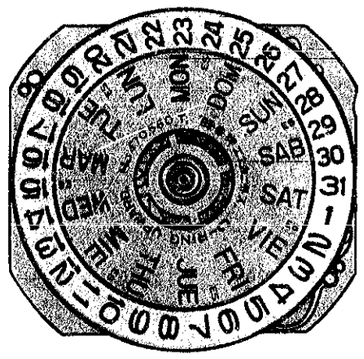
TECHNICAL GUIDE

SEIKO

QUARTZ

CAL. 6430. 6431. 6432. 6433. 6439

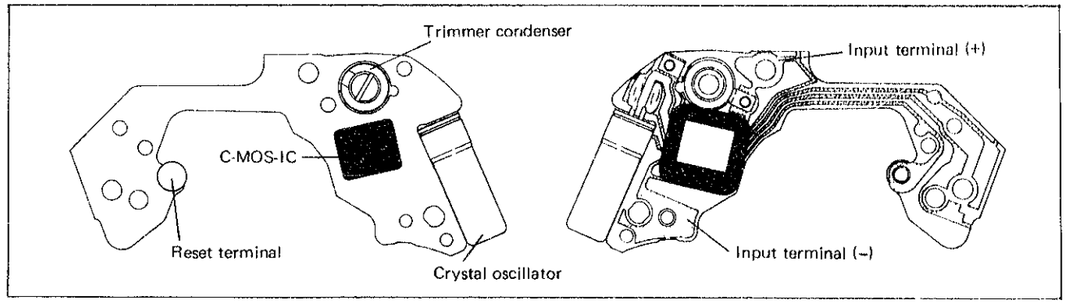


CONTENTS

I. SPECIFICATIONS

Item \ Cal. No.		6430	6431	6432	6433	6439
Time indication		2 hands	3 hands	3 hands	3 hands	2 hands
Additional mechanism	Date	–	–	√	√	√
	Day of the week	–	–	–	√	
	Bilingual changeover system for the day of the week	–	–	–	√	
	Instant date setting device	–	–	√	√	√
	Instant day setting device	–	–	–	√	
	Electronic circuit reset switch	√	√	√	√	√
	Train wheel setting device	√	√	√	√	√
	Battery life indicator	–	√	√	√	
Loss/gain		Loss/gain at normal temperature range Monthly late: less than 15 seconds (Annual rate: less than 3 minutes)				
Casing diameter		ϕ 24.0 mm				
Height		2.4 mm without battery		2.7 mm without battery		
Measuring gate by Quartz Tester		Any gate is available				
Regulation system		Trimmer condenser				
Battery		Maxell SR1120SW, U.C.C. 381, SEIKO (SEIZAIKEN) TR1120SW or SB-DS Battery life is approximately 2 years. Voltage: 1.55 V				
Jewels		7 jewels				

II. STRUCTURE OF THE CIRCUIT BLOCK



III. LIST OF SCREWS USED

Shape	Parts No.	Parts Name	Shape	Parts No.	Parts Name
	022 411	Train wheel bridge screw Circuit block screw Battery connection (+) screw Setting lever spring screw		022 754	Date dial guard screw Hour wheel guard screw

IV. DISASSEMBLING, REASSEMBLING AND LUBRICATING

Disassembling procedures Figs.: ① ~ ㊽

Reassembling procedures Figs.: ㊽ ~ ①

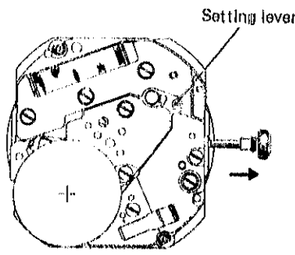
- Lubricating: Type of oil
  - ●● Moebius A
  - ○○ SEIKO watch oil S-6
- Use the movement holder S-667 or S-680

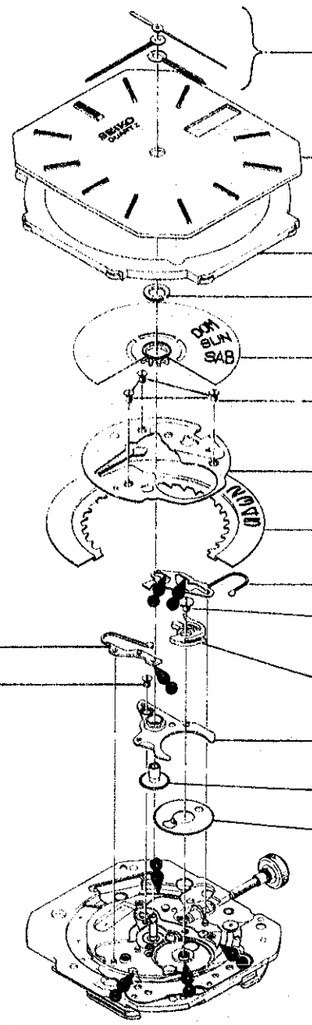
(1) Calendar mechanism

Ex: Cal. 6433A

How to disassemble the winding stem

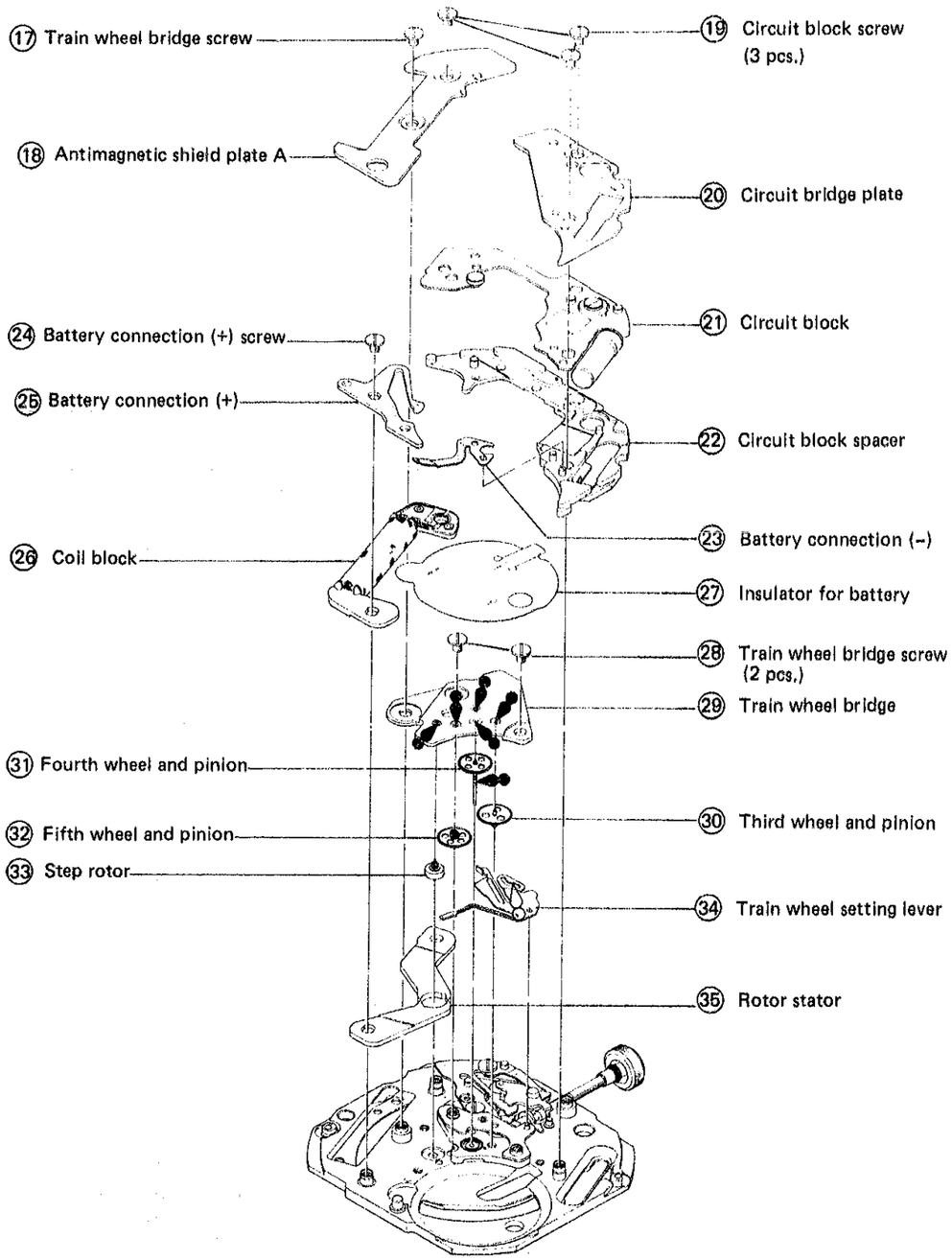
Pull out the crown completely and remove the winding stem while pushing the setting lever.





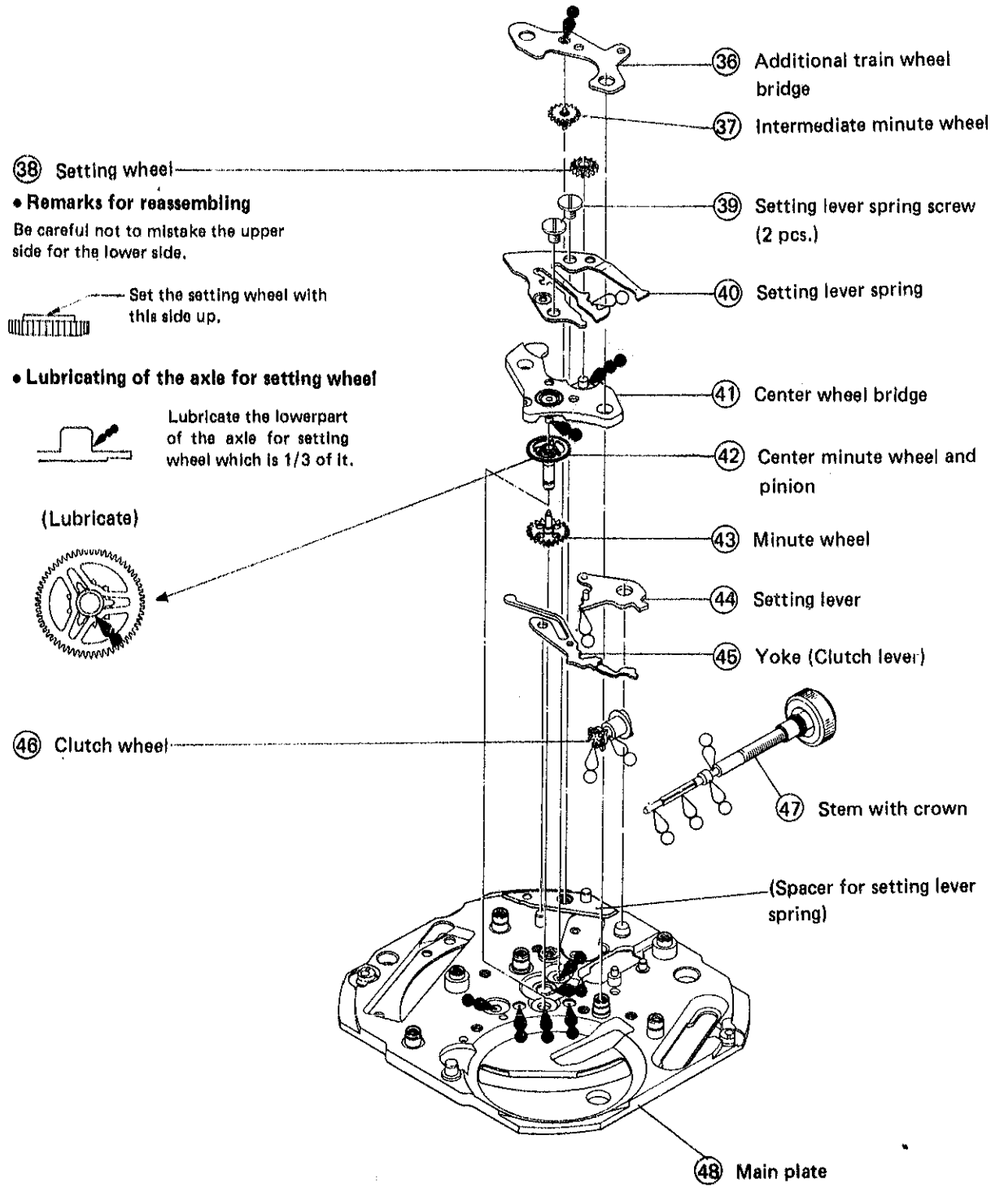
① Hour, minute and second hands
② Dial
③ Holding ring for dial
④ Snap for day star with dial disk
⑤ Day star with dial disk
⑥ Date dial guard screw (3 pcs.)
⑦ Date dial guard
⑧ Date dial
⑨ Day corrector
⑩ Day and date finger screw
⑪ Day and date finger
⑫ Date jumper
⑬ Hour wheel guard screw
⑭ Hour wheel guard
⑮ Hour wheel
⑯ Date driving wheel

(2) Circuit block, coil block and gear train



⑰ Train wheel bridge screw
⑱ Antimagnetic shield plate A
⑲ Circuit block screw (3 pcs.)
⑳ Circuit bridge plate
㉑ Circuit block
㉒ Circuit block spacer
㉓ Battery connection (–)
㉔ Battery connection (+) screw
㉕ Battery connection (+)
㉖ Coil block
㉗ Insulator for battery
㉘ Train wheel bridge screw (2 pcs.)
㉙ Train wheel bridge
㉚ Third wheel and pinion
㉛ Fourth wheel and pinion
㉜ Fifth wheel and pinion
㉝ Step rotor
㉞ Train wheel setting lever
㉟ Rotor stator

(3) Setting mechanism



V. CHECKING AND ADJUSTMENT

- **Refer to the "SEIKO QUARTZ TECHNICAL GUIDE, GENERAL INSTRUCTION" for analogue watches for details.**

Procedure

CHECK OUTPUT SIGNAL

Result:

Blinking 1-second intervals: Normal
No blinking 1-second intervals: Defective

CHECK HAND SETTING CONDITION

CHECK BATTERY VOLTAGE

Result:

More than 1.5V: Normal
Less than 1.5V: Defective

CHECK BATTERY CONDUCTIVITY

CHECK CIRCUIT BLOCK CONDUCTIVITY

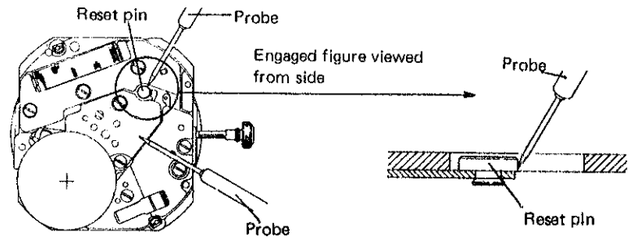
CHECK COIL BLOCK

Result:

1.5kΩ ~ 3.5kΩ: Normal
Less than 1.5kΩ, More than 3.5kΩ: Defective

CHECK RESET AND TRAIN WHEEL SETTING CONDITIONS

1. Check to see if the second hand stops immediately when the crown is pulled out completely and starts promptly after one second when the crown is pushed back in.
2. Check the conductivity condition of the reset pin and the train wheel bridge by using the Quartz tester with the crown pulled out completely.

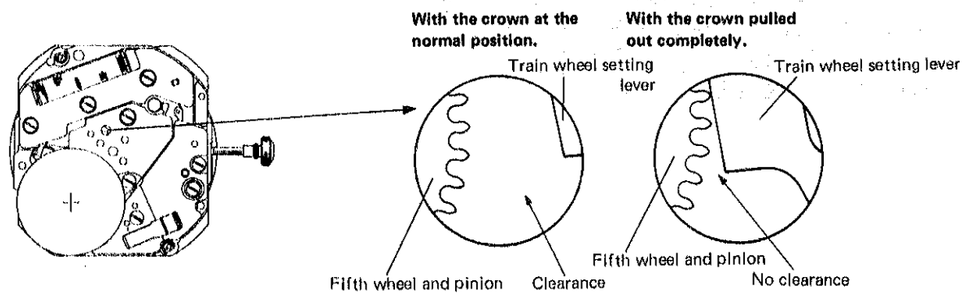


Result:

Less than 10Ω: Normal
More than 10Ω: Defective

Procedure

3. Check for the clearance between the train wheel setting lever and the fifth wheel and pinion.



CHECK GEAR TRAIN MECHANISM

CHECK SETTING AND CALENDAR MECHANISM

CHECK ACCURACY

CHECK CURRENT CONSUMPTION

Result:

Less than 2.5μA: Normal

More than 2.5μA: Defective

CHECK APPEARANCE AND FUNCTIONING

All procedures of Disassembling, Reassembling, Checking and Adjustment are completed.