

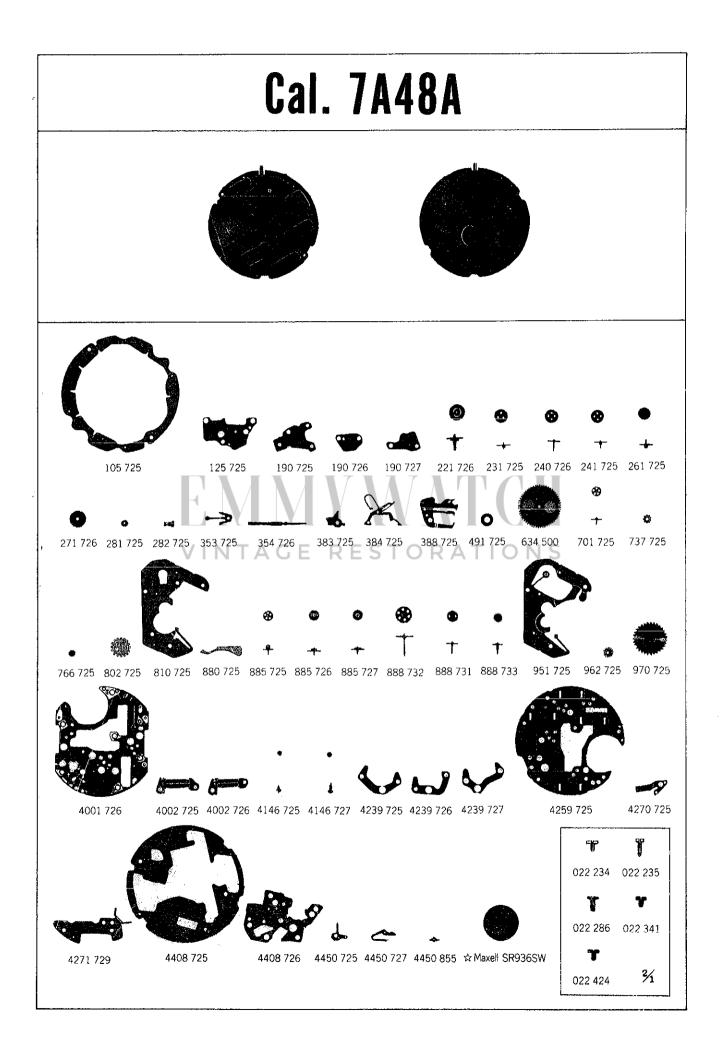
Seiko 7A48A Movement Parts (1)

Compiled by EmmyWatch - https://www.emmywatch.com

SEIKO QUARTZ

Cal. 7A48A EMMYWATCH VINTAGE RESTORATIONS





Cal. 7A48A

Characteristics

Casing diameter :

Maximum height : Jewels :

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\$\phi\$ 29.0 mm 4.4 mm without battery

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Frequency of quartz crystal oscillator : 32,768 Hz (Hz-Hertz Cycles per second)

Driving system : Step motor (2 poles)

Regulation system : Rotary step switch

Train wheel setting

Date and moon phase display Chronograph

Chronograph test system

Battery life indicator

PART NO.	PART NAME	PART NO.	PART NAME
105 725	Dial seat	4146 727	Step rotor B (for second)
125 725	Train wheel bridge	4239725	Rotor stator A (for time)
190 725	Chronograph second bridge	4239726	Rotor stator C (for chronograph
190 726	Chronograph minute bridge		minute)
190 7 2 7	Chronograph 5/100 second bridge	4239726	Rotor stator D
221 726	Center wheel & pinion		(for chronograph 5/100 second)
231725	Third wheel & pinion	4239727	Rotor stator B
240 726	Small second wheel		(for chronograph second)
241 725	Fourth wheel & pinion	4259725	Anti-magnetic shield plate
261725	Minute wheel	4270725	Battery connection (-)
271726	Hour wheel	4271729	Battery connection (+)
281 725	Setting wheel	4408 725	Circuit block spacer
282725	Clutch wheel	4408 726	Setting wheel spacer
353725	Friction spring for second counting	4450 725	Change-over switch lever
	wheelVINIAGE REA	4450 727	Switch lever
354726	Winding stem	4450 855	Rotary step switch
383 725	Setting lever	022 235	Dial screw
384 725	Yoke	022 234	Moon phase jumper screw
388 725	Setting lever spring	022 286	Anti-magnetic shield plate screw
491725	Dial washer	022 286	Battery connection (+) screw
634 500	Moon phase indicator	022 341	Chronograph second bridge screw
701725	Fifth wheel & pinion	022 424	Train wheel bridge screw
737 725	Date corrector setting wheel	022 424	Chronograph minute bridge screw
766725	Intermediate minute wheel	022 424	Chronograph 5/100 second bridge
802725	Date driving wheel		screw
810725	Date jumper	022 424	Coil block screw
880725	Day corrector	022 424	Setting lever spring screw
885725	Second-counting intermediate wheel	011 151	 Lower hole jewel for 5/100 second
885726	Minute-counting intermediate wheel		counting wheel
885727	5/100 second-counting intermediate wheel	011 306	Upper hole jewel for minute countir wheel
888732	Second counting wheel	011 306	Upper hole jewel for 5/100 secon
888 731	Minute counting wheel		counting wheel
888733	5/100 second counting wheel	011 542	Upper hole jewel for fifth wheel
951725	Moon phase jumper	011 542	Upper hole jewel for 5/100 secon
962725	Intermediate wheel for calendar		counting intermediate wheel
	corrector	011 542	Lower hole jewel for 5/100 secon
970 725	Date star		counting intermediate wheel
4001 726	Circuit block	011 5 5 2	Lower hole jewel for step rotor
4002 725	Coil block A (for time indication)	011 552	Lower hole jewel for step rotor
4002 725	Coil block B (for chronograph second)		(chronograph minute)
4002 726	Coil block C (for chronograph minute)	011 552	Lower hole jewel for step rotor
4002 726	Coil block D		(chronograph second)
	(for chronograph 5/100 second)	011 5 5 2	Lower hole jewel for step rotor
4146 725	Step rotor A (for time)		(chronograph 5/100 second)
4166 725	Step rotor C (for chronogroph minute)	011 568	Upper hole jewel for rotor stator
4146 725	Step rotor D (for 5/100 second)		

rightarrow Please see remarks on the reverse page.

Part numbers in light letters are not shown in photos.

Cal. 7A48A

	PART NAME	PART NO.	PART NAME
011 568	Upper hole jewel for rotor stator		screw (B)
011 568	(chronograph minute) Upper hole jewel for stee rotor	☆027 144	Tube for anti-magnetic shield plate (C)
	(Chronograph second)	027 146	Tube for chronograph second bridge
011 568	Upper hole jewel for step rotor	☆027 153	Tube for train wheel bridge A
011 739	(Chronograph 5/100 second) Upper hole jewel for center minute wheel	027 153 027 153	Tube for chronograph minute bridge Tube for chronograph 5/100 second bridge
023 337	Tube for setting lever spring screw	☆027 154	Tube for anti-magnetic shield plate
023 351	Guide tube for setting lever spring		screw (D)
027 138	screw Tube for train wheel bridge B	027758	Setting lever pin Switch lever axle
027 139	Tube for setting lever spring screw	027 760	Tube for setting lever
027 140	Tube for coil block screw	027 761	Switch pin
2027 141	Tube for anti-magnetic shield plate	027 769	Pin for intermediate wheel for
	screw (A)		calendar correction
027 141	Tube for battery connection (+) screw (A)	027770	Pin for calendar corrector setting wheel
☆027 143	Tube for anti-magnetic shield	027 966	Date star pin
027 143	plate (B) Tube for battery connection (+)	☆ Maxell SR936SW ☆ U.C.C. 394	Silver oxide battery
Remarks :	F. VI VI V		
Winding			
Tube fo	winding stem.		ogue" to choose a corresponding
유 (유 (유 (유 (winding stem. or train wheel bridge (A), (B), Tube for an 027 138 027 141 027 143 027 144 027 144	ti-magnetic shiel	
☆ (☆ (☆ (☆ (☆ (winding stem. or train wheel bridge (A), (B), Tube for an 027-138 027-141 027-143 	ti-magnetic shiel	
☆ (☆ (☆ (☆ (☆ (winding stem. or train wheel bridge (A), (B), Tube for an 27 138 27 141 27 143 27 144 27 144 27 153	ti-magnetic shiel	
☆ (☆ (☆ (☆ (☆ (winding stem. or train wheel bridge (A), (B), Tube for an 27 138 27 141 27 143 27 144 27 144 27 153	ti-magnetic shiel	
☆ (☆ (☆ (☆ (☆ (winding stem. br train wheel bridge (A), (B), Tube for an 277138 277144 277144 277153 277154 Refer to the illustration below 277154 277154 277154 2727138 2027141 2027141 2027143	ti-magnetic shiel	Id plate (A), (B), (C)
⇔ (⇔ (⇔ (⇔ (⊕ () ⊕ M	winding stem. br train wheel bridge (A), (B), Tube for an 27 138 27 141 27 143 27 144 27 153 27 153 27 154 27 154 27 153 27 153 27 154 27 124 27	ti-magnetic shiel	Id plate (A), (B), (C)

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TECHNICAL GUIDE

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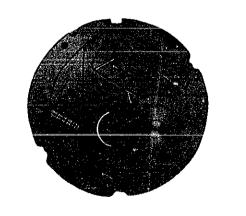
I. SPECIFICATIONS

II. CALENDARS

III. DISASSEMBLING, REASSEMBLING, AND

IV. CHECKING AND ADJUSTMENT

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UBRICATING	2
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I. SPECIFICATIONS

III. DISASSEMBLING, REASSEMBLING, AND LUBRICATING

• List of the screws used (Calendar mechanism only)

Name

Part No.

Shape

Item	Cal. No.	7A48A	_ ()	- 146 V
Time indicat	lion	Hour, minute and small second hands	and the second	No.
Additional mechanism		 Stopwatch function (Minute, second and 5/100 second hands) Calendar (date) function Lunar calendar function Counter function Electronic circuit reset switch Train wheel setting device Battery life indicator 		
Loss/gain		Monthly rate at normal temperature range: less than 15 seconds	_	i
	Outside diameter	¢31.1 mm	_	:
Movement	Casing diameter	¢29.0 mm	_	
size	Height	4.4 mm without battery		
Regulation system		Rotary step switch		
Measuring gate by quartz tester		Use the 10-second gate.	7	
Battery		U.C.C. 394, Maxell SR936SW Battery life is approximately 2 years. Voltage: 1.55V		
Jewels		15 jewels		

CALENDARS 11.

• Date

The date is indicated by the date hand. Read the numeral or the dot between numerals on the dial that the date hand points to.

How to adjust the date

- 1. Pull the crown out to the 1st click position.
- 2. Turn the crown clockwise and set the date hand.

Moon phase

The phases (waxing and waning) of the moon are displayed by those shapes which a circle (the moon) and the dualmountain-shaped opening on the dial combine to form.

The illustration on the right does not show the exact shapes of the moon.

Age of the moon	0 (New Moon)	7	15 (Full Moon)	22
Moon phase				

Date hand

How to adjust the moon phase

Refer to a newspaper for the age of the moon. Round off fractions if any.

Ex.: Age of the moon: $25.4 \rightarrow 25.0$

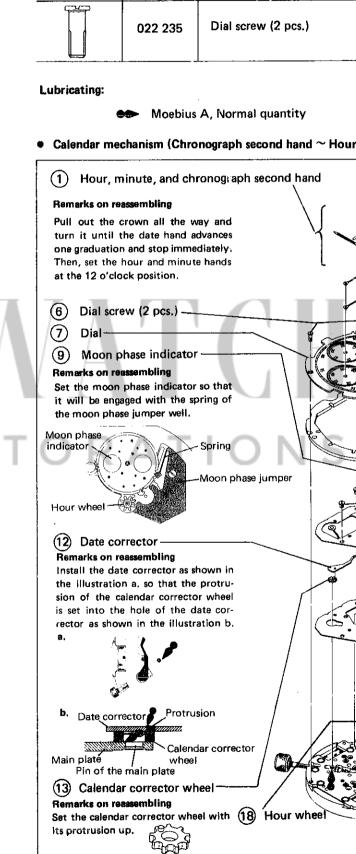
- 1. Pull the crown out to the 1st click position.
- 2. Turn the crown counterclockwise and set the moon on the position as shown in the illustration on the right.
- 3. Then advance the moon to the 25th step position by turning the crown counterclockwise.

Age of the moon: 1

Moon phase

(The moon peers slightly over the left moon.)

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Shape	Part No.	Name
	022 234	Moon phase jumper screw (3 pcs.)
	assembling pro	~ ~ ~
	/2 Da Remarks	all second hand te hand on reassembling date hand exactly on a
	(4) Ch (5) Chr (8) Dia Remarks	ronograph minute hand onograph 5/100 second hand Il base sheet on reassembling ne dial base sheet so that the
		hs of the main plate are set corresponding holes of the sheet. Holes of the
	Mod	dial base sheet on phase jumper screw (3 pcs.) on phase jumper endar correction transmit
	whe Remark Set it wi	el s on reassembling ith its flat side up.
	Remarks Set the d of the d date star.	e jumper on reassembling ate jumper so that the spring late jumper will engage the
	-lour wheel	Spring Date jumper Date driving wheel e star
	\searrow	te driving wheel

IV. CHECKING AND ADJUSTMENT

 The explanation here is only for the particular points of Cal. 7A48A. Refer to the "TECHNICAL GUIDE, Cal. 7A28A" and the "TECHNICAL GUIDE, GENERAL INSTRUCTION" for SEIKO Analogue Quartz for details.

Proc	edure
CHECK SETTING AND CALENDAR MECHANISM	
• With the crown at the 1st clock position, check crown clockwise.	to see if the date hand can be adjusted by turning the
	Result:
	Normal: The date hand advances by one gradua- tion.
Note: Do not adjust the calendars while the watch indicates around 10:00 p.m. to	Defective: The date hand does not advance by one graduation.
around 4:00 a.m., since it may cause the calendars malfunction.	Proceed to check the date star cogs. Neither cog break nor scratch: Check the date
	corrector. Either cog break or scratch: Replace the date star with a new one.
• With the crown at the 1st click position, check the turning the crown counterclockwise.	to see if the moon phase indicator can be adjusted by
	Result:
	Normal : The moon phase indicator advances by one step. Defective : The moon phase indicator does not advance by one step.
	Proceed to check the moon phase indicator cogs. Neither cog break nor scratch: Check the calendar
	correction transmit wheel. Either cog break or scratch: Replace the moon phase indicator with a new one.
• With the crown at the 2nd click position, turn it the hand and the moon phase indicator are geared to characteristic charact	o advance the hour and minute hands to see if the date ange properly.

VWATCH Restorations

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