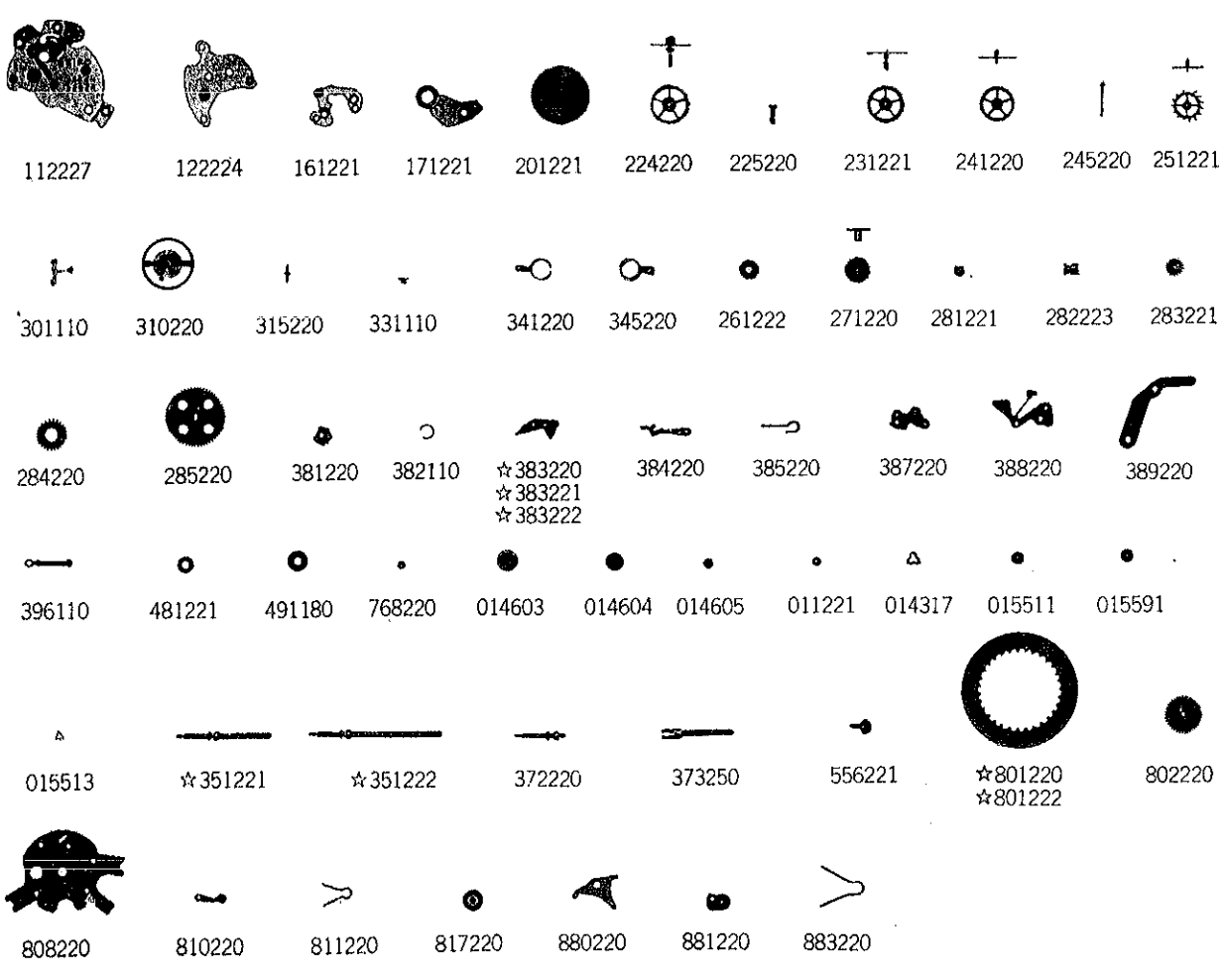



































Cal. 2202A












### Characteristics








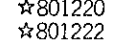

Casing diameter: 17.20 $\phi$  mm  
 Maximum height: 3.80 mm  
 Vibrations per hour: 28,800  
 Non-automatic with sweep second  
 Calendar (date)  
 Instant date setting  
 "Diashock" Shock Resistant Device  
 "Diafix" Oil Lubrication Device





























































Catalog No.

Calibre No.	Jewels	Style Name	
<b>2202A</b>	<b>21j</b>		
PART NO.	LIST OF MATERIALS	PART NO.	LIST OF MATERIALS
112227	Barrel & train-wheel bridge	810220	Date jumper
122224	Center wheel bridge	811220	Date jumper spring
161221	Pallet cock	817220	Intermediate date wheel
171221	Balance cock	880220	Date corrector
201221	Complete barrel with arbor & mainspring	881220	Date corrector lever
224220	Center wheel & pinion with cannon pinion	883220	Date corrector spring
225220	Cannon pinion	012121	Stud screw
231221	Third wheel & pinion	012124	Friction spring screw for sweep second pinion
241220	Fourth wheel & pinion	012204	Pallet cock screw
245220	Sweep second pinion	012207	Barrel & train-wheel bridge screw
251221	Escape wheel & pinion	012208	Minute wheel bridge screw
261222	Minute wheel	012263	Balance cock screw
271220	Hour wheel	012280	Center wheel bridge screw
281221	Setting wheel	012407	Case screw
282223	Clutch wheel	012512	Crown wheel screw
283221	Winding pinion	012668	Click screw
284220	Crown wheel	012670	Setting lever spring screw
285220	Ratchet wheel	012724	Dial screw
301110	Jewelled pallet fork & staff	012736	Setting lever axle spring screw
310220	Balance complete with stud	012750	Date dial guard screw
315220	Balance staff	011521	Upper hole jewel for center wheel
331110	Roller with jewel	011153	Lower hole jewel for center wheel
341220	Regulator	011542	Lower hole jewel for 3rd wheel
345220	Stud holder	011541	Upper hole jewel for 4th wheel
☆351221	Winding stem	011541	Lower hole jewel for 4th wheel
☆351222		011528	Lower hole jewel for escape wheel
372220	Joint stem (movement portion)	011321	Upper hole jewel for sweep second pinion
373250	Joint stem (case portion)	011713	Lower hole jewel for sweep second pinion
381220	Click	011505	Upper hole jewel for pallet
382110	Click spring	011505	Lower hole jewel for pallet
☆383220	Setting lever	013014	Tube for barrel & train-wheel bridge screw
☆383221		013014	Tube for center wheel bridge screw (long)
☆383222		013015	Tube for center wheel bridge screw (short)
384220	Yoke (Clutch lever)	013016	Tube for date corrector
385220	Yoke spring (Clutch lever spring)		(Tube for setting lever axle spring screw)
387220	Minute wheel bridge	013017	Tube for yoke spring
388220	Setting lever spring		(Tube for setting lever spring screw)
389220	Setting lever axle spring		
390221	Setting lever axle		
396110	Friction spring for sweep second pinion		
481221	Crown wheel ring		
491180	Dial washer		
768220	Setting lever axle ring		
014603	Diashock upper frame		
014604	Diashock lower frame		
014605	Diashock hole jewel with frame		
011221	Diashock cap jewel		
014317	Diashock spring		
015511	Diafix upper hole jewel with frame for 3rd wheel		
015591	Diafix upper hole jewel with frame for escape wheel		
011221	Diafix cap jewel		
015513	Diafix spring		
556221	Date finger		
☆801220	Date dial		
☆801222			
802220	Date driving wheel		
808220	Date dial guard		

☆ ⇨ Please see remarks on the next page.

☆ ⇨ Please see remarks on the next page.  
 Items in light letters are not shown in photos.

Calibre No. <b>2202A</b>	Jewels <b>21 j</b>	Style Name
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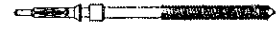
**Remarks:**

**Winding stem** ————— Refer to the photograph on the front page and shapes in the lower diagram. —————

- ☆ 351221 ..... **Short** winding stem (Thread is provided completely on the crown portion.)
- ☆ 351222 ..... **Long** winding stem (Thread is provided only on the end of the crown portion.)



☆ 351221



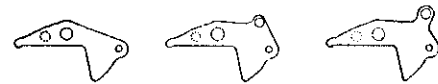
☆ 351222

**Setting lever**

(Fig. 1)

There are three types of setting levers. Select the suitable setting lever by following the procedures after referring to the shapes in Fig. 1.

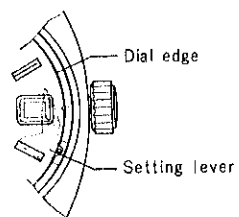
In the one-piece waterproof case, when a setting lever unsuitable for the dial external diameter is used, the winding stem cannot be pulled out or movement cannot be assembled in the case; pay attention to this point. (Refer to Fig. 2, Example of suitable setting lever).



☆ 383220    ☆ 383221    ☆ 383222

- ☆ 383220 ..... Used for watches other than one-piece and square type waterproof cases.
- ☆ 383221 ..... For one-piece waterproof case (This can be applied to the round dial with 17.50 or 18.00φ mm external diameter.)
- ☆ 383222 ..... For one-piece waterproof case (This can be applied to the round dial with 18.50 ~ 19.00φ mm external diameter.)

(Fig. 2)



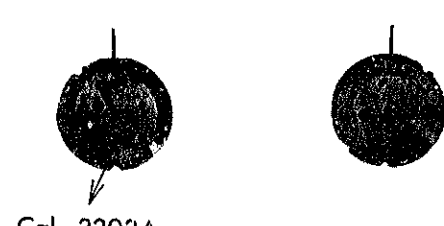

If the parts number of the setting lever is unknown or when ordering a setting lever other than the above-mentioned ones, specify ① Cal. No. ② the dial No. and ③ the case No.

**(Example of suitable setting lever)**  
Tail of the setting lever is located between the dial and the case.

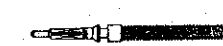
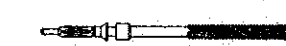
**Date dial**

- ☆ 801220 ..... Used when both the crown and the date frame are located at **3** o'clock.
- ☆ 801222 ..... Used when the crown is located at **3** o'clock and the date frame at **6** o'clock.

If the date dial is required in any other type, specify ① Cal. No. ② the crown position ③ the date frame position and ④ the dial No.

Calibre No. <b>2202A</b> Basic Calibre 2202A 21J Catalog No. 22-02-1	Jewels <b>23j</b>	Style Name
 <p>Cal. 2202A</p>		
<p><b>Characteristics</b></p> <p>Casing diameter: 17.20<math>\phi</math> mm          Maximum height: 3.80 mm          Vibrations per hour: 28,000          Non-automatic with sweep second          Calendar (date)          Instant date setting          "Diashock" Shock Resistant Device          "Diafix" Oil Lubrication Device</p>		
 <p>112228</p>		
<p><b>Remarks:</b> — continued —</p> <p><b>Setting lever</b></p> <p>There are three types of setting levers. Select the suitable setting lever by following the procedures after referring to the shapes in Fig. 1.</p> <p>In the one-piece waterproof case, when a setting lever unsuitable for the dial external diameter is used, the winding stem cannot be pulled out or movement cannot be assembled in the case; pay attention to this point. (Refer to Fig. 2, Example of suitable setting lever.)</p> <p>☆ 383220.....Used for watches other than one-piece and square type waterproof cases.</p> <p>☆ 383221.....For one-piece waterproof case (This can be applied to the round dial with 17.50 or 18.00<math>\phi</math>mm external diameter.)</p> <p>☆ 383222.....For one-piece waterproof case (This can be applied to the round dial with 18.50~19.00<math>\phi</math>mm external diameter.)</p> <p>If the parts number of the setting lever is unknown or when ordering a setting lever other than the above-mentioned ones, specify ① Cal. No. ② the dial No. and ③ the case No.</p> <p><b>Date dial</b></p> <p>☆ 801220.....Used when both the crown and the date frame are located at 3 o'clock.</p> <p>☆ 801222.....Used when the crown is located at 3 o'clock and the date frame at 6 o'clock.</p> <p>If the date dial is required in any other type, specify ① Cal. No. ② the crown position ③ the date frame position and ④ the dial No.</p>		

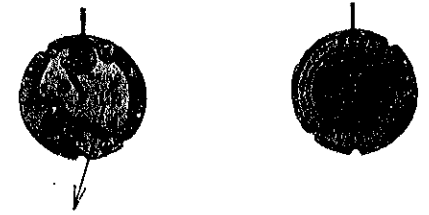


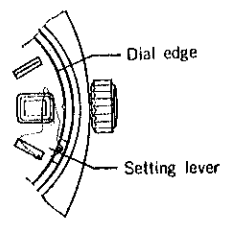
Catalog No. 22-02-2

Calibre No. <b>2202A</b> Basic Calibre 2202A 21J Catalog No. 22-02-1	Jewels <b>23j</b>	Style Name	
<b>PART NO.</b>	<b>LIST OF MATERIALS</b>	<b>PART NO.</b>	<b>LIST OF MATERIALS</b>
112228	<b>Barrel &amp; train-wheel bridge</b>	015591	Diafix upper hole jewel with frame for escape wheel
122224	Center wheel bridge	011221	Diafix cap jewel
161221	Pallet cock	015513	Diafix spring
171221	Balance cock	556221	Date finger
201221	Complete barrel with arbor & mainspring	☆ 801220	Date dial
224220	Center wheel & pinion with cannon pinion	☆ 801222	
225220	Cannon pinion	802220	Date driving wheel
231221	Third wheel & pinion	808220	Date dial guard
241220	Fourth wheel & pinion	810220	Date jumper
245220	Sweep second pinion	811220	Date jumper spring
251221	Escape wheel & pinion	817220	Intermediate date wheel
261222	Minute wheel	880220	Date corrector
271220	Hour wheel	881220	Date corrector lever
281221	Setting wheel	883220	Date corrector spring
282223	Clutch wheel	012121	Stud screw
283221	Winding pinion	012124	Friction spring screw for sweep second pinion
284220	Crown wheel		
285220	Ratchet wheel	012204	Pallet cock screw
301110	Jewelled pallet fork & staff	012207	Barrel & train-wheel bridge screw
310220	Balance complete with stud	012208	Minute wheel bridge screw
315220	Balance staff	012263	Balance cock screw
331110	Roller with jewel	012280	Center wheel bridge screw
341220	Regulator	012407	Case screw
345220	Stud holder	012512	Crown wheel screw
☆ 351221	Winding stem	012668	Click screw
☆ 351222		012670	Setting lever spring screw
372220	Joint stem (movement portion)	012724	Dial screw
373250	Joint stem (case portion)	012736	Setting lever axle spring screw
381220	Click	012750	Date dial guard screw
382110	Click spring	011159	Upper hole jewel for barrel
☆ 383220	Setting lever	011153	Lower hole jewel for barrel
☆ 383221		011521	Upper hole jewel for center wheel
☆ 383222		011153	Lower hole jewel for center wheel
384220	Yoke (Clutch lever)	011542	Lower hole jewel for 3rd wheel
385220	Yoke spring (Clutch lever spring)	011541	Upper hole jewel for 4th wheel
387220	Minute wheel bridge	011541	Lower hole jewel for 4th wheel
388220	Setting lever spring	011528	Lower hole jewel for escape wheel
389220	Setting lever axle spring	011321	Upper hole jewel for sweep second pinion
390221	Setting lever axle	011713	Lower hole jewel for sweep second pinion
396110	Friction spring for sweep second pinion	011505	Upper hole jewel for pallet
481221	Crown wheel ring	011505	Lower hole jewel for pallet
491180	Dial washer	013014	Tube for barrel & train-wheel bridge screw
768220	Setting lever axle ring	013014	Tube for center wheel bridge screw (long)
014603	Diashock upper frame	013015	Tube for center wheel bridge screw (short)
014604	Diashock lower frame	013016	Tube for date corrector
014605	Diashock hole jewel with frame		(Tube for setting lever axle spring screw)
011221	Diashock cap jewel	013017	Tube for yoke spring
014317	Diashock spring		(Tube for setting lever spring screw)
015511	Diafix upper hole jewel with frame for 3rd wheel		
<p><b>Remarks:</b></p> <p><b>Winding stem</b> ——— Refer to the photograph on the page of the basic calibre (Catalog No. 22-02-1) and shapes in the lower diagram.</p> <p>☆ 351221.....<b>Short</b> winding stem (Thread is provided completely on the crown portion.)</p> <p>☆ 351222.....<b>Long</b> winding stem (Thread is provided only on the end of the crown portion.)</p>			
			
☆ 351221		☆ 351222	


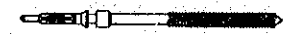
— continued on front page —

As for all other parts not shown here, please refer to the basic calibre (Cal. No. 2202A 21J Catalog No. 22-02-1 Red page).

☆⇨ Please see remarks.  
 Items in light letters are not shown in photos; those parts are interchangeable with the basic calibre.  
 (Cal. No. 2202A 21J Catalog No. 22-02-1 Red page).

Calibre No. <b>2202A</b>	Jewels <b>17j</b>	Style Name
Basic Calibre 2202A 21J Catalog No. 22-02-1		
 <p>Cal. 2202A</p>		<b>Characteristics</b> Casing diameter: 17.20 $\phi$ mm Maximum height: 3.80 mm Vibrations per hour: 28,800 Non-automatic with sweep second Calendar (date) Instant date setting "Diashock" Shock Resistant Device
		
<b>Remarks :</b> ---continued---		
<b>Setting lever</b> There are three types of setting levers. They are used according to the structure of cases and types of winding stems. Select a suitable one by the following procedures referring to the shapes indicated in Fig. 1. In case of a one-piece water-resistant case, if an incorrect setting lever for dial diameter is used, the winding stem cannot be pulled out or the movement cannot be set in the case. Attention must be paid to this point. (Refer to Fig. 2, Example of suitable setting lever) ☆ 383220.....Used for watch with joint stem, or with ordinary winding stem other than one-piece or square type water-resistant case. ☆ 383221.....Used for one-piece water-resistant case with ordinary winding stem and dial of diameter 17.50~18.00 $\phi$ mm. ☆ 383222.....Used for one-piece water-resistant case with ordinary winding stem and dial of diameter 18.50~19.00 $\phi$ mm. When parts number of the setting lever is unknown or when ordering setting levers other than the above, specify ① Cal. No., ② number of jewels ③ dial No. and ④ case No.		(Fig. 1)  (Fig. 2)  (Example of suitable setting lever) Tail of the setting lever is located between the dial and the case.
<b>Date dial</b> ☆ 801220 (Red figures on white background).....Used when both the crown and the date frame are located at 3 o'clock. ☆ 801222 (Red figures on white background).....Used when the crown is located at 3 o'clock and the date frame at 6 o'clock. ☆ 801224 (White figures on black background).....Used when both the crown and the date frame are located at 3 o'clock. ☆ 801225 (White figures on black background).....Used when the crown is located at 3 o'clock and the date frame at 6 o'clock. If the date dial is required in any other type, specify ① Cal. No., ② number of jewels ③ the crown position ④ the date frame position and ⑤ dial No.		

Catalog No. 22-02-3

Calibre No. <b>2202A</b>	Jewels <b>17j</b>	Style Name	
Basic Calibre 2202A 21J Catalog No. 22-02-1			
PART NO.	LIST OF MATERIALS	PART NO.	LIST OF MATERIALS
112226	Barrel & train-wheel bridge	556221	Date finger
122222	Center wheel bridge	☆801220	
161221	Pallet cock	☆801222	Date dial
171221	Balance cock	☆801224	
201221	Complete barrel with arbor & mainspring	☆801225	
224220	Center wheel & pinion with cannon pinion	802220	Date driving wheel
225220	Cannon pinion	808220	Date dial guard
231220	Third wheel & pinion	810220	Date jumper
241220	Fourth wheel & pinion	811220	Date jumper spring
245220	Sweep second pinion	817220	Intermediate date wheel
251220	Escape wheel & pinion	880220	Date corrector
261222	Minute wheel	881220	Date corrector lever
271220	Hour wheel	883220	Date corrector spring
281221	Setting wheel	012121	Stud screw
282223	Clutch wheel	012124	Friction spring screw for sweep second pinion
283221	Winding pinion		
284220	Crown wheel	012204	Pallet cock screw
285220	Ratchet wheel	012207	Barrel & train-wheel bridge screw
301110	Jewelled pallet fork & staff	012208	Minute wheel bridge screw
310220	Balance complete with stud	012263	Balance cock screw
315220	Balance staff	012280	Center wheel bridge screw
331110	Roller with jewel	012407	Case screw
341220	Regulator	012512	Crown wheel screw
345220	Stud holder	012668	Click screw
☆351221	Winding stem	012670	Setting lever spring screw
☆351222		012724	Dial screw
372220	Joint stem (movement portion)	012736	Setting lever axle spring screw
373250	Joint stem (case portion)	012750	Date dial guard screw
381220	Click	011521	Upper hole jewel for center wheel
382110	Click spring	011153	Lower hole jewel for center wheel
☆383220	Setting lever	011542	Lower hole jewel for 3rd wheel
☆383221		011541	Upper hole jewel for 4th wheel
☆383222		011528	Upper hole jewel for escape wheel
384220	Yoke (Clutch lever)	011528	Lower hole jewel for escape wheel
385220	Yoke spring (Clutch lever spring)	011713	Lower hole jewel for sweep second pinion
387220	Minute wheel bridge	011505	Upper hole jewel for pallet
388220	Setting lever spring	011505	Lower hole jewel for pallet
389220	Setting lever axle spring	013014	Tube for barrel & train-wheel bridge screw
390221	Setting lever axle	013014	Tube for center wheel bridge screw (long)
396110	Friction spring for sweep second pinion	013015	Tube for center wheel bridge screw (short)
433111	Upper hole jewel with frame for 3rd wheel	013016	Tube for date corrector
481221	Crown wheel ring		(Tube for setting lever axle spring screw)
491180	Dial washer	013017	Tube for yoke spring
768220	Setting lever axle ring		(Tube for setting lever spring screw)
014603	Diashock upper frame		
014604	Diashock lower frame		
014605	Diashock hole jewel with frame		
011221	Diashock cap jewel		
014317	Diashock spring		
<b>Remarks :</b> Winding stem ——— Refer to the photograph on the page of the basic calibre (Catalog No. 22-02-1) and shapes in the lower diagram. ☆ 351221.....Short winding stem (Thread is provided completely on the crown portion.) ☆ 351222.....Long winding stem (Thread is provided only on the end of the crown portion.)			
	 ☆ 351221	 ☆ 351222	--- continued on front page ---

☆⇨ Please see remarks.  
 Items in light letters are not shown in photos; those parts are interchangeable with the basic calibre  
 (Cal. No. 2202A 21J Catalog No. 22-02-1 Red page).

# 2202A

## 2202A Calendar Setting Mechanism

### 1) Specifications

Casing diameter	17.20mm
Height	3.80mm
Vibrations per hour	28,800
Calendar (date) with instant date setting mechanism (Pull out type)	

### 2) Features

Since this movement is designed considering ease in disassembling and assembling operations and also functional stability, the numbers of parts are reduced and a high vibration mechanism of 8 beats per second is adopted.

To enhance watch quality, a light-weight, small pallet and bridge type pallet cock are employed. The space around the balance is increased to reduce the air resistance of the balance.

### 3) Disassembly and assembly

Disassemble the watch according to Figs.

①-⑤⑥

Assemble by reversing the above order: Figs. ⑤⑥-①

### 4) Lubrication

Colored symbols in the illustrated figures indicate the types of oil, its quantities to be applied, and the lubricating points.

#### Types of oil

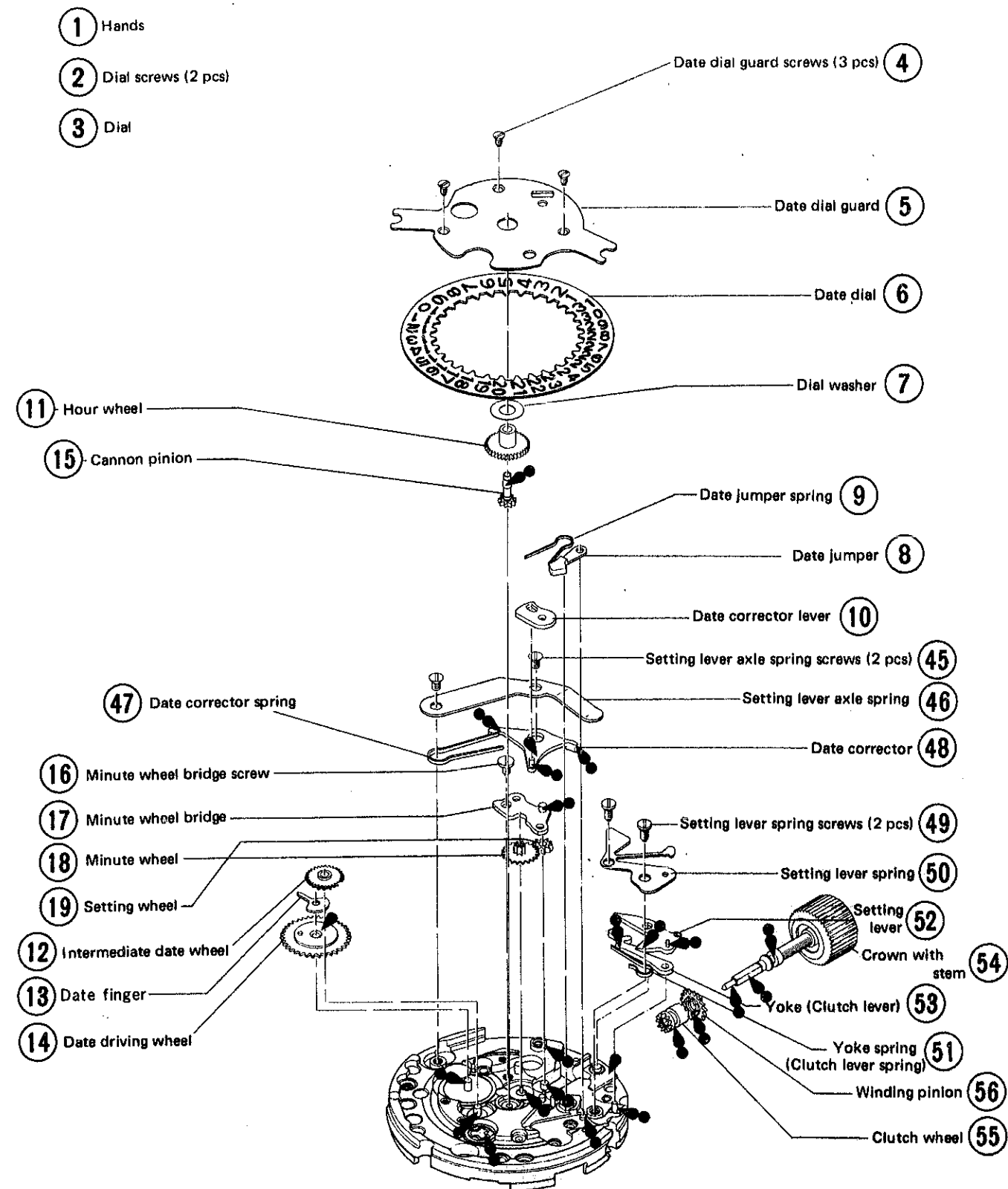
- Moebius Synt-A-Lube
- Seiko Watch Oil S-4

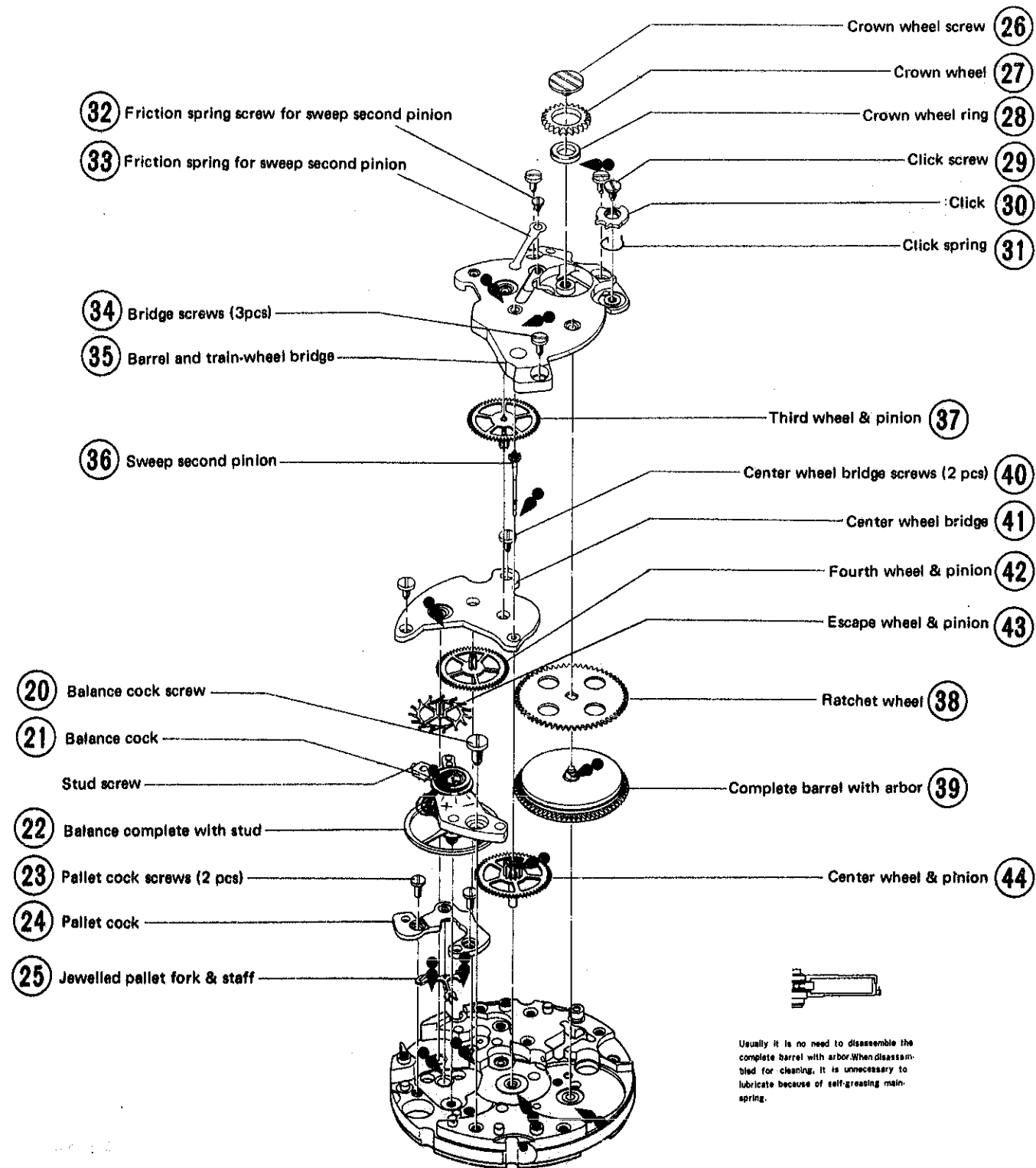
#### Oil quantity

- Sufficient quantity
- Normal quantity
- Extremely small quantity



Movement





5) Date corrector mechanism

Fig. 1: Date is changed by pulling out the crown to the second click.

Fig. 2: Hands are set by turning the crown at the first click.

Date correction is achieved by repeating pull-out and push-in processes.

In this case, after pulling out the crown to the second click, it automatically returns to the first click when releasing the finger tips from the crown.

Action of each section is as follows:  
Winding stem → Setting lever → Date corrector (Date corrector spring) → Date corrector lever → Date dial

Numbers marked in Figs. 1 and 2 indicate the operating sequence.

6) Date driving mechanism

Hour wheel → Intermediate date wheel → Date driving wheel → Date finger → Date dial

Force transmission from the hour wheel to the date dial is as above mentioned. The solid line in the diagram indicates the position just before starting date driving, and the double-dotted chain line those finishing date driving. (Fig. 3)

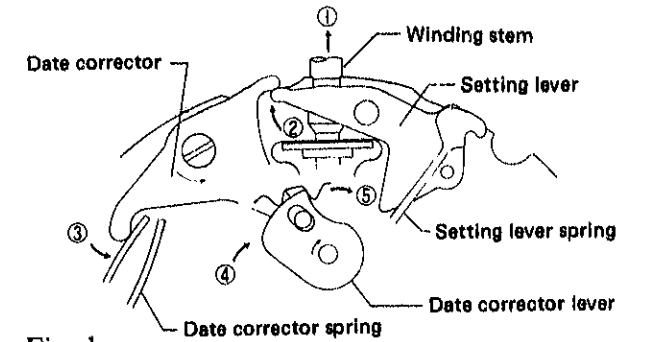


Fig. 1

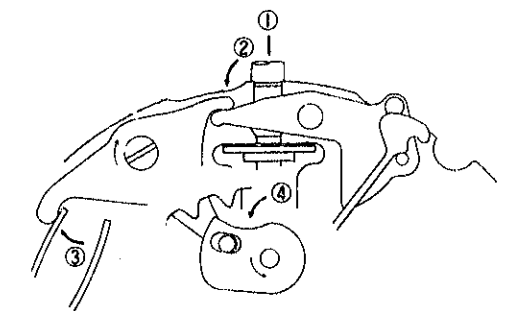


Fig. 2

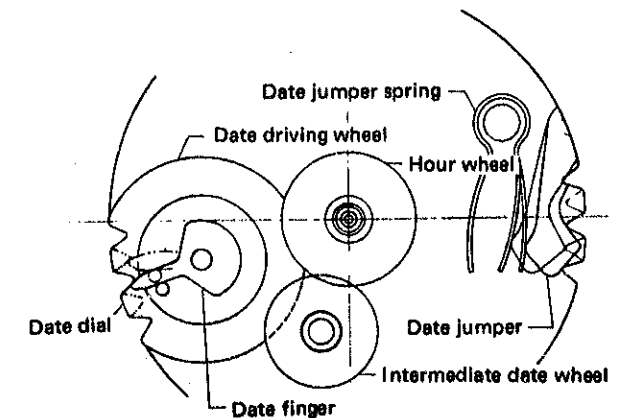


Fig. 3