

(1) Specifications

Casing diameter	25.60mm
Height	3.95mm
Vibrations per hour	28,800
Automatic winding (with auxiliary hand winding device)	
Calendar (day & date, Bilingual change-over mechanism for day indication; instant day & date setting device).	
Second-setting device	
Micro-adjustor (Outer-micro adjusting device for one-piece water resistant case)	

(2) Features

Watch movement designed with slim lines despite many functions. High beat mechanism (8 vibrations per second) assures excellent accuracy.

Instant day and date setting device is easily manipulated by revolving the crown.

Either one of two languages for day indication selectable through change-over mechanism.

(3) Disassembling and assembling

Disassemble the watch according to the procedures in Figs. 1 to 65. Assemble the watch according to the procedures in Figs. 65 to 1.

(4) Lubrication

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

Oil types

- Moebius Synt-A-Lube
- SEIKO Watch oil S-4
- SEIKO Watch oil S-3

Oil quantity

- Sufficient quantity
- Normal quantity
- Extremely small quantity

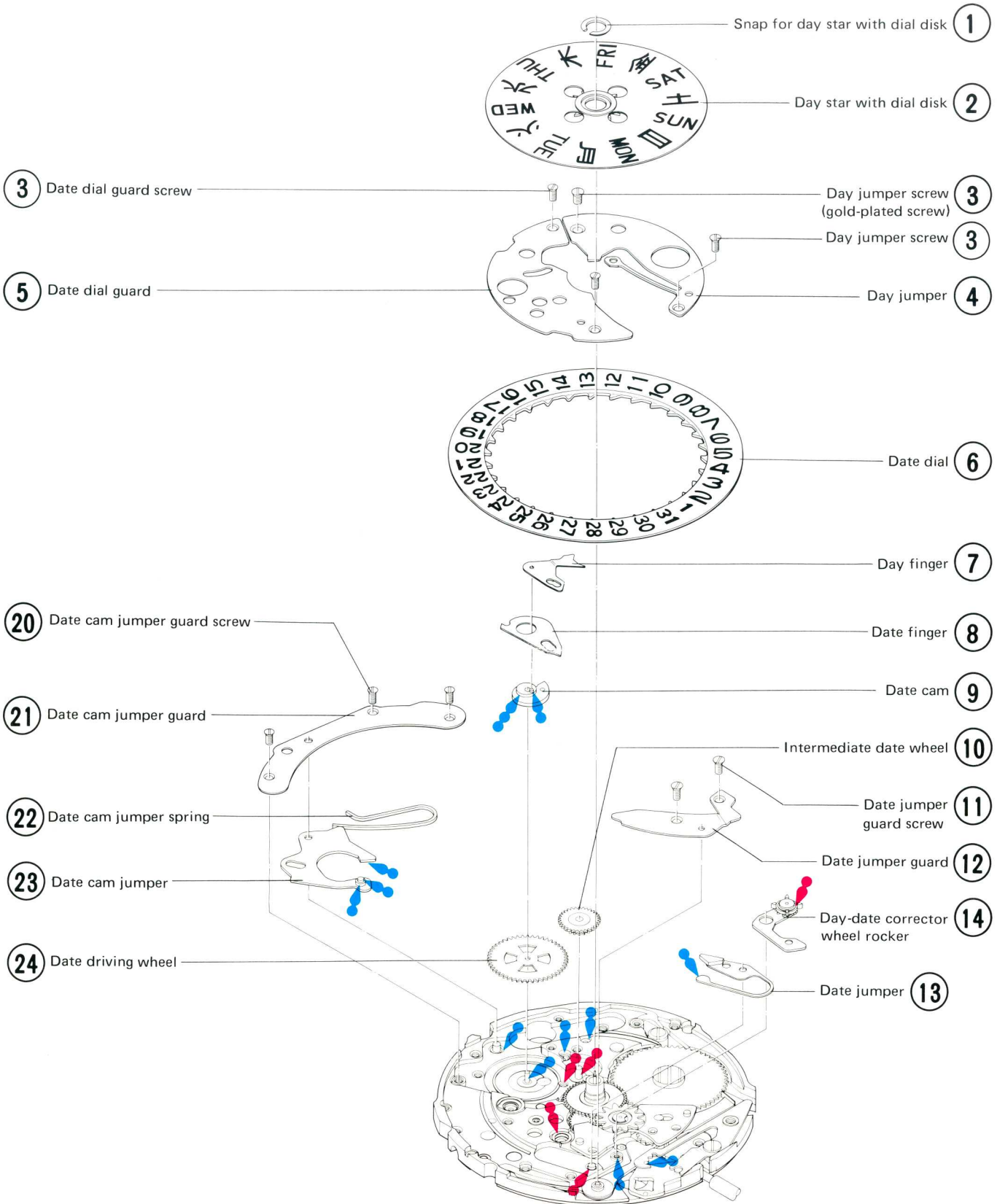


Movement

(5) Precautions on Handling the Watch

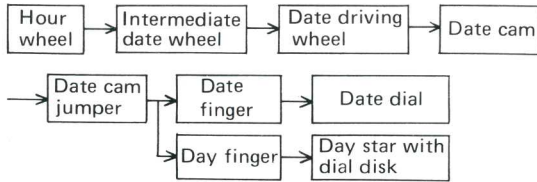
- 1) Correct the date approximately between 3:45 A.M. and 9:00 P.M.; also perform the day setting and bilingual changing approximately between 7:00 A.M. and 11:00 P.M. During periods other than the above-mentioned, these devices cannot be operated.
- 2) The mainspring is wound automatically; however, it can also be wound through the crown. When the date is corrected, the mainspring is wound at the same time.
- 3) Crown
 - The crown has three-stage change-over system.
 - Crown normal position – Winding the mainspring
 - first click – Correcting the date (clockwise)
 - Correcting the day (counterclockwise)
 - Winding the mainspring
 - second click – Setting the hands and second setting

5206A Calendar Mechanism



(6) Calendar Mechanism

6)-1 Instant day and date setting device (Figs. 1 and 2)



The date cam is assembled on the date driving wheel which revolves once for 24 hours. Date finger forwarding the date dial located on the date cam, and on the date finger, the day finger is assembled. The date cam jumper is always pressed against the date cam by a spring. When the date driving wheel revolves, the date cam is simultaneously rotated, and the date cam jumper contacting the date cam is raised through the spirally shaped circumference of the cam; at the same time, the date cam jumper spring is bent. When the date cam jumper passes the top of the cam, the date cam and the date cam jumper are revolved by force of the date cam jumper spring. At this time, the cam and the date cam jumper drive the date finger and the day finger.

Since these motions occur instantaneously, the end of the date finger forwards the date dial one day and the tip of the day finger advances the day star one day instantaneously.

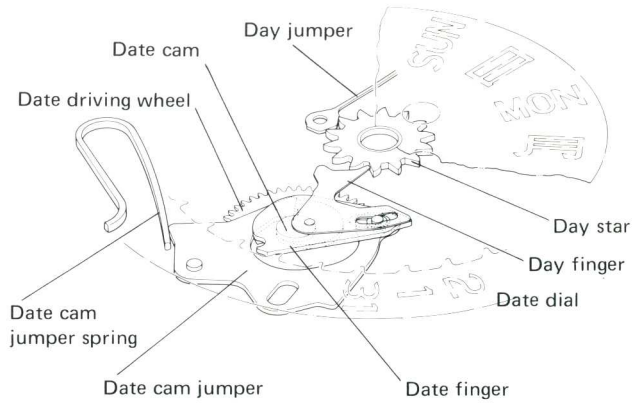


Fig. 1

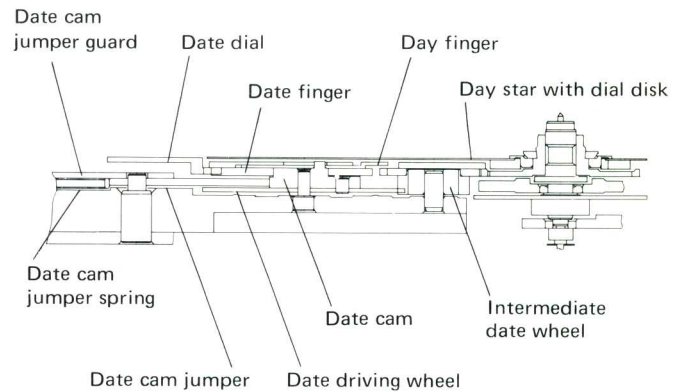


Fig. 2

(Before forwarding day and date)

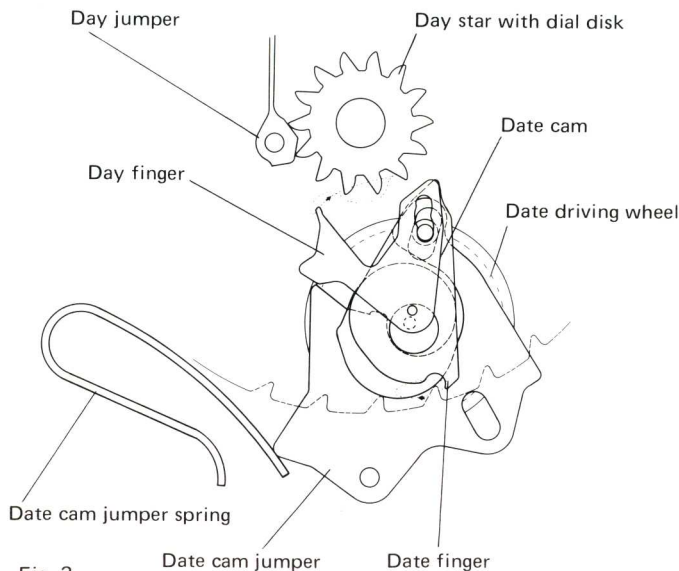


Fig. 3

(After forwarding day and date)

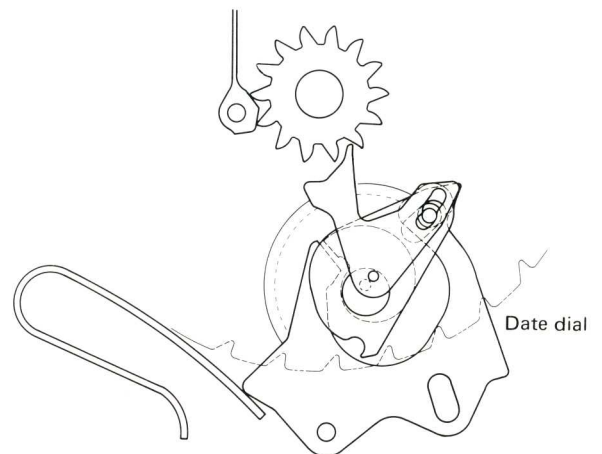
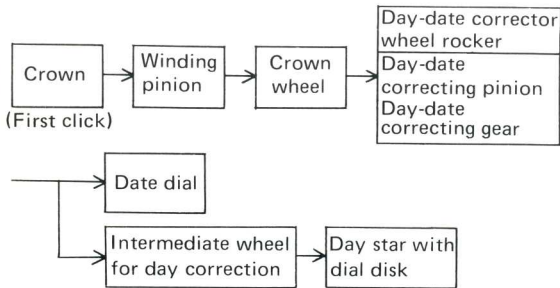


Fig. 4

5206A Calendar Mechanism

6)-2 Day and date correcting device (First click of Crown)



Date correction

The winding pinion and the crown wheel are meshed (they are assembled on the minute wheel bridge). When turning the crown clockwise, the day-date correcting gear attached to the day-date corrector wheel rocker meshes with the date dial, turning it as shown in Fig. 6.

(The mainspring can also be wound during the date correction by the crown).

Day correction

When turning the crown counterclockwise, the day-date corrector gear attached to the day-date correction wheel rocker meshes with the intermediate wheel for the day correction, turning the day star with dial disk.

Slipping of the day-date correcting gear

As shown in Fig. 4, when the tip of the date finger is between teeth of the date dial, or when the tip of the day finger is between the teeth of the day star, the correcting mechanism will not operate even when attempting to perform the day and date correction, due to slip of the day-date correcting gear.

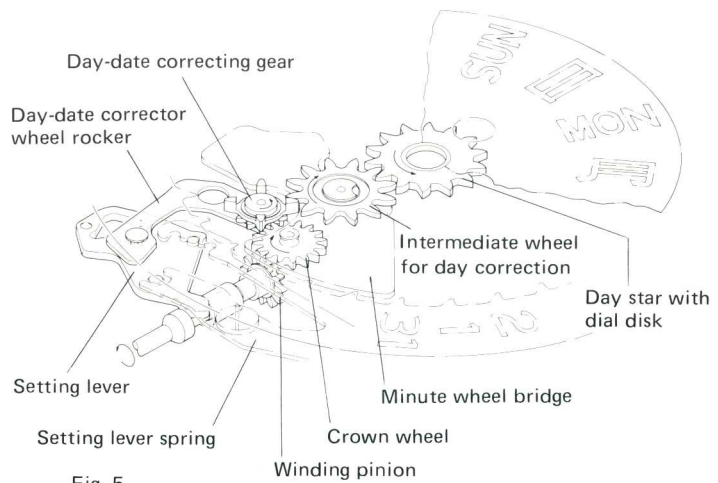


Fig. 5

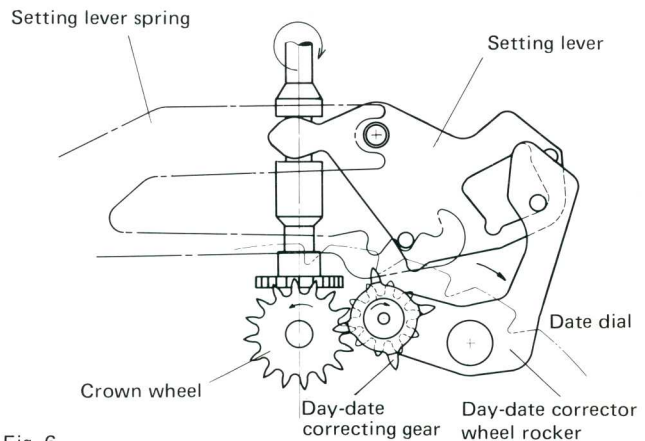


Fig. 6

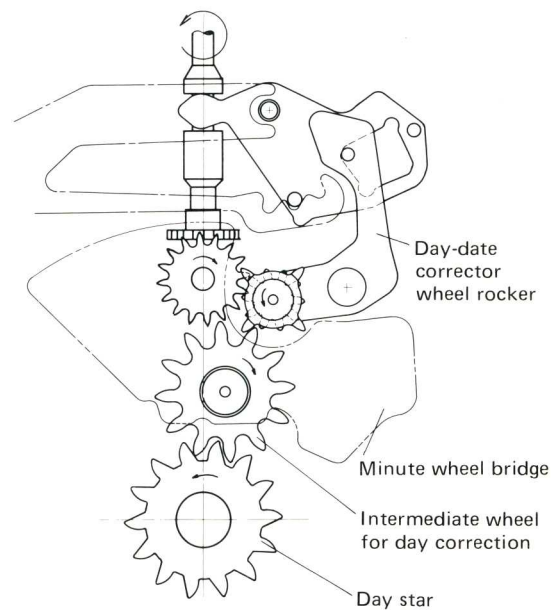
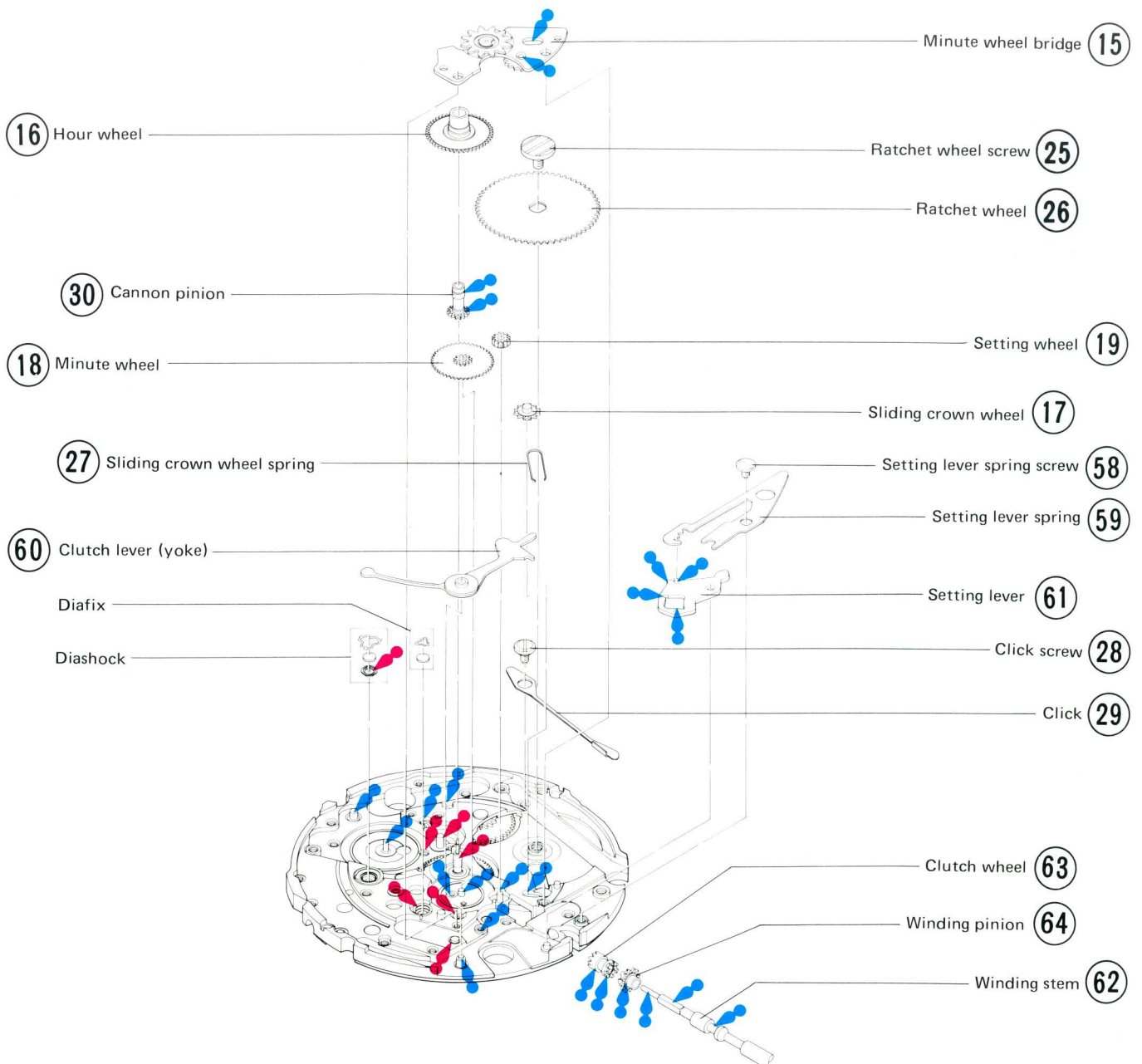


Fig. 7

5206A Setting Mechanism



(7) Winding the mainspring (Crown normal position)

When turning the crown clockwise in a condition that the winding pinion and the crown wheel are meshed (they are assembled on the minute wheel bridge), the ratchet wheel is turned through the sliding crown wheel as shown in Fig. 8. Consequently the mainspring is wound.

When turning the crown counterclockwise, the crown wheel is released from the sliding crown wheel.

In ordinary automatic winding, the crown wheel is also released from the sliding crown wheel.

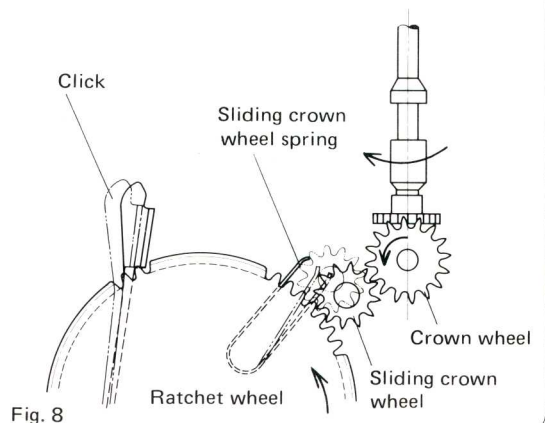
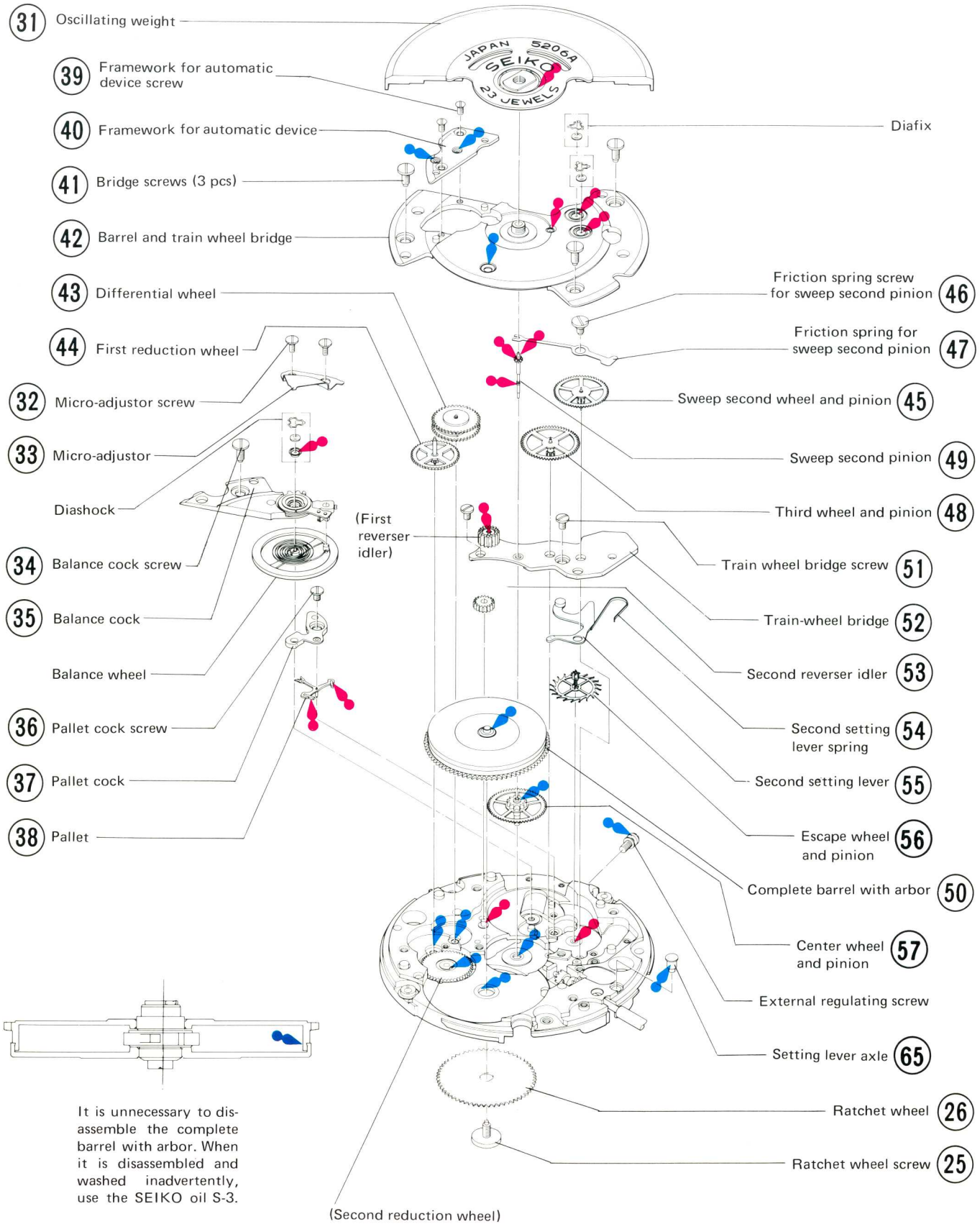


Fig. 8

5206A Automatic Winding Mechanism and Train Wheel



It is unnecessary to disassemble the complete barrel with arbor. When it is disassembled and washed inadvertently, use the SEIKO oil S-3.

5206A Disassembling and Assembling

Sectional Diagram of the Train Wheel

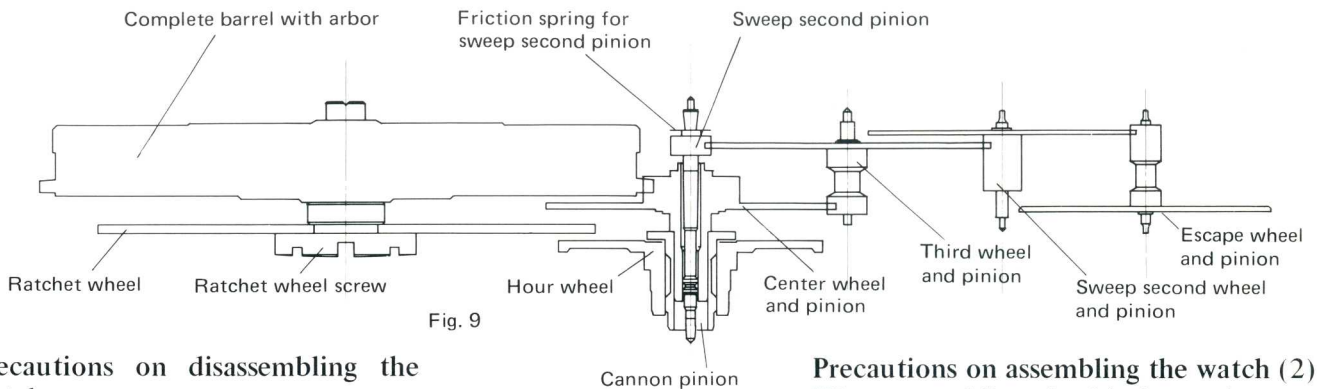


Fig. 9

Precautions on disassembling the watch

1) Releasing the mainspring

For releasing the mainspring, first remove the framework for automatic device; next, remove the differential wheel and the first reduction wheel, then gently move the click in the direction of the arrow with a pair of tweezers pushing the crown to release the mainspring as shown in Fig. 10.



Precautions on assembling the watch (1)

Lubrication

Second reduction wheel

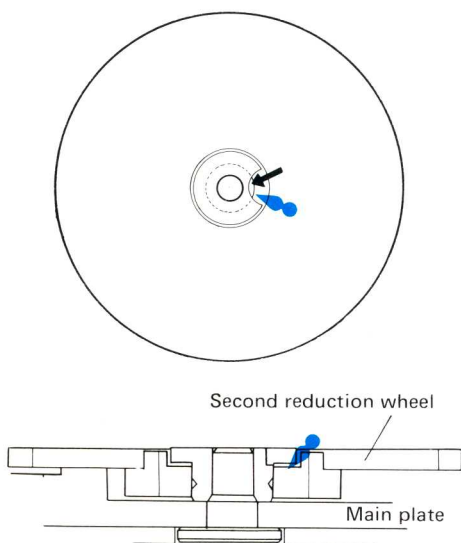


Fig. 11

Precautions on assembling the watch (2)

When assembling the friction spring for sweep second pinion, assemble it from the side as shown in Fig. 12 (assemble it from the arrow direction).

As shown on the right diagram of Fig. 12, if it is assembled from above the sweep second pinion, the friction spring for sweep second pinion will contact the pivot portion, preventing the correct installation.

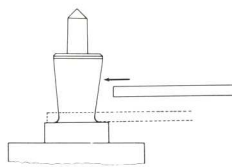
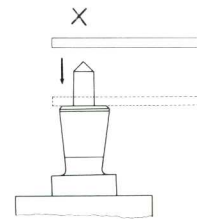


Fig. 12

First reverser idler



Day-date correcting gear

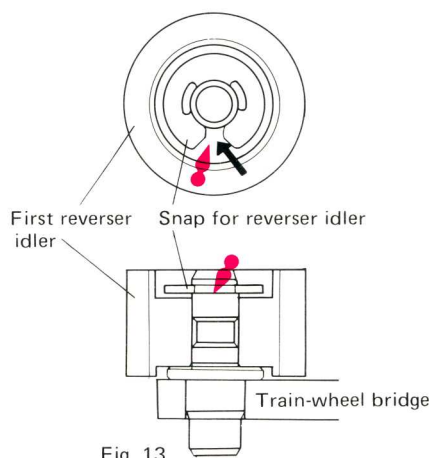
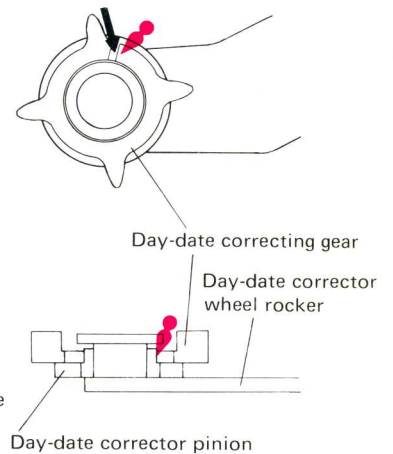


Fig. 13



Lubricate the portions indicated by the arrows as shown in the diagrams. Rotate the gear 3-4 times to spread oil over the shaft surface.

5206A Automatic Winding, Second-setting and Outside Micro-adjusting

(8) Automatic Winding Mechanism

Although the oscillating weight rotates to either the right or left, the rotation is changed into a constant direction by the action of the differential wheel to wind the mainspring constantly. (Fig. 15).

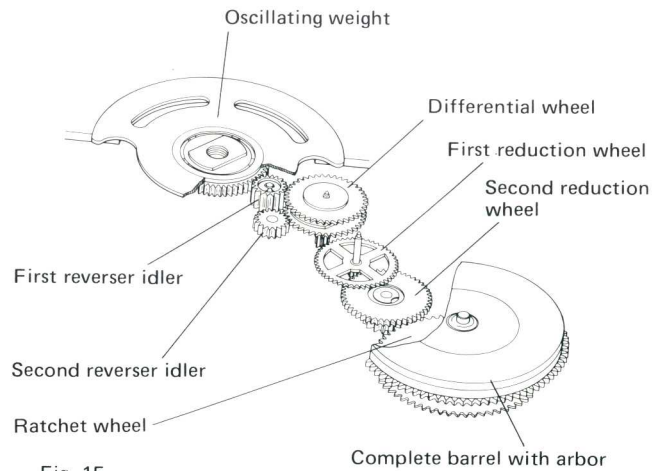
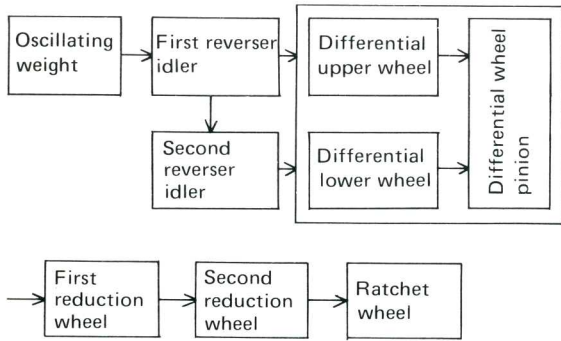


Fig. 15

(9) Second Setting Device

When the crown is pulled out to the second click to make hand-setting condition, the pin tip of the second-setting lever holds the balance wheel so that the watch stops. (Fig. 16).

(10) Outside micro-adjusting device

This device permits adjusting the watch gain or loss without opening the case.

When turning the external regulating screw clockwise after removing the tap-screw of outer device on the case, the micro-adjuster is moved to turn the regulator in the direction of (-). If the external regulating screw is turned counterclockwise, the micro-adjuster moves the regulator in the direction of (+). (Fig. 17).

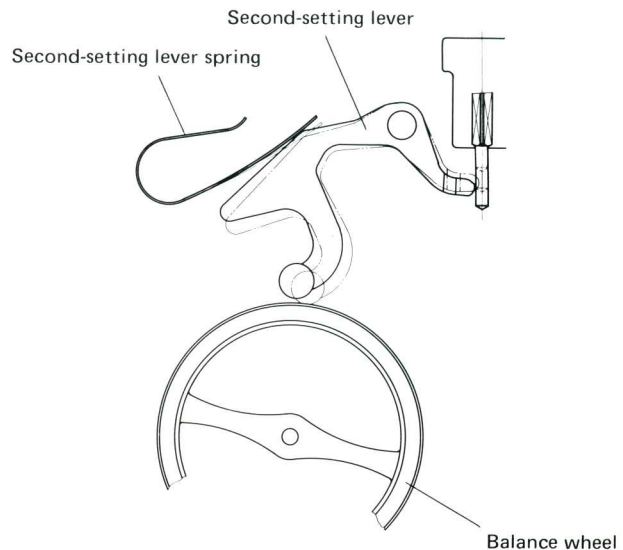


Fig. 16

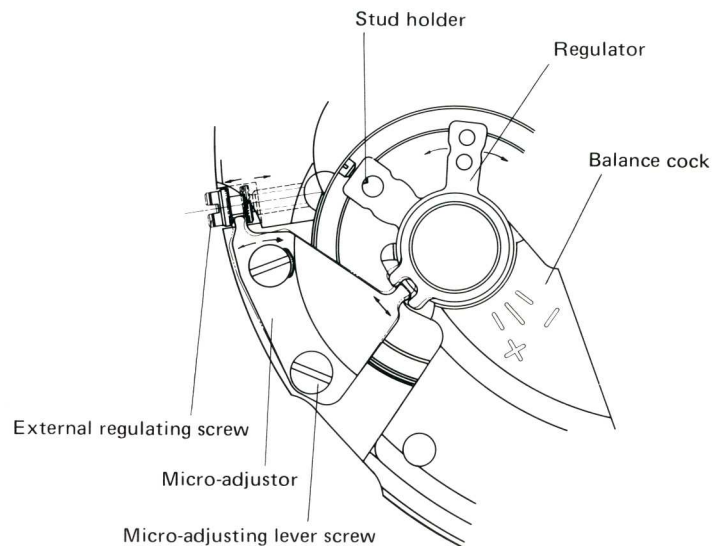


Fig. 17