

Seiko V400A, V401A Movement Parts (1)

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PARTS CATALOGUE/ TECHNICAL GUIDE Cal. V400A Cal. V401A

[SPECIFICATIONS]

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Ci	vi. No. V400A	V401A		
Movement				
	(x 2.0)	(x 2.0)		
Outside diam	eter 13.0mm between 3 o'clock and 9 o'clo 15.5mm between 6 o'clock and 12 o'c	13.0mm between 3 o'clock and 9 o'clock sides 15.5mm between 6 o'clock and 12 o'clock sides		
size Casing diameter Ap15.1mm RESTORATIONS				
Height	2.1mm	2.3mm		
Time indication	2 hands (Move at 20-second intervals)	3 hands		
Driving system	Step motor (Fixed-width pulse system)	Step motor (Load compensated driving pulse type)		
Additional mechanism	-	Train wheel setting device		
	Electronic circuit reset switch			
Loss/gain	Monthly rate at normal temperature ra	Monthly rate at normal temperature range: less than 20 seconds		
Regulation system	Nil	Nil		
Measuring gate by quartz test	er Use 10-second gate.	Use 10-second gate.		
Battery	SEIKO SR516SW, Maxell SR516SW, Matsushita SR516SW	SEIKO SR521SW, Maxell SR521SW, SONY SR521SW, EVEREADY 379		
	Battery life is approximately 3 years.	Battery life is approximately 2 years.		
	Voltage: 1.55∨			
Jewets	0 jewel			

HATTORI SEIKO CO., LTD.

PARTS CATALOGUE

Cal. V400A, V401A



2

PARTS CATALOGUE Cal. V400A, V401A **Remarks:** (4) Hour wheel (12) Fourth wheel and pinion (Only for Cal. V401A) (16) Center minute wheel (Only for Cal. V401A) Center wheel and pinion (Only for Cal. V400A) **Combination:** [Cal. V401A] Part name Hour wheel Center minute wheel Fourth wheel and pinion Type* М 271 298 270 298 241 [Cal. V400A] Part name Hour wheel Center wheel and pinion Type* М

*Abbreviation : M ..., Standard type (Movement type)

221,138

Movement type varies, depending on the design of cases. Refer to "Casing Parts Catalogue".

(23) Winding stem

351 164, 351 165

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.

271 463

TECHNICAL GUIDE

- The explanation here is only for the particular points of Cal. V400A and V401A.
- For the repairing, checking and measuring procedures, refer to the "TECHNICAL GUIDE, GENERAL INSTRUCTIONS,"

I. STRUCTURE OF THE CIRCUIT BLOCK



To identify the circuit blocks for the respective calibres, check the positions of the numbers printed on them. They are positioned differently according to the calibre as shown by the reticulated portions in the illustrations below. Also note that some of the circuit blocks for Cal. V401A do not have numbers printed on them.



Spring portion of

R

battery connection (+)

Portion stamped with numbers

II. REMARKS ON DISASSEMBLING AND REASSEMBLING

- (1) Hands
- How to install

When installing the hands, place the movement directly on a flat metal plate or the like, escaping the spring portion of the battery connection (+).

(5) Battery

How to install

When installing the battery, check that the battery connection (+) securely touches the side face of the battery.

(7) Battery connection (+)

How to install

Have the hook portions (4 places) catch the main plate (Fig. 1 & 2).

In disassembling and reassembling, take care not to deform the hook portions.

After installing the battery connection (+), check that the four hock portions securely catch the main plate.



TECHNICAL GUIDE

(11) Train wheel bridge

Setting position

Note:

Since the fifth wheel and pinion and step rotor are made of plastics, take care not to damage them in disassembling and reassembling.

Cal. V400A



- Take care not to deform the spring portion of the yoke.
- Since the train wheel setting lever is made of plastics and easily damaged, lightly catch it with tweezers taking care not to touch the portion engaging with the fifth wheel and pinion.

TECHNICAL GUIDE

Cal. V400A, V401A

(25) Main plate

• Lubricating

Notes:

- Since the setting wheel is fixed securely to the main plate with a pin, never disassemble them apart.
- Apply Moebius A to the setting wheel as indicated in the illustration below.



Setting wheel

III. VALUE CHECKING

Cal. No. Coil block resistance		V400A	V401A
		2,0KΩ ~ 2,4KΩ	$2.1 \mathrm{K}\Omega \simeq 2.5 \mathrm{K}\Omega$
Current consumption	For the whole of the movement	less than 0.5µA	less than 1.1µA
	For the circuit block alone	less than 0.3µA	less than 0.3µA

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.