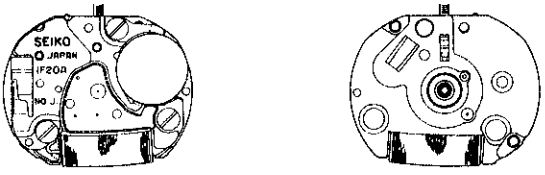


# PARTS CATALOGUE/TECHNICAL GUIDE

## Cal. 1F20A

### [SPECIFICATIONS]

Item		Cal. No.	1F20A
Movement		 <p style="text-align: right;">(x 2.0)</p>	
Movement size	Outside diameter	$\phi$ 12.5 mm 10.0 mm between 3 o'clock and 9 o'clock sides	
	Casing diameter	$\phi$ 12.5 mm 10.0 mm between 3 o'clock and 9 o'clock sides 11.5 mm between 6 o'clock and 12 o'clock sides	
	Height	1.8 mm (1.9 mm including battery portion)	
Time indication		2 hands (Hand motion: 20-second step)	
Driving system		Step motor	
Additional mechanism		Electronic circuit reset switch	
Loss/gain		Monthly rate at normal temperature range: less than 15 seconds	
Regulation system		Nil	
Measuring gate by quartz tester		Use 10-second gate.	
Battery		Maxell SR416SW Battery life is approximately 3 years. Voltage: 1.55V	
Jewels		0 jewel	

# PARTS CATALOGUE

Cal. 1F20A

Disassembling procedures Figs.: ① → ②③

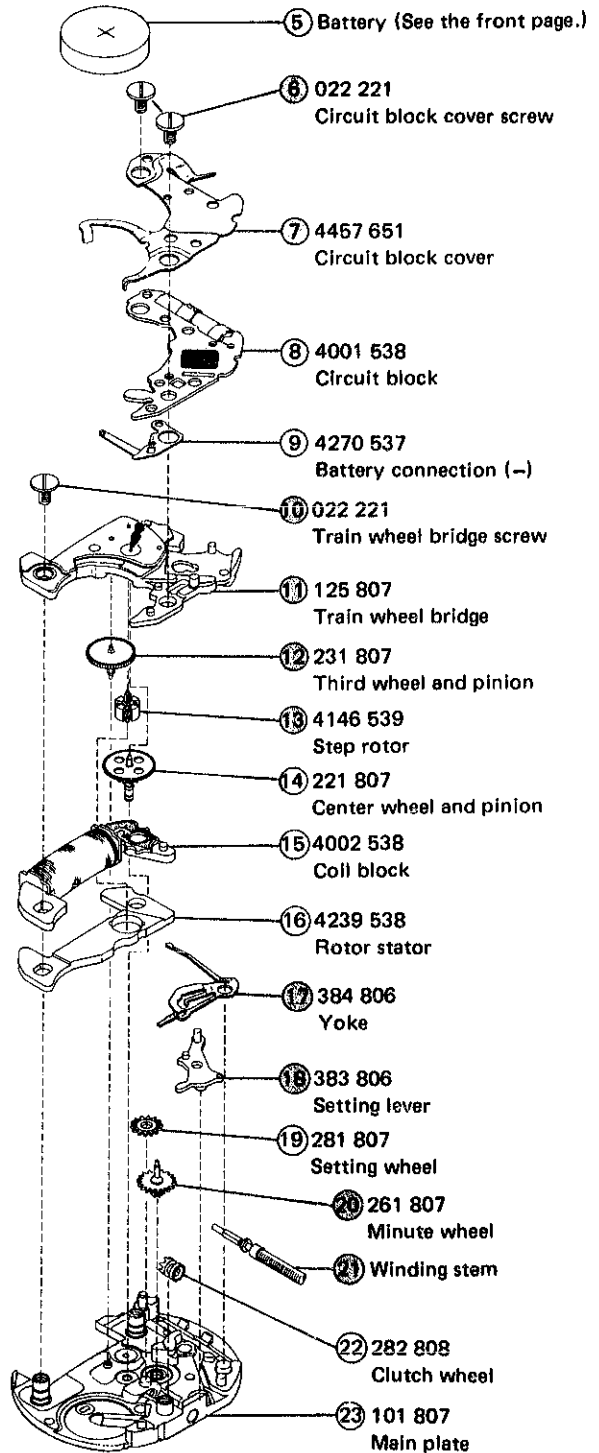
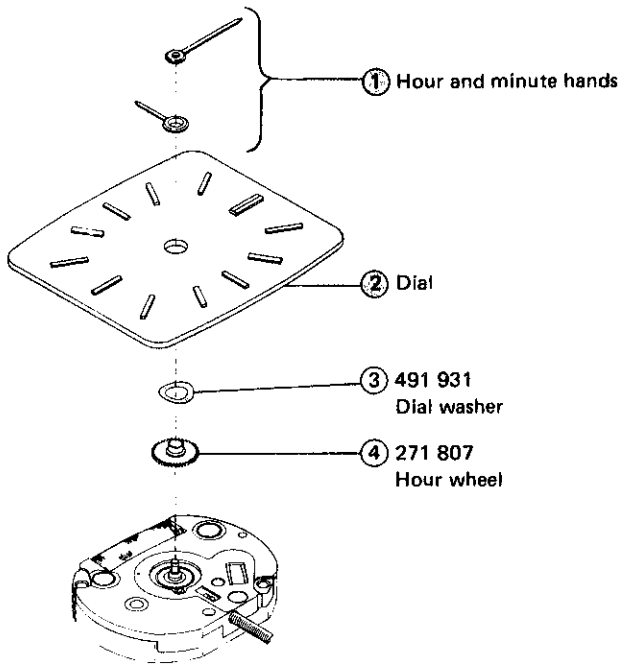
Reassembling procedures Figs.: ②③ → ①

Lubricating: Types of oil

Oil quantity

● Moebius A

○ Normal quantity



	022 221
	Circuit block cover screw (2 pcs.)
	271 807
	Train wheel bridge screw (1 pc.)

⊙ ⇨ Please see the remarks on the following pages.

**Remarks:**

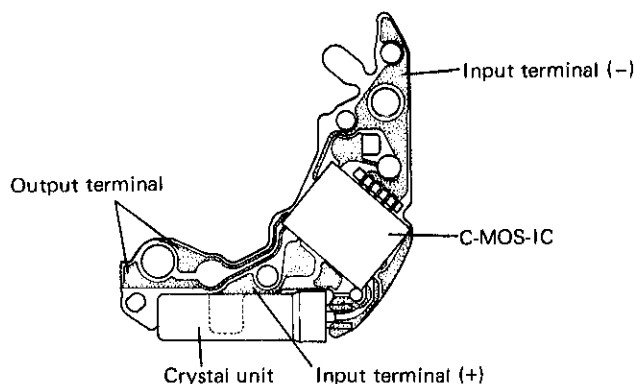
- ②① Winding stem 351 807

The type of winding stem is determined based on the design of cases.  
Check the case number and refer to "SEIKO Casing Parts Catalogue" to choose a corresponding winding stem.

## TECHNICAL GUIDE

- The explanation here is only for the particular points of Cal. 1F20A.
- For the repairing, checking and measuring procedures, refer to the "TECHNICAL GUIDE, GENERAL INSTRUCTIONS".

### I. STRUCTURE OF THE CIRCUIT BLOCK



### II. REMARKS ON DISASSEMBLING AND REASSEMBLING

Use the universal movement holder for disassembling and reassembling.

① Hands

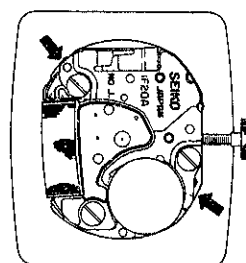
- How to install

Place the movement directly on a flat metal plate or the like and install the hands, escaping the spring portion of the circuit block cover.

② Dial

- How to remove

Insert a tip of screwdriver into the arrow-marked notch between the main plate and the dial, and remove the dial by prying it up alternately at both ends.



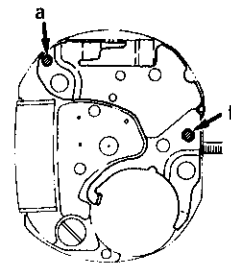
⑥ Circuit block cover screw

While tightening the circuit block cover screw on the coil side, be careful not to break the coil wire.  
(Make sure that the size of the screwdriver tip corresponds with the diameter of the screw head.)

⑦ Circuit block cover

• How to install

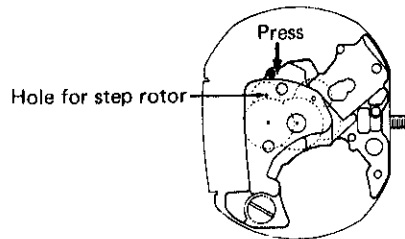
Set the circuit block cover holes "a" and "b" securely onto the corresponding collars of the train wheel bridge, and then tighten the screws while lightly pressing the circuit block cover.



⑩ Train wheel bridge screw

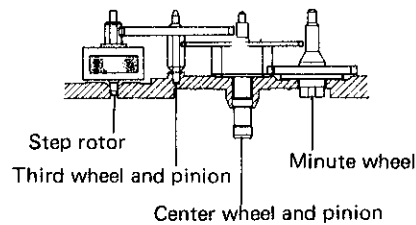
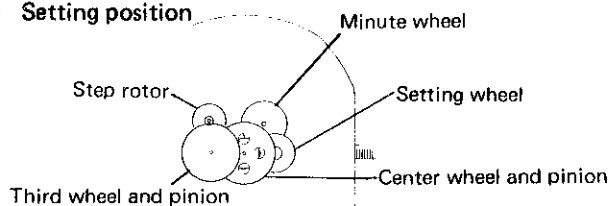
• How to install

To prevent the dislocation of each wheel and pinion, tighten the train wheel bridge screw while lightly pressing the arrow-marked portion in the illustration with tweezers, etc.



⑪ Train wheel bridge

• Setting position



⑫ Third wheel and pinion

⑬ Step rotor

⑳ Minute wheel

Since the third wheel and pinion, step rotor and minute wheel are made of plastics, take care not to damage their gear or shaft portion while disassembling and reassembling them. Be sure to hold the other portions lightly with tweezers.

⑰ Yoke

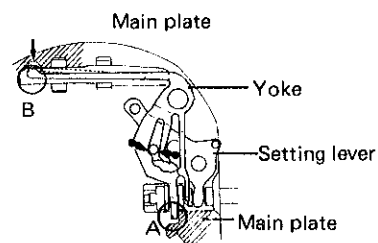
⑱ Setting lever

• How to install

Place the part A first on the main plate, and then push the part B in the direction of the arrow with tweezers to set it to the main plate.

• Lubricating

Lubricate as shown in the illustration on the right.



### III. VALUE CHECKING

• Coil block resistance

2.0K $\Omega$  ~ 2.6K $\Omega$

• Current consumption

For the whole movement : Less than 0.3 $\mu$ A  
 For the circuit block alone: Less than 0.25 $\mu$ A