

Technical Guide

Prod. by: pelrom

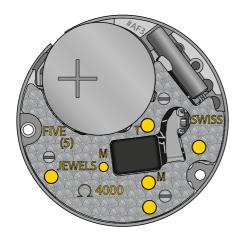
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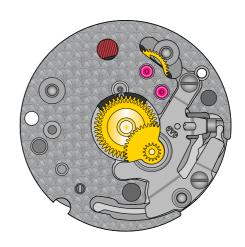
Α

Date: 02.07.2007

CALIBRE 4000

| | Version A Version B | | |
|---------------------|---------------------|--|--|
| 4 7/8''' Ø 11 mm | | | |
| Height on movement | 2.50 mm | | |
| Height on battery | 2.50 mm | | |
| Jewels | 5 | | |
| Version Rohs | no yes | | |





Omega personalised quartz movement, featuring circular graining, rhodium-plating and gilded engraving. Hour hand and minute hand. Rate adjustment by inhibition. Stepper motor, with three impulses per minute.



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Major points

Information on the battery (ref. 9939)

| 1,55 V | «Low Drain» |
|----------------------------|-------------|
| Ø 5,80 mm, | H 1,60 mm |
| Renata | 317 |
| Vartachron | 317 |
| UCAR, Energizer, Ray-O-Vac | 317 |
| Maxell, Sony, Panasonic | SR516SW |

Movement exchange is recommended According to Working Instruction 31. Repair and movement exchange policy.

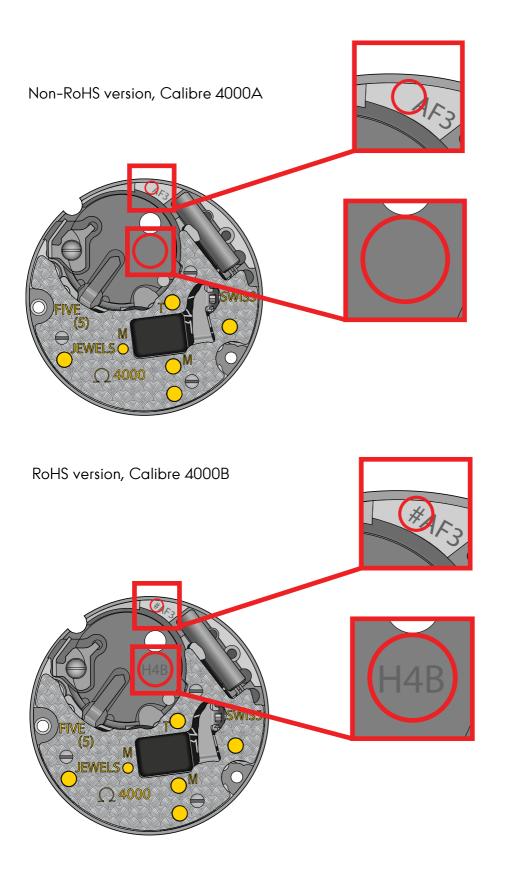
Mandatory tools:

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| Hand fitting Movement holder for hand setting | Ref. 507 0064 |
|--|--------------------------|
| Extracting the work stem Support for extracting push piece Universal movement holder | 506 0024 502 110 4039 |
| Tweezers Plastic tweezers | 502 310 0051 |



Differences between a non-RoHS version and a RoHS version

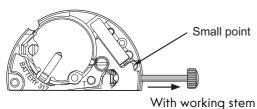




| Hour wheel, assembled | Version | Reference | |
|----------------------------|---------|------------------|--|
| | 4000A | 700 4000 4 055 4 | |
| | 4000B | 7224000A2554 | |
| Battery | Version | Reference | |
| | 4000A | 1449939 | |
| + | 4000B | 1449939 | |
| Battery isolator | Version | Reference | |
| <i>S</i> 1 | 4000A | 7224000A4046 | |
| Car | 4000B | 7224000A4040 | |
| Battery bridle + | Version | Reference | |
| | 4000A | 7224000A20761 | |
| | 4000B | 7224000A20701 | |
| Push-piece stem | Version | Reference | |
| | 4000A | 7224000A954 | |
| Screw for battery bridle + | Version | Reference | |
| *** | 4000A | 7224000A5166 | |
| B B | 4000B | | |



Fig. 1.0



1.0 Extraction of working stem

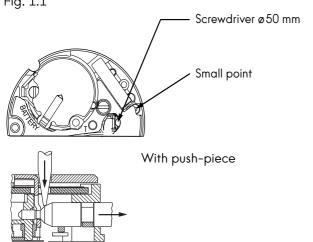
Removing the stem is easier with the support for extraction stem / push piece reference 506 0024.

The dial and hands can be in place when removing the stem with this support.

Procedure:

- 1. Place the movement on top of the support ref. 506 0024, see drawing Fig 1.0.
- 2. Press down on shaft of setting lever with help of a small
- 3. Remove the working stem.

Fig. 1.1



1.1 Extraction of lateral push piece

Procedure with specific supprt:

The advantage of using the specific support for removing the push piece is that the dial and hands can be let in place.

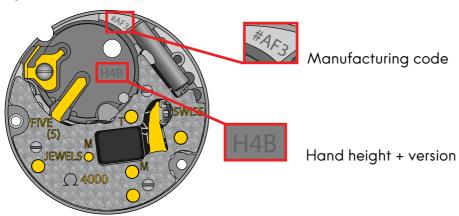
- 1. Place the movement on support ref. 506 0024.
- 2. By pressing down on the movement, the lateral push piece emerges partially and can be extracted using tweezers.

Procedure without specific support:

- 1. Place the movement on top of a universal movement holder ref 502 110 4039, see drawing Fig 1.1.
- 2. By pressing on setting lever shaft and on the lateral push piece dome, the push piece stem emerges partially from the movement and can then be extracted using tweezers.

2.0 Information on height of hands

Fig. 2.0

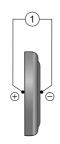


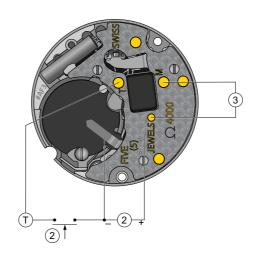
2.1 Runners for hand setting and hand setting force

| Description | Movement holder for hand setting | No of runners for hand setting | Minimum force (N) | Maximum force (N) | Support (jewel) |
|-------------|----------------------------------|--------------------------------|-------------------|-------------------|-----------------|
| Hour hand | 507 0064 | 3 | 8 | 30 | no |
| Minute hand | 307 0004 | 1 | 8 | 30 | no |



3.0 Electrical tests





| Pos. | Setting of apparatus | Measurement | Test | Remarks |
|------|--|---|------------------------------------|---|
| 1 | 2 V (Ri $\geq 10 \text{ k}\Omega / \text{V}$) | 1.55 V | Battery voltage | Measured with battery |
| | 10 μΑ | ≤ 0.35 µA | Movement consumption | Measured without battery, external supply, 1.55 V |
| 2 | 2 V | ≤ 1,30 V Connect the (T) point with the lane (□) to accelerate the wheel train. | Lower limit for operating voltage. | Measured without battery, variable external supply, starting with 1.55V, continually reduce voltage until movement stops. |
| 3 | ● 10 kΩ 1 mA | 0.9 - 1.2 kΩ 165 - 225 μΑ | Coil continuity | U = 0.2 V |

Ohmmeters with measuring voltage greater than 0.40 V inappropriate; recommended voltage 0.20 V. Ambient temperature $20 ^{\circ}\text{C}$.

Rate adjustment by inhibition. The rate can only be measured using an instrument capable of measuring for sixty seconds or multiple times sixty seconds.

The rate must be measured with ambient temperature between $20^{\circ}\,\text{C}$ and $30^{\circ}\,\text{C}$.

