SEIKO

ONE PIECE CASE OPENER

MODEL S-14

HANDLING MANUAL

CONTENTS

Hattori Trading Co., Ltd.

This case opener set, MODEL S-14, is designed to remove and insert the glass of **SEIKO** watches with one piece cases (an intergrated structure of the caseband and back).

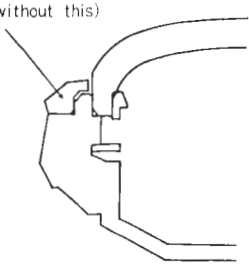
WHAT IS A ONE PIECE CASE ?

A one piece case consists of an integrated structure of the caseband and back. Dismounting the movement is performed by removing the glass. Model S-14 case opener should be employed both for attaching and removing the glass.

One piece case watch (Case construction)

A

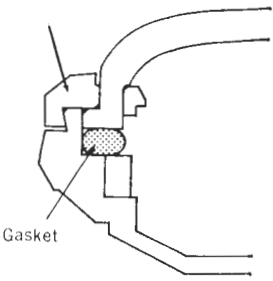
Bezel (some watches are without this)



In case of A, use Model S-14 case opener to remove glass.

B

Bezel (holding the glass)



In case of B, glass can be removed merely by removing the bezel.
Never squeeze the glass with the opener.

HOW TO DISTINGUISH A ONE PIECE CASE FROM OTHERS

Differentiating a one piece case can be performed in the following ways. After confirmation, remove glass with the S-14 case opener.

1. Those which do not have notch for the snap-in case nor the spanner grooves for the screw-in case are one piece case watches.
2. Those whose back cases are inscribed with the watches.

Indicates the glass external diameter

JAPAN A

Indicates the glass external diameter

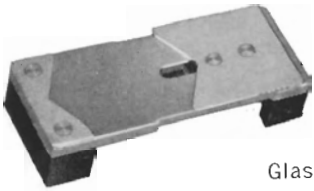
JAPAN J

ONE PIECE CASE

Be sure to refer to the proper procedures described on pages 6 and 7 for removing and inserting glass.

COMPONENTS OF S-14 ONE PIECE CASE OPENER

One piece case opener
Designed to remove or insert glass by gripping the external circumference of glass.



Glass guide
When inserting glass on men's watch cases, this tool determines depth of glass inserted portion.

Glass inserting disk
(6 pieces)
This tool, designed to push glass with tension-ring into ladies' watch cases, is used by attaching to a waterproof case tightening tool.

14.5 ø⅝ – 15.5 ø⅝ 20.0 ø⅝ – 20.5 ø⅝
16.5 ø⅝ – 17.5 ø⅝ 21.5 ø⅝ – 22.5 ø⅝
18.5 ø⅝ – 19.5 ø⅝ 23.5 ø⅝ – 24.5 ø⅝

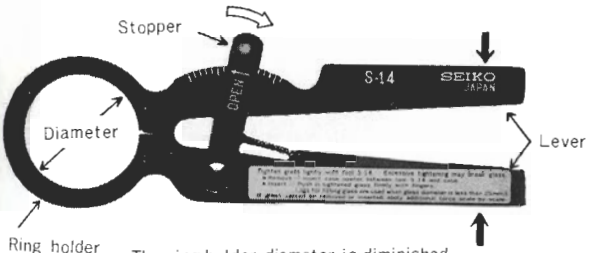
Glass tightening ring
Employed to tighten glass by inserting in ring holder of one piece case opener.

Size is indicated in the area with ■ mark.

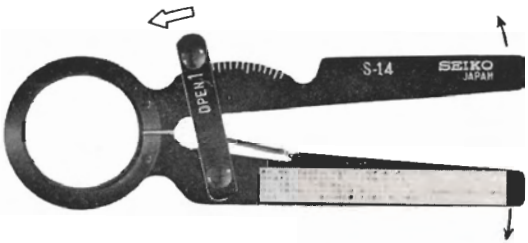
Primarily for gentlemen's
Diameters (4 sizes)
28.0 ø⅝ – 29.0 ø⅝
30.0 ø⅝ – 31.0 ø⅝
31.5 ø⅝ – 32.0 ø⅝
33.0 ø⅝ – 34.0 ø⅝

Primarily for ladies'
Diameters (7 sizes)
14.5 ø⅝ – 15.5 ø⅝
16.5 ø⅝ – 17.5 ø⅝
18.5 ø⅝ – 19.5 ø⅝
20.0 ø⅝ – 20.5 ø⅝
21.5 ø⅝ – 22.5 ø⅝
23.5 ø⅝ – 24.5 ø⅝
26.0 ø⅝ – 27.0 ø⅝

HOW TO USE S-14 ONE PIECE CASE OPENER

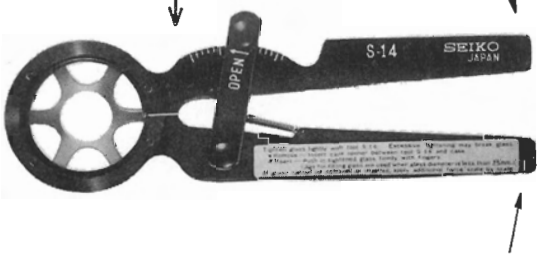


The ring holder diameter is diminished by squeezing the levers. With the aid of an attached spring, the stopper moves toward the ⇨ mark direction, and keeps the same position after releasing the levers.



Return the stopper toward the ⇦ mark direction to widen the levers.

Function of scale
If the glass is tightened excessively at one time, the tension ring will be weakened, resulting in unsatisfactory waterproofing or a broken glass. This scale is utilized to prevent such occurrences when tightening the glass. (Refer to HOW TO REMOVE GLASS for details.)

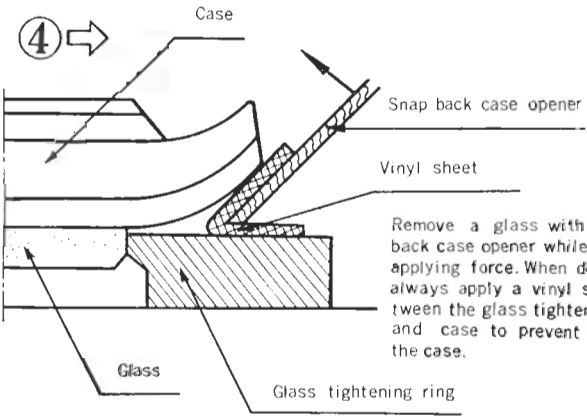


HOW TO REMOVE GLASS

①⇨

Remove the bezel. Set a glass tightening ring of the same size as the glass external diameter in the case opener. Ascertain that the ring surface which conforms to the glass external diameter is attached to the rear side of the case opener (the side without the SEIKO mark). The sizes of the ring head and tail are not the same.

④⇨



Remove a glass with the snap back case opener while gradually applying force. When doing this, always apply a vinyl sheet between the glass tightening ring and case to prevent damaging the case.

PRECAUTIONS ON REMOVING GLASS

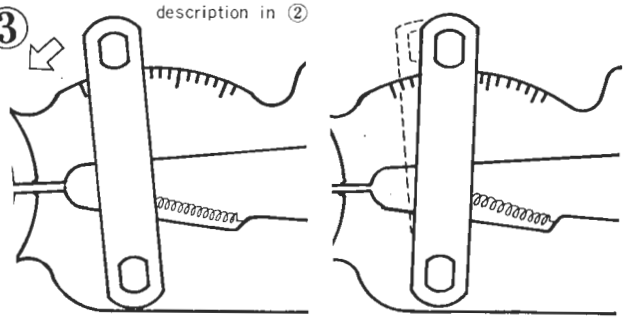
- When gripping the glass, ascertain that the watch and the case opener contact in a horizontal position. (Refer to figure on the right.)
- Remove the glass by gradually applying force to the watch case and glass tightening ring with the snap back case opener, while clamping the glass with the glass tightening ring.

②⇨

Clamp the glass lightly, but to a degree that the watch does not fall off.

Stopper position conforming to description in ②

③

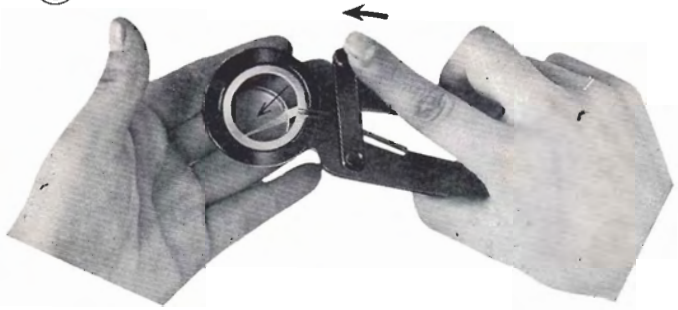


Squeeze the glass further than the condition described in ② by 2 graduations for gentlemen's watches and by 2 or 3 graduations for ladies' watches.
Do not squeeze any harder: otherwise broken glass or deformation of the tension-ring might result.

⑤⇨

By applying the method described in ④, the glass should be dismountable without trouble. In case it cannot be removed, squeeze the glass one graduation further than the condition stated in ③ above.
Then employ the method explained in ④ to remove the glass.

⑥

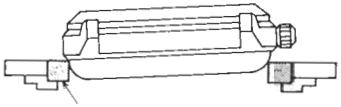


Return the stopper to its original position. Remove the glass from the glass tightening ring.

good

Glass tightening ring

no good



Glass tightening ring

- Do not try to remove the glass by turning the tool. If the tool is turned to remove, the glass might be damaged, resulting in inefficient waterproofing performance.
- Never remove the tension ring from the glass.
- In case of apprehension that the glass might have been clamped excessively, perform a waterproof test without the movement.

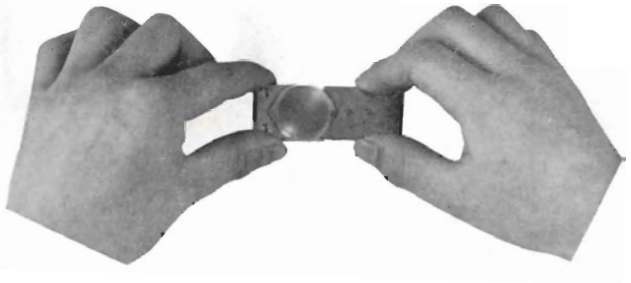
HOW TO INSERT GLASS (Method differs between ladies' and gentlemen's watches)

ONE PIECE CASE FOR GENTLEMEN'S WATCHES

①⇨

Insert a glass tightening ring (the same ring used for removing glass) with the same size of glass external diameter in the case opener's ring holder.

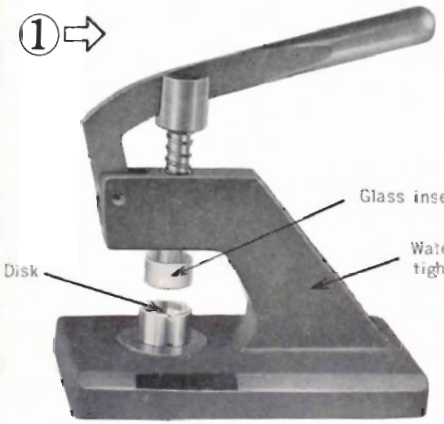
②⇨



Set the glass to the glass guide. (The guide determines the glass depth to be inserted in the case.)

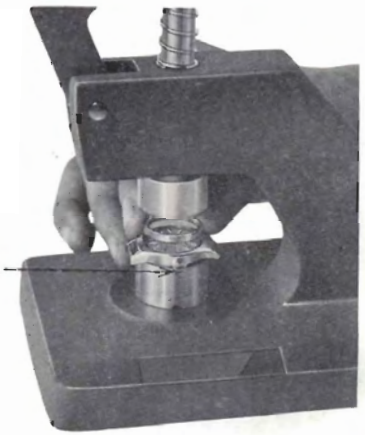
ONE PIECE CASE FOR LADIES' WATCHES

①⇨



- Set the glass inserting disk to the waterproof case tightening tool.
- Upper side:
  Employ the same-sized glass inserting disk as the glass external diameter.
- Lower side:
  Use a disk conforming to the case.

②⇨



Mount the watch on the disk.
Place the glass on the watch horizontally.

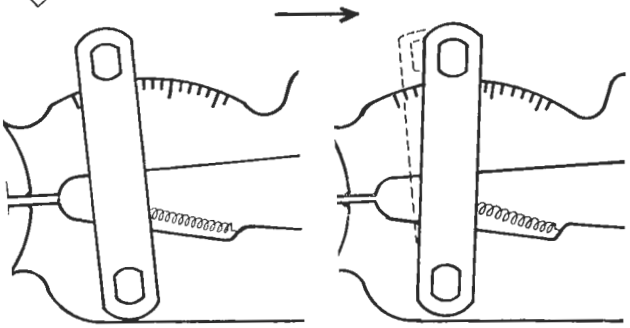
PRECAUTIONS ON INSERTING GLASS

- When inserting a glass, thoroughly remove dust or other foreign matter on the external circumference of the glass and the case where the glass is to be inserted, then insert it carefully.
  Dust and other foreign matter cause inefficiency in waterproof characteristic. (If the glass is defective, replace it with a new one.)
- Do not clamp the glass excessively. Oversqueezing of the glass causes deformation of the tension-ring, resulting in an ineffecient waterproof characteristic or causing the glass to break.

③⇨

Clamp the glass lightly by the one piece case opener, but to a degree that the glass does not fall off.
When gripping the glass, hold the glass and the ring in a horizontal position.

④⇩ Stopper position conforming to description in ③



Squeeze the glass two graduations further than the condition corresponding to ③.

③

Insert the glass by pressing downward.
Ascertain that the glass has been securely inserted by applying pressure with the fingers around the entire glass circumference.

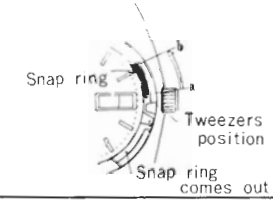
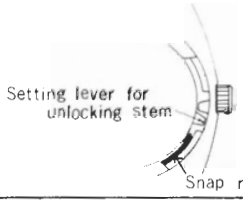
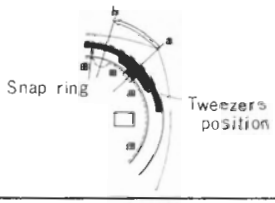
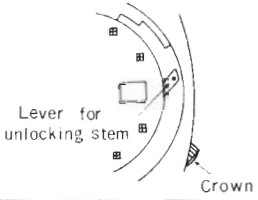
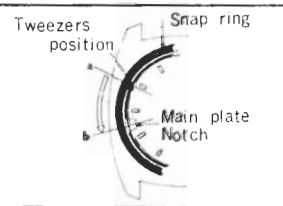
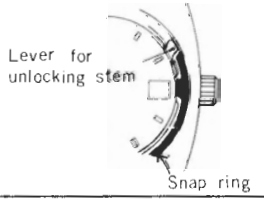
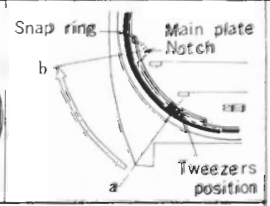
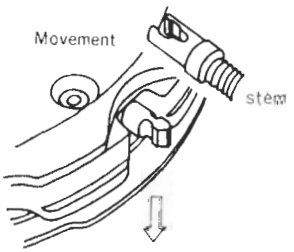
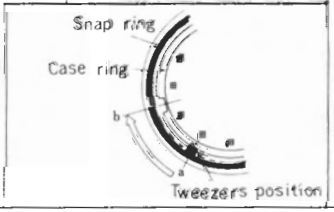
⑤⇩ Insert the glass into a case.

Push the glass in the case by applying force with the fingers. In this case, do not push the ring. After inserting the glass, return the stopper to its original position (in the OPEN direction). Then remove the opener from the watch.
Press hard over the entire glass circumference with the fingers, and make it sure that the glass is securely inserted.

HOW TO REMOVE AND REPLACE THE MOVEMENT

Movement removing and replacing procedures by calibers

(Movement removing procedures)

Working procedures	1 According to the mark appearing on the case back surface, select the proper dismounting procedure.	2 Release the movement fixation by turning the snap ring. Turn it from a to b, using tweezers, continuing until it feels light to the touch. Release the movement fixation without fail before removing the stem.	3 Remove the stem. Pull it off while pressing down the setting lever for unlocking stem with tweezers.	4 Turn the watch over and remove the movement.
Cal. 56 --				〃
Cal. 61 --				〃
Cal. 83 --				〃
Cal. 62 〃				Turn the watch rear side up. Turn the crown until the joint stem is situated as shown in the illustration. In this condition, the movement can be removed.
Cal. 26 --	Watches whose rear surfaces have neither marks nor spanner grooves or notch for opening the case back.			

(Movement replacing procedures)

5

Place the snap ring's projected portion at the same position where it was when the movement was removed.

Align the snap ring's projected portion with the C position as illustrated in procedure [7], then insert the movement.

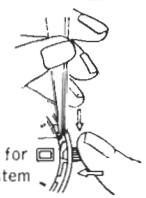
Align the snap ring's projected portion with the C position as illustrated in the figures, procedure [7]. Subsequently insert the movement.

6

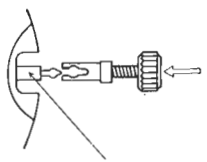
After inserting the movement, set the winding stem properly. Apply silicon grease (500,000 units) to the crown gasket. Be sure to insert the winding stem before turning the snap ring.

This is a winding stem with taper thus installation can be performed merely by pushing it in.

The winding stem can be set merely by pushing in while pressing down the setting lever for unlocking stem with tweezers.



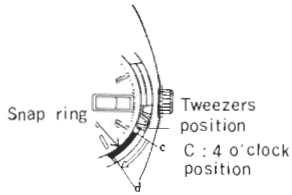
Turn the crown counterclockwise until a clicking sound is audible: then push it in to set the winding stem.

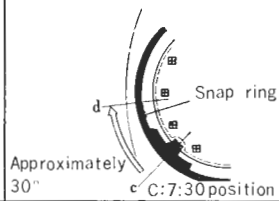


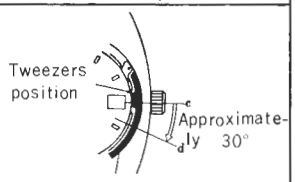
Put this winding stem into the normal position for winding spring, then set it to the case.

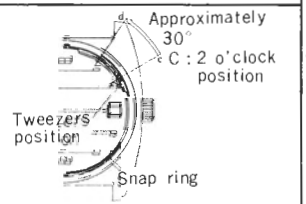
7

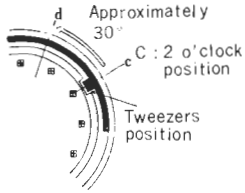
Turn the snap ring to secure the movement.
Use tweezers to turn the snap ring from c to d.







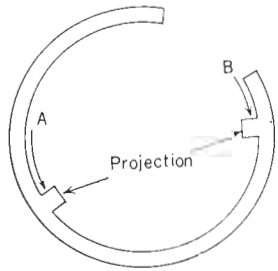




Precautions (common for all calibers)

1. When turning the snap ring, place tweezers at the proper position. Put the tweezers at B when turning clockwise and at A when counterclockwise. Exert sufficient care not to damage the case.

A: for counterclockwise
B: for clockwise



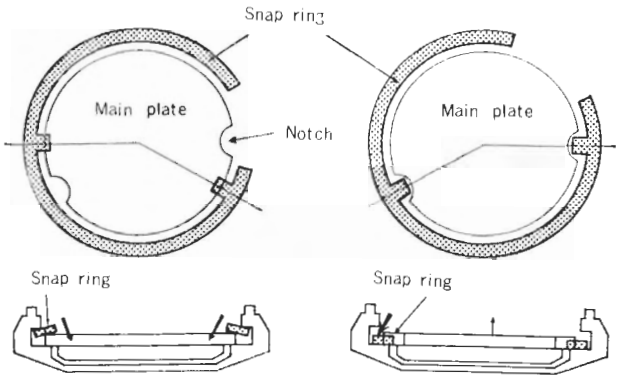
2. When dismounting the movement, place a piece of soft cloth under it so that the movement can be dropped on it while preventing the dial and the hands from being damaged.
3. Do not remove the snap ring from the case.
4. Apply silicon grease (500.000 units) to the crown gasket.
5. If glass side gasket is attached, apply a thin coating of silicon grease (500,000 units) to it.

HOW TO SET AND REMOVE THE MOVEMENT

1. Snap ring Type

Snap ring type watches have snap rings with two projected portions which hold the main plate, securing the movement. Turn the snap ring until the projected portions align with the main plate notches. When the moment is aligned with the main plate notches, the snap ring will turn lightly. Under this condition, the movement can be dismounted.

When everything is set as illustrated in Fig. 1, the movement is secured.



(Fig. 1) Condition in which the movement is set

(Fig. 2 Condition in which the movement is ready for removal

2. Other Type (Glass-hold type)

The movement can be taken out of the case by removing the glass and reset into the case by inserting the glass.

68-5

Printed in Japan

Vorkehrung für den Gebrauch

1. Dieses Werkzeug ist nur für einteilige Gehäuse bestimmt.
2. Drücken Sie die Zange nicht zu sehr zusammen, da sonst das Glas zerstört wird.
3. Wenn das Glas entfernt oder eingesetzt wird, die Zange nicht drehen, da das Glas eventuell beschädigt werden kann.
4. Verwenden Sie den Einpreßstempel, wenn der Außendurchmesser des Glases weniger als 25 mm ⌀ beträgt.
5. Glas so kurz wie möglich in der gespannten Zange lassen, da sich sonst das Glas verformen kann.

Wie ein einteiliges Gehäuse von einem anderen zu unterscheiden ist

Ein einteiliges Gehäuse zu erkennen, kann auf folgende Weise geschehen:
Nach Feststellung entfernen Sie das Glas mit dem Gehäuse-Öffner S-14.

1. Uhren, die weder eine Nut für Druckdeckel oder Einkerbung für den Gehäuse-Öffner haben (wie bei Uhren mit schraubbarem Gehäuseboden), sind einteilige Gehäuse.
2. Uhren, bei denen der Gehäuseboden graviert ist.

zeigt den Außendurchmesser des Glases an.

JAPAN A

zeigt den Außendurchmesser des Glases an.

JAPAN J

ONE PIECE CASE