

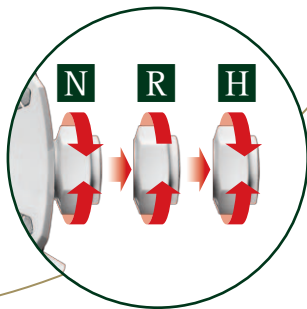
INSTRUCTIONS FOR USE
MODE D'EMPLOI

ROYAL OAK
CONCEPT GMT
TOURBILLON

CALIBRES 2913 & 2930
HAND-WOUND

AUDEMARS PIGUET

Le Brassus



ENGLISH

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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Introduction

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.

Introduction

TIMES-ZONES

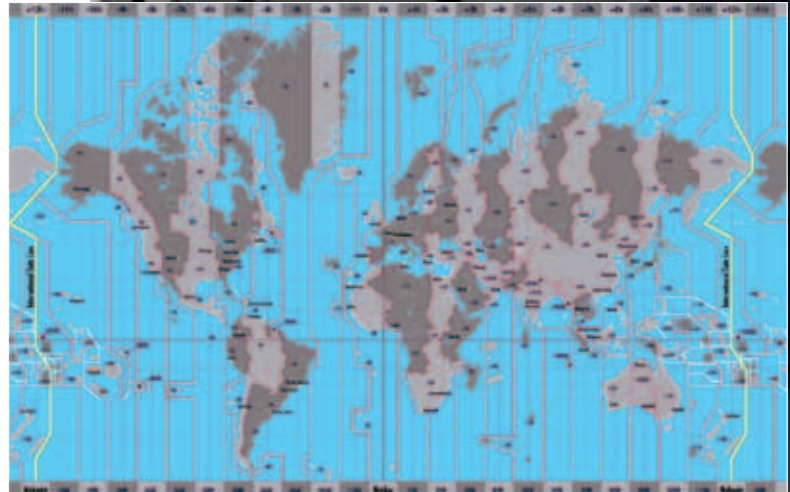
THE EARTH'S ROTATION MEANS THAT TRUE LOCAL TIME CHANGES AT THE LEAST MOVEMENT TO THE EAST OR WEST.

A worldwide system of meridians at 15° intervals has therefore been adopted to measure the average local time. The Earth has thus been divided into 24 time zones, with the central meridian in the middle.

This system was adopted during the international conference in Washington in 1884 and Greenwich was chosen as the Earth's prime meridian. The meridian passing through Greenwich in Great Britain was chosen as the prime meridian, i.e. the reference axis for Coordinated Universal Time (UTC or GMT) on which all time zones would be based.

Thus you have to put your watch forward by one hour when crossing from one time zone to the next going East. Put your watch back by one hour when crossing from one time zone to the next going West.

Theoretically, all of the points on the globe with the same longitude should be in the same time zone. In reality, each country has defined its time zone(s) as a function of political borders, among other considerations (see the map of time zones based on political borders).



Time zones follow political borders

About the watch

MATERIALS

TITANIUM FOR THE MIDDLE-CASE



The single-piece middle-case is made of titanium. This metal is both lightweight and resistant, making it the ideal material for an exceptional watch.

Titanium is also very corrosion-resistant and has thus been used in the AP case back and folding buckle.

CHROMATISED ALUMINIUM AND CERAMICS

Borrowed from the automotive and aeronautics industries, these materials have pride of place in the Royal Oak Concept GMT Tourbillon.

The bridges are in nickel silver with all-black galvanic finish and the flange is black-chromatised aluminium. These anodising processes increase hardness and improve resistance to friction.

Research work in another field led to the development of innovative ceramics. For the bezel, crown and pushpieces, Audemars Piguet selected a ceramic material with very specific physical properties.

The ceramic has undergone particularly delicate treatments calling on all the knowhow of the Manufacture's engineers and watchmakers. The

essential qualities of this technical ceramic are its tremendous resistance to friction and wear and its exceptionally smooth final finish.



TREATMENTS AND FINISHES

Of course, other materials are also used to make the various parts that make up the movement. But this watch stands out more than anything for the way the visible parts are finished: brushed and smudged lines, all-black finish (galvanic coating) or shot-peened (satin-polish finish).

Finishes which turn the Royal Oak Concept GMT Tourbillon into a firmly sporty and modern watch in appearance.

Movement :

- Titanium middle-case
- Black or white ceramic crown and pushpiece

Dial side :

- Nickel silver bridges with all-black galvanic finish
- Blackened balance
- Black or white ceramic bezel
- Sapphire crystal with double-sided anti-reflection coating

Caseback side :

- Central nickel silver bridge with all-black galvanic or white ceramic finish
- Titanium sapphire caseback
- Sapphire crystal with anti-reflection coating on one side



About the watch

FUNCTIONS

The Audemars Piguet Calibres 2913 and 2930 qualify as an extraordinary exploit. These hand-wound movements, with double barrel providing an exceptional ten-day power reserve, combine a tourbillon and second time zone display.

TOURBILLON

The most outstanding watchmakers have been striving to improve timing accuracy since the second half of the 18th century. The desire to achieve an identical setting for a timepiece in all positions is a major challenge. Under the Earth's pull, the tiniest variations in equilibrium have a negative influence on the regulating part (balance/balance-spring) when positioned vertically, thus causing running differences in the watch.

In 1801 the watchmaker Abraham Louis Breguet thought up a tourbillon regulating system that balanced the running differences in all positions.

The operating principle has remained largely the same to this day : the escapement parts (wheel, pallet and balance) are held in a movable frame rather than being fixed in the movement. By rotating on its axis every minute with the escapement parts, this frame enables all the parts to change position constantly, thereby offsetting the running differences caused by the effects of gravitation.

185 years later, in 1986, Audemars Piguet successfully fitted this system for the first time into a production wristwatch with an ultra-thin automatic mechanical movement. The Manufacture in Le Brassus has since built on this success by presenting many tourbillon models combined with all watch complications.

The Manufacture, still one of the select few mastering the secrets of this complication, offers more than 25 different tourbillon movements.





GMT DISPLAY



Audemars Piguet launched its first wristwatch on the market in 1990. This was the Dual-Time calibre (2329/2846), with instant reading of the time in a second time zone.

This particularly useful and appreciated function is once more a feature in the Royal Oak Concept GMT Tourbillon. The indication of the second time zone, based on twelve hours, comprises two discs making it easy to tell the time. The first, on which the figures are inscribed, completes one turn in twelve hours. The second, just below, completes a turn in 24 hours and has two coloured areas: a white half for daytime and a black half for night-time. This makes it easier to read the figures.

About the watch

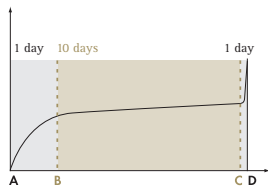
TWIN-BARREL SYSTEM

Calibres 2913 and 2930 have a power reserve of 237 hours (about 10 days). This endurance is achieved by a large diameter, dual barrel system developed by Audemars Piguet, with a blocking mechanism guaranteeing optimum performances.

ENERGY AT ITS BEST

The fast-rotating, dual barrel system - with revolutions limited to 19.75 made possible by using an especially thin spring - guarantees a constant force during the ten-day running time, hence improved efficiency and chronometry. In reality the two barrels fitted in parallel produce a power reserve of twelve days. But an ingenious blocking system - in the high (C-D, see graph below) and low (A-B, see graph below) load zones - concentrates the watch rate on the ten median running days, with the most regular (B-C, see graph below) providing optimum efficiency.

This specific feature transmits the energy far more gently and regularly to the wheels, thus ensuring optimum efficiency and therefore greater rate accuracy and reliability.



TREMENDOUS OPERATING ACCURACY

■ The blocking system



Position of the gears when fully wound

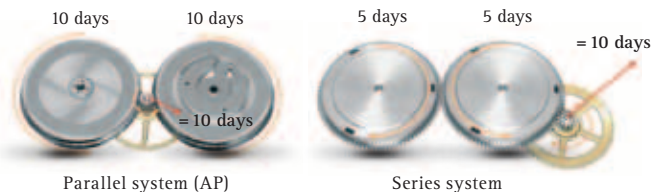
Position of the gears 3 days before stopping



Position of the gears when stopped



■ A parallel barrel system



Parallel system (AP)

Series 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.

Watch description

VIEWS OF THE MOVEMENT

Calibre 2913



Bridge side



Dial side

MOVEMENT TECHNICAL DATA

Total thickness : 9.90 mm

Total diameter : 35.60 mm

Frequency : 21,600 vibrations/hour (3 Hz)

Number of jewels : 29

Minimal power reserve : approx. 237 hours

Hand-wound

Crown position indicator
(Winding, Neutral, Time-setting)

Balance with variable inertia screws

Breguet hairspring

Mobile stud-holder

Number of parts : 291

SPECIFICITIES

Twin barrels in parallel

Locking gear Stopwork

GMT display mechanism through 2 differential
powered superimposed discs

Manual finishing on both bridges and mainplate

Manual finishing of the cut out parts (polished
bevels, grained finishing on top and Matt
"brouillé" finishing underneath)

Watch description

VIEWS OF THE MOVEMENT

Calibre 2930



Bridge side



Dial side

MOVEMENT TECHNICAL DATA

Total thickness : 9.90 mm

Total diameter : 35.60 mm

Frequency : 21,600 vibrations/hour (3 Hz)

Number of jewels : 29

Minimal power reserve : approx. 237 hours

Hand-wound

Crown position indicator
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Use of functions

WATCH INDICATIONS AND FUNCTIONS

(see figure on the inside cover)

- ① Hour hand
- ② Minute hand
- ③ Second time zone aperture
- ④ Crown position indicator hand
- Ⓕ Second time zone setting pushpiece

Your watch is fitted with a three-position crown:

- N** Crown in neutral and “screwed down” position
- R** Crown in manual winding position
- H** Crown in the proper position to set the hour and minutes

Caution: always unscrew the crown to access the different setting positions. Afterwards, carefully screw it back to ensure water resistance.

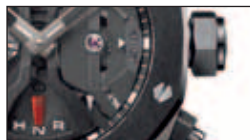


Use of functions

CROWN POSITION INDICATOR

Your watch features a hand indicating the position of the crown.

The crown starts out in **Neutral N** position. It is screwed in and the watch is running normally.

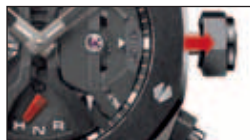


Unscrew the crown. Then:

Pull the crown into **Position R**: the crown position indicator hand will move into the **Rewinding** position. This is the proper position for rewinding your watch.



Pull the crown into **Position H**: the crown position indicator hand will move into the **Time-setting** position. This is the proper position for setting the time.



Push the crown into **Position N**: the crown position indicator hand will move into the **Neutral** position. This will disconnect the crown.



To ensure that your watch will run properly, the crown must be returned to **Neutral (N)** position once the proper adjustments have been completed. You must also screw the crown back in to ensure the watch's water resistance.

SETTING THE TIME

Always unscrew the crown to access the different setting positions.

Pull the crown to position **H**. 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.

Carefully screw the crown back to position **N** to ensure water resistance.

WINDING THE WATCH

Unscrew the crown before use. To rewind the watch, make sure that the selection indicator hand is in position **R**.

The simplest method is to rewind the watch completely every 7 days (do not allow more than 9 days to elapse) by turning the crown clockwise. This will prevent the watch from stopping on the last day.

The crown features a disconnecting-gear system to prevent damage to the barrel mechanism caused by over-winding (the crown turns freely).

Carefully screw the crown back to position **N** to ensure water resistance.

Use of functions

ADJUSTING THE SECOND TIME ZONE

Pushpiece **F** is used to set the second time zone. Press once to alter by one hour.

Based on the location of the second time zone, set local time by pressing as many times as necessary until you reach the desired time. Depending on the time of day, the second disc underneath displays daytime (white background) or night-time (black background).

Example : it is 4 a.m. (time in the second time zone), press pushpiece **F** until the figure 4 is displayed on black background opposite the arrow.



