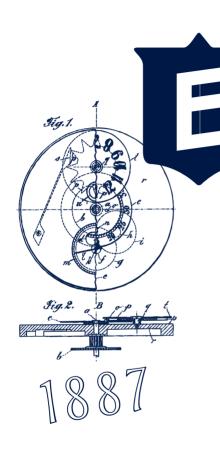
Extra-fort Roue à colonnes retour en vol



EBERHARDO

Manufacture Suisse d'Horlogerie depuis 1887

**USER MANUAL** 



The Eberhard & Co. watch manufactory was founded by Georges-Lucien Eberhard at La Chaux-de-Fonds back in 1887. Ever since, the venture has specialised in the making of chronographs.

In this capacity, it has attained a highly respected position in the world of high-grade watches. With the introduction, at a later stage, of sportively elegant watches it has furthermore augmented this status of the Eherhard & Co. brand name

Eberhard's success story is backed by consistent deployment of advanced technology, meticulous craftsmanship and, not least, by observing that long tradition of superior workmanship which has made Swiss watchmaking a household name.

Today, with well over a century gone by, watches by Eberhard & Co. continue to stand for that high-grade quality and those excellent virtues which will please even the most demanding of connoisseurs.

Today the historic Eberhard & Co. headquarters, at 73 Avenue Léopold-Robert, house the brand museum, which can be visited by appointment.

# Extra-fort **Roue à colonnes** retour en vol

"Extra-fort Roue à Colonnes Retour en Vol" takes the renowned collection launched in 1940 to a new and refined evolution, with the introduction of the fly-back function, also known as "retour en vol". Originally conceived in the 1930s for aviators, this complication allows multiple readings to be taken in rapid succession and continues to be a source of admiration for connoisseurs of the art of watchmaking.

With its elegant and unmistakable style, the chronograph is available in a variety of colors for the striking dial, which alternates frappé and azurée finishes in a sophisticated interplay of geometries.

We hereby guarantee your Eberhard & Co. watch against any defect in manufacture or materials for a period of 24 months from the date of purchase, subject to normal conditions of use.

This guarantee does not cover:

- · damage, including indirect damage, caused by shocks, falls or incorrect use of the watch
- wear and tear of the strap, glass or any other part of the watch due to normal use
- watches whose reference or matriculation number has been worn away or altered, or Shield Cards that have not been correctly activated
- work carried out on the watch or strap by non-authorised persons or alterations made to the watch that do not respect its original configuration
- · damage caused by the failure to check the watch's water resistance
- possible shipping and insurance costs

To have your Eberhard & Co. watch serviced or repaired, please contact one of our service centres or an authorised retailer and present your Shield Card, filled in and complete with the activation PIN.

We recommend a check-up or overhaul of the movement on average every 3 years, depending on the conditions of use

For more information, please visit eberhard1887.com



- A Push-button to start and stop the chronograph
- B Push-button for setting to zero all hands of the chronograph and activating the "retour en vol" function
- C Winding crown
- D Hour hand of the watch
- E Minute hand of the watch

- F Small continuous seconds hand
- G Centre seconds counter hand of the chronograph
- **H** Small minute counter hand of the chronograph
- I Date indicator
- L Tachometer scale
- M 1/5 second scale



## **FEATURES**

The "Extra-fort Roue à Colonnes Retour en Vol" has a mechanical automatic-winding bidirectional movement, chronograph with column wheel, 28800 alternances/h, power reserve > 50 h. The vitré caseback reveals the elegant finish of the movement and the personalised oscillating weight. Screwed-in crown and vaulted sapphire glass, the caseback is fixed with 6 screws.

From this collection, the following version is available:

Case in stainless steel with crocodile leather strap or with steel bracelet.
Water-resistant down to 50 m.

## READING THE DIAL

On the "Extra-fort Roue à Colonnes Retour en Vol" dial there are 2 counters which have the following functions:

- Small continuous seconds hand F
- Small minute counter hand of the chronograph H

The chronograph seconds are given by the centre hand G

The date indicator is situated at 6 o' clock.

## **PUSH-BUTTONS**

For the chronograph function, the push-buttons should be pressed in the following order:

A: start A: stop

B: return to zero

For the "retour en vol" function in the following order:

A: start

A: activation of "retour en vol" function (also sequential)

A: stop

B: return to zero

We recommend not operating the push-buttons in water. Water resistance is only guaranteed under normal conditions.

# LA ROUE À COLONNES (COLUMN WHEEL)



It is the sophisticated control centre which allows to start and stop the chronograph, and prevents the accidental setting to zero when the chronograph is working. Characteristics of this fine device are the remarkable technical value, the accuracy and the smoothness of its functions. Its realisation involves a total technical mastery both during the components production and the control and assembly phases. It is the signature of a great chronograph.

## OPERATING INSTRUCTIONS FOR THE CHRONOGRAPH

Press the push-button **A** to start the chronograph mechanism. Press the push-button a second time to stop the chronograph mechanism. You can now read on the counters how many seconds **G** and minutes **H** have elapsed. Press the push-button again and the chronograph will restart from the intermediate stop. To return to zero, the chronograph must be in the stop position.

Press the second push-button  ${\bf B}$  and all hands will return to zero. You are advised not to leave the chronograph mechanism operating continuously.

# INSTRUCTIONS FOR THE ACTIVATION OF THE "RETOUR EN VOL" FUNCTION

To activate the functioning of the chronograph hands, press push-button  $\bf A$ . By pressing push-button  $\bf B$  and immediately releasing it, the hand starts again from zero. In this case, the mechanical parts associated with push-button  $\bf B$  initiate three operations in rapid succession:

- Interruption of the transmission of motion between driven and driving wheels
- Simultaneous resetting of the chronograph by the action of a single hammer which brings the hands back to their initial '0' position
- Restart of timing when the push-button is released, thanks to the combined action of multiple levers which allow the transmission of motion between the chronograph wheels to be resumed.

This highly complex sequence of movements is controlled directly by the chronograph lever which is in turn actuated by push-button **B**. This type of instantaneous 'flyback' is an example of precision operation thanks to the particular execution of the movement, which also includes the presence of the column wheel integrated into the mechanism, which accurately coordinates the operation of all the mechanical components associated with it.

To permanently reset the 'retour en vol' function to zero, press push-button **A** and subsequently push-button **B**.







POSITION A - Screwed-in crown, guaranteed water-resistance



POSITION B - WINDING OF THE WATCH - To unscrew the crown turn it counter-

When it is unscrewed, turn it clockwise to transmit the manual charge to the movement. If your "Extra-fort Roue à Colonnes Retour en Vol" has not been worn for some time, the automatic movement has to be winded manually, in order to obtain an immediate sufficient power-reserve and to ensure an accurate working of the watch.



POSITION C - RAPID DATE-SETTING: Pull the crown to the first notch.

Turning the crown clockwise you will operate for setting the desired date.

IMPORTANT: Never make the correction of the date between 10 p.m. and 1 a.m.



POSITION D - TIME SETTING - Pull the crown to the second notch to set the time.

## **IMPORTANT**

To set back the crown, push it lightly against the watch case while twisting it clockwise until it is fully screwed back in.

### HOW TO USE THE TACHOMETER SCALE

The outer rim on the dial shows the data needed for metering the speed of a vehicle over a distance of 1,000 metres. The moment the vehicle passes the first reading marking the beginning of said 1,000m distance, activate the hand  $\mathbf{G}$  of the chronograph to bring it to a stop the moment the vehicle passes the second reading mark. Said hand  $\mathbf{G}$  will now indicate the average speed reached in km/h in tune with the tachometer scale. Example: when one kilometre is covered within 45 seconds, the average speed displayed by the centre seconds-hand  $\mathbf{G}$  on the tachometer scale will be tantamount to a speed of 80 km/h.

### 1/5 SECOND SCALE

The division on the dial of this model **M** enables the user to make observations not just to approximately a second, but to the order of 1/5 second.

### DIRECTIONS FOR USE OF WATERTIGHT WATCHES

You may wear your "Extra-fort Roue à Colonnes Retour en Vol" when in the water or when taking a shower, but it is not fit for breath-held diving, plunging or diving activities. Important: we strongly recommend that you have the crown well tightened before possible contacts with water. Do not activate the push-buttons nor manipulate the crown as long as the watch is wet or in the water. After using in seawater, rinse the watch under fresh water. Exposure to temperature shocks should be avoided. We recommend that you have the water-resistance checked at least once a year by a qualified technical service facility in order to find out if the gaskets need to be replaced.



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