



ARNOLD & SON  
1764

Instruction booklet  
**ULTRATHIN TOURBILLON**  
A&S8300 - A&S8320

# ULTRATHIN TOURBILLON

Thank you for choosing Arnold & Son, we are proud to have you as Owner of the Ultrathin Tourbillon.

Your Ultrathin Tourbillon combines one of the most intricate horological complications, the tourbillon, with a uniquely designed ultrathin movement. In spite of its thinness, your Ultrathin Tourbillon is equipped with two barrels providing 100 hours of power reserve.

The tourbillon cage of your Ultrathin Tourbillon boasts several remarkable features. First of all the tourbillon cage is totally spherical – one devoid of any flat surfaces – for a magnificent three-dimensional aesthetic effect. Then the cage has no visible screws so the spherical tourbillon cage appears beautifully balanced and harmonious. Finally the tourbillon cage is “flying”, which is much more complex as the entire cage must be supported from the bottom only. As the flying tourbillon’s cage is pivot mounted on one side only with no supporting bridge, it is virtually floating over the movement.

Owing to its mechanical complexity and meticulous finishing, this timepiece is a fully-fledged member of the watches created by the 18th century English master watchmaker John Arnold.

As for each Arnold & Son's timepiece, Ultrathin Tourbillon was born in our Manufacture of La Chaux-de-Fonds (Switzerland). Developed by our designers and engineers and produced by our watchmakers.



# DISPLAYS

Your Ultrathin Tourbillon indicates hours and minutes with its two hands in a counter at 12 o'clock.

## **One-minute tourbillon**

Your watch features a one-minute tourbillon. The tip of the anchor points on the tourbillon cage indicates the seconds.

A tourbillon is a mechanism that constantly rotates the balance wheel, balance spring and escapement while the movement is running. This is done to counter the affect of Earth's gravity on the isochronal properties of the balance wheel and spring.

John Arnold certainly had a decisive role in the invention of the tourbillon.

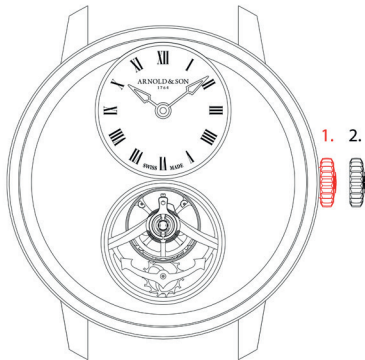
John Arnold and Abraham-Louis Breguet have long shared their knowledge and their watchmaking passion. As a tribute to his friend, Breguet mounted his very first tourbillon cage on Arnold's No. 11 movement. Furthermore, Breguet's first two operational tourbillons (regulator n°169 and 282) both used Arnold's famous detent escapement.

# WINDING

The movement can be wound by turning the crown when it is in position 1.

We suggest that you wind your watch every 90 hours at the latest to provide it with the power it requires to operate for the next 90 hours. This is how you will keep your watch in a state of constant and accurate operation.

If your watch has stopped, you will need to wind the crown approximately 40 times to wind it up fully.

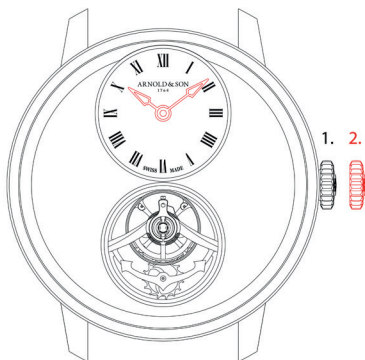


Note: as soon as you feel resistance to winding stop immediately; the movement is fully wound.

# SETTING

## Time:

To set the time (hours and minutes hands), pull the crown to position 2 and turn it in a clockwise or anticlockwise direction.



**Note:** do not forget to push the crown back to its winding position 1 when you have set it, to guarantee the water-resistance of your watch.

# MOVEMENT

Equipped with the A&S8300 / A&S8320 manual winding calibre, your Ultrathin Tourbillon indicates hours, minutes and have a one-minute flying tourbillon indicating seconds. Decorated in accordance with the codes of Swiss high-quality watchmaking, the movement is finely decorated. In the background of the tourbillon, the tourbillon bridge appears in the mainplate aperture, hand-engraved with a design inspired by the engravings found on John Arnold's pocket watches. Crafted in 3N yellow gold, it blends with the gear train while creating an aesthetic contrast with the rest of the calibre.

With a fine control system, your movement has been set by one of our watchmakers in 5 positions to make it operate with optimum accuracy.

## Technical characteristics:

- Calibre : A&S 8300 / A&S 8320, mechanical with manual winding
- Functions: hours, minutes, seconds on tourbillon
- Jewels : 29
- Diameter : 32.00 mm
- Thickness : A&S8300 : 2.97mm / A&S8320 : 3.30 mm
- Power reserve : 100 hours, double barrel
- Frequency : 3Hz (21,600 vibrations/h)
- Set to 5 positions

## **WATER-RESISTANCE**

Your watch is guaranteed to be water-resistant to 3 ATM. This means that it has been verified at a pressure equivalent to immersion at 30 metres. It has been designed to be water-resistant for swimming only and should not be used for deep-sea diving, diving or sports that have a high risk of major shocks, such as windsurfing or waterskiing. Leather straps are not suitable for water sports.

If any use in sea water, clean your watch properly in fresh water and a little soap, rinse it and dry it with a soft cloth.

The water-resistance of your watch can, moreover, be affected by shocks (falls, etc.) or aggressive substances (acids, perfumes, cosmetics, liquid metals, etc.). We therefore recommend that you have the water-resistance of your watch verified once a year, or after it has been subject to a shock, to guarantee its original water-resistance properties.

If water penetrates within the case, or if you notice any sign of humidity, please take your watch to a certified Arnold & Son sales or after-sales partner without delay.



## **MAINTENANCE**

Your watch has a mechanical movement which requires cares and adequate maintenance. It should be kept from violent shocks.

The movement in your watch must be serviced at regular intervals because oils change viscosity over time, and this impedes its smooth operation and speeds up wear and tear.

We therefore recommend that you have your watch fully serviced by a certified Arnold & Son after-sales service centre every four to five years to guarantee its smooth operation. Only authorized service centres are recognized for servicing your watch.





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