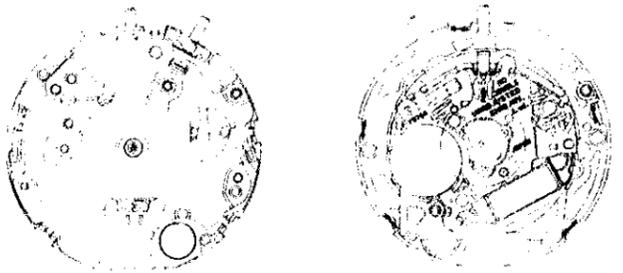


SERVICE GUIDE CAL. Y97 SERIES

1. SPECIFICATIONS

Cal. No.		Y974A	Y975A	Y977A
Item				
Movement		 <p>The illustrations refer to Cal. Y974A. (x 1.5)</p>		
Movement size	Outside diameter	$\phi 24.0\text{mm}$ 23.0mm between 3 o'clock and 9 o'clock sides		
	Casing diameter	$\phi 23.3\text{mm}$ 23.0mm between 3 o'clock and 9 o'clock sides		
	Height	3.8mm		
Time indication	3 hands			
Driving system	Step motor			
Additional mechanism	<ul style="list-style-type: none"> • Electronic circuit reset switch • Train wheel setting device • Alarm function <ul style="list-style-type: none"> • Alarm time is indicated by the alarm hand. (12-hour indication) • At the designated time, the alarm of Cal. Y974 and Y977 beeps for approximately 15 seconds and stops, and the melody alarm of Cal. Y975 chimes and stops. To stop it manually, push back the crown at the 4 o'clock side into the normal position. • A piezoelectric buzzer is used for the alarm sound. 			
Loss/gain	Monthly rate at normal temperature range: 30 seconds			
Regulation system	Nil			
Measuring gate by Quartz Tester	Use 10-second gate.			
Battery	SEIKO SR626W, MAXELL SR626W, SONY SR626W Voltage: 1.55V Battery life is approximately 1.5 years.			
Jewels	0 jewel			

2. AFTER-SALES SERVICING SYSTEM

The movement parts are fixed by heat-treatment or hooked to the plastic main plate, and no screws are used. Therefore, the parts cannot be supplied.

- Models with a one-piece case
Replace the watch completely with a new one.
- Models other than using one-piece case
If repair of the movement is required, the movement must be completely replaced with a new one.

3. REMARKS ON AFTER-SALES SERVICING

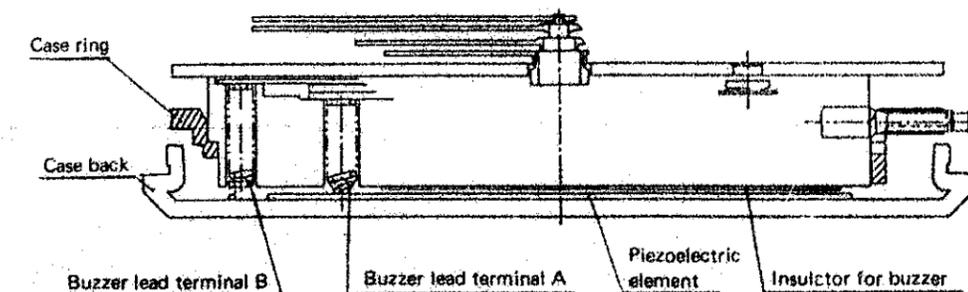
- (1) Time accuracy
The watch is equipped with a logical regulation system. When measuring the time accuracy, use the 10-second gate.
- (2) Replacement of the parts
The movement parts are fixed securely to the plastic main plate by calking it and no screws are used, requiring no maintenance work for the watch. Therefore, the movement parts cannot be replaced with new ones.
- (3) How to install the hands
Cal. Y97 series have an alarm hand in addition to the hands for time indication. Therefore, install them following the steps below.
 - ① After installing the battery, set the crown at the 3 o'clock side at the normal position, and check that the watch is operating.
 - ② Pull out the crown at the 4 o'clock side to the second click, and turn it counterclockwise to move the hands until the alarm starts ringing. (*1)
 - ③ Pull out the crown at the 3 o'clock side to the first click, and turn it clockwise to move back the hands 30 minutes. Then, turn the crown counterclockwise to advance the hands until the alarm starts ringing. (*1)
 - ④ Securely fix in the alarm, hour and minute hands at the 12 o'clock position. (*2)
 - ⑤ Turn the crown at the 3 o'clock side in the first click position to move back the hour and minute hands a few minutes, and then turn it counterclockwise to advance them until the alarm starts ringing. (*1)
If the alarm rings before or after the time the alarm hand indicates, re-install the hands.
 - ⑥ Install the second hand. (*2)

Notes:

- 1*) To check the alarm sound, refer to "(4) Alarm test".
2*) When installing the hands, refer to "(6) How to fix in the hands".

(4) Alarm test (*1)

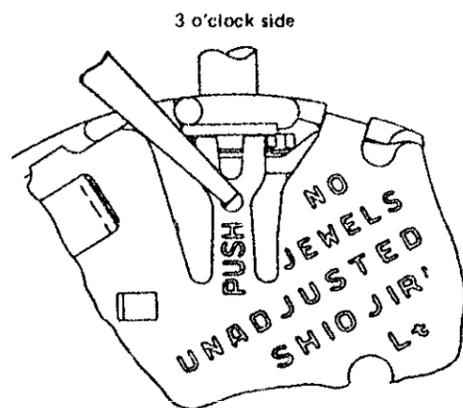
After checking that the insulator for buzzer is attached to the back of the movement, mount the case ring inside the case back and set the movement. Then, while holding down the movement so that the buzzer lead terminals A and B touch the piezoelectric element and case back, respectively, turn either of the two crowns slowly. The alarm starts ringing.



(5) How to remove the crowns

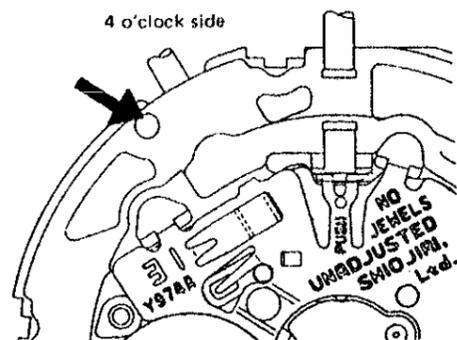
a) Crown at the 3 o'clock side

While pushing the indented portion of the battery connection (+) marked with "PUSH O" in the illustration below with a tip of tweezers or the like, remove the crown.



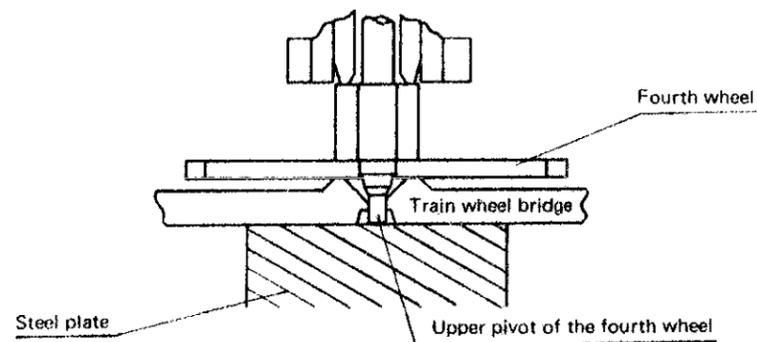
b) Crown at the 4 o'clock side

While pushing the portion indicated by the arrow in the illustration below with a tip of tweezers or the like, remove the crown.



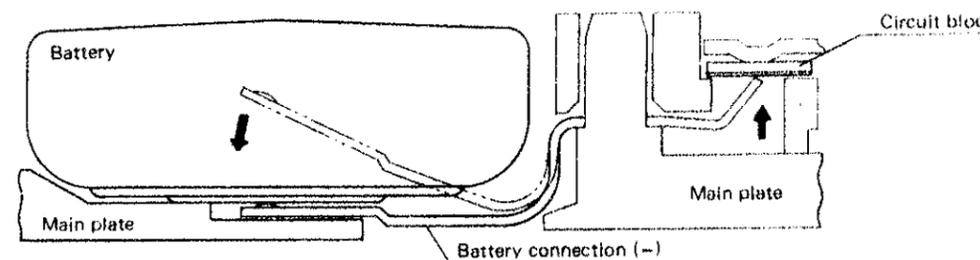
(6) How to fix in the hands (*2)

Place the movement on a flat steel plate so that the upper pivot of the fourth wheel directly touches the steel plate as shown in the illustration below, and fix in the hands. Otherwise, the fourth wheel and train wheel bridge may be damaged.



(7) Checking the operation of the movement

To drive the movement with an external power supply, connect the (+) and (-) terminals of the power supply to the battery connections (+) and (-), respectively. Then, press the battery connection (-) against the main plate. Otherwise, the voltage may not be applied to the circuit block and the movement may not operate, either, as the movement is so constructed that the complete conductivity can be obtained when the battery installed presses the battery connection (-) against the main plate. Also, as the main plate is made of plastics, the movement may not operate even if the (+) terminal of the power supply is connected to the winding stem.



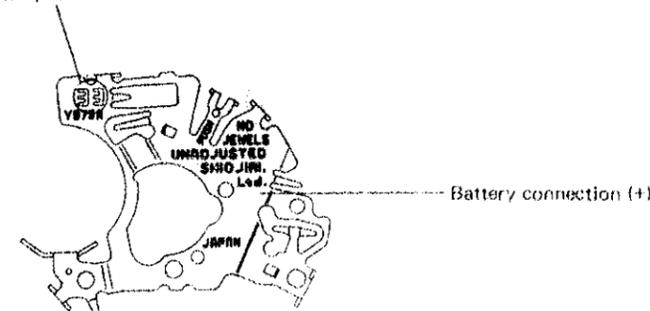
(8) Melody alarm (only for Cal. Y975)

To identify the melody played, the respective numbers are stamped on the battery connection (+) according to each melody as indicated in the illustration below.

Ex.)

33 Mickey Mouse March
© 1955 Walt Disney Music Company

Portion stamped with numbers



4. VALUE CHECKING

• Current consumption

Use the SEIKO Digital Multi Tester S-840A (with Multi Adaptor MA-40A).

Range to be used: μA	Result:
Red probe Battery connection (+)	For the whole of the movement . . . Less than $1.8\mu A$
Black probe Battery connection (-)	