

Venus 230 Movement Parts (1)

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EBAUCHES S.A. NEUCHATEL

SWITZERI AND

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VENUS S. A., MOUTIER

12½" **230**ALERTIC
28 mm

Lever movement, direct sweep second, with:

Alarm device

Caliber with single barrel



Enlarged movement

TECHNICAL AND PRACTICAL COMMUNICATION FOR THE GUIDANCE OF WATCH REPAIRERS



DISASSEMBLING :

- 1. Let down the mainspring as indicated under « Remarks ».
- 2. Remove balance wheel and pallet fork
- Remove winding stem 401 and alarm setting stem 7405; remove casing clamps or case screws (dog screws), and take the movement out of the case.
- 4. Remove hands and dial.
- 5. Remove unlocking wheel holder 7151, then unlocking wheel 7288, friction spring of the unlocking wheel 7315, hour wheel 255, intermediate setting wheel for alarm 7296, intermediate setting yoke for alarm 7308, disconnector spring 7480, disconnector 7459, alarm both 7496, alarm setting connection wheel 7294, intermediate setting yoke spring for alarm 7312, setting lever spring (set bridge) 445, alarm setting lever 7443, alarm setting wheel 7295, and then the ordinary parts of the winding and setting mechanism.
- Remove ratchet wheel 415 (screw with left-hand thread) and, in the following order: barrel arbor wheel for alarm 7202, alarm stop wheel spring 7441, alarm stop wheel 7437, barrel bridge 105, intermediate wheel for alarm 7289, intermediate wheel racker for alarm 7427, rocker spring for intermediate wheel of alarm 7442, alarm hammer 7498 and alarm wheel 7290.
- 7. Dismantle the watch movement proper and clean all its parts in the usual way.

ASSEMBLING:

- 1. Assemble the gear train, then place pallet fork in position (this makes it easier to check the alarm mechanism).
- Fit the barrel, alarm wheel 7290, alarm hammer 7498, rocker spring for intermediate wheel of alarm 7442, intermediate wheel rocker for alarm 7427, intermediate wheel for alarm 7289, setting lever springs 5443 and 57443, and barrel bridge 105.

- Fit barrel arbor wheel for alarm 7202, alarm stop wheel spring 7441, alarm stop wheel 7437, ratchet wheel 415 with its screw, and crown wheel 420 with its screw.
- 4. Fit the parts of the ordinary winding and setting mechanism, then alarm setting wheel 7295, alarm setting stem 7405, alarm setting lever 7443, setting lever spring (set bridge) 445 with its screw 5445, disconnector 5459, disconnector spring 7480, alarm bolt 7496, alarm bolt 7496, alarm bolt 7496, alarm bolt 7496, the 7486, friction spring of unlocking wheel 7315, hour wheel for sweep second 255, unlocking wheel 7288, alarm setting connection wheel 7294, intermediate setting yoke for alarm 7308, intermediate setting wheel for alarm 7296, unlocking wheel holder 7151, intermediate setting yoke spring for alarm 7312 with its screw 57312
- 5. Fit balance wheel, dial and hands, and then place the movement in the case.

REMARKS

1. Adjustment of alarm hammer

To alter the height of stop screw 57498, it is sufficient to loosen set screw 57498/1 and to effect the necessary adjustment. The set screw should then be tightened again.

2. Letting down the mainspring

If the mainspring has to be let down, this can be done in one of two ways:

- a) Remove balance cock, balance wheel and pallet fork, and let the train wheels turn, braking them at the same time.
- b) To let down the spring without dismantling the movement, proceed as follows:
 - Turn the alarm setting knob until the catches of hour wheel 255 fall into the corresponding holes in unlocking wheel 7288. This releases the alarm hammer by the action of disconnector 7459.
 - Wind the watch until stop wheel 7437 clicks. This wheel is just below the ratchet wheel and projects slightly beyond it.
 - With a pair of tweezers, hold the stop wheel in the unlocked position (same operation as in normal letting down), and release the winding crown.
 - 4. Pull out the alarm setting crown, at the same time holding the stop wheel to prevent it from turning. The alarm train is then released, and the mainspring runs down by degrees.

IMPORTANT NOTES

On no account let down the mainspring by means of the pinion of intermediate wheel for alarm 7289. When casing has been done, make certain that the winding stem A is free.

STEM FUNCTIONS



In normal position:

The mainspring of the movement and alarm is wound only when the disk is red.



Setting the watch hands.

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Alarm stem B

In normal position:

The red disk shows that the alarm mechanism is blocked. The alarm hand is moved. The stability of the alarm hand is insured by turning stem B slightly backwards before pulling it out.

Pulled out:

The green disk shows that the alarm mechanism is released and that at the same time the effect of the stems is cancelled as regards the setting of the watch hands. Push back stem B to stop the alarm mechanism.







Description and numbering of spare parts according to the « Technological Dictionary of Watch Parts », 2nd edition.

100 Plate 445 Setting lever spring (set bridge) 7290 Alarm wheel
106 Barrel bridge 450 Setting wheel 3724 Alarm setting connection wheel
110 Train wheel bridge 750 Sexper wheel and pinion with straighl 7255 Alarm setting wheel 3725 Alarm setting

121 Balance cock for flat hairspring private p

Table Casing damp 722 busines with flat managemy, regioner 7315 Friction spring for uncoking wheel 7315 Priction spring for uncoking wheel 7315 Balance self, pivoled 7316 Priction spring for uncoking wheel 7316 Roller 7316 Roller 7317 Mainspring 7317 Mai

55 Hour wheel for sweep second 5125 Pallet cock screw 7480 Disconnector spring 60 Minute wheel 5126 Center wheel cock screw 748 Alarm bolt yoke

101 Regulator for flat hairspring 102 Regulator for flat hairspring 1031 Upper end-piece screw, for balance 103 Upper end-piece screw,

7 Clutch wheel 5443 Setting lever screw 5715 Unlocking wheel holder screw 0 Winding pinion 5445 Screw for setting lever spring 57312 Screw for intermediate setting yoke spring 6 alarm of alarm

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When ordering parts for a shock-protecting device, make certain to specify its exact type. For further details of the description and numbering of spare parts, see the «Technological Dictionary of Watch Parts», 2nd edition, published by Ebauches S. A.