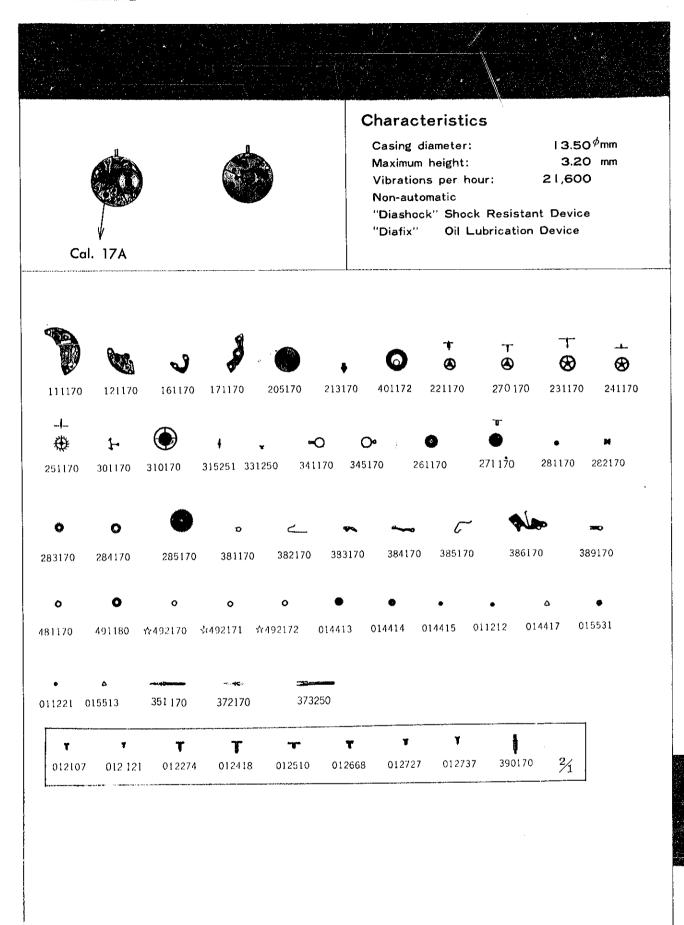
## SEIKO



Catalog No.

☆⇔Please see remarks. ☆ ⇔ Please see remarks on the reverse page.

Calibre No.		lawale	Style Name	
Patible un.	1 7 A	Jewels	Style Name	
	17 A	20j		
PART NO.	LIST OF MATERIALS		PART NO.	LIST OF MATERIALS
111170 121170 161170 161170 205170 205170 213170 221170  231170 241170 251170 261170 271170 281170 281170 281170 281170 281170 310170 310170 310170 315251 331250 341170 345170 372170 372170 373250 381170 382170 384170 385170 3872170 373250 381170 3872170 372170 372170 372170 372170 372170 373250 381170 385170 381170 385170	Barrel bridge Train-wheel bridge Pallet cock Balance cock Complete barrel with arbor Barrel arbor Large driving wheel & pinion (off center) Third wheel & pinion Fourth wheel & pinion Escape wheel & pinion Minute wheel Center minute wheel with opinion Hour wheel Setting wheel Clutch wheel Winding pinion Crown wheel Intermediate ratchet wheel Ratchet wheel Jewelled pallet fork & state Balance complete with stude Balance staff Roller with jewel Regulator Stud holder Winding stem Joint stem (movement porticulation) Click Click spring Setting lever Yoke (Clutch lever) Yoke spring (Clutch lever) Setting lever axle spring Setting lever axle spring Setting lever axle spring Setting lever axle shainspring (self-greasing) Crown wheel ring Intermediate ratchet wheel Dial washer  Balance cock washer  Diashock upper frame Diashock hower frame Diashock hower frame Diashock spring Diafix upper hole jewel with for escape wheel Diafix lower hole jewel with for escape wheel	on  cannon  spring) oridge)  ring	011221 015513 012107 012121 012274 012274 012274 012510 012510 012510 012668 012727 012737 0111536 011536 011528 011527 011528 011523 011505 013006 013007 013008	Diafix cap jewel Diafix spring Dial screw Stud screw Pallet cock screw Bridge screw Screw for intermediate ratchet wheel Crown wheel screw Ratchet wheel screw Click screw Setting lever spring screw Lower hole jewel for barrel Upper hole jewel for large driving wheel & pinion Lower hole jewel for large driving wheel & pinion Upper hole jewel for 3rd wheel Lower hole jewel for 3rd wheel Lower hole jewel for 4th wheel Upper hole jewel for 4th wheel Upper hole jewel for pallet Tube for balance cock screw Tube for pallet cock screw Tube for pallet cock screw
Remarks:  Balance cock washer———— Please measure the thickness———————————————————————————————————				
☆ 492170・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・				

Items in light letters are not shown in photos.

# SEIKO

(Revised) Calibra No. Jeweis Style Name ⇔ Basic Calibre 17 A 20 J Catalog No. 17-00-1 Characteristics Casing diameter: 13.50 pmm Maximum height: 3.20 mm Vibrations per hour: 21,600 Non-automatic "Diashock" Shock Resistant Device Cal. 17A 121171 251171 271170 433110 270170 (1.95 mm)(1.17mm) 271171 270171 (1.67mm) (2.45mm)

Catalog No. 17-00-2

As for all other parts not shown here, please refer to the basic calibre

(Cal. No. 17 & 20 J Catalog No. 17.00.1 Red page)

Style Name Jewels Calibre No. 17 i ⇒ Basic Calibre 17A 20J Catalog No. 17-00-1 PART NO. PART NAME PART NAME PART NO. 014417 Diashock spring 111170 Barrel bridge 012107 Dial screw Train-wheel bridge 123171 012121 161170 Pallet cock Stud screw 012274 Balance cock Pallet cock screw 171170 Complete barrel with arbor 205170 012274 Bridge screw 213170 Barrel arbor 012418 Screw for intermediate ratchet wheel Large driving wheel & pinion 221170 012510 Crown wheel screw (off center) 012510 Ratchet wheel screw Third wheel & pinion 231170 012668 Click screw 241170 Fourth wheel & pinion 012727 Setting lever spring screw Escape wheel & pinion 251171 012737 Setting lever axle spring screw 261170 Minute wheel 011536 Upper hole jewel for large driving wheel Center minute wheel with cannon 270170 & pinion 270171 011536 Lower hole jewel for large driving wheel 271170 & pinion Hour wheel 271171 011542 Upper hole jewel for 3rd wheel Setting wheel 281170 011527 Lower hole lewel for 3rd wheel Clutch wheel 282170 011528 Upper hole jewel for 4th wheel Winding pinion 283170 011523 Lower hole jewel for 4th wheel 284170 Crown wheel 011505 Upper hole jewel for pallet Intermediate ratchet wheel 284170 011505 Lower hole jewel for pallet Ratchet wheel 285170 013006 Tube for balance cock screw Jewelled pallet fork & staff 301170 013007 Tube for bridge screw Balance complete with stud 310170 013008 Tube for pallet cock screw Balance staff 315251 Roller with jewel 331250 Regulator 341170 345170 Stud holder Winding stem 351170 372170 Joint stem (movement portion) 373250 Joint stem (case portion) 381170 Click 382170 Click spring 383170 Setting lever Yoke (Clutch lever) 384170 Yoke spring (Clutch lever spring) 385170 Setting lever spring (Set bridge) 386170 Setting lever axle spring 389170 Setting lever axle 390170 Mainspring (self-greasing) 401172 Upper hole jewel with frame for 433110 escape wheel Lower hole jewel with frame for 433110 escape wheel 481170 Crown wheel ring 481170 Intermediate ratchet wheel ring 491180 Dial washer ☆492170) Balance cock washer ☆492171 ☆ 492172 014413 Diashock upper frame 014414 Diashock lower frame Diashock hole jewel with frame 014415 011212 Diashock cap jewel Remarks: Balance cock washer ------ Please measure the thickness ----\$ 492170 ····· 0.035 mm thickness

☆ ⇒ Please see remarks.

Items in light letters are not shown in photos; those parts are interchangeable with the basic calibre (Cal. No. 17 A 20J Catalog No. 17-00-1 Red page).

## 1) Specifications

13.50mm Casing diameter 3.20mm Height Vibrations per hour 21,600 Movable stud holder (for correcting outof-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. -(1). (48)





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

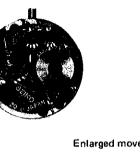
- Sufficient quantity
- Normal quantity
- Extremely small quantity

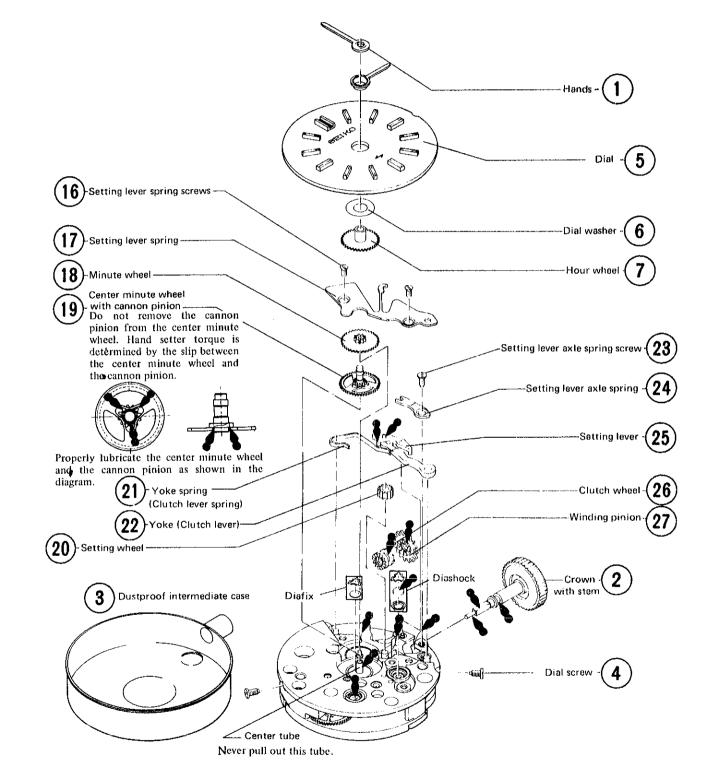
#### Note:

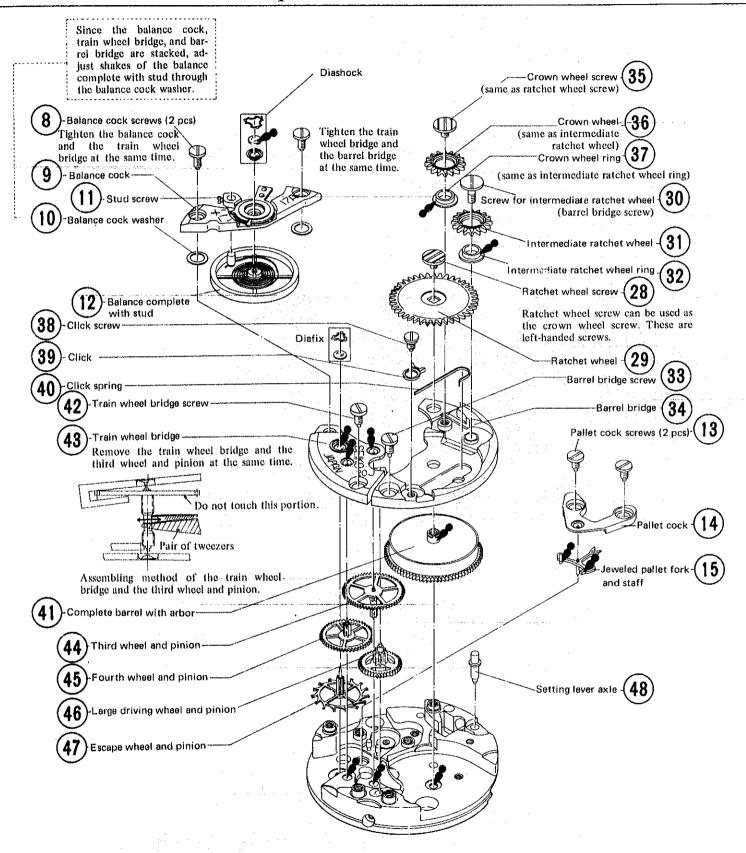
Refrain from lubricating points not so indicated.

#### 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.







#### 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)

