PROFESSIONAL SERIES



An American Brand SKYMASTER A-12 EDITION



Hagerstown, MD

SKYMASTER PROFESSIONAL A-12

AIR SUPREMACY

Congratulations on the purchase

of your Hager Watches SKYMASTER A-12 limited edition. A refined, practical and rugged timepiece which commemorates both the best technology of the Cold War and the bravery of those involved in applying and using it in the defense of their country. We are proud to present this American brand timepiece using only the finest components from across the world and assembled here in the USA. In the following pages you will learn about your new watch and the magnificent plane in which it is named after, the A-12 Oxcart. The A-12 program (aptly named CYGNUS) represented a pioneering achievement in aeronautical engineering and, to this day, holds records for speed and altitude (Mach 3.29 at 90,000 feet) by piloted aircraft. Enjoy your new watch!



SKYMASTER PROFESSIONAL

The Skymaster is subtle, balanced and contemporary. Built to withstand some the most extreme air missions, and incorporates all the qualities of an instrument for professionals blending timeless design and readability for those who push the boundaries. The distinctive features of the watch include the following:

The clean, uncluttered dial retains a sense of visual balance, making it pleasing to the eye and easy to read.

A unique 60-minute elapsed-time counter at 9 o'clock and 12-hour counter at 6 o'clock, making timing measurements simple and highly readable at a glance. In addition, the bezel functions either as an elapsed-time counter in true pilot tradition (reverse numeral order) or as second time-zone (in traditional clockwise order); either bezel available as an option at time of order. These bezels are scratch-resistant ceramic and are luminescent, making them readable at night along with the dial hour-markers and hands.

The scratch-resistant, glow-in-the-dark ceramic bezel comes in two versions and can serve multiple functions. In addition to being beautifully finished and highly legible both day and night due to their oversized numerals and luminescent filling, both bezels are bi-directional in their rotation for quick setting and have 36 ratchet stops for fine timing adjustment.

It is waterproof to 100 meters (330 ft.), ensured by the recessed, screw-down crown and unique chronograph activation pushers. The case and bracelet are top-quality biocompatible stainless steel.



SKYMASTER PROFESSIONAL

Its smooth contoured case belies the fact that it is a chronograph, and with its sculpted and finely finished curved lugs can be easily worn under dress shirts without fraying the shirt cuffs. It is equally at home in the boardroom as it is in the wild blue yonder.

The bracelet and buckle have been specially designed to provide a wide range of adjustments to fit virtually every wrist size. Easy micro-adjustments are now possible on the buckle to allow for more comfortable wearing positions due to seasonal temperature changes.

Your Hager A-12 Skymaster contains a special chronograph movement manufactured by one of the most renowned independent watchmakers in Switzerland, Dubois Depraz. The specially modified (for Hager Watches) DD Caliber 2016 is unique in that it displays a 60-minute elapsed time at 9 (almost all chronographs display only 30 minutes, making it a guessing game as to whether 15 minutes, or 45 minutes have elapsed since activating the chronograph). Guess no more—one glance will tell you. Add to this the 12-hour counter at 6, and the central chronograph minute counter, and a quick look at the dial will tell you the hours, minutes and seconds elapsed without searching or calculation.

This exquisite self-winding (automatic) movement contains 62 total jewels and runs at a frequency of 28,800 beats/ hour (4 Hz). It can be manually wound if desired, but once running it will remain constantly wound if worn. If set aside, the power reserve is approximately 44-48 hours. Like most high-quality movements (and all true military/pilot watch movements), this movement also contains a "hacking" feature which stops the second hand when the crown is in the time-setting position, originally used for synchronizing watches prior to the start of a military offensive operation).

SKYMASTER PROFESSIONAL



CASE

Diameter

44 mm

Material

316L stainless steel Polished beveled edges with satin finish or DLC coated

Bezel

Bi-directional rotatable 24 click luminous graduated Ceramic bezel insert engraved numerals and graduations

Waterproofness

Fully threaded recessed crown and pushers and caseback offer 100 meters two-button buckle and extension. (330 feet) of water resistance

MOVEMENT

Functions

Self winding mechanical Chronograph

Displays a 60-minute elapsed time at 9 and a 12-hour counter at 6, and the central chronograph minute counter. 44-48 hour power reserve 62 jewels 28,800 BPH/4hz

CRYSTAL

Domed scratch-resistant sapphire crystal with anti-reflective treatment

DIAL

Two tiered stadium dial with brass hour markers and hands

Highly legible SuperLumiNova appliqués for long-lasting luminescence

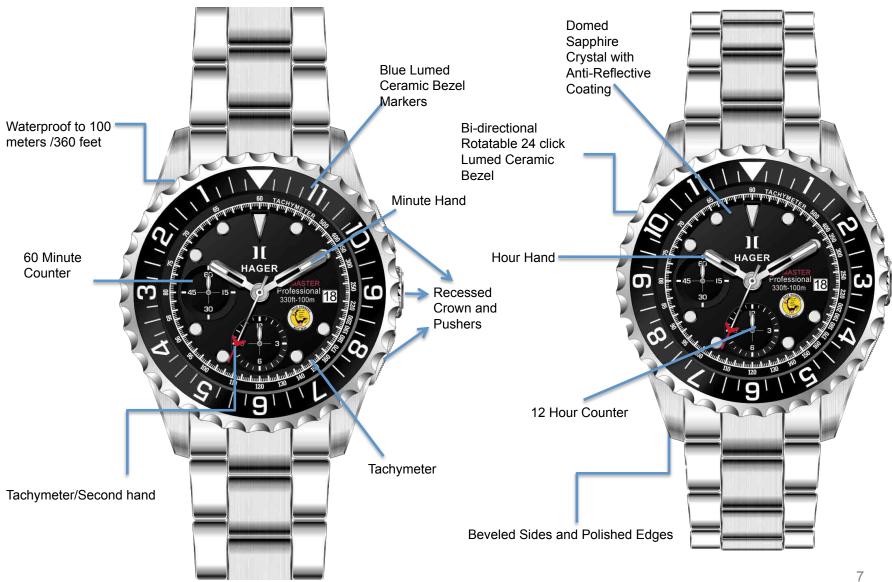
BRACELET

STABILITY

AUGMENTATION GYROS

Stainless steel, satin finished with polished sides, micro-adjustable 2 removable pinned links; folding clasp with push-pieces on either side to open the clasp and folding extension piece to lengthen the strap

SKYMASTER DISPLAY AND CONTROLS



SKYMASTER OPERATING INSTRUCTIONS



PLEASE BE ADVISED: engaging the date function when dial hands are between 8pm - 2am can cause serious damage to the calendar gears of the internal movement as the watch gearing will already be aligning itself to change the date. It is therefore vital to avoid adjusting the calendar or moving the time backwards during this period. Such damage is not covered under warranty. You must advance the time past midnight before you can set the date again.

After an extended period of non-use, the movement must be set in motion by winding the crown clockwise in its normal position approximately 20 times. This watch has a recessed spring-loaded screw-down crown, most easily accessible by rotating your finger along its knurled surface on the backside of the watch to loosen or tighten it (which can easily be done while wearing it as well). NOTE: Ensuring the water-tightness of the case does <u>not</u> mean the crown must be screwed down completely and with great force. When tightening the crown (moving it in a clockwise direction when viewing the watch from the side), push the crown in and when it stops begin turning the crown as shown in the diagram below. Once resistance is met, stop turning the crown. Over-tightening the crown can cause damage, as well as make the crown more difficult to unscrew later.

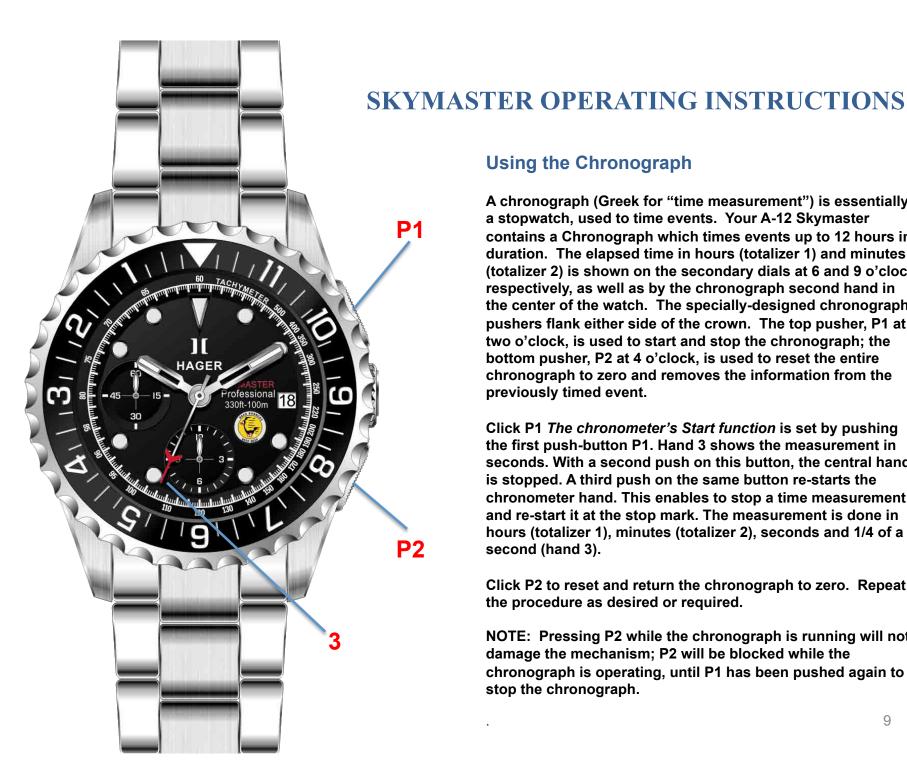
Flush- The crown is fully screwed-down. The watch is completely sealed and the movement protected.

(1st Position) For Manual Winding- Unscrew the crown counterclockwise until it completely disengages from the threads. This is also the wind-up position for the watch for manual winding. If the watch has not been worn in some time and needs to be started for use, rotate the crown in a continuous clockwise movement in this position (without putting any side-pressure on the crown to push it inward into its screw-down position). It is recommended that the watch be started in this fashion before setting it.5-6 turns of the crown should be sufficient to get the watch running; to check, briefly activate the chronograph

(2nd Position) Setting the Date- Unscrew the crown counterclockwise until it until it completely disengages from the threads (the winding position). With your thumb and forefinger slightly pull on the crown to reach the 2nd extended position. To set the date, wind the crown upwards (towards 12 o'clock) until you reach the appropriate date. When completed, lightly push and screw the crown tightly back into place. If the date needs to be re-set during these hours, simply move the hands backward to prior to 8 PM, change the date, and then reset the watch to the appropriate time. If the date is actually changed during this time period, no damage to the movement will result, but the date will not change to the next day at midnight as usual—it will only change 24 hours later, and therefore again have to be reset.

(3rd Position) Setting the Time- Unscrew the crown counterclockwise until it pops out from the side (the winding position). Extend the crown past the 2nd position, which is fully extended from the side (this also activates the "hacking" feature). To set the time, wind the crown clockwise or counterclockwise until you reach the appropriate time. When completed, lightly push the crown back into position 1 and gently screw the crown in clockwise direction, then tighten it again until you feel some resistance. Do not force! You must always ensure the crown is fully tightened before any use in water.

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Using the Chronograph

A chronograph (Greek for "time measurement") is essentially a stopwatch, used to time events. Your A-12 Skymaster contains a Chronograph which times events up to 12 hours in duration. The elapsed time in hours (totalizer 1) and minutes (totalizer 2) is shown on the secondary dials at 6 and 9 o'clock, respectively, as well as by the chronograph second hand in the center of the watch. The specially-designed chronograph pushers flank either side of the crown. The top pusher, P1 at two o'clock, is used to start and stop the chronograph; the bottom pusher, P2 at 4 o'clock, is used to reset the entire chronograph to zero and removes the information from the previously timed event.

Click P1 The chronometer's Start function is set by pushing the first push-button P1. Hand 3 shows the measurement in seconds. With a second push on this button, the central hand is stopped. A third push on the same button re-starts the chronometer hand. This enables to stop a time measurement and re-start it at the stop mark. The measurement is done in hours (totalizer 1), minutes (totalizer 2), seconds and 1/4 of a second (hand 3).

Click P2 to reset and return the chronograph to zero. Repeat the procedure as desired or required.

NOTE: Pressing P2 while the chronograph is running will not damage the mechanism; P2 will be blocked while the chronograph is operating, until P1 has been pushed again to stop the chronograph.

9



Tachymeter Scale

What it Does

Just outside the minute circle on the watch dial is the *Tachymeter Scale*. This scale has a variety of uses, but the most common are measuring speed and measuring production (in an industrial setting). Essentially, the Tachymeter allows the determination of a quantity of output (miles, units per hour) based on a fixed beginning and end point which can be timed. The dial is a logarithmic scale which computes the function:

TACHYMETER DIAL=3600/Elasped Time in Seconds.

The scale is valid for all elapsed times from 7.2 seconds to 60 seconds. If the duration of the even is outside its range, then the answer on the dial is invalid.

Here are two examples:

Measuring Speed

The tachometer measurement enables to know the plane speed when taking off on a short runway. As a matter of fact, if the pilot has not reached the sufficient acceleration to take off regarding a pre-set distance, he will choose to reverse the engine push in order to try to take off again safely.

If you are traveling by train, where you have no access to a speedometer, and can reference a known distance outside the window—a mile marker, for instance, on an adjacent road—start the chronograph at the mile marker and stop it when the next mile marker is reached. Then simply read off where the second hand of the chronograph has stopped on the Tachymeter Scale, and this will be the speed, in "Units Per Hour" (miles) that you have been traveling. No calculation necessary, it is as simple as that.

Measuring Production

Calculating the rate of production of any item is an essential ingredient to determining its ultimate cost. Industrial Engineers, for instance, use chronographs for Motion-Time-Studies (MTS) to determine the efficiency of an operator's performance in a manufacturing setting. When automated production is involved, such as a machine, the output of the machine can be easily determined by starting the chronograph at the beginning of a manufacturing cycle and stopping it at the start of the following cycle. Again, reading the point on the Scale where the second hand has stopped will give the production in "Units Per Hour" (parts).



USING THE SKYMASTER COUNTDOWN BEZEL

Pilot Version—the Countdown Bezel

The bidirectional rotating bezel has the numerals in reverse order to a normal watch dial, in other words counter-clockwise. Those who rule the skies, whether commercial or military, tend to think a bit differently than land-bound people who only occasionally travel by air. A pilot looks at his destination more in countdown mode, as in an ETA of T-minus 6 hours and counting; for a true pilot, it makes more sense to see how much time is <u>remaining</u> on his flight (for fuel calculations, etc.) than what has already elapsed, which is at that point irrelevant. For that reason, we offer the Countdown Bezel as one option. *The rotating bezel* completes the sums of minutes and hours by acting as a countdown timer. For a two hour flight, the pilot enters the number 2 opposite the hour hand of the main dial (A), and starts the chronograph: when the hour hand is opposite the luminous 0 mark (Triangle), the two hours have elapsed.



USING THE SECOND TIME ZONE BEZEL

Traveler Version—the Second Time Zone Bezel

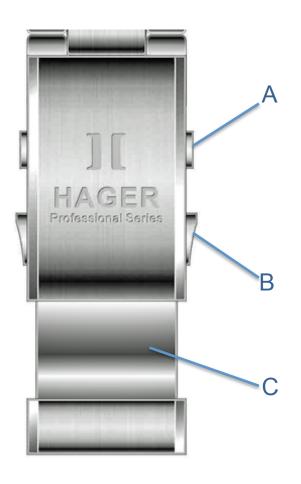
This bezel, to increase the practicality of the watch, comes in a 12-hour version for extra uses:

As a Second Time Zone: With the time difference between two destinations easily determined by experience or on-line, it is simple to rotate the bezel in either direction until the appropriate time appears (using 12 (Triangle) is the best reference). For example, after flying from Chicago to Zurich, with a 7-hour forward time change, simply rotate the bezel until the "5" on the bezel appears opposite the "12" on the watch dial; wherever the hour hand is on the dial from that point on (Zurich time on the dial) will give the exact home time in Chicago, read off the bezel. Conversely, after flying from Chicago to Los Angeles, with a two-hour backward time change, rotate the bezel until the "2" on the bezel coincides with the "12" on the dial; the hour hand (LA time) will now show the time in Chicago—two hours later—directly on the bezel.

This version can, however, also be used as a chronograph timer as well, if for any reason poor lighting conditions or eyesight strain prevent the 12-hour sub-dial on the watch from being readily legible, or if a second simultaneous event needs to be timed while the chronograph is already running and timing a prior event. The moment the event begins, rotate the bezel so that the "12" on the bezel coincides with either the minute hand of the watch (if the event is known to be of short duration) or the hour hand of the watch (if it is likely to be a longer event). Since the bezel is divided into 12 sections, like the dial, each section not only represents one hour, but for the minute hand, also 5 minutes. If the minute hand reaches the "1" on the bezel, 5 minutes have elapsed; the "2", 10 minutes, and so on, up to an hour. If the bezel is set relative to the hour hand, the elapsed time can be read normally like the chronograph dial, up to 12 hours. For travelers especially, this bezel can be of tremendous utility.

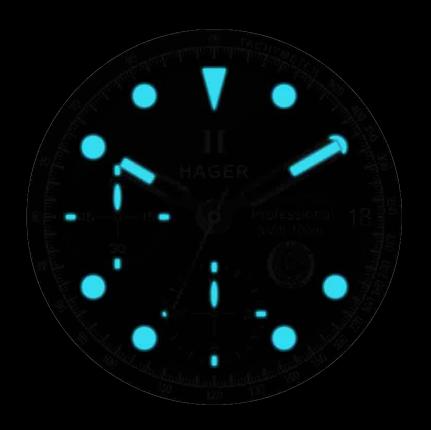


OPERATING THE BRACELET



The Bracelet and Buckle

Your Skymaster A-12 is equipped with a bracelet/buckle combination normally found in only the highest-quality watches from the most famous Swiss and German brands in the industry. The buckle is a masterpiece of convenience and engineering; it is micro-adjustable to obtain the most comfortable fit in a variety of climatic conditions (which can affect wrist size). The buckle contains two sets of pushers, both activated by squeezing simultaneously from the sides. The smaller rectangular set (A) opens the butterfly clasp and allows the watch to be slid on and off the wrist. The second, larger pair controls the micro-adjustment feature (B). When squeezing this pair of pushers from both sides, the buckle can be slid to a wider or narrower opening position (C), all the while remaining closed and on the wrist.



SKYMASTER

LUMINESCENCE

The dial displays generous hour markers for perfect visibility in dark environments. Fully charged in natural light, the luminescence is eye catching as it shifts from blueish- green to a uniform blue as light shifts to darkness and your eyes adjust to the wave length. The markers on the ceramic bezel are also luminescent, making it highly suitable for diving needs.



MOVEMENT

Dubois Depraz 2016

Self –winding mechanical movement **Caliber:** Proprietary Dubois Depraz 2016

Functions: Chronograph with 60 minutes at 9h and 12 hours at 3h. Quick correction date, hours, minutes and

Tachymeter hand reset, date display at 3H

Total Diameter: 13 1/4" linge

Height: 6.9mm Jewels: 62 Jewels

Power Reserve: 44-48 Hours

Beat Rate: 4Hz/28'800 vibrations per hour/ Automatic in

two directions

Accuracy: -4/+20 seconds per day



A-12 OXCART

Top speed: MACH 3.29 (2,524 mph)

Range: 2,485 miles Altitude: 90,000 feet

Wingspan: 56'

Weight: 54,670 lbs

Designer: Kelly Johnson

Manufacturer: Lockheed Corporation

Engine types: Turbojet, Pratt & Whitney J58

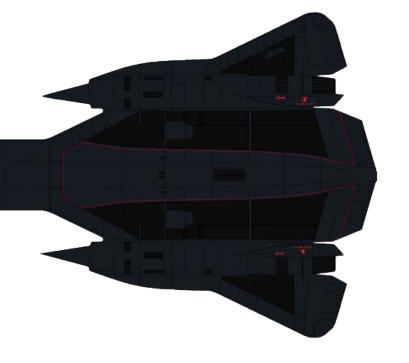
First flight 26 April 1962; Last Flight 1968

Primary User: Central Intelligence Agency

Number built: 13

For more information visit https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/a-12/

Archangel-2ndEdition-2Feb12.pdf



WARRANTY INFORMATION

Your Hager wristwatch has been designed to give you years of outstanding timekeeping performance. You may, however, have some questions about your watch's guarantee or its regular servicing intervals. This section of the User Manual has been created to answer your questions and to provide you with information that will help you make sure your timepiece works optimally for as long as you wear it. Your Hager® watch is warranted by HAGER* for a period of twenty-four (24) months.

A mechanical watch is a precision mechanism which is asked to work 24 hours a day, indefinitely. Treat it with respect. Each Hager timepiece is designed and manufactured to the highest of standards.

This manufacturer's warranty does not cover:

- normal wear and tear and ageing (for example scratched crystal; bezel; metallic bracelet). Damage to the crown.
- any damage on any part of the watch resulting from abnormal/ abusive use, lack of care, negligence, accidents (knocks, dents, crushing, broken crystal, etc.), incorrect use of the watch and non- observance of the operating instructions provided by HAGER.
- --the Hager watch handled by non-authorized persons (for service or repair) or which has been altered in its original condition beyond HAGER's control. Any consequential or indirect damage resulting from the use, failure to operate, defects or lack of precision of the Hager watch. HAGER's OBLIGATION IS STRICTLY LIMITED TO REPAIR OR REPLACEMENT AS EXPRESSLY STATED IN THIS LIMITED WARRANTY. Please be aware that:
- Goods presented for repair may be replaced by refurbished goods of the same type rather than being repaired. Refurbished parts may be used to repair the goods.

HOW TO MAKE A CLAIM UNDER THIS WARRANTY

In the unlikely event that service is required during the guarantee period, we recommend that you first contact info@hagerwatches.com. You will be responsible for paying the expenses associated with making a claim under this Warranty, including postal or delivery expenses and any relevant taxes. Repairs after the guarantee period will be charged. Owner will be charged for postage, insurance and such costs as may be incurred outside the normal repair costs under the guarantee. Our service is, of course, also available after the guarantee period has expired for repair and maintenance work against an appropriate charge. [Payment in advance]. Sometimes it is cheaper to contact first a qualified watchmaker in your area. Please ask your watchmaker for a free estimate!

Special recommendations: What must I do to ensure that my Hager watch provides me with excellent service for many years?

Magnetic fields: avoid placing your watch on computers, loudspeakers or refrigerators, since they generate powerful magnetic fields.

Swimming in the sea: always rinse your watch with fresh water afterwards.

Shocks: whether physical, thermal or other, avoid them.

Screw-down crown: screw the crown down carefully to prevent

water from penetrating the case.

Cleaning: for metal bracelets, and water-resistant cases, use a toothbrush and soapy water for cleaning and dry with a soft cloth.

Chemical products: avoid direct contact with solvents, detergents, perfumes, cosmetics etc., since they may damage the bracelet, case or gaskets.

Temperature: avoid exposure to extreme temperatures (greater than 60°C, or 140°F, less than 0°C, or 32°F) or extreme temperature changes.

Water-resistance: a watch's water-resistance cannot be permanently guaranteed. It may notably be affected by the ageing of gaskets or by an accidental shock to the crown. We recommend you have the water resistance of your watch checked once a year by an authorized Service Center.

][HAGER

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HAGERWATCHES.COM

info@hagerwatches.com

https://twitter.com/hagerwatches

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Customer Services
Fashion Time
8097 Tysons Corner Center,
McLean, VA 22101
703-893-9005
Please email
info@hagerwatches.com prior to
calling customer services

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