

THE FALL

AND RISE

OF THE

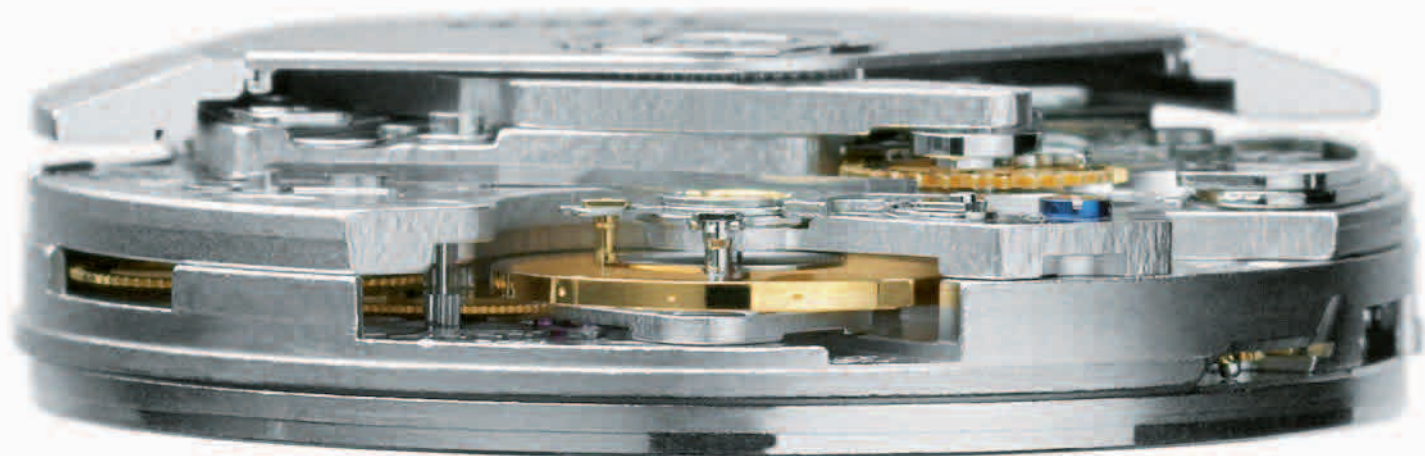
VALJOUX

7750

BY GIBERT L. BRUNNER

*How the famed self-winding
chrono caliber got a second wind*





*The movement is
7.9 mm thick.*



The Valjoux 7750, the most famous chronograph movement there is, would be just a dim memory if not for the insubordination of the farsighted watchmaker who developed it. This mutinous savior was named Edmond Capt.

Capt is an academically trained horological engineer, a native of the Vallée de Joux. In 1970, after studying at the Geneva Technicum and working for a year at Rolex, he returned to the valley of his birth and took a job with Valjoux SA, in Les Bioux, which had long supplied Rolex with chronograph movements. (Valjoux, as you probably guessed, is a contraction of Vallée de Joux.)

Soon after hiring him, his new employer presented him with a challenge: Valjoux wanted Capt to develop, as soon as humanly possible, a sturdy, reliable, affordable automatic chronograph with a quick-set day-date calendar.

Watch companies had already succeeded in incorporating a self-winding mechanism into a chronograph. Heuer, Breitling, Dubois Dépraz, Buren and Hamilton had joined forces to develop

the Chronomatic, and Zenith-Movado had come up with the El Primero. Both movements appeared in 1969. Now the pressure was on Valjoux to introduce its own automatic chronograph. That pressure was made greater by the debut of the first quartz watch, made by Seiko, at the end of 1969. Mechanical-watch firms knew they would need to launch some dazzling technological innovations to keep from being entirely upstaged.

Capt chose as his point of departure the Valjoux 7733, a hand-wound chronograph movement introduced in 1969. The 7733 was a descendant of the Venus 188 (the movement-maker Venus SA had gone out of business in 1966 and Valjoux had acquired its assets).

At first, Capt worked on the project alone, but was later joined by Gérald Gander, who had been a student of Capt at the watchmaking school in Le Sentier, and by Donald Rochat. The youthful cadre, which also included another watchmaker and a draftswoman, had one advantage: they were able to use a computer to help them design the 7550. In

AFTER THEY'VE BEEN GIVEN CAREFUL FINE-TUNING, THE 7750 AND ITS DERIVATIVES BREEZE THROUGH OFFICIAL CHRONOMETER TESTS.

A view from the dial side showing the day-of-the-week disk



Cam and fine adjustment for the index pointer

those days, computers were rare and extremely expensive. Valjoux's technical director was the only person within reach who had one. He worked in Neuchâtel, about an hour's drive from the Vallée de Joux, and Capt had to travel there regularly throughout the project in order to digitize his technical sketches and simulate the movement's kinetic sequences and functions. The Valjoux 7750 was among the first watch movements developed with the help of a computer.

The result was an unorthodox, but durable, precise and reasonably priced device. Instead of incorporating a column wheel, the traditional mechanism for controlling the chronograph stop, start, and

return-to-zero functions, the 7750 had a cam system (also known as a coulisse lever system). The coulisse was cheaper to manufacture than a column wheel because its parts were manufactured by stamping. The 7750 had another notable feature: the coupling took place by means of a "rocking pinion" rather than a conventional geared coupling system. When the chronograph button is pushed to start the chronograph, the pinion meshes with the chronograph's center wheel. When it is pushed again to stop the chronograph, the pinion disengages from the wheel and the chronograph hand stops. This system is not only simpler, but sturdier, than the traditional coupling method.

The 7750's specs, largely unchanged to this day, included:

- Integrated construction with plated switching cam
- Blocking lever, originally made of plastic, but now made of metal
- Two push-pieces for starting, stopping and returning to zero
- 30-minute and 12-hour counters positioned, for structural reasons, at 12 o'clock and 6 o'clock, respectively
- Running seconds subdial at 9 o'clock
- Date and day displayed in apertures and adjusted via the crown
- Unidirectional winding by means of a central, ball-borne rotor
- Self-winding subassembly that can be removed by unscrewing three screws
- Power reserve of about 42 hours
- Frequency of 28,800 vph, allowing measurements to the nearest eighth of a second

- Etachron regulator-pointer system to alter the active length of the balance spring
- Stop-seconds function
- Diameter of 13 ¼ lignes
- Height of 7.9 mm
- About 250 components
- Weight of 29 grams

The first Valjoux 7750 movements began ticking in 1972 and Valjoux began deliveries in 1973. Production reached 100,000 units per year.

In 1975, the Valjoux 7750 fell victim to growing demand for quartz watches and was assigned to the scrap heap. The management of Valjoux ordered the destruction of all 7750 movements in stock and, worse yet, the tools to make them.

Capt protested. When his arguments fell on deaf ears, he took matters into his own hands. Capt carefully packed up the

tools and movements for safekeeping, and hoped for a brighter future.

THAT FUTURE TOOK EIGHT long years to arrive. It wasn't until 1983, when mechanical watches had begun their dramatic comeback, that the Valjoux 7750 returned to the scene, thanks to Capt's foresight in rescuing the tools used to make it. He had left Valjoux SA in 1978, moving to Frédéric Piguet, and Valjoux SA itself had become part of the movement maker ETA, owned by what is now the Swatch Group. (Capt is now a consultant for the Swatch Group's Frédéric Piguet subsidiary.)

The relaunch was a success, and modifications of the 7750 soon began to appear. In 1985, when moon-phase displays had become popular, the 7750 CCL (*con cours de lune*) was introduced. In addition to a moon-phase, it also had a date



Valgranges
A07.111

Valgranges
A07.161

display consisting of a center-mounted hand moving around the dial.

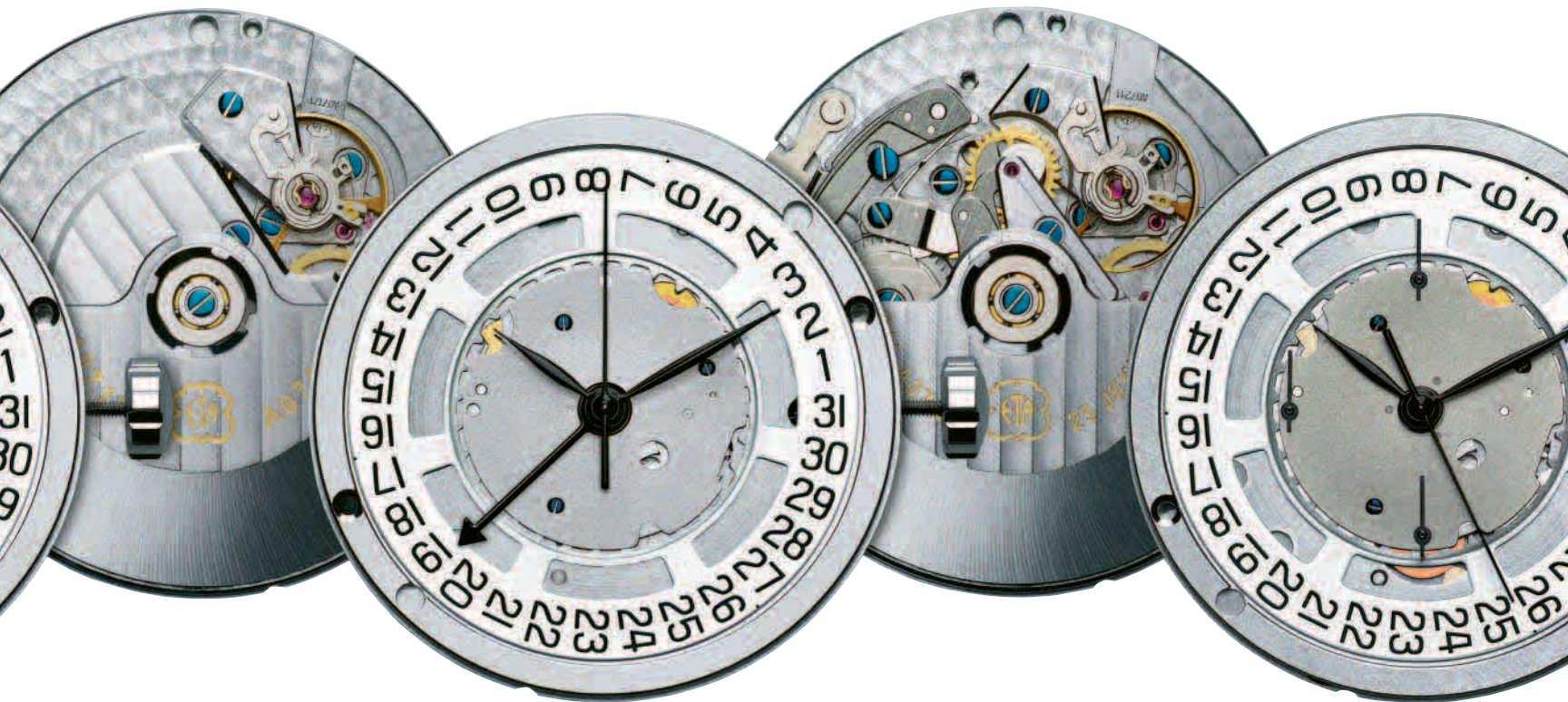
The 7751, which was considerably more complex, followed in 1986. It had a full calendar, with a center-mounted hand for the date, apertures for the day of the week and the month, and a moon-phase at 6 o'clock.

In 2002, ETA's technicians developed another 7750 offshoot, the 7753, with the classic configuration of subdials used in Universal Genève's famous Tri-Compax from 1942, i.e., the 30-minute counter at 3 o'clock, the 12-hour counter at 6 o'clock, and the running seconds at 9 o'clock. According to ETA, the change was made so that ETA customers would have room at 12 o'clock to place their brand name. Caliber 7753 also has a calendar, shown in an aperture between the 4 o'clock and 5 o'clock positions, and set by a small push-piece on the left

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THE VALJOUX 7750 WAS IN MOTHBALLS FOR EIGHT YEARS. ETA REVIVED IT IN 1983 WHEN MECHANICAL WATCHES BEGAN THEIR DRAMATIC COMEBACK.

The members of the Valgranges family, which evolved from the Valjoux 7750; each measures 37.2 mm in diameter.



*Valgranges
A07.171*

*Valgranges
A07.211*

The Valjoux 7750 Family

Caliber	Diameter / Height	Duration of production	Description
7750	30 / 7.9 mm	1973 – 1975, 1983 – present	Base caliber with self-winding mechanism: unidirectional rotor winding, coulisse-lever switching, oscillating pinion, counters for 30 minutes and 12 hours, 28,800 vph, stop-seconds function, quick-set day-date display, 24 jewels, 42-hour power reserve, about 250 components
7751	30 / 7.8 mm	Since 1986	Unidirectional rotor winding, coulisse-lever switching, oscillating pinion, counters for 30 elapsed minutes and 12 elapsed hours, day and month window, date hand, moon-phase display, 24-hour hand, 28,800 vph, stop-seconds function, 25 jewels, 42-hour power reserve, about 280 components
7753	30 / 7.9 mm	Since 2002	Unidirectional rotor winding, coulisse-lever switching, oscillating pinion, counters for 30 elapsed minutes at the “3” and for 12 elapsed hours at the “6,” date in a window at “4:30,” rapid adjustment of date display via push-piece at 10 o’clock, 28,800 vph, stop-seconds function, 27 jewels, 42-hour power reserve
7754	30 / 7.9 mm	Since 2003	Unidirectional rotor winding, coulisse-lever switching, oscillating pinion, counters for 30 elapsed minutes and 12 elapsed hours, date window, additional 24-hour hand with time-zone mechanism, 28,800 vph, stop-seconds function, 25 jewels, 42-hour power reserve
7757	30 / 7.9 mm	1985-2003	Based on the 7750, coulisse-lever switching, geared coupling, 10-minute countdown for regattas, 28,800 vph, 25 jewels, 42-hour power reserve
7758 (also 7750 CCL, <i>con cours de lune</i>)	30 / 7.9 mm	1985-2003	Based on the 7750, coulisse-lever switching, geared coupling, counters for 30 elapsed minutes and 12 elapsed hours, hand-type date display from the center, moon-phase display at 3 o’clock, about 267 components
7760	30 / 7 mm	1985-2003	Hand-wound, coulisse-lever switching, oscillating pinion, counters for 30 elapsed minutes and 12 elapsed hours, quick-set displays for the day and date, 28,800 vph, stop-seconds function, 17 jewels, 50-hour power reserve
7761	30 / 7 mm	1986-1998	Based on the 7760, 24-hour indication, quick-set hand-type date display, indicators for the month and the phases of the moon
7765	30 / 6.35 mm	1983-1998	Hand-wound, coulisse-lever switching, oscillating pinion, counter for 30 elapsed minutes, quick-set date in window, 28,800 vph, 17 jewels, 50-hour power reserve
7768	30 / 7 mm	1985-1998	Based on the 7760, counter for 30 elapsed minutes, date and moon-phase display
7770	30 / 7.9 mm	Since 2002	Unidirectional rotor winding, coulisse-lever switching, oscillating pinion, counters for 30 elapsed minutes and 12 elapsed hours, split seconds hand (rattrapante) with additional push-piece at 10 o’clock, 28,800 vph, stop-seconds function, 29 jewels, 48-hour power reserve
A07.111	36.6 / 7.9 mm	Since 2004	Derived from the 7750, no chronograph, with center-mounted seconds hand, power-reserve display at 6 o’clock, date window, 24 jewels
A07.161	36.6 / 7.9 mm	Since 2005	Derived from the 7750, no chronograph, with center-mounted seconds hand, power-reserve display at 6 o’clock, date window, 24 jewels
A07.171	36.6 / 7.9 mm	Since 2005	Derived from the 7750, no chronograph, with center-mounted seconds hand, additional 24-hour hand with time-zone mechanism, date window, 24 jewels
A07.211	36.6 / 7.9 mm	Since 2005	7750 with larger base plate, unidirectional rotor winding, coulisse-lever switching, oscillating pinion, counters for 30 elapsed minutes and 12 elapsed hours, quick-set date in window, 28,800 vph, stop-seconds function, 25 jewels, 42-hour power reserve

**IN 1975, THE VALJOUX 7750 FELL VICTIM
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SCRAP HEAP.**



Edmond Capt, who developed the 7750 and later rescued it from obsolescence.

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of the case. The same year, ETA introduced a rattrapante, or split seconds model, the 7770. The rattrapante mechanism is located on the front of the movement beneath an additional plate. ETA eliminated the date display in this model, making it possible to increase the power reserve to 48 hours. Like the 7750, the 7770 has its 30-minute counter at 12 o'clock. One year later, the company released Caliber 7754, which can display the time in a second time zone by means of a 24-hour hand.

The 7750 is also the base for a whole new family of calibers, the Valgranges line, which debuted in 2004. These movements are notable for their size, a remarkable 16 ½ lignes (37.2 mm) in diameter. The lineage of the Valgranges can be traced back to the Panerai brand, which had needed a big, workhorse, self-winding movement with a running-seconds subdial at 9 o'clock and a window-type date display. ETA responded with several large movements: an automatic with date window (the Caliber OP III); a power-reserve model (the A07.161); a GMT model (the A07.171), and a chronograph (A07.211), this last being a conspicuously enlarged 7750.

THERE IS MUCH to admire about the 7750 and its offspring. These movements are famously precise and reliable. In fact, after they've been given careful fine tuning, the 7750 and its derivatives breeze through official chronometer tests.

Furthermore, the 7750 offers designers many options. They can choose to leave out the running seconds hand, the date display and/or the day indicator. The designer can also dispense with the 12-hour counter or the self-winding subassembly.

Critics do cite some drawbacks. Some watchmakers note the 7750's relative

thickness and large diameter, but these attributes are less problematic in this era of jumbo watches. And, in a watch with a transparent back, the 7750's size is actually an asset. In addition, some wearers are conscious of the sound the rotor makes. It occurs because the large oscillating weight with its heavy metal segment can reach very high speeds when rotating in its non-winding direction. The sound is unavoidable, however, and shouldn't be considered a defect.

Others complain about the movement's lack of exclusivity: about 200,000 units of the 7750 are made each year. Big as that number is, though, it isn't high enough to satisfy demand.

The shortage is likely to get worse this year because, in accord with its agreement with the Swiss Competition Commission, ETA will start to reduce its deliveries of all of its movement kits, including those for the 7750, in preparation for a total cutoff in 2010. (ETA will continue to sell complete movements.) About 75 percent of all mechanical movements in Switzerland are based on ETA movement kits, so this step will be a painful one for the firm's customers.

Movement makers are developing substitutes for the 7750. The simplest is an exact replica. Since the patent for the 7750 has expired, nothing stands in the way of this project. Sellita is now hard at work on a clone of the 7750. It hasn't been born yet, but it has been named: it will be called the SW 500. In the meantime, ingenious manufacturers in China are producing large numbers of rather coarse copies of the 7750 in various versions.

Other 7750 alternatives are more loosely based on the original. La Joux-Perret has developed a column-wheel version. Hublot has come up with a high-end variation on the 7750, the HUB44,

which has components made from an alloy containing magnesium, manganese and aluminum. The movement weighs just 3.7 grams but is very sturdy. Despite the HUB44, Hublot will continue to buy 7750s from ETA. Hublot CEO Jean-Claude Biver says, “We’ll continue to purchase from ETA because calibers like the 7750 offer not only reliability and precision, but also a truly outstanding cost-benefit ratio. We surely couldn’t achieve that on our own.”

Over the decades, many companies have used the 7750 as a base for more

complicated movements. As early as 1985, IWC Schaffhausen augmented the 7750 with an under-the-dial perpetual calendar mechanism. Components of the 7750 are incorporated in the company’s Grande Complication, with chronograph, perpetual calendar and minute repeater, as well as in the extremely complicated Il Destriero Scafusia. Franck Muller, too, has been very creative in devising attractive modifications of the 7750.

Eterna uses the 7750 as a base for the highly complex Porsche Design Indicator, which has four barrels and shows elapsed

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Why is the Valjoux 7750 so popular?

“The Valjoux 7750 is characterized, on the one hand, by its extraordinary toughness and its very good, nearly indestructible self-winding mechanism. On the other hand, it also represents a good cost-benefit ratio. And it’s very easy to service, as long as no work is needed on the mechanism for tallying the elapsed hours, which is a difficult item to service on any chronograph. Some improvements have been made since the 7750 was designed. For example, in the early 1990s, Chronoswiss was the first company to produce and insert a blocking-lever (component no. 8200) made of metal. ETA later adopted this change and incorporated it into its movements. We therefore regard this caliber as a very contemporary device. Of course, we have no other option, since there’s no other model with a built-in chronograph. We would like to see a reduction in the overall height, and would welcome versions with a big date display and power-reserve indicator. But most important of all, we hope that this model will continue to be manufactured for a long time.”

Gerd-Rüdiger Lang, founder and owner of Chronoswiss Uhren GmbH

“Oris uses the Valjoux caliber in the basic version and in several variations. Its architecture is straightforward, with a clearly defined timekeeping movement and a separate chronograph assembly. The caliber delivers good rate performance and supports numerous options. Other companies also modify and equip it with other features, underscoring the fact that the 7750

provides a solid base for additional functions. Its service-friendliness also deserves mention: after disassembly, this caliber can be readily reassembled and set into motion again. This movement remains very much abreast of the latest horological developments. We would welcome a version with a power-reserve display or a big date. Delivery delays are quite long, too. Possible improvements could include reducing its height, enabling the rotor to wind the main-spring in both directions, and giving the movement a longer power reserve. But all in all, the 7750 gives us enough latitude for innovations.”

Hanspeter Schneider, director of production, and Ralf Hilbich, director of product development, Oris SA

“The 7750 is a tried and tested movement without any negative surprises. It’s outstandingly well suited for alterations and additions, such as depicting the time in a second time zone, as Sinn does. Furthermore, it provides many options for technological developments, for example, Diapal technology, where we select special duos of materials that can work together without friction and thus require no lubrication. We’re also satisfied with the range of variations, which leaves plenty of room for us to augment this caliber with our own additions. One example is Sinn’s SZ02, where we’ve rebuilt the caliber so that it can now tally 60 rather than 30 elapsed minutes. Many watch companies have used the Valjoux 7750, so watchmakers are very familiar with it. This familiarity further enhances its already excellent service-friendliness for retail customers. There’s currently no other movement with a better cost-benefit ratio. This fact makes it all the more important for this caliber to remain available, also because alternatives such as the Lemania 5100 are no longer being made.”

Lothar Schmidt, CEO of Sinn Spezialuhren

Sinn 756 Diapal UTC



Chronoswiss Pathos with split seconds hand



Oris TT3 Chronograph in titanium

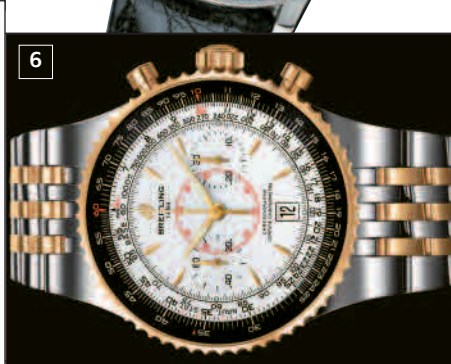


Modifications on a Valjoux Base

Company	Diameter / height	Description
Alfred Rochat	30 / 7.9 mm	Based on the 7750, skeletonized, Chronoswiss Caliber C.741 S, "Opus," launched in 1995
Alfred Rochat	30 / 8.3 mm	Based on the 7750, skeletonized, split seconds hand, Chronoswiss Caliber C.732 S, "Pathos," launched in 1998
Alfred Rochat	30 / 8.1 mm	Based on the 7750, hand-type date at 3 o'clock, 24-hour hand at 9 o'clock is adjustable via push-piece at 3 o'clock; among others, Chronoswiss C.743, "Tora" and Jacques Etoile JE Ingolstadt Village, launched in 1999
Alfred Rochat	30 / 7.9 mm	Based on the 7750, hand-type date at 3 o'clock, Chronoswiss Caliber C.741 or C.741 BO, "Classic Chronograph," "Chronometer Chronograph," launched in 1999
Alfred Rochat	30 / 7.9 mm	Based on the 7750, counter for 30 elapsed minutes at 3 o'clock, flyback function, Chronoswiss C.763, "Timemaster Flyback Chronograph," launched in 2003
Alfred Rochat	30 mm	Based on the 7750, off-center time display, Chronoswiss Caliber C.753, "Kairos Chronograph," launched in 2006
Alfred Rochat	30 / 7.9 mm	Based on the 7750, moon-phase display, analog date adjustable via the crown, Chronoswiss Caliber C.755, "Lunar Chronograph," launched in 1999
A. Rochat for Chronoswiss	30 / 8.3 mm	Based on the 7750, split seconds hand (rattrapante), column-wheel control for the split seconds hand, additional push-piece at 10 o'clock, hand-type date at 3 o'clock, 29 jewels, among others Chronoswiss Caliber C.732, launched in 1992
Fortis	30 / 7.9 mm	Based on the 7750, alarm mechanism with designated second barrel, developed by Paul Gerber, Caliber Fortis F 2001, launched in 2001
Franck Muller	30 mm	Based on the 7750, two additional and independently adjustable pairs of "Master Banker"-style hands, hand-type date display at 3 o'clock, counter for 30 elapsed minutes at 9 o'clock, Caliber FM 7850 CC MB, "Chronobanker," "Master Banker Chronograph"
Franck Muller	30 mm	Based on the 7750, off-center hands for hours and minutes at 6 o'clock, counter for 30 elapsed minutes at 12 o'clock
Franck Muller	30 / 7.9 mm	Based on the 7750, retrograde seconds hand at 9 o'clock and retrograde counter for 30 elapsed minutes at 3 o'clock, Caliber FM 700 B, "Cintrée Curvex Chronograph Bi-retrograde"
Franck Muller	30 mm	Based on the 7750, module for perpetual calendar with retrograde displays of the day at 9 o'clock and date at 3 o'clock, month and leap year at 12 o'clock, Caliber FM 5888 B, "Cintrée Curvex Chrono QP Bi-retrograde"
IWC	30 mm	79261: "Da Vinci," automatic with perpetual calendar and year display, manufactured from 1985 to 2007
IWC		79091: "Grande Complication," automatic with perpetual calendar, minute repeater and chronograph, launched in 1990
IWC	30 / 7.9 mm	79230: "Double Chronograph," 7750 with split seconds hand, launched in 1992
IWC		18680: "Il Destriero," hand-wound, perpetual calendar, minute repeater, cantilevered tourbillon, split seconds chronograph, 750 components, launched in 1992
IWC		79251: "Da Vinci Rattrapante," perpetual calendar, split seconds hand, launched in 1995
IWC	30 / 7.9 mm	79240: "Portuguese Chrono Automatic," 7750 without date display, running seconds hand at 6 o'clock
IWC	30 / 6.2 mm	Based on the 7760: 76240 Portuguese rattrapante hand-wound, 21 jewels
IWC		76061, "Da Vinci Tourbillon," hand-wound, cantilevered tourbillon
Jacques Etoile	30 / 7.9 mm	Based on the 7750, split seconds hand, hand-type date display at 3 o'clock, Caliber IV.C4
La Joux-Perret	30 mm	Based on the 7750, rattrapante, designed by Franck Muller, among others Ulysse Nardin UN 57/UN 58, launched in 1992
La Joux-Perret	30 / 7.9 mm	Based on the 7750, La Joux-Perret 8286 (P8) 26 jewels, 30-minute counter at 12 o'clock, hand-type date display at the 3 o'clock, second time zone (hours/minutes) at 6 o'clock, e.g. Concord's "Saratoga" Dual Time Chronograph

Company	Diameter / height	Description
La Joux-Perret		Based on the 7750, concentric subdial for running seconds and 12 elapsed hours at 9 o'clock, Graham's G 1710
La Joux-Perret	30 / 11.5 mm	Based on the 7750, big date at 12 o'clock, counters for 30 minutes at 3 o'clock and for 12 elapsed hours at 6 o'clock, flyback function, 28 jewels, La Joux-Perret 8151/518; Graham's version G 1721 with big date at 6 o'clock, "Grand Silverstone"
La Joux-Perret		Based on the 7750, two center-mounted hour hands (sweeping through one full circle in 12 and 24 hours, respectively), 30-minute counter at 3 o'clock, date window at 4:30, La Joux-Perret 8105, e.g. JeanRichard "Bressel Chronograph GMT"
La Joux-Perret		Based on the 7750, 24-hour hand at 6 o'clock, adjusted via push-piece at 8 o'clock, hand-type date display at 3 o'clock
La Joux-Perret	30 mm	Based on the 7750, 24-hour hand at 6 o'clock, adjusted via push-piece at 8 o'clock, 30-minute counter at 3 o'clock, among others Jaquet Droz Caliber 1825
La Joux-Perret		Based on the 7750, version with column wheel, La Joux-Perret 8144, Hublot HUB 44 with 30-minute counter at 3 o'clock and date window at 4:30
La Joux-Perret		Based on the 7750, 30-minute counter at 3 o'clock and 12-hour counter at 6 o'clock, alterations by Jaquet (today La Joux-Perret), Franck Muller FM 7501
La Joux-Perret		Based on the 7750, chronograph started and stopped via a button in the crown, column wheel, Graham G 1742 (also SQ) "Chronofighter"
La Joux-Perret		Based on the 7750, various rattrapantes; among others, for Panerai (with column wheel), Chopard, Corum, Hublot, Eberhard, launched in 2005
La Joux-Perret		Based on the 7750, flyback chronograph bi-compax LJP8139 (Panerai)
La Joux-Perret		Based on the 7750, foudroyante LJP8952-2; Panerai, Corum
La Joux-Perret for Paul Picot		Based on the 7750, rattrapante, power-reserve display at 6 o'clock, hand-type date display at 3 o'clock, 30-minute counter/day display at 12 o'clock, Paul Picot "Atelier Technicum" (sold out)
Panerai		Based on the 7750, no chronograph, date window at 3 o'clock, OP III
Panerai		Based on the 7750, no chronograph, date window at 3 o'clock, GMT function, OP VIII
Panerai		Based on the 7750, no chronograph, date window at 3 o'clock, power-reserve display, OP IX
Panerai		Based on the 7753, no counter for 12 elapsed hours, OP XII
Panerai		Based on the 7750, split seconds-hand function, OP XVIII
Panerai		Based on the 7750, no chronograph, date window at 3 o'clock, "Luminor Submersible" bathometer
Panerai		Based on the 7750, OP XIX with flyback function, 30 jewels, 30-minute counter at 3 o'clock
Poljot	31.05 / 7.35 mm	3133 = replica of the 7734, 23 jewels
Poljot	31.05 / 7.55 mm	31679 = 3133 with moon-phase display
Poljot	31.05 / 7.55 mm	31681 = 3133 with 24-hour indicator at 6 o'clock
Poljot	31.05 / 7.55 mm	31682 with day-night display at 6 o'clock
Porsche Design	36 / 14.3 mm	Based on the 7750, four barrels, window-type counters to tally elapsed minutes and hours, power-reserve display, Caliber Eterna 6036
Revue-Thommen		Based on the 7750, rapid adjustment, "Airspeed Flyback"
Sinn		Based on the 7750, flyback function, (SRS switching), manufactured from 1998 to 1999
Soprod		Based on the 7750, Soprod SORA, rattrapante with center-mounted hands for hours and minutes, hand-type date display at 3 o'clock, button to control the split seconds hand at 10 o'clock
Soprod		Based on the 7750, Soprod 9055, power-reserve display at 3 o'clock, date window at 6 o'clock, also with date window at 3 o'clock
Soprod		Based on the 7750, SORM3H, power-reserve display at 3 o'clock
China		Various replicas of the 7750, frequencies of 21,600 or 28,800 vph, diameters of the staffs of the hands sometimes adapted accordingly

A Valjoux 7750 Sampler



1. The 7750 without its chronograph function in Panerai's Luminor Marina Automatic
2. Vulcain's Vulcanographe has a 7750 modified by La Joux-Perret to incorporate a column wheel.
3. The 7750 with alarm in Fortis's B-42 Official Cosmonauts Chronograph Alarm Titanium
4. The 7750 with chronometer certificate in Ebel's Discovery 1911
5. A complicated watch based on the 7750: IWC's Il Destriero Scafusia with tourbillon, perpetual calendar, minute repeater and split seconds chronograph
6. Breitling's Montbrillant Légende contains a 7750 rebuilt to support a bicompa dial.
7. Graham's Chronofighter Oversize Diver Deep Seal has its crown and a start/stop lever on the left.
8. The Valjoux 7750 without the weekday indicator, in TAG Heuer's Link Calibre 16
9. Tutima's Pilot's Chronograph 1941 with the Valjoux 7760
10. Longines's Grande Vitesse Classic contains the Valjoux 7753.
11. This Big Bang from Hublot contains a replica of the 7753, Caliber HUB44 from La Joux-Perret, with bridges made of an alloy containing aluminum and magnesium.

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time via numerals. The list goes on and on: Alfred Rochat has skeletonized and otherwise modified versions of the 7750; La Joux-Perret, along with other companies, has variations with big date and fly-back function. Soprod has modified the 7750 in several ways. In 2001, Paul Gerber, at the request of Fortis, equipped the 7750 with an alarm mechanism. This resulting caliber is the F 2001.

From the most humble to the most elaborate, they all owe their existence to one man, the forward-looking Capt, who not only designed the 7550, but saved it from extinction. ○