MODEL SERIES 757

GB

Sinn

SPEZIALUHREN ZU FRANKFURT AM MAIN

CONTENTS

DEAR CUSTOMER,

We know from numerous conversations that the people who buy our watches do so out of conviction. This includes people with a pronounced affinity to technology who are fascinated, for example, by the solutions we have devised for protection from magnetic fields and scratch resistance. Some of our customers, such as divers, pilots and the German GSG 9 special police unit, rely on their watches in their respective careers because their lives depends on it.

They all swear by the performance, resilience and durability, as well as the quality and precision of our watches. That is why Hamburg-based Germanischer Lloyd regularly tests and certifies the water and pressure resistance of our diving watches.

We have selected pilot's watches tested and certified to the Technical Standard for Pilot's Watches (TESTAF) by Aachen University of Applied Sciences. The TESTAF ensures that a pilot's watch meets all timekeeping requirements during flight operations in accordance with visual and instrumental flight regulations and is suitable for professional use. Functionality is our top priority and ultimately determines the design. Only the technical features that are really needed can be found on our watches. Because we believe that products have to speak for themselves.

The basic question that we ask ourselves is: which innovative technologies and materials can be employed for our craft and provide solutions for rendering our watches even more practical for everyday use? It is often worth indulging in a little lateral thinking to see what is going on in other industrial sectors or fields of science. We repeatedly go to the limits of physical resources to upgrade our watches – with the aim of making what's good even better. Most of our best developments are yet to come!

I am delighted that you have decided to buy a SINN timepiece and hope that it will continue to give you pleasure for many years to come.

Yours sincerely,

Lothar Schmidt

SINN SPEZIALUHREN ZU FRANKFURT AM MAIN

It was back in 1961 that pilot and blind-flying instructor Helmut Sinn founded the company. Since then, we have been committed to producing high-specification mechanical watches. In 1994, the graduate engineer Lothar Schmidt took over the company. This marked the beginning of a new era for the SINN brand, because the new owner took a decisive step towards more innovation. Under his leadership, new technologies and materials were introduced, thus providing the crucial incentives for our company's evolution and gradual emergence as an insider's tip for lovers of fine watches. Today, our name stands for technical innovations – much to the delight of both the trade and our customers alike.

Advancements in endurance testing

Take, for example, the absolutely condensation-free, anti-reflective, german submarine steel diving watch – made possible by HYDRO technology. Other examples include a chronometer chronograph fashioned from a 22-carat gold alloy that is as hard as stainless steel and a chronometer with a magnetic resistance 20 times the standard. There are also watches with a clockwork mechanism optimally protected from aging by an inert gas and integrated dehumidifying capsule. The list would not be complete without mentioning the development of mission timers (Einsatzzeitmesser or EZM in German) for special police units and border patrol guards as well as temperature resistance technology to keep mechanical watches performing at temperatures ranging from −45 °C to +80 °C. This technology has proven its worth in the EZM 10 TESTAF model, for example, used as part of the official approvals procedure for Eurocopter's EC 145 T2 high-performance helicopter. Hot and cold climate tests and high-altitude experiments were carried out in the deserts of the USA, the Rocky Mountains and the frozen wastes of Canada. The watch was worn unprotected, outside the pilot's overall, during cold climate tests at temperatures reaching −45 °C.

Innovations and certifications

Germanischer Lloyd, the world's largest classification society for maritime safety, has been testing our diving watches for pressure and water resistance since 2005. As part of Germanischer Lloyd's official certification process, our diving watches have been treated as part of diving equipment since 2006 and tested and certified in accordance with European diving equipment standards. This is unparalleled in the watch industry.

We have had selected pilot's watches tested and certified to the Technical Standard for Pilot's Watches (TESTAF) by Aachen University of Applied Sciences since 2012. The TESTAF, the result of a research project at the initiative of Sinn Spezialuhren, ensures that a pilot's watch meets all timekeeping requirements during flight operations in accordance with visual and instrumental flight regulations and is suitable for professional use.

DIAPAL is one of our most important technological developments, with oiling no longer needed for the most important functions in the watch thanks to the materials we select. This technology was first used in 2001. With the aid of TEGIMENT Technology, we achieve greatly increased scratch resistance through surface hardening.

Ongoing advancement in technology and quality

Our top priority has always been to develop watches that offer superior performance – both in daily and in professional use. Which is why our engineers are working continually to identify which innovative methods, materials and technologies are best suited for optimising our watches. Each new development has to first undergo rigorous practical tests before being incorporated. And no watch leaves our workshops before it has been subjected to thorough checking and fine adjustment by our master watchmakers.

Workshop modifications and hand-engraving

From the robust case and the polished crystal through to elaborate refinements: we make sure that each and every detail of our watches is fit for purpose. The same applies to our workshop modifications. Only the perfect interaction of all components and technologies ensures that our watches can meet all their design specifications in full. Take for example the SZ02 calibre of our U1000 diving chronograph. The 60-minute scale of the stopwatch minute counter is much simpler and more intuitive to read than the 30-minute scale commonly found on other watches. The hand-engraving represents a highly personal form of refinement. If required, our specially trained master engraver can etch a name, initials, monograms or symbols onto the rotor, movement bridge and case back.


UTC
Sinn

MODEL SERIES 757

The 757 series pilot's watches unite all our core watchmaking competencies: these are instrument watches with a consistently functional design which honour the tradition of our navigation cockpit clocks.

The features include Magnetic Field Protection of up to 80,000 A/m, Ar-Dehumidifying Technology and pressure resistance of up to 20 bar. The pilot's bezel make these watches perfect, all-purpose instruments.

The stainless steel pilot's bezel with minute ratcheting can be rotated on both sides and features a special mechanical system developed by SINN to protect against loss. Like the case material, the base of the bezel is tempered with TEGIMENT Technology. The labelling is silver on an inset, black anodised aluminium ring to ensure optimal scale readability. A luminous triangle serves as the 0/60 minute mark. The rotating pilot's bezel can be turned in both directions and clicks firmly and audibly into place at minute intervals.


50
40
30
20
10
12
3
6
9

MODEL 757 DIAPAL

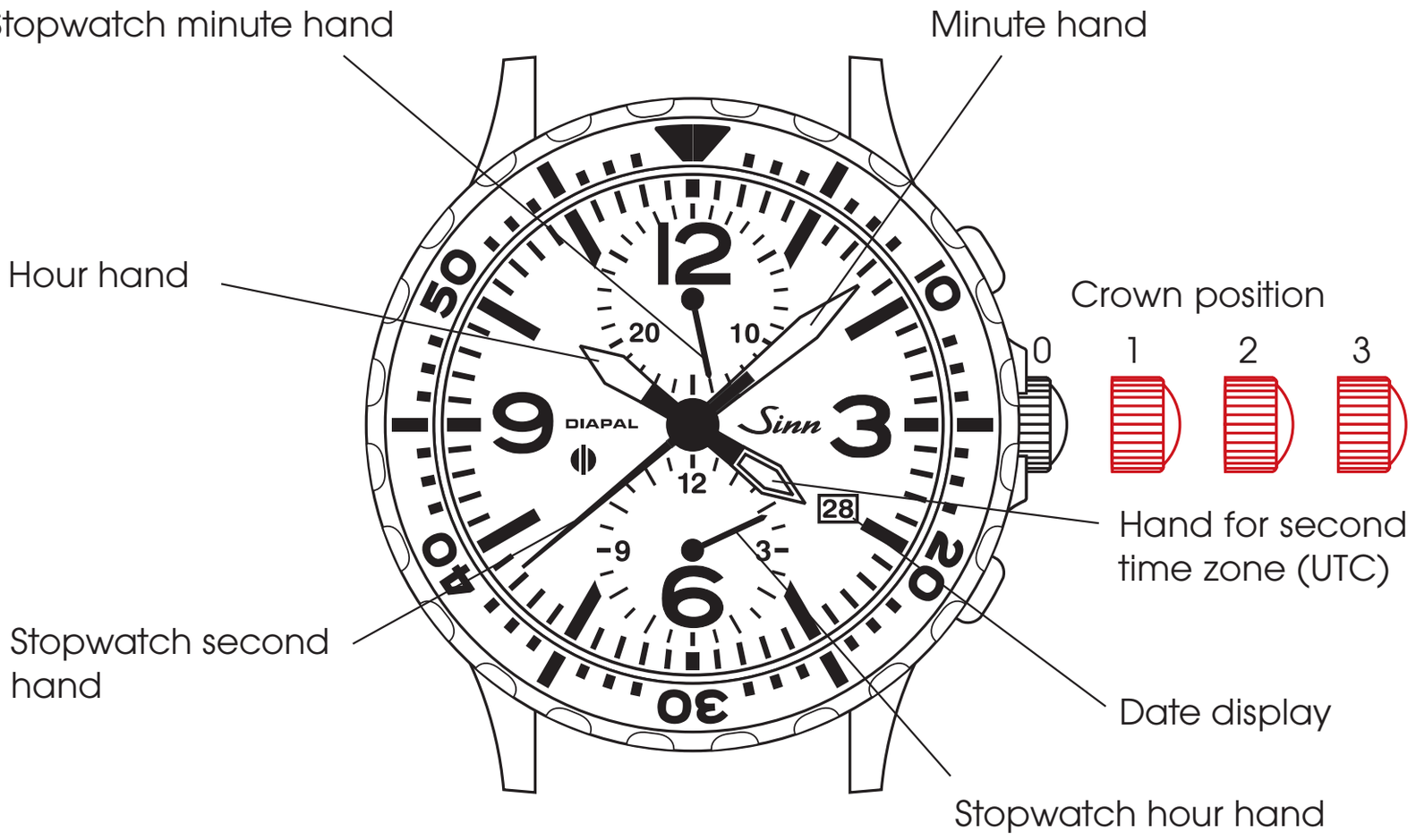
The special in this instrument chronograph is the DIAPAL Technology.

First developed by SINN in 2001, it is now in successful practical use.

The starting point for our considerations back then was the critical feature of every mechanical watch: the aging of the oil, particularly around the Swiss anchor escapement, and the accompanying adverse effects on the accuracy of the movement. Theoretically, it was only a small step from the analysis to the solution: where there's no oil, there's no aging. However, this concise expression required numerous tests in practice. The technology is documented by the DIAPAL logo on the charcoal grey galvanized dial.

INSTRUCTIONS FOR USE

757 DIAPAL/757 UTC/757 S UTC



Winding the watch (crown position 1)

The crown is screwable (crown position 0). To loosen the crown, turn it *counter-clockwise* (crown position 1). The movement is wound by turning the crown *clockwise*. About 40 winds of the crown are generally enough to ensure reliable functionality. Under normal circumstances, simply wearing the watch every day should suffice to keep the self-winding mechanism wound. The power reserve allows you to take off your watch overnight without having to re-wind it.

Time adjustment (crown position 3)
In crown position 3, the motion is paused. This helps you to set the watch precisely. Please make sure the date changes at midnight and not at midday. Just move the hands forward until the date changes. Afterwards you attempt to set the time. We recommend moving the hands past the desired minute marker and then adjusting it backwards. The movement restarts as soon as the crown is no longer in position 3.

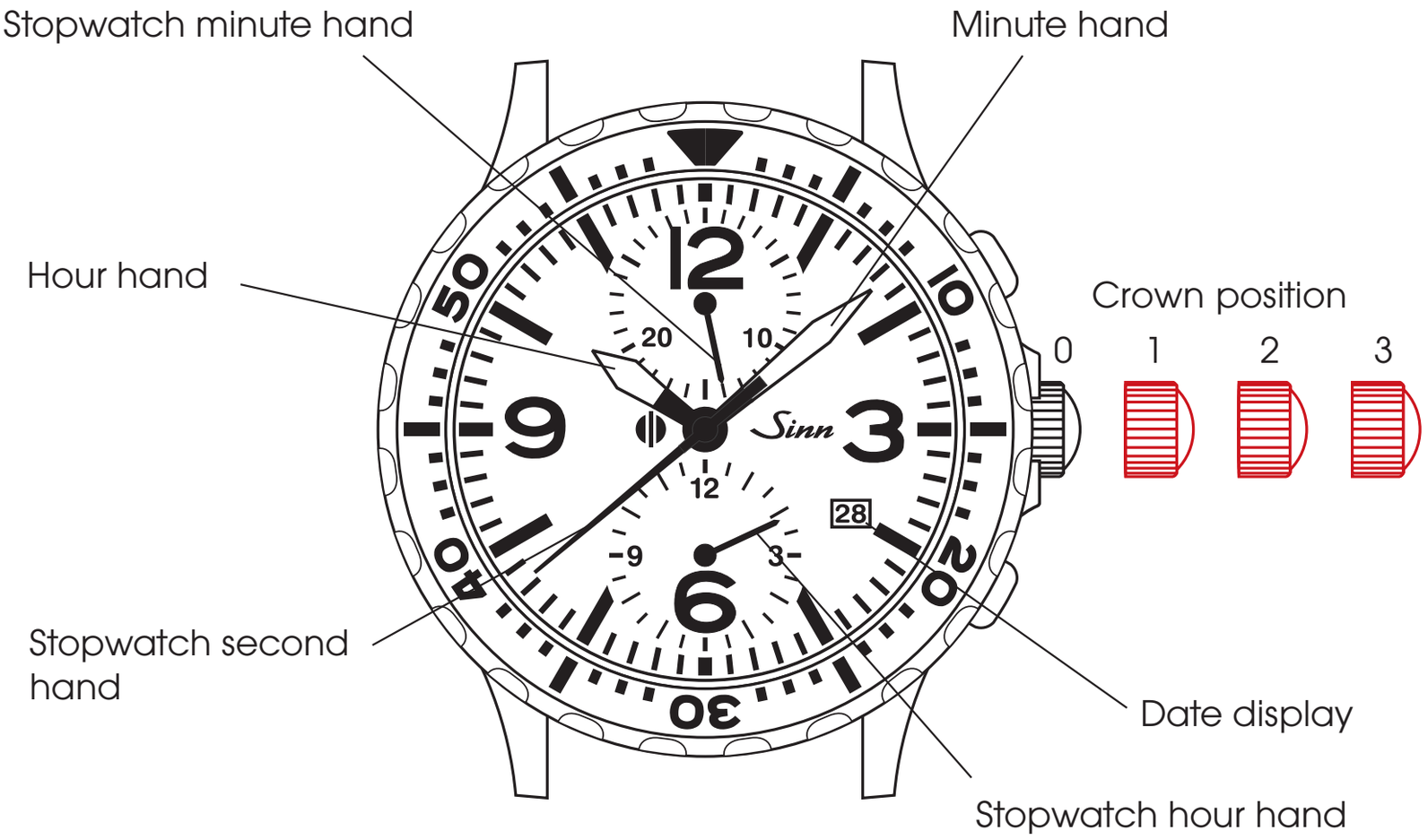
Quickset date adjustment (crown position 2)
Do not use this function between 9 p.m. and 3 a.m. Set the crown in position 2 and turn it *clockwise* until the correct date appears in the date display window. **Please do not use the date-setting function between 9 p.m. and 3 a.m.** Between these times, the gear wheels used for changing the date are engaged, and the movement could be damaged.

Adjusting the second time zone (crown position 2)
Pull the crown into position 2 and turn it *counter-clockwise* until the correct time appears. The UTC hand stops at hourly intervals. This setting may be adjusted between 9 p.m. and 3 a.m., but it is important to ensure that you are really setting the second time zone in this period by turning the crown *counter-clockwise*! Otherwise the watch could be damaged!

Please take care to fasten the crown after making adjustments.

INSTRUCTIONS FOR USE

757/757 S



Winding the watch (crown position 1)
The crown is screwable (crown position 0). To loosen the crown, turn it *counter-clockwise* (crown position 1). The movement is wound by turning the crown *clockwise*. About 40 winds of the crown are generally enough to ensure reliable functionality. Under normal circumstances, simply wearing the watch every day should suffice to keep the self-winding mechanism wound. The power reserve allows you to take off your watch overnight without having to re-wind it.

Time adjustment (crown position 3)
In crown position 3, the motion is paused. This helps you to set the watch precisely. Please make sure the date changes at midnight and not at midday. Just move the hands forward until the date changes. Afterwards you attempt to set the time. We recommend moving the hands past the desired minute marker and then adjusting it backwards. The movement restarts as soon as the crown is no longer in position 3.

Quickset date adjustment (crown position 2)
Do not use this function between 9 p.m. and 3 a.m. Set the crown in position 2 and turn it *clockwise* until the correct date appears in the date display window. **Please do not use the date-setting function between 9 p.m. and 3 a.m.** Between these times, the gear wheels used for changing the date are engaged, and the movement could be damaged.

Please take care to fasten the crown after making adjustments.

Using the chronograph to measure time

The chronograph is operated by means of buttons A and B. The measurement starts when button A is pressed once. Pressing this button again stops the measurement. The measurement is resumed by pressing button A once more. This allows you to add up and record the cumulative time. Button B resets the hands of the chronograph to zero.

Push piece A: start/stop

Push piece B: reset

Using the pilot's bezel to measure time

The pilot's bezel is can be moved manually in both directions. The triangle glows in the dark. It can be used in a number of ways, including to measure important lengths of time. For example, you can set the marking to the beginning of the time span to be measured, or you can use it to indicate the end of a given span of time.

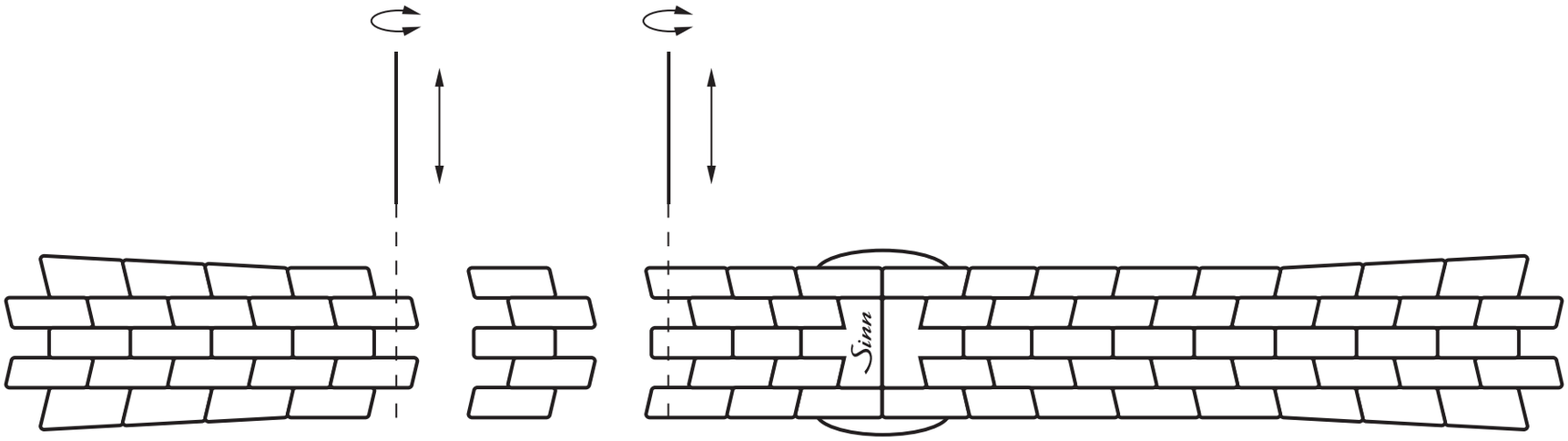
ADJUSTING THE LENGTH OF THE WATCH STRAPS

If you don't know how to shorten or lengthen the solid bracelet, please contact your SINN dealer or the watchmakers in our customer service department in Frankfurt am Main. Our customer service employees are also happy to help you over the telephone.

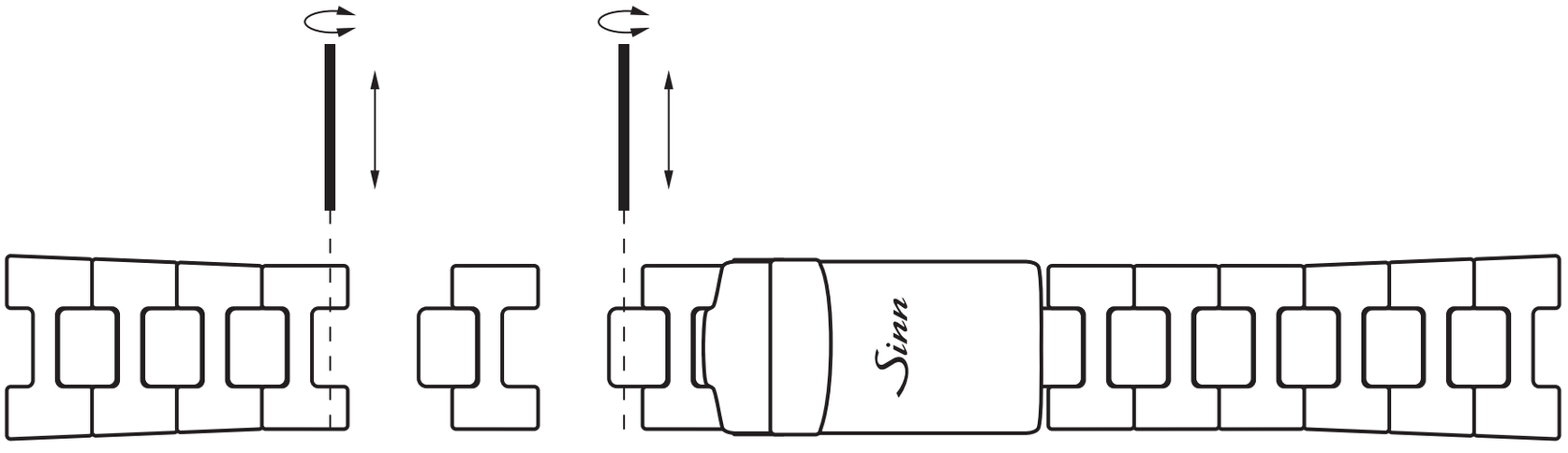
Adjusting the length of the solid bracelet
Determine the relative lengths of the two sides before adjusting the length of the bracelet. To ensure maximum comfort, both sides of the bracelet should contain the same number of links. If this is not possible, the top bracelet strap (above the 12 on the clock) should be longer.

It is not necessary to detach the solid bracelet from the watch or the clasp.

1. Loosen the screws on the side of the bracelet link which is to be removed or added.
2. Remove the superfluous bracelet link or insert a new one.
3. Before screwing tight, add a small drop (no more!) of thread-locker (AN 302-42 medium-tight) to the thread of the bracelet screw.



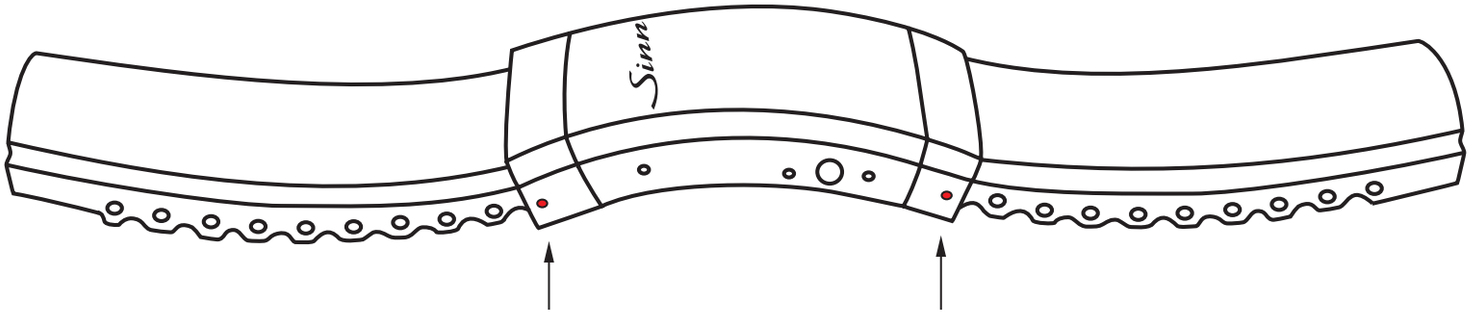
757 DIAPAL



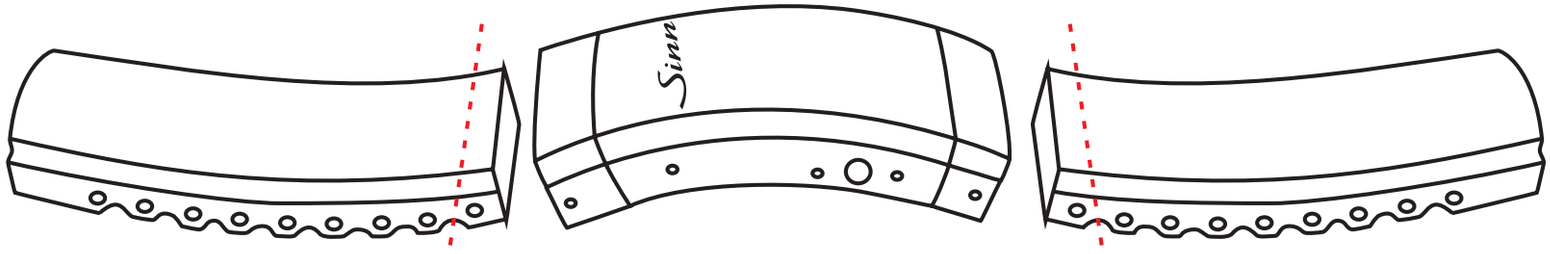
757 / 757 UTC / 757 S / 757 S UTC

Adjusting the length of the silicone strap

1. Release the silicone band from the clasp. To do so, use the pointed end of the band replacement tool to push the spring bar out of the fastener. The other side of the spring bar can be removed while the fastener is open, enabling you to remove the silicone band.



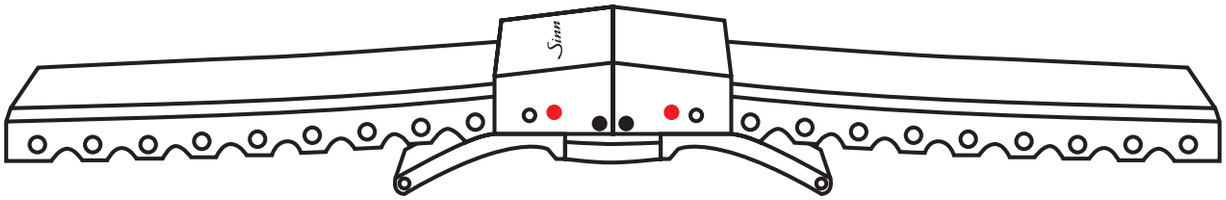
2. Using a knife or scissors, cut the silicone band in the middle between two metal pins. You should shorten the band symmetrically and little by little, starting from the clasp, until you have reached the desired length. Test the length from time to time before proceeding. Shortening both ends by the length of one metal pin results in a total difference of 10 mm in the length of the strap; shortening one end reduces the length by 5 mm.

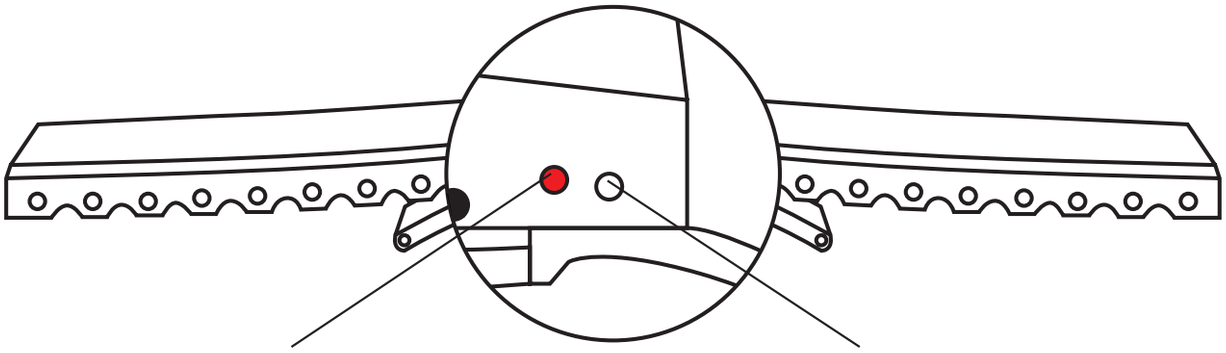


3. Remove the first metal pin and replace it with the spring bar. Then reattach the clasp to the band.

Attach the butterfly folding clasp as follows

We recommend first inserting the bar at the red marker, as per the illustration. If the silicone strap is too tight, use the option shown in the illustration by the white marker.





Hole for spring bar:
Tight-fitting strap

Hole for spring bar:
Extend strap

If you want to shorten the overall length of the silicone strap, refer to steps 1 to 3 in chapter "Adjusting the length of the silicone strap".

(Ar)-DEHUMIDIFYING TECHNOLOGY

Indication colours of the drying capsule

Pale blue

Up to 25% saturation

Initial condition

Light blue

Up to 50% saturation

Medium blue

Up to 75% saturation

Dark blue

Up to 100% saturation

Drying capsule saturated

The colour scale for the Ar-Dehumidifying Technology: the capsule continues to absorb moisture until the darkest colouration is reached.

Perfect freedom from fogging

All watches in this series are water-resistant as per DIN 8310. But even with watertight instruments, the air enclosed in the case contains water in a gaseous state. And air can also penetrate the seals. When the water vapour in the case condenses into liquid, the instruments are impossible to read. To prevent this from happening, we have developed the Ar-Dehumidifying Technology. The combination of a special drying capsule, EDR seals (**e**xtreme **d**iffusion **r**eduction) and a filling of protective gas guarantee that the crystal remains free from fogging, even in difficult conditions.

Longer service intervals

The sophisticated Ar-Dehumidifying Technology considerably slows the aging process of the watch's inner workings and keeps the movement functioning properly for longer. That is why we issue a three-year warranty on all our watches featuring Ar-Dehumidifying Technology. When the drying capsule is saturated, as indicated by a deep blue colour (refer to picture on the left side), we recommend you have it exchanged so you can continue to enjoy all the advantages of the Ar-Dehumidifying Technology (enhanced reliability, longer intervals between maintenance).

Luminous

TECHNICAL DETAILS 757 DIAPAL

Mechanical movement

- Calibre Valjoux 7750
- Self-winding mechanism
- Hand adjustment with stop-second function
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Functions

- Hours, minutes, subsidiary seconds
- Second time zone on a 12-hour basis
- Chronograph
- Date display
- Pilot's bezel with luminescent key mark

SINN Technologies/Special Features

- DIAPAL Technology, lubrication-free escapement
- Ar-Dehumidifying Technology
- Magnetic Field Protection up to 80,000 A/m
- Case made with TEGIMENT Technology
- Functionally reliable from −45°C up to +80°C
- Integrated push-pieces protection with D3 System
- Captive bezel

Watch case

- Stainless steel, satinized
- Crown screwable
- Sapphire crystal glass in front
- Case back screw-fastened, nickel-free
- Water-resistant as per DIN 8310
- Water- and pressure resistant up to 20 bar (= 200 m underwater depth)
- Low pressure resistant
- Band lug width 22 mm
- Case diameter 43 mm

Dial & Hands

- Charcoal grey electroplated dial
- Number "12" and indices coated with luminescent colour
- Hour and minute hand coated with luminescent colour

Luminous

TECHNICAL DETAILS 757 UTC/757 S UTC

Mechanical movement

- Calibre Valjoux 7750
- Self-winding mechanism
- Hand adjustment with stop-second function
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Functions

- Hours, minutes, subsidiary seconds
- Second time zone on a 12-hour basis
- Chronograph
- Date display
- Pilot's bezel with luminescent key mark

SINN Technologies/Special Features

- Ar-Dehumidifying Technology
- Magnetic Field Protection up to 80,000 A/m
- Case made with TEGIMENT Technology
- Functionally reliable from −45°C up to +80°C
- Integrated push-pieces protection with D3 System
- Captive bezel

Watch case

- 757 UTC: Case made of stainless steel, bead-blasted
- 757 S UTC: Case made of stainless steel with Black Hard Coating
- Crown screwable
- Sapphire crystal glass in front
- Case back screw-fastened, nickel-free
- Water-resistant as per DIN 8310
- Water- and pressure resistant up to 20 bar (= 200 m underwater depth)
- Low pressure resistant
- Band lug width 22 mm
- Case diameter 43 mm

Dial & Hands

- Matte black dial
- Number "12" and indices coated with luminescent colour
- Hour and minute hand coated with luminescent colour

Luminous

TECHNICAL DETAILS 757/757 S

Mechanical movement

- Calibre Valjoux 7750
- Self-winding mechanism
- Hand adjustment with stop-second function
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Functions

- Hours, minutes, subsidiary seconds
- Chronograph
- Date display
- Pilot's bezel with luminescent key mark

Watch case

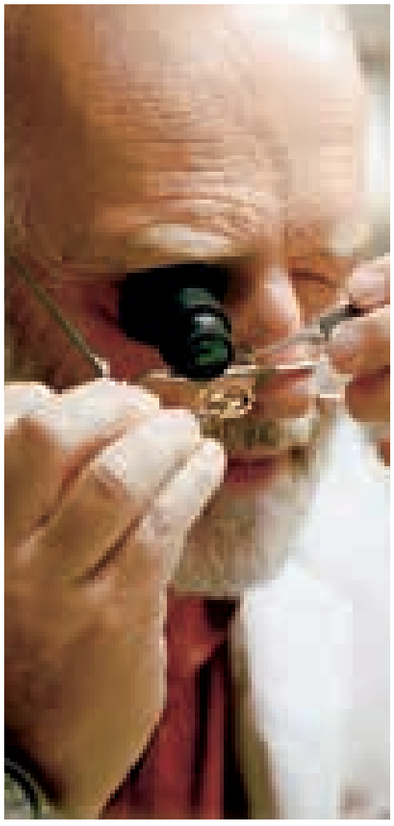
- 757: Case made of stainless steel, bead-blasted
- 757 S: Case made of stainless steel with Black Hard Coating
- Crown screwable
- Sapphire crystal glass in front
- Case back screw-fastened, nickel-free
- Water-resistant as per DIN 8310
- Water- and pressure resistant up to 20 bar (= 200 m underwater depth)
- Low pressure resistant
- Band lug width 22 mm
- Case diameter 43 mm

SINN Technologies/Special Features

- Ar-Dehumidifying Technology
- Magnetic Field Protection up to 80,000 A/m
- Case made with TEGIMENT Technology
- Functionally reliable from −45°C up to +80°C
- Integrated push-pieces protection with D3 System
- Captive bezel

Dial & Hands

- Matte black dial
- Number "12" and indices coated with luminescent colour
- Hour and minute hand coated with luminescent colour



SERVICE

General advice

To preserve the water resistance for as long as possible, the watch should be rinsed whenever it has been in contact with seawater, chemicals, etc. If your watch is frequently worn in water or underwater, we recommend having its water resistance checked at yearly intervals.
The watch is designed to withstand high levels of mechanical wear and tear and is shock resistant as per DIN 8308. Nevertheless, it goes without saying that continual mechanical stress in the form of impacts or vibration will affect its durability. Care should therefore be taken to protect your watch from unnecessary wear and tear. It is only possible to judge how well the watch keeps time after it has been in operation for approximately eight weeks, since it takes that long for the working mechanism to become adjusted, especially in view of the fact that everybody has different lifestyles and habits. In the event of any excessive deviation, please keep a day-to-day record of its timekeeping over a period of about one week, for example.

Do you have any questions?

Our employees will be pleased to advise you. Simply get in contact with us. We look forward to talking to you.

Telephone: + 49 (0)69 978 414 400
Telefax: + 49 (0)69 978 414 401
E-mail: kundendienst@sinn.de

Should you need to send your watch in to customer service, we need to ensure the process goes smoothly. We ask that you please include the following information:

- Name, address, e-mail address and fax number (where applicable) and a daytime telephone number.
- A detailed description of the problem. What is the exact nature of the defect? At what time does the problem arise? How often does the problem occur?
- Wherever possible, please state the date of purchase and your customer number (indicated on the invoice) or enclose a copy of the invoice.

For information about the process, please refer to the section entitled "Repairs" in our general terms and conditions of business. You'll find our general terms and conditions of business on our website **www.sinn.de/en.** We would be happy to send you a copy of the general terms and conditions, or you can contact our customer service department directly. For insurance reasons, we strongly recommend sending us any return goods by registered parcel post. As an alternative for customers in Germany, there is also the option of a collection service covered by transport insurance, on request. To ensure your request is dealt with smoothly, please call our customer service department! We regret that we are unable to accept deliveries with unpaid postage!

Please send your watch to the following address:
Sinn Spezialuhren GmbH
Kundendienst
Im Füldchen 5–7
60489 Frankfurt am Main
Germany

Sinn

Spezialuhren zu Frankfurt am Main

Im Füldchen 5–7 · 60489 Frankfurt/Main
Telefon +49 (0) 69 . 97 84 14-200 · Fax -201
http://www.sinn.de · vertrieb@sinn.de

1. Auflage / 1st Edition
02 2014
Technische Änderungen vorbehalten.
Technical specifications are subject to changes.