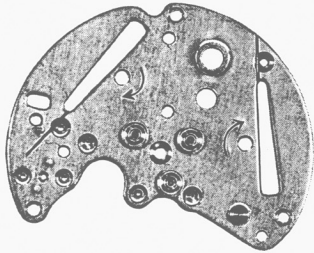


Cal. 245

LE COULTRE

Fournitures spéciales

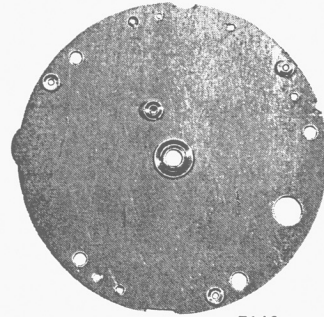
Special parts



106



461



7146

106 ¾ platine
Important: préciser exécution pour mouvement 7 ou 15 pierres

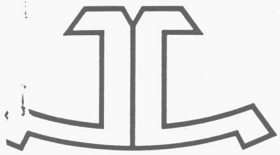
461 Ressort de bascule de roue de couronne
7146 Couvre-platine dessous

106 ¾-plate bridge
Important: state the movement has 7 or 15 jewels

461 Crown wheel rocker spring
7146 Lower plate cover

Pour toutes les autres fournitures du cal. 245, consulter les pages 3, 4 et 5.

For all the other parts of caliber 245, see the pages 3, 4 and 5.



JAEGER-LECOULTRE

Repair notes

Calibre 240

Automatic 8 days alarm "Recital"

Calibre 245

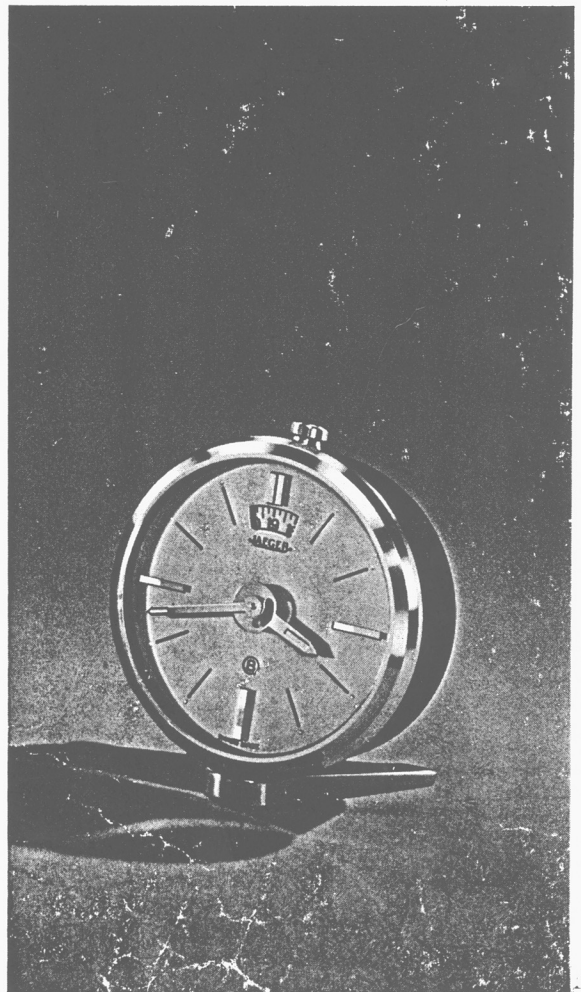
8-day table clock

Cal. 240 and 245

- Ten days minimum reserve of going time.

Cal. 240

- Movement and alarm wound by single key.
- Automatic alarm ringing every 24 hours.
- Power reserve for 14 ten-second rings.
- Facility on certain models for stopping alarm instantaneously by hand, with automatic release for the next alarm ring.
- Means of stopping automatic alarm ringing for an indefinite period.



Calibres 240 and 245

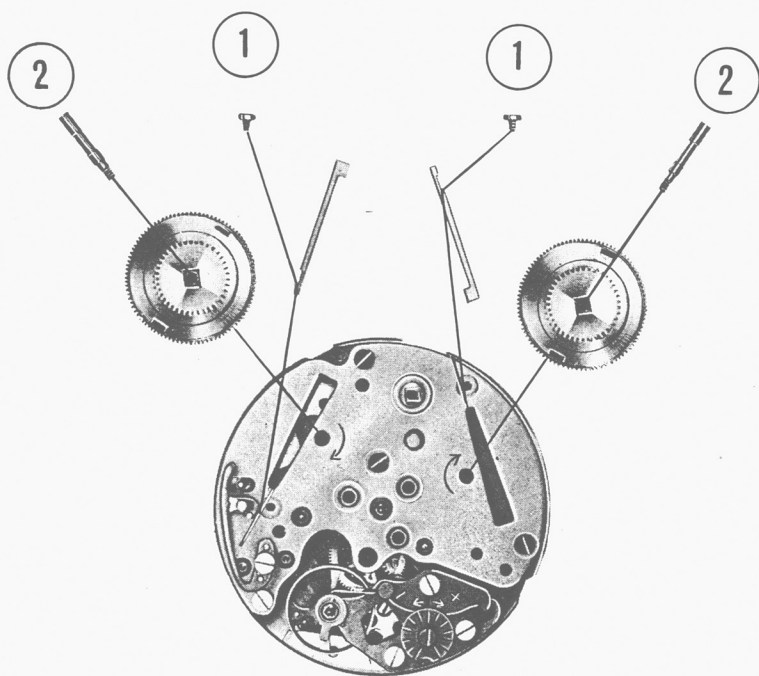
Characteristics

Dimensions:

Plate diameter: 42.90 mm
Bell diameter: 43.40 mm
Total height over bridges: 14.50 mm
Total height over bell: 16.30 mm

Movement:

8 days. Effective reserve of going time: more than 10 days.
Special design giving rational utilisation of small volume movement.



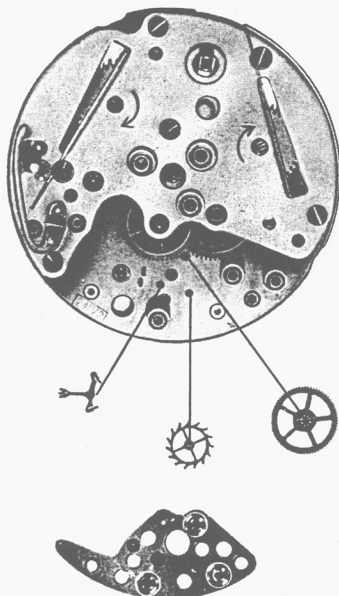
Winding mechanism:

A single key enables both barrels to be wound; in one direction the barrel for the going part of the movement is wound, while the other is the alarm barrel (Cal. 240). This key is particularly robust; it is located well away from the centre of the bell, which avoids any accidental displacement of the hands during winding.

The barrels:

A very simple device enables both barrels to be removed easily from the movement **without dismantling the wheel trains.**

- ① Let down the barrel and take out the clicking-spring.
- ② Undo the barrel axle screw (left-hand thread). Remove the barrel sideways.



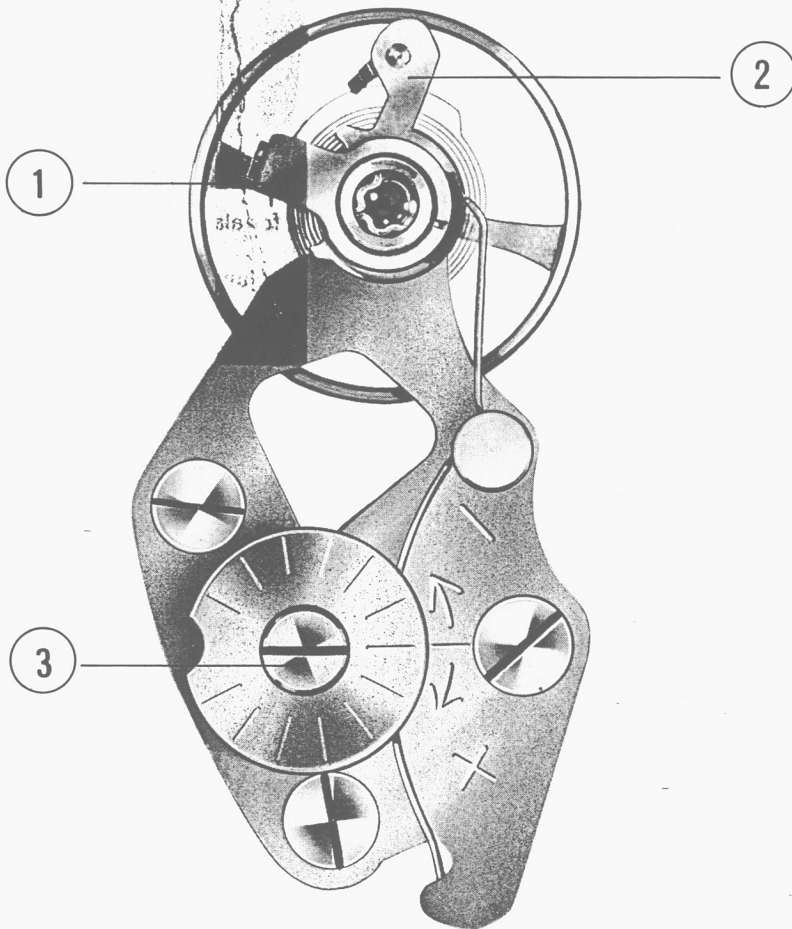
Escapement

The fourth wheel and the escapement (wheel and pallets) can be dismantled independently of the barrels and alarm mechanism, enabling this part to be serviced quickly.

The pallet frame is made of a special light alloy—to the best of our knowledge, for the first time—leading to improved efficiency owing to considerable reduction in its inertia.

Calibres 240 and 245

Balance, balance spring and regulator contain important new features:



The balance

This is of large diameter, without screws, and ensures a high rate of stability.

Balance jewellery

This consists of "Duofix" units, both being removable from the bridge side of the movement. In this way, it is possible to clean rapidly the "Duofix" which is pressed into the plate without removing the dial.

The regulator:

This has been specially designed to improve the performance of the balance and spring.

- Regulator pin replaced by special spring support eliminating isochronal errors present in conventional regulators.
- Outer spring termination by clamping in "Spirotor" spring carrier—no stud is used. This device facilitates assembly of balance into movement, and setting in beat ①.
- Patented regulating device enabling:
 - quick adjustment to rate by regulator ②.
 - fine adjustment within ± 1 minute per day from outside the case ③.

Assembling the balance into the movement:

- 1 Put the balance and spring into the movement as one would any wheel, without first securing the balance spring to the cock (going barrel unwound). In the natural position the balance spring should have the form shown in Fig. 1.
- 2 Turn the regulator key so as to be free of the spring; make sure that the jaws of the spirotor are open.
- 3 Mount the balance cock on the movement.
- 4 Rotate the balance until the roller jewel is engaged with the fork and engage the end of the balance spring with the jaws of the Spirotor.
- 5 Tighten the Spirotor clamping screw slightly, so that the spring may be set parallel to the plane of the cock plate. This will be easier if the spring extends slightly beyond the jaws (Fig. 2); then tighten the screw.

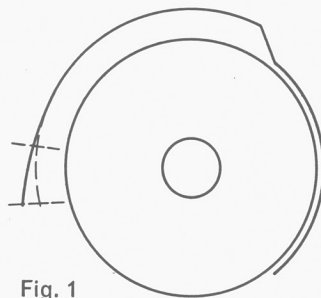


Fig. 1

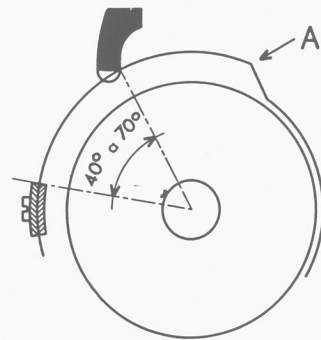


Fig. 3

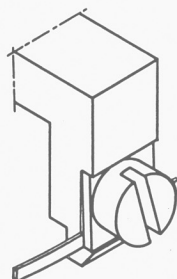


Fig. 2

Adjusting pressure of regulator key against spring:

Rotate the balance until it reaches the end of its possible supplementary arc (about to "knock") in the direction in which the spring is wound up; move the regulator stud or key until it just comes into contact with the spring, and then release the balance (Fig. 3). If it is necessary to centre the spring it should only be corrected near to point A. When all manipulation of the spring is finished, check again that the regulator key or stud is bearing correctly.

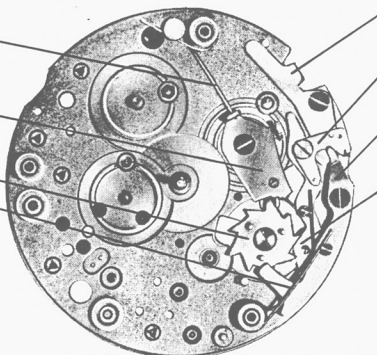
To make repairing easier

4 pre-assembled units are available

Pre-assembled Plate (Calibre 240)

Ref. 20

Disconnecting lever spring
Disconnecting lever
Alarm control star
Spring for alarm stop lever and
control star jumper

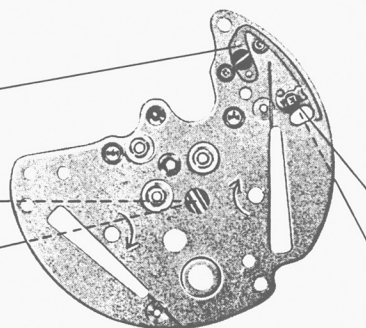


Control piece for alarm stop lever
Lifting piece for jumper
Alarm stop lever
Alarm control star jumper

Pre-assembled 3/4 Plate (Calibres 240 and 245)

Ref. 21

Alarm bolt
Intermediate crown wheel for alarm
Intermediate crown wheel core for
alarm

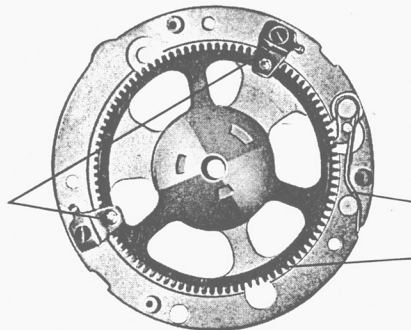


Alarm bolt lever
Alarm bolt lever gib

Pre-assembled Unlocking Wheel Bridge (Calibre 240)

Ref. 23

Friction spring for unlocking wheel

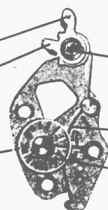


Spring for unlocking wheel click
Unlocking wheel

Pre-assembled Balance Cock (Calibres 240 and 245)

Ref. 22

Regulator for adjustable stud holder
Spirotor balance-spring support
Regulator adjuster gib



Duofix for cock
Regulator spring
Adjuster for regulator

Calibre 240

Putting on the hands (after putting on the dial)



Fig. 4

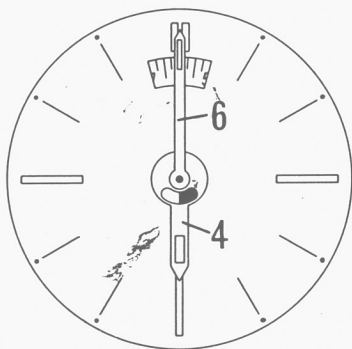


Fig. 5

- 1 Turn the alarm setting disc till the figure 6 appears in the window (6 a.m.).
- 2 Slowly rotate the set-hands control until the alarm releases. Take care to rotate it in the direction shown on the bell.
- 3 Put on the day-and-night indicator in the exact position shown in Fig. 4.
- 4 Put on the hour hand (Fig. 5).
- 5 Turn the set-hands control again; approach the time of alarm release very slowly so as to determine the instant of release with accuracy.
- 6 Put on the minute hand (Fig. 5) and check the accuracy of the alarm release.

Lubrication

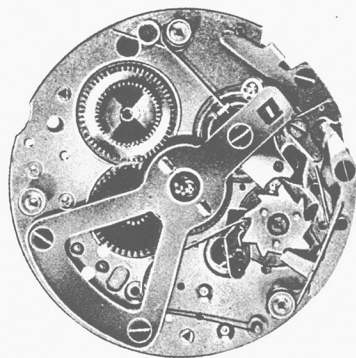
Balance, escape and fourth pivots only
All other pivots
Lifts
Other working parts

SYNTALUBE
CUYPERS I
CUYPERS I
BLASOLUBE 302 grease

When ordering replacement pieces, please refer to the parts list for calibres 240 and 245, which gives complete details.

Calibre 240

Alarm mechanism

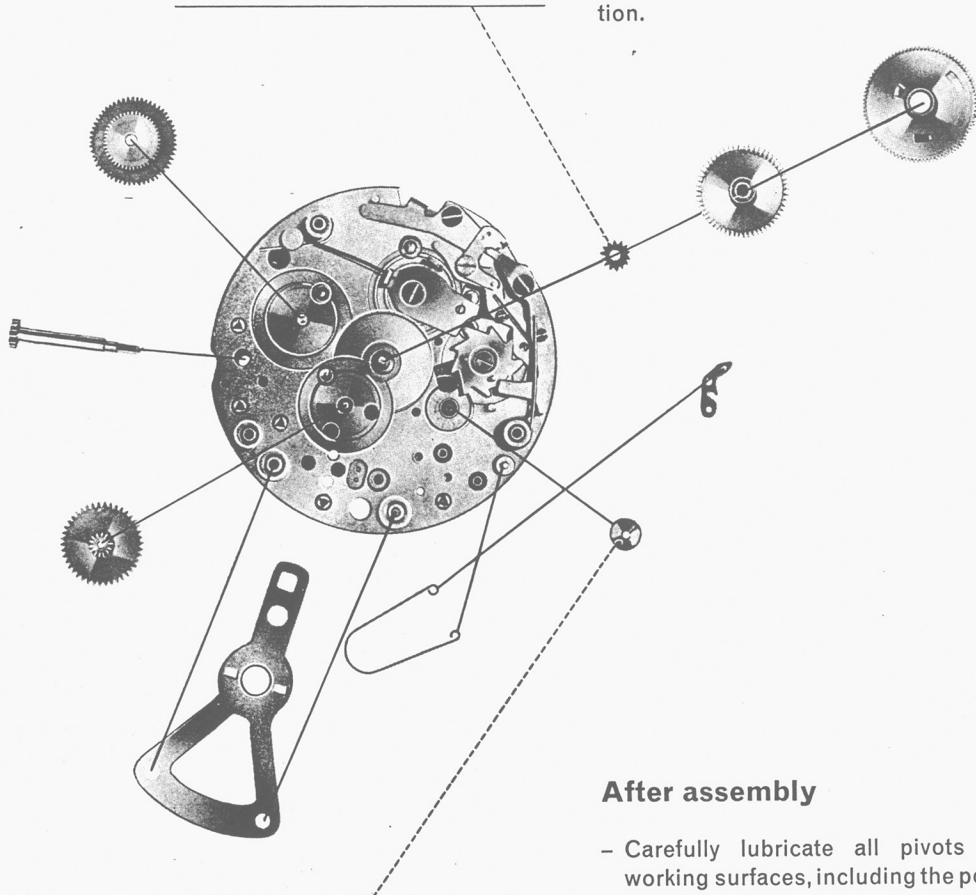


The mechanism for releasing the alarm and for limiting the duration of ringing involves only simple and robust components. Although the mechanism is complicated it has been possible, when establishing the design, to allow for wide manufacturing tolerances to avoid any correction during assembly.

Assembling the alarm mechanism

During a complete cleaning, the mechanism must be dismantled to the extent shown below. If the plate has to be replaced, it may be supplied to the repairer ready assembled in this condition.

Cannon pinion pressed on to centre stem. First lubricate its bearing.



Disc pressed on level with pivot end. Take care with special form of hole. Lubricate bearing before pressing disc into position.

After assembly

- Carefully lubricate all pivots and working surfaces, including the points at which springs act on the levers.
- **Check that all parts of the mechanism are perfectly free.**

Lubrication

see following page

