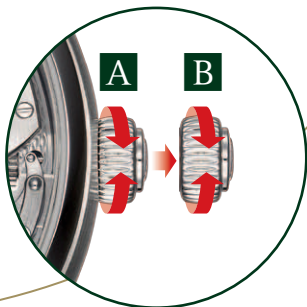


INSTRUCTIONS FOR USE
MODE D'EMPLOI

JULES
AUDEMARS
CHRONOMETER
WITH AP
ESCAPEMENT

CALIBRE 2908 - HAND-WOUND

AUDEMARS PIGUET
Le Brassus



ENGLISH

Quick-link contents page.

Simply click on the relevant title or subheading to following the link to your chosen section.

Click on the white «English» to return to the main contents page.

GUARANTEE AND CARE

All details concerning the guarantee and care instructions of your watch are provided in the certificate of origin and guarantee attached.



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THE MANUFACTURE AUDEMARS PIGUET

THE VALLÉE DE JOUX : CRADLE OF THE WATCHMAKER'S ART

In the heart of the Swiss Jura, around 50 kilometres north of Geneva, nestles a landscape which has retained its natural charm to this day: the Vallée de Joux. Around the mid-18th century, the harsh climate of this mountainous region and soil depletion drove the farming community settled there to seek other sources of income. With their high degree of manual dexterity, inexhaustible creativity and enormous determination, the inhabitants of the valley, known as Combiens, were naturally drawn to watchmaking.

Due to their high quality, the movements they produced acquired great popularity with the Geneva firms which used them to create complete watches.

From 1740 onwards, watchmaking developed into the principal industry of the Vallée de Joux. This region was thus transformed, as an 1881 chronicle put it, "into a land of milk and honey, in which poverty has rapidly disappeared".





TWO NAMES FOR A GREAT ADVENTURE

In 1875, two young men passionate about Haute Horlogerie – Jules Louis Audemars and Edward August Piguet – decided to pool their skills to design and produce watches with complications in the Vallée de Joux, the cradle of Haute Horlogerie. Determination, imagination and discipline led them to instant success. A branch in Geneva was their next move in about 1885 and new commercial links were forged at the 1889 Paris World Exposition, where they exhibited complication pocket watches. The Audemars Piguet factory continued to expand as the years went by. Its creations represented major milestones in the history of Haute Horlogerie, like the first minute repeater wristwatch in 1892 and the smallest five-minute repeater movement ever made in 1915.

From 1918 onwards, the founders passed the reins of the business onto their sons, who in turn perfected their expertise in manufacturing men's and ladies'

wristwatches as well as designing new sophisticated, ultra-thin movements. Perseverance and initiative were the watchwords: while the Wall Street crash in 1929 was a bitter blow, the company directors were soon designing so-called skeleton watches before embarking on chronograph production. But this new momentum was abruptly interrupted by the Second World War. Re-organisation was necessary in the aftermath of the conflict. The factory focused on creating top-of-the-range items in keeping with its tradition of innovation. A strategy that would prove its worth, especially since it was backed by outstanding creative daring.



Audemars Piguet continued to build on its now international reputation with creative designs. 1972 saw the launch of the Royal Oak, the first, immediately successful high-quality sports watch in steel, followed in 1986 by the first ultra-thin tourbillon wristwatch with automatic winding. The creative spirit of the Manufacture has not faltered since, offering aesthetically original timekeepers with outstanding movements. Thus it brought watches with complications back into fashion at the end of the 1980s, launching its extraordinary Tradition d'Excellence collection in 1999. All the signs of a bold spirit rooted firmly in tradition and auguring well for the future.



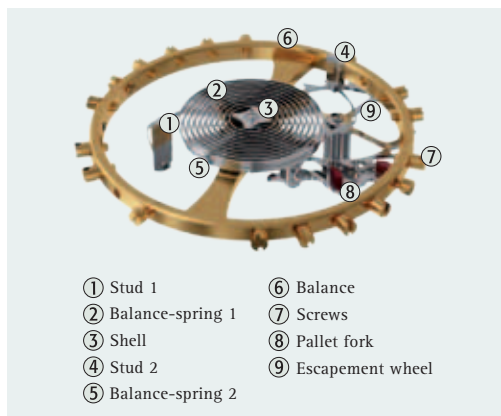
JULES AUDEMARS CHRONOMETER WITH AP ESCAPEMENT

The most striking thing about the new Jules Audemars watch with AP escapement is the design. With no covering dial, the outstanding mechanics of the calibre 2908 are shown in all their glory, with a with gold mainplate engine-turned by hand or treated with an NAC galvanic finish. The watch's three-dimensional aesthetic leads the eye straight to the small seconds display, then to the hours and minutes and the two barrels. The escapement is the nerve centre of the new calibre and appears to reach out from the plate in a bid to stamp its unique authority on the watch. Everything fits into a generous case in 950 platinum or pink gold, with sapphire crystal and caseback so that these impressive mechanics may be admired to the full.

The new hand-wound design with its 267 components represents a return to the roots of watchmaking. The AP escapement boasts exceptional frequency and bears the hallmark of an ongoing quest for accuracy. The small seconds display is placed firmly in the foreground to provide clear proof of the philosophy behind the timepiece.

THE AUDEMARS PIGUET ESCAPEMENT

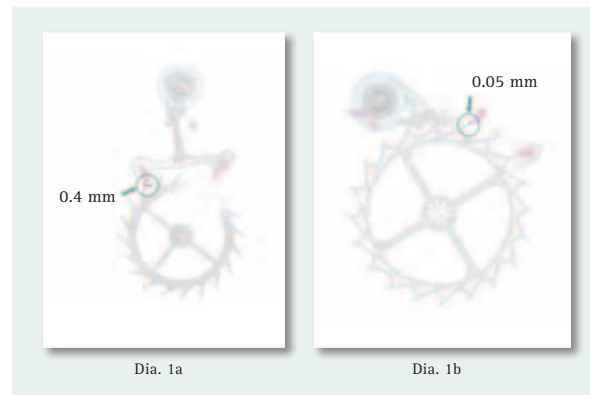
The new Audemars Piguet escapement system takes its inspiration from the mechanism proposed by Robin. This direct-impulse escapement has a large number of advantages, including full shock resistance. Its innovative design and outstanding performance render this patented system a minor revolution in watchmaking mechanics. It heralds the new generation of Audemars Piguet movements and furthers the performances of the watches produced by the Manufacture. The new escapement will shortly be fitted to the brand's complication movements and ultimately, in a few years time, to all the Audemars Piguet mechanical movements.



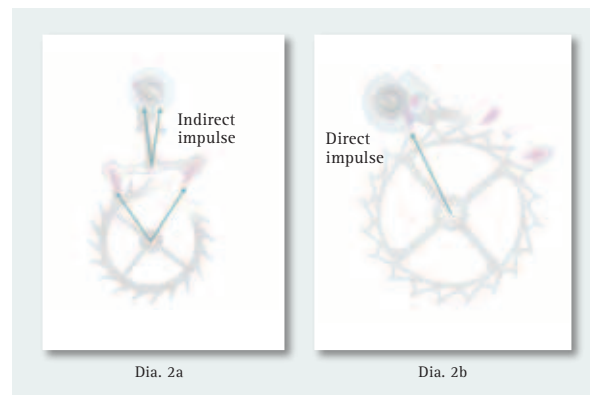
The new AP design hosts a number of technical features far superior to the traditional (Swiss lever) escapement :

- Detached pin-pallet escapement : a single impulse corresponds to two vibrations, causing fewer setting disturbances and very high efficiency.
- Improved chronometry : the spring balance isochronism may be adjusted by moving the quiescent point with respect to the impulse given to the balance ; reducing mechanical disturbances at the escapement increases movement accuracy.
- Optimum long-term stability : tests performed over the last five years have shown that this escapement has excellent operational stability.

- High efficiency : with the conventional Swiss lever system, the escapement absorbs around 70% of the energy; the new AP system reduces this figure to 50%, enabling a significant boost in efficiency over traditional designs.
- No lubrication on the lifts (Dia. 1a and 1b) : the special geometry of the Audemars Piguet escapement means no lubrication - a watchmaker's dream ! - which facilitates maintenance and prevents greasy paste build up after oil evaporation.
- Direct impulse on balance (Dia. 2a and 2b) : energy is transmitted directly from the escapement to the balance without passing through a pallet fork, which limits energy losses by improving efficiency.
- Excellent shock resistance : the meticulous shape of the various components (especially the guard pin) and their ultraprecise cut out provide maximum security against tripping and over-banking.



The need to lubricate the fork pallets is eliminated by shortening the sliding.



Fewer moving parts in the transmission equals greater efficiency

DUAL BALANCE-SPRING

The calibre 2908 also stands out for its totally new regulator component. Two balance-springs positioned one on top of the other, offset by 180°, automatically compensate for any balancing defects.

UNDOUBTED ADVANTAGES

The system of dual “opposing” flat balance-springs has many advantages :

- no more balance-spring “end curves” pioneered by Breguet and Phillips, which require painstaking construction, and thus the end to defects caused by the slight asymmetric balance-spring development.
- automatic compensation for any balance-spring balancing defects, thus improving accuracy.
- prevents errors caused by the watch’s vertical position.



HIGH FREQUENCY AND PRECISION

Apart from the intrinsic progress in the Audemars Piguet escapement, the calibre 2908 stands out for its very high frequency. This is so far uncommon in the world of Haute Horlogerie. It is twice as efficient as conventional designs, boasting 43,200 vph (6 Hz), and marks a major milestone in the AP watchmakers' long-standing quest for improved accuracy. The increase in the oscillation frequency of the variable inertia balance improves movement accuracy, making the watch more resistant to impact and other factors that can affect balance. The two parallel barrels provide a power reserve of at least a 90 hours, amply offsetting the extra power needed for the 43,200 vph frequency.

ADVANTAGES OF THE PARALLEL BARREL SYSTEM

- reduces pressure in the gearing
- the friction in the barrels is used to offset torque variations
- increased running precision, a greater power reserve and enhanced reliability



VIEWS OF THE MOVEMENT

Calibre 2908

Caseback side



Dial side



TECHNICAL DATA OF THE MOVEMENT

Total thickness : 8.11 mm

Total diameter : 39.80 mm

Frequency : 43,200 vibrations/hour (6 Hz)

Number of jewels : 33

Power reserve : minimum 90 hours

Manual winding

Balance with variable inertia screws

Flat dual-balance spring

Mobile stud-holder

Number of parts : 267

SPECIFICITIES

COSC-certified movement

Stop balance when setting time
(stops second hand)

Direct-impulse escapement without lubrication

Twin barrels in parallel

Escapement holder

Differential power reserve

White gold mainplate engine-turned by hand or
NAC treated

Manual finishing on both bridges and mainplate

WATCH INDICATIONS AND FUNCTIONS

(see figure on the inside cover)

- ① Hour hand
- ② Minute hand
- ③ Small second hand
- ④ Chronograph hand

Your watch is fitted with a two-position crown :

- A** Crown in position for winding movement manually
- B** Crown in position for setting the time



SETTING THE TIME

Pull the crown to position **B**. The stop-seconds arresting lever is automatically activated when the crown is pulled to ensure precision time adjustment.

You may now set the time by winding in either direction without risk of damaging the movement. It is advisable to set the hand five minutes past the desired time and then to move it back to the exact time. This allows the gears to re-align themselves, thus ensuring optimal precision.

WINDING THE WATCH

Your watch is fitted with a mechanical hand-wound movement.

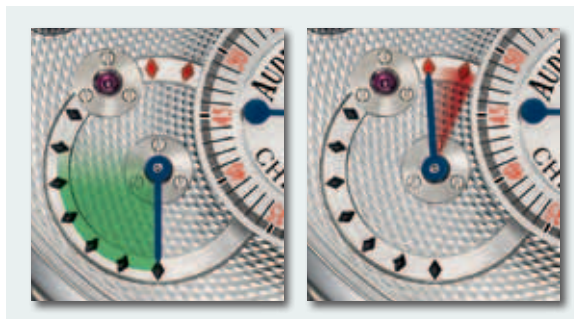
We recommend that you rewind your watch completely every day at the same time (crown in position **A**). Take great care not to overwind (never force it when fully wound).

The crown features a disconnecting-gear system to prevent damage to the barrel mechanism caused by over-winding. When fully wound, the crown uncouples and no longer drives the stem. A certain resistance remains, however, from the uncoupling mechanism.

POWER RESERVE

When the watch has been wound to a maximum, the hand which shows the power reserve will be at the outside of the indicator. The watch has a power reserve of at least 90 hours at this point.

Once the needle reaches the red area, the watch has a power reserve of around 12 hours. At this point, we recommend that you wind the watch fully to ensure optimal timekeeping.



IF YOUR WATCH STOPS

Normally if your watch stops, simply winding it with the crown is enough to start the movement. However, sometimes the movement does not start again automatically.

This is because the escapement is no longer receiving an impulse, as the impulse-pin and pallet fork remain fixed in this position (Fig. 1). No impulse is being sent to the balance.

Turning the case a few times to turn the balance is enough to reactivate it (Fig. 3). This means that the escapement wheel sends the necessary impulse to the balance (Fig. 2).

Winding the watch until the end stop (crown in position **A**) ensure that the watch functions correctly during approximately 90 hours.

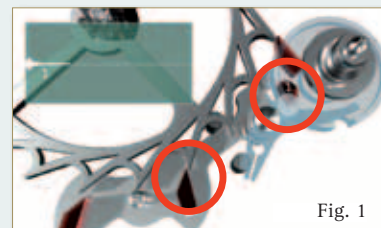


Fig. 1

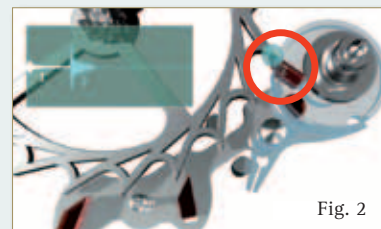


Fig. 2

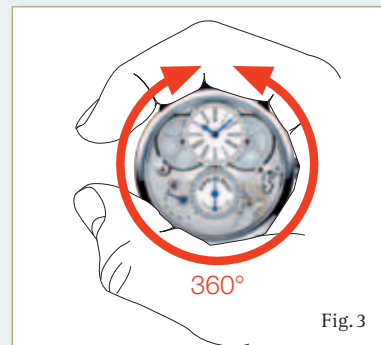


Fig. 3

