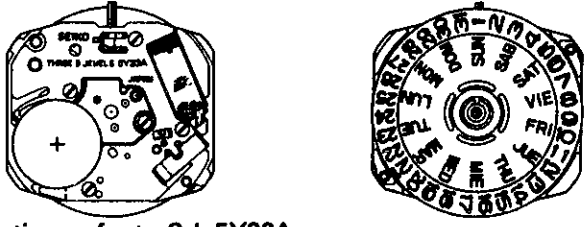


PARTS CATALOGUE/ TECHNICAL GUIDE

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 | ϕ 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 | | | | ϕ 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 | ϕ 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

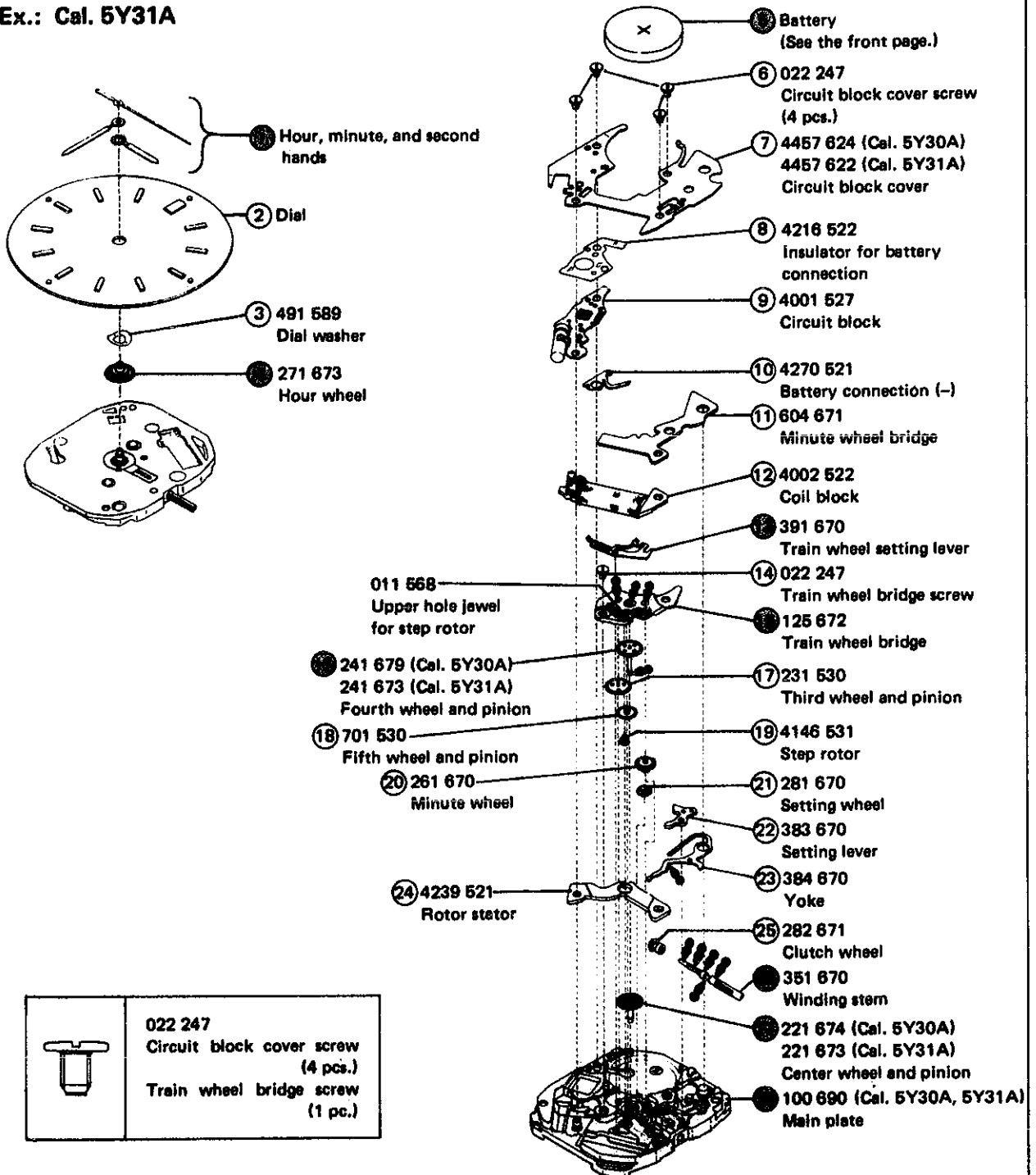
● SEIKO Watch Oil S-6

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

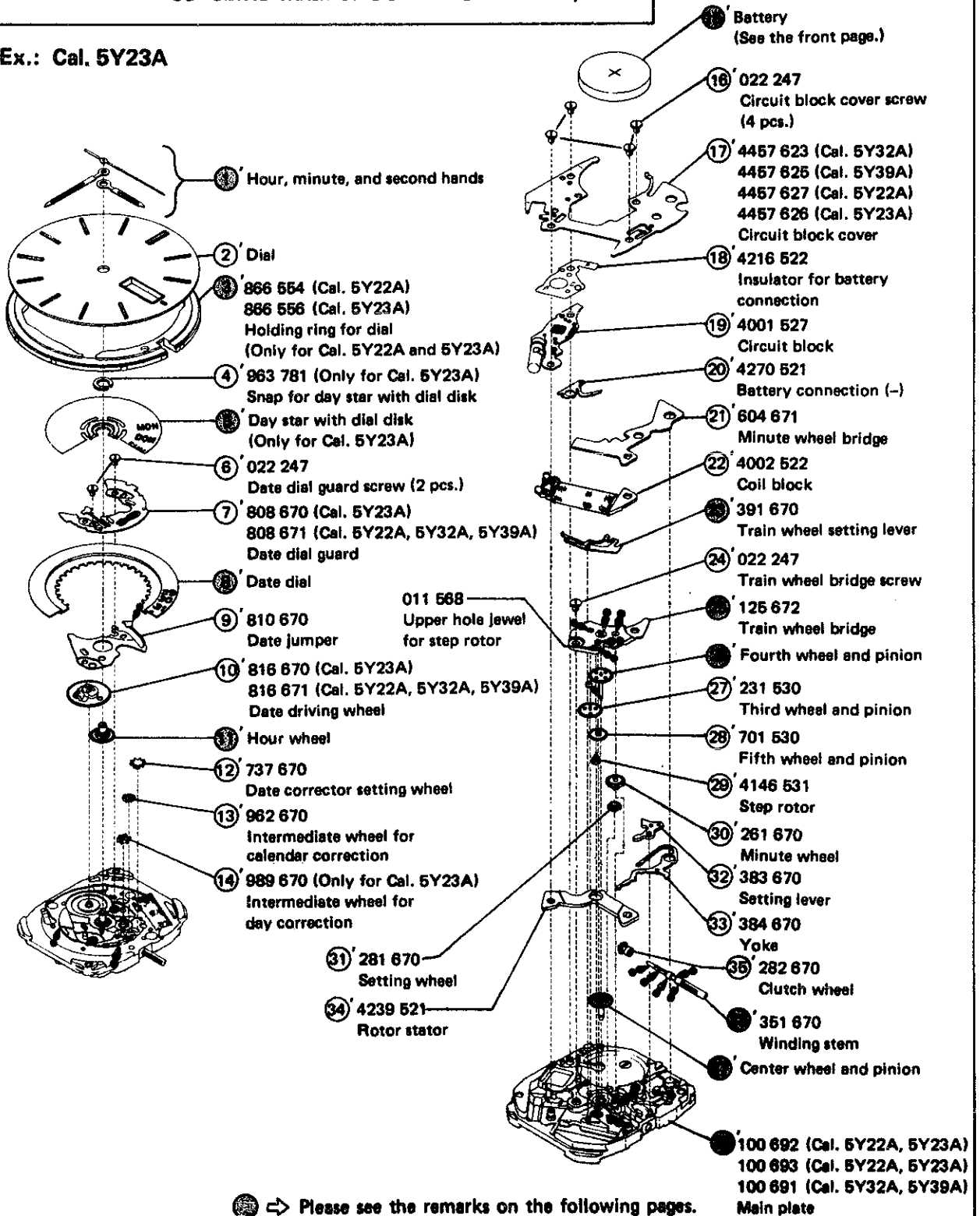
● Moebius A

○ 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




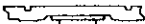







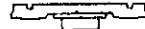



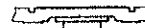
The type of winding stem may differ, depending on the design of cases.

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




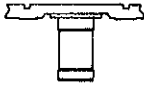




Combination:

| 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".

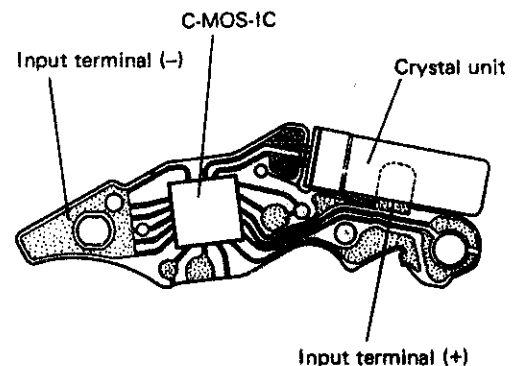
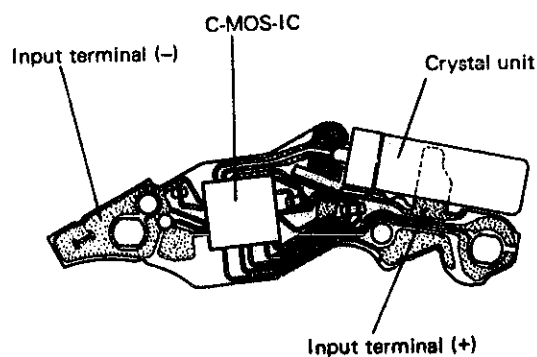
TECHNICAL GUIDE

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

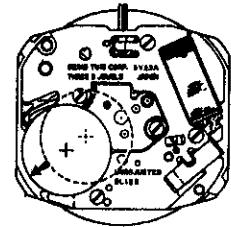
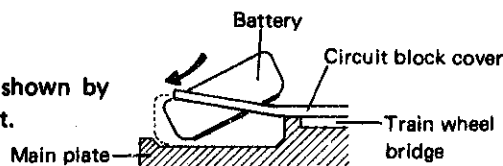
● Remarks on installing

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

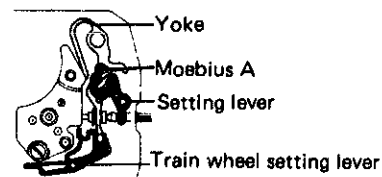
Install the battery in the direction as shown by the arrow in the illustration on the right.



⑬ ⑳' Train wheel setting lever

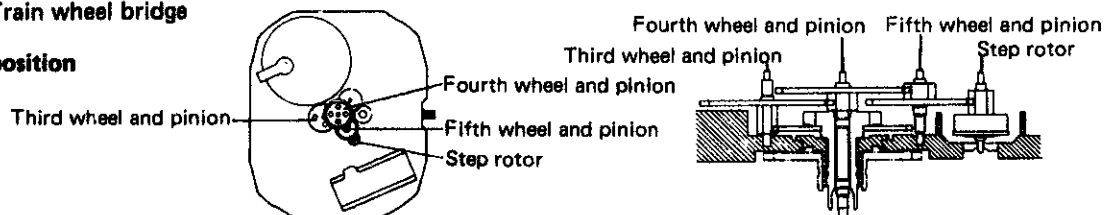
● Setting position and lubricating

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



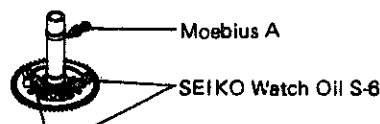
⑮ ⑳' Train wheel bridge

● Setting position



⑳ ㉓' Center wheel and pinion

● Lubricating



III. VALUE CHECKING

● Coil block resistance

2.7K Ω ~ 3.2K Ω

● Current consumption

For the whole of the movement : less than 1.2 μ A

For the circuit block alone : less than 0.4 μ 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: ϕ 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