

17 A

1) Specifications

Casing diameter	13.50mm
Height	3.20mm
Vibrations per hour	21,600
Movable stud holder (for correcting out-of-beat)	

2) Features

By adopting a special train wheel which effectively utilizes a narrow space, a large barrel and a balance are built in. Therefore, in spite of its very small size, it offers stabilized performance, comparable to larger models. Since winding hairspring direction has been improved to be wound to the left, a posture difference of the watch movement which generates while worn on the wrist is reduced.

Adoption of a bridge-type-balance cock and pallet cock, considered rather difficult to integrate in small watches, raises accuracy of the escapement and governor mechanism.

To maintain an excellent running condition of this small-scaled, highly accurate lady's watch, a dustproof intermediate case is provided inside the two-piece case.

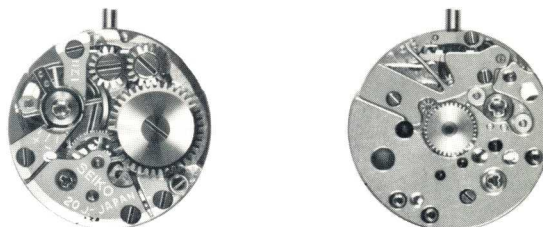
3) Disassembly and assembly

Disassemble the watch according to Figs.

① - ④⑧ .

Assemble by reversing the above by Figs.

④⑧ - ① .



Enlarged movement

4) Lubrication

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

Types

- ▶ Moebius Synt-A-Lube
- ▶ Seiko watch oil S-4

Oil quantity

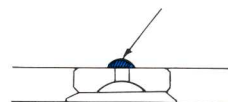
- ▶ Sufficient quantity
- ▶ Normal quantity
- ▶ Extremely small quantity

Note:

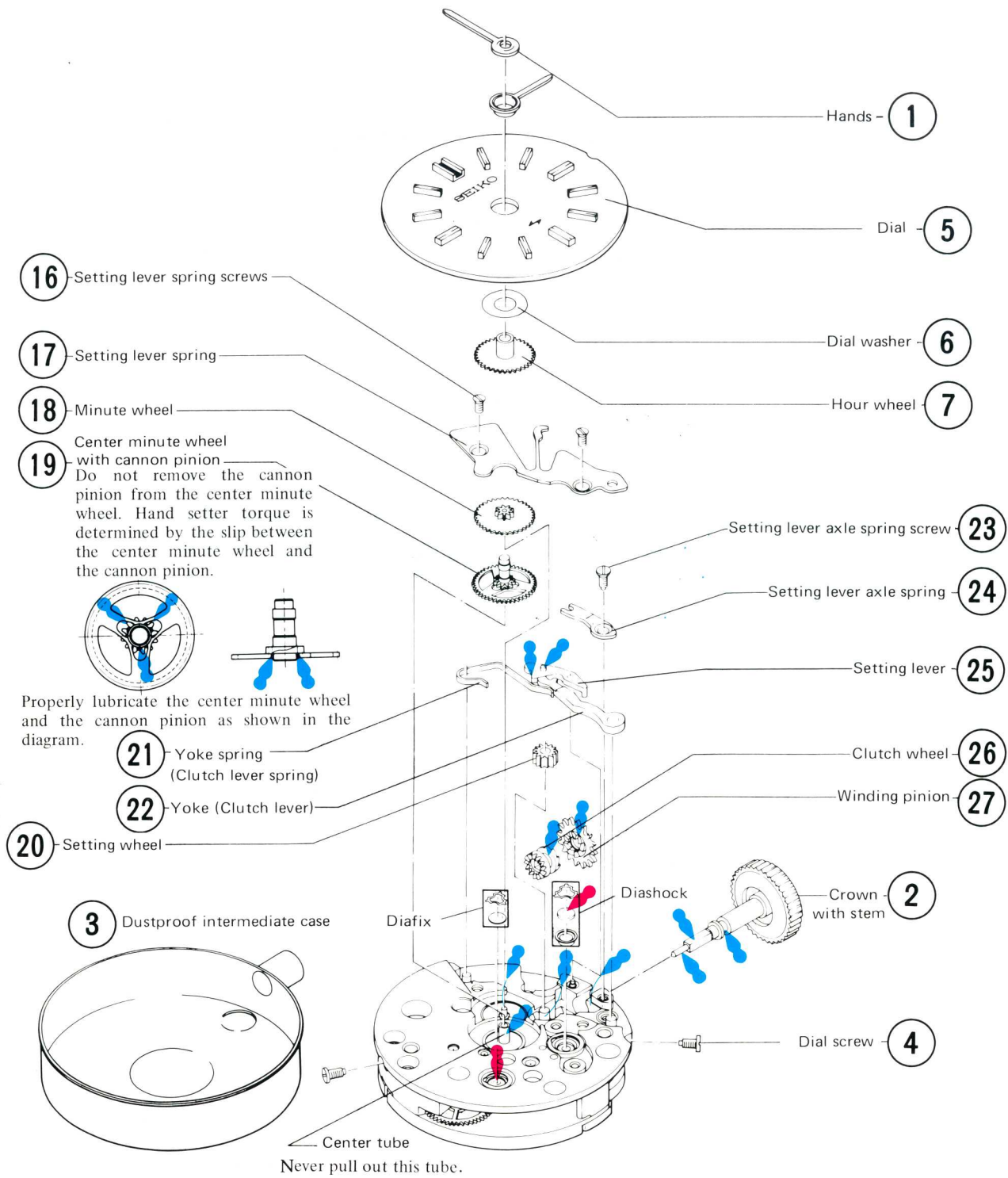
Refrain from lubricating points not so indicated.

Lubrication of SEIKO Watch Oil S-4

Lubricate the pivot holes of the front train wheel such as the plates, bridges etc. with SEIKO Watch Oil S-4 on the side in which the pivots are inserted as shown in the diagram.

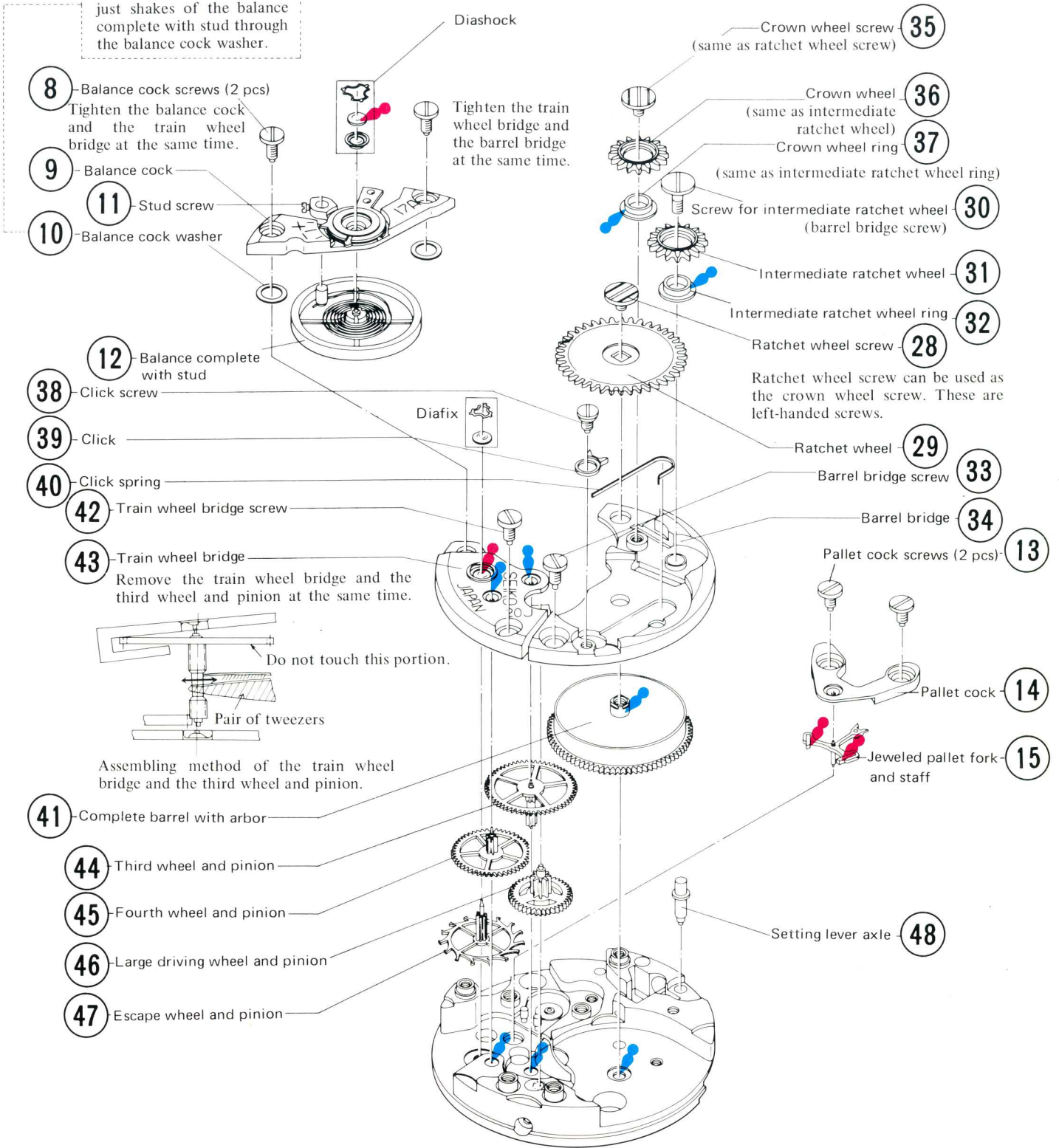


17 A Setting Mechanism



17 A Train Wheel, Escapement and Governor Mechanism

Since the balance cock, train wheel bridge, and barrel bridge are stacked, adjust shakes of the balance complete with stud through the balance cock washer.



5) Construction

5.-1 *Special train wheel*

By adopting a new, special train wheel, the 17 QUEEN SEIKO has a very large barrel and balance; consequently, the large driving wheel and pinion is located eccentrically from the center of the movement. The cannon pinion (to which the minute hand is inserted) is attached to the center minute wheel, and the center minute wheel is assembled to the center tube which is set on the rear surface of the plate. Consequently, the process of power transmission is as follows:

Complete barrel with arbor → Large driving wheel → Center minute wheel → Hour wheel

The process of power transmission for the front train wheel is the same as a conventional system. (Fig. 1)

5.-2 *Center minute wheel with cannon pinion*

Different from a conventional system, the cannon pinion is set to the toothed minute wheel by elastic portions of three supports of the toothed minute wheel. When turning the hands, these three elastic portions slip and the cannon pinion is turned.

As a result, slipping torque is extremely stabilized so that it becomes unnecessary to adjust the torque. (Fig. 2)

5.-3 *Pull-out mechanism for crown with stem*

This is a substitutional mechanism for the conventional joint stem. As shown in the diagram, when depressing tail A of the setting lever, the B portion is raised with C as a supporting point and permit attaching and detaching the crown with stem. Also the crown with stem can be detached by depressing the setting lever axle from the case back. (Fig. 3)

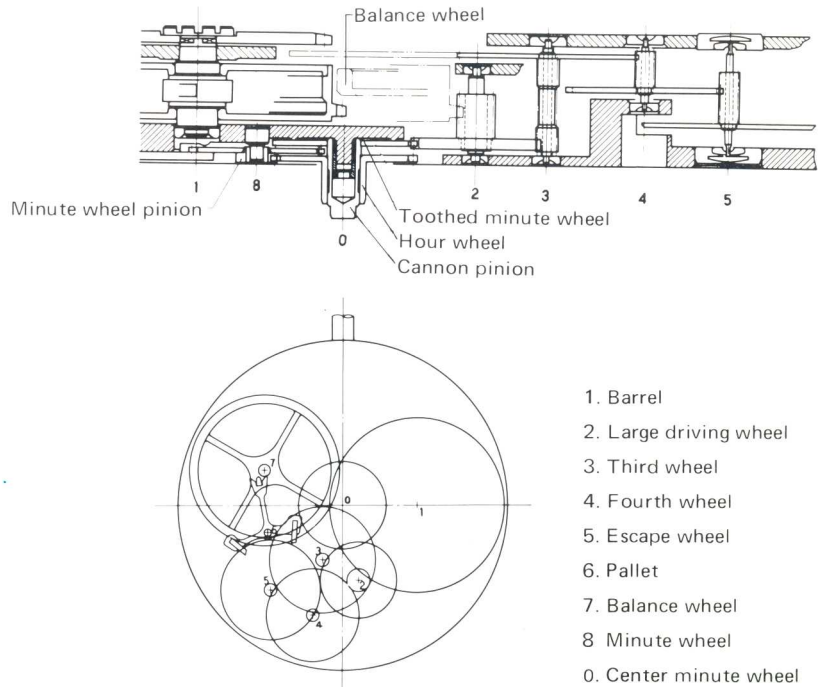


Fig. 1

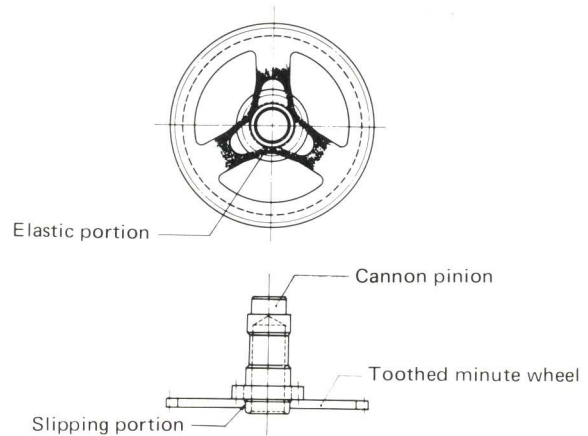


Fig. 2

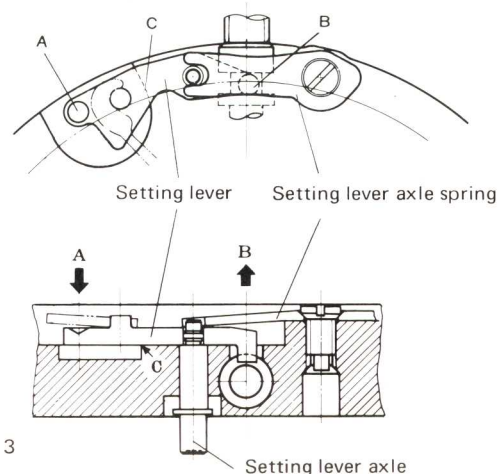


Fig. 3