TECHNICAL GUIDE

SEIKO LASSALE

QUARTZ

CAL. 7750A CAL. 7751A CAL. 7752A CAL. 7759A





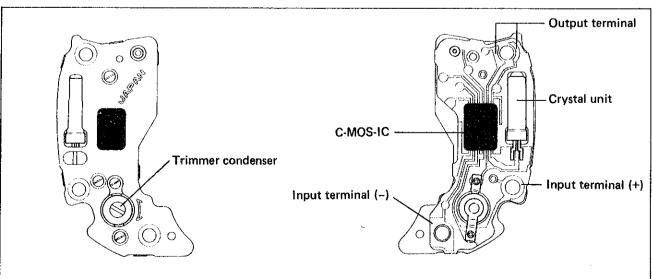
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I. SPECIFICATIONS

Item	Cal. No.	7750A	7751A	7752A	7759A
Time indication		2 hands	3 ha	nds 2 hands	
Additional mech	anism	-		Date	
				Instant date setting device	
	į	Train wheel setting device			
		Electronic circuit reset switch			
Battery life indic	ator	-	Battery life	fe indicator –	
Loss/gain		Monthly rate: Less than 15 seconds			
Movement size	Outside diameter	φ24.4mm (22.0mm between 6 o'clock and 12 o'clock sides 20.0mm between 3 o'clock and 9 o'clock sides)		φ24.6mm (22.0mm between 6 o'clock and 12 o'clock sides 21.0mm between 3 o'clock and 9 o'clock sides)	
ĺ	Casing diameter	φ24.0mm			
	Height	1,5mm 1.9mm		9mm	
Regulation syster	n	Trimmer condenser			
Measuring gate by	y Quartz Tester	Any gate is available.			
Battery		SEIKO (SEIZAIKEN) TR916SW Battery life is approximately 3 years. Voltage: 1.55V			
Jewels		6 jewels			

II. STRUCTURE OF THE CIRCUIT BLOCK



III. DISASSEMBLING, REASSEMBLING AND LUBRICATING

Disassembling procedures Figs.: 1

→ (43)

Lubricating

Types of oil

Oil quantity

Moebius A

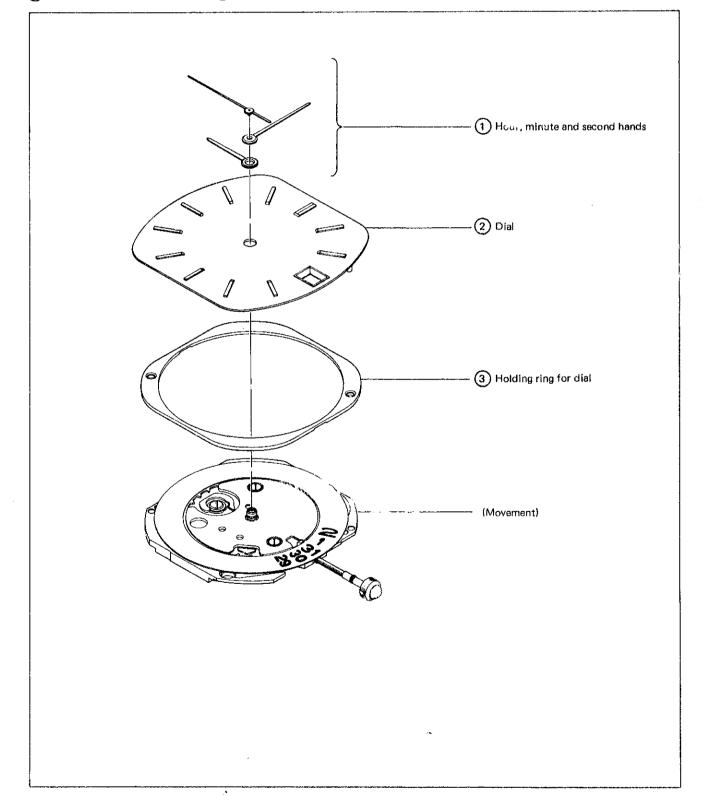
SEIKO watch oil S-6

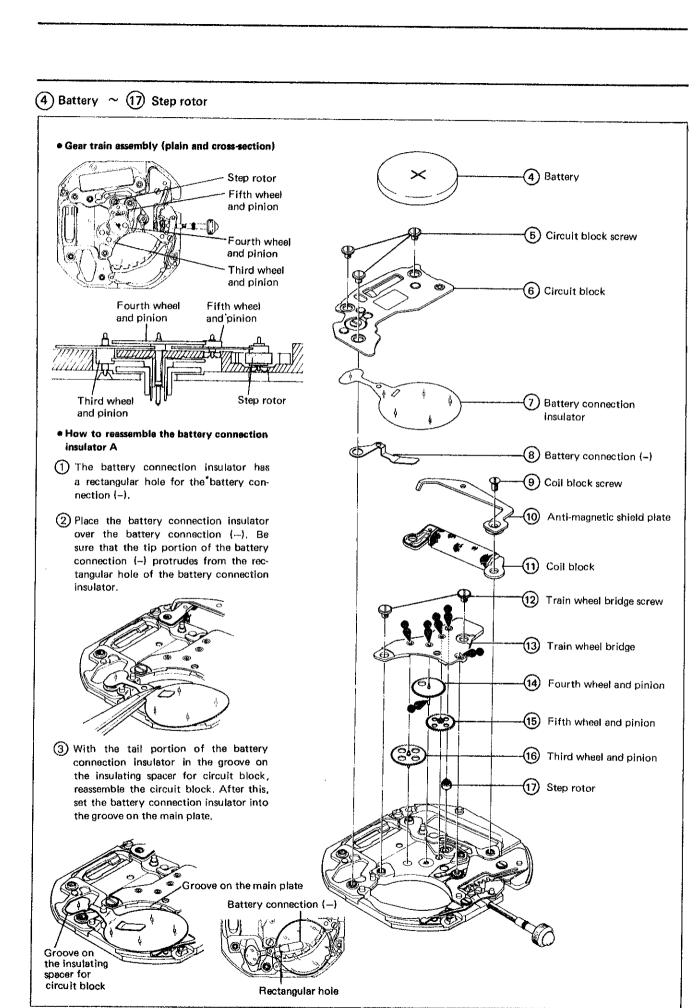
Normal quantity:

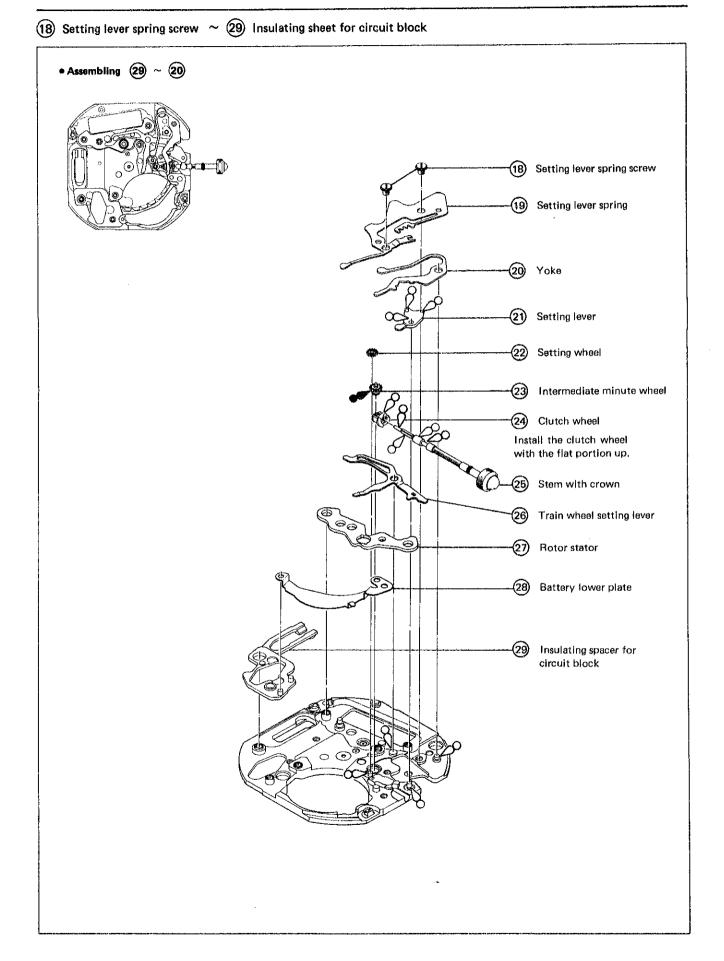
Use the movement holder S-678.

Reassembling procedures Figs.:

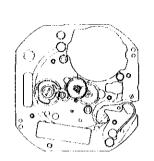
1 Hour, minute and second hands ~ 3 Holding ring for dial



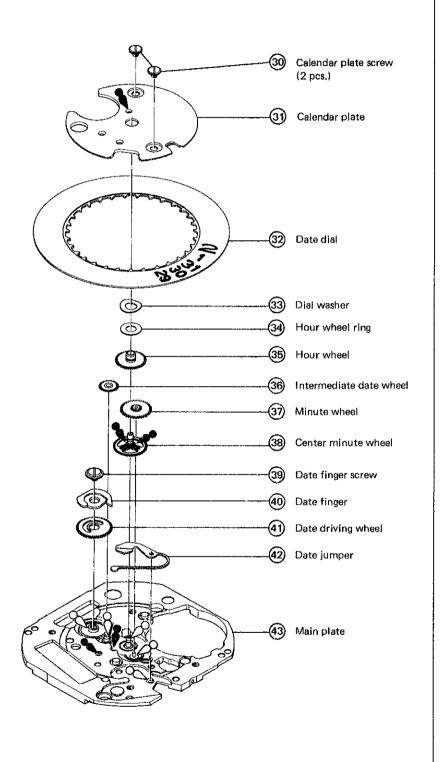




30 Calendar plate screw ~ 43 Main plate



• Assembling from (43) ~ (35)



IV. CHECKING AND ADJUSTMENT

- The explanations here are only for the particular points of these calibres.
- Refer to the "TECHNICAL GUIDE, GENERAL INSTRUCTION" for SEIKO Analogue Quartz for details.

Procedure

Note: When checking, be sure not to press the date dial with figures.

CHECK OUTPUT SIGNAL

Use the electromagnetic microphone.

Result:

Indicator blinks

Normal Defective

Indicator does not blink:

CHECK BATTERY VOLTAGE

Set up the volt-ohm-meter.
Range to be used: DC3V

Result:

More than 1.5V: Less than 1.5V:

Normal Defective

Replace the battery with a new one.

CHECK BATTERY CONDUCTIVITY

Check to see if the battery current flowing to the circuit is normal.

CHECK CIRCUIT BLOCK CONDUCTIVITY

Check for any short and defective conductivity of the conductive portions of the circuit block.

CHECK COIL BLOCK

Set up the volt-ohm-meter, and be sure to make a zero-ohm adjustment. Check for a broken wire, short, etc.

Range to be used: OHMS x 100

Result:

Normal :

3.0k $\Omega \sim 3.8$ k Ω

Defective Less than 3.0kΩ (Short)

More than 3.8k Ω (Broken wire)

Replace the coil block with a new one.

CHECK GEAR TRAIN MECHANISM

Be sure there is play in the step rotor and in the wheels.
 Check for alignment, lubrication, dust and lint.

Procedure

CHECK SETTING AND CALENDAR MECHANISM

• Check for oil overflow, clearance, dust, lint, etc.

CHECK RESET AND TRAIN WHEEL SETTING CONDITIONS

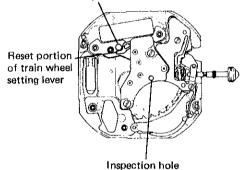
Note: Check the condition of the watches which have been assembled up to the train wheel bridge screw.

(1) Reset condition

Check for the clearance between the reset portion of the train wheel setting lever and reset pin.

(a) For the watch with calendar:

Inspection hole for reset portion



(i) Crown at the normal and the first click position

Result:

Inspection hole

Normal: Reset portion is out-

side of the inspection

hole.

Reset portion

Defective: Reset portion is inside

of the inspection hole.



(ii) Crown at the second click position

Result:

Normal: Reset portion is inside of the inspection hole.



Defective: Reset portion is out-

side of the inspection

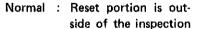


(b) For the watch without calendar

for setting portion

(i) Crown at the normal position

Result:



hole.

Defective: Reset portion is inside

of the inspection hole.



(ii) Crown at the first click position

Result:

Normal: Reset portion is inside of the inspection hole.



Defective: Reset portion is out-

side of the inspection

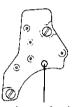


Procedure

(2) Setting condition

Check for the clearance between the setting portion of the train wheel setting lever and the fourth wheel and pinion.

(a) For the watch with calendar:



Result:

Normal: Setting portion is off

the fourth wheel.

(i) Crown at the normal and the first click position



Defective: Setting portion is set-

ting the fourth wheel.



(ii) Crown at the second click position

Result:

Normal: Setting portion is set-

ting the fourth wheel.



Defective: Setting portion is off

the fourth wheel.



(b) For the watch without calendar:

(i) Crown at the normal position

Result:

Normal: Setting portion is off

the fourth wheel.



Defective: Setting portion is set-

ting the fourth wheel.



(ii) Crown at the first click position

Result:

Normal: Setting portion is set-

ting the fourth wheel.



Defective: Setting portion is off

the fourth wheel.



(3) Check to see if the second hand stops promptly when the crown is pulled out to the second click and if it starts promptly after one second when the crown is pushed in back to the normal position,

For the watch with 2 hands:

Reset condition can also be confirmed by the procedure CHECK OUTPUT SIGNAL.

Crown at the normal position : Blinks every second

Crown at the first click position: Does not blink every second

Procedure

CHECK ACCURACY

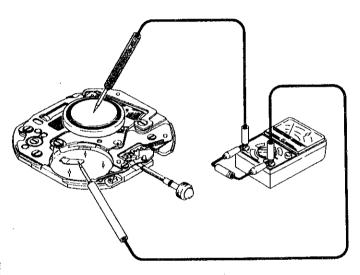
Use the electromagnetic microphone.

CHECK CURRENT CONSUMPTION

Use the volt-ohm-meter Range to be used: DC12 μ A

• Check the current consumption for the whole movement. Place the battery on the train wheel bridge and check current consumption.

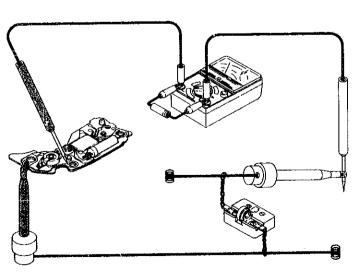
Probe red : Battery connection (-) Probe black: Battery (-) surface



Result:

Normal: Less than 1.1µA More than 1.1μA Defective :

*How to find defects when the current consumption is more than 1.1 μ A. Check the current consumption for the circuit block alone.



Result:

Normal (Circuit block): Less than 0.5µA Check the gear train.

Defective (Circuit block): More than 0.5µA Check the circuit block.

Procedure

CHECK BATTERY LIFE INDICATOR

Check to see if the battery life indicator functions correctly (only for the watch with the second hand).

Check voltage: 1.30 V ~ 1.48 V

CHECK WATER RESISTANCE

CHECK APPEARANCE AND FUNCTIONING

All procedures of Disassembling, Reassembling, Lubricating, Checking and Adjustment are completed.