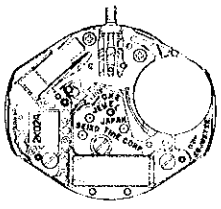
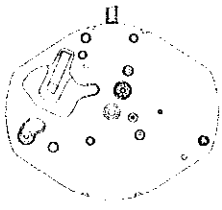
PARTS CATALOGUE/TECHNICAL GUIDE

Cal. 2K02A

Cal. 2K03A

[SPECIFICATIONS]

Item \ Cal. No.		2K02A	2K03A
Movement		  The illustrations refer to Cal. 2K02A. (x 1.5)	
Movement size	Outside diameter	18.4 mm between 6 o'clock and 12 o'clock sides 15.3 mm between 3 o'clock and 9 o'clock sides	
	Casing diameter	ϕ18.1 mm 17.8 mm between 6 o'clock and 12 o'clock sides	
	Height	2.5 mm	
Time indication		3 hands	
Driving system		Step motor (Load compensated driving pulse type)	
Additional mechanism		• Electronic circuit reset switch • Train wheel setting device	
Loss/gain		Monthly rate at normal temperature range: less than 15 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. 2K02A

Disassembling procedures Figs.: ① → ㉙

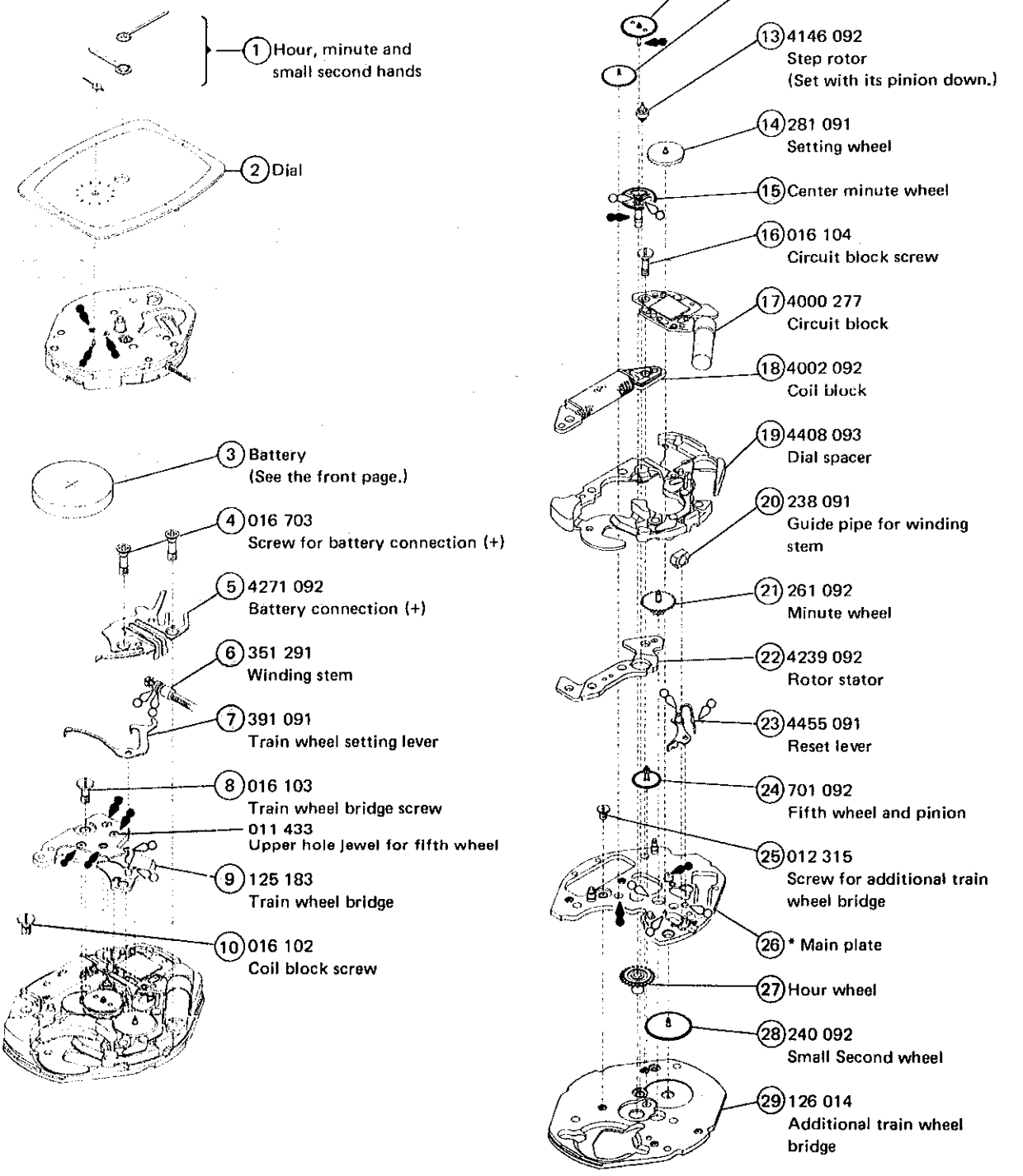
Reassembling procedures Figs.: ㉙ → ①

Lubricating: Types of oil

- Moebius A
- SEIKO Watch Oil S-6

Oil quantity

- Normal quantity



① Hour, minute and small second hands

② Dial

③ Battery (See the front page.)

④ 016 703 Screw for battery connection (+)

⑤ 4271 092 Battery connection (+)

⑥ 351 291 Winding stem

⑦ 391 091 Train wheel setting lever

⑧ 016 103 Train wheel bridge screw

011 433 Upper hole jewel for fifth wheel

⑨ 125 183 Train wheel bridge

⑩ 016 102 Coil block screw

⑪ Fourth wheel and pinion (Lubricate at the two beads.)

⑫ 231 091 Third wheel and pinion

⑬ 4146 092 Step rotor (Set with its pinion down.)

⑭ 281 091 Setting wheel

⑮ Center minute wheel

⑯ 016 104 Circuit block screw

⑰ 4000 277 Circuit block

⑱ 4002 092 Coil block

⑲ 4408 093 Dial spacer

⑳ 238 091 Guide pipe for winding stem

㉑ 261 092 Minute wheel

㉒ 4239 092 Rotor stator

㉓ 4455 091 Reset lever

㉔ 701 092 Fifth wheel and pinion

㉕ 012 315 Screw for additional train wheel bridge

㉖ * Main plate

㉗ Hour wheel

㉘ 240 092 Small Second wheel

㉙ 126 014 Additional train wheel bridge

◯ ⇨ Please see the remarks on the following pages.

* Unavailable for supply

PARTS CATALOGUE

Cal. 2K03A

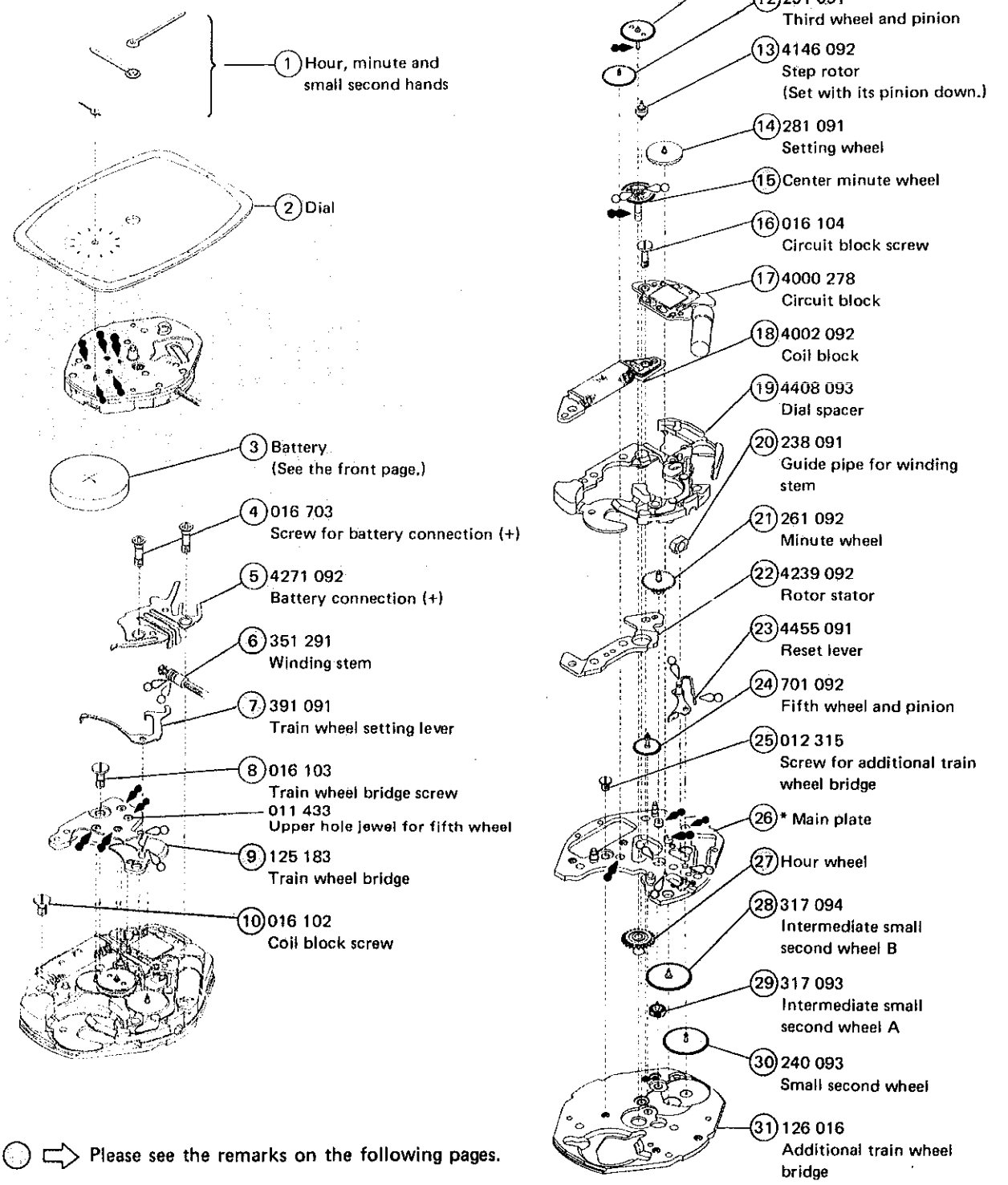
Disassembling procedures Figs.: (1) → (31)

Reassembling procedures Figs.: (31) → (1)

Lubricating: Types of oil — Moebius A; SEIKO Watch Oil S-6

Oil quantity — Normal quantity

* Unavailable for supply



(1) Hour, minute and small second hands

(2) Dial

(3) Battery
(See the front page.)

(4) 016 703
Screw for battery connection (+)

(5) 4271 092
Battery connection (+)

(6) 351 291
Winding stem

(7) 391 091
Train wheel setting lever

(8) 016 103
Train wheel bridge screw

011 433
Upper hole jewel for fifth wheel

(9) 125 183
Train wheel bridge

(10) 016 102
Coil block screw

(11) Fourth wheel and pinion
(Lubricate at the two beads.)

(12) 231 091
Third wheel and pinion

(13) 4146 092
Step rotor
(Set with its pinion down.)

(14) 281 091
Setting wheel

(15) Center minute wheel

(16) 016 104
Circuit block screw

(17) 4000 278
Circuit block

(18) 4002 092
Coil block

(19) 4408 093
Dial spacer

(20) 238 091
Guide pipe for winding stem

(21) 261 092
Minute wheel

(22) 4239 092
Rotor stator

(23) 4455 091
Reset lever

(24) 701 092
Fifth wheel and pinion

(25) 012 315
Screw for additional train wheel bridge

(26) * Main plate

(27) Hour wheel

(28) 317 094
Intermediate small second wheel B

(29) 317 093
Intermediate small second wheel A

(30) 240 093
Small second wheel

(31) 126 016
Additional train wheel bridge

○ ⇨ Please see the remarks on the following pages.

Remarks:

⑥ Winding stem 351 291

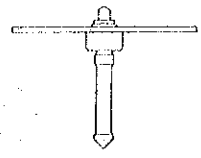
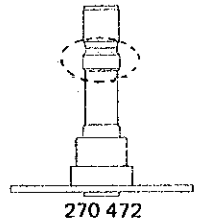
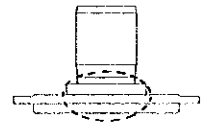
The type of winding stem is determined based on the design of cases.
Check the case number and refer to "SEIKO Casing Parts Catalogue" to choose a corresponding winding stem.

⑪ Fourth wheel and pinion

⑮ Center minute wheel

㉗ Hour wheel

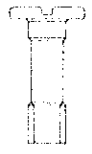
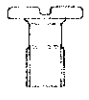
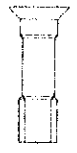
Combination:

Type* \ Parts name	Fourth wheel and pinion	Center minute wheel	Hour wheel
L	 241 295	 270 472	 271 292

*Abbreviation (Movement type) L ..... Long type

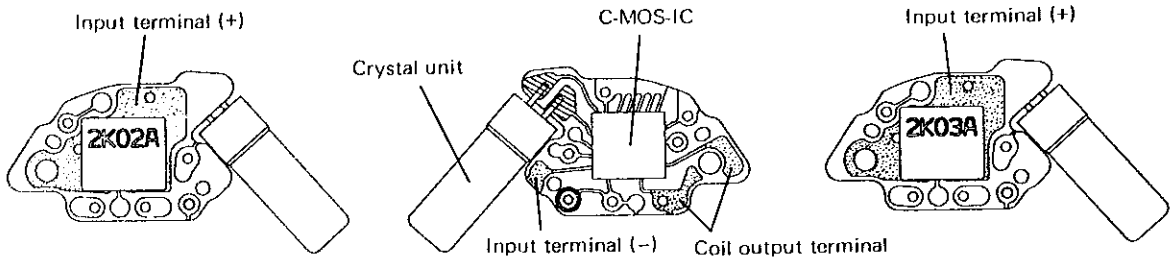
Note: Some of the long type wheels (270 472 and 271 292) are not constricted at the portion indicated by the dotted circle.

LIST OF SCREWS USED

Shape	Part No.	Name	Shape	Part No.	Name
	012 315	Screw for additional train wheel bridge (1 pc.)		016 104	Circuit block screw (1 pc.)
	016 102	Coil block screw (1 pc.)		016 703	Screw for battery connection (+) (2 pcs.)
	016 103	Train wheel bridge screw (1 pc.)			

- The explanation here is only for the particular points of Cal. 2K02A and 2K03A.
- For repairing, checking and measuring procedures, refer to the "TECHNICAL GUIDE, GENERAL INSTRUCTIONS".

I. STRUCTURE OF THE CIRCUIT BLOCK



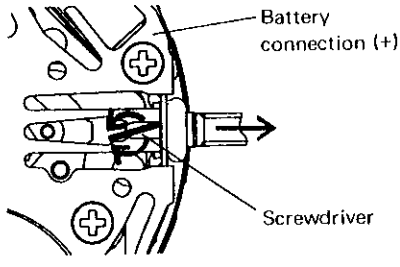
II. REMARKS ON DISASSEMBLING AND REASSEMBLING

Use the universal movement holder for disassembling and reassembling.

⑥ Winding stem

- **How to remove**

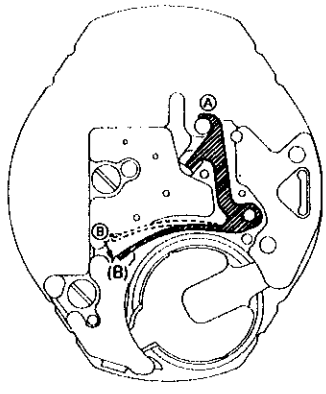
Using a slotted screwdriver with a little wider tip, twist it alternately right and left as shown by the arrows in the illustration below, and pull out the winding stem.



⑦ Train wheel setting lever

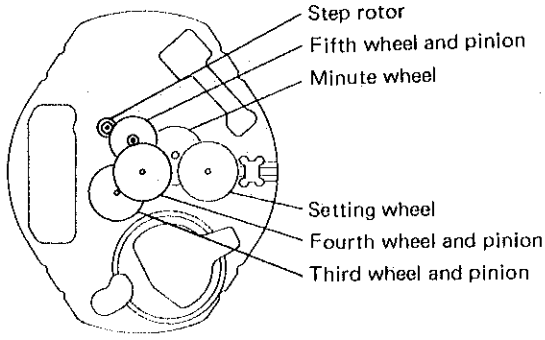
- **Setting position**

Set Ⓐ portion first, and then insert Ⓑ portion into the long slot (B) in the train wheel bridge.
When setting Ⓐ portion, check that it does not touch the fourth wheel and pinion.

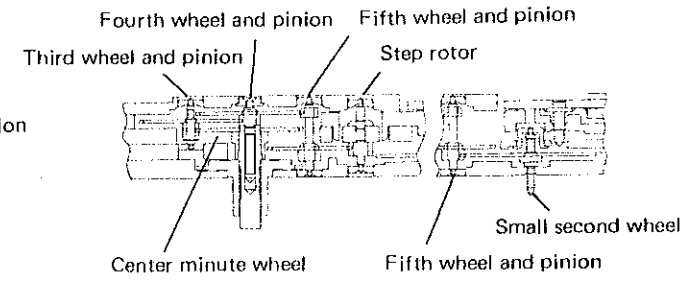


⑨ Train wheel bridge

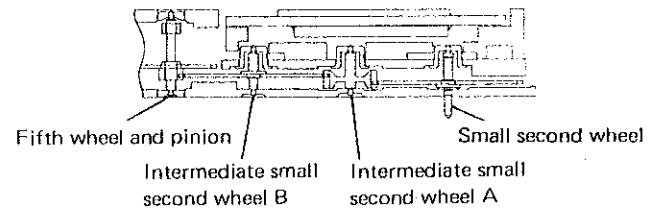
- **Setting position**



- **Cal. 2K02A**



- **Cal. 2K03A**



Note: Set the step rotor with its pinion facing toward the main plate side.

III. VALUE CHECKING

- Coil block resistance

  2.3KΩ ~ 2.7KΩ

- 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 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.