

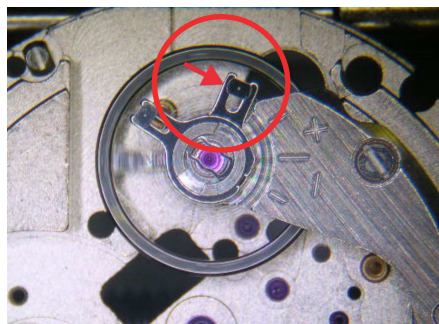
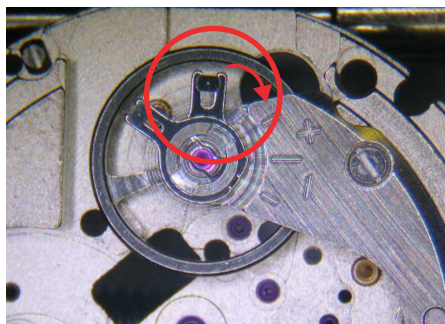
● Balance and escapement

How to disassemble/reassemble the BALANCE and BALANCE COCK

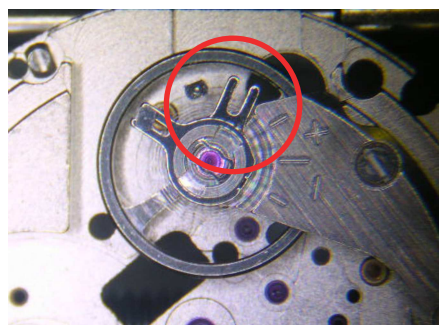
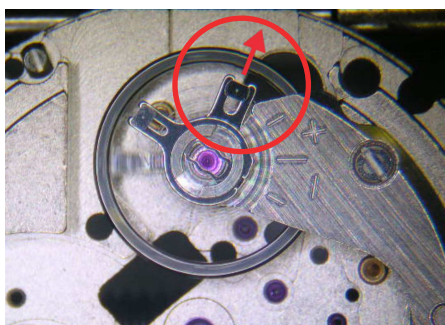
• Disassembling

- 1) Rotate the STUD SUPPORT until it touches to the BALANCE COCK.

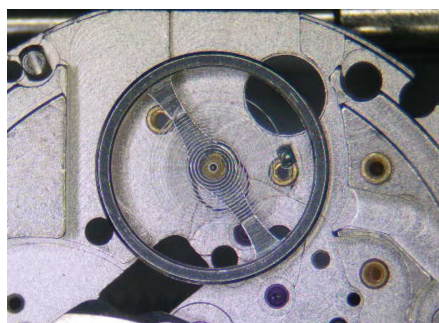
When doing so, make sure that the second bend of the balance-spring does not touch the REGULATOR PIN.



- 2) Push out the stud parallel to the slit of the STUD SUPPORT (the direction also shown by the red arrow in the illustration) in order to remove it from the STUD SUPPORT.



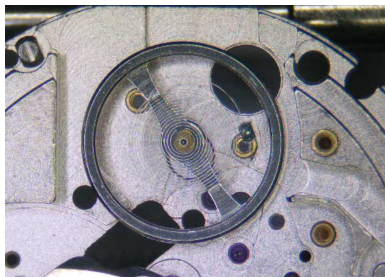
- 3) Unscrew the BALANCE COCK SCREW and remove the BALANCE COCK WITH REGULATOR.



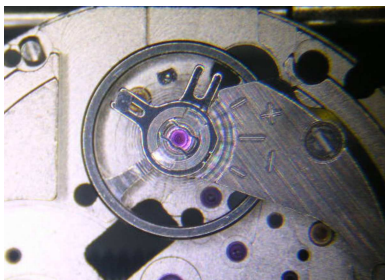
- 4) Remove the BALANCE COMPLETE WITH STUD.

• Reassembling

- 1) Install the BALANCE COMPLETE WITH STUD to the MAIN PLATE.

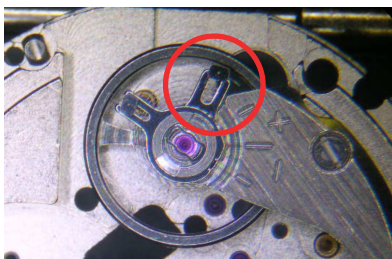


- 2) Set the BALANCE COCK WITH REGURATOR and tighten the BALANCE COCK SCREW.

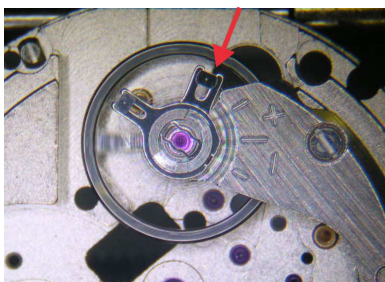


- 3) Temporarily set the stud to the STUD SUPPORT.

Do not engage the balance-spring to the REGULATOR PIN. The balance-spring passes outside of the REGULATOR-PIN at this stage.



- 4) Push back the stud parallel to the slit of the STUD SUPPORT.



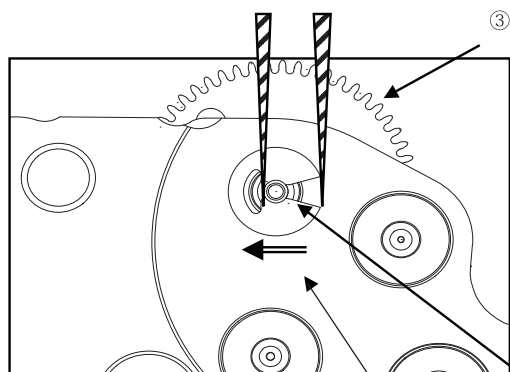
- 5) Engage the balance-spring with the slit of the REGULATOR PIN.



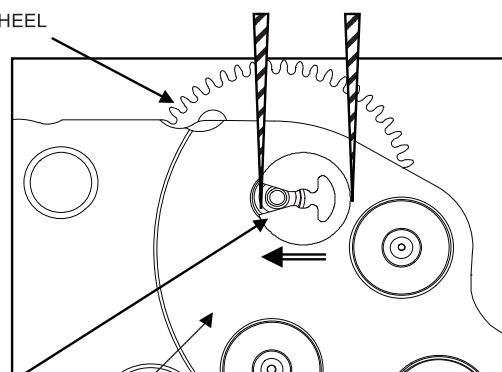
* When assembling the BALANCE COMPLETE, pay great attention not to deform the balance-spring, especially at the second bend.

● First reduction wheel holder

• Disassembling



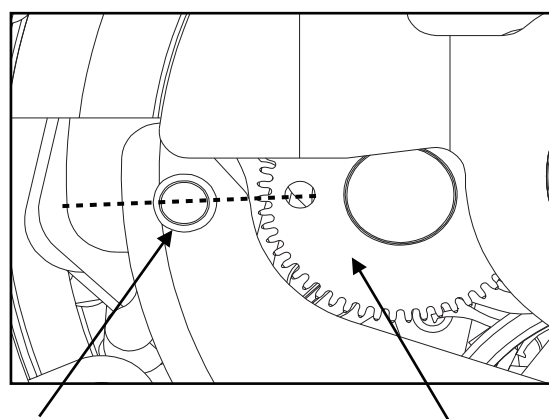
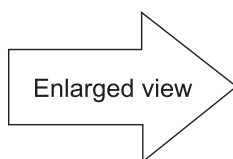
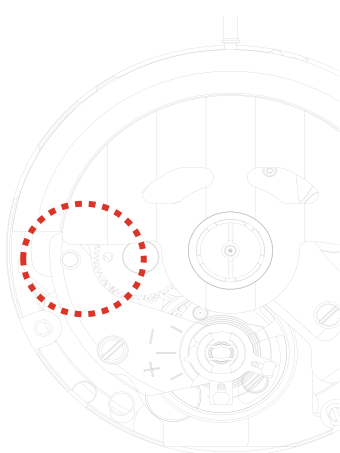
• Reassembling



③ FIRST REDUCTION WHEEL
③④ REDUCTION WHEEL HOLDER
③① BARREL AND TRAIN WHEEL BRIDGE (BACK SIDE)

● Oscillating weight

When fixing the OSCILLATING WEIGHT, an alignment with the FIRST REDUCTION WHEEL is necessary in order to wind the MAINSPRING most efficiently. Rotate the FIRST REDUCTION WHEEL manually until its hole aligns with the gilt dot on the BALANCE COCK and set the OSCILLATING WEIGHT vertically at the stem side, and then tighten the screw. Refer to the figure below.



BALANCE BRIDGE GUIDE PIN

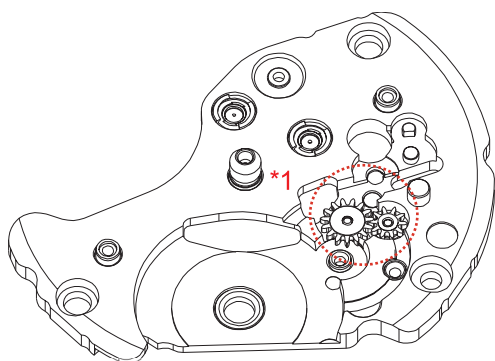
③⑥ FIRST REDUCTION WHEEL

● Barrel and train wheel bridge with hole jewel frame

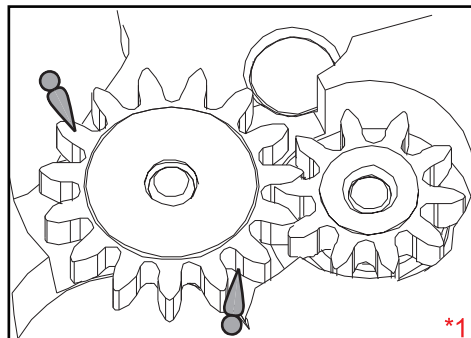
③② BARREL AND TRAIN WHEEL BRIDGE WITH HOLE JEWEL FRAME

Lubricating: Types of oil

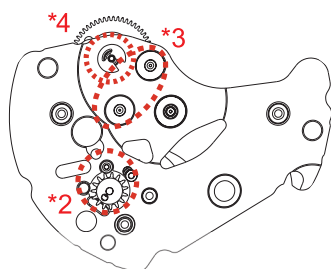
- AO-3 (Moebius A)
- SEIKO Watch Oil S-6
- SEIKO Watch Oil S-4



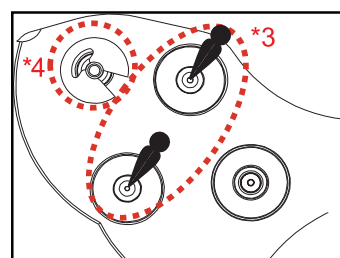
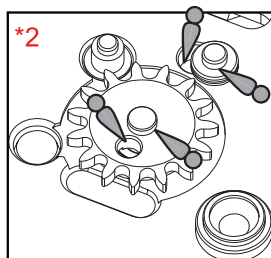
Enlarged view



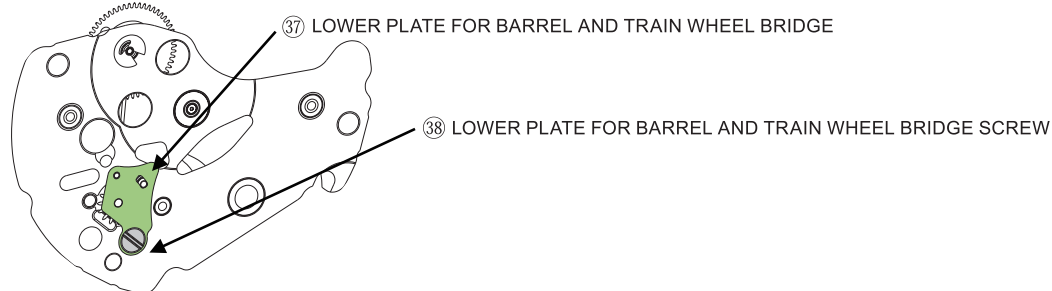
Back side



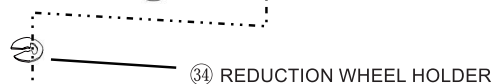
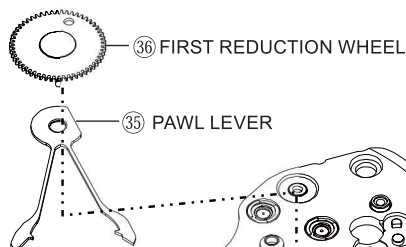
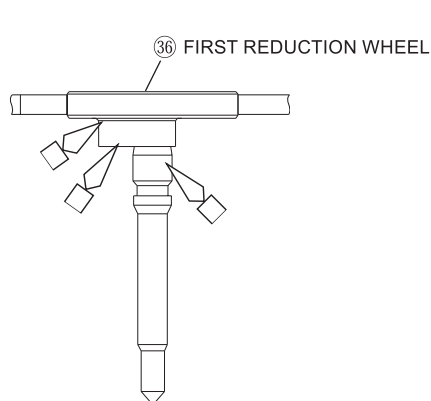
Enlarged view



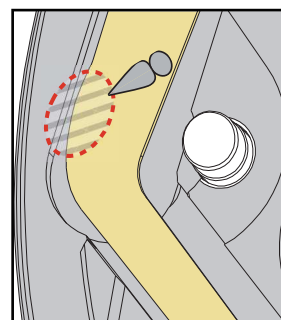
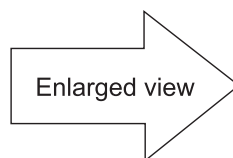
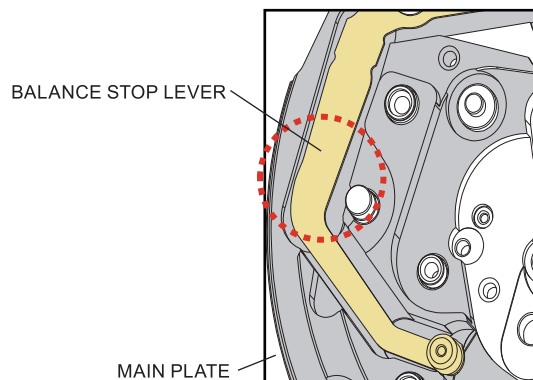
***2** After lubricating, set lower plate for barrel and train wheel bridge & screw.



***4** After lubricating, set First reduction wheel & Pawl lever & Reduction wheel holder.



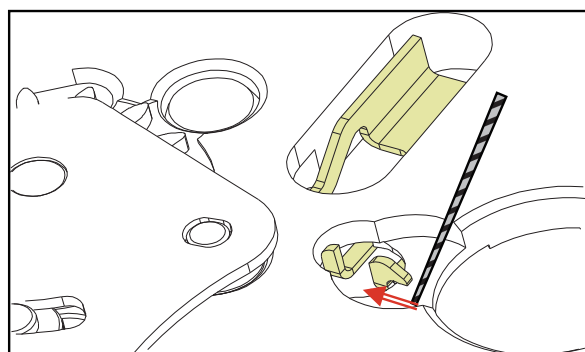
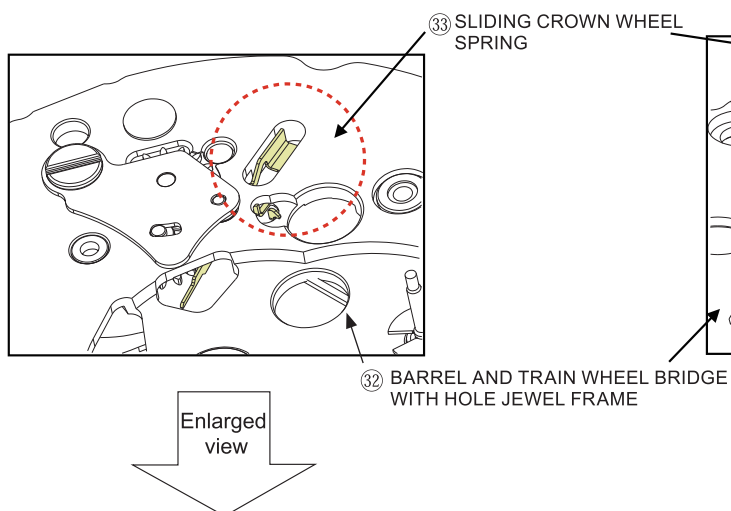
● Balance stop lever



Contact part of main plate and balance stop lever

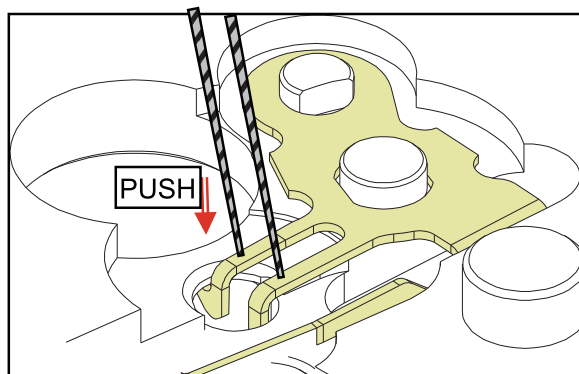
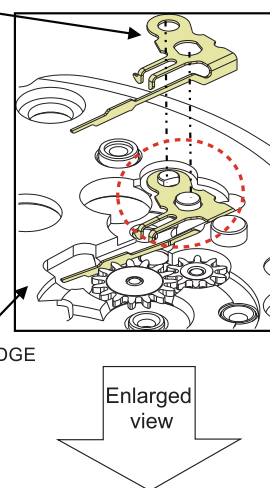
● Sliding crown wheel spring

• Disassembling



Remove the hook of the SLIDING CROWN WHEEL SPRING from BARREL AND TRAIN WHEEL BRIDGE WITH HOLE JEWEL FRAME.

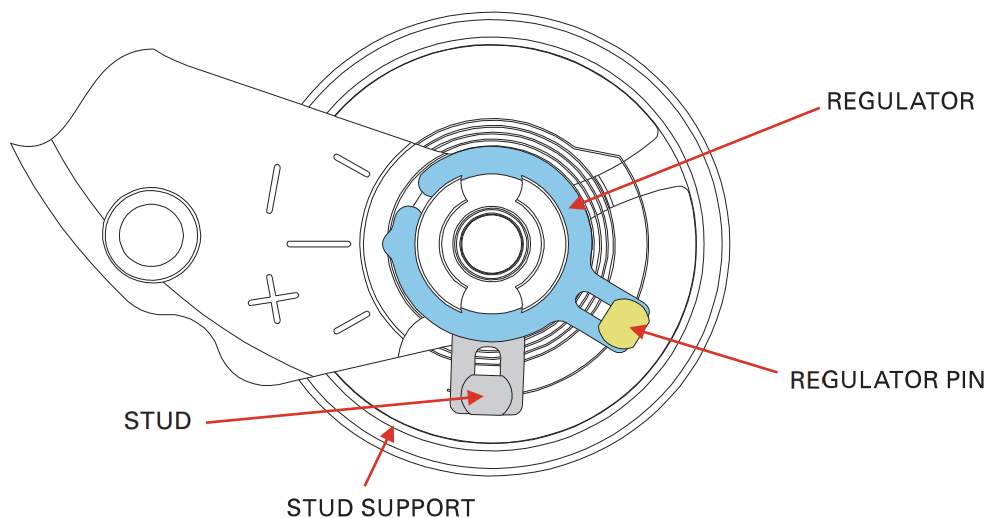
• Reassembling



The hook of SLIDING CROWN WHEEL SPRING is hang up a BARREL AND TRAIN WHEEL BRIDGE WITH HOLE JEWEL FRAME.

REGULATION

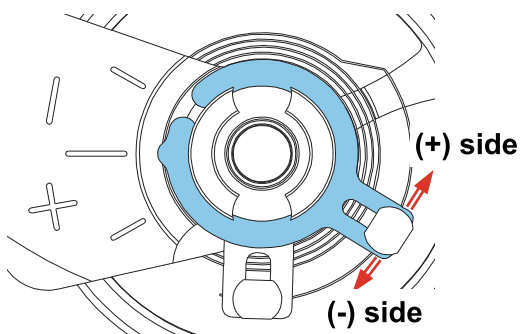
● Names of the parts for regulation and their functions



Note:

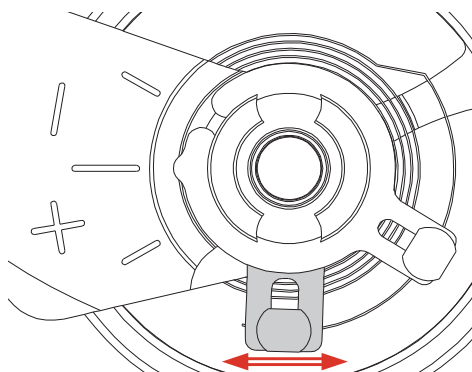
• Regulator

Regulation of the accuracy rate(+) or (-) by adjusting the operative length of the balance-spring



• Stud support

Correction of the beat error by positioning the roller jewel correctly

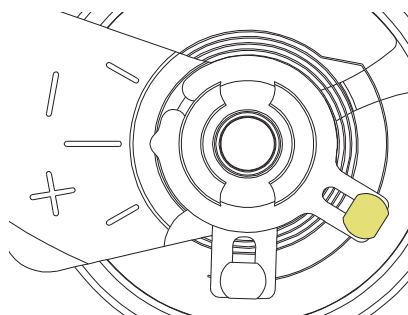


• Stud (glued at the balance-spring)

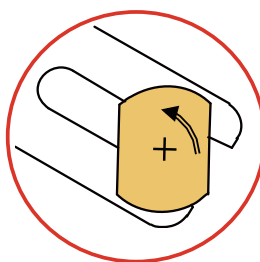
Alignment of the balance-spring to the center of the regulator pin's slit

• Regulator pin

Adjustment of the play of the balance-spring embraced in its slit



Counterclockwise rotation



No clockwise rotation

