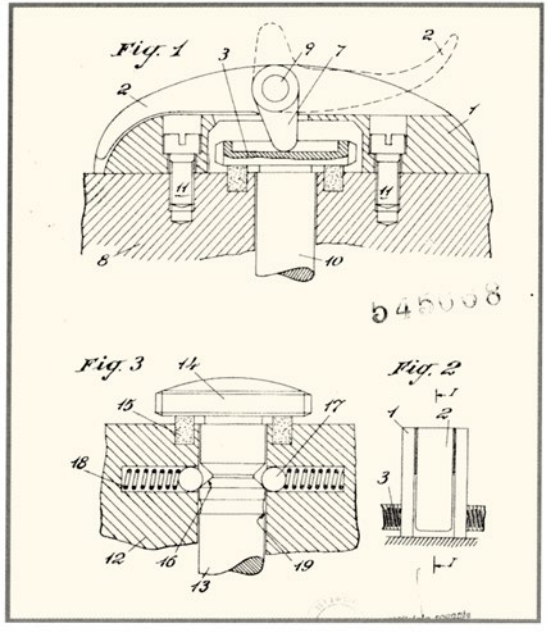
PANERAI

SPECIAL EDITIONS

ISTRUZIONI/INSTRUCTIONS


60 TACHYMETER
LUMINOR
TANTALIUM
PANERAI


OFFICINE PANERAI
FIRENZE
1860
OP 6611
BB 1115637
TANTALUM



Patent of the lever device granted to Maria and Giuseppe Panerai for Italy (1956) and the United States (1960). The invention was also patented in the UK, France and Switzerland in the course of the 1950's.

HISTORY

Established in Florence in 1860, the firm of G. Panerai & Figlio, suppliers to the Italian Royal Navy, produced instruments combining precision with highly sophisticated technology. It was this craftsmanship which forged the strongest links between the company and the naval authorities as creators of instruments measuring time and space. The firm devoted itself to the developement of a standard of quality and safety which are prerequisite features of supplies to the armed forces.

Panerai began to produce watches in March 1938, when it brought out the Radiomir. This watch marked a new epoch as a result of the exploits carried out by the Navy's commandos, who wore the watch.

The Panerai Luminor quickly became a legend as a result of its reliability and the originality of its design. Panerai only produced a few hundred pieces in all which, along with the first Radiomir, became rarities very much sought after by collectors.

In 1993, Officine Panerai offered new models of the Panerai Luminor watch and the Panerai Mare Nostrum chronograph. These watches are still made to the same standards of craftsmanship and they are tested to withstand even the toughest demands made upon them.

SPECIAL EDITIONS:
PANERAI LUMINOR CHRONO TANTALIUM

The Panerai Luminor Chrono Tantalium watch is a special edition created in only 300 pieces, unique for its structural complexity and distinguished by the adoption of a high quality chronograph movement, the Panerai OP XVI calibre. This series of watches will require two years to be completed.

The use of tantalum confirms and reinforces the perspective of constant innovation and research into quality which has always been characteristic of Officine Panerai. This metal has a range of very unusual properties, among which are its high density and extreme resistance to corrosion by chemical agents at temperatures of up to 150° centigrade.

The Panerai Luminor Chrono Tantalium stands out as an exceptional watch, in which the properties of the metal are accentuated by its colour, a lightly blued anthracite grey.

THE CASE

The case, 44 mm in diameter, is formed from a single block of tantalum.
The characteristics of this metal mean that working it is a long and complex process, carried out exclusively by highly skilled engineers. Because of the ductility of the metal, special cutting tools have to be used: the high temperature reached in the course of machining operations causes premature erosion of the tools. The stages of finishing (polishing or brushing) are also difficult and involve a series of complex operations. Making a case requires an amount of material equivalent to 300/400 grams to obtain a final case weighing 115 grams, and the process of transforming tantalum into a finished product takes five times longer than steel. Simply making the holes for the chronograph push-buttons takes eight hours of machining.
Water-resistance is guaranteed to a depth of 200 metres. The screw back is of titanium and engraved upon it are the individual progressive identification number, the number of the annual edition, and the maximum pressure and depth of use.

THE DEVICE PROTECTING THE WINDING CROWN

(Protected as a trade mark)

Executed in polished tantalum, this protects the winding crown from shocks and accidental rotation and it also helps to preserve the watch's water-resistance when it is locked in the closed position. By means of the movable click lever set in the supporting bridge fixed to the case, it applies axial pressure to the gasket sealing the winding crown without damaging it, thus locking it and achieving a high degree of water-resistance. The brushed tantalum push-buttons controlling the chronograph functions are integrated within the device. The little lever, also made of brushed tantalum, opens from the bottom to the top, allowing very easy operation of the push-button for stopping and starting the chronograph.

THE LEATHER STRAP

The strap of the Panerai Luminor Chrono Tantalium is executed in craftsman-sewn leather. It is fitted with an adjustable buckle in brushed tantalum and is personalised Panerai.

THE MOVEMENT

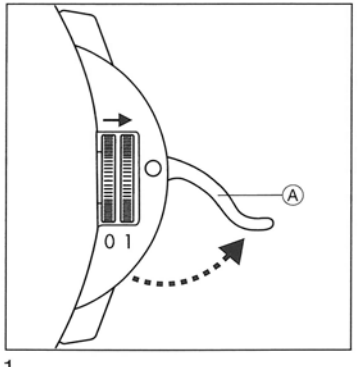
The Panerai Luminor Chrono Tantalium watch is fitted with a hand-wound mechanical movement, the Panerai OP XVI calibre, of 12 lignes. Power reserve of 48 hours, 18 jewels, 21,600 vibrations/hour and Incabloc® anti-shock device. Column wheel system of switching the chronograph functions, Côtes de Genève decoration, chronograph bridge personalised PANERAI.
Functions: hours, minutes, small seconds, minutes counter, chronograph seconds.

Officine Panerai is not the owner of the Incabloc® trademark.

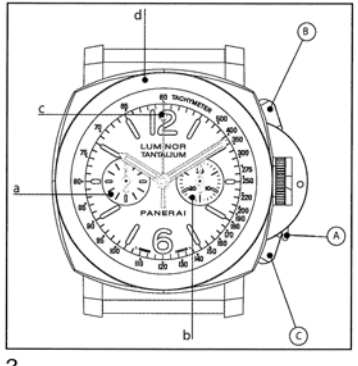
INSTRUCTIONS FOR USE

WINDING THE WATCH

In order to achieve the best operation, it is recommended that the operation of winding the watch should be carried out daily.
Open the lever of the device protecting the crown (A) and wind the winding crown without pulling it out, until it stops. Close the lever of the device to preserve the water-resistance of the watch.



1



2

SETTING THE TIME (picture 1)
Open the lever of the device protecting the crown (A) and pull out the winding crown to the first click. After setting the required time, push the winding crown back in and close the lever of the protective device.

Continuous seconds (picture 2) (a)
The small seconds dial, positioned at 9 o/clock, shows continuous seconds. Its hand moves even when the chronograph is stopped.

CHRONOGRAPH FUNCTIONS

The chronograph Panerai Luminor Chrono Tantalium measures the time taken for a body to move from one point to another in minutes and seconds.

Start/stop button for the chronograph functions (B)
Unscrewing and pressing it starts the timing by the two chronograph hands, the minute counter (b), and the chronograph seconds hand (c). When the same button is pressed again all the hands are stopped, indicating the time elapsed. At this point the total time can be reset to zero by pressing the button C (zero-setting button).

Zero-setting button (C)
Unscrewing and pressing this instantly returns all the chronograph hands to zero: the minute counter (b) and the chronograph seconds hand (c). It cannot be operated while the chronograph is running, but only when it is stationary, that is, after the button B has been pressed a second time.

b - Minute counter
This is the small dial positioned at 3 o'clock on which the minutes since the chronograph commenced timing are shown.

c - Chronograph centre seconds hand
This is at the centre. It measures the seconds elapsed from the beginning of the chronograph timing.

d - Tachimeter scale
Situated on the outer part of the dial, it is a measurement scale for calculating the average speed of a moving object over a measured distance of one kilometre. Start the timing when the object passes a reference point and stop it after one kilometre. On this scale, the chronograph seconds hand indicates the average speed of the object over the distance. This indication is signalled by the centre hand.

TANTALUM – TECHNICAL CHARACTERISTICS

❑ Tantalum was discovered in 1802 by the Swedish scientist Anders Ekeberg.

❑ This metal has a slightly bluish dark anthracite grey colour and is very resistant. It remains chemically inert to the majority of mineral compounds up to a temperature of 150°. It is naturally and spontaneously covered with a passive layer that makes it immune to corrosion. This film of oxide is stable to 250° in the air and reconstitutes itself instantly.

❑ It is non-magnetic, like titanium.

❑ It is a soft metal with a high density (16.6 g/cm^3), highly ductile and resistant to very high temperatures with its extremely high melting point, which is of the order of 2850°. Its boiling point is 6000.

❑ It is found naturally in the form of an oxide in a particular mineral. The metal tantalum is produced by the electrolysis of its molten oxide, very like aluminium. It is then refined by electron beam melting in a vacuum.

❑ Because of its extreme resistance to acids and its compatibility with the tissues of the body, it is used in surgical, optical and dental instruments.

MAINTENANCE ADVICE

Panerai watches are made to very high standards of quality. It is worth remembering that the mechanical parts run 24 hours a day when used, so the watch must undergo regular maintenance to ensure long life and good operation.

Water-resistance

Have your watch checked periodically for water-resistance by an Authorized Panerai Service Centre and restore it every two years with regular servicing, or whenever the watch has to be opened.
The restoration of water-resistance necessarily involves replacing the seals so as to ensure the maximum water-resistance and security.
Where the watch is used in underwater sports activities, it is recommended that it should be checked every year before the underwater activities begin.

The movement

Have the movement of your watch checked periodically by an Authorized Panerai Service Centre so as to preserve its perfect operation.
If the watch has a tendency to gain or lose time to a significant degree, the movement may need to be overhauled.
The movements are designed to withstand temperature variations between -10°C and + 60°C (14°F and 140°F). Outside this range of temperatures, operational variations exceeding those set out in the specifications of the movement may be noticed. In addition, there is a risk that the lubricants contained in the movement may deteriorate, resulting in damage to some of its parts.

Cleaning the exterior

To keep the exterior in perfect condition, we recommend washing your Panerai watch with soap and warm water, using a soft brush. After this operation, and also after bathing in the sea or a swimming pool, carefully rinse the watch with clean water. All Panerai watches can be polished with a soft, dry cloth.

The strap

Panerai straps must be washed in warm water and left to dry. It is important not to dry them on a hot surface or exposed to direct sunlight, because the rapid evaporation of the water could damage their shape and quality. After each bathe in the sea or a swimming pool, carefully rinse the strap with clean water.
To replace the strap, it is recommended that you should go to an Authorized Retailer or a Panerai Service Centre. In this way the inconvenience caused by incorrect replacement can be avoided.
Only an Authorized Retailer or Panerai Service Centre can guarantee the use of genuine Panerai straps, properly designed to fit the dimensions of the case and manufactured according to the quality standards of the brand.

ATTENTION

a) Do not operate the winding crown under water;
b) Do not use the watch at a depth greater than that indicated.