

A COMPANY OF THE SWATCH GROUP

# CALIBRE 625 17.5 T1 PC 17 Jewels

| ø 17.50 mm  |                                 |
|---|---------------------------------|
| Height  | 2.50 mm                         |
| Power-reserve<br>Jewel number<br>Frequency<br>Angle of lift of balance<br>Thread diameter of winding stem | 41 h<br>17<br>21'600 A/h<br>52° |
| Thread diameter of winding stem   | 0.90 mm                         |



modernisation of production methods compels us to hold a constantly changing conception of our calibers. The stability of the new machines allows manufacture of parts never possible to realise previously, though not without imposing new limits which lead us to transform existing movements. In this way, caliber 625 replaces caliber 620. It is a new movement whose parts are not interchangeable with the former one. Alone the exterior dimensions remain unchanged. As far as technical performance is concerned, this has been improved to a marked extent by increase of the frequency and maximalisation of the organs.

# ASSEMBLING

| Op.               | Order of operations   | Part        | Firing dorigo       | Lubrication    |          | Demortes                               |
|-------------------|---|-------------|---------------------|----------------|----------|--|
| No.               |   | No.         | Fixing device       | point          | code     | Remarks                                |
|                   |   |             |                     |                |          |  |
| 1.0               |   |             |                     |                |          |  |
| 1.0.              | WHEEL IKAIN   |             |                     |                |          |  |
| 1.1.              | escape wheel  | 1305        |                     |                |          |  |
| 1.2.              | fourth wheel  | 1243        |                     |                |          |  |
| 1.3.              | third wheel   | 1240        |                     |                |          |  |
| 1.4.              | barrel  | 1200        |                     | bearings       | 1.00     | the spring is self-lubricated          |
|                   |   | 1016        |                     | drum + cover   |          |  |
| 1.5.              | Center wheel  | 1210        | 2 0 0 0 0 0 2 2 9 5 |                |          |  |
| 1.0.              | sheck end-shakes  | 1002        | J SCIEWS 2305       |                |          | $0.02 \pm 0.05 \text{ mm}$             |
|                   |   |             |                     |                |          | 0,02 C0 0,05 mm                        |
| 2.0.              | LUBRI CATION  |             |                     |                |          |  |
|                   | 1 1   | 1           |                     | a              | 1 00     |  |
| $\frac{2.1}{2.1}$ | escape wheel  |             |                     | lower jewei    | 1.02     |  |
| 2.2.              | tourth wheel  |             |                     | lower jewel    | 1.02     |  |
| 2.3.              | harrel  |             |                     | lower nivot    | 1.07     |  |
| 2.4.              | center wheel  |             |                     | lower jewel    | 1.07     |  |
| 2.6.              | escape wheel  |             |                     | upper jewel    | 1.02     |  |
| 2.7.              | fourth wheel  |             |                     | upper jewel    | 1.02     |  |
| 2.8.              | third wheel   | ·   · · · · |                     | upper jewel    | 1.07     | ······································ |
| 2.9.              | barrel  |             |                     | upper pivot    | 1.00     |  |
| 2.10.             | center wheel  |             |                     | upper jewel    | 1.07     |  |
| اا                |   |             | •                   |                |          |  |
| 3.0.              | MECHANISM   |             |                     |                |          |  |
| 3.1.              | cannon pinion   | 1218        |                     | center pinion  |          | see 7.1.0.                             |
| 5.1.              | cannon printon  | 1210        |                     | stem           | 1.07     |  |
| 3.2.              | winding pinion  | 1108        |                     | Breguet        | 1.00     |  |
| 3.3.              | clutch wheel  | 1107        |                     |                |          |  |
| 3.4.              | winding stem  | 1106        | pressure lever      | square + pivot | 1.00     |  |
| 3.5.              | setting lever   | 1109        |                     | function       | 1.00     |  |
| 3.6.              | yoke  | 1111        |                     | 1              |          |  |
| 3.7.              | setting wheel   | 1113        |                     | pivoting       | 1.00     | bevel, underneath                      |
| 3.8.              | minute wheel  | 1246        |                     | pivoting       | 1.00     |  |
| 3.9.              | yoke apring   | 1112        |                     | active-point   | 1.00     |  |
| 3.10.             | setting lever spring  | 1110        | 2 screws 2385       | notches        | 1.00     |  |
| 3.11.             | incabloc in-setting and   | 1341        |                     |                | 1 00     |  |
|                   | cap jewel for balance, lower  | 1342        |                     | cap jewei      | 1.00     |  |
| 4 0               | WINDING WHEEL UPPER   |             |                     |                |          |  |
| <del>4.0.</del>   |   |             | ·                   |                |          |  |
| 4.1.              | crown wheel   | 1101        |                     |                |          |  |
| 4.2.              | crown wheel core  | 1102        | 1 screw 2559        | exterior       | 1.00     |  |
| 4.3.              | click   | 1104        | 1 screw 2559        |                |          |  |
| 4.4.              | click spring  | 1105        | 1                   |                |          |  |
| 4.5.              | ratchet wheel   | 1100        | 1 SCrew 2210        |                |          |  |
| 5.0               | ESCAPEMENT  |             |                     |                |          |  |
|                   |   |             | F                   |                |          |  |
| 5.1.              | pallet fork   | 1316        | 0.000               | pallets        | 1.06     |  |
| 5.2.              | pallet cock   | 1005        | 2 screws 218/       |                |          | 0.01.0.00                              |
| 5.3.              | cneck end-snakes  |             | l                   | L              | L        | U,UL TO U,US mm                        |
| 6.0               | AD THSTMENT   |             |                     |                |          |  |
| 0.0.              | страницарания с страницарание с страницарание с страницарание с страницарание с страние с страние с страние с с |             |                     | •              |          |  |
| 6.1.              | regulator assembly  |             |                     | <u></u>        |          | see 6.1.0.                             |
| 6.2.              | incabloc in-setting and   | 1341        |                     | cap jewel      | 1.02     |  |
|                   | cap jewel for balance, upper  | 1343        |                     |                |          |  |
| 6.3.              | fix balance to balance cock   |             | 1 screw 2595        |                |          | see 6.3.0.                             |
| 6.4.              | balance cock mounted  |             | 1 screw 2385        |                | <u> </u> | 0.01 to 0.02                           |
| 6.5.              | cneck end-shakes  |             |                     | +              | <u> </u> | U,UI TO U,U3 mm                        |
| 0.0.              | nairspring-setting  |             | L                   | L              | <u>I</u> |  |
| 7.0.              | EXTERIOR  |             |                     |                |          |  |
| 7.1               | hour wheel  | 1231        | T                   | 1              |          | see 7.1.0.                             |
| 7.2               | dial  |             | 1                   | 1              | +        | see 7.2.0.                             |
| 7.3.              | hands   |             |                     |                |          |  |
| 7.4.              | casing-up   |             |                     | 1              |          | position of fixing clamps              |
|                   | ~ .   |             |                     |                |          | different to that for cal.620          |

#### 1.6.0.

This movement possesses one bridge only which covers both the wheel train and barrel.

Fitting of this part is easily effected; the very lowplaced center of gravity of the wheels causes the pinions to be perpendicular to the plate prior to fitting of the bridge.

#### 6.1.0. REGULATOR ASSEMBLY

Shocks to which the movements are submitted sometimes result in displacement of the regulator. The fixing principle adopted for the regulator assembly in this caliber has the advantage of increasing the contact surfaces, producing a lateral grip as well as a new vertical grip. Friction thus being increased, the risks of accidental displacement of the regulator are considerably reduced.



#### 6.3.0. PINNING-UP TO THE STUD

The modern method which consists in fixing the hairspring to the stud by glueing provides two major advantages as far as quality of adjustment is concerned:

A blade fixed by means of a pin is deformed in its section; obliged to follow the curve of the hole, it no longer offers the initial physical conditions at the point where imbedded.

The glueing process, on the contrary fixes the hairspring with care and constitutes an ideal setting point.





The blade of the hairspring is not subjected to any mechanical coercion during the glueing operation. Having thus retained its natural position, the hairspring maintains both its flat and centering without any correction being necessary.







H1



H2

### 7.1.0.

Indication of the hand-fitting height is found on the hour wheel; circular grooves are made on its top, and the number of these grooves designates the respective hand-fitting height.

## 7.2.0.

The dial holders consist of pieces of plastic driven onto the dial feet. Their special shape produces a grip when the feet are inserted in the holes of the plate.

