Maintenance Manual No. 12

Caliber L 817.4

LONGINES

Caliber L 817.4

Without second

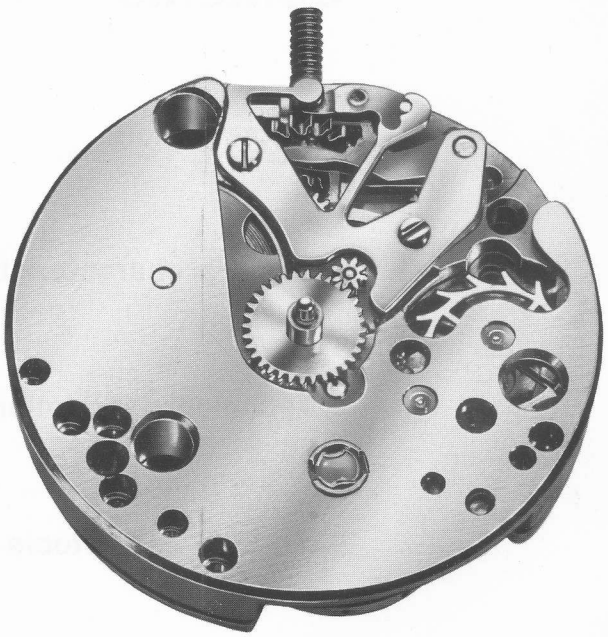
17 jewels

Round 6 3/4''' movement

Hand winding

Lever escapement

21,600 vibrations per hour



1. Presentation

This movement is an improved version of our caliber 460, from which it differs in so far as it incorporates a certain number of functional improvements including, in particular, the addition of a micrometer-screw rate-adjustment system of the "Triovis" type.

2. General characteristics

2.1 Casing

Diameter	15.30 mm
Overall height	2.90 mm

2.2 Balance

Annular, screwless
Protected by shock-absorber system
Lift angle 51°

2.3 Hairspring

Non-magnetic
Self-compensating

2.4 Mainspring

Stainless
Self-lubricated

2.5 Run reserve

44 hours

2.6 Rate adjustment

Triovis system

3. Technical description and instructions

3.1 Motor organ

The barrel cover is marked «Mainspring self-lubricated". The self-lubricated, practically unbreakable mainspring of stainless alloy requires no attention. In case of damage, the motor organ should be replaced with a complete barrel supplied by the factory (reference No. L 817.4 – 180/1).

3.2 Transmission organ

The train consists of four wheels with their pinions, all running in jewel bearings.

3.3 Escapement

The escapement is of the standard lever type. The steel escape wheel has 15 teeth.

3.4 Regulating organ

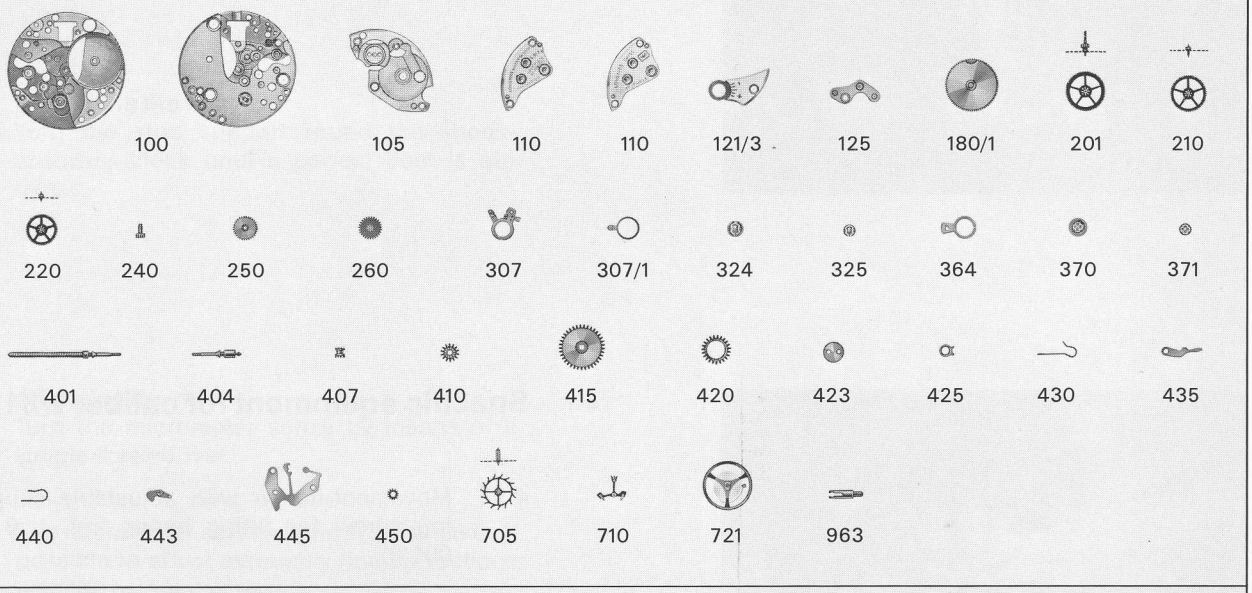
The screwless monometal balance, coupled with a selfcompensating hairspring which is insensitive to variations of temperature and ordinary magnetic fields, ensures an excellent rate in actual wear. The balance pivots are protected by a shock-absorber system. The rate is adjusted by means of a Triovis device (see section 5).

3.5 Winding and hand-setting mechanism

The winding and setting functions are performed by a mechanism of the standard type. The winding-stem can be extracted by simply pressing the setting-lever axle. To replace it, simply press the crown.

3.6 Table of components, showing concordances

No.	460	L 817.4	Designation
100	X		Main plate
100		X	Main plate
105	X	X	Barrel bridge
110	X		Train-wheel bridge
110		X	Train-wheel bridge
121/3	X	X	Balance cock
125	X	X	Pallet cock
180/1	X	X	Barrel, complete (with mainspring)
201	X	X	Center wheel
210	X	X	Third wheel
220	X	X	Second wheel, short pivot
240.1	X	X	Indented cannon pinion, ht 185
240.2	X	X	Indented cannon pinion, ht 205
240.4	X	X	Indented cannon pinion, ht 245
250.1	X	X	Hour wheel, ht 92
250.2	X	X	Hour wheel, ht 112
250.4	X	X	Hour wheel, ht 152
260	X	X	Minute wheel
307		X	Triovis device, complete
307/1	X		Regulator for adjustable stud support, flat hairspring
324		X	Upper "Incabloc"
325		X	Lower "Incabloc"
364	X		Stud support for flat hairspring
370	X		Upper "Kif"
371	X		Lower "Kif"
401	X	X	Winding-stem
404	X	X	Stem for water-resistant case (movement portion)
407	X	X	Sliding pinion
410	X	X	Winding-pinion
415	X	X	Ratchet wheel
420	X	X	Crown wheel
423	X	X	Crown-wheel core
425	X	X	Click
430	X	X	Click spring
435	X	X	Yoke
440	X	X	Yoke spring
443	X	X	Setting-lever
445	X	X	Setting-lever spring
450	X	X	Setting-wheel
705	X	X	Escape wheel
710	X	X	Pallets, assembled
721	X		Balance with flat hairspring
721		X	Balance with flat hairspring
963	X	X	Stem for water-resistant case (crown portion)
5101	X	X	Case screw (1050.53)
5105	X	X	Barrel-bridge screw (1060.49)
5110	X	X	Screw for train-wheel bridge (1060.49)
5121/3	X	X	Balance-cock screw (1060.49)
5125	X	X	Pallet-cock screw (1060.50)
5415	X	X	Ratchet-wheel screw (16050.0)
5423	X	X	Screw for crown-wheel core (1050.54)
5425	X	X	Click screw (1060.51)
5445	X	X	Screw for setting-lever spring (1050.55)
5738		X	Stud screw (1040.38)
5738/1	X		Stud screw (1040.19)
5750	X	X	Dial screw (1050.56)
601	X	X	Center-wheel jewel, upper (202501)
602	X	X	Center-wheel jewel, lower (204130)
605	X	X	Third-wheel jewel, upper (201213)
606	X	X	Third-wheel jewel, lower (201203)
610	X	X	Second-wheel jewel, upper (201213)
611	X	X	Second-wheel jewel, lower (201203)
615	X	X	Escape-wheel jewel, upper (201011)
616	X	X	Escape-wheel jewel, lower (201005)
620	X	X	Pallet-staff jewel, upper (201002)
621	X	X	Pallet-staff jewel, lower (201005)



105053 (5101)	106049 (5105) (5110) (5121/3)	106050 (5125)	160500 (5415)	105054 (5423)	106051 (5425)	105055 (5445)	104038 (5738)	104019 (5738/1)	105056 (5750)
202501 (601)	204130 (602)	201213 (605)	201203 (606)	201213 (610)	201203 (611)	201011 (615)	201005 (616)	201002 (620)	201005 (621)