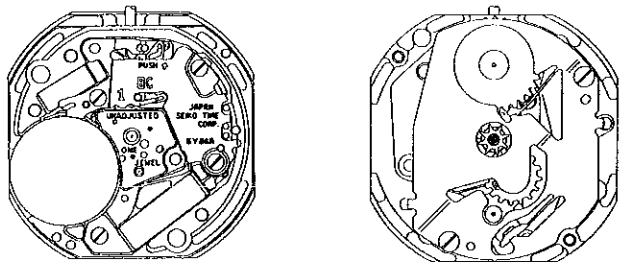
PARTS CATALOGUE / TECHNICAL GUIDE

Cal. 5Y86A

[SPECIFICATIONS]

Item \ Cal. No.		5Y86A
Movement		(Front) (Rear)  (x 1.5)
Movement size	Outside diameter	ø24.0mm 21.5mm between 3 o'clock and 9 o'clock sides 21.5mm between 6 o'clock and 12 o'clock sides
	Casing diameter	ø23.3mm 21.5mm between 3 o'clock and 9 o'clock sides 21.5mm between 6 o'clock and 12 o'clock sides
	Height	3.05mm (Including battery portion)
Time Indication		Three hands
Driving system		Step motor (Load compensated driving pulse type)
Additional mechanism		• Date calendar (Date hand) • Day calendar (Day hand) • Instant date setting device • Electronic circuit reset switch • Second setting device
Loss/gain		Monthly rate at normal temperature range: Less than 20 seconds
Regulation system		Nil
Measuring gate by quartz tester		Use 10-sedond gate
Battery		SEIKO SR916SW Maxell SR916SW Matsushita SR916SW Battery life is approximately 3 years. Voltage: 1.55V
Jewels		1 jewel

SEIKO CORPORATION

PARTS CATALOGUE

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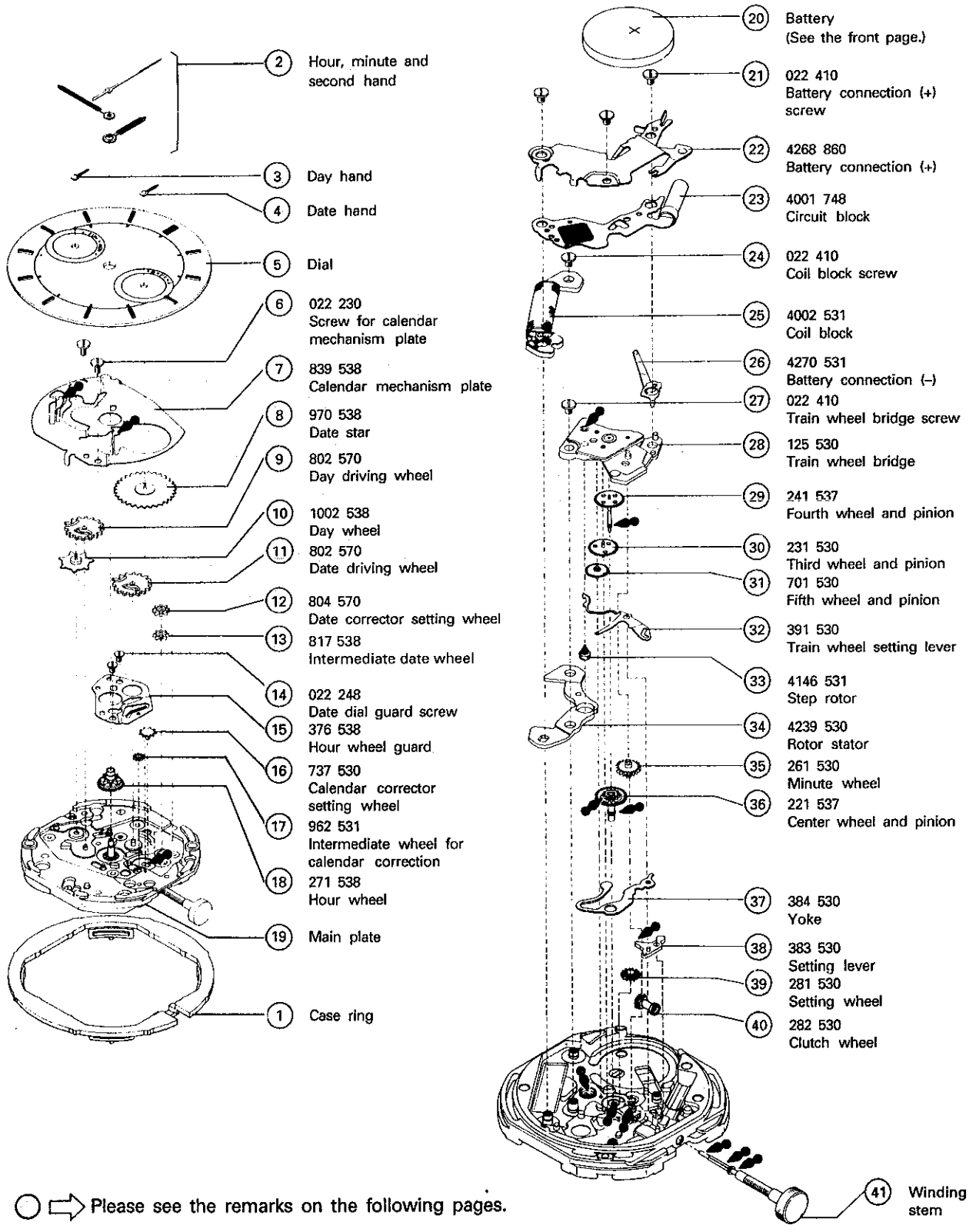
Disassembling procedures Figs. : (1) → (41)

Reassembling procedures Figs. : (41) → (1)

Lubricating: Types of oil — Moebius A

Oil quantity — Normal quantity



(2) Hour, minute and second hand
(3) Day hand
(4) Date hand
(5) Dial
(6) 022 230 Screw for calendar mechanism plate
(7) 839 538 Calendar mechanism plate
(8) 970 538 Date star
(9) 802 570 Day driving wheel
(10) 1002 538 Day wheel
(11) 802 570 Date driving wheel
(12) 804 570 Date corrector setting wheel
(13) 817 538 Intermediate date wheel
(14) 022 248 Date dial guard screw
(15) 376 538 Hour wheel guard
(16) 737 530 Calendar corrector setting wheel
(17) 962 531 Intermediate wheel for calendar correction
(18) 271 538 Hour wheel
(19) Main plate
(1) Case ring
(20) Battery (See the front page.)
(21) 022 410 Battery connection (+) screw
(22) 4268 860 Battery connection (+)
(23) 4001 748 Circuit block
(24) 022 410 Coil block screw
(25) 4002 531 Coil block
(26) 4270 531 Battery connection (–)
(27) 022 410 Train wheel bridge screw
(28) 125 530 Train wheel bridge
(29) 241 537 Fourth wheel and pinion
(30) 231 530 Third wheel and pinion
(31) 701 530 Fifth wheel and pinion
(32) 391 530 Train wheel setting lever
(33) 4146 531 Step rotor
(34) 4239 530 Rotor stator
(35) 261 530 Minute wheel
(36) 221 537 Center wheel and pinion
(37) 384 530 Yoke
(38) 383 530 Setting lever
(39) 281 530 Setting wheel
(40) 282 530 Clutch wheel
(41) Winding stem

○ ⇨ Please see the remarks on the following pages.

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Cal. 5Y86A

Remarks:

(6) Screw for calendar mechanism plate
(14) Date dial guard screw
(21) Battery connection (+) screw
(24) Coil block screw
(27) Train wheel bridge screw

Shape	Parts No.	Name	Screw classification	
			Screw length	Screw head dia.
	022 230	Screw for calendar mechanism plate (2 pcs.)	Long	Big (ø1.8 mm)
	022 248	Date dial guard screw (2 pcs.)	Short	Small (ø1.3 mm)
	022 410	Train wheel bridge screw (1 pc.) Coil block screw (1 pc.) Battery connection (+) screw (3 pcs.)	Short	Middle (ø1.5 mm)

* Classify screws according to length and head diameter

(41) Winding stem

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

TECHNICAL GUIDE

Cal. 5Y86A

- The explanation here is only for the particular points of Cal.5Y86A.
- For the repairing, checking and measuring procedures, refer to the "TECHNICAL GUIDE GENERAL INSTRUCTIONS".

I. REMARKS ON DISASSEMBLING AND REASSEMBLING

(2) ~ (4) Hands

1. Hand assembly procedure

Install the hands following these steps:

1) Turn the crown until the date driving wheel becomes completely disengaged from the date star and the day driving wheel also becomes completely disengaged from the day wheel. Then, attach the dial.
2) Install the date and day hands (Install them at any desired position, but be sure they are aligned with the calendar scales.)
3) Pull the crown to the second click position, then wind it until the date hand shifts.
4) Install the hour hand at the 12 o'clock position.
5) Install the minute and second hands. (Unlike ordinary day-date watches, the minute and second hands are installed after having installed the date and day hands. If not, the date hand will not shift correctly.)

2. How to remove the date and day hands

When removing the date and day hands, be sure to hold the dial, while pulling on them. (If the dial is not held, the date and day jumpers could come disengaged from the gear teeth.)

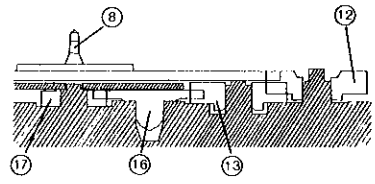
(7) Calendar mechanism plate

• **Lubricating**

Date jumper section

Day jumper section

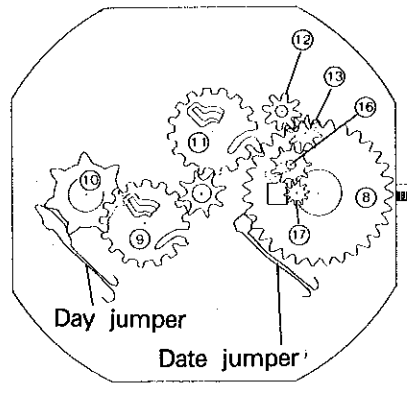
(8) ~ (17) Calendar wheels



• **Setting position**

1) Assemble the day jumper and date jumper so that they are securely engaged with the gear teeth.

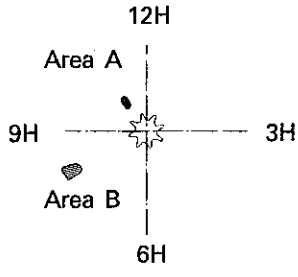
2) The calendar corrector setting wheel (16), intermediate date wheel (13) and date corrector setting wheel (12) have distinct front and back sides.
When assembling them, refer to the diagram on the right.

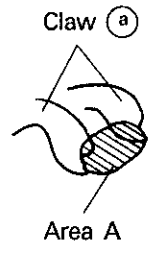


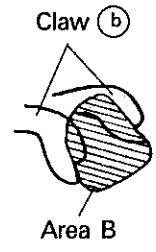
(9) Day driving wheel

(11) Date driving wheel

• Set the date driving wheel (11) so that its claw (a) is in shaded area A. (See the illustration below.)
• Set the day driving wheel (9) so that its claw (b) is in shaded area B. (See the illustration below.)







(16) Calendar corrector setting wheel

• **Lubricating**

Lubricate the sliding surface of calendar corrector setting wheel.

II. VALUE CHECKING

- Coil block resistance:
  3.0KΩ ~ 3.4KΩ

- Current consumption
  For the whole of the movement : Less than 1.2μA
  For the circuit block alone : Less than 0.4μA

Remarks: When the current consumption exceeds the standard value for the whole of the movement but within the standard value range for the circuit block alone, overhaul and clean the movement parts and then measure current consumption for the whole of the movement again. The reason for this is that the driving pulse generated to compensate for a heavy load that may be applied to the gear train, etc., is one possible cause of excessive current consumption by the whole of the movement.