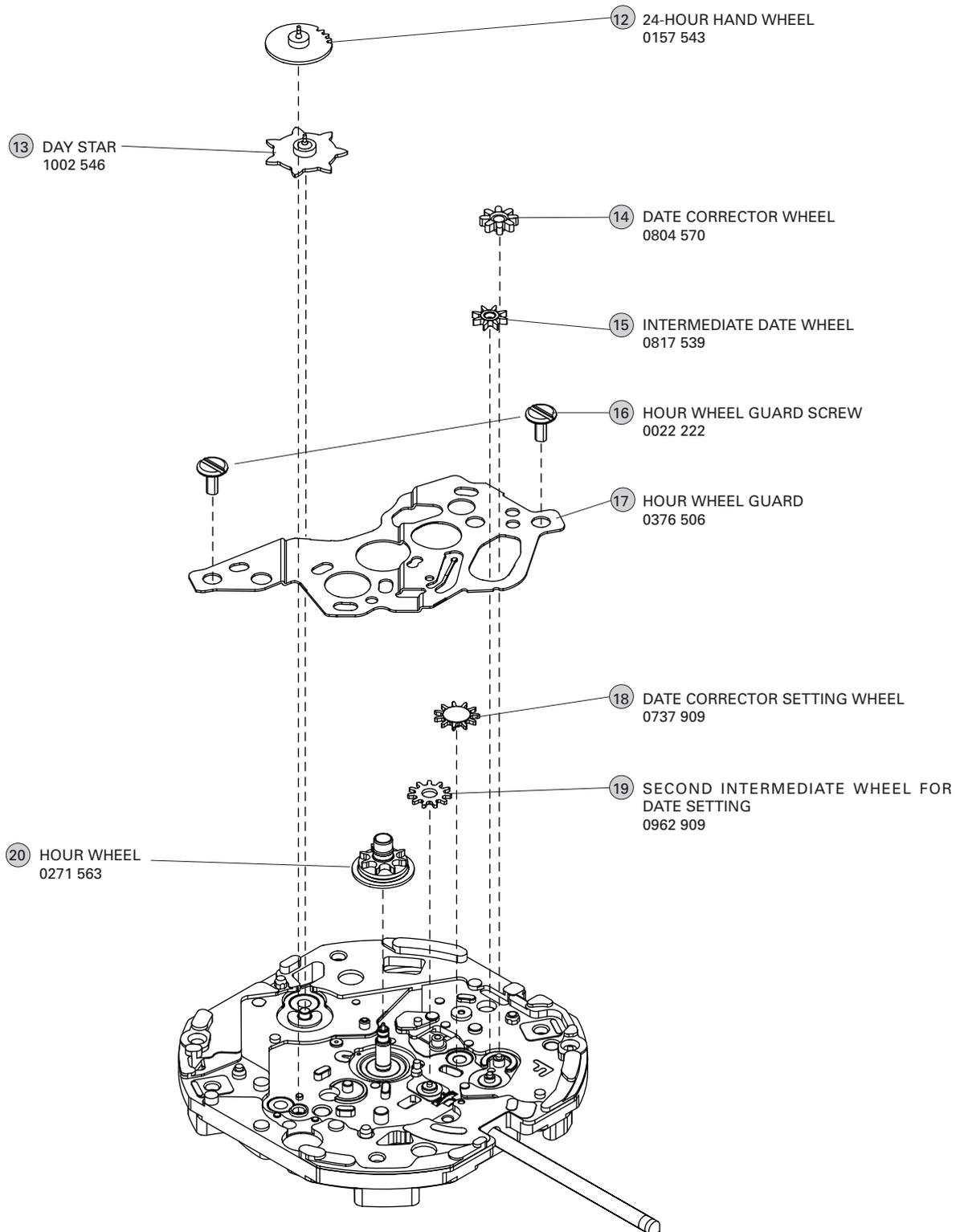
-  Normal quantity
-  Large quantity



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

# PARTS LIST

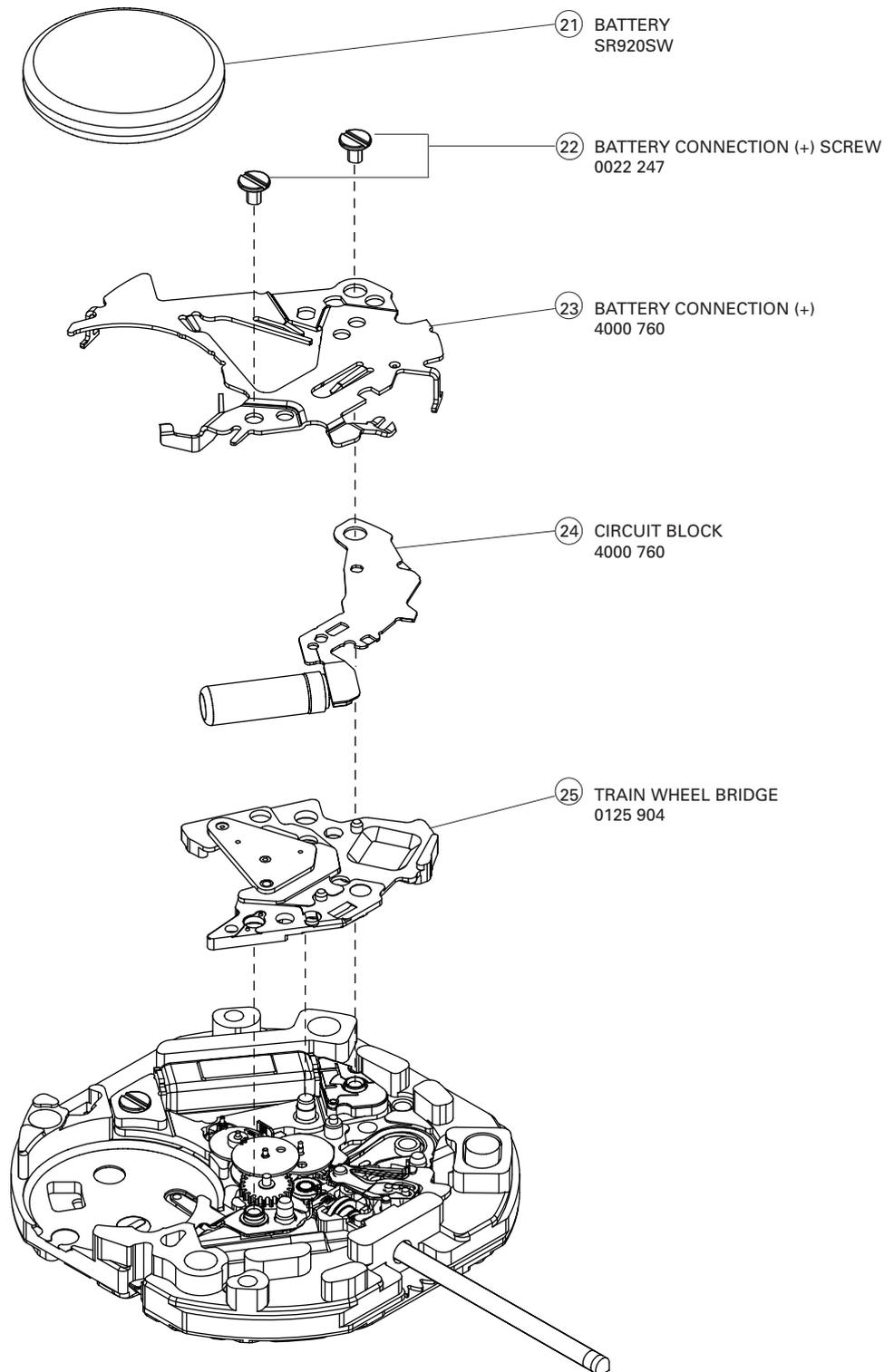
Cal. 5Y19A



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

# PARTS LIST

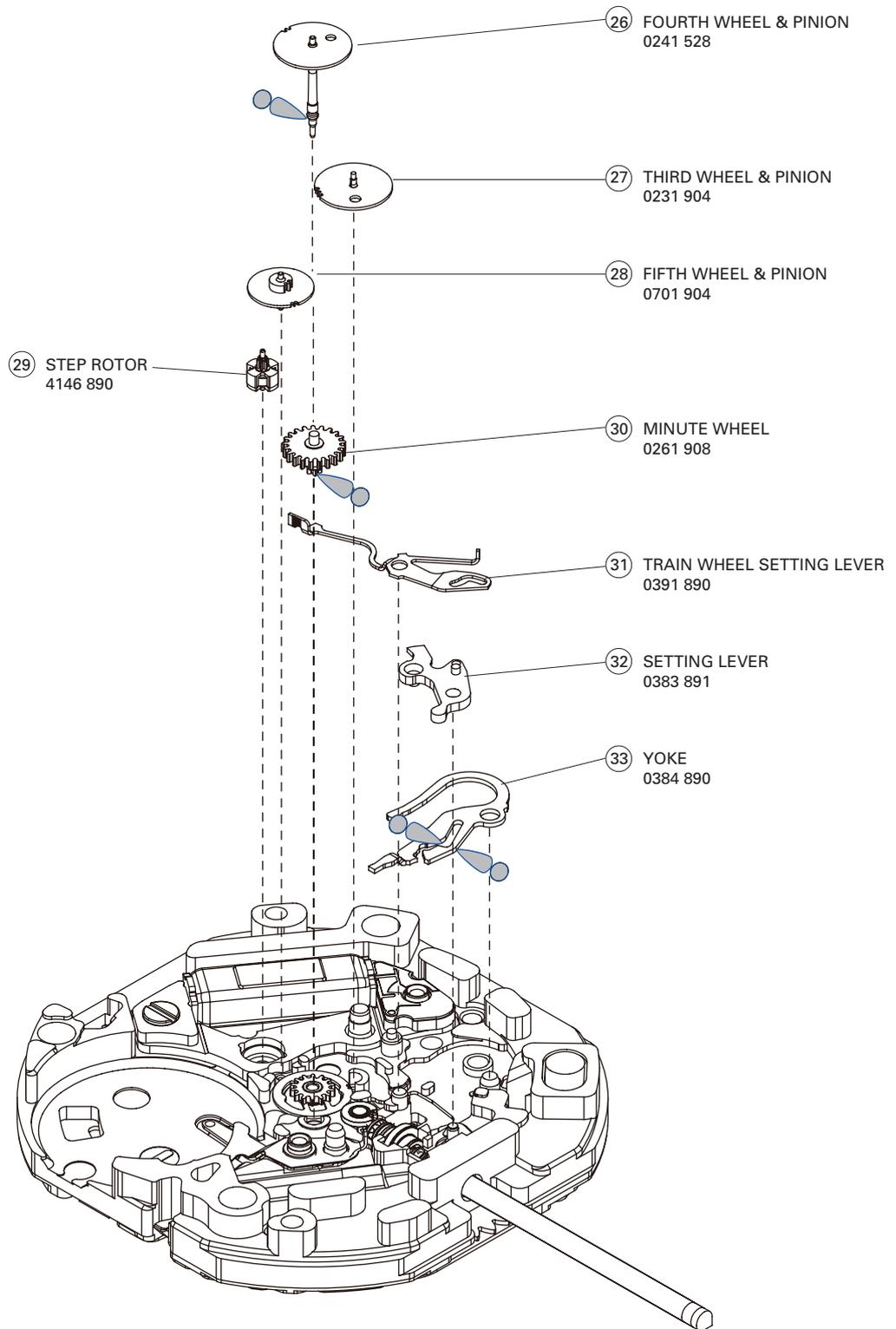
Cal. 5Y19A



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

# PARTS LIST

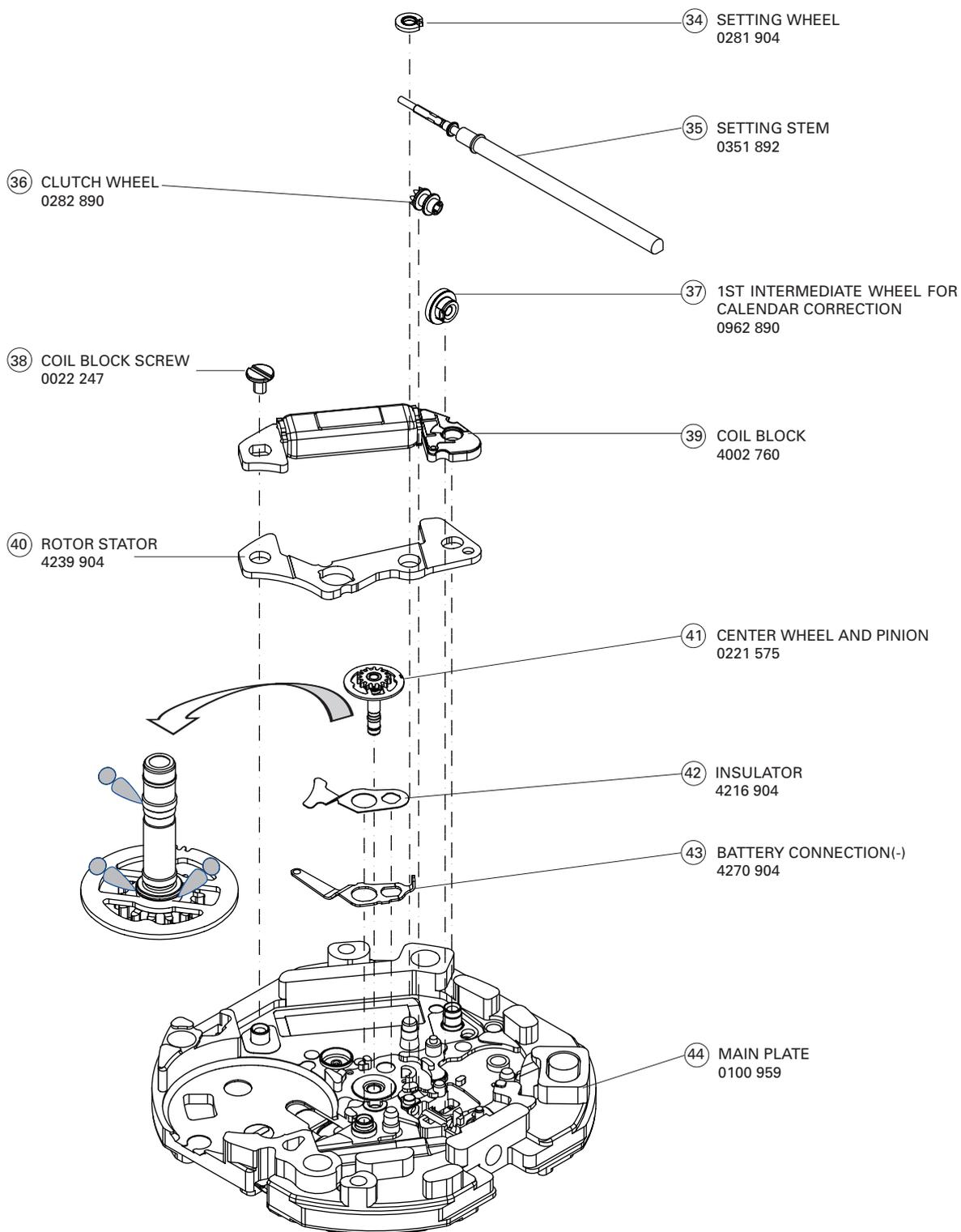
Cal. 5Y19A



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

# PARTS LIST

Cal. 5Y19A

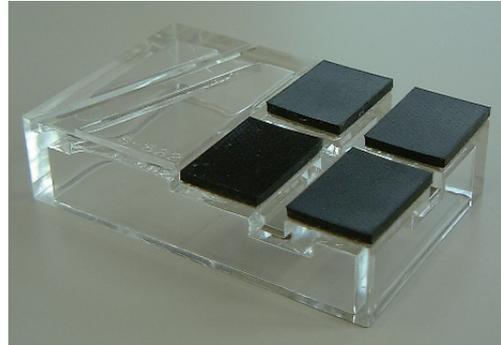


☉ ➔ Please see the remarks on the following pages.  
Lubricating of some parts is shown in "II. REMARKS ON DISASSEMBLING AND REASSEMBLING".

- **Tools and consumables required for disassembling/reassembling**

- **Movement holder**

UNIVERSAL MOVEMENT HOLDER (S-682)



- **Watch oils**

SEIKO watch oils (AO-3 and AO-2)

AO-3



AO-2



SEIKO watch grease (S-6)

S-6



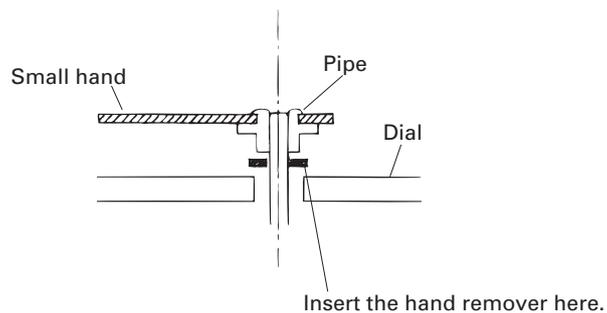
- The explanation here is only for the particular points of the Cal. 5Y19A.

## I. REMARKS ON DISASSEMBLING AND REASSEMBLING

### ② HOUR, MINUTE, SECOND HANDS—⑥ DIAL

#### ■ 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.

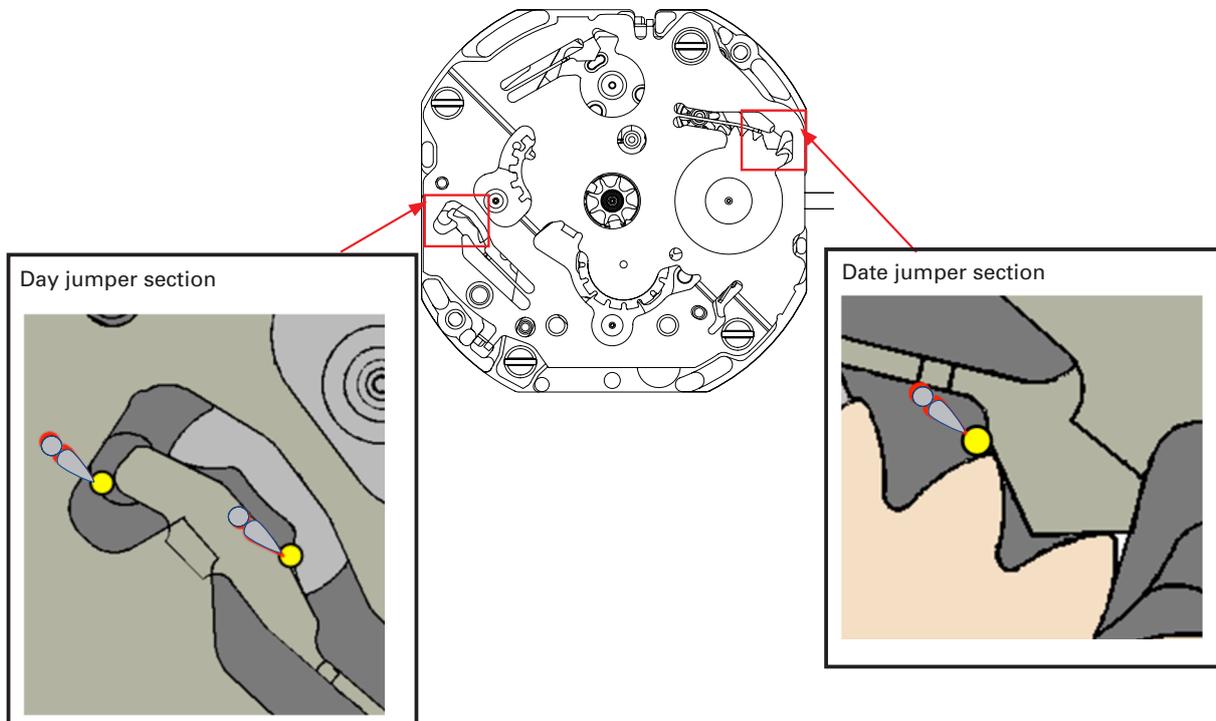


#### ■ How to install the dial and the hands

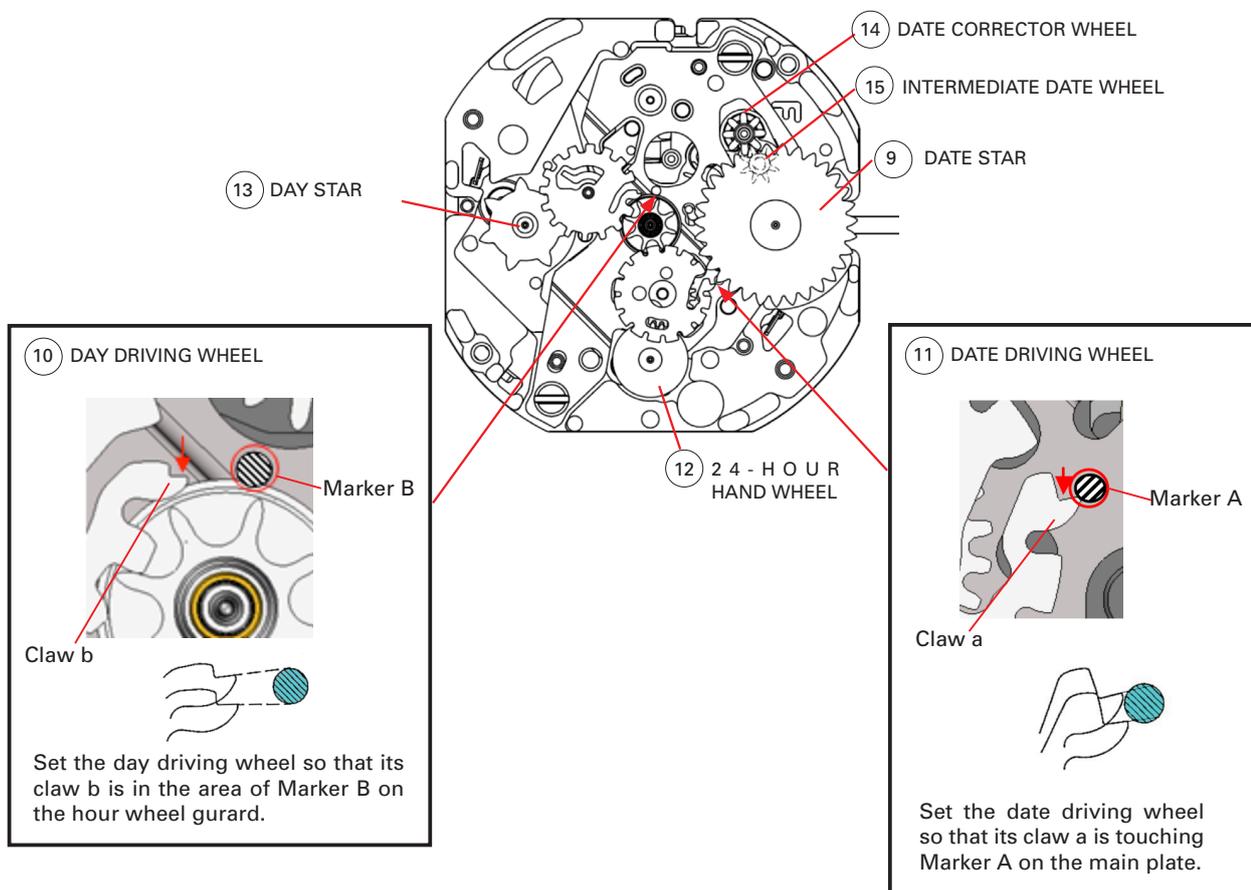
1. Pull out the crown to the second click position. Turn the crown until the date, and subsequently, the day of the week change. Make sure the completion of the date and the day of the week change, set the dial.
2. Install the date hand and the day hand in order.
3. Turn the crown further until just 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.

## 8 CALENDAR MECHANISM PLATE

<Lubrication>

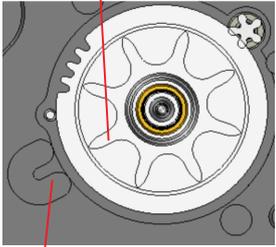


## 9 DATE STAR - 15 INTERMEDIATE DATE WHEEL



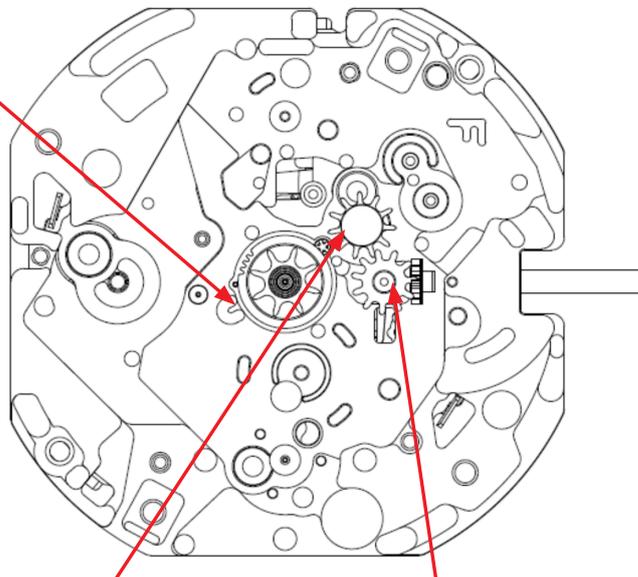
**18 DATE CORRECTOR SETTING WHEEL-20 HOUR WHEEL**

**20 HOUR WHEEL**  
Edge of the Teeth

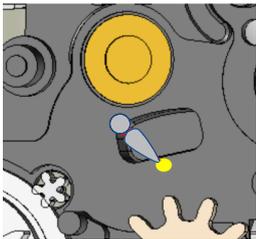


Marker C

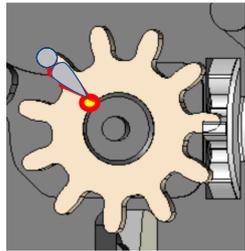
Set the hour wheel so that any of its eight teeth is in alignment hollow of the Marker C on the main plate.



**18 DATE CORRECTOR SETTING WHEEL**  
Lubricate as shown in the illustration below before installing the date corrector setting wheel.



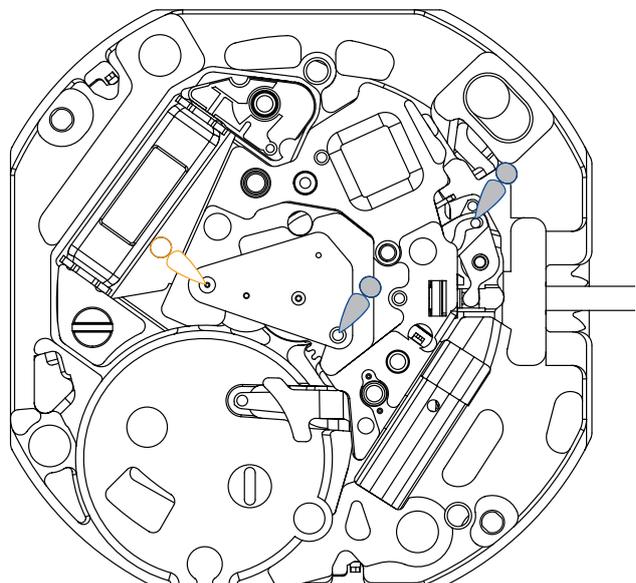
**19 SECOND INTERMEDIATE WHEEL FOR DATE SETTING**  
Lubricate as shown in the illustration below.



**23 TRAIN WHEEL BRIDGE**

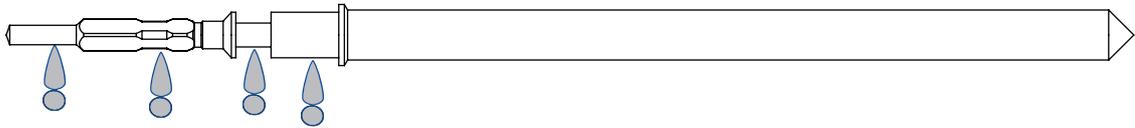
**<Lubrication>**

Lubricate the step rotor pivot and minute wheel pivot as shown in the illustration. Be sure to lubricate the cotact point of TRAIN WHEEL SETTING LEVER and SETTING LEVER.



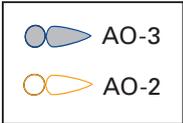
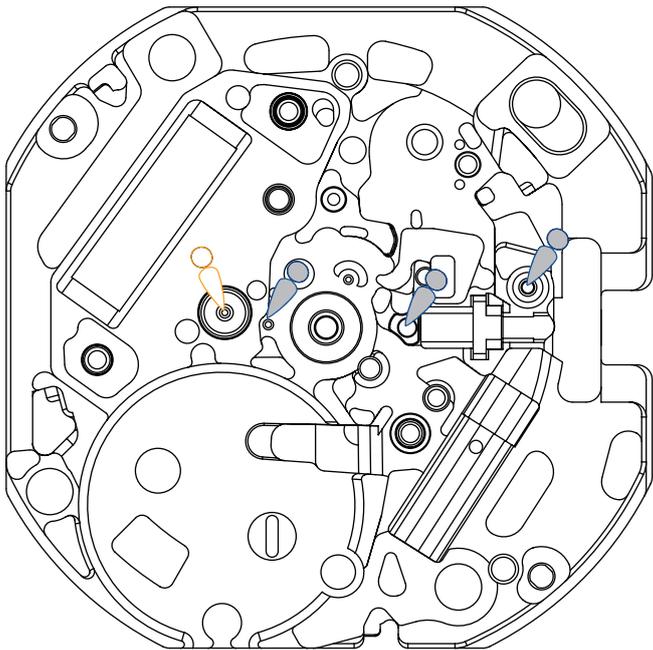
33 SETTING STEM

<Lubrication>



39 MAIN PLATE

<Lubrication>



## II. Value checking

### ■ Coil block resistance

Between 0.75 kΩ and 1.1 kΩ

### ■ Current consumption

For the whole movement : Less than 2.1 μA

For the circuit block only : Less than 0.28 μA

## 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 dis-engaged. The relevant jumpers are dis-engaged.	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 incorrectly installed.	Reinstall the relevant wheels correctly. (Refer to the instructions on the page 9 and 10.)
	The hour, minute hands are incorrectly installed.	Reinstall the hour and minute hands correctly. (Refer to the instructions on the page 7.)