

Omega Constellation Ultra-Thins of the Sixties and Seventies

Ultrathins have long been a trademark of superior watchmaking, made possible by the finest craftsmanship and precision technology. Few manufactures have been tempted to produce ultra-thin movements, as these somewhat delicate constructions are within the technical capability of only the best watchmaking companies. In this survey of **Omega Constellation** men's ultra-thin, jewellery and dress watches of the nineteen-sixties and seventies, both the calibre 700 hand-wind and 711-712 automatic calibre Constellations will be included.

Nearly 40 years has elapsed since the last Constellation ultra-thin men's watch powered by this calibre series rolled off the production lines. Some newcomers to watch collecting may not have even been born when the collection was released and would be unaware of the place dress watches occupied in the world of style and tradition, nor would they be aware of the near-universal enthusiasm amongst watch lovers of the time for the thinnest watches on offer. So, the first task is to establish both the design and social context in which the ultra-thins were placed.

Context

Firstly, ultra-thins were not meant for the hoi polloi: they were very expensive, were encased mostly in precious metals and served a particular purpose in the 'style' milieu of the time.

Once everyone had become used to the idea of wearing wrist watches in the late twenties and early thirties, conventions emerged as to the type of watch appropriate for various social occasions: tool and dive watches were worn only for their specific purposes, utility watches served most activity-related pursuits, day watches were for the office, and dress watches were for formal occasions. In some strata of 'polite' society these rules still apply today. (In fact, stylish northern Italians have earned my enduring respect when I have observed them changing their watches up to three times in a day to reflect their social settings).

Secondly, it's important to remember that ultra-thin dress watches were a trend parallel to mainstream designs. Dress Constellations were not aimed at the 'Carnaby Street' mass market, 'Haight-Ashbury wannabees' or even the increasingly comfortable middle-classes. They were targeted towards those who saw themselves as sophisticated and stylish and who possessed enough disposable income and acquired taste to aspire to ownership of an elegant piece of jewellery that told the time.

Later, in the early eighties, dress watch designs would blend into the mainstream and were worn across occasions, a welcome respite from some of the bulky and almost-ubiquitous LED and quartz contraptions that assaulted the more sensitive of retinas at the time.

Today, dressier watches are making a cautious comeback. As fashion cycles move away from the gargantuan wrist hardware of the first decade of this century, minimalism may yet again touch the aesthetic nerves of the style and fashion conscious, and when it does a resurgence of interest in vintage ultra-thins may ensue.

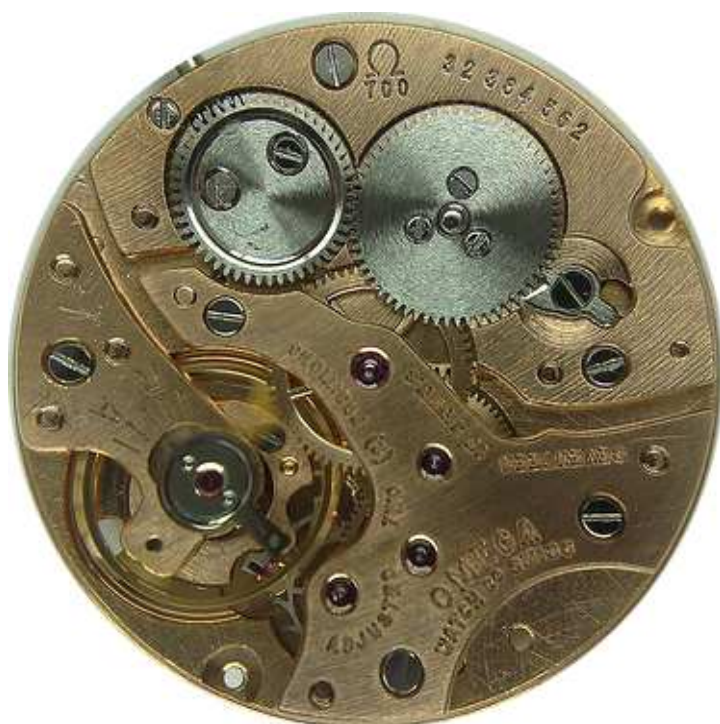


The movements

To understand the origins of the Omega ultra-thins of the sixties and seventies, we must dip into the history of the Frederic Piguet organisation led by a descendant of the great watch designer, Louise-Elisee Piguet, and explore Omega's association with Rayville (formerly Blancpain) and the Marc Favre Company.

SSIH (the Omega holding company) bought the Blancpain/Rayville factory in Villeret in 1961, mainly because of the factory's reputation as a maker of quality small movements. It was later in 1970 that SSIH purchased the company that owned the Blancpain name. The Blancpain brand-name remained on ice during the quartz and throwaway watch phenomenon of the 1970s, to be revived in the 1980s.

Calibre 700 Hand-Wind



In 1963, Omega was looking for a successor to its 'ultra-thin' calibre 540 movement. This calibre was used mainly in special watch models, like coin-watches, jewellery watches and 'classic' models. Omega's design department, anticipating the rise in popularity of ultra-thin watches, lobbied for a new series that could drive the expansion of its luxury dress watch portfolio.

The 1.71mm thin calibre 700 hand-wind (seen opposite) was created in 1963, the base calibre of which was the Frederic Piguet 9 ligne movement. The movement was composed of 133 basic parts and featured solid gold balance parts since their small dimensions did not allow production in steel or brass. The 18,000 bph calibre 700 is, in anyone's language, a superbly designed and executed movement.

Frederic Piguet (independent manufacture purchased by the SMH Group in 1993) ebauches were widely valued by watch companies for their originality, high quality construction and elegant, albeit minimalist cosmetic finish. Piguet made the blanks for the calibre 700, and 12,500 pieces were finished and assembled at Omega's Rayville factory (formerly Rayville Blancpain). They powered a series of limited edition pieces, most movements being reserved for Constellations. At the time, the calibre 700 was the most expensive to produce movement ever to sit under the dial of an Omega watch.

John Diethelm from the Omega Museum confirmed that the total number of calibre 700 hand-wind pieces did not exceed 12,500. The calibre was used for both men's and women's collections. As the 12,500 movements were spread across various models, it can be said that any calibre 700 piece is at least uncommon and often rare, particularly with the Mille et Une Nuits and Emeraude collections.

The Omega vintage data-base does not list all models. Further complicating the identification process is the custom of the time of stamping four-digit numbers on the inner case back while using a seven-digit number to describe the model. The best way in which to fully authenticate and confirm four-digit models is to obtain an extract from the Omega Museum archives. The table below lists known men's examples:

Known Men's Calibre 700 Ultra-Thins			
1962	BA 111.1719	Limited Edition Pocket/Fob Watch Constellation	Solid gold
1964	BA 111.0055	Limited Edition Omega	Solid gold non-Constellation
1966	BA 111.0075	Limited Edition Constellation	Solid gold
1966	BA 311.0090	Limited Edition Constellation	Solid Gold, soldered bracelet
1967	BC 358.0155	Limited Edition Constellation	Diamond Bezel
1968	BA 111.0099	Limited Edition Constellation	Solid gold(on leather strap)
1968	BA 311.0108	Limited Edition Constellation	Solid gold optional bracelet
1968	BC 111.0091	Limited Edition Constellation	Solid gold guilloche bezel
1968	BC 8115	Limited Edition Constellation	Square with soldered bracelet
1969	BA 411.0015	Jeux D'Or Jewellery	Solid Gold, woven bracelet, smoky quartz crystal. With cufflinks. Designed by Andrew Grima
1970	BC 311.4147	Limited Edition Constellation	Solid gold metal bracelet
1970	BC7 7262	Limited Edition Constellation	Woven Milanese bracelet
1971	BA 111.0104	Limited Edition Constellation	Solid Gold with leather strap
1973	BA 8114	Limited Edition Constellation	Solid Gold with leather strap, also with bracelet
1973	BA 711.1858	Limited Edition. "Emeraude" 2 piece case. Rectangular. Guilloche bezel quartz crystal -	Solid gold with woven wire bracelet
1973	BA 711.1814	Limited Edition "Emeraude" Constellation	Solid Gold, guilloche bezel, emerald cut crystal in amethyst, woven net bracelet
1973	BA 107.0001	Limited Edition 'Emeraude'	Solid Gold with woven net bracelet and hand engraved case. Designed by Andrew Grima
1976	BA 411.0018	Mille et Une Nuits Collection	Lapis lazuli dial 48 diamond bezel with matching ring and cufflinks

Below are some examples of calibre 700 designs:





BA 111.0171



BA 311.0108



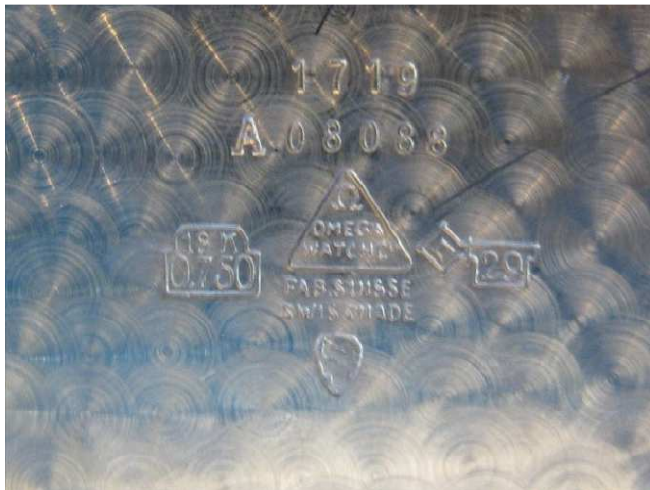
BC 711.1814 Emeraude Collection Men's



BA 8114



BC 8114 with integrated bracelet



BA 111.1719



BC 8115



BA 3292



BC7262: Courtesy ASaeed

Calibres 711 and 712



Contrary to some opinions, this movement was not based on the 18,000 bph calibre 700. It was designed from the bottom up. The 3mm thick automatic calibre 711-712 series base calibre was the 710 and the series went into production in 1964. The movements were initially manufactured at Omega's Rayville factory and, later, production was transferred to the Marc Favre factory, acquired by Omega (SSIH) in 1955. The much loved calibre 501 – 505 movements were also manufactured at the Favre factory, as were the earlier 470 series movements.

While no knowledgeable collector would claim that the calibre 501/505 series is anything but in-house production, for some reason a myth is making the rounds that

questions the in-house status of the 710-712 series. At no time was this series ever produced from Piguette blanks and at no time was it ever produced outside the Omega conglomerate. There is a suggestion that this calibre series was part of the 'booty' that Omega acquired with the takeover of the Rayville factory in 1961, but I have not been able to uncover any evidence to support that assertion, save the fact that Rayville had the technical capacity to manufacture ultra-thin movements.

The 710-712 family was the thinnest automatic series Omega ever produced. The 3mm thickness of the calibre was made possible by the re-design of the basic movement configuration, thinner plate and bridges, extremely precise production tolerances that permitted the spaces between wheels and other parts to be reduced, and the use of an indirect minute hand drive. Many parts were miniaturised, including the crown and ratchet wheels.



The 710 series also served as base movements for the limited edition Phase de Lune in 1983 (715), the 1984 Louis Brandt collection (716) and GMT (717) of perpetual calendar/moonphase watches.

Both calibre 711 and 712 contain 24 jewels and beat at a rate of 19,800 half oscillations an hour. The power reserve was an ample 43 hours. Both calibres had centre seconds capacity; however it was the norm of the time to produce dress watch designs without a centre sweep. There are exceptions, such as the 167.0021 (replacement for the 167.005) and the 163.0001.

The automatic winding system was markedly different to the larger mid-500 series powering the mainstream Constellation collections, diagrams of which appear overleaf:

AUTOMATIC WINDING

Functional description of the mechanism when the rotor revolves clockwise

The rotor pinion A, while moving in the direction of arrow F1, drives the large wheel of winding wheel B which, in turn, causes the superior winding wheel DS to revolve in the direction shown by arrow F2; through pinion G, the superior winding wheel DS actuates the driving wheel for ratchet wheel E, and the pinion thereof will communicate its motion to automatic ratchet wheel F in the direction of arrow F3, thus winding the mainspring.

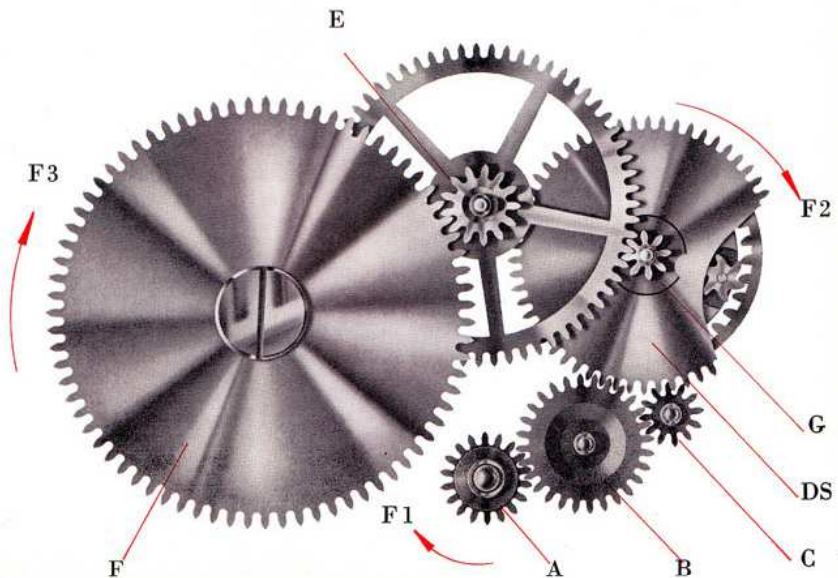


Figure 1

Functional description of the mechanism when the rotor revolves anti-clockwise

When the rotor pinion A moves in the direction of arrow F4 it successively drives the wheels of winding wheel B and C. The small wheel C, meshing with inferior winding wheel D1, makes the latter revolve in the direction of arrow F2. Through its pinion G, the inferior winding wheel actuates the driving wheel for ratchet wheel E, and the pinion communicates its motion to automatic ratchet wheel F in the direction of arrow F3, thus winding the watch.

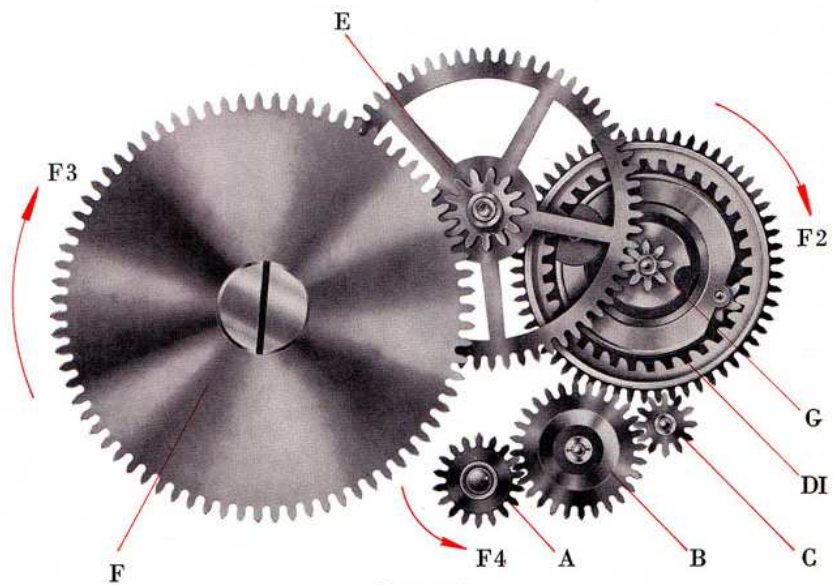


Figure 2

Calibre 711 and 712 automatics are not the easiest movements to work on and are best left to those who have a love of, and indeed the expertise to work on, ultra-flat movements. I have heard one or two run-of-the-mill watchmakers denigrate these calibres, whereas I have also heard one master watchmaker describe them as the "Italian Greyhounds of Omega calibres – delicate, yet surprisingly resilient little buggers". Often forgotten by those who fall for the fundamentally human trait of blaming the tools rather than the workman, is the fact that this series of calibres was not designed to power utility watches or daily bangers, but high-end dress watches created to adorn the wrists of their owners in more formal occasions.

Never-the-less, this calibre series has now been around for more than four decades, long enough to assess its overall strengths and weaknesses. In speaking with respected senior watchmakers and several Omega service agents as part of the preparation for this essay, I have found that the general consensus appears to be that the series is as robust as any other ultra-thin series they have had the opportunity to observe and work on over time. Ultra-thins, generally, are marginally less resilient than their 'thick skinned' cousins, but if worn as intended will hold their own against most comers. The Omega calibres are regarded as a very fine movement series that uphold the benchmarks of the high value ultra-thin genre.

While the movements are scaled down in thickness to achieve the aims of an ultrathin profile, the technical compromises in their design and construction are intelligent and sometimes ingenious. The cosmetic finish of the 711-712 series is minimalist, but the functional finish is of a high standard. Bridges are nicely bevelled and friction surfaces are expertly polished. Ratchet wheel wear is not unheard of and rotor posts appear to be the main parts replaced. I was cautioned that servicing and repair of these movements is not for the faint-hearted (as is working on any ultra-thin), but for those whose love for the craft is still intact, they "can enrich an otherwise uneventful day".

Calibre 712 was the chronometer version, adjusted to five positions, whereas calibre 711 was adjusted to two positions and normally did not have chronometer certification. Some calibre 711 models, however receive chronometer certification. One cannot rely on the dial printing to determining chronometer status of these models because design considerations often dictated how much lettering was applied to the dial.

Over 146,000 pieces of the twenty-four jewel calibre 710 - 12 series were produced, and yet only a few of the many case designs released are listed in the Omega vintage database. As mentioned earlier, it can be quite difficult to identify models in this range because of the four-digit watch head numbers stamped on the inner case back. What follows is a cavalcade of confirmed designs, but far from the complete inventory of dress Constellations. If you have a model not featured, I would be more than happy to include it in future updates.

Calibre 711 Models





351.8656 and 351.8657 Constellations 'Millet et Une Nuits' collection of 1976



ST 155.0013



BA 151.9108



BA 351.0063 Courtesy ChristopherY

Calibre 712 Models



BA 351.0064 also powered by Cal 711



BA 353.0016



157.0001 Courtesy SteveR



ST 357.0800





Watch Head ref 8310 filigree dial



Watch Head Ref 8319



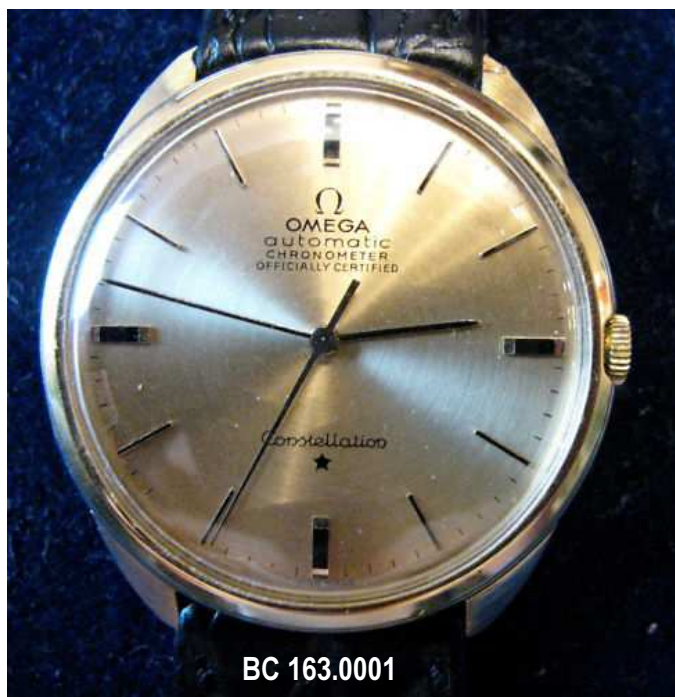
Watch Head Ref 8310



BC 353.0010



BA 151.0032



BC 163.0001



BA153.0039 Courtesy ThomasDN



BA353.0021 Priced \$7700 when new in 1977



BA153.0040



BA 153.004 Courtesy FilipeC



BA 153.0015 18k Dial



153.014 18k white gold Courtesy WillC



BA 153.0027 18k Dial



BA 353.0022 on watch-head 8299

