EMMYWATCH

VINTAGE RESTORATIONS

Longines 761.2 Movement Parts (1)

Compiled by EmmyWatch - https://www.emmywatch.com

Maintenance Manual

No. 30

Calibre L761.2

LONGINES

Calibre L761.2

Electronic quartz controlled

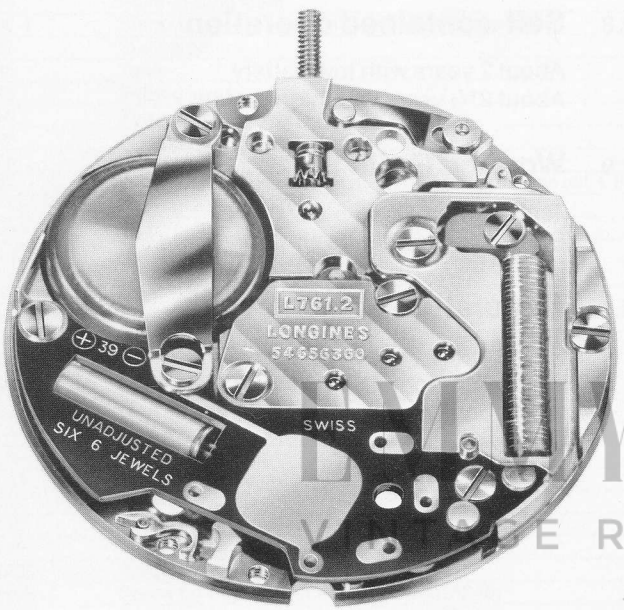
Without second

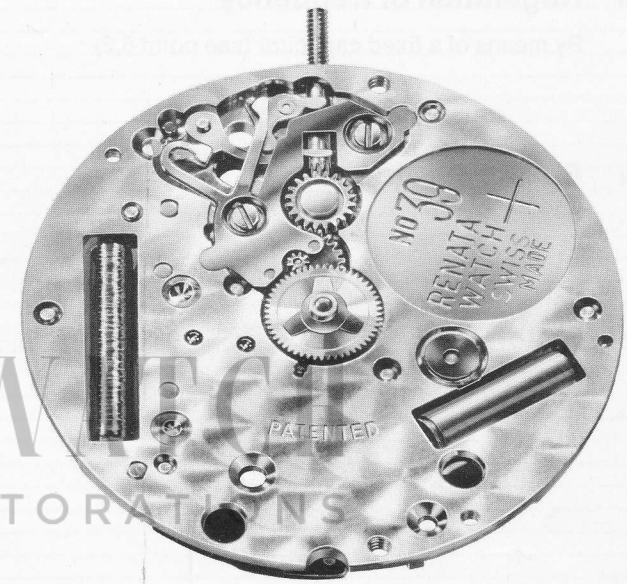
6 jewels

Round 9‴ movement

Analog display

Stepping motor





1. Presentation

This quartz calibre is one of the flattest in its category. In spite of its thinness, it incorporates the latest theoretical and technological concepts in the matter of electronic horology, and particularly:

– A bipolar rotary stepping motor, LAVET type, insensitive to the accelerations which occur in wear.

– A quartz oscillator 32768 Hz, tuning-fork type, offering maximum resistance to the influence of shocks.

– The movement is supplied by a silver-oxide battery of 1.55 V.
Depending on the models, it may be:

  – a battery of 15 mAh ensuring self-contained operation of the watch for about 2 years (low battery),

  – or a battery of 19 mAh ensuring self-contained operation of the watch for about 2 1/2 years (high battery).

Technical characteristics and performances

Casing

Diameter	20.40 mm
Height on movement	1.50 mm
Height on battery clamp:	
– with low battery	1.63 mm
– with high battery	1.83 mm

Time base

Quartz oscillator, tuning-fork type, frequency 32 768 Hz

Regulation of frequency

By means of a fixed capacitor (see point 6.2)

Electronic circuit

Integrated CMOS

Motor

Bipolar rotary stepping motor, LAVET type.

2.6 Power supply

– either by silver-oxide battery Ag_2O – 1.55 V – of 15 mAh (**low** battery)

diameter	7.90 mm
thickness	1.40 mm

RENATA 39

– or by a silver-oxide battery Ag_2O – 1.55 V – of 19 mAh (**high** battery)

diameter	7.90 mm
thickness	1.60 mm

RENATA 40 – VARTA 530 – UCAR 315

2.7 Power consumption

$\leq$0.75 µA at 1.55 volt

2.8 Self-contained operation

About 2 years with low battery
About 2 1/2 years with high battery

2.9 Working limits

Temperature: 0° to +50°C
Shocks: according to NIHS standard 91-10

2.10 Regulation

Rate adjustable between ±0.50 s/d at 25°C, corresponding to a maximum variation of about 20 seconds per month.

Instructions for use and recommendations

Hand-setting

By turning the setting stem in the extended position. When it is pushed in, the stem has no specific function.

Stocking of watches

If watches have been in stock for more than 6 months, it is advisable to fit a new battery at the time of sale.

Stocking and handling of batteries

The original spare batteries (see point 2.6) can be obtained from the general agent or ordered directly from LONGINES S.A., CH-2610 St-Imier. They should be stocked at a temperature not exceeding 20 ±5°C (68 ±9°F).

The degree of humidity should be lower than 60% and the stocking period is limited to one year.

Do not handle batteries with metal tweezers (risk of short-circuiting) but only with tweezers made of plastic material or covered with an insulating sheath.

3.4 Exposure to magnetic fields

Watches and movements should not be deliberately exposed to powerful magnetic fields. They must on any account be demagnetized in the apparatus obtainable on the market.

4. List of components

No.	Designation
100	Main plate
110	Train-wheel bridge
144	Dial-fastener
163.0	Cannon-pinion stud short Ht = 1.60 mm (for cannon-pinion height .0 and .1)
163.2	Cannon-pinion stud long Ht = 2.04 mm (for cannon-pinion height .2, .3 and .4)
203	Intermediate wheel
210	Third wheel
242.0	Cannon pinion with driving wheel Ht = 1.31 mm
242.1	Cannon pinion with driving wheel Ht = 1.53 mm
242.2	Cannon pinion with driving wheel Ht = 1.74 mm
242.3	Cannon pinion with driving wheel Ht = 1.99 mm
242.4	Cannon pinion with driving wheel Ht = 2.29 mm
250.0	Hour wheel Ht = 0.59 mm
250.1	Hour wheel Ht = 0.69 mm
250.2	Hour wheel Ht = 0.95 mm
250.3	Hour wheel Ht = 1.15 mm
250.4	Hour wheel Ht = 1.45 mm
260	Minute wheel
405	Hand-setting stem
405.4	Stem for water-resistant case (movement portion)
407	Sliding pinion
435	Yoke
443	Setting lever
445	Setting-lever jumper
450	Setting wheel
479	Setting lever spring
963	Stem for water-resistant case (crown portion – as cal. L 890)
2714	Setting-wheel corrector stud
4000	Electronic module
4038	Upper magnetic screen
4145	Insulating disc
4211	Mounted rotor
4401	Positive battery clamp
4402.2	Negative battery clamp, low (battery 7.9 mm × 1.4 mm)
4402.4	Negative battery clamp, high (battery 7.9 mm × 1.6 mm)
4929.2	Low battery (7.9 mm × 1.4 mm)
4929.4	High battery (7.9 mm × 1.6 mm)
5101	Case screw (1071.42)
5102	Water-resistant case screw (1071.43)
5103	Case screw "Capofix" (1071.49) Lt = 2.09 mm
5104	Case screw "Capofix" (1071.53) Lt = 3.00 mm
5110	Screw for train-wheel bridge (1071.48)
5445	Screw for setting-lever jumper (1060.97)
54000	Screw for electronic module (1071.48)
54038	Screw for upper magnetic screen (1071.48)
54402	Screw for negative battery clamp (1071.48)
54402.1	Shouldered flat head screw for negative battery clamp (1081.15)