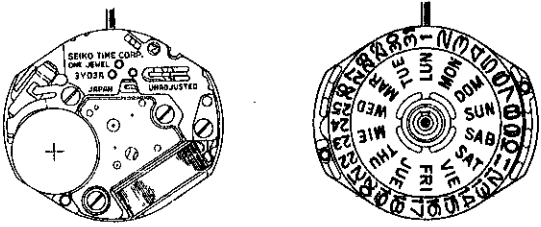


PARTS CATALOGUE/ TECHNICAL GUIDE

Cal. 3Y02A, 3Y03A, 3Y09A

[SPECIFICATIONS]

| | | Cal. No. | 3Y02A | 3Y03A | 3Y09A |
|---------------------------------|---------------------------------|---|--|--------|---------|
| Item | | | | | |
| Movement | | |  | | |
| | | | The illustrations refer to Cal. 3Y03A. | | (x 1.0) |
| Movement size | Outside diameter | ϕ 17.6 mm 15.3 mm between 3 o'clock and 9 o'clock sides | | | |
| | Casing diameter | ϕ 17.1 mm 15.3 mm between 3 o'clock and 9 o'clock sides | | | |
| | Height | 2.6 mm | 2.8 mm | 2.6 mm | |
| Time indication | | 3 hands | | | 2 hands |
| Driving system | | Step motor (Load compensated driving pulse type) | | | |
| Additional mechanism | Day | — | ✓ | — | |
| | Date | ✓ | ✓ | ✓ | |
| | Instant calendar setting device | ✓ | ✓ | ✓ | |
| | Train wheel setting device | ✓ | ✓ | ✓ | |
| | Electronic circuit reset switch | ✓ | ✓ | ✓ | |
| Loss/gain | | Monthly rate at normal temperature range: less than 20 seconds | | | |
| Regulation system | | Nil | | | |
| Measuring gate by quartz tester | | Use 10-second gate. | | | |
| Battery | | SEIKO SR621SW, Maxell SR621SW, SONY SR621SW, EVEREADY 364 Battery life is approximately 2 years. Voltage: 1.55V | | | |
| Jewels | | 1 jewel | | | |

PARTS CATALOGUE

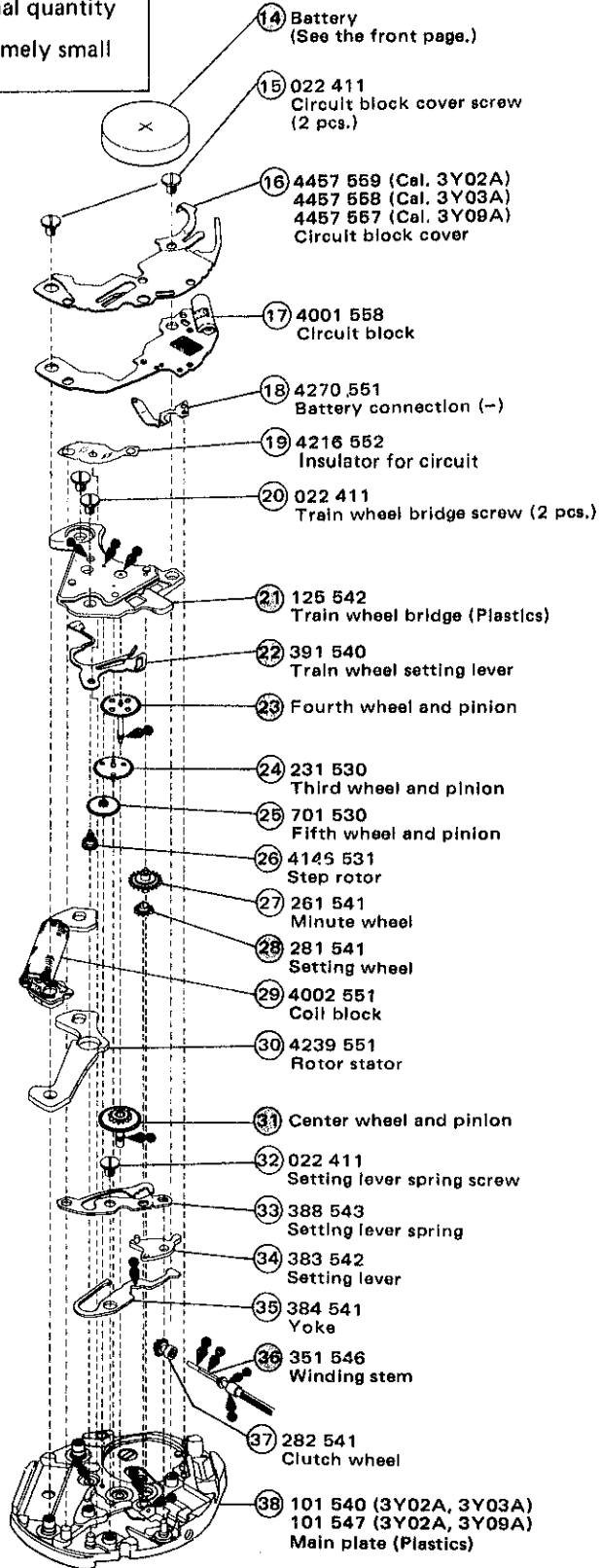
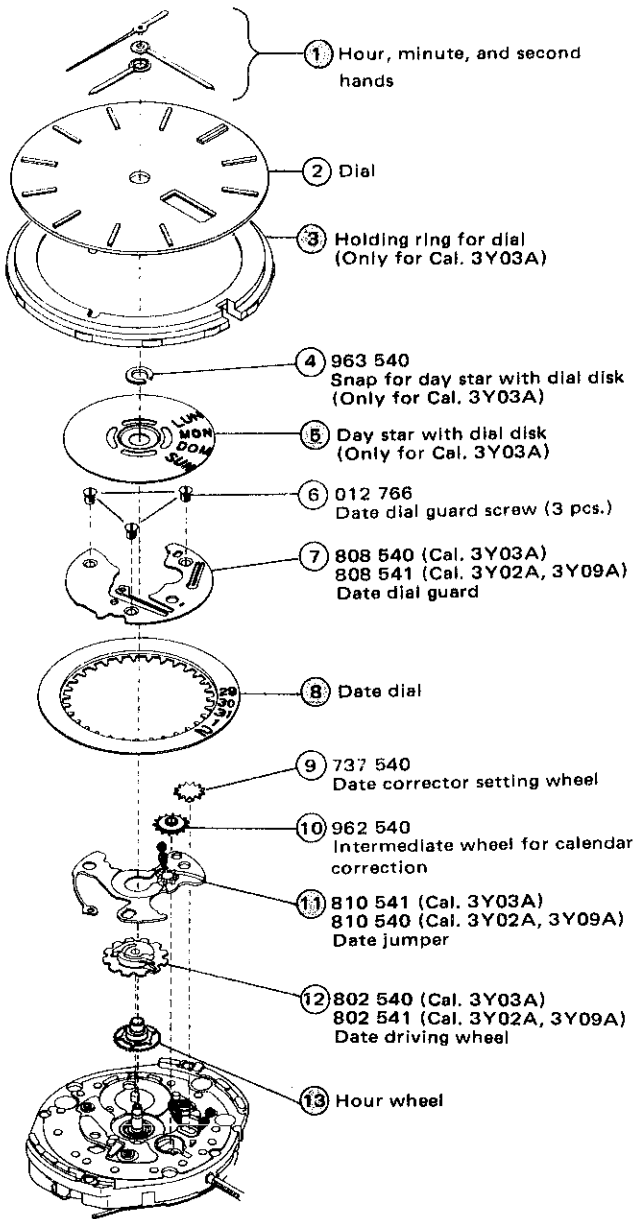
Cal. 3Y02A, 3Y03A, 3Y09A

Disassembling procedures Figs. : ① → ③⑧
 Reassembling procedures Figs. : ③⑧ → ①

Lubricating: Types of oil

| | |
|-----------------------|-------------------|
| ● Moebius A | ○ Normal quantity |
| ○ SEIKO Watch Oil S-6 | ○ Extremely small |

Ex.: Cal. 3Y03A



⊙ ⇨ Please see the remarks on the following pages.

PARTS CATALOGUE

Cal. 3Y02A, 3Y03A, 3Y09A

Remarks:

③ Holding ring for dial 866 553, 866 575 (Only for Cal. 3Y03A)

③⑥ Winding stem 351 546

The types of these parts depend on the design of each model.
Refer to "SEIKO Casing Parts Catalogue" to choose corresponding parts.

⑤ Day star with dial disk (Only for Cal. 3Y03A)

| Part code | Position of crown & calendar | Language | Color of figure | Color of background |
|-----------|------------------------------|-------------------|-----------------|---------------------|
| 470 919 | 3 o'clock | English ↔ Spanish | Black | White |
| 470 920 | 3 o'clock | English ↔ French | 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

| Cal. No. | Part code | Position of crown & calendar | Color of figure | Color of background |
|----------|-----------|--|-----------------|---------------------|
| 3Y02A | 801 754 | 3 o'clock | Black | White |
| | 801 807 | | Black | Gold |
| 3Y03A | 801 752 | 3 o'clock | Black | White |
| 3Y09A | 801 756 | Crown : 3 o'clock Calendar: 6 o'clock | Black | White |
| | 801 764 | | Black | Gold |

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.

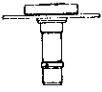
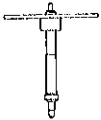


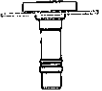
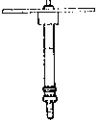


PARTS CATALOGUE

Cal. 3Y02A, 3Y03A, 3Y09A

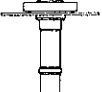
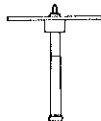


- ⑬ Hour wheel
- ⑳ Fourth wheel and pinion
- ㉑ Center wheel and pinion

Combination:

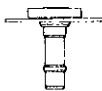
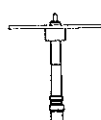


Cal. 3Y02A

| Type | Center wheel and pinion | Fourth wheel and pinion | Hour wheel | Main plate (Center part) |
|------|--|--|---|--|
| M |  221 549 |  241 549 |  271 552 |  101 547 |
| L |  221 541 |  241 553 |  271 553 |  101 540 |

Cal. 3Y03A

| Type | Center wheel and pinion | Fourth wheel and pinion | Hour wheel | Main plate (Center part) |
|------|--|--|---|--|
| M |  221 542 |  241 542 |  271 551 |  101 540 |

Cal. 3Y09A

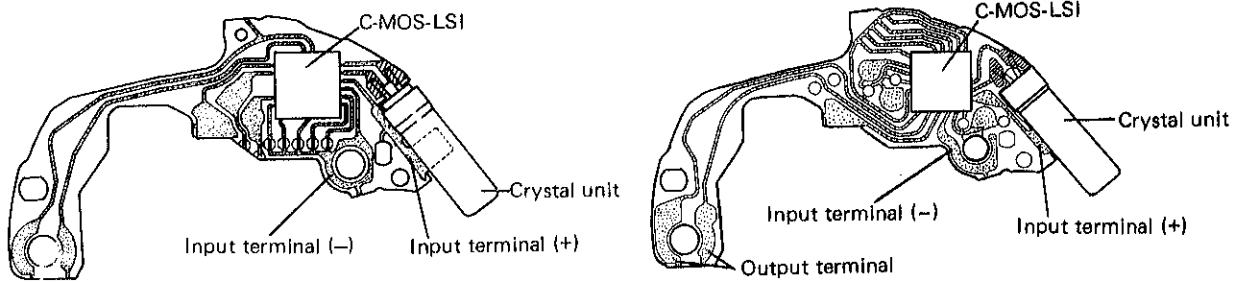
| Type | Center wheel and pinion | Fourth wheel and pinion | Hour wheel | Main plate (Center part) |
|------|--|--|---|--|
| M |  221 549 |  241 551 |  271 552 |  101 547 |

* Abbreviation : M Standard type
(Movement type) : L Long type

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

- The explanation here is only for the particular points of Cal. 3Y02A, 3Y03A, and 3Y09A.
- For the repairing, checking and measuring procedures, refer to the "TECHNICAL GUIDE, GENERAL INSTRUCTION".

I. STRUCTURE OF THE CIRCUIT BLOCK



II. REMARKS ON DISASSEMBLING AND REASSEMBLING

Use the universal movement holder for disassembling and reassembling.

① Hands

• Installing

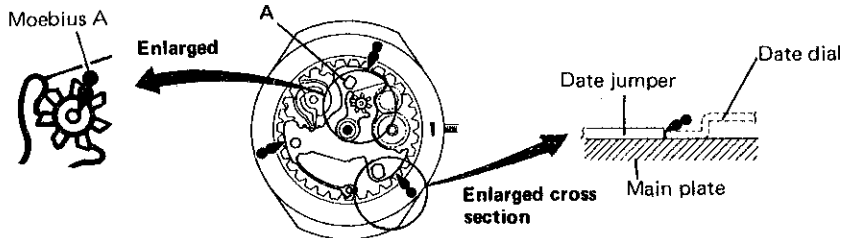
Since a plastic train wheel bridge is used, take out the battery and place the movement directly on a flat metal plate or the like to install the hands.

⑪ Date jumper

• Installing

Push the interference part "A" with tweezers, etc. to fix the date jumper in position.

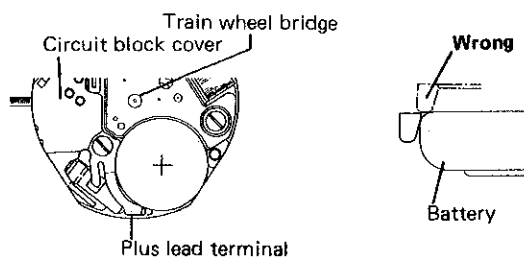
• Lubricating



⑭ Battery

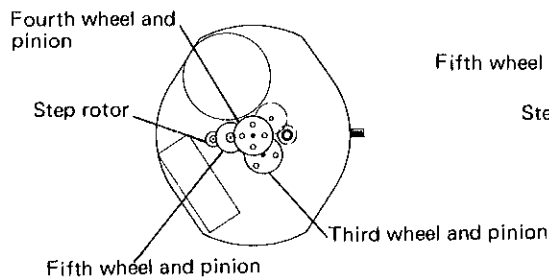
• Setting position

The plus lead terminal portion of the circuit block cover touches the side surface of the battery.



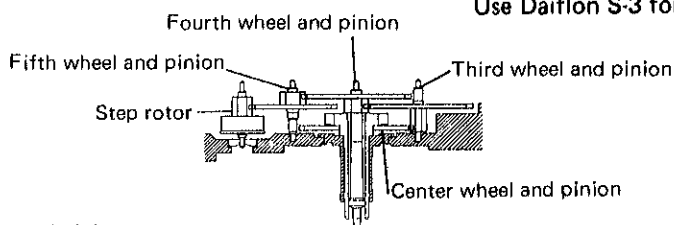
②1 Train wheel bridge

● Setting position



● Cleaning

Use Daiflon S-3 for cleaning.



②2 Train wheel setting lever

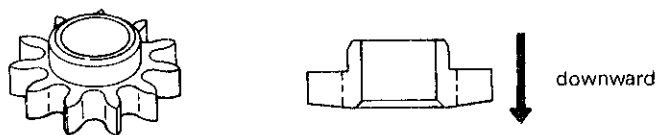
● Setting position

● Lubricating



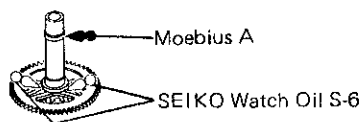
②8 Setting wheel

● Installing



③1 Center wheel and pinion

● Lubricating



III. VALUE CHECKING

● Coil block resistance

2.7K Ω ~ 4.1K Ω

● Current consumption

For the whole of the movement : less than 1.4 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.
- Be sure to protect the movement from light with black paper or the like while measuring accuracy and current consumption, as the C-MOS-LSI installed on the movement may be adversely affected by strong light and abnormal values may result.