# PARTS CATALOGUE/TECHNICAL GUIDE Cal. W339A

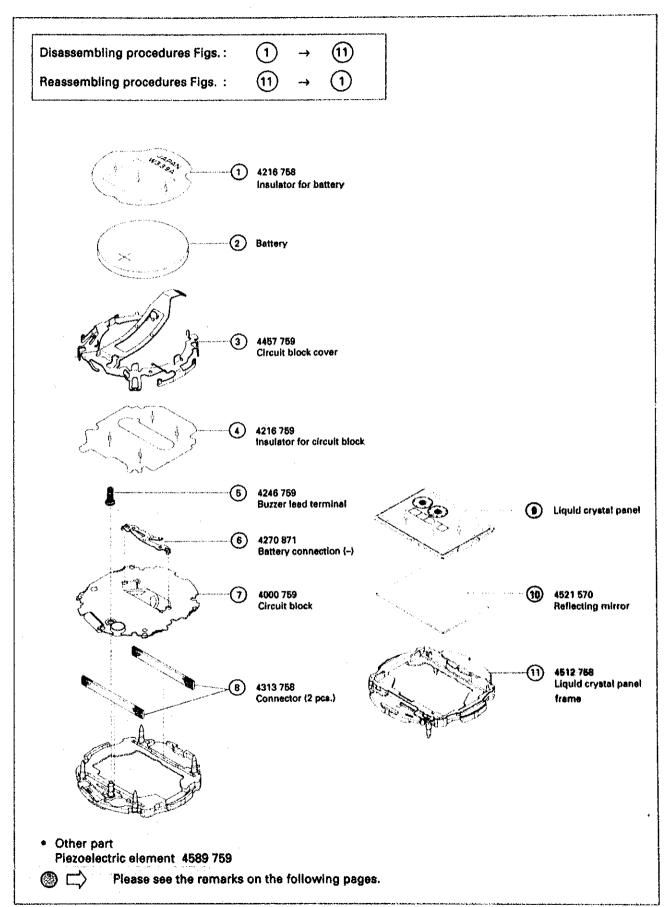
#### [SPECIFICATIONS]

Cal. No.		W339A		
Item				
Module		JAPAN W339A  W399A 4305/674  Another Corporation for the corporati		
Module size	Outside diameter	ø27.4mm		
	Casing diameter	ø27.4mm		
	Height	5.73mm		
Display medium		Nematic Liquid Crystal, FEM (Field Effect Mode)		
Liquid crystal driving system		1/3 multiplex driving system		
Display system		<ul> <li>Time/calendar display</li> <li>Stopwatch display (Up to 30 hours in 1/100 seconds)</li> <li>Timer display (Up to 30 hours)</li> <li>Alarm display (3-channel alarm)</li> <li>Dual time display</li> </ul>		
Additional mechanism		Alarm test system     Illuminating light     All segments light-up system     Hourly time signal		
Loss/gain		Monthly rate at normal temperature range: less than 20 seconds		
Regulation system		NII		
Measuring gate by quartz tester		Use 6-second gate with all the segments of the display lit up.		
Battery		SEIKO CR2025, Matsushita CR2025 Battery life is approximately 5 years. Voltage: 3.0 V		

# SEIKO CORPORATION

**PARTS CATALOGUE** 

Cal. W339A



## **PARTS CATALOGUE**

Cal. W339A

### Remarks:

(9) Liquid crystal panel

L/C panel No.	L/C panel color	L/C panel design	Module ref. No.
4520 758	Silver	Circular graphic display	UW33920
4520 759	Gold	Circular graphic display	UW33925
4520 778	Silver	Semicircular graphic display	UW33921
4520 779	Gold	Semicircular graphic display	UW33926

The type of liquid crystal panel is determined based on the design of cases. Refer to "Casing Parts Catalogue" to choose a corresponding liquid crystal panel.

## **TECHNICAL GUIDE**

Cal. W339A

The explanation here is only for the particular points of Cal. W339A.

For the repairing, checking and measuring procedures, refer to the "TECHNICAL GUIDE, GENERAL INSTRUCTIONS".

I. STRUCTURE OF THE CIRCUIT BLOCK

Crystal unit

Upconverter condenser

Upconverter condenser

Upconverter condenser

Condenser for battery protection

Diode

Transistor

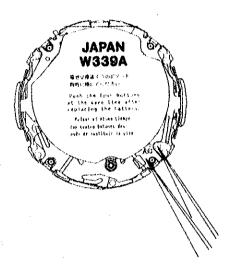
Condenser network

## **TECHNICAL GUIDE**

Cal. W339A

## II. REMARKS ON INSTALLING THE BATTERY

- . A necessary step after installing the battery
- After the battery is replaced with a new one, or after the battery is removed and re-installed following the repairing procedures, be sure to short-circuit the AC terminal of the circuit block and the switch spring with conductive tweezers to reset the circuit.



## III. REMARKS ON DISASSEMBLING AND REASSEMBLING

- (9) Liquid crystal panel
- (10) Reflecting mirror
- After disassembling the parts 1 to 8, reverse the module to remove the liquid crystal panel and reflecting mirror.

#### IV. VALUE CHECKING

- Upconverter coil resistance:  $140\Omega \sim 180\Omega$
- Current consumption

For the whole of the module:

less than 4.0µA

For the circuit block alone :

less than 3.0μA

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