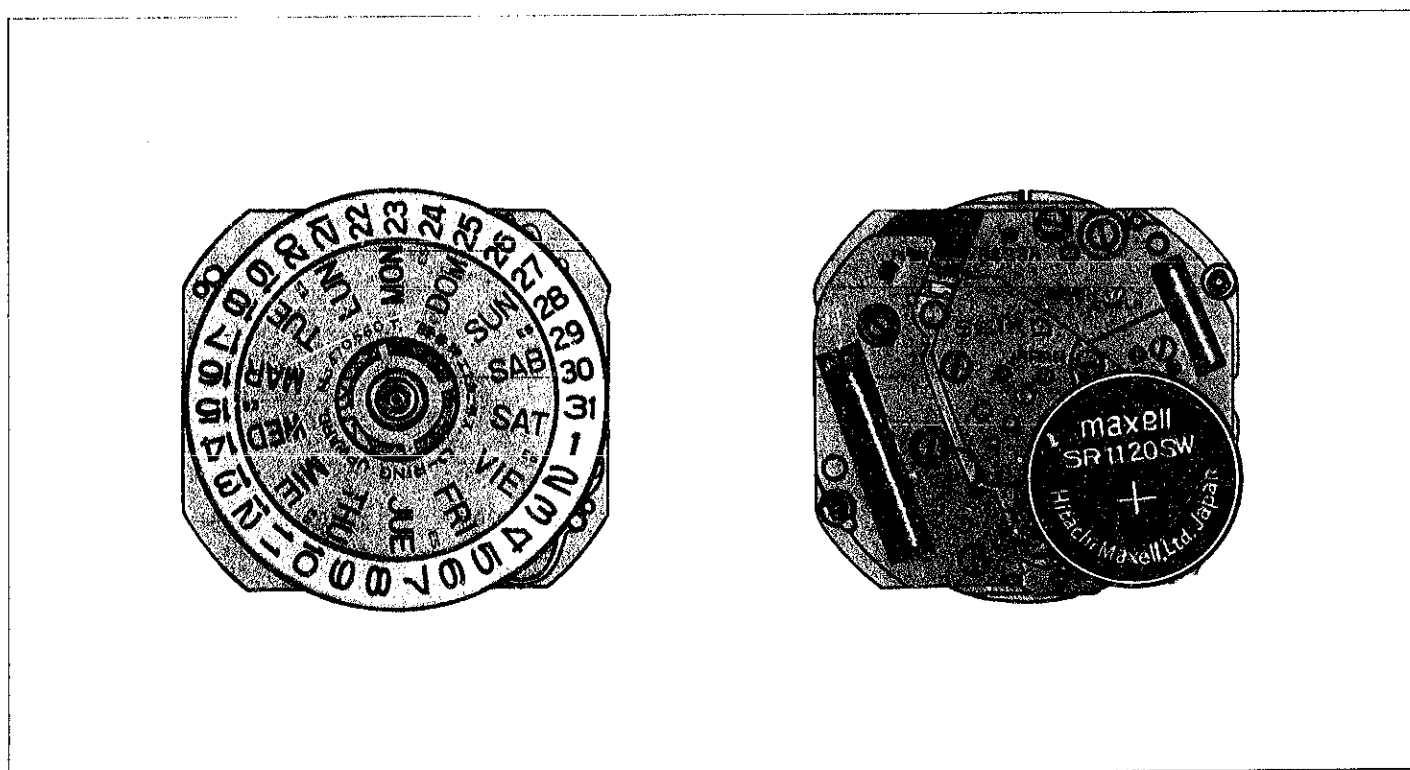


TECHNICAL GUIDE

SEIKO
QUARTZ

CAL. 6430. 6431. 6432. 6433. 6439



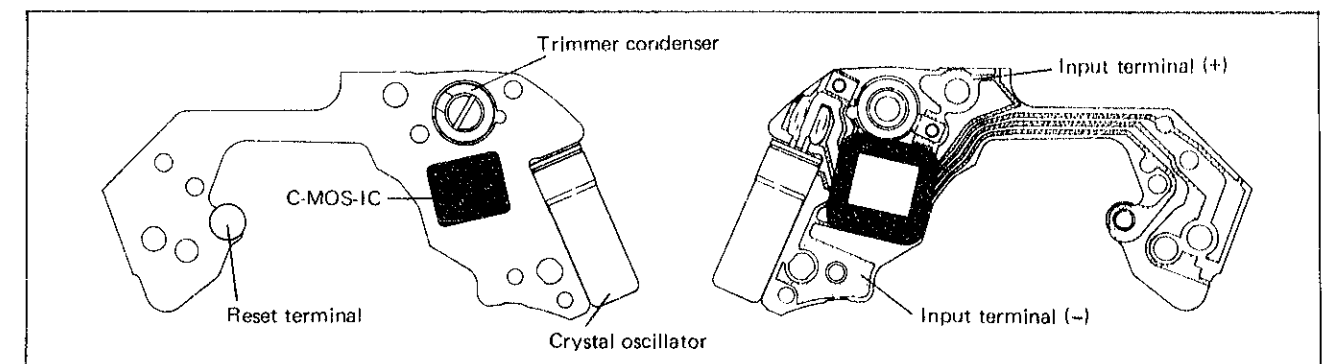
CONTENTS

I. SPECIFICATIONS	1
II. STRUCTURE OF THE CIRCUIT BLOCK	1
III. LIST OF SCREWS USED	1
IV. DISASSEMBLING, REASSEMBLING AND LUBRICATING	2
V. CHECKING AND ADJUSTMENT	5



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: 1.55V					
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

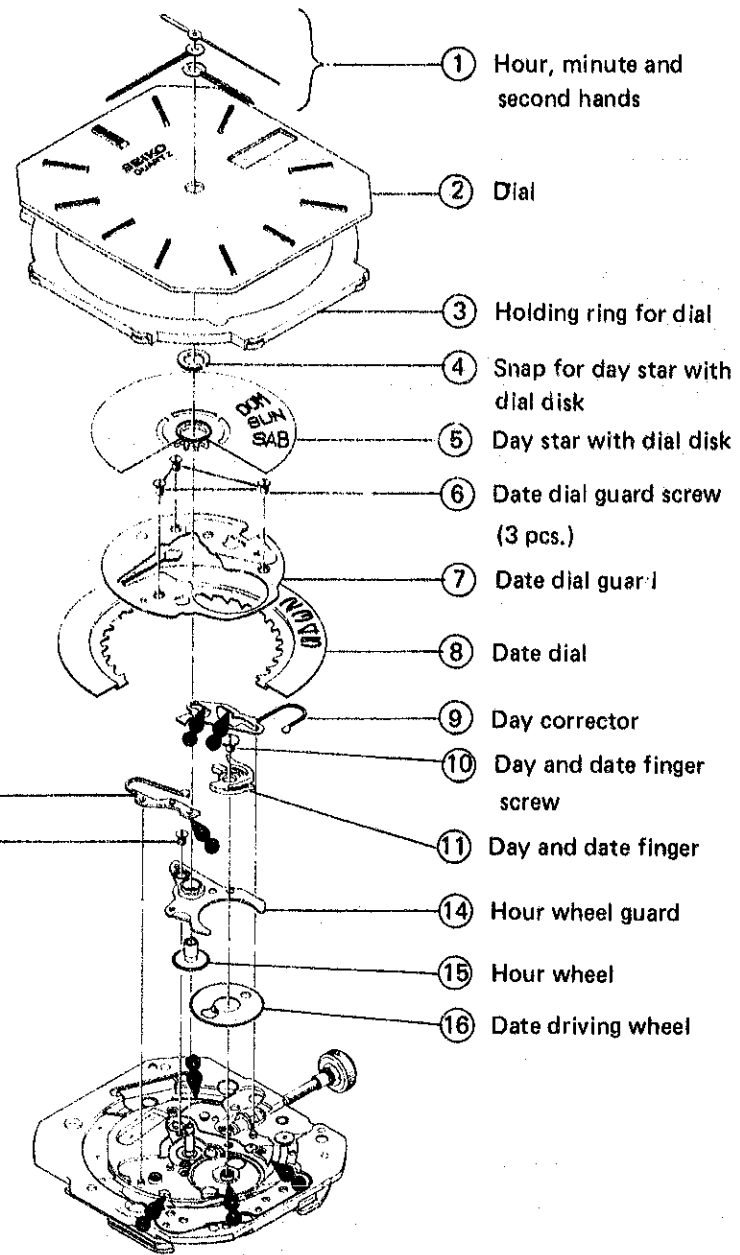
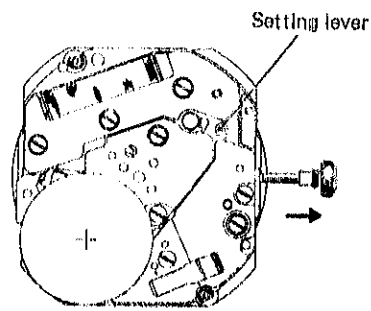
- Lubricating: Type of oil
 - Moebius A
 - SEIKO watch oil S-6
- Use the movement holder S-667 or S-680

(1) Calendar mechanism

Ex: Cal. 6433A

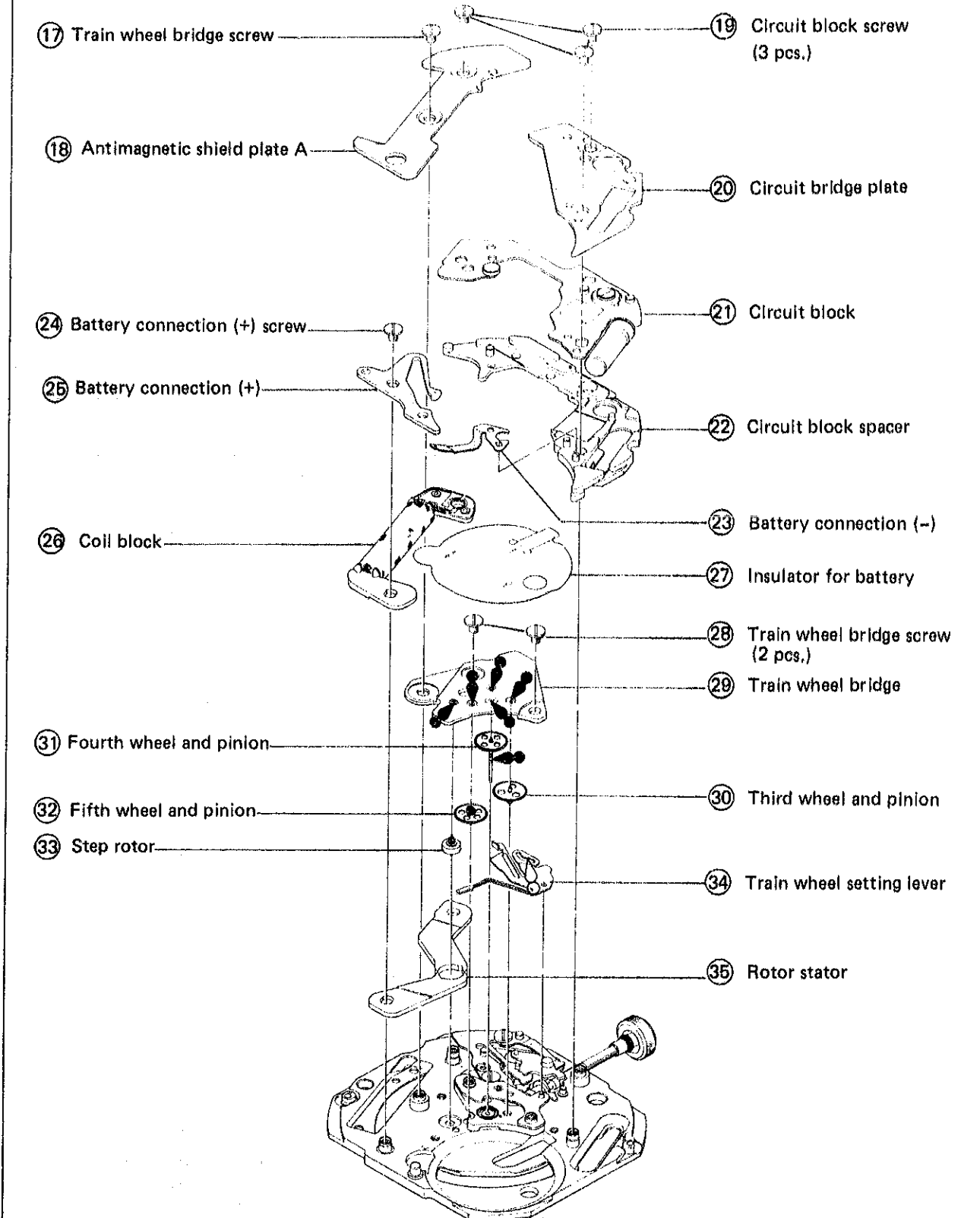
How to disassemble the winding stem

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

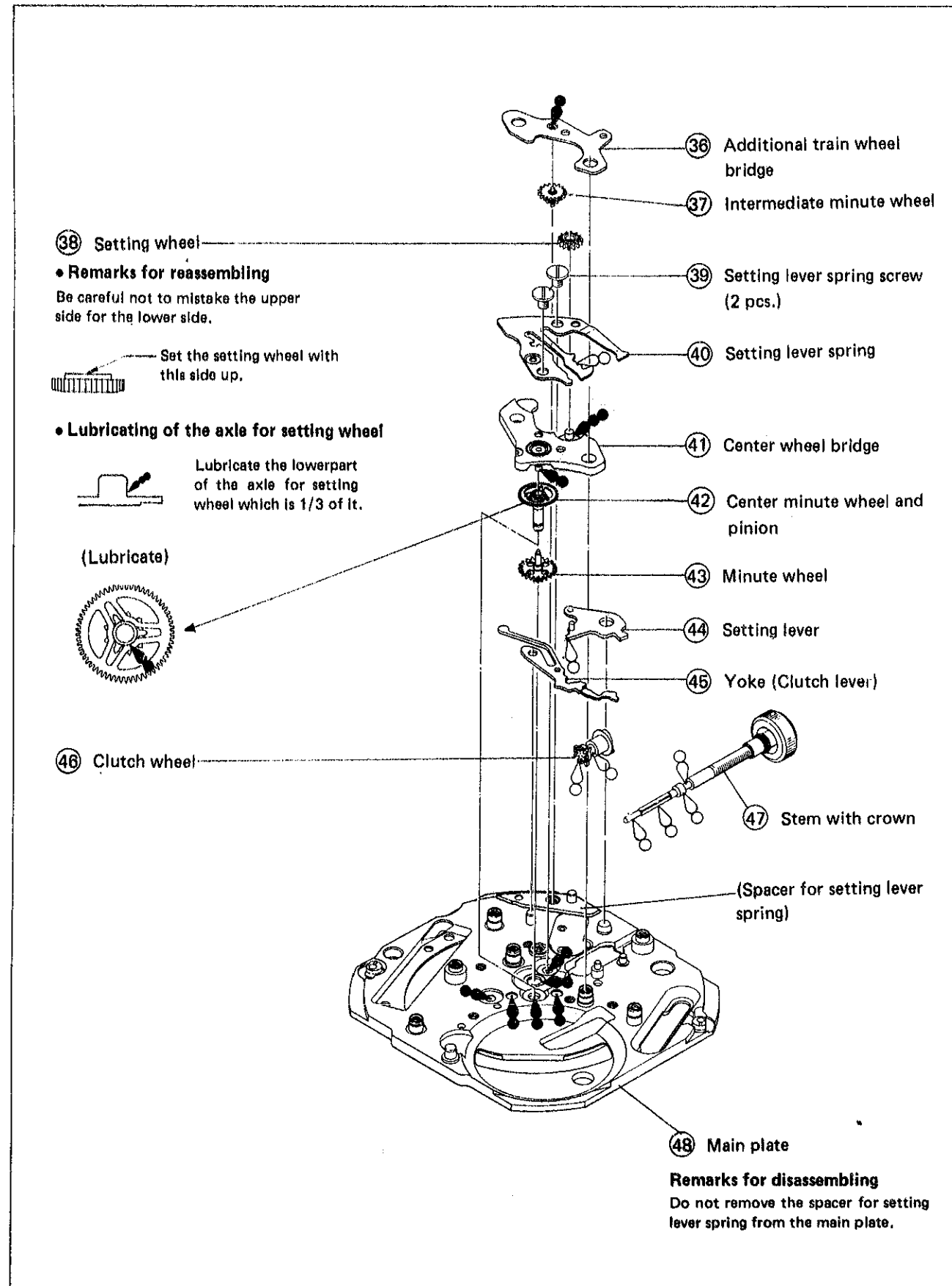


⑫ Date jumper
⑬ Hour wheel guard screw

(2) Circuit block, coil block and gear train



(3) Setting mechanism



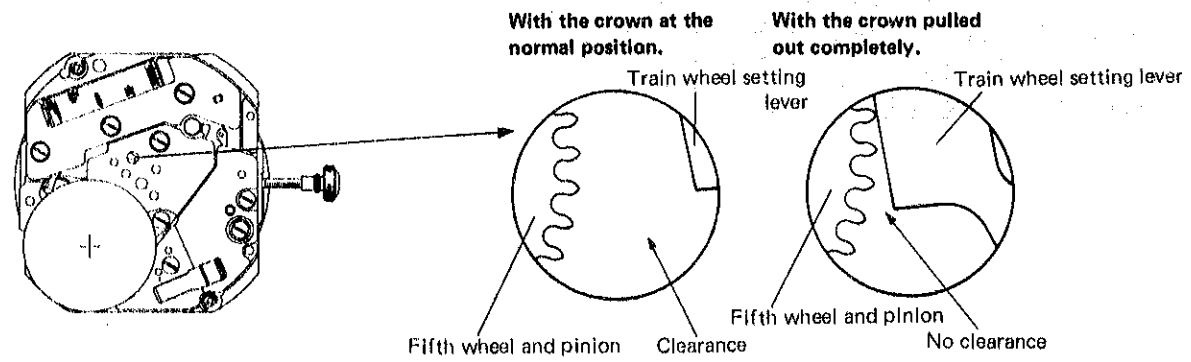
V. CHECKING AND ADJUSTMENT

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

Procedure	
CHECK OUTPUT SIGNAL	<p>Result:</p> <p>Blinking 1-second intervals: Normal</p> <p>No blinking 1-second intervals: Defective</p>
CHECK HAND SETTING CONDITION	
CHECK BATTERY VOLTAGE	<p>Result:</p> <p>More than 1.5V: Normal</p> <p>Less than 1.5V: Defective</p>
CHECK BATTERY CONDUCTIVITY	
CHECK CIRCUIT BLOCK CONDUCTIVITY	
CHECK COIL BLOCK	<p>Result:</p> <p>1.5kΩ ~ 3.5kΩ: Normal</p> <p>Less than 1.5kΩ } Defective</p> <p>More than 3.5kΩ }</p>
CHECK RESET AND TRAIN WHEEL SETTING CONDITIONS	<ol style="list-style-type: none"> 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. Check the conductivity condition of the reset pin and the train wheel bridge by using the Quartz tester with the crown pulled out completely.
	<p>Result:</p> <p>Less than 10Ω: Normal</p> <p>More than 10Ω: Defective</p>

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 $2.5\mu\text{A}$: Normal

More than $2.5\mu\text{A}$: Defective

CHECK APPEARANCE AND FUNCTIONING

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