# Reference 5207 Caliber R TO 27 PS QI



Wristwatch with minute repeater. Tourbillon. Instantaneous perpetual calendar with aperture displays. Manually wound. White gold.

With an extraordinarily large number of parts, 557, to be precise, this timepiece ranks among Patek Philippe's most complicated wristwatches. The case flanks and the minute-repeater slide are artistically hand-engraved. The slightly cambered sapphire-crystal glass protects a blue sunburst dial that gives the perpetual calendar an exceptionally unique face. The apertures for the day, date, and month feature mirror-polished white-gold frames and are arranged along an arc between 10 and 2 o'clock. The subsidiary seconds dial is positioned at 6 o'clock and accommodates the lunar disk in the characteristic moon-phase cutout. Each of these little discoveries by themselves delight watch connoisseurs, but the big surprise comes at

midnight, when all displays of the perpetual calendar advance instantaneously and synchronously. This is not merely a welcome function, it is also an extremely challenging additional complication based on the flawless interaction of 2l2 individual parts. Patek Philippe's caliber engineers invested five years in the development of this ingenious mechanism to assure that the disks for the day, the date, the month, and the leap-year cycle really switch to the next calendar day simultaneously and at the same time. The core of their invention is a mechanism consisting of levers and complex program cams for which two patent applications were filed.

#### The minute repeater

On demand, the minute repeater strikes the hours, the quarter-hours, and then the minutes that have elapsed since the last quarter-hour. The first hammer strikes the hours on the low-pitched gong with one strike for each hour. Subsequently, each quarter-hour is sounded as an alternating double strike by two hammers on both the high- and low-pitched gongs. Finally, the second hammer strikes the high-pitched gong to count the number of minutes that have passed since the last quarter-hour.

At 12:59, for instance, the melody consists of 12 low sounds, 3 double high/low sounds, and 14 high sounds (totaling the maximum of 32 strikes).

## The tourbillon

In the course of the l8th century, watchmakers discovered that the rate deviations of their movements were, in the final analysis, caused by the tiny hairsprings which together with the balance constitute the oscillator of every timepiece. Since its center of gravity does not coincide with the geometric center of the spring, the regular breathing of the hairspring is negatively affected by the earth's pull in any orientation except horizontal.

The tourbillon corrects this systemic "positional" error. This is done by integrating the balance and the escapement in a hinged cage that rotates about its axis once a minute. On this orbit, the slightly eccentric center of gravity of the hairspring revolves around the center of the cage every 60 seconds, so the positional error is automatically offset by progression, regardless of the orientation of the spring.

# Instantaneous perpetual calendar with aperture displays

At midnight 2 minutes, all calendar displays except the moon phase and the day/night indicator simultaneously and instantaneously advance to the next day and, as the case may be, to the next month and the next year.

The perpetual calendar automatically recognizes months with fewer than 31 days and switches directly from September 30 to October 1 and from February 28 to March 1.

In leap years, which are indicated by the Roman numeral IV in the aperture between 4 and 5 o'clock, the date disk first indicates February 29 before switching to March 1 a day later.

If the watch is wound every day, the perpetual calendar will not need to be corrected until February 28, 2100. The year 2100 is a secular year in which the leap day is skipped according to the rules of the Gregorian calendar.

The reference 5207 is a Patek Philippe perpetual calendar in which the date correction push piece acts only on the date and does not change the month and year displays.

## Indications, functions, and settings



#### DISPLAYS AND FUNCTIONS

- 1- MONTH
- 2- YEAR (IV = LEAP YEAR)
- 3- MOON PHASE DISPLAY
- 4- DAY/NIGHT INDICATOR
- 5- DAY OF WEEK
- 6- DATE
- 7- WINDING POSITION
- 8- HANDSETTING POSITION
- 9- SLIDE FOR ACTUATING THE STRIKING MECHANISM

#### SETTINGS

- A- PUSH PIECE FOR DATE CORRECTIONS (6)
- B- PUSH PIECE FOR MONTH (1) AND YEAR (2) CORRECTIONS
- C- PUSH PIECE FOR MOON PHASE CORRECTIONS (3)
- D- PUSH PIECE FOR DAY OF WEEK CORRECTIONS (5)

#### NOTE ON CORRECTING PERPETUAL CALENDAR DISPLAYS (PUSH PIECE A) AND MOON PHASE DISPLAY (PUSH PIECE C):

- TO PREVENT DAMAGE TO YOUR WATCH, PLEASE PERFORM ALL SETTINGS AND CORRECTIONS WITH THE CORRECTION STYLUS THAT WAS SUPPLIED WITH YOUR WATCH. ANY OTHER TOOL COULD DAMAGE YOUR WATCH.
- MAKE SURE TO SET YOUR WATCH TO **3 AM** BEFORE CORRECTING DISPLAYS OR PERFORMING OTHER SETTINGS.
- THE SETTING SEQUENCE DESCRIBED BELOW MUST BE OBSERVED.
- FOR EVERY CORRECTION PROCEDURE, THE CORRECTOR PUSH PIECES MUST BE PUSHED ALL THE WAY IN AND THEN TOTALLY RELEASED AGAIN.

## Settings

#### PREPARATIONS PRIOR TO SETTING



- Before performing any corrections or settings, always wind the watch (10 turns of the winding crown).
- Pull the crown out (8).
- Advance the hands clockwise until the date display (6) advances by one day.
- Set the hands to **3 am.**
- The color of the day/night indicator must be dark blue.
- Push the winding crown home again (7).

#### SETTING THE CALENDAR DISPLAYS



#### SETTING THE MOON PHASE



#### SETTING THE TIME



- Actuate push piece (A) as many times as needed to display the current date (6).
- Actuate push piece (B) as many times as needed to display the current year (2) and the current month (1).
- Actuate push piece (D) as many times as needed to display the current day of the week (5).

- Actuate correction push piece (C) until lunar disk (3) indicates full moon
- Consult the "Full Moon Calendar" and determine how many days have elapsed since the last full moon.
  For each elapsed day (not counting the full-moon day), actuate correction push piece (C) once to set the moon phase display.

Then, use the winding crown to set the correct time. If you advance the hands beyond midnight, all displays of the perpetual calendar will be advanced as well.

- Pull the crown out (8).
- Set the hands to the correct time If you advance the hands beyond midnight, all displays of the perpetual calendar will be advanced as well.
- After having set the time, push the winding crown (7) home again.



## Minute repeater

The strike sequence of the minute repeater must be allowed to end completely before it is activated again.

Caution: Never actuate the winding crown as long as the repeater is working and for 30 seconds thereafter. Doing so could cause damage to the repeating mechanism which would not be covered by the warranty.

To activate the striking mechanism, push the slide (9) all the way up.

Now release it completely – do not pull it down. Two small hammers will now strike the hours, quarter-hours, and minutes on two gongs of low and high pitch.

If the watch was set aside unwound for an extended period of time, the minute repeater might not indicate the correct time because the oil may have thickened at some points inside the mechanism. This is absolutely normal and has no negative consequences. The striking mechanism will function correctly again within one or two hours after the watch has been rewound.

## Recommendations

#### WATER RESISTANCE

Although your watch is equipped with a waterresistant crown, it is not protected at all against the ingress of moisture because of the slot for the minute repeater slide.

Therefore, exercise care to ensure that liquid does not come into contact with your watch.

### SERVICE

We recommend that you have your watch serviced at least once every three to five years. For this purpose, we suggest you take it to an Authorized Patek Philippe Retailer who will send it to our Geneva manufacture, the only location authorized to service watches with minute repeaters. You can then be assured that your watch will be inspected and overhauled by a qualified master watchmaker at Patek Philippe headquarters in Geneva.

The master watchmaker will completely disassemble the movement and then inspect, clean, and lubricate all the individual parts prior to reassembly. All functions of the watch will also be tested in detail and the escapement regulated if necessary. Finally, its rate accuracy will be monitored and precision-adjusted for a further period of at least two weeks.

The case and the buckle will be polished as per your instructions and your watch will be returned to you in mint condition. The entire process will take several weeks because each watch must undergo a complete series of tests to fulfill the strict quality criteria of Patek Philippe.

If you have any questions regarding the maintenance of your watch, contact the Authorized Patek Philippe Retailer nearest you or our International Customer Service department in Geneva, or visit www.patek.com.

#### WINDING

When fully wound, your wristwatch has a power reserve of at least 38 hours. We recommend that you wind your watch at about the same time every day.

We advise you to wind the watch before you put it on. This way, you can avoid lateral pressure on the winding stem which, in the course of the years, could damage the stem tube.

The same applies to handsetting. Please use your fingernails to pull the crown out and turn it gently between two fingertips.

#### DYNAMOMETRIC WINDING CROWN

Make sure you wind the watch gently and uniformly. If you proceed too vigorously, you could damage the movement and break parts, especially toward the end of the winding process. To reduce this risk, Patek Philippe has equipped some of its manually wound watches, including the reference 5207, with a dynamometric crown. This patented Patek Philippe innovation prevents damage to the winding mechanism when the mainspring is fully tensioned. When you hear a succession of soft clicks, this indicates that the watch is now wound. This clicking sound is absolutely normal and indicates when you can stop winding the watch.

#### CHANGING THE CASE BACK

Your watch comes with a sapphire-crystal case back and a interchangeable solid metal back. Only qualified master watchmakers at the Patek Philippe workshops in Geneva are authorized to exchange the backs.

#### PATEK PHILIPPE SEAL

The Patek Philippe Seal is a global emblem of quality that applies to the completed and fully cased watch. It covers the movement, the case, the dial, the hands, the pushers, the straps and bracelets, the clasps, as well as all other components that contribute to the accuracy and aesthetic appeal of a watch. It takes technical, functional, and design-related aspects into account and also covers the visual appearance of the watch, its rate accuracy and dependability, as well as the quality of the customer service to which its owner is entitled. It encompasses the entire know-how and the unique facets that govern the development, production, and longterm maintenance of an exceptional timepiece.

## Movement technical data



CALIBER:	R TO 27 PS QI
DIAMETER:	32 MM
HEIGHT:	9.33 MM
NUMBER OF PARTS:	557
NUMBER OF JEWELS:	37
POWER RESERVE:	MIN. 38 HOURS - MAX. 48 HOURS
BALANCE:	GYROMAX®
FREQUENCY:	21,600 SEMI-OSCILLATIONS PER HOUR (3 HZ)
TOURBILLON:	STEEL CAGE, 69 PARTS, 0.3 GRAMS,
	1 REVOLUTION PER MINUTE
BALANCE SPRING:	BREGUET
HALLMARK:	PATEK PHILIPPE SEAL