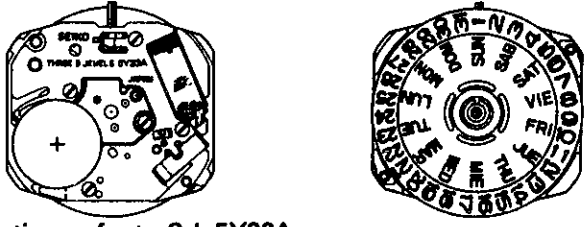


# PARTS CATALOGUE/ TECHNICAL GUIDE

## Cal. 5Y22A, 5Y23A Cal. 5Y30A, 5Y31A Cal. 5Y32A, 5Y39A

### [SPECIFICATIONS]

Cat. No.		5Y30A	5Y31A	5Y32A	5Y39A	5Y22A	5Y23A
Item							
Movement		 <p>The illustrations refer to Cal. 5Y23A. (x1.2)</p>					
Movement size	Outside diameter	$\phi$ 24.0 mm 19.0 mm between 3 o'clock and 9 o'clock sides 22.0 mm between 6 o'clock and 12 o'clock sides				$\phi$ 25.4 mm 19.0 mm between 3 o'clock and 9 o'clock sides 22.0 mm between 6 o'clock and 12 o'clock sides	
	Casing diameter	$\phi$ 23.3 mm 19.0 mm between 3 o'clock and 9 o'clock sides 21.0 mm between 6 o'clock and 12 o'clock sides					
	Height	2.1 mm not including battery portion		2.5 mm not including battery portion		2.7 mm not including battery portion	
Time indication		2 hands	3 hands		2 hands	3 hands	
Driving system		Step motor (Load compensated driving pulse type)					
Additional mechanism		—		Date calendar		Day and date calendar	
		—		Instant calendar setting device			
		Train wheel setting device					
		Electronic circuit reset switch					
Loss/gain		Monthly rate at normal temperature range (-5°C ~ +50°C): $\pm$ 20 seconds					
Regulation system		Nil					
Measuring gate by quartz tester		Use 10-second gate.					
Battery		SEIKO SR920SW, Maxell SR920SW, EVEREADY 371, SONY SR920SW, Matsushita SR920SW Battery life is approximately 3 years. Voltage: 1.55V					
Jewels		1 jewel					

# PARTS CATALOGUE

Cal. 5Y30A, 5Y31A

Disassembling procedure Figs.: ① → ②⑧

Reassembling procedure Figs.: ②⑧ → ①

Lubricating: Types of oil

● Moebius A

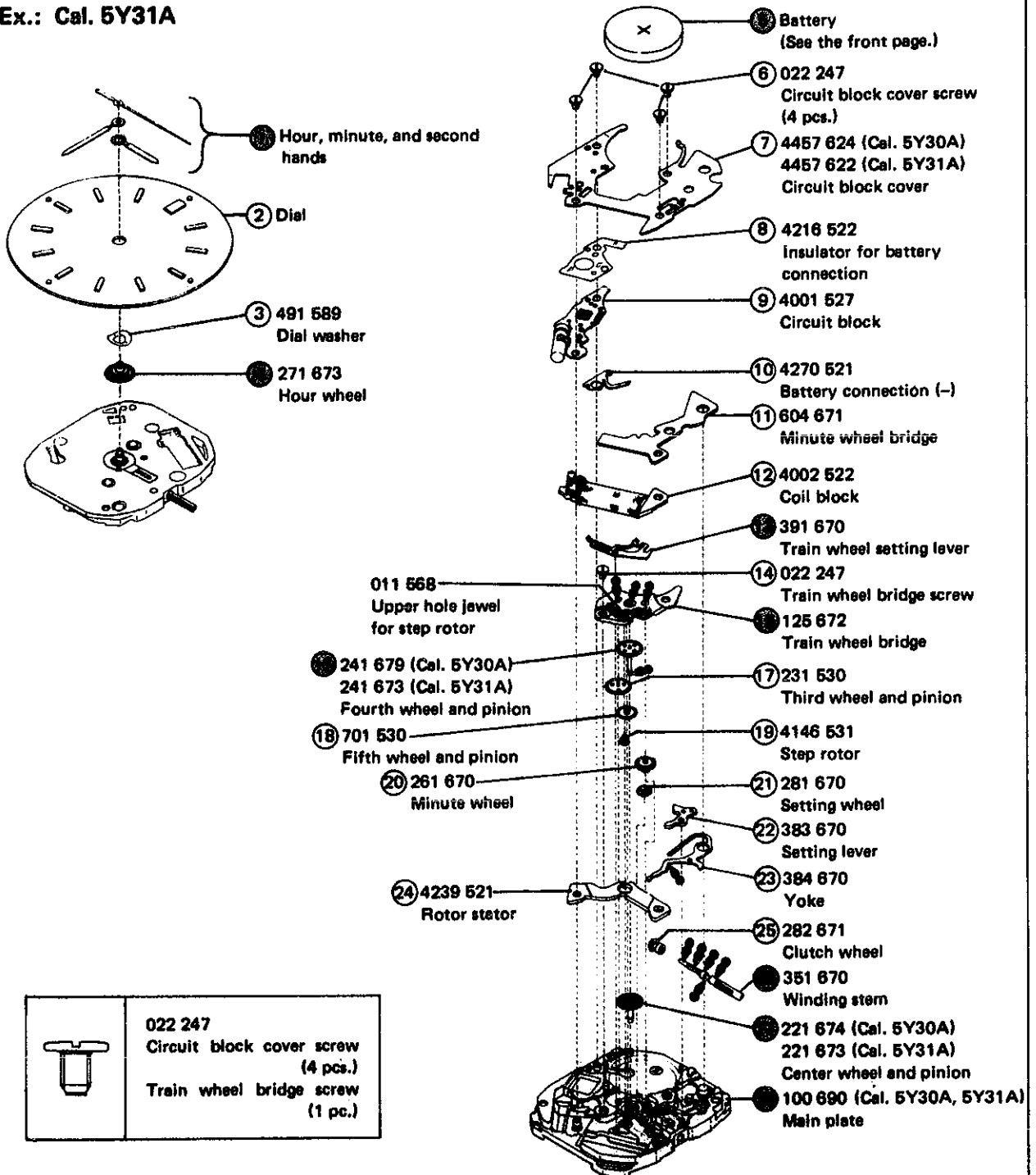
● SEIKO Watch Oil S-6

Oil quantity

○ Normal quantity

○ Extremely small

Ex.: Cal. 5Y31A



● ⇨ Please see the remarks on the following pages.

# PARTS CATALOGUE

Cal. 5Y32A, 5Y39A  
5Y22A, 5Y23A

Disassembling procedures Figs.: ①' → ③⑧'

Reassembling procedures Figs.: ③⑧' → ①'

Lubricating: Types of oil

Oil quantity

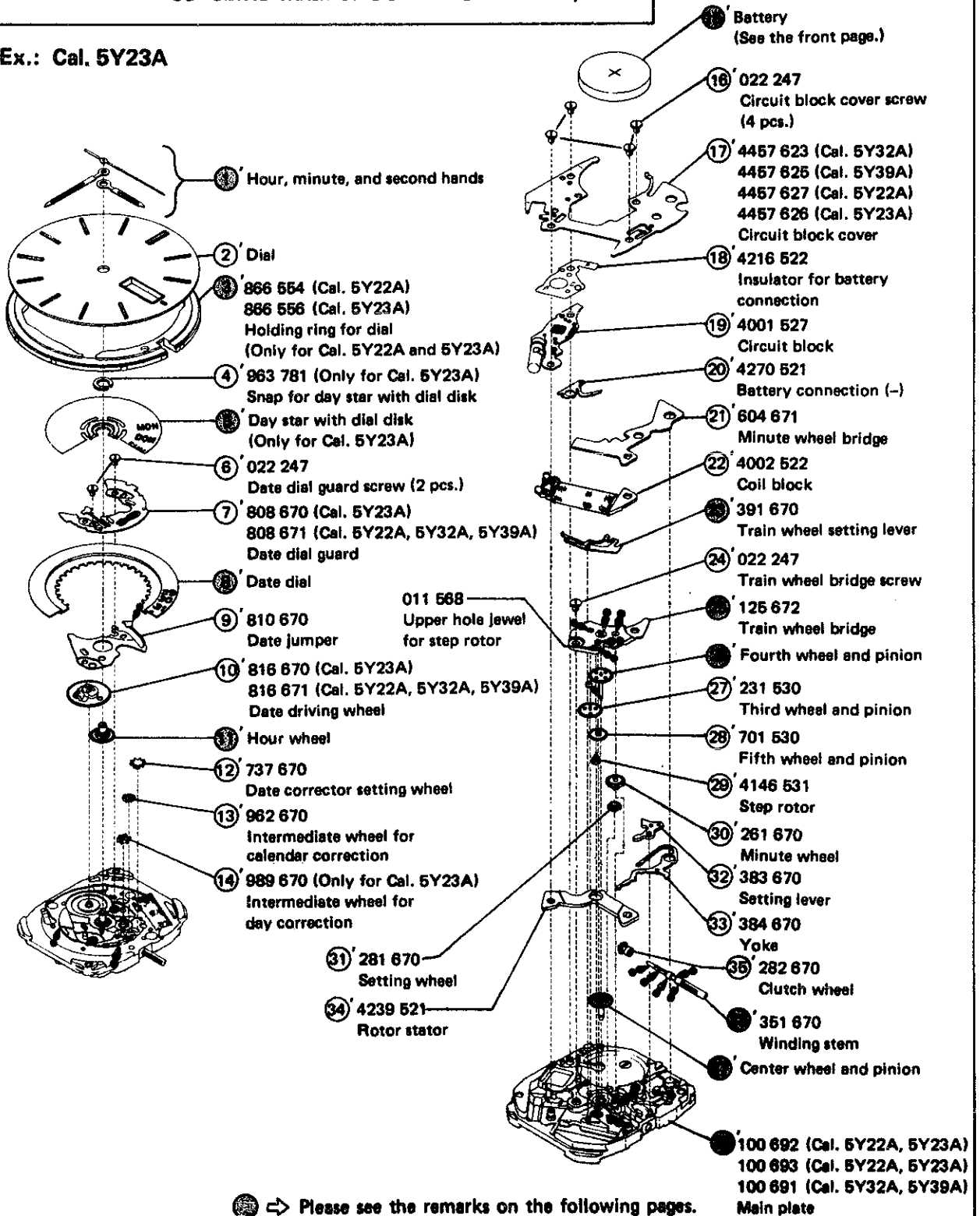
● Moebius A

○ Normal quantity

● SEIKO Watch Oil S-6

○ Extremely small

Ex.: Cal. 5Y23A



⊙ ⇨ Please see the remarks on the following pages.

# PARTS CATALOGUE

Cal. 5Y22A, 5Y23A, 5Y30A  
5Y31A, 5Y32A, 5Y39A

**Remarks:**

③ Holding ring for dial (Only for Cal. 5Y22A, 5Y23A) 866 554, 866 556

The holding ring for dial is used or not used, depending on the design of cases, and, when used, its type is also determined based on the design of cases.  
For details, refer to "SEIKO Casing Parts Catalogue".

⑤ Day star with dial disk (Only for Cal. 5Y23A)

Part code	Language	Color of figure	Color of background
470 819	English ↔ Spanish	Black	White

If any other type of day star with dial disk is required, please specify the number inscribed on the disk.

⑧ Date dial

Part code	Position of crown & calendar	Color of figure	Color of background
801 722	3 o'clock	Black	White

If any other type of date dial is required, please specify (1) Cal. No., (2) the crown position, (3) the calendar frame position, and (4) Dial No.



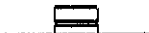
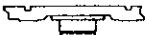


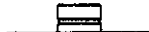




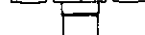




②⑥ ③⑥ Winding stem 351 670

The type of winding stem may differ, depending on the design of cases.  
Refer to "SEIKO Casing Parts Catalogue" to choose a corresponding winding stem.

④ ①① Hour wheel, ①⑥ ②⑥ Fourth wheel and pinion, ②⑦ ③⑦ Center wheel and pinion,  
and ②⑧ ③⑧ Main plate

Cal. 5Y30A, 5Y31A, 5Y32A, 5Y39A




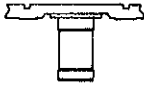




Combination:

Cal. No.	Type*	Center wheel and pinion	Fourth wheel and pinion	Hour wheel	Main plate (Center part)
5Y30A	M	 221 674	 241 679	 271 673	 100 690
5Y31A	M	 221 673	 241 673	 271 673	 100 690
5Y32A	M	 221 671	 241 671	 271 671	 100 691
5Y39A	M	 221 671	 241 677	 271 671	 100 691

# PARTS CATALOGUE

Cal. 5Y22A, 5Y23A, 5Y30A  
5Y31A, 5Y32A, 5Y39A

Cal. 5Y22A, 5Y23A  
Combination:

Type*	Center wheel and pinion	Fourth wheel and pinion	Hour wheel	Main plate (Center part)
S	 221 672	 241 676	 271 672	 100 693
M	 221 670	 241 670	 271 670	 100 692

\*Abbreviation : S ..... Short type  
(Movement type) : M ..... Standard type

Parts combination varies, depending on the design of cases.  
Refer to "SEIKO Casing Parts Catalogue".

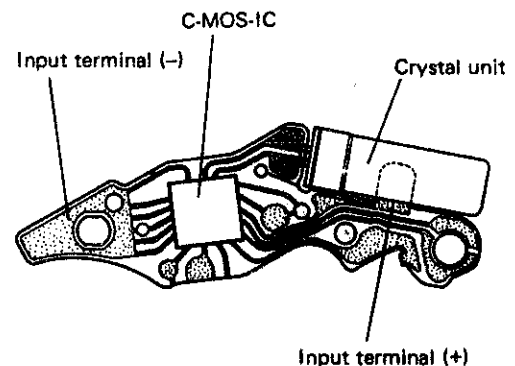
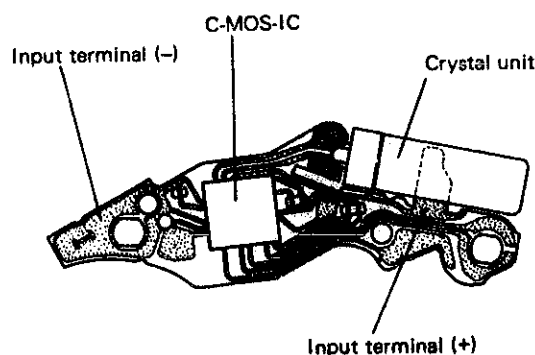
# TECHNICAL GUIDE

Cal. 5Y22A, 5Y23A, 5Y30A  
5Y31A, 5Y32A, 5Y39A

- The explanation here is only for the particular points of Cal. 5Y22A, 5Y23A, 5Y30A, 5Y31A, 5Y32A, and 5Y39A.
- For the repairing, checking and measuring procedures, refer to the "TECHNICAL GUIDE, GENERAL INSTRUCTIONS".

## I. STRUCTURE OF THE CIRCUIT BLOCK

There are two types of circuit block, and they can be used interchangeably.



# TECHNICAL GUIDE

Cal. 5Y22A, 5Y23A, 5Y30A  
5Y31A, 5Y32A, 5Y39A

## II. REMARKS ON DISASSEMBLING AND REASSEMBLING

Use the universal movement holder for disassembling and reassembling.

### ① ①' Hands

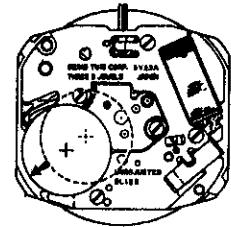
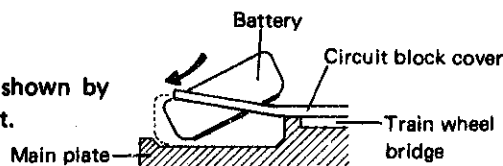
#### ● Remarks on installing

Since a plastic train wheel bridge is used, take out the battery and place the movement directly on a flat metal plate or the like to install the hands.

### ⑤ ⑮' Battery

#### ● Installing

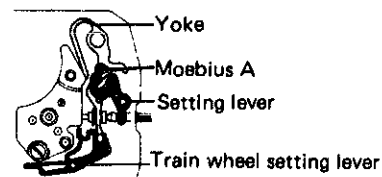
Install the battery in the direction as shown by the arrow in the illustration on the right.



### ⑬ ⑲' Train wheel setting lever

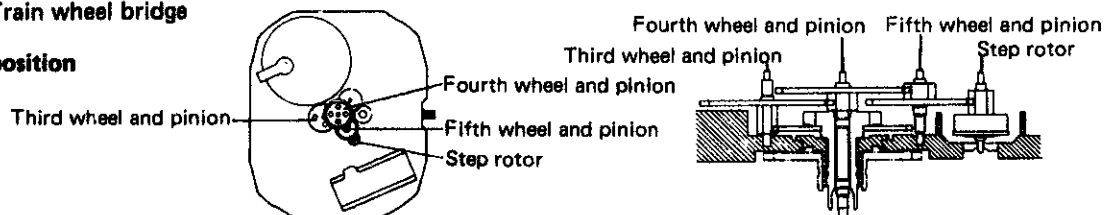
#### ● Setting position and lubricating

Set the yoke and the train wheel setting lever into position. Lubricate the contacting portion of the yoke and the setting lever.



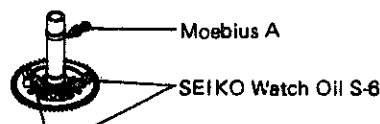
### ⑮ ⑲' Train wheel bridge

#### ● Setting position



### ⑲ ⑳' Center wheel and pinion

#### ● Lubricating



## III. VALUE CHECKING

#### ● Coil block resistance

2.7K $\Omega$  ~ 3.2K $\Omega$

#### ● Current consumption

For the whole of the movement : less than 1.2 $\mu$ A

For the circuit block alone : less than 0.4 $\mu$ A

#### Remarks:

When the current consumption exceeds the standard value for the whole of the movement but is less than the standard value for the circuit block alone, overhaul and clean the movement parts and then measure current consumption for the whole of the movement again. The driving pulse generated to compensate a heavy load that may apply on the gear train, etc. is considered to cause excessive current consumption for the whole of the movement.

PARTS LIST FOR CAL. 5Y37A

JUNE, 1988

Characteristics

Casing diameter:  $\phi$ 23.3 X 21.0 X 19.0mm

Maximum height: 2.2mm

Jewels: 1j

Remarks

Winding stem: #351670

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

N/*	Part No.	Part Name
N	100695	Main plate (Plastic)
	125672	Train wheel bridge
	221671	Center wheel & pinion
	231530	Third wheel & pinion
	241677	Fourth wheel & pinion
	261670	Minute wheel
	271674	Hour wheel
	281670	Setting wheel
	282671	Clutch wheel
*	351670	Winding stem
	383670	Setting lever
	384670	Yoke
	391670	Train wheel setting lever
	491589	Dial washer
	604671	Minute wheel bridge
	701530	Fifth wheel & pinion
N	4001524	Circuit block

N/*	Part No.	Part Name
	4002522	Coil block
	4146531	Step rotor
	4216522	Insulator for battery
	4239521	Rotor stator
	4270521	Battery connection (-)
N	4457629	Circuit block cover
	011568	Upper hole jewel for step rotor
	022247	Train wheel bridge screw
	022247	Circuit block cover screw
	SEIKO SR920SW MAXELL SR920SW SONY SR920SW EVEREADY 371	Battery

'N' mark: New part

'\*' mark: See above remarks