

# SEIKO watch technical information



① REPAIRING AND CHECKING  
METHODS OF  
CAL, 7005A AND 7006A

② REPAIRING AND CHECKING  
METHODS OF  
CAL, 6138A AND 6139A

## SEIKO

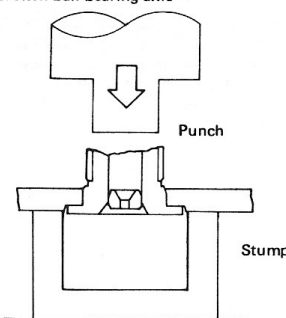
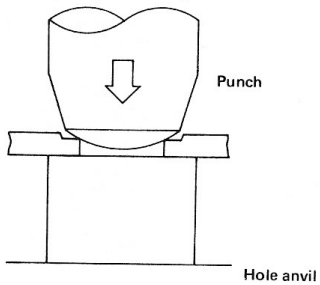
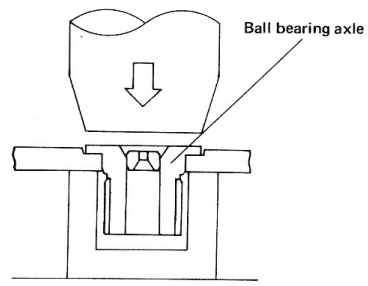
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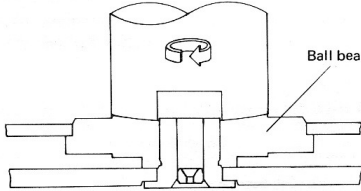
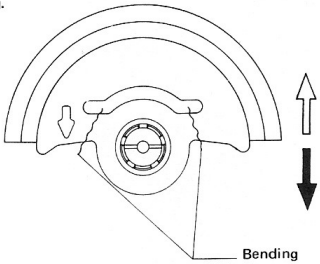
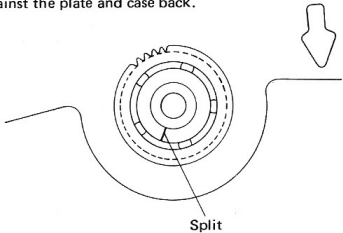
# REPAIRING AND CHECKING METHODS OF CAL, 7005A AND 7006A

When malfunctions exist in the automatic winding mechanism, phenomena can be roughly divided into the following two conditions:

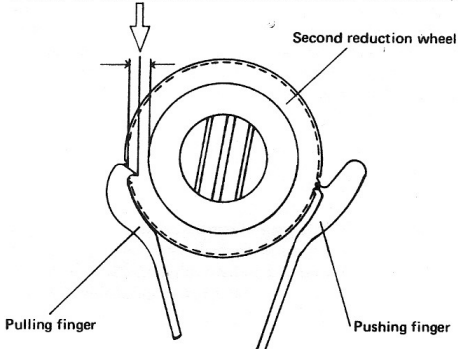
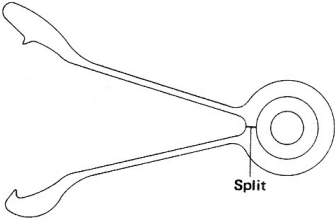
1. Manually shaking the watch, rattling or scratching sounds are generated.
2. Manually shaking the watch, no sound is heard.

## A. When rattling or scratching sounds are generated.

Item	Cause of malfunction	Repairing method
1	Broken ball bearing axle	<p>Replace the ball bearing axle with a new one.                      Instruments for repairing: Staking tool                      Part No. 828002</p> <p>1) Pull out the broken ball bearing axle</p>  <p>2) Squeeze the hole for the ball bearing axle of the barrel and train wheel bridge by using the staking tool</p>  <p>3) Drive in a new ball bearing axle</p> 

Item	Cause of malfunction	Repairing method
2	<p>Oscillating weight is detached from the ball bearing</p>	<p>Replace the oscillating weight.</p> <p>When tightening the screw for oscillating weight fork, use a special driver as below. Clamping force should be three or four times that of the bridge screw for man's wrist watch.</p> 
3	<p>Warp of the oscillating weight.</p> <p>As the oscillating weight is warped, it strikes against the plate, first reduction wheel, or case back.</p> <p>Oscillating weight is too high . . . →</p> <p>Oscillating weight is too low . . . →</p> <p>Note: Take care so that the pushing strength of the ball bearing or the oscillating weight is not too heavy.</p>	<p>Correcting or replacing of the oscillating weight.</p> <p>Adjust it by manually pressing the surrounding portion of the ball bearing.</p> 
4	<p>Holding ring for ball bearing is split.</p> <p>As the ball bearing is shaken, oscillating weight strikes against the plate and case back.</p> 	<p>Replacing of the oscillating weight</p> <p>Part No. Cal. 7001, 7005, 7006 . . . . . 509004 Cal. 7017 . . . . . 509007</p>

**B. When shaking the watch, no sounds are generated.**

Item	Cause of malfunction	Repairing method
1	<p>Pawl lever is excessively opened.</p> <p>The second reduction wheel is not rotated because the tips of the pawl lever are opened too much.</p>	<p>Correct the pawl lever</p> <p>Correct the lever so that the pulling finger tip comes halfway between the tooth bottom and the inner diameter of the wheel.</p>  <p>Second reduction wheel</p> <p>Pulling finger</p> <p>Pushing finger</p>
2	<p>Split of the pawl lever</p> <p>The second reduction wheel is not rotated because the tip of the pawl lever is opened by it's splitting too much.</p>  <p>Split</p>	<p>Replace the pawl lever</p> <p>Part No.            Cal. 7001, 7005, 7006, 7019 .....831001            Cal. 7017 .....831002</p>