EMMYWATCH

VINTAGE RESTORATIONS

Seiko 3421A,3423A Movement Parts (1)

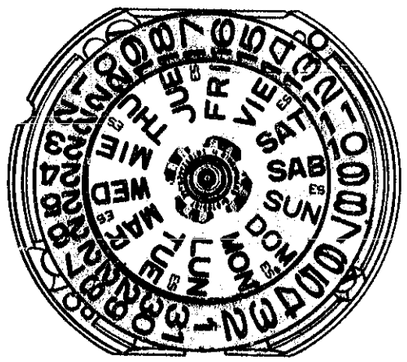
Compiled by EmmyWatch - https://www.emmywatch.com

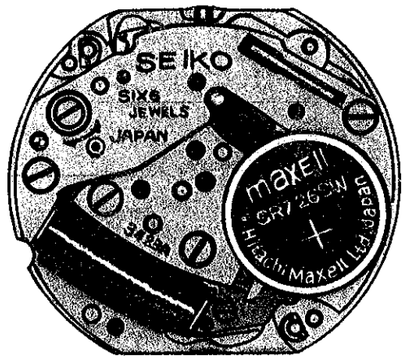
TECHNICAL GUIDE

SEIKO

QUARTZ

CAL. 3421A
CAL. 3423A



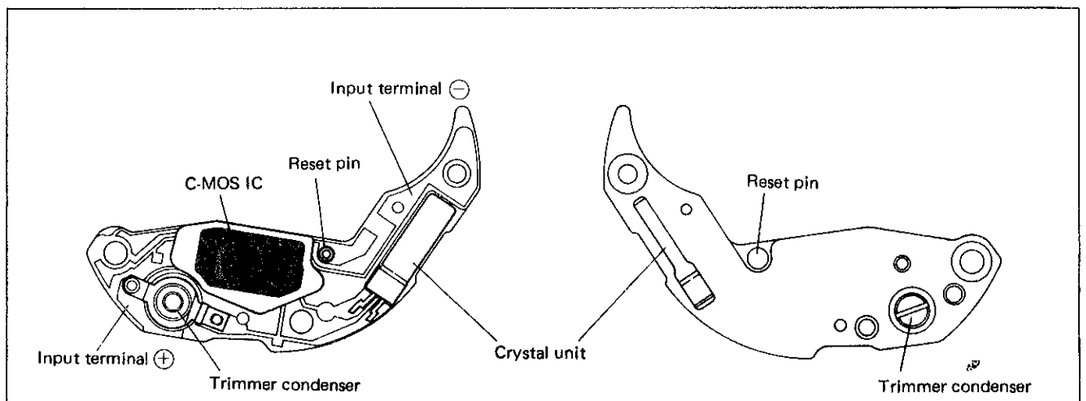


CONTENTS

I. SPECIFICATIONS

Item \ Cal. No.	3421A	3423A
Time indication	3 hands	
Additional mechanism	–	Day and date
	• Second setting device (stops at every second) • Battery life indicator • Electronic circuit reset switch	
Loss/gain	Loss/gain at normal temperature range Monthly rate: less than 15 seconds (Annual rate : less than 3 minutes)	
Movement size	ϕ18.2 mm (15.3 mm between 3 o'clock and 9 o'clock sides)	ϕ18.4 mm (16.3 mm between 3 o'clock and 9 o'clock sides)
Casing diameter	17.8 mm (between 6 o'clock and 12 o'clock sides)	ϕ18.0 mm
Height	3.0 mm	3.6 mm
Regulation system	Trimmer condenser	
Measuring gate by Quartz Tester	Any gate is available.	
Battery	SEIKO TR726SW, Maxell SR726SW or U.C.C. 397 Battery life: approx. 2 years Voltage : 1.55 V	
Jewels	6 jewels	

II. STRUCTURE OF THE CIRCUIT BLOCK



Circuit Block (Back) Circuit Block (Front)

III. DISASSEMBLING, REASSEMBLING AND LUBRICATING

Disassembling procedures Figs.: ① → ㊽

Reassembling procedures Figs.: ㊽ → ①

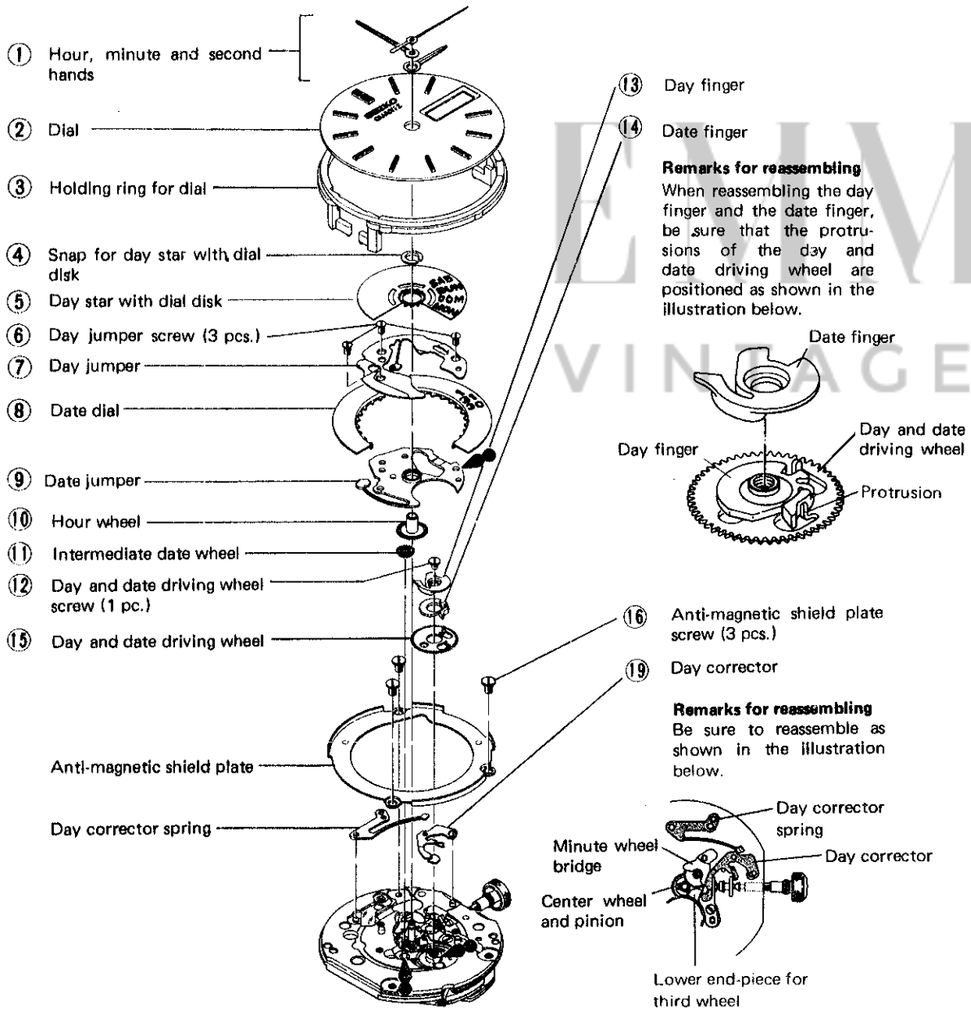
- Lubricating

  Moebius A

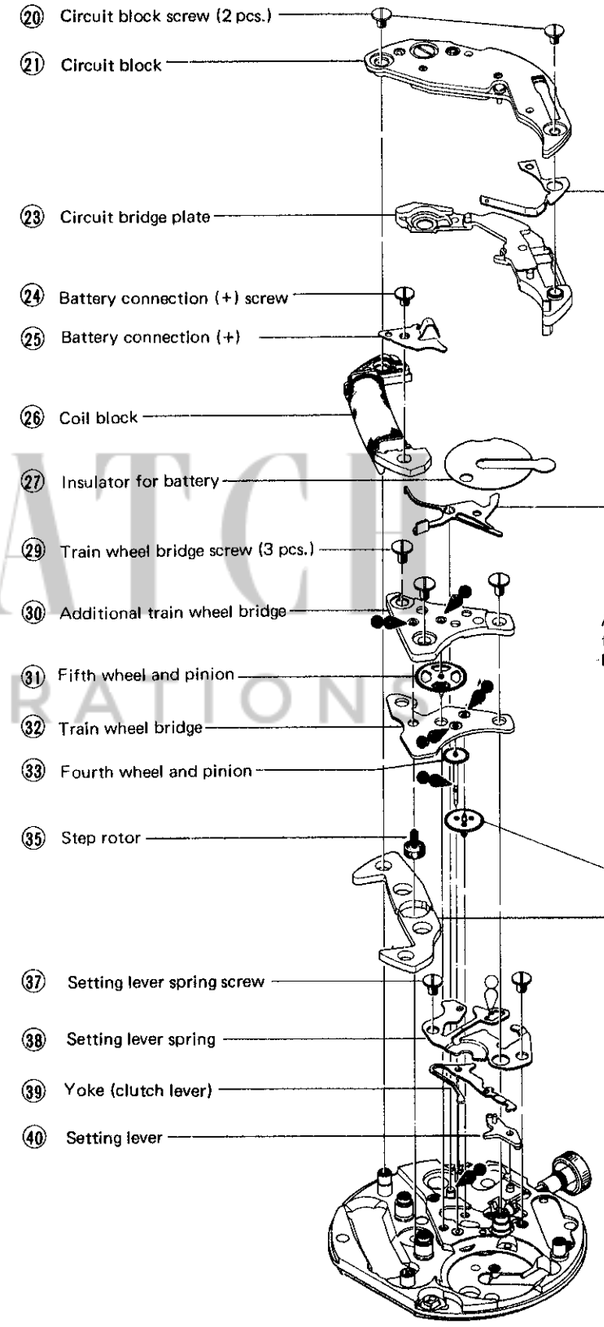
  SEIKO Watch Oil S-6

- Use the movement holder S-648 for disassembling and reassembling.

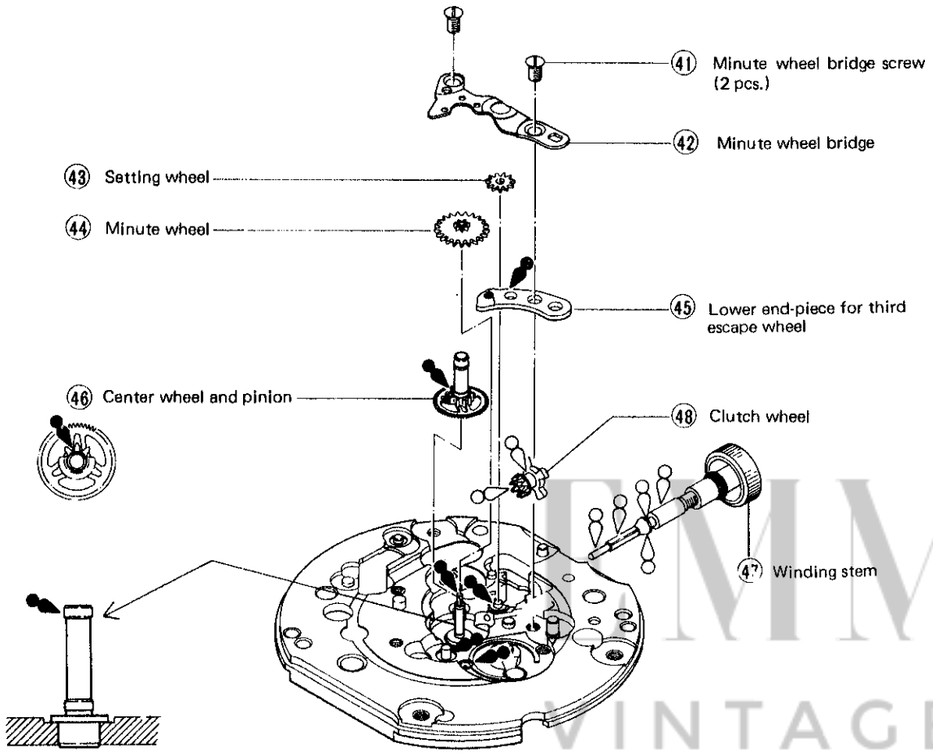
(1) Calendar mechanism (Cal. 3423A)



(2) Circuit block, coil block and gear train



(3) Setting mechanism



- **List of screws used**

Shape	Parts No.	Parts Name
	022 241	Train wheel bridge screw (3 pcs.) Battery connection (+) screw (1 pc.) Circuit block screw (2 pcs.) Setting lever spring screw (2 pcs.) Anti-magnetic shield plate screw (3 pcs.)
	022 282	Day and date driving wheel screw (1 pc.)
	022 754	Day jumper screw (3 pcs.) Minute wheel bridge screw (2 pcs.)

IV. PROCEDURES FOR CHECKING AND ADJUSTMENT

- Refer to the Checking and Adjustment of the "SEIKO QUARTZ TECHNICAL GUIDE, GENERAL INSTRUCTION for ANALOGUE WATCHES".

Procedure

CHECK OUTPUT SIGNAL

Result:
One-second blinking . . . Normal
No one-second blinking . . . 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

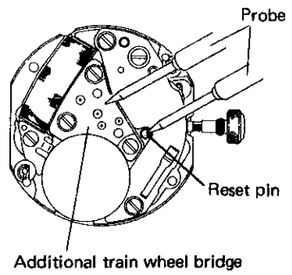
- **Standard resistance for Cal. 3421A and 3423A**

2.0 ~ 4.0 KΩ ..... Normal
Less than 2.0 KΩ or more than 4.0 KΩ ..... Defective

CHECK RESET AND SECOND SETTING CONDITIONS

1. Check to see if the second hand stops immediately when the crown is pulled out completely and if it starts promptly after one second when the crown is pushed in to the normal position.

2. With the crown pulled out completely, check for the conductivity between the reset pin and the additional train wheel bridge by using the Volt-ohm-meter.

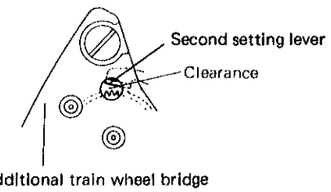


Result:
Less than 10Ω: Normal
More than 10Ω: Defective

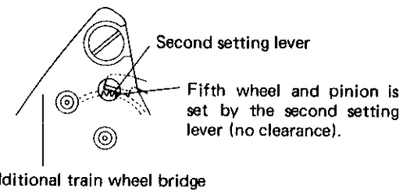
Procedure

3. Check to see if there is a clearance between the second setting lever and the fifth wheel and pinion.

Pull out the crown to the first click.



Pull out the crown completely.



CHECK GEAR TRAIN MECHANISM

CHECK SETTING AND CALENDAR MECHANISM

CHECK ACCURACY

CHECK CURRENT CONSUMPTION

- **Standard value:**
  Less than 1.8μA: Normal
  More than 1.8μA: Defective

CHECK WATER RESISTANCE

CHECK APPEARANCE AND FUNCTIONING

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