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LE LANDERON
 BRANCH OF FONTAINEMELON WATCH FACTORY
 LE LANDERON

13 $\frac{3}{4}$ '''	185
13 $\frac{3}{4}$ '''	186
31 mm	

Recording chronograph with adjustable hammer and minute hand and :

Calendar device (cal. 185)

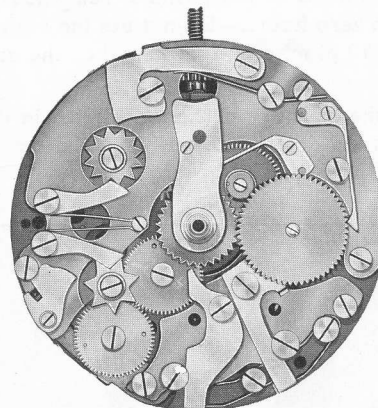
Calendar and moon phase device (cal. 186)



Cal. 148, 185, 186



Cal. 185



Cal. 186

Enlarged movements

TECHNICAL AND PRACTICAL COMMUNICATION FOR THE GUIDANCE OF WATCH REPAIRERS

Recording chronograph with adjustable hammer and minute heart, and calendar device

13 3/4" 185

Chronograph 185 is the same as caliber 148 (see Technical Communication No. 9), with the addition of a calendar device.

DISASSEMBLING :

To gain access to the calendar device, it is necessary first of all to go through operations 1 to 6 for disassembling the chronograph mechanism (see under cal. 148), after which the device can be disassembled easily. Check cleanness and wear of all parts.

ASSEMBLING :

The device is equally easy to assemble, but the following special points should be taken into account: day star driving wheel 2560 (see diagram) should be placed with its pin F on the line joining the center of the movement and the center of the wheel. Date star driving wheel 2556 should be be placed with its large hole G on the line joining the center of the movement and the center of the wheel.

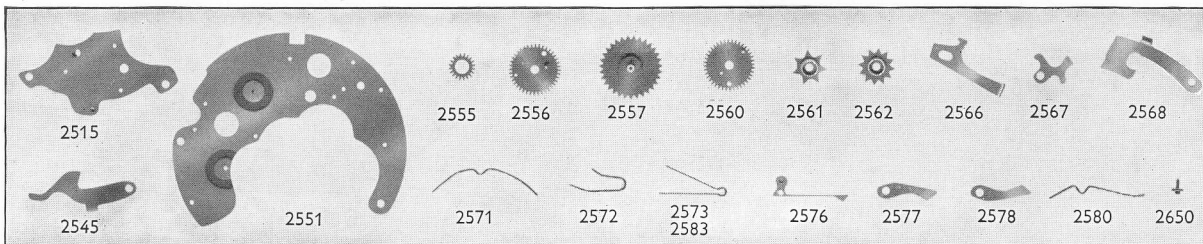
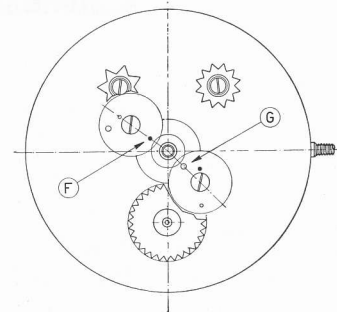
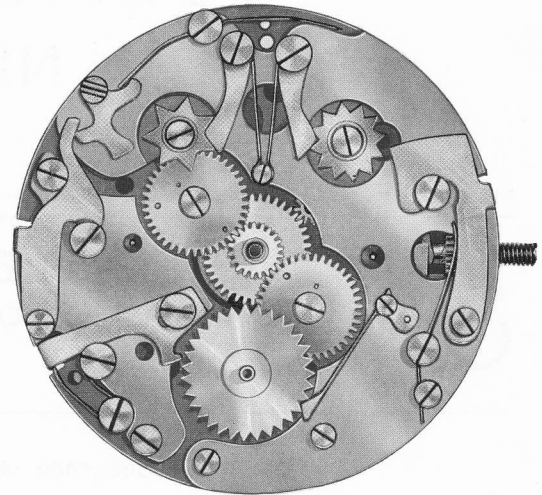
CHECKING AND LUBRICATION :

Check the working by means of the correctors and slightly grease the set screws of the latter.

WORKING AND SETTING OF CALENDAR :

After having fitted the dial, turn the winding stem until the day disk jumps forward; fit the date hand, then the hour and minute hands, making sure that they point to 12, and lastly the second hand; then, with the hammer pressed against the hearts by means of the zero action pusher, fit the sweep second hand and the minute-recording hand. Set the watch to the correct time, then set the calendar to the correct date by means of the pushers, remembering that the hands have been set to zero hours. Do not use the pushers to work the calendar between 10 p. m. and 2 a. m., when the automatic "jumping" takes place.

In this caliber, the calendar pushers are fitted in the side of the case; pusher A works the date hand, pusher B the day disk and pusher C the month disk.



- 2515 Additional calendar plate
- 2545 Day corrector lever
- 2551 Calendar plate
- 2555 Calendar driving wheel
- 2556 Date star driving wheel
- 2557 Date star
- 2560 Day star driving wheel

- 2561 Day star
- 2562 Month star
- 2566 Date corrector
- 2567 Day corrector
- 2568 Month corrector
- 2571 Day corrector spring
- 2572 Date corrector spring
- (2573/2583 Spring with 2 functions)

- 2573 Day jumper spring
- 2576 Date jumper
- 2577 Day jumper
- 2578 Month jumper
- 2580 Month corrector spring
- 2583 Month jumper spring
- 2650 Date star stud

On page 4 of this leaflet it is shown how the parts of the movement, chronograph mechanism and calendar device correspond. There is also an illustration showing the screws of the calendar device, on the same page.

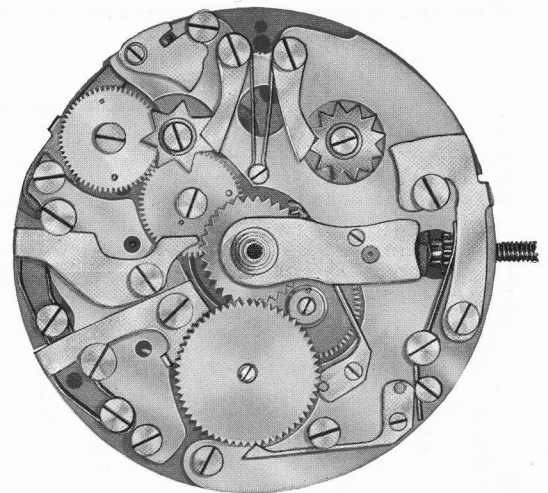
Recording chronograph with adjustable hammer and minute heart, and calendar and moon phase devices

13 3/4" 186

Chronograph 186 is the same as caliber 148 (see Technical Communication No. 9), with the addition of calendar and moon phase devices.

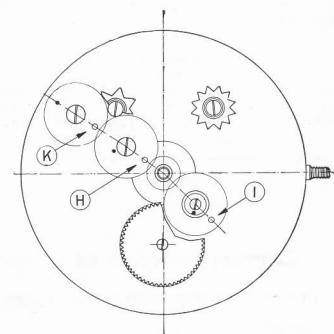
DISASSEMBLING :

To gain access to the calendar and moon phase devices, it is necessary first of all to go through operations 1 to 6 for disassembling the chronograph mechanism (see under cal. 148), after which the moon phase device can be disassembled easily. Check cleanness and wear of all parts.



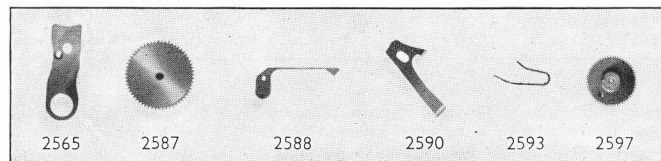
ASSEMBLING :

The device is equally easy to assemble, but the following special points should be taken into account: date star driving wheel 2556 (see diagram) should be placed with its mark H on the line joining the center of the movement and the center of the wheel. It is advisable to make moon phase star 2587 jump forward about 12 hours after the "jumping" of the calendar stars occurs, so as to reduce the resistance of the gears concerned. To do this, place moon phase star driving wheel 2597 with its mark I on the extension of the line joining the center of the movement and the center of the wheel. Then place day star driving wheel 2560 with its mark K on the line joining the center of the movement and the center of the wheel.



CHECKING AND LUBRICATION, WORKING AND SETTING OF CALENDAR AND MOON PHASE DEVICES :

As for caliber 185. Any almanac will show the phase of the moon at the time of setting. Pusher D works the moon phase disk. Do not use the pusher to work the moon phase disk between 10 a. m. and 2 p. m., when the automatic "jumping" takes place.



2565 Date star bridge
2587 Moon phase star
2588 Moon phase jumper

2590 Moon phase corrector
2593 Moon phase corrector spring
2597 Moon phase star driving wheel

On page 4 of this leaflet it is shown how the parts of the movement, chronograph mechanism and calendar and moon phase devices correspond. There is also an illustration showing the screws of the moon phase device, on the same page.

Correspondence of parts and screws of movement, chronograph mechanism and calendar and moon phase devices of calibers 48 (Technical Communication No. 1), 148 (Technical Communication No. 9), 185 and 186.

(Parts used in former types of caliber 48 (Technical Communication No. 1) have not been included in the following table.)

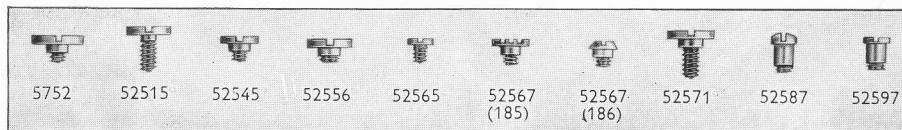
Correspondence of parts of the 4 calibers.

Ex. Plate 100 is identical in calibers 48 and 148 ; on the other hand, special types are made for calibers 185 and 186. Balance cock 121 is identical in the 4 calibers. Additional calendar plate 2515 is not used in calibers 48 and 148, but special types are made for calibers 185 and 186. It should also be noted that certain parts have two functions, for instance operating lever spring 8335, which also acts as fly-back lever spring 8340.

	100	106	118	121	125	180	195	206	210	225	245	255	260	301	311	330	401	407	410	415	420	423	425
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
148	48	148	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
185	185	185	185	48	48	48	48	48	48	185	185	185	48	48	48	48	48	48	48	48	48	48	48
186	186	185	186	48	48	48	48	48	48	186	186	186	48	48	48	48	48	48	48	48	48	48	48
	430	435	440	443	445	450	705	710	714	721	723	730	770	2515	2545	2551	2555	2556	2557	2560	2561	2562	2565
48	48	48	48	48	48	48	48	48	48	48	48	48	48	—	—	—	—	—	—	—	—	—	—
148	48	48	48	48	48	48	48	48	48	48	48	48	48	—	—	—	—	—	—	—	—	—	—
185	48	48	48	48	48	48	48	48	48	48	48	48	48	185	185	185	185	185	185	185	185	185	185
186	48	48	48	48	48	48	48	48	48	48	48	48	48	186	186	186	186	186	186	186	186	185	186
	2566	2567	2568	2571	2572	2573	2576	2577	2578	2580	2583	2587	2588	2590	2593	2597	2650	8000	8020	8040	8060	8080	8100
48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	48	48	48	48	48
148	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	48	48	48	48	48
185	185	185	185	185	185	185	185	185	185	185	185	185	185	—	—	—	—	—	185	185	185	185	185
186	186	186	185	186	185	185	186	186	185	185	185	186	186	186	186	186	—	186	186	186	186	186	186
	8120	8139	8146	8147	8180	8220	8221	8270	8290	8320	8325	8335	8340	8350	8356	8400	8401	8403	8404	8405	8406	8407	8500
48	48	48	—	—	48	48	48	48	48	48	48	—	48	48	—	48	48	48	48	48	48	48	48
148	48	148	148	148	148	148	48	48	48	48	48	148	148	—	148	48	48	48	48	148	48	48	48
185	48	148	148	148	148	148	48	48	48	48	48	148	148	—	148	48	48	48	48	148	48	48	48
186	48	148	148	148	148	148	48	48	48	48	48	148	148	—	148	48	48	48	48	148	48	48	48

Correspondence of screws of calendar and moon phase devices of calibers 185 and 186.

The screws in the movement and chronograph mechanism, shown in Technical Communication No. 1 (cal. 48), are identical in the 4 calibers.



5752 Banking screw for dial - 52515 Screw for additional calendar plate - 52545 Day corrector lever screw - 52545¹ Safety screw for day corrector lever - 52551 Calendar plate screw - 52556 Date star driving wheel screw - 52560 Day star driving wheel screw - 52561 Day star screw - 52562 Month star screw - 52565 Date star bridge screw - 52566 Date corrector screw - 52567 Day corrector screw - 52568 Month corrector screw - 52568¹ Safety screw for month corrector - 52571 Screw for day corrector spring - 52572 Screw for date corrector spring - 52573 Screw for day jumper spring - 52576 Date jumper screw - 52577 Day jumper screw - 52578 Month jumper screw - 52580 Screw for month corrector spring - 52580¹ Banking screw for month corrector spring - 52583 Screw for month jumper spring - 52587 Moon phase star screw - 52588 Moon phase jumper screw - 52588¹ Safety screw for moon phase jumper - 52590 Moon phase corrector screw - 52590¹ Safety screw for moon phase corrector - 52593 Screw for moon phase corrector spring - 52597 Moon phase star driving wheel screw.

	5752	52515	52545	52545 ¹	52551	52556	52560	52561	52562	52565	52566	52567	52568	52568 ¹	52571
185	185 (1)	185 (3)	185 (2)	185 (1)	185 (3)	185 (6)	185 (6)	185 (2)	185 (2)	—	185 (1)	185	185 (2)	185 (1)	185 (5)
186	—	185 (3)	—	—	185 (3)	185 (6)	185 (6)	185 (2)	185 (2)	186 (4)	185 (1)	186	185 (2)	185 (1)	—
	52572	52573	52576	52577	52578	52580	52580 ¹	52583	52587	52588	52588 ¹	52590	52590 ¹	52593	52597
185	185 (5)	185 (4)	185 (4)	185 (1)	185 (1)	185 (5)	185 (2)	185 (4)	—	—	—	—	—	—	—
186	185 (5)	185 (4)	185 (4)	185 (1)	185 (1)	185 (5)	185 (2)	185 (4)	186	186 (4)	186 (1)	186 (1)	186 (1)	186 (5)	186

The above table is arranged in exactly the same way as the table of parts given above ; however, certain screws, identical in 2 calibers, are also identical with certain other screws ; this is indicated by a number between brackets, placed after the caliber number, e.g. screw 52515 is identical with screw 52551, as the same number (3) appears after the caliber number.

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 Technical Communications Nos 1 (Landeron, cal. 48) and 9 (Landeron, cal. 148), or the "Technological Dictionary of Watch Paris", 2nd edition, published by Ebauches S. A.

Order repair parts through your jobber, giving the numbers and designations, thus insuring prompt and efficient deliveries.